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In May 2003, Theo van den Hout approached me with the request to write a brief review of a recently published collective volume (*The Luvians*. Ed. C. Melchert. HdO 1/68. Leiden-Boston: Brill) for the *Journal of Near Eastern Studies*. As I was making my way through the book, I realized that reviewing it on six double-spaced pages was not going to be an easy task. I had to discuss the papers by different authors trying to address the question "Who were the Luvians?", and the answers of the contributors sometimes contradicted each other. As a reviewer, I felt obliged to take sides in unsettled debates, but there was no way of doing it within the prescribed page limit.

The solution seemed to emerge when I was invited to take part in the conference "Hittites, Greeks, and their Neighbors in Bronze Age Anatolia", which was organized by Billie-Jean Collins, Mary Bachvarova and Ian Rutherford and took place in Atlanta in September 2004. I excised the debate of the Luvian origins from my review and presented it as a talk at this forum. My own views on the subject of Luvian ethnic history, as formulated in 2004, were summarized in the paper that I submitted to the Proceedings of the Atlanta conference (Yakubovich, forthcoming[2]). When this paper is finally published, the readers will be able to see that it anticipates many conclusions reached in

the present dissertation, but also shows a number of differences, both in the selection and presentation of the data. Not all of my initial conclusions convinced the other conference participants, and this prompted me to reject some of them, while realizing the need for a more detailed argumentation in the case of some others. Gradually I came to the realization that the appropriate venue for expanding my work would be the University of Chicago PhD thesis. My dissertation proposal was defended in December 2005.

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The preliminary results of my dissertation work have been presented at the following academic conferences and invited talks:

1. "The Origin of Anatolian Medio-passive Extensions *–si* and *–di*". 17th Annual UCLA Indo-European Conference. Los Angeles, November 2005.
2. "Prehistoric contacts between Hittites and Luwians". School of Orental and African Studies, University of London, December 2005.
3. "Life after Death: a Linguist's View. Grammatical Evolution without Native Transmission". École Pratique des Hautes Études, Paris, June 2006.
4. "Asymmetrical Bilingualism in the Hittite Empire". University of Michigan, Ann Arbor, MI, October 2006.
5. "Clitic Reduplication in Neo-Hittite". Linguistic Society of America, 2007 Annual Meeting. Anaheim, CA, January 2007.
6. "Pragmatics of the Glossenkeil in Bronze Age Syria and Anatolia". American Oriental Society, 217th Annual Meeting. San Antonio, TX, March 2007.
7. "The Status of Luvian in the Hittite Empire". Department of Greek and Latin, University of London, March 2007.
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1 INTRODUCTION

1.1 Purpose of the Dissertation. The study of linguistic contacts in ancient societies can be described as an inverse sociolinguistic problem. When one is dealing with modern languages, it is frequently easier to gather information about the ecology of their development than to elicit the relevant linguistic data. In the case of extinct languages, we begin our research with a corpus of texts exhibiting foreign influence, but we are frequently unaware of social factors that could trigger this impact. We can, however, use our typological knowledge in order to elucidate contact mechanisms through their results, and then to reconstruct contact stimuli through these mechanisms. This, in its turn, can contribute to the better understanding of civilizations whose ethnic history does not yield to direct observations.

Although Bronze Age Asia Minor would hardly represent an obvious first choice for a sociolinguist wishing to apply his skills to the study of extinct languages, the reasons for this are sociological rather than linguistic. The cuneiform languages are rarely taught in linguistics departments, while the kingdom of the Hittites generates less public interest than Pharaonic Egypt or Imperial Rome. But from a purely linguistic point of view, Ancient Anatolia as a region is particularly conducive to paleo-

sociolinguistic research. The cuneiform tablets that belonged to the palatial archives of the Hittite capital Hattusa contain texts in seven different languages: Hittite, Akkadian, Sumerian, Hattic, Hurrian. Luvian and Palaic (the eighth language, Mitannian Aryan, is attested through foreign words in Hittite texts). In addition, they provide us with abundant examples of structural interference, lexical borrowing, code-mixing, and code alternation. They also contain a limited amount of historical information concerning various ethnic groups against which one's linguistic conclusions can be checked.

Some aspects of Anatolian ethnic history in the second millennium BC appear to be uncontroversial. The self-designation of the Hittite language as Nesite, which can be inferred from the adverbs *nisili*, *nāsili*, *nesumnili* 'in the Nesite language', owes its exisatence to the ancient toponym Nesa, which has been identified with the site Kültepe near Kayseri in Central Anatolia. This city, also known in Hittite and Akkadian sources under the name Kaneš, functioned as an important trade center in the 20th - 18th centuries BC, hosting a large emporium (*kārum*) of Assyrian merchants.[1] Most Anatolian names preserved in the records of Assyrian colonists excavated in Kaneš appear to be Hittite (Garelli 1963: 133-52). Anitta, an eighteenth century ruler of Kaneš / Nesa, succeeded in defeating a coalition of hostile kings and established his dominion over much of Central Anatolia. The Hattian town of Hattusa, destroyed by Anitta, was later re-founded and

[1] The names Kaneš and Nesa not only designate the same town but also are etymologically related. Presumably, the form Nesa developed from **Knesa* in a dialect that simplified word-initial consonant clusters. Accordingly, the transliteration Kanes or Knes would be phonetically more accurate, but it might render the town in question unrecognizable for Assyriologists. On the other hand, the traditional transliteration Kanesh is misleading for the scholars of Bronze Age Asia Minor, since the graphic sequence <sh> normally corresponds to the consonant cluster /sx/ in the transliteration of the Anatolian toponyms, as e.g. in Washaniya or Purushanda. The transliteration Kaneš accepted in the present work represents a necessary compromise between these two extremes.

re-populated as the new administrative and cult center of the Hittites. Hittite (Nesite) was the main official language of the kingdom of Hatti, whose political history between the seventeenth and the thirteenth century BC is well known from written sources.

At the same time, there are many open questions in the ethnic history of Bronze Age Anatolia the answer to which requires a paleo-sociolinguistic investigation. One of them, which provided the impetus for the present work, concerns the history of the Luvian (or Luwian) speech community. The Hittite Laws contain a handful of references to the country named Luviya, which is not accompanied by the geographic identification of this region, while a number of other texts introduce passages that were expected to be uttered *luwili* "in the Luvian language", even though not all of them are actually recorded in Luvian. This is all the historical information that is available about Luviya and the Luvians.

The linguistic analysis yields more interesting results. Luvian represents an Anatolian language that is closely related to Hittite, and there is no doubt that the two languages are derived from a common ancestor. At the same time, it has enough structural peculiarities to guarantee that it was perceived as a separate language, not a dialect of Hittite. Once the formal features of the Luvian language are identified, one can see that it was used in a vast area stretching from the Sakarya river basin in northwestern Anatolia to the Euphrates valley in present-day Syria. Furthermore, the progress in the decipherment of the Hieroglyphic Anatolian Script, which has fully replaced the cuneiform in the region after the collapse of the Hittite Empire in about 1200 BC, brought about the recognition of the fact that it was predominantly used for writing

Luvian. This enabled Hittitologists to realize that Luvian was the official language of the Neo-Hittite states.

Thus, Luvians must have been as important for the history of Bronze Age Anatolia as were the Hittites. Nevertheless, few researchers attempted to systematically discriminate between these two ethnic groups. More frequently than not, the Luvians are mentioned in connection with particular geographical or political entities, be it the southeastern Anatolian kingdom of Kizzuwatna or Homeric Troy. This must have been in part due to the fact that the scholars of Hittite are normally trained as historians and philologists rather than sociolinguists. On the other hand, the nature of primary data represented an additional challenge for the paleo-sociolinguistic investigation of this region. Before approaching the issues of language contact in ancient Anatolia, one had to clarify the synchronic structure of Luvian. Great advances made in this field in the last three decades are associated with the work of D. Hawkins, C. Melchert, A. Morpurgo-Davies and F. Starke, among other scholars.

The first comprehensive attempt at reconstructing Luvian ethnic history was undertaken in Bryce 2003. The Australian scholar offered a scenario of Luvian eastward expansion. He hypothesized that by the seventeenth century BC "Luvian-speaking groups had occupied extensive areas in the Western half of Anatolia" (p. 28). His conclusions appear to be mainly based on the identification of the countries of Luviya and Arzawa, which seemingly alternate in the two versions of § 19 of the Hittite Laws. Bryce goes on to state that "by the middle of the millennium, Luwian-speaking groups had spread southwards and eastwards, occupying much of Southern Anatolia, from the region of (Classical) Lycia in the west through (Classical) Pamphylia, Pisidia, Isauria

and Lycaonia to Cilicia in the East" (p. 31). He concludes by reiterating the hypothesis that the basic migratory pattern of Luvians within Anatolia was a movement southeastwards (p. 35), cautiously extrapolating this trajectory to the earlier period when Luvians had allegedly penetrated Anatolia via the northwest (p. 40). No systematic defense of this scenario has been suggested, perhaps due to the fact that Bryce saw his work as a historical overview, rather than a polemical article.

Leaving aside linguistic considerations for the time being, I believe that this scenario is unlikely on purely historical grounds. The archaeological evidence speaks rather in favor of cultural continuity in Anatolia from the Early through the Middle Bronze Age (Mechert 2003a: 25 with ref.). The ethnic groups that undertake sweeping migrations are expected to be archaeologically identifiable, but there is no such thing as an established Luvian archaeology at the present time. If one assumes that the Luvian eastward migrations occurred after the formation of the Hittite kingdom, one faces an additional problem of how to explain the complete silence of the Hittite sources on this account. The scenario of peaceful expansion facilitated by the economic superiority of the Luvians would remain unconvincing unless one can point to the specific economic advantages of the Luvian population groups. The political fragmentation of Asia Minor assumed for the period before the formation of the Hittite kingdom and the social dominance of Hittite in the subsequent period speak against a drastic shift to Luvian in central Anatolia that was not accompanied by population movements.

The research methodology of Trevor Bryce consists in the synthesis and interpretation of Hittite narrative sources. It is quite suitable for presenting the political history of the Luvian-speaking world but is hardly appropriate for the reconstruction of

Luvian ethnic history per se. In fact, Bryce (2003: 34) explains that "our history of the Luwian peoples will in effect amount to a historical overview of various states and regions where we assume that there was a significant population of Luwian speakers". Immediately below, he acknowledges the limitations of his research program by stressing that "we cannot with any degree of confidence draw a clear distinction between Luwian and non-Luwian areas anywhere in Anatolia". This is a correct assessment, when applied to the approach of Bryce 2003, but I believe that it is over-pessimistic as a general statement. One can, with varying degrees of confidence, make claims about the status of Luvian in individual points in space and time, but in order to accomplish this task one needs to engage the full arsenal of contact linguistics.

In what follows, I will endeavor to clarify the role of the Luvians in Bronze Age Anatolia using linguistic methodology. One will easily see that my answers to the research questions posed by Trevor Bryce are very different from his. I intend to demonstrate that the Luvian population groups were the close neighbors of the Hittites in the central part of Asia Minor at least from the late third millennium BC onwards. Beginning with Anitta's conquest, Hittites and Luvians were united in one polity, where the first group exercised social dominance, while the second one was linguistically dominant. The subsequent migrations of the Luvians in southeastward and westward directions were closely connected with the expansion of the Hittite state. At the same time, the unstable balance between the Hittite and the Luvian speakers in Hattusa and its surrounding area continued to shift in favor of the second group, till the point when all the Hittite elites, including the king and the members of the royal family, were fully bilingual in Luvian.

1.2 Basic Assumptions. Most linguists nowadays regard the Anatolian group of languages as an outlier within the Indo-European family.[2] I explicitly recognize this fact by using the term Indo-Hittite for the common linguistic ancestor of Anatolian and Indo-European, but this terminological choice does not have direct consequences for the conclusions of my work. The nature of my research project allows me to remain agnostic regarding the place and time of the separation between the Indo-European and the Anatolian languages and the trajectory of Anatolian migrations to Asia Minor (or Indo-European migrations from Asia Minor). It appears, however, necessary to assume a lack of continuity between these events and the Luvian migrations across Asia Minor, which must have occurred at a considerably later date.

In what follows, I will operate with the model of Anatolian genetic phyliation that is reflected in the tree below. The crucial morphological innovations that characterize each of the nodes on the suggested tree are listed in descending order. My phylogeny closely resembles the one suggested in Oettinger 1978. A separate and more detailed discussion is needed in order to fully justify this precise configuration, but it appears to be close to the *consensus majorum* and will be accepted here as a working tool without further deliberations. [3]

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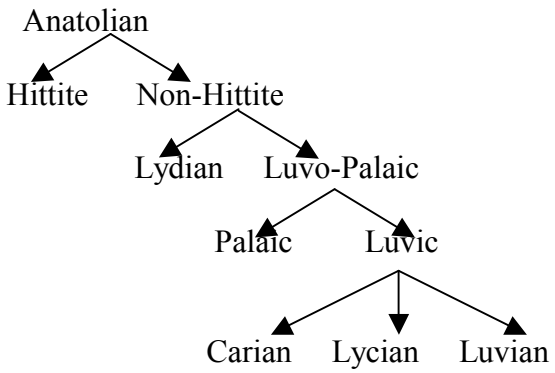
[2] See e.g. Jasanoff 2003:20 (with fn. 41). As one can infer from this discussion, the agreement with the essence of the Indo-Hittite hypothesis does not automatically entail the acceptance of the term "Indo-Hittite", which some linguists find aesthetically unappealing. I accept this term as a convenient way of reducing terminological ambiguity between various stages in the development of Indo-European.

[3] Ivanov 2001 attempts to demonstrate that the Anatolian group of languages should be regarded as a linguistic area rather than a genetic unit. It is true that some of the linguistic features traditionally

Figure 1: Anatolian Linguistic Phyliation



1) First singular present ending *-wi* (instead of **-mi*): innovation that can be reconstructed for non-Hittite

2) Generalization of the first singular preterit *–ha* (at the expense of **–om*): innovation that can be reconstructed for Luvic and Palaic.

3) Nominative plural **–nsi* (instead of **-es*): innovation that can be reconstructed for Luvic.

It is easy to see from the tree given above that one should postulate several intermediate stages between the Proto-Anatolian and the Common Luvian state. On the other hand, a large number of genetically unrelated words in the basic lexicon of Luvian and Hittite also prompt one to relegate the date of their separation far into Anatolian prehistory. The list of 13 diverging lexical items, all of which belong to Swadesh's hundred-word list, is given in Table 1 (based to a large extent on Ivanov 2001). Given that only about one half of the Luvian lexical hundred-word list could be identified so far, one can extrapolate that the total number of lexical divergences in the list could be around 25. Thus we wind up with a cognacy rate that is lower than that of Slavic

taken as common Anatolian innovations can be reinterpreted as secondary contact-induced changes (cf. Chaper 4 for one of such instances). There are, however, several non-trivial common Anatolian innovations whose contact-induced nature is unlikely to be ever proven, such as the generalization of *ū* in **amū* 'me' by analogy with **tū* 'thou', the enclitization of the demonstrative pronoun **o-* > *a-*, or the fusion of the prefix *pe-* with the verbal root **ai* 'to give' (the objections of Kloekhorst 2006 against the reality of this fusion appear to be mainly based upon his reluctance to accept the Indo-Hittite phoneme **a*). This does not mean that such innovations could not have spread by way of diffusion in a continuum of already differentiated dialects, but this claim cannot be tested. The comparative method requires that a given common innovation must be treated as genetically inherited unless one can demonstrate its secondary character.

languages (no more than 20 lexical divergences between any two given languages). The split of Proto-Slavic into distinct dialects is usually dated to the mid-first millennium AD on historical grounds. If we assume that the rate of lexical replacement was roughly the same in the case of Anatolian, one has to hypothesize that Hittite and Luvian separated from each other at least some 1500 years before the historical attestation of both languages, that is to say around 3000 BC.

Table 1: Discrepancies in Basic Lexicon between Hittite and Luvian

Meaning	Hittite	Luvian	Meaning	Hittite	Luvian
'all'	*humant-*	*puna*(*da*/*i*)-	'long'	*dalugi-*	*ārray(a)-*
		tanima/i-	'man'	*pesna-*	*zida/i-*
'big'	*salli-*	*ura-*	'road'	*palsa-*	*harwa-*
'burn'	*warnu-*	*kinu-* (?)	'say'	*mema-*	*assa*(*za*)-
'die'	*ak(k)-*	*wal-*	'see'	*au(s)-*	*manā-*
'head'	*harsar/n-*	*harmaha/i-*	'stand'	*ar-* (med.)	*tā-*
'know'	*sakk-*	*un(a)i-*	'water'	*watar/weten-*	*wār*

Thus, the differences between Hittite and Luwian seem to be rather close to those observable in the case of Polish and Russian, or perhaps Italian and Spanish. By contrast, the attested dialects of Luvian do not appear to display any differences in the core lexicon (the verb 'to do, make' discussed in 2.7 is not included in the hundred-word list). It would be impossible to explain their close similarities if we assume that the dispersal of Luvians throughout Anatolia occurred already in the third millennium BC. In the absence of a centralized state that could enforce the uniformity of language, the dialects of, say, Tabal and Kizzuwatna would have become mutually unintelligible over a period of a thousand years. One has no choice but to admit that extensive Luwian migrations must be synchronized with the period of Old Assyrian trade in Anatolia, if not with the Hittite Old Kingdom (cf. Bryce 2003: 31). If so, it is futile to look for

continuity between the migrations of Proto-Anatolians to Asia Minor, and the subsequent Luwian expansion, just as the German *Drang nach Osten* in the early second millennium AD in no way continues the westward migrations of Germanic tribes a millennium earlier. Neither is there any need for the basic direction of Luvian migrations to continue any old pattern, as the Germanic parallel clearly illustrates.

Another point that deserves explicit comments concerns the taxonomic status of "Luvian". A number of scholars (A. Morpurgo-Davies, T. Bryce, I. Hajnal) use the term "the Luvian languages" for the group comprising "Cuneiform Luvian", "Hieroglyphic Luvian", Lycian A, Lycian B (Milyan), and now also Carian. Assuming that the Luvian family consists of several distinct languages would allow one to relegate Luvian migrations to a more distant past. On the other hand, Melchert (2003b: 175-176) argues that the indigenous languages of Lycia, as known from the local inscriptions, represent close relatives of Luvian, but not its direct descendants. This prompts him to introduce the notion of the Luvic family that represents a higher taxonomic unit than the Luvian dialectal continuum and comprises Luvian and its close relatives of the first millennium BC (ibid: 177, fn. 7). If so, the earlier Luvic migrations must be considered separately from the more recent Luvian migrations.[4]

[4] At the same time, one must recognize that the delineation between the "Luvian" and "Luvic" forms is not always possible. Thus, Houwink ten Cate (1965: 113-87) conducted a detailed survey of Lycian and Cilician personal names attested in the Hellenistic period in order to demonstrate their "Luvian" character. Using the terminology adopted in the present dissertation, he was only able to show that the inhabitants of Southern Anatolia belonged to Luvic population groups. This distinction, however, is hard to make based on the onomastic material alone, since the crucial morphosyntactic innovations characterizing Luvian proper are not reflected in personal names.

It is perfectly possible, in my opinion, that the Luvic languages still formed a continuum of mutually understandable dialects in the Late Bronze Age. Nevertheless, all the occurrences of the term *luwili* in Hittite texts that are accompanied by non-Hittite citations appear to refer to the Luvian core of this continuum. Therefore, we lack positive arguments to claim that the linguistic ancestors of Lycians and Carians were identified as members of the Luvian speech community in the second millennium BC.[5] In fact, the complete absence of Bronze Age texts written in Proto-Lycian or Proto-Carian suggests the disparity of status between these dialects and Luvian, at least from the perspective of the Hittite elites.[6] Therefore, Melchert's methodological distinction between the notions of the Luvian and the Luvic dialects is not only formally meaningful but also sociolinguistically justified. In the absence of evidence to the contrary, it seems reasonable to assume that all the Luvic passages preserved in the cuneiform are also Luvian in the narrow sense, even if they lack the explicit label *luwili*. The (relatively) high prestige of Luvian in the Hittite capital licensed the preservation of these texts in the palatial archives of Hattusa.[7]

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[5] In fact, Hittite sources frequently refer to the Lukka-peoples, which, as we will see in 3.7 below, represent the likely ancestors of the classical Lycians, and the Lukka-lands that these people inhabited. Most scholars agree that the Hittite geographic terms Lukka and Luviya were applied to different territories.

[6] Compare the discussion in 3.4 and 5.7, where I discuss the transmission of the Arzawa and Kizzuwatna rituals respectively. The Kizzuwatna rituals that were performed in Luvian were partially recorded in their original language, while the rituals of Arzawa, where one spoke the local Luvic dialect, perhaps Proto-Carian, were invariably transmitted in Hittite.

[7] In practice, this sociolinguistic assumption is mainly relevant for claiming the Luvian identity of the dialect of Istanuwa, since the Istanuwa Luvian passages are never introduced by the adverb *luwili*.

Finally, a responsible scholar studying the history of the Luvian speech community must take a stance on the controversial issue of the Greek toponyms in -(ι)νθο- and -(α)σσο-, for which the Luvic origin has been claimed.[8] A reconstruction of the Luvic substrate in continental Greece would shift the "center of gravity" of the Luvic-speaking area far to the west, which in its turn would add plausibility to the scenario of Luvian migrations offered in Bryce 2003. In my opinion, the presence of a common substrate in Anatolia and the Balkans, a hypothesis that was first advanced in Kretschmer 1896, remains plausible. In particular, it is likely that Gk. λαβύρινθος 'palace of the Cretan kings, labyrinth' and the Carian place-name Λαβρυανδα attested in a Greek transmission, or the Greek mountain-name Παρνασ(σ)ός and the Anatolian town name *Parnassa* attested in a cuneiform transmission ultimately contain the same morphemes. This, however, does not point to an original Anatolian substrate in Greece any more than it bespeaks a Greek substrate in Bronze Age Asia Minor. In order to argue that this layer of toponyms has a Luvian or Anatolian origin, one has to demonstrate a preponderance of Luvian or Anatolian morphemes within this layer.

None of the Greek toponyms in -(ι)νθο- or -(α)σσο- attested outside Anatolia assuredly contains an inherited Anatolian root. Luv. *parna*- 'house' is frequently

[8] Forrer (1921: 23) was the first to insist on the "Luvian" character of the place names in *-anda* and "*-assus*". Kretschmer (1896: 293 ff; 401-409) had already compared the suffixes -νθο- and -σσο- of the toponyms of the mainland Greece and the Aegean islands with their Anatolian counterparts -νδα- and -σσο-, although he had assumed a non-Indo-European origin for the common substrate of Greece and Anatolia. In the later years Kretschmer modified his position in accordance with Forrer's suggestions. Among the later defendant of Kretschmer's views, one can single out Leonard Palmer, who was a staunch supporter of Luvian migrations to Anatolia through mainland Greece predating the coming of the Greeks (see e.g. Palmer 1965: 321-56 and Palmer 1980: 10-16). For the most explicit rejection of Kretschmer's views, see Kammenhuber 1969: 144.

invoked as the derivational base of Παρνασ(σ)ός, but this root lacks secure cognates outside Anatolia (cf. HEG, P: 569-71). By contrast a large proportion of toponyms in *-anda* and *-assa* attested in cuneiform sources appear to have been derived from Anatolian roots (Laroche 1961). This, however, can tell us little about the origin of the respective suffixes since both of them were synchronically productive in Bronze Age Anatolia. Thus, the town Milawata, which appears to represent the earlier name of the classical Miletus, was alternatively rendered *Millaw-anda* in Hittite sources (del Monte and Tischler 1974: 268). When Muwattalli II founded the new Hittite capital in the southern part of the Empire, he named it *Tarhunt-assa* after the Storm-god Tarhunt. Therefore, it is perfectly possible that all of the toponyms in *-(a)nda* and *-(a)ssa* with Anatolian root etymologies likewise represent secondary formations, while their counterparts of unclear origin, such as Purushanda or Nenassa, reflect an older stratum [9]

As for the suffixes in question, I find attractive the arguments for their non-Indo-Hittite origin that are presented in de Hoz 2004. The consonantism of the Greek -(ι)νθο- suffix appears to be more archaic than that of its Anatolian counterpart *-(a)nda* , since /t^h/ could be easily reinterpreted as /t/~/d/ in the Anatolian languages that lacked phonological aspiration, whereas the opposite change in Greek would be unmotivated. The presence of the (voiceless) aspirate series in the Pre-Greek substrate is independently confirmed through the devoicing of the etymological voiced aspirates in

[9]In typological terms, one can compare the proliferation of the toponymic suffix *-stan* in Central Asia. While this morpheme ultimately goes back to Ir. **stāna-* 'place', only two country names endowed with this suffix, Afghanistan and Tajikistan, have a predominantly Iranian population, and only the former of the two probably has an Iranian root etymology. By contrast, four country names formed according to the same model, Kazakhstan, Kyrgyzstan, Turkmenistan, and Uzbekistan are mostly populated by the Turks, and their designations are based on Turkic ethnic names.

Greek. With regard to the Greek suffix -(α)σσο-, de Hoz (2004: 46-47) reminds us of the existence of its allophone -(η)ττο- in Attica (for examples, see already Kretschmer 1896: 405). The dialectal variation between -σσ- and -ττ- in the inherited stratum of the Greek lexicon normally points to the etymological clusters *-*kj*- or *-*tj*-, which later developed into the affricate /ts/ or something similar. Neither the substrate suffix *-*nt*^{h}*o*- nor the substrate suffix *-*tso*- would have convincing comparanda in the Indo-Hittite language family. The reflexes of these suffixes in the Balkan toponymy were poorly integrated into the morphological system of the Greek language and therefore remained unproductive. In Asia Minor, the reflexes of the same morphemes were reinterpreted as the derivative of the adjectival suffix -*ant* and the possessive marker *-*assa* respectively, and this ensured their continued productivity.[10]

Based on this analysis, I conclude that the Anatolian toponymic stratum is confined to the territory of Asia Minor and that we do not have any positive arguments for the presence of Anatolian substrate in Euriope.[11] Consequently, I will assume that the Anatolian and (by implicature) Luvic linguistic phyliation took place within Anatolia.

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[10] For the reconstruction of the Luvian genitive ending -*assa*, cognate with Lycian -*ehe* and going back to Anat. *-*os-so* , see Section 2.4.

[11] The attempts to read the Aegean scripts in the Luvian language deserve but a passing mention. Some advocates of the Luvian colonization of Crete through western Anatolia have produced the idiosyncratic decipherments of the Linear A documents or the Phaistos disk, not accepted by the rest of the scholarly community (for the recent attempts, see e.g. Marangozis 2003 and Woudhuizen 2006). When dealing with the issue of the putative Luvian substrate in the Aegean, one is facing a vast continuum of secondary literature ranging from works by scholars with solid background in both Classics and Anatolian Studies, to the contributions made by Hellenists who are less familiar with Luvian, to the books and articles written by amateurs in both fields. One cannot get around the fact that those who are interested in the prehistory of the Greek language, the decipherment of Ancient Mediterranean scripts, or the "Sea people" migrations form a larger and more heterogeneous group in comparison with those who study Ancient Anatolian philology for its own sake. As long as the consensus on the areas settled by the Luvians

1.3 Structure of the Dissertation. Each of the chapters of this work contributes to the reconstruction of the history of the Luvian speech community, but their methodology is not uniform. Chapter 2 is organized as a corpus-based study of dialect geography. The object of study is restricted to the Luvian dialects in the narrow sense, as opposed to their Luvic relatives. The positive conclusions of this chapter consist of the reconstruction of Luvian dialectal phyliation. The discussion of the Luvic dialects to be (or not to be) reconstructed for the Bronze Age constitutes the main topic of Chapter 3. Since the corpus of relevant linguistic data is restricted in this case to a handful of proper nouns, more attention is paid to the study of historical sources and the reading of this chapter requires very little linguistic background. It concludes with a scenario of the ethnolinguistic history of western Anatolia that is best compatible with the available sources. The most significant results of this chapter are, however, negative. I endeavor to demonstrate that most of the claims regarding the presence of Luvians on the Aegean coast advanced in the secondary literature are either empirically unfounded or based on the broad understanding of the term "Luvian" in the sense "Luvic".

Chapters 4 through 6 all deal with linguistic contacts between Hittite and Luvian. Chapter 4 represents a focused essay that provides a linguistic proof of prehistoric structural contacts between the two languages through the comparative and historical analysis of the Anatolian reflexive pronouns. In comparison with the other parts of this work, this chapter is loaded with more terminology and its understanding probably

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is not reached, the exploitation of this ethnic group for speculations on Aegean prehistory will, no doubt, continue unabated.

requires some formal linguistic preparation. The structure of Chapter 5, which concentrates on the historical contacts between Hittite and Luvian in the period before the formation of the Hittite Empire, is more eclectic. I operate there with very heterogeneous pieces of evidence, both historical and linguistic, and sometimes have to recur to speculations in an attempt to unify this mosaic into a coherent picture. The significant non-linguistic conclusions of this chapter are new theories about the Luvian core area and the place of origin of the Anatolian hieroglyphic writing. Chapter 6 spans the period of some 150 years of the existence of the Hittite Empire, when we can simultaneously observe contact-induced changes in the phonology, morphosyntax, and lexicon of the Hittite texts. Consequently, it can be read as a self-sufficient essay in contact-linguistics, where various types of descriptive data are checked against each other and placed in the perspective of the general theory of language contact.

Since individual chapters of this work may appeal to different groups of readers, I do not expect that everyone interested in its final conclusions will peruse it from the beginning to the end. Therefore, I have tried to summarize my main arguments and/or place them in a more general perspective in the last section of each chapter. A possible strategy for someone who wishes to learn about my results but is not willing to commit himself to going through the hundreds of pages of a specialized discussion is to begin with the first and the last sections of Chapters 2 through 6. If one is interested in learning how I have arrived at the particular conclusions, one can proceed to reading the relevant sections, which are all cross-referenced in the introduction to each chapter.

At the same time, I do not want to create an impression that my dissertation is indigestible as a cohesive text. I hope that those interested in the application of

linguistic methods to the study of the forgotten pages of human history will find its consecutive reading not only useful but also entertaining. If this happens to be the case, I must share the credit for it with the Luvians. After all, they were kind enough to leave behind sufficient traces, which make possible the detective work leading to the reconstruction of their continuous presence behind the façade of the Hittite state.

2 LUVIAN DIALECTS

2.1 Introductory remarks. Before searching for the Luvian core area or discussing Luvian migrations, one needs to address issues of Luvian dialect geography. The comparison of Luvian dialects and the analysis of their respective archaisms vs. innovations may have important ramifications on various levels. On the one hand, the number and range of distinct dialectal innovations can give one an idea about the time that had elapsed between the collapse of the reconstructed "common Luvian" state and the actual attestations of individual dialects. On the other hand, specific dialectal configurations may provide clues as to the direction of likely Luvian migrations through Anatolia. To give just one example from not such a remote region, the common innovations shared by the landlocked Arcadian and the peripheral Cypriote dialects of Greek, but absent in the Doric dialects spoken in the vast areas between the two, allows one to identify Arcadian and Cypriote as descendents of the dialectal continuum that characterized Bronze Age Southern Greece, and viewing Doric tribes as later newcomers to the area.

The difficulties involved with reading and understanding Luvian texts inhibited for a long time the linguistic discussion of dialectal variation within Luvian. The first

attempts at deciphering Anatolian Hieroglyphic were made in the late nineteenth century, when little was known about the Anatolian languages, and the label Hieroglyphic Hittite coined during this period reflected nothing more than a plausible historical guess. Nevertheless, this label continued to be used even after the difference between the Hittite and Luvian languages had been firmly established, and specific isoglosses linking Cuneiform Luvian and Hieroglyphic Anatolian texts had been identified. One of the reasons that contributed to the long survival of this misnomer was erroneous phonetic values assigned to individual Hieroglyphic Anatolian signs, which exaggerated the differences between Luvian texts written in the Cuneiform and Hieroglyphic scripts. It is characteristic that Emmanuel Laroche, who invested considerable efforts into proving a close relationship between Cuneiform Luvian and Hieroglyphic Anatolian (Laroche 1958, 1960, 1967), chose the name *Les hiéroglyphes hittites* for his catalogue of Anatolian hieroglyphs (Laroche 1969).[1] Even Piero Meriggi, who proposed the term "hieroglyphisch-luvisch" as early as 1934, returned nonetheless to the traditional designation "hieroglyphisch-hethitisch" in his works published in the sixties (see especially Meriggi 1962: 1 with fn. 1).

The uncertainties that hampered the reading of Luvian hieroglyphic inscriptions sometimes complicated the study of the cuneiform data. Thus Bossert (1944) wondered whether foreign words marked by the Glossenkeil (gloss mark) in the Empire Period

[1] One can say in Laroche's defense that the title of his work did not directly refer to the language rendered by Anatolian hieroglyphs, but perhaps conveyed the idea of "hieroglyphs used in the Hittite Empire and Neo-Hittite states". Nevertheless, one must recognize that Laroche 1969, still remaining a useful research tool, has an enormous impact on the proliferation of the misleading term "Hieroglyphic Hittite".

Hittite texts should belong to Luvian or to "Hieroglyphic Hittite" and, being unable to answer this question, assigned them on methodological grounds to a separate "Glossenkeilsprache". Once one recognizes that the Hieroglyphic Luvian and Cuneiform Luvian texts are written in essentially the same language, the existence of the "Glossenkeilsprache" obviously loses it *raison d'être*. The small overlap between Glossenkeil-words, lexical items occurring in Cuneiform Luvian passages, and the vocabulary of Hieroglyphic Luvian inscriptions must be explained through the genre peculiarities of the respective texts, rather than their dialectal affiliations. The same holds for the lexicon of the so-called "Istanuvian Songs", whose seemingly mundane subjects separate them sharply from ordinary Cuneiform Luvian incantations.

The situation changed with the New Readings of several hieroglyphic signs, independently proposed by Günter Neumann and J. David Hawkins in cooperation with Anna Morpurgo Davies (Hawkins et al. 1974). The improved transliteration system eliminated the most striking differences between cuneiform Luvian and Hieroglyphic Anatolian. After the New Readings had been met with general acceptance among specialists, the term Hieroglyphic Hittite, or simply Hieroglyphic, was gradually replaced with Hieroglyphic Luvian.[2]

Although the misunderstandings responsible for the terms such as "Hieroglyphic Hittite" or "Clossenkeil Sprache" have been successfully resolved, and

[2] Nevertheless, my personal experience shows that the misnomers "Hieroglyphic Hittite" or "Hittite Hieroglyphs" still remain common in the jargon of those Near Eastern scholars who are less versed in Anatolian philology.

should be now primarily of interest for the historians of Near Eastern Studies, rather than for linguists, they help to explain why no serious discussion of dialectal divisions within Luvian was possible up to the very recent past. The first attempt at such a discussion can be found in Melchert (2003b: 171-75), where a number of morphosyntactic variables important for dialectal classification are listed. Melchert properly objects to the attitude of Starke (1997a: 458a) and Carruba (1998), who dismiss dialectal distinctions within Luvian as being too insignificant to merit serious investigation. He also makes a fundamental observation that the "Glossenkeil-dialect" display features that unite it with the dialect of hieroglyphic inscriptions rather than the dialect of cuneiform texts from Kizzuwatna. Elaborating on this observation will constute one of the main motives of this chapter. Nevertheless, the scope of his essentially synchronic work did not allow Melchert to dwell on particular isoglosses or follow the full implications of his insights for the study of Luvian dialectology. I hope to accomplish both tasks below.

For the purposes of the present discussion, I will ignore the onomastic and toponymic materials and limit myself to the texts and lexical data known from indigenous Anatolian sources. I suggest dividing them into two basic groups: Bronze Age sources that predate the collapse of the Hittite Empire, and Iron Age sources that come from New Hittite states. I believe that this chronological dichotomy is methodologically safer than the aprioristic segregation of Cuneiform Luvian and Hieroglyphic Luvian dialects, which confuses the issue of languages vs. writing systems. While all the Iron Age Luvian texts were written using the hieroglyphic script, Bronze Age Luvian must be studied based on both the cuneiform and the hieroglyphic sources.

Before embarking on a linguistic discussion, one needs to specify the geographical distribution of Luvian data that need to be taken into consideration. This issue is addressed in Section 2.2. Sections 2.3 through 2.9 are devoted to the discussion of linguistic isoglosses that correlate with the classification of Luvian texts proposed on historical and philological grounds. I do not intend to describe all the known innovations of individual Luvian dialects, but only those that are, or were thought, to be relevant for their subgrouping.[3] With one exception addressed in Section 2.3, I will forego discussing phonetic innovations that occurred within Luvian, since these can be studied almost exclusively on the basis of the Iron Age texts, and concentrate instead on morphosyntactic developments. The focus of my account is the linguistic relationship between the Bronze Age dialects of Hattusa and Kizzuwatna, and the dialectal origins of Iron Age Luvian.[4] Section 2.10 summarizes the conclusions obtained through the comparison of historical-philological and linguistic classification of Luvian data.

2.2 Philological Classification. The Bronze Age Luvian data at our disposal have a wide geographical distribution. The classification provided below is based on historical and philological considerations, and excludes the discussion of structural dialectal isoglosses, which will be addressed later in this chapter. Since the relevant

[3] Thus I will not address, for example, the innovative 1sg. pret. /-xan/ used instead of the earlier /-xa/ (Melchert 2003b: 192), since the occurrences of this ending are restricted to late texts and therefore we cannot use it as an isogloss defining a Luvian dialectal area in the Bronze Age.

[4] I will have nothing to say about the dialectal position of Low Land Luvian, since the facts at our disposal are not sufficient for its meaningful linguistic discussion, and I will use "the Songs of Istanuwa" mainly as a way of controlling my conclusions about other dialects, since the dialectal unity of this corpus is hard to prove. The fact that both these areas contained Luvian population groups will, however, be important for the argument of the subsequent chapters.

historical and philological data are frequently lacking, this classification does not pretend to be exhaustive.

Luvian incantations in the ritual of Zarpiya (CTH 757) must have been recorded in the dialect of Kizzuwatna, the professed place of origin of this ritual practitioner (Starke 1985: 50). Although we lack exact information about the ethnic background of the attendant woman Kuwatalla and the "cunning woman" (^{MUNUS}ŠU.GI) Silalluhi (CTH 759-62), religious historians classify the rituals attributed to these individuals as belonging to the Kizzuwatna group, since they show the admixture of Hurrian elements. The texts attributed to Kuwatalla and Silalluhi mention several Hurrian/Syrian divine figures, such as Hebat (KUB 9.6 ii 6), Sawoska (KUB 35.82 7), and Ninatta (KUB 35.71 iii 3). On the other hand, the name of Silalluhi is mentioned in the Ammihatna ritual in a Hurrian context (Haas-Wilhelm 1974: 6). The ritual of Puriyanni (CTH 758) can be connected with the same region, since a number of Luvian collocations occurring in this text find nearly exact parallels in the rituals attributed to Kuwatalla/Silalluhi (cf. (20) vs. (22) below). Note that both the incantations of Puriyanni and Kuwatalla/Silalluhi contain the transparent West Semitic borrowing *halāl(i)-* 'pure', which does not seem to occur in Hittite or Luvian texts from beyond Kizzuwatna.

The Luvian incantations coming from Kizzuwatna constitute about one half of the available Bronze Age Luvian Corpus, but they are understood to various degrees. Several quasi-bilingual passages contribute to our knowledge of Luvian ritualistic vocabulary, while the meaning of many other words can be plausibly extrapolated from Hittite. Nevertheless, no continuous translation is available for any of the rituals mentioned in the previous paragraph. Laroche 1959 and Starke 1990 can be consulted

for the translation of individual sentences and passages, while Melchert 1993 represents a reasonably up-to-date *vade mecum* through the rest of the relevant incantations. In chronological terms, they are likely to represent a relatively homogeneous group, recording the ritual practices of the early fourteenth century BC (cf. the sociolinguistic discussion of these texts in 5.8 below).

On the whole, the Hittite/ Luvian texts from areas beyond Kizzuwatna are thought to be characterized by less Hurrian influence (Singer 1981: 124). The variety of Luvian spoken in the Lower Land is likely to be reflected in a short incantation embedded in the Tunnawiya ritual (CTH 409). The name of the "cunning woman" Tunnawiya associates her with the city of Tunna (classical Tynna), located near Tarhuntassa (Hutter 2003: 248), while Miller (2004: 255-58) persuasively argues for separating CTH 409 from the Kizzuwatna ritualistic tradition. The Luvian forms sprinkled through the texts describing the cult of Huwassanna (CTH 690-94) and collected in Laroche 1959: 175-77 also reflect the dialect of the Lower Land, since the veneration of this female deity was associated with the town of Hubisna (classical Kybistra).[5] This is, of course, an extremely meager corpus, even though it is intrinsically likely that some of the Luvian incantations whose exact provenance cannot be identified also originated in the Lower Land.

Two types of sources can contribute to our knowledge of Luvian dialects spoken in the area of Hattusa. On the one hand, we have a large corpus of lexical items corresponding to what was inauspiciously labeled "Glossenkeilsprache". As I intend to

[5] For the location of Tunna and Hubisna, see del Monte and Tischler 1978: 117, 439.

argue in 6.4.2 on purely philological grounds, Luvian foreign words embedded in the discourse attributed to Hittite kings and high officials of the Empire period are unlikely to represent the mediation of Luvian scribes and should be taken at their face value. On the other hand, the extensive Hieroglyphic inscriptions of the last Hittite kings were clearly composed in a variety of Luvian. Although the location of some of them (notably Emirgazi altars) is distant from Hattusa, I deem it very likely that their text was designed at the royal court. For the widespread Hittite-Luvian bilingualism in Hattusa in the Empire period see van den Hout 2005 and Chapter 6 of the present dissertation.

In some cases it is impossible to decide on historical grounds whether a particular text reflects the variety of Luvian spoken in Hattusa, or in the Lower Land. This holds for the Hittite rituals preserved in the Old and Middle Scripts and containing alternating Luvian and Palaic passages (CTH 752, Starke 1985: 39-42). The same thing can be said about the festival CTH 665, which reflects the Hittite state cult, but contains Luvian passages (Starke 1985: 270-94). The *asusala*-men, which apparently play the key role in the Old Script version of a script of this festival, are replaced with the related Luvian professional designation *asusatalla*- in its Late New Script version.[6] The ritual practices of the Hittite Old Kingdom apparently drew upon the traditions of Luviya and Pala, which are mentioned in the Hittite Laws as separate geographic entities under Hittite sovereignty. Since the precise boundaries of Luviya are unknown, one can only

[6] For the Luvian origin of the suffix -*atalla*-, see Melchert 2005: 456. As per Hawkins (2000: 480a), the Iron Age Luvian infinitive *asusatallaūna* 'to ride on horse-back' is probably not cognate with this term, since nothing in the actions of *asusatalla*- cult officials betrays their connection with horses.

say at this point that the relevant Luvian incantations ought to have originated in the core area of the Old Kingdom.[7]

It is important to keep in mind in dealing with Bronze Age Luvian texts coming from the central part of the Hittite state that their time span is comparable to that of the Hittite texts found in Hattusa. The earliest cuneiform passages in question reflect the ritual practices of the Old Kingdom, while the bulk of Bronze Age hieroglyphic inscriptions were produced in the second part of the thirteenth century BC. Since we know that the Hittite language underwent significant evolution during the period in question, it would be a methodological mistake to exclude the same possibility in the case of Luvian. Therefore, the dialectal innovations of Hattusa Luvian established based on the thirteenth century data may be absent in older Luvian texts, even if they were composed in the area of Hattusa. In what follows, I will use the term Empire Luvian for the dialect of Luvian words and texts recorded by Hattusa scribes in the late fourteenth and thirteenth centuries BC.

The westernmost area that can be associated with the preserved Luvian textual passages is the Sakarya river basin. A group of texts devoted to the cultic practices of the town Istanuwa and containing Luvian poetic passages (CTH 771-72) prescribes sacrifices to the (deified) river Sahiriya (del Monte and Tischler 1978: 152). We know from other sources that the river Sahiriya was situated somewhere between Hatti and

[7] Hutter (2003: 250-51) hypothesizes that the Luvian passages of CTH 665 originated in Kizzuwatna, even though the ritual itself was written and probably composed in Hattusa. In my opinion, there are no grounds for this assertion. Hutter seems to base this claim on the lack of linguistic differences between the Luvian of CTH 665 and the Luvian of the Kizzuwatna rituals, but this argument would be cogent only if one could demonstrate that the distinct structural innovations of Kizzuwatna rituals are present in CTH 665. As we will see below, this does not appear to be the case.

Arzawa (del Monte and Tischler 1978: 545). The identification of this hydronym with Sangarius of classical sources and the present day river Sakarya is very tempting. The only problem involved in this hypothesis is the occurrence of the deity *hurlas* ^{d}*Inar* 'Inar of the Hurrians' next to the river Sahiriya in one of the Hittite passages referring to the cult of Istanuwa (Starke 1985: 322). The overall structure of the Istanuvian pantheon does not seem, however, to betray Hurrian impact (Haas 1994: 582-83). Since "Inar of the Hurrians" does not appear to represent an indigenous theonym, but rather a syncretism made by outsiders, I am inclined to dismiss this divine title as evidence for Hurrian influence on Instanuwian religious practices.

The "Songs of Istanuwa", to be performed at various points between ritual acts, are not known in their entirety. Only the initial lines of the songs, sufficient to recognize them for someone intimately familiar with the local repertoire, are preserved as part of the ritual script. Tracing the peculiarities of the Istanuwian speech based on this evidence is similar to studying the dialects of Tennessee with the help of a CD jacket inscribed with titles of local country songs. Nevertheless, this is a large corpus in comparison with what we can glean from more westerly regions of Anatolia, and it allows one to identify the local dialect(s) as Luvian. For the sake of completeness, one also has to mention the "Songs of Lallupiya", which are preserved in the same fashion as the "Songs of Istanuwa", but are fewer in number (CTH 773). Both CTH 771-72 and CTH 773 contain the archaic[?] form *pāyu* 'let it give'[?], unknown to the rest of the Luvian dialects (Melchert 1993: 163).

Finally, there are Bronze Age Luvian texts that give us confusing historical clues as to their origin. This holds, for example, for the myth about the neglected deity and the

accompanying ritual (CTH 764, Starke 1985: 236-241). Although one encounters the mention of the Hurrian god Nubadig in KUB 35.108 iv 13, the text's overall analysis does not speak in favor of pervasive Hurrian influence. Its conspicuous divine figures are Kamruseba and her son, the Tutelary Deity of Taurisa. It is to be noted that Kamruseba probably originally belonged to the pantheon of Kaneš (Klinger 1996: 157), while the town of Taurisa was located in the vicinity of Zippalanda, in the core area of the Hittite Kingdom (Haas 1994: 816). The existence of Hittite recensions of the same myth interspersed with occasional Luvian foreign words speaks in favor of a gradual process of its adaptation at the hands of Hattusa scribes.

On the other hand, the content of many Luvian fragments is not conducive to hypothesizing about the place where the respective texts had originated. Most of the Luvian magical incantations booked under CTH 765 and 767 belong to this group. Their anonymous character precludes prosopographic analysis, while no specific parallels with texts of known origin are forthcoming. In my opinion, many incantations of this group may have a folkloric character, which means that they could be simultaneously used in various parts of the Luvian-speaking area. Here too, we encounter the ongoing translation of texts from Luvian into Hittite accompanied by incompetence-driven code-switching (compare the discussion in 6.4.4).

The geographical localization of Iron Age Luvian texts is easier to accomplish. Given that most of the monumental hieroglyphic inscriptions have been found *in situ* and frequently mention the name and title of the local commissioner, one can normally assume that they reflect the scribal practices of the area of their provenance. This does not, of course, amount to saying that the vernacular of the area was Luvian, since the

language of public monuments normally reflects the high variety in diglossic communities. Nevertheless, the distribution of these inscriptions allows one to form a general idea about where Luvian continued to be used as an official language.[8]

The map indicating the location of Hieroglyphic Luvian inscriptions can be found in Hawkins (2003: 142). As expected, there is a significant overlap between the areas where Bronze Age and Iron Age Luvian texts must have originated. The area of historical Kizzuwatna corresponded to the Iron Age states of Que (Hiyawa) and Gurgum, while the Iron Age kingdom of Tabal was located in the historical Lower Land. The territory in the bend of the Halys river, where the Hittite capital was located in the Bronze Age, yielded fewer Hieroglyphic Luvian texts, presumably because its population had a substantial Phrygian component during this period. Nevertheless, one must mention the poorly preserved inscriptions ÇALAPVERDİ 1 and 2 (Hawkins 2000: 498) and the ALİŞAR ostracon apparently inscribed with an epichoric name Hattusamuwa (Hawkins 2000: 568). No Hieroglyphic Luvian inscriptions were found in the Sakarya river basin, but one must keep in mind that this area constituted the central part of the Phrygian Kingdom, and so its earlier Luvian population was likely to be displaced or assimilated. The same, *mutatis mutandis*, holds for Western Anatolia, where Luvic linguistic elements, especially personal names can be gleaned only from Lydian inscriptions in the period under consideration.

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[8] This general observation can be supported through comparing monumental inscriptions with the ASSUR letters written or dictated by Luvian merchants. The ASSUR lead strips, which differ so much in terms of their genre and execution from the rest of the Hieroglyphic Luvian corpus, also show several grammatical and/or orthographic peculiarities.

By contrast, the area of widespread Luvian literacy appears to have expanded southeast in the Early Iron Age. A large number of Hieroglyphic Luvian texts come from the New Hittite states in the Orontes and Middle Euphrates valleys, as well as in the area between the two. The petty "New Hittite" kingdoms emerged in Northern Syria after the fragmentation of the erstwhile Hittite vassal state of Carchemish, and their rulers could continue to use the Anatolian hieroglyphic script for public monuments as one of the ways of invoking associations with the Hittite imperial past. One should therefore pay attention to the reminder of Bryce (2003: 125) that "the discovery of a hieroglyphic inscription in a particular area is not in itself an unquestionable indicator that this was a Luvian-occupied zone".[9]

Nevertheless, there are arguments to support the view that Luvian was more than a mere language of tradition in Syria. Although the royal monumental inscriptions constitute the largest part of this textual corpus, a number of texts commissioned by private individuals and/or for private purposes, such as bullae or inscriptions on tombstones, are also available.[10] The personal names appearing in these inscriptions are predominantly Luvian, or at least Anatolian, while Hurrian onomastic elements appear to be restricted to a handful of dynastic names (e.g. KARKAMIŠ A7, Hawkins 2000:

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[9] It is to be noted, however, that Bryce makes rather arbitrary implications from this maxim. Thus he questions the spread of Luvian to the core area of the Hittite Empire, even though it is independently supported through grammatical and lexical interference between Late Hittite and Luvian, but states without hesitation that the Western Anatolian kingdom of Mira was Luvian-speaking, a hypothesis for which we have considerably less linguistic evidence.

[10] Compare, for example, the burial inscriptions TİLSEVET, KARKAMIŠ A18b, KARKAMIŠ A5a, KARKAMIŠ A5b, a shell inscribed with the name of "King Urahilana" (HAMA frag. 5), and bullae used as tallies of sheep (HAMA frag. 7-10). All of the above documents have been published in Hawkins 2000.

129). This distribution contrasts with the sociolinguistic situation in the Late Bronze Age, when the Hurrian names were widely used throughout Northern Syria, Hurrian "Glossenkeil-words" abounded in the local cuneiform texts, while the use of Hittite and Luvian languages appears to be restricted to the official sphere.[11] One should also compare also the remarks of Singer (2005: 439-40) regarding the spread of burial through cremation to Syria in the Early Iron Age as a possible indicator of Anatolian migrations to this area.

This does not, of course, imply that Luvian remained the only spoken language in Northern Syria: then as before we have abundant evidence of Northwest Semitic presence in this region. But the existing evidence is compatible with a domino model, according to which the displacement of certain Luvian population groups from Central Anatolia ultimately caused the migration of other Luvian population groups into Syria.

2.3 Common Gender Accusative Plural. In what follows I intend to discuss linguistic isoglosses that can partially substantiate the classification of Luvian texts as to their origins proposed in the preceding section. The first change to be addressed is a morphosyntactic innovation separating Empire Luvian and Iron Age Luvian from Kizzuwatna Luvian.

The Luvic languages inherited the Proto-Anatolian common gender accusative plural ending *-*ms* > *-*ns*. A crucial morphological innovation of the Luvic subfamily is

[11] The distribution of personal names in the late Bronze Emar is documented in Pruszinsky 2003. The author concludes that the Anatolian personal names in the Emar documents are closely associated with officials from Carchemish and the Hittite heartland, while the Hurrian personal names, which occurr about three times more frequently, appear to reflect the existence of an indigenous minority group.

the analogical formation of nom. pl. c. *-*nsi* in lieu of the inherited nom. pl. c. *-*es* preserved in Hittite.[12] Another innovation, characterizing the Luvian language alone, is the formation of the dative plural ending *-*ans*, which appears to represent the result of a contamination between the old dat. pl. in *-*as* and the accusative plural ending.[13] All three endings underwent regular epenthesis in the history of Luvian and came to sound like [-nts], [-ntsi], and [-ants] respectively.[14] In the cuneiform orthography they were rendered by graphic sequences -*Vn-za* and -*Vn-zi*. This stage is directly reflected in Laroche's sketch of Cuneiform Luvian grammar (Laroche 1959: 137).

The New Readings of Hieroglyphic Luvian signs L 376 and L 377 have enabled scholars to see that the Cuneiform Luvian plural forms ending in -*Vn-zi* and -*Vn-za* find their direct counterpart in Hieroglyphic Luvian terminations -*V-zi* and -*V-za*. Since the syllable-final -*n* was not reflected in the Hieroglyphic Anatolian script, the formal correspondence between the two pairs is impeccable. Their functional distribution is, however, different. The Luvian plural forms in -*zi*, as known to us from the first millennium hieroglyphic inscriptions, function as both common gender subjects and direct objects, while plural forms ending in -*za* invariably function as indirect

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[12] For the common Luvic date of this process, see Melchert (2003b: 176, fn. 6 with ref.). Unfortunately, the origin of the -*i* extension in the nom. pl. remains unclear.

[13] Alternatively, one can argue that Luvian extended the function of the original acc. pl. *-*ns* ending to dat. pl., and then extended the thematic dative plural in *-*ans* to other dative plural forms in an attempt to disambiguate the dat. pl. and acc. pl. case endings. None of the two explanations is particularly straightforward linguistically, but the existence of the *-*as* ending in Proto-Luvic is born out by the Lycian evidence (Starke 1990: 44-45). Note that the dat. pl. ending -*e* is now postulated not only for Lycian, but also for Milyan (e.g. dat. pl. *xbade*, Melchert 2004a: 135).

[14] The situation is further complicated by the sporadic syncope [ija] > [i:] in Luvian (Melchert 2003b: 183), which frequently yields dative plural forms ending in -*inza*

objects in the inscriptions of the same period.[15] This important distinction, noted already in Hawkins et al. 1974: 169, fn. 100, can be summarized in the following table:

Table 2: Plural Cases in the Luvian Dialects

	"Cuneiform Luvian"	"Hieroglyphic Luvian"
nom. pl. c.	-nzi	-nzi ↓
acc. pl. c.	-nz(a)	-nzi
dat. pl.	-(a)nz(a)	-(a)nz(a)

The contrast between the usual forms of common gender plural accusative in Bronze Age and Iron Age Luvian can be illustrated with the following examples, where the relevant endings are highlighted:

(1) KUB 9.31 ii 22-24, CTH 757.B (NS), Starke 1985: 53
^{d}An-na-ru-um-mi-en-zi aš-ha-nu-wa-an-ta ku-in-zi wa-aš-ša-an-ta-ri
^{d}Lu-u-la-hi-i**n-za**-aš-tar hu-u-up-pa-ra-**za** ku-in-zi hi-iš-hi-ya-an-ti
'*Annarummi*-gods, who wear bloodied (clothes), who tie on Lulahian belts…'

(2) KARKAMIŠ A15b, § 15, Hawkins 2000: 131.
POST+ra/i-**zi**-pa-wa/i-tú |FRATER-*LA*-**zi-i** MAGNUS+ra/i-nu-ha
'And I promoted his younger brothers'.

Since the comparative data indicate that the original function of *=za* was to mark the plural accusative of the common gender, the distribution of Luvian endings attested in the inscriptions of the Iron Age must be considered an innovation. It is, however, not a priori clear whether this was an innovative feature of Luvian as a whole, or that of a particular Luvian dialect. In the first case, we are dealing with a purely chronological distribution that is not useful for establishing dialectal isoglosses, while in the second

[15] These cases should be distinguished from neuter singular nominal forms endowed with the extension /-sa/, which appears as *–za* after /-n/ and /-l/ (Melchert 2003b: 186-87 wit ref.).

case one can attempt to localize the dialect of Bronze Age Luvian that had a particular impact on the language development of the later period.

Melchert (2003: 173) pronounced himself in favor the second solution. He has highlighted the Luvian incantation in one of the Kizzuwatna rituals attributed to Kuwatalla, the two copies of which show a systematic pattern of grammatical errors. The original text of the incantation presumably contained a long chain of plural accusatives in *-nz(a)*. Its later copies, presumably executed in Hattusa, inconsistently replace them with forms in *-nzi*. It is significant that both copyists began a chain of accusatives with innovative forms, presumably reflecting their own idiolects, but then realized their mistakes and switched to the standard ending *–nz(a)* at different points in the sentence.[16] According to Melchert's cautious suggestion, the scribal indecision has to do here with a grammatical mismatch between the Luvian dialects of Kizzuwatna and Central Anatolia.

(3) KUB 35.45 ii 18-21, CTH 760.II.2.A (NS), Starke 1985: 152
x-x EN-ya ti-wa!-a-li-ya pí-⌜ya⌝-aš ^{LÚ}KÚR.MEŠ-i**n-z[i]**
kat-ta-⌜wa⌝-at-na-al-li-i**n-za** ú-ut-na-aš-ši-i**n-za** hi-iš-hi-ša-aš-ši-i[**n-]za**
ta-pa-ru-wa-aš-ši-⌜i**n**⌝**-za** ta-a-ta-ri-ya-am-ma-na-aš-ši-i**n-za**
hi-i-ru-t[a-aš-]ši-i**n-za** EN.MEŠ-a**n-za**
KUB 35.48 ii 11-14, CTH 760 II.2.B (NS), Starke 1985: 155
[EN-y]a ti-wa-li-ya pi-ya-aš ^{LÚ}KÚR-i**n-zi** [kat-ta-wa-at-na-a]l-li-i**n-zi**
ú-ut-na-aš-ši-in-zi hi-iš-hi-ša-aš-ši-**zi** [ta-pa-ru-w]a-aš-ši-i**n-za**
ta-ta-⌜ri⌝-ya-am-ma-aš-ši-i**n-za** [hi-ru-ta-a]š-ši-i**n-za** EN.MEŠ-a**n-za**
'O …, the Sun-like lord, render them, the enemies, the lords of revenge, spells, (magic) bonds, *taparu*-, incantations, and curses[?]'!

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[16] A potentially similar example is the phrase DINGIR.MEŠ-*in-zi pu-u-na-ti-in-za* 'all the gods' in KUB 35.107 iii 7. Starke (1985: 238) assumes that this is the subject phrase and takes *pu-u-na-ti-in-za* as a scribal error for the expected **pu-u-na-ti-in-zi*. In my opinion, the case error is more likely to occur in the first constituent of a nominal phrase, and so I suggest that DINGIR.MEŠ-*in-zi* may represent a scribal modification of the original acc. pl. *DINGIR.MEŠ-*in-za*. The fragmentary context, however, makes it impossible to verify my hypothesis.

Van den Hout (2005: 236) adduced four additional examples where the Luvian forms in *-nzi* function, likely or assuredly, as plural accusatives in cuneiform texts. In all these cases we are dealing with Luvian foreign words embedded in Hittite texts. Examples (4) and (5) are coming from ritual texts that probably originated in Kizzuwatna and Arzawa respectively, example (6) is taken from an oracular inquiry that was likely recorded in Hattusa, while example (7) belongs to the Hittite adaptation of the Atra-hasis epic. The only feature that unites all these examples is the lack of a Luvian context for the problematic forms. Whatever the origin of the respective passages may be, it was obviously easier for a copyist to modify the case morphology of Luvian nouns, adjusting it to the current colloquial norm, if the rest of the passage did not allow him to rectify the grammar. In these cases, however, scribal interference cannot be directly proven, since we lack parallel contexts with Luvian forms in *-nz(a)*.

(4) KBo 11.2 i 8-10, CTH 703.1.A (MH$^{?}$/LNS), Lebrun 1996: 40
IGI-zi UD-at n=asta ^{LÚ}HAL 1 UDU kuenzi nu=kan ^{UZU}Ì.UDU arha dāi
nu=za LUGAL-us SISKUR ha-la-li-e**n-zi** iyazzi
'On the first day the exorcist slaughters one sheep and takes the sheep fat away, so that the king may accomplish pure sacrifices'. [17]

(5) KUB 54.65 ii 10-11, CTH 757.E (NS), Bawanypeck 2005a: 142
nu ^{d}Iyarrin 3-*ŠÚ* ekuz[zi] *ŠA* ^{d}Iyarri DINGIR.MEŠ Mar-wa-i**n-z[i** x-*ŠÚ* ekuzzi]
Then he drinks Iyarri 3 times [and he drinks] *marwai*-gods of Iyarri [x times]

(6) IBoT 2.129 obv. 22-24, CTH 574 (LNS)
^{d}UTU-*ŠI*=ya=kan kuwapi ŠÀ.BI É DINGIR-*LIM* wezzi nu *IŠTU*

[17] One should further compare KUB 24.5 obv. 29 (+) KBo 9.13 obv. 19 *lukkatti=ma* LUGAL-*us* SISKUR […]*inzi* DÙ-*zi* 'At dawn the king performs … sacrifices'. Unfortunately, the Luvian accusative plural form in the lacuna cannot be restored with certainty. The restoration [*ha-la-le-e?-i*]*n-zi* attempted in Kümmel 1967: 10 appears to require more space than is available.

⌜É⌝.GAL-*L*[*IM*]
EZEN$_4$ še-hi-el-li-i**n-zi** pieskir kinun=ma=aš karšanue[r]
'When My Majesty enters the temple, they used to give pure festivals on account of the palace, but now they have cut them off'.

(7) KUB 8.63 iv 12-13, CTH 347.1 (NS), Polvani 2003: 534
nu kišš[an iya$^{?}$] ≤hu-ta-nu-e**n-zi** dā
'[Do$^{?}$] as follows: take *hudanu*-s'

In the following case, a copyist's error can be demonstrated by purely philological means. Examples (8) and (9) taken from two copies of the same birth ritual, are identical except for the final verbal form, which is replaced with the shorthand KI.MIN 'ditto' in (9). Nevertheless, the preceding context unambiguously shows that *kistanunun* 'I burned' represents a proper antecedent for KI.MIN in (9). In (9) we encounter the plural accusative in *-nz(a)*, expected in Cuneiform Luvian texts, while in (8) it is replaced with acc. pl. *-nzi*, typical of Hieroglyphic Luvian, but also occurring in examples (3-7). The assumption of an error driven by interference with the Luvian dialect of the scribe emerges as the only likely solution. Note that in this case we are also dealing with Luvian foreign words embedded in Hittite clauses.

(8) KUB 17.15 ii 6-9, CTH 767.2.C (LNS), Starke 1985: 232
[n=asta anda hu-u-i]š-te-i**n-zi** [ša-pár-ta-ra-an-zi] kistanunun [n=asta and]a tah-ha-ra-a**n-zi** [ma-al-wa-ra-a**n-z]i** kistanunun
'I have extinguished birth-cries$^{?}$ (and) [*sapartara*-s], I have extinguished *tahhara*-s (and) [*malwara*-s]'.[18]

(9) KUB 35.145 ii 14-15, CTH 767.2.A (NS), Starke 1985: 230
[n=asta anda h]u-u-iš-ti-i**n-za** ša-pár-ta-ra-a**n-za** KI.MIN n=asta anda [tah-ha-ra-an-za] ma-al-wa-ra-a**n-za** KI.MIN
Birth-cries$^{?}$ (and) *sapartara*-s, ditto, [*tahhara*-s] (and) *malwara*-s, ditto.

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[18] The preverb *anda* is left without translation here. Perhaps it indicates that "extinguishing" occurred simultaneously with certain ritual acts, which are, however, not recorded in the available portion of the text.

The merger between plural nominatives and accusatives of the common gender can already be observed in the Luvian dialect of Hattusa in the thirteenth century BC. Innovative accusative forms in *-nzi* certainly stem from the interference of copyists in (3) and (8), and the same conclusion is probable in (4) and (5). The same form in (6) may have been faithfully recorded from a priest conducting the oracular inquiry, while in (7) it is likely to reflect the Luvian idiolect of the translator. At the same time, there is limited evidence that acc. pl. in *-nz(a)*continued to be used with Luvian foreign words embedded in New Hittite texts. Thus example (6) can be contrasted with example (10), which is likewise taken from an oracular inquiry. The dates proposed for this text range from the reign of Mursili II to the reign of Hattusili III, but nobody doubts that it represents an original New Hittite composition (Houwink ten Cate 1983-1984: 44, fn. 29 with ref.).[19]

(10) KUB 5.6 ii 46, CTH 570 (NH/NS), Archi 1979: 88
nu=kan $^{MUNUS.MEŠ}$dam-ma-ra-a**n-za** *I-NA* ^{URU}Zithara parā neanzi
'One dispatches *dammara*-women to Zithara

The data presented above admit of two different interpretations. Either the Luvian dialect spoken in the area of Hattusa was characterized by synchronic variation between acc. pl. c. *-inzi* and *–inza*, or Luvian foreign words in original New Hittite compositions reflect two competing dialectal norms. Unfortunately, the choice between these two alternatives cannot be made based on the analysis of Bronze Age Hieroglyphic Luvian inscriptions. The sign L 376 (<zi> in later Luvian) had the value <za>/<zi> in

[19] Compare also the Luvian form ⸜*la-pa-na-li-an-za* occurring in the Bronze Tablet and the Ulmi-Tessub treaty. Otten (1988: 66) takes is as acc. pl. 'pasturing rights (vel sim.)' while van den Hout (1995: 282) prefers to interpret it as acc. sg. 'summer pasture area'.

this period, and so the nominative, accusative, and dative plural endings looked identical in writing, whether or not they had already merged phonetically. The following example, taken from a text composed shortly after the fall of the Hittite Empire, illustrates the consequences of this phonetically ambiguous usage for syntactic analysis. The sequence *a-mi-zi/a* REGIO-*zi/a* can be interpreted either as an independent locative phrase 'in my lands', or as an accusative attribute to the following noun '(belonging to) my land'.

(11) KARAHÖYÜK § 13, Hawkins 2000: 290
a-wa/i || a-mi-**zi/a** REGIO-**zi/a** |URBS+MI-**zi/a** (DEUS)TONITRUS POCULUM.PES.*67 PRAE DARE
'And in my lands I handed over the cities to the Storm-god of the land POCULUM' (Or 'I handed over my land's cities to the Storm-god of the land POCULUM').

Nevertheless, there is an argument that tips the scales in favor of the first scenario. The merger between nominative and accusative plural endings of the common gender is a dominant tendency in New Hittite and represents a regular phenomenon in Late New Hittite. The exact mechanism of this process will be discussed below in Chapter 7, while its tabular representation will suffice for our present purposes. The Class I of Late New Hittite nominal and adjectival forms consisted of stems in *-u-*, *-nt-*, and the interrogative/relative pronoun *kui-*, while most other stems belong to Class II. The non-ablauting *i*-stems constitute an intermediate case, in that the nom.-acc. pl. c. endings *-es*, *-is,* and even *-as* appear to be promiscuously used within this group in New Hittite original compositions.

Table 3: Development of Plural Case Endings in Hittite

	Old Hittite	New Hittite (Class I)	New Hittite (Class II)
nom. pl. c.	-es	-es ↓	-us
acc. pl. c.	-us	-es	-us ↑
dat. pl.	-as	-as	-as

The phonetically unmotivated mergers between functionally identical endings in New Hittite and Empire Luvian cannot be accidental, and must be discussed within the context of structural contacts between the two languages. The Luvian change represents the functional extension of one morpheme in a particular direction, while the parallel change in Hittite, where different morphemes spread into the opposite directions only to produce an identical merger, can be rather described as an analogical conspiracy. The change of the second kind is manifestly more likely to be contact-driven, and so Luvian emerges as a trigger of this merger, as has been already argued in Rieken 2006a: 275.

There is also a more specific argument that prompts the same conclusion. It stems from the analysis of the "classical Middle Script" tablet KBo 39.8, which represents a copy of the Mastigga ritual against a domestic quarrel. This tablet shows the merger of nom. pl. c. and acc. pl. c. at the time when this development was absent in standard Hittite.[20] This merger is completely absent in a number of later manuscripts describing the same ritual (cf. example 12). Another non-standard feature of the same tablet indicates that its scribe (or the scribe of its *Vorlage*) was a Luvian native speaker who learned Hittite as a second language. The Hittite vessel name *isnura-* appears there as nom. sg. *iš-nu-u-ri-iš* and acc. sg. *iš-nu-u-ri-in*, thus betraying unambiguous

[20] The rituals edited in Kassian 2002 can be viewed as a model example of standard MH/MS texts for our purposes. The functional contrast between the *–es* and *–us* endings is systematically preserved in these rituals. The earliest genuinely Hittite texts where the confusion between *–es* and *–us* has been traced are the Maşat Letters, which reflect a transition from Middle Hittite to New Hittite (cf. 5.7 and especially 6.3.2 below).

interference with the Luvian pattern of *i*-mutation.[21] This feature is likewise restricted to a particular redaction of the discussed Mastigga ritual (cf. example 13).[22]

(12) KBo 39.8 ii 47-49, CTH 404.1.I.A (MH/MS), Miller 2004: 76
nu kūs=a *BEL* SÍSKUR idā[lawēs] hu-ur-ta-**uš** *QATAMMA* lē uw[an]zi
KBo 2.3 ii 1-2, CTH 404 1.II.A (MH/NS), Miller 2004: 76
nu kūs EN.MEŠ SÍSKUR idālawēs ⌜hur-da⌝-a-e-**eš** *QATAMMA* lē uw[an]zi
'Likewise, let the evil curses also not see these ritual patrons'.

(13) KBo 39.8 iii 22, CTH 404.1.I.A (MH/MS), Miller 2004: 86
EGIR-anda=ma IM-as iš-nu-r**i-in** iyazzi
KBo 2.3 ii 30, CTH 404 1.II.A (MH/NS), Miller 2004: 86
[nu] EGIR-anda IM-[as ^{D}]^{UG}iš-nu-r**a-an** iya[z]i
'Then (she) makes an *isnura*-vessel of clay'.

Sidel'tsev (2002: 182), who was the first to indicate the non-standard features of KBo 39.8, was inclined to interpret them as "the impact of colloquial speech". Miller (2004: 215, fn. 339) specifies that we are dealing here with foreign language influence. It is tempting to propose the common source for the two unusual features of KBo 39.8 illustrated above. If we interpret them as driven by linguistic contacts with Luvian, it amounts to saying that the scribe of KBo 39.8 was a Luvian native speaker, who acquired Hittite as a second language.[23] Apparently his Luvian dialect that influenced

[21] For the transfer of *i*-mutation as a diagnostic feature identifying the imperfectly learned Hittite of Luvian native speakers, see 6.3.1 below.

[22] See Miller 2004: 241 for the manuscript phyliation of CTH 404.1 and ibid., pp. 168, 170 for the competing forms of Hitt. *hurtai-* 'curse' and *isnura-* 'a type of vessel' occurring in the Mastigga ritual.

[23] It is noteworthy that the idiosyncrasies of KBo 39.8 are not shared by the parallel versions of the same text, some of which are demonstrably more recent. Thus KBo 39.8 ii 48 *hu-ur-ta-uš* (nom. pl.) corresponds to KBo 2.3 ii 1 ⌜*hur-da*⌝*-a-e-eš* (NS). The stem *isnuri-* of KBo 39.8 corresponds to the stem *isnura-* of KBo 2.3 (only nominative and accusative forms are attested).

the grammar of this tablet was characterized not only by *i*-mutation, but also by the early merger of nom. pl. c. and acc. pl. c.[24]

Another very peculiar feature, which characterizes CTH 404.1 as a whole, is the form *ti-wa-ri-ya* (KBo 39.8 iv 17), which is used as an epithet for "the plant of the Sun-god" (^{d}UTU-*as welku*). This form can hardly be disconnected from the divine epithet *ti-wa-(a)-li-ya-* 'heavenly (vel sim.), which occurs in both Hittite and Luvian texts but appears to be Luvian in origin (Melchert 1993: 229).[25] The rhotacism *l>r* is, however, otherwise attested only in the Luvian hieroglyphic texts of the Iron Age, although even in those texts the scribes would more frequently than not resort to historical orthography (Melchert 2003b: 179-80). The precocious manifestation of the same change in a fifteenth century tablet reveals the second isogloss between the Luvian idiolect that influenced the language of CTH 404.1 and Iron Age Luvian. This raises a question about the variety of Bronze Age Luvian that this idiolect can represent.

It is hardly possible to assume that this idiolect belongs to Mastigga, a female ritual practitioner from Kizzuwatna, since the forms of nom. pl. c. and acc. pl. c. are clearly distinct in the Luvian passages embedded in Kizzuwatna rituals discussed in the previous section. It is, however, likely that the Hattusa scribe who wrote KBo 39.8 or its

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[24] Compare also the possible irregular use of the instrumental of separation in KBo 39.8 ii 24 (Melchert 1977: 302-03). The ablative was used to express this function throughout the history of Hittite, but the ablative and the instrumental cases were formally identical in Luvian, and so this might be another example of an error made by a Luvian native speaker. Yet the would-be irregular instrumental is also present in the parallel version KBo 2.3 i 37and therefore it must be discussed separately.

[25] I must reject the suggestion of Popko 1984 and Starke 1990: 147 to derive *tiwariya* directly from the name of the Sun-god Tiwad. The variant ***tiwadiya* is not attested, while the variant *tiwaliya* can be used as an epithet of Ishtar and the Storm-god of Harapsili. In all probability, this lexeme is derived from the Luvian root *tiw-* < IH. *dy(e)w-*'day sky[?]' with the help of the chain of productive suffixes *-ali-ya-* (cf Luv. *huitw-ali-ya-* 'of a living person', Melchert 1993: 84).

Vorlage did not base his records on dictation, but simply described the Mastigga ritual that was familiar to him from his general knowledge.[26] According to my hypothesis, this scribe was a native speaker of the Luvian dialect that was spoken in the area of Hattusa.[27] We have seen that the replacement of *-nz(a)* with *–nzi* in acc. pl. c. has other manifestations in Empire Luvian. Altough the rhotacism *l>r* is not paralleled in this dialect, one can perhaps argue that it was a stigmatized colloquial feature that was usually not reflected in Bronze Age orthography. This should not surprise us, given that this change was also suppressed in the orthography in the Iron Age Period.[28]

Thus we wind up with the argument that linguistic interference with Luvian could cause the merger between nom. pl. c. and acc. pl. c. in Hittite already in the fifteenth century BC. In this period it was a sporadic phenomenon restricted to the imperfectly learned variety of Hittite, but two centuries later it became a grammatical

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[26] See Miller (2004: 530-32) for the analysis of Kizzuwatna rituals as literary compositions, which have prescriptive rather than descriptive values and were only loosely associated with the actual activity of the practitioners to whom they are ascribed.

[27] The last assumption, of course, cannot be strictly proven. One cannot a priori exclude a hypothesis that a compiler or a copyist of CTH 404.1 whose Hittite idiolect is reflected in CTH 39.8 had been born and raised far from Hattusa, and migrated to the capital as an adult. This would imply that the case merger originated in a dialect of Luvian that we cannot identify at the present time, and spread to Hattusa Luvian a century or so later. There is, however, no positive evidence to support this complicated scenario and Occam's razor would speak against it.

[28] The fact that the change *l>r* was widespread in colloquial Iron Age Luvian follows from the analysis of Luvian lexemes attested in foreign transmission. Thus I interpret the form *krntryš* attested as an epithet of Baal in the Phoenician version of the KARATEPE bilingual as *kuranatarīs* < *kuwalanatallīs* 'of the Army'. The Luvian equivalent of "Baal of the Army" in KARATEPE 1, § 51 is "Highly Blessed Tarhunt". Note, however, that the Storm-god of the Army is well attested in the Hittite pantheon, and that he also appears as one of the supreme gods of the Trojans in the Alaksandu treaty (Hutter 2003: 266). Therefore it is possible that "Baal of the Army" functioned simply as an interpretative translation of the Luvian Storm-god Tarhunt. Furthermore, the Cilician name attested in the Hieroglyphic script as TONITRUS-*wa/i-ra/i-i-sá* (EĞREK, § 1) and in Greek transmission as Ταρκυαρις or Τροκοαρις (Houwink ten Cate 1961: 180) can be safely interpreted as **Tarhuwalli-* and further compared with the Anatolian name *Ta-ar-hu-a-lá* attested in Old Assyrian transmission (Laroche 1966, #1255).

norm. If the Luvian dialect of Hattusa and the surrounding area was a trigger of this process, one must assume that the case merger was generalized there even earlier than it was in Hittite. This would clearly set it apart from the Kizzuwatna dialect of Luvian, which preserved the archaic paradigm in the fifteenth century BC. This also would also speak against the Hattusa origin of cuneiform Luvian incantation of unknown provenance that systematically use accusative forms in *-nza*. Unfortunately, unambiguous accusative plural forms do not seem to occur in archaic Luvian passages embedded in CTH 572 and CTH 665, and so one cannot set up a *terminus post quem* for this morphosyntactic innovation.

Although (10) represents the only example known to me where acc. pl. c. in *-nza* appears in an assured composition of the Empire period, it is sufficient to hypothesize that the discussed case merger failed to occur in some Luvian-speaking areas in the 13th century BC. We obviously cannot be sure whether acc. pl. c. *dammaranza* reflects the dialect of the scribe of KUB 5.6, or rather the dialect of an official conducting the ritual inquiry, but one of the two is suspect of not being born in Hattusa. The hypothesis that the scribe deliberately used the archaic form as a stylistic device is also possible but less likely in view of the genre of our text.

Our evidence for acc. pl. c. forms occurring in Istanuwa Luvian is predictably limited. On the one hand, the acc. pl. phrase *tarhuntassi**nza*** […]*wi**nza*** 'X-s of Tarhunt' appears to depend on the 3sg. verbal form *daitta* of unknown meaning in KUB 25.37 ii 33-34. On the other hand, example (14) may bear witness to acc. pl. c. in *-nzi*. This passage, constituting the initial lines of a song, defies comprehensive syntactic analysis because the meaning and function of *lammaur* and *alinan* remain unknown to us, but it

is clear that the only finite verbal form here is 3sg. med. *haltittari* 'he calls' (vel sim.). The plural animate form DINGIR.MEŠ-*zi* 'gods' cannot be the subject of a singular predicate and so, unless we assume a vocative insertion, one has to analyze DINGIR.MEŠ-*zi* as the object of *haltittari*. Assuming that my analysis of both examples is correct, one can either attempt to reconstruct synchronic variation between the dialects of the Songs of Istanuwa, or reckon with the possibility of imperfect textual transmission in (14) reflecting the interference of the Luvian dialect of Hattusa.[29] But the number of uncertainties involved here is so large that *non liquet* appears to be the honest position to take.

(14) KBo 4.11 obv. 47-49, CTH 772.1 (NS), Starke 1985: 341
tap-pa-ši-tar ta-pa-la tap-pa-ši-tar ta-pa[!]-la lam-ma-úr ti-ti-⌜ya⌝-a-la
a-li-na-an hal-ti-it-ta-ri DINGIR.MEŠ-**zi**

The case merger discussed in this section was a dialectal phenomenon in Bronze Age Luvian, but it became pervasive in the first millennium BC. The hieroglyphic Anatolian inscriptions that distinguish between L 376 <zi> and L 377 <za> consistently employ the former sign as the nominal ending of nom.-acc. pl. c. and the latter sign as the nominal ending of dat. pl. Among the large number of Iron Age Luvian inscriptions coming from the area of former Kizzuwatna, not a single one shows the interference pattern that would make one presume the survival of the older norm in the colloquial

[29] For a different interpretation of (14) see Watkins 1995: 150.

language of this area. Even more telling is the example of the Assur letters, a group of texts whose genre makes them unlikely to deviate from the colloquial usage.[30]

(15) ASSUR b, § 9, Hawkins 2000: 534
|a-wa/i |2-**zi-i** || |sa-na-wa/i-i-**zi** ("*481")wa/i+ra/i-mu-ta-li-**zi**
|PUGNUS-ri+i-´
'Pick two good hunting[?] dogs[?]'

Examples such as (15) speak against the hypothesis that the Luvian written norms of Central Anatolia were superimposed in this case upon the spoken language of Cilicia and Northern Syria, the way Standard Babylonian was superimposed upon Assyrian dialects in the same period. An analysis in terms of the wave theory appears to be more consistent with the available data. The merger between the nominative and the accusative plural of the common gender originated in the area of Hattusa in the Bronze Age, but then gradually spread to the whole Luvian speaking area. This, of course, does not exclude the possibility that the spread of this merger was connected with particular social networks that included scribes, but one must assume that it was a feature of the spoken language within these networks. What remains to be seen is whether one can propose other dialectal isoglosses the spread of which followed the same pattern.

2.4 Extended Genitives in *-assa* and *-assi*. It is usually assumed that the "Cuneiform" Luvian dialect has lost its genitive case, employing instead the possessive adjective in *-assa/i-* (Melchert 2003b: 171). While "Hieroglyphic" Luvian also makes a

[30]Internal reference in one of the Assur letters (ASSUR a, § 6) suggests a connection with Carchemish, which perhaps had been already included the Neo-Assyrian Empire by the time the letters were written. In any event, it is intrinsically less likely that a Luvian merchant trading in Assur would come from the area of Hattusa, which was beyond the Assyrian sphere of influence.

heavy use of possessive adjectives, it also features two distinct genitival markers °*a-sa* and °*a-si*.[31] The (near-)generalization of possessive adjectives in Luvian cuneiform texts is normally taken as a dialectal innovation, since other Luvic languages likewise feature genuine forms of the genitive singular, which do not agree in case with their respective head-nouns.

The analysis of Luvic genitives constitutes the topic of a forthcoming article by Craig Melchert. The author came to the conclusion that the languages of the Luvic subgroup preserve not only the Indo-Hittite gen. sg. ending in *-*os*, but also the thematic ending *-*oso* and probably also *-*osyo.* Melchert followed Neumann (1970: 61) in his assumption that the Lycian zero ending characterizing a number of personal names (e.g. TL 127.1 *Epñxuxa tideimi* 'son of E.') represents a direct reflex of *-*os*. He further argued that the Lycian ending -*Vhe* / -*Vh* (e.g. TL 2.2 *Murazahe: tideimi* 'son of M.' vs. TL 122 *Tutinimeh: tideimi* 'son of T.') reflected the earlier *-*oso* and suggests the same origin for the Milyan ending -*ese* in *Kuprllese* (cf. Melchert 2004a: 97). With regard to the Luvian ending °*a-sa*, he observed that the Anatolian Hieroglyphic script leaves us no way to decide whether it reflects *-*os* or *-*oso.* Finally he cautiously hypothesized that the Luvian ending °*a-si* may owe its existence to an irregular apocope of the earlier -*osyo*.

I am very much in agreement with the general thrust of Melchert's article, which attempts to provide a historical account for a number of forms that are sometimes

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[31] The phrase INFANS.NEPOS-*sa* INF[ANS] 'son of (my) grandson' in EMİRGAZİ, § 4 is the only instance of a genitive in Bronze Age hieroglyphic texts known to me. All the other examples come from Iron Age monuments.

dismissed without much discussion as language-specific innovations (explicitly so in Hajnal 2000: 177-78). It is possible, however, to demonstrate that some of the etymologies proposed in Melchert, forthcoming, and sources this article quotes have superior alternatives if one takes into consideration Bronze Age Luvian data. The most serious problem for the suggested scenario comes from the existence of Luvian genitives in *-assa*. Melchert, forthcoming, did not mention the existence of such a formation, although it is implicitly recognized in Melchert's *Cuneiform Luvian Dictionary*, where KUB 35.54 ii 14, iii 17 *im-ma-ra-aš-sa* is booked as an absolute form of the possessive adjective *im(ma)rassa/i-* 'of the open country' (Melchert 1993: 89). I intend to show below that further attestations of this formation can be adduced and that the existence of the Luvian genitive singular in *-assa* has profound consequences for Luvian dialectology.

I will begin my analysis with the discussion of a Luvian foreign word embedded in the Hittite context. The example cited immediately below is taken from a Late New Hittite instruction for unspecified high officials, which in all likelihood has been composed in Hattusa. The emendation to nom. sg. n. *mar-ša-aš-ša-<an>* in (21), as per Melchert 1993: 140, is strictly *ad hoc*. While the syntax of the passage is compatible with the plural interpretation of *marsassa mēhur* as 'ominous times', nom.pl *mēhur* would be formally irregular, since the endingless plural forms of the Hittite neuter *r*-stems consistently show the *plene* spelling on the suffix, not on the root.

(21) KBo 4.14 ii 57-59, CTH 123 (NH/LNS), Stefanini 1965: 42
nasma=kan LUGAL-us tūwali KASKAL-si arha paizzi nasm=at GIM-an asān imma ≈mar-ša-**aš-ša** mēhur
'… Or (when) the king goes to a long campaign, or whatever time of calamity[?] there may be…'.

Turning to the Luvian textual material, there are at least four attestations of these forms in the Luvian passages embedded in the Ritual of Puriyanni (CTH 758). As argued in the previous section, this ritual has its origin in Kizzuwatna, and therefore the passages cited below must also reflect the Kizzuwatna dialect of Luvian.

(22) KUB 35.54 ii 14, 758.1.C (MS), Starke 1985: 66
[…] im-ra-**aš-ša** ^{d}IŠKUR-aš-ša-an-za […]
'…of the Storm-god of an open country'

(23) KUB 35.54 ii 35-36, 758.1.C (MS), Starke 1985: 67
a-ta im-ra-**aš-ša** ^{d}IŠKUR-u[n-t]i pa-ri ta-ra-a-u-i-it-⌜ta⌝
'He handed them over to the Storm-god of an open country'.

(24) KUB 35.54 iii 2-5, CTH 758.1.C (MS), Starke 1985: 68

hal-li-iš-ša ⌜pa⌝-ra-at-ta-an[-za]	'…*halis-* and impurity
pu-wa-ti-il-za [n]a-nu-un-tar-ri-š[a]	past and present
ir-hu-u-wa-**aš-ša** pa-⌜ri⌝-it-tar-u-wa-a-**aš-š**[**a**][32]	of *ir(hu)wa-* and of
u-⌜la⌝-an-ta-al-li-ya-an hu-it-w[a-li-ya-an]	*parittarwa-* of the dead and of the living'.

(25) KUB 35.54 iii 6-8, 758.1.C (MS), Starke 1985: 68
a-ta a-ap-pa za-aš-ta-an-za DINGIR.MEŠ-an-za pár-ra-an ni-iš <<???>>
im-ma-ra-**aš-ša** ^{d}IŠKUR-aš-ša-⌜an⌝-za ha-li-iš-ša
'Let the *halis-* of the Storm-God of an Open Country not <<???>> before these gods'.

Melchert (pers. comm.) takes examples (22) and (25) as instances of group inflection involving the omission of the redundant ending *-anza*. There is, however, no need to assume that the original ending contained the deictic element *-za*. One might as well reconstruct **immarassan Tarhuntassan-za halis-sa* in the original version of the ritual. If it is possible that the inconsistent use of *-sa*/*-za* represented the last resort strategy of expressing syntactic dependency in the iterated possessive construction "the

[32] The restoration *pa-⌜ri⌝-it-tar-u-wa-aš-š*[*a-an*] is likewise formally possible.

halis- of the Storm-God of the Open Country". The construction with two possessive adjectives **immarassan-za Tarhuntassan-za halis-sa* probably had a default interpretation "the *halis*- of the Storm-God **and** of the Open Country". If one accepts this reconstruction, it appears that the *–assa* genitives in the Puriyanni ritual are restricted to those contexts where one might otherwise expect the possessive adjectives ending in *–assan* (acc. sg. n. and dat. sg.).

The close connection between the forms in *-assa* and *-assan* is born out by the parallelism of (23) with the dative adjectival phrase KUB 35.54 ii 37 *im-ma-[r]a-aš-ša-an* ^{d}IŠKUR-*ti* occurring in the adjacent paragraph of the same text. It can be further confirmed through the analysis of the parallel versions of the Kizzuwatna ritual CTH 760.II attributed to Kuwattalla. The majority of the manuscripts of this text display preference for possessive adjectives, such as acc. sg. n. *kursassan* and **tuliyassan* in (27). By contrast, the manuscript CTH 760 II.1.A contains the genitival forms **kuwarsassa* and *tuliyassa* (26).

(26) KBo 29.55 iii 1-5 + KUB 35.43 iii 28-32, CTH 760 II.1.A (Pre-NH/NS), cf. Starke 1985: 147
l[a-la-i-]du-ut-ta ta-⌜pa-a-ru⌝ ta-ta-ri-ya-am-ma-an h[i-i-ru-ú-u]n
e-ir-hu-u-wa-⌜al⌝-li-ya-an pa-ri-it-tar-wa-al-li-ya-an wa-a[l-l]i-ya-an
hu-u-it-wa-li-ya-an pu-u-wa-ti-i-il pa-ri-ya-na-al-la<-an> ^{LÚ}⌜lu-la⌝-hi-ya-an
ha-ap-pí-ri-ya-an ku-wa-a[r-š]a-**aš-ša**<<-aš-ša>> tu-ú-li-ya-**aš-ša**
'It takes (away from) him *tabaru*, the spell, (and) the curse, of *ir(hu)wa*- (and) of *parittarwa*-, of the dead (and) of the living, past (and) future, of the *lulahhi* (and) of the *habiri*, of *ku(wa)rsa*- (and) of the assembly'.

(27) KUB 35.45 ii 1-4, CTH 760 II.2.B (Pre-NH/NS), Starke 1985: 151
hi-i-ru-ú-un pu-ú-wa-<ti>-i-il$^{!}$ pa-ri-ya-na-**al-la-an** AMA-ya-an
ta-a-ti-ya-an ŠEŠ-ya-an NIN-ya-an ARAD-ya-an GEMÉ-ya-an
^{LÚ}lu-u-la-hi-ya-an ha-pí-ri-ya-an kur-ša-**aš-ša-an** tu-ú-li-ya-**<aš-ša>-an**
'the curse past (and) future, maternal (and) paternal, fraternal (and) sororal, of slaves (and) of slave-women, of the *lulahhi* (and) of the *habiri*, of *ku(wa)rsa*- (and) of the assembly'.

The final example of a genitive in *-assa* occurring in a position where *–assan* is expected comes from a fragmentary incantation of uncertain provenance. The ending *-assa* appears there in a simplified spelling *(C)a-ša*. Melchert (1993: 177) takes the form *Pirwa(s)sa* as nom.-acc. pl. n. of the possessive adjective *Pirwassa/i-* 'belonging to Pirwa', but the following singular head-noun *hantawadahi-sa* 'kingship' undermines such an analysis.[33] There is, of course, a possibility that *Pirwasa* modifies the preceding plural noun, lost in the lacuna, but the dependent proper noun usually precedes its syntactic head in the Luvian possessive construction (as, for example, in the genealogies of Neo-Hittite kings).

(28) KUB 35.123 iv[?] 7, CTH 768.2 (LNS), Starke 1985: 251
[….[d]P]í-ir-w**a-ša** ha-an-ta-⌜wa⌝-da-hi-ša
'…the kingship of Pirwa'.

The absence of alternations between gen. sg. *-assa* and the other inflectional forms of possessive adjectives supports the analysis of Melchert 1993, according to which gen. sg. *-assa* in Kizzuwatna rituals represents the corruption of the earlier **-assan*. I intend to argue in 6.2.3 that the nasalization [an]>[ã]/_C/#[?] represents a likely optional feature of colloquial Luvian, which is responsible for the frequent omission of <an> in word-medial position. It is unclear, however, why variant spellings reflecting nasal vowel formation in word-final position would be compartmentalized in the category of possessive adjectives. The only case where Melchert 1993 restores the final graphic <an> in another lexeme is *pa-ri-ya-na-al-la<-an>* in (26). But in this case the

[33] Starke (1990: 47) attempts to circumvent this difficulty by assigning the plural meaning to the nominal ending *-sa* in *hantawadahi-sa*. A similar grammatical analysis of *-sa* in *halis-sa* allows him to interpret *immarassa* as acc. pl. n. of a possessive adjective in (25). Starke's analysis of nominal extensions *-sa*/*-za* has been widely and justly rejected (cf. the discussion in 2.5 below).

scribe may have reinterpreted *pūwatīl pariyanallan* as *pūwatīl pariyanall-a*, the pair of two endingless adjectival forms linked by the coordinative clitic *=(i)a*.[34]

I believe that the omission of the final graphic <an> was possible only in those cases where the misspelled forms could receive the new grammatical interpretation that would fit the general context of the passage. In the instance of the possessive adjectives in *–assan*, they would be reinterpreted as genitives in *–assa*. My hypothesis implies that the genitives in *-assa* were absent in the original Luvian dialect of Kizzuwatna rituals, but were secondarily introduced there by Hattusa copyists. In other words, the secondary gen. sg. froms in *–assa* in Kizzuwatna Luvian passages have the same explanation as the secondary acc. pl. c. *-nzi* in (3) and (9). The phonetic development [an]>[ã] may have increased the chance of dictation errors, but it alone could hardly be responsible for the emergence of gen.sg. *–assa*.

Once we turn to the Iron Age Luvian data, the genitives rendered as *-(C)a-sa* in hieroglyphic orthography represent a perfect counterpart to the *-assa* ending attested in cuneiform texts. In this case, however, the alternative reading *-as* is also possible. Melchert 1993 lists the genitive forms *hantiyassas*, *hirudas,* ˢ*kulanas*, *tarmatnas*, ˢ*tarpattas*, and ˀ*warwalanas* occurring in Hittite contexts. All these forms are clearly derived from Luvian nouns, but are provided with the genitive ending *-as*. While it is perfectly possible that some of these nouns represent (partially) assimilated Luvian borrowings into Hittite, one cannot exclude that other forms represent Luvian foreign

[34] Note, however, the case of KUB 9.6 i 30-31 [*ku-wa-ar-š*]*a-*⌜*aš*⌝*-ša*<<*-an*>> *tu-úli-ya-aš-ša-*<<*a*[*n*]>> where the AN signs need to be deleted, as per Fortson (2004: 170).

words provided with the inherited ending *-as*. The last possibility, already raised in van den Hout 2006: 236, fn. 107, strengthens the claim that some of the hieroglyphyc genitives in *-(C)a-sa* may have a purely graphic final vowel. Yet the genitives in *-ehe* and *-ese* attested in Lycian and Milyan respectively and representing the perfect external comparanda of this newly discovered form in *-assa* suggest that at least in some of the *-(C)a-sa* endings the final vowel should have been real.

A better-known formation that can be compared with Luv. *-assa* is the Indo-European gen. sg. ending usually reconstructed as **-e-so/-o-so* (Fortson 2004: 114, 129). The Cuneiform Luvian examples discussed in this section, all of which, with the exception of (28), show the double spelling of /s/ in the genitive ending *–assa*, prompt the revision of this reconstruction. The data of Indo-European languages where this suffix occurs are compatible with the alternative reconstruction **-es-so/-os-so* (in particular, this holds for OCS. *česo* 'of what' and for the Greek genitive ending *–ου*). Besides allowing me to account for the Luvian data, this modification also helps to explain the internal structure of the extended genitive case ending. In terms of internal reconstruction, the genitives **-os-so* can be analyzed as basic genitive in **-os* extended by the deictic particle **-so*. It is significant that a reflex of the **-so* particle is independently attested in Luvian as the extension *-sa/-za* of nom./acc. sg. n. nominal forms (cf. Melchert 2003b: 186-87).[35]

[35] Since the particle **-so* > *-sa* must be synchronically regarded as a separate morpheme in Luvian, one can analyze the geminate /ss/ in *-assa* as a cluster arising in secondary contact. Its preservation in Luvian cuneiform texts can be directly compared with the case of nom./acc. sg. *tappassa* 'heaven' (Melchert 1994: 257).

It is more difficult to trace the Bronze Age precursors of the Iron Age Luvian forms forms in °*a-si*. The Luvian dialect of Kizzuwatna appears to lack them altogether. Most of the forms in *-assi* attested in Hittite cuneiform texts can be analyzed as truncated ("Akkadographic") spellings of possessive adjectives. This holds for numerous oblique case forms of the theonym ^{d}U *pihassassi*, as well as for [A.]ŠÀ ≈*lalattassi* (KUB 8.75 iv 52) and NINDA.GUR$_4$.RA *hawiyassi* (KBo 21.42 i 11). The most likely candidates for the genuine forms in *-assi* are *kulimmassi=wa* and […]*nissi=pa=ku=wa*, which appear in the two consecutive lines (iii 9 and iii 10) of a very fragmentary text KUB 35.79 (MS). The hypothesis that this text did not originate in Kizzuwatna is likely on independent grounds.[36] To this one has to add the form in a title of a Lallupiya song KUB 25.37 iii 33 *ma-aš-ša-ni-ya-aš-ši wa-al-z*[*a-me-en*] alternating with KUB 35.37 i 14 [*ma-aš-ša-ni-y*]*a-aš-ši-in wa-al-za-me-en*. The last form KUB 35.70 ii 5 acc. [*ma-a-y*]*a*[*-aš-*]*-ši* EME-*in* 'slander of the adults' occurs in a Kizzuwatna incantation, and alternates with e.g. KBo 13.262 8 nom. [*ma-ay-*]*a-aš-ši-iš* [EME-*iš*] in a related incantation. Scribal errors made by Hattusa copyists and triggered by the structure of their own dialects suggest themselves as explanations in the last two cases.

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[36] KUB 35.79 iii 13 contains the sequence […]*u-na*, which is probably to be taken as the infinitive suffix. Luvian infinitives in *-una* are abundantly attested as foreign words in Hittite texts, and they frequently occur in Iron Age Luvian, but there is not a single instance of such a form in Luvian passages embedded in Kizzuwatna rituals. The other two (likely) infinitival forms occurring in Luvian incantations are KBo 7.68 ii 5 *a-du-na* and VBoT 60 obv. 12 *kar-šu-na*, but both of these fragments are likewise suspect of reflecting the Luvian dialect of Hattusa. The infinitives in *-una* must have existed in Proto-Luvian, since the noun *i-ú-na-hi-ša* 'mobile property' attested in Kizzuwatna Luvian is apparently derived from inf. *iuna*, 'to go', known from Iron Age Luvian. Yet the Luvian dialect of Kizzuwatna appears to have eliminated or severely restricted the use of these infinitives. Unfortunately, it does not seem possible at present to indicate a construction that replaced the infinitival phrase in Kizzuwatna Luvian. This means that my argument is now supported by purely statistical considerations, and therefore it remains somewhat hypothetical.

These cuneiform examples are admittedly too few in number to settle the question of the phonological reconstruction /-assi/, as opposed to /-asi/ suggested in Melchert (2003b: 187). Yet the only evidence adduced in favor of /-asi/ is its connection with the Indo-European thematic genitive ending *-*osyo* (Melchert, forthcoming). The examples like Luv. *is(sa)ra/i-* < **g'esr-*'hand' or Luv. **immara/i-* < **g'emro-* 'open country' suggest that the rule stating that Hittite /s/ and /m/ geminate as the first members of heterosyllabic consonant clusters can be extended to Luvian.[37] If so, the etymological sequence /-osyo/ is expected to have yielded */-assya/ and then, after the apocope, */-assi/. Thus, etymological considerations speak for rather than against my phonological reconstruction.[38]

If one accepts the scarce cuneiform evidence for gen.sg. *-assi* as genuine, one winds up with a new parallel between Iron Age Luvian and the Bronze Age dialect of Hattusa scribes. If one accepts that the "hieroglyphic" ending °*a-sa* can represent *-assa*, one gets an additional isogloss between these two dialects. In both cases one is dealing shared syntactic archaisms, and therefore these isoglosses carry less weight than the replacement of acc. pl. c. *–nz(a)* with *–nzi*. But the dialectologists rarely insist on the strict application of cladistic methodology because of the commonly recognized

[37] See Melchert (1994: 150-152) for the formulation of the rule for Hittite. Luv. *tahusiya-* 'to keep silent' does not constitute a genuine counterexample to this rule, because Luvian, as well as Hittite, appears to have generalized the "Sievers" allomorph /iya/ of the stem-forming verbal suffix *-*ya-*.

[38] An additional argument for the reconstruction of the geminate /ss/ in *-assi* is put fprward in Yakubovich, forthcoming. It appears that the genitives in *–assa* and *–assi* represent the only plausible source for the derivation of Luvian possessive suffix *–assa/i-*, where the geminate is reliably attested.

important role of diffusion within a continuum of mutually understandable dialects. Therefore, due attention must be paid to the phenetic isoglosses discussed in this section.

2.5 Possessive Construction with Plural Possessor. The reflex of the Indo-Hittite genitive plural ending *-*ōm* was inherited in Proto-Anatolian. Its reflexes are Old Hittite gen. pl. *-an*, Lycian gen. pl. *-ẽ*, and the Lydian ending *-av* combining the functions of the genitive and the dative plural. Beginning with the Middle Hittite period, one observes the extension of the genitive singular ending *-as* to the genitive plural. The functionally identical spread of singular possessor markers to the plural can be observed in Iron Age Luvian. Thus, formally speaking, the noun phrases 'foundations of the god(s)' and 'by the authority of the god(s)' in the examples cited below are syntactically ambiguous. Only the subsequent mention of a group of gods in (29) and a reference to Kubaba and the Moon-god of Harran in the same fragment as (30) tip the scales in favor of the polytheistic interpretation.

(29) ANCOZ 7, § 4, Hawkins 2000: 356
|za-zi-i-pa-wa/i URBS-ni-i-zi-´ || DEUS-na-**si-i** DOMUS.PONERE?-ti-zi
|za-a-zi-ha u+x?-pari-ia-zi REL-i-sa i-mara/i$^{+ra/i}$-sa-na
(DEUS)CERVUS$_2$-ia á-ta$_5$ (DEUS)AVIS (DEUS)SOL-ti (DEUS)i-ku+ra/i
(DEUS)ta-sà-ku ARHA |tà-i
'One who takes away these cities, foundations[?] of the gods, and these demesnes[?], from the Stag-god of an open country, ADA Kubaba, Sun-god, Ikura and Tasku…'[39]

(30) GELB, § 1, Hawkins 2000: 569
...] DEUS-ní-**sa-ti-i** LEP[US ...
'…by the]authority of the gods[…'

[39] I tentatively interpret the form *u+x?-pari-ia-zi* as acc. pl. of *ubadi-* 'demesne' (vel sim.). The sign carved immediately below *u* remains, however, unexplained.

There are reasons to think that the merger between the markers of singular and plural possessors in a noun phrase represents a common Luvian phenomenon. The idiom *māyassa/i- lāla/i-* 'tongue of the grown-ups' (i.e. 'slander of the mob') has the nominative *ma-a-ya-aš-ši-iš* EME-*iš* and the accusative *ma-a-ya-aš-ši-in* EME-*in* in the Kizzuwatna rituals. These forms could also mean **'tongue of the grown-up' and only the occurrences of the same idiom with the head noun in the instrumental, as in (37) below, vindicate its correct grammatical interpretation. The Luvian genitive plural ending -*as* lurks in the fragment KBo 7.68 iii 6 […]x DINGIR.MEŠ-*aš-ta za-an-ta* [..]. Unfortunately, the origin of the festival text with extensive Luvian passages reflected in KBo 7.68+ remains unknown.

To this one must add the difficult case of KUB 35.89 13 GEŠTUG.HI.A-*ša* GIG-*za* 'ailment of the ears' alternating with KUB 35.88 iii 16 ^{UZU}GEŠTUG-*za* GIG-*za* in a parallel passage. If we assume that the underlying Luvian stem for 'ear' is *tummant-* in both cases, then we must be dealing with the alternation of forms *tummantassa* and *tummantassanza*, as per Starke (1990: 47). Contra Starke, however, *tummantassanza* must be taken as a neuter singular possessive adjective depending on a neuter singular noun GIG-*za*. Then the only way to interpret *tummantassa* is to assume one more instance of a genitive in -*assa*, which in this case functions as genitive plural. It is not clear which of the two variants is older, but if GEŠTUG.HI.A-*ša* is an emendation, it may reflect the conservative dialect of a Boğazköy copyist.[40]

[40] By contrast, the form *á-pa-sa-ti* in CEKKE § 6b does not necessarily need to be interpreted as 'their', as Hawkins (2000: 145) has suggested. The translation "They bought the city Kamana from the

Nevertheless, Melchert (2000: 173-79) succeeded in demonstrating that certain Bronze Age Luvian texts contain innovative possessive adjectives marking the plurality of the possessor. The plural marker *-anz-* is inserted between the possessive suffix *-assa/i-* and the inflectional endings. This adjective, however, appears to be used only with dative/locative or ablative/instrumental head-nouns, as in (31-33). In many cases, the plural interpretation of the possessor does not impose itself from the contexts, but there is not a single instance where it is precluded by the general sense of a passage. What follows is only a brief selection of the participial forms in *-assanza-*, while Melchert 2000 should be consulted for the full list of their occurrences.

(31) KUB 32.9 rev. 8-11, CTH 761.2 (MS), Starke 1985: 90
pa [ha-la-a-l]i-iš a-aš-du ma-a[l-ha-aš-ša-aš-ši-iš EN-aš]
ma-a-aš-ša-na-an-za pár-ra-a[n a]d-du-wa-la-ti EM[E-ti ad-]du-wa-la-ti
i-iš-š[a-ra-ti] ta-pa-ru-wa-**aš-ša-an-za-t[i**
d]a-a-ta-ri-ya-am-n[a-**aš-ša-a]n-za-ti** hi-ru-ta-**aš-ša-a[n-za-ti]**
ma-a-⌜ya⌝-**aš-ša-an-za-ti** ⌜EME-ti⌝
'Let then the ritual patron be purified in front of the gods from the evil tongue, from the evil hand, from the tongue of *taparu*-s, incantations, curses, from the slander of the adults'.

(32) KUB 9.6 iii 12-14, CTH 759.2 (NS), Starke 1985: 115
ku-iš-tar ma-al-ha-aš-ša-**aš-ša-an-za-an** EN-ya a-ad-du-wa-la a-an-ni-ti
a-an DINGIR.MEŠ-in-zi a-ah-ha na-a-ta-at-ta ta-ta-ar-ha-an-du
'Whoever causes evil to the patron of the rituals, let the gods break him like reeds'.

(33) KUB 35.78 i 7-8, CTH 767.1 (NS), Starke 1985: 134
[x[?]-x[?] ma-al-h]a-aš-ša-**aš-ša-an-za-an-za** EN-an-za [īkkun]attas 1 UDU sipanti
'[?] sacrifices one anointed[?] sheep on behalf of the patrons of the rituals'.

Kanapuweans together with **its** X", where 'its' has 'city' as its antecedent, is likewise acceptable. Therefore this example cannot be used as a probative argument in the present section.

Melchert's analysis can perhaps be carried one step further. The same variety of Luvian that disambiguated possessive adjectives in oblique cases may have also introduced an optional genitive plural marker *-assanza*. The coexistence of several strategies of forming possessive noun phrases need not amaze us after we have discussed parallel synchronic variation between ordinary possessive adjectives and singular genitives in *-assa*. The number of examples illustrating the new category is, however, not sufficient to reach a positive conclusion about its existence. The four suggestive cases known to me show nominative[?], accusative, dative/locative, and ablative/instrumental head nouns respectively.[41]

(34) KUB 35.103 rev. 8-9, CTH 766 (MS), Starke 1985: 222
hu-iš-ti-in-zi ⌜wa⌝[!]-ya-am-ma-na ú-li-ip-na-**aš-ša-an-za**
'… birth-cries, the howls of the wolves'. .

(35) KUB 32.8 iii 16-17, CTH 762.3 (NS), Starke 1985: 118-19
iš-ša-ra-**<aš-ša>-an-za**-pa-ti-it-ta pa-a-ta-**aš-ša-an-za** ta-am-mu-u-ga la-a-at-ta
'(It[?]) took the clippings of hands and feet' (scil. '…of fingers and toes').

(36) KUB 35.45 ii 7-10, 760 II.2.A (NS), Starke 1985: 151-52
⌜a⌝-an-ta-pa-⌜at-ta⌝ a-ar-la-nu-wa-at-ta SÍSKUR-**aš-ša-an-za** ⌜EN⌝-ya
hu-i-it-wa-la-hi-<ta>-ti a-an-na-ru-um-ma-hi-<ta>ti MU.KAM.HI.A
GÍD.DA EGIR.UD-*MI*-HI.A-ti DINGIR.MEŠ-aš-ša-za-ti
wa-aš-ša-ra-hi-ta-ti hu-i-tum-ma-na-hi-ta-ti
'Also, (he) turned[?] to[?] the patron of the rituals with life, strength, long years, future days, the favor of the gods, and vigor'.[42]

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[41]The uncertainty about the case of *wayammana* in (40) is prompted by considerations discussed in Section 2. Since we have to admit that *hwistinzi* in (8) may represent a plural accusative reflecting the dialect of a Boğazköy copyist, the same explanation remains formally possible in (40). The fragmentary context does not allow us to say more.

[42] Differently Poetto (1997: 237-240), who translates the stem *arlanu-* as 'to make a gift'. Although this interpretation fits well the general context of the passage, one would expect a verb with such a meaning to be transitive.

(37) KUB 35.43 iii 6-8, CTH 760.II.1.A (NS), Starke 1985: 145-46
[na-a-ú-wa-te-ya-t]a har-ma-ha-ti mu-u-wa-i na-a-⌜ú⌝ [-wa-te-ya-ta
a-la-la-at-ta-t]i KI.MIN na-a-ú-wa-te-ya-ta [ma-an-na-hu-un-na-ti K]I.MIN
na-a-ú-wa-te-ya-ta t]a-a-u-wa-a-**aš-ša-an-za** ti-ti-t[a-a-ti KI.MIN]
'(He) is powerful with (his) new head, (he) is powerful with (his) new [*alalatta*-], (he) is powerful with (his) new [*mannahu(wa)nna*-], (he) [is powerful] with (his) [new] eye pupils.

None of the previous accounts for the highlighted endings is fully satisfactory. Starke (1990: 47) took the forms in -*assanza* (34) and (35) as plural possessive adjectives, using them as arguments that the particle -*sa*/-*za* represents a plural ending. Although the Empire Luvian data presented in van den Hout 1984 and the Iron Age Luvian facts described in Hawkins et al. 1974: 173-76 prove the singular interpretation of -*sa*/-*za* in the respective varieties of Luvian, the seeming counterevidence adduced by Starke appears to have been simply ignored. A way to analyse these forms without assuming a special genitive plural ending is to take them as regular neuter plrals of possessive adjectives in -*assanza*-. This would imply that the expression of the plurality of the possessor was not limited to oblique stems, but there is a ready morphophonemic explanation for this exception, as we will see below.

The traditional account of (36) and (37) relies on scribal errors. Starke 1985 suggested an emendation to SÍSKUR-*aš-ša-an*<<-*za*>> in (36), while Melchert (2000: 174) opts for an emendation to SÍSKUR-*aš-ša-an-za*<-*an*> adducing (32) as a justification. Starke 1985 emends (37) to *ta-a-u-wa-aš-ša-an-za*<<-*ti*>> supporting it by the variant KUB 35.43 ii 14 *da-a-u-wa-aš-*⌜*ša-an*⌝*-za-ti ti-ti-ta-a-ti*. It is indeed possible that Hattusa copyists were negligent with respect to the special Kizzuwatna Luvian forms that they perhaps could not understand. On balance, one needs more attestations in

order to decide whether the assumption of an innovative genitive plural in Kizzuwatna Luvian is warranted. Only the discovery of new texts can shed more light on this problem.[43]

An important distributional fact that concerns both the genitive plural in *-assanza* and the related adjectival forms is that they do not seem to occur outside Kizzuwatna Luvian. The majority of the examples cited above belong to the texts that can be assigned to Kizzuwatna on independent grounds. Although (34) and a couple of other forms in *-assanza-* come from birth incantations of uncertain origin, this should be taken as an argument for establishing their connection with Kizzuwatna rather than a reason to think that other Bronze Age Luvian dialects also marked the plurality of the possessor. The lack of these innovative forms in Hattusa and Istanuwa Luvian may be theoretically explained as an accident, but their absence in the large corpus of Iron Age Luvian texts is more telling. In view of the isoglosses between the Luvian of Hattusa and Iron Age Luvian discussed above, I suggest that forms in *-assanz*(-) never existed in Central Anatolia.

This geographic distribution will play an important role in my account for the origin of the *-assanz*(-) suffix. Melchert (2000: 178-79) was no doubt correct when he took it as a combination of the possessive marker *-assa-* and the marker *-nz-* borrowed from animate plural case endings. What he failed to explain is the relative order of the two elements. If one assumes that the suffix *-nz-* was reanalyzed as a case-insensitive

[43] It is to be noted in passing that the emendation KUB 35.59 7 EN.SÍSKUR-*anza*<*n*> proposed in Melchert 2000: 174 appears to be equally unnecessary. Here we encounter an ordinary plural dative of an unknown Luvian noun meaning '(ritual) patron'.

plural marker, one would expect the possessive suffix *-assa* to be appended to the new plural stem, and not inserted between the root and the plural suffix. This is what happened, for example in the history of Lycian, where the dat. pl. *ebtte* 'to them' was reanalyzed as an oblique plural stem, based on which the new possessive pronoun *ebttehi-* 'their' was subsequently formed. In general, he morphemic sequence STEM+NUMBER+CASE is typologically common in agglutinative languages, whereas the opposite sequence STEM+CASE+NUMBER (*massan(a)-ass(a)-anz(a)-*) is very rare and must have a historical explanation.[44] The counterintuitive character of the sequence *-assanz-* presumably led Melchert (2003b: 171) to erroneously cite it as **-*anzassa-*, an error that has already been repeated by Fortson (2004: 169), presumably for the same reason.[45]

I suggest that the element *-nz*(-) alone carries the functional load in the sequence *-assanz*(-). In other words, the new possessive suffix *-nz-*, disambiguating between singular and plural possessor, was mechanically attached to the old possessive suffix *-assa-* that neutralized the number of the possessor. A typologically similar doubling of grammatical markers can be seen in English *child-re-n* or *you-r-s*, let alone

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[44] This statement represents a paraphrase of Universal 39 in Greenberg 1963. The most famous exception to this generalization is, of course, the Proto-Indo-Hittite accusative plural ending *-*ms* > *-*ns* usually reconstructed as a combination of the accusative singular ending *-*m* and the plural marker *-*s* (Meier-Brügger 2000: 185, Fortson 2004: 106). In this case, however, one may hypothesize that *-*s* continues an old particle that was adjoined to the right periphery of the noun. A similar explanation would not be acceptable in our case since *-(a)nz* was extended along the plural paradigm through reanalysis rather than grammaticalization.

[45] The same reason is probably responsible for the traditional interpretation of *-anzati* as instrumental plural, which implied that *-anz-* in *massan-ass-anz-ati* etc. marked the plurality of the adjective itself, and not of its possessor. Melchert 2000 suggeeded in showing the erroneous character of this analysis by philological means, but in purely formal terms it is more straightforward since it yields the expected sequence NUMBER+CASE at the end of the adjectival form.

irregular forms such as *sang-ed* or *wrote-d*. It is true, however, that if such forms become standard in a situation of language maintenance, it is usually because the old affix has lost productivity. We avoid this problem if we assume that Luvian possessive forms in *-nz*(-) were introduced by second language learners, who processed morphemic complexes like *massanassa-* as secondary stems.[46] Since the area of Kizzuwatna had a mixed Hurrian and Luvian population, Hurrian emerges as the likely native language of these individuals.

This, of course, does not relieve me from the necessity of explaining why *-nz*(-) could acquire the meaning of a possessive plural marker. The answer comes from analysis of the Hurrian possessive construction. We have already seen that the dependent noun agrees in case with its syntactic head in the Hurrian language, which yields "double case" forms like *i-ni-pa-a-i* in (38) where the agreement case follows the genitive. Morphophonemic changes on morpheme boundaries could, however, "consume" the genitive ending *-ve* in certain environments in such a way that it would lose any phonetic representation. This is what happened in (39) and other cases where an instrumental head noun governed a plural dependent noun. The consonant *v* underwent a perseverative assimilation to the preceding sibilant, while *e* disappeared in sandhi with the following vowel (Giorgieri 2000: 188). As a result, the inflection of the dependent noun consisted of the plural marker *-(a)ž-* followed by the instrumental marker *-āe* on

[46] The form *iš-ša-ra-an-za-ti* in (35) may theoretically be taken not as a scribal error but as the plural possessive marker *-anza-* attached to a bare root. This suggestion, however, must remain a pure speculation as long as it is made on the basis of a single attestation.

the surface level. The exact equivalent of this sequence in Luvian was *-anz-adi*, as in (31).

(38) KUB 29.8 iii 39, CTH 777.2.A (MS), Haas 1984: 97
i-ni-pa-a-i ha-a-ša-ra-a-i
eni=v(e)=āe hāž=ar(i)=āe
god-Gen=Instr anoint=Suff=Instr
'with the oil of the god'.

(39) KUB 29.8 iii 7-9, CTH 777.2.A (MS), Haas 1984: 94[47]
da-a-du-ga-ra-a-i DINGIR.MEŠ-na-ša-a-[(e tar-šu-wa-na-ša-a-e)]
tad=ugar(i)=āe en(i)=n(a)=až=(ve)=āe taržuwan(i)=n(a)=až=(ve)=āe
love=Recipr=Instr god-RltPl=Pl=Gen=Instr god-RltPl=Pl=Gen=Instr
'with the mutual love of gods and humans'

Giorgieri (2000: 217) has not found any cases where the sequence *-až-āe* would be used for marking the plurality of the instrumental noun, and not its possessor. This gap is not accidental given that the marker *=āe* appears to function as an adverbial suffix (Giorgieri 2000: 218 with ref.). Thus the sequence DINGIR.MEŠ-*na-ša-e* is an unlikely candidate for conveying the meaning 'with the gods' in addition to 'with (one) of the gods'. This is, of course, a similar distribution to what we encounter in Kizzuwatna Luvian, where *massanassa-nz-adi* meant 'by (one) of the gods' (Melchert 2003b: 188), but **massan-adi* would mean 'by/through/with the god(s)', with no distinction in number.

Thus I propose that the Luvian forms in *-assa-nz-adi*, the most frequent ending signaling the plurality of the possessor, represented direct calques of Hurrian forms in *-až-āe* built on top of the pre-existing possessive stems. In terms of language contact, we are dealing here with an instance of morphosyntactic imposition of Hurrian upon

[47] Restored according to KUB 29.8 iii 16-18

Luvian. More frequently than not, imposition effects manifest themselves in a situation of language shift. Neither Hurrians nor Luvians are normally viewed as autochthonous to Kizzuwatna, but if my analysis is correct, then Hurrians are expected to have arrived to this area earlier, and then gradually shift to the language of the Luvian newcomers. This scenario squares well with what we know about the situation in Iron Age southeastern Anatolia, where one finds no trace of Hurrian except for relic personal names. Luvian emerged as a winner in the competition between the two languages.

Once *-nz-* acquired the value of a plural possessive infix, it began its analogical spread across the paradigm, and hence we encounter it before dative singular and plural endings. Melchert (2000: 178-79) proposed that its spread to the nominative and the accusative possessive adjectives was blocked by phonotactic constraints. The consonantal infix *-nz-* was apparently not compatible with inflectional endings beginning with a consonant, since their juxtaposition would generate inadmissible consonant clusters (**-*nz-n*, **-*nz-nzi* etc.). This consideration would, however, not apply to the genitive plural in *-assanza*, which could be built upon the analogy *-assadi* / *-assa* = *-assanzadi* / *X*. If this mechanism was indeed responsible for the rise of plural genitives in Kizzuwatna Luvian, then their final *-a* must have been phonetically real. If we assume that forms in *-assanza* in (34) and (35) show nom./acc. pl. n. *-a*, this ending would likewise be licensed by Melchert's constraint.

If my explanation is correct, it provides a direct proof that Luvian passages embedded in Hittite purification rituals are written in the dialect of Kizzuwatna. We have seen in 2.2 that the rituals of Zarpiya, Puriyanni, and Kuwatalla/Silalluhi reflect the Kizzuwatna cultural setting, but only the discovery of structural innovations that

complement their peculiar diction warrants the hypothesis that we are dealing here with a separate dialect. One can now use the presence of contact-induced forms in *-assanz(a)-* as a test for determining which other Luvian texts were written in the Kizzuwatna dialect. Thus we reach the dialectal attribution of KUB 35.102+103 (CTH 766): besides *ú-li-ip-na-aš-ša-an-za* cited in (34), one can mention dat. pl. ^{d}EN.ZU-*an-za-an-za* (ii 11). This is a non-trivial result since the content of this text does not seem to give any indication as to its geographic origin.[48]

2.6 Imperfective *-zza-* and the Verb 'to do'. The hieroglyphic Luvian inscriptions of the Iron Age contain a large set of verbal forms provided with a derivational suffix *-(z)za-*. Formally speaking, this suffix represents an impeccable cognate of the Hittite imperfective marker *-ske-* < PIH. **-sk'e-* (Melchert 1987: 198-201 and passim). The semantic correspondence between the two suffixes is less perfect. While Hitt. *-ske-* can be regarded as a synchronic aspectual marker (Hoffner and Melchert 2002), Luv. *-(z)za-* was in process of being lexicalized. While the synchronic opposition between "CRUS"*-i* (*=ta-i*) and *tazza-ttu* in (40) appears to convey aspectual distinctions, and the ideogram CRUS+CRUS in (41) may indicate that the native speakers perceived the respective form as distributive, nothing speaks for the imperfective character of the commonly used Luvian verb *assazza-* 'to say' (42). So far as we can judge, it has completely replace its shorter equivalent *assa-*, whose possible

[48] The analysis of KUB 35.90 7 ^{d}UTU-*ša-an-za-a[n]* is less clear. Since the syntactic position of this word cannot be determined due to its fragmentary context, one cannot exclude that we may be dealing here with a combination ^{d}UTU-*sanz=an.* Consequently, any conclusions about the dialect of KUB 35.90 would be premature.

attestations are limited to Bronze Age Luvian (Melchert 1993: 34). Nevertheless, the etymological match between Hitt. *-ske-* and Luv. *-(z)za-* remains beyond a reasonable doubt.

(40) KARATEPE 1, § 74-75 (Hu.), Hawkins 2000: 58
POST-na-wa/i ARHA?! (“CRUS<”>)**ta-za-tu** |ara/i-zi OMNIS-MI-zi (OCULUS)á-za-ti-wa/i-tà-sa |á-ta$_5$-ma-za (DEUS)LUNA+MI-sa-wa/i (DEUS)SOL-ha REL-ri+i á-ta$_4$-ma-za “CRUS”-i
‘Hearafter may Azatiwada’s name **continue to stand** for all ages as the Moon’s and the Sun’s name stands’.

(41) KARKAMIŠ A 6, § 25
za-sa-pa-wa/i (MENSA.SOLIUM)á-sa-sa CRUS+CRUS(-)**ni-za-ia** |REL-a-ti REL-ti-i-ha REX-ti |PRAE-na
‘If this seat **passes down** to any king…’

(42) KARATEPE 1, § 67-68 (Hu.), Hawkins 2000: 57
|a-wa/i za-ri+i |**á-sa$_5$-za-ia** wa/i+ra/i-la-ia-wa/i “PORTA”-la-na i-zi-i-wa/i
‘Or (if he) **proclaims** thus: “I will make these gates my own” ’.

The Bronze Age Luvian verbal forms endowed with the same suffix do also exist, but the scholars who discussed them in the past failed to stress that they appear to be restricted to the Luvian dialect of Hattusa. The clearest example is (49), where the marker *-zza-* is probably used with an inchoative value. This passage belongs to a prayer attributed to Mursili II. Another relevant example is 3sg. pres. *hal-wa-at-na-az-za-i* that is attested in a fragmentary context KUB 36.89. obv. 39 in a Hittite ritual for the Storm-god of Nerik (the parallel locus KUB 36.88 obv. 11 has [*hal-wa-a*]*t-na-za-i*). The meaning of this verb is a matter of some debate. Starke (1990: 475-77) collected a dossier of cognate Luvian forms and opted for the traditional translation ‘to become irritated’. Melchert (1993: 50) suggested a different translation ‘to become excited’, which in my opinion fits better the meaning of the available cognates. Whichever solution one prefers, the inchoative interpretation of *-(z)za-* remains likely. A question

whether we are dealing here with a Luvian foreign word or with an assimilated borrowing likewise cannot be resolved at the present time. Nevertheless, the Luvian origin of this verb is certain, not only because of the discussed suffix but also in view of the lack of assimilation in the consonant cluster *-tn-*.

(43) KUB 14.8 obv. 23-24, CTH 378.II (NH/NS), Lebrun 1980: 205
ABU-YA=m[a] ˹**kap-pí**˺**-la-az-za-at-ta** n=as *INA* KUR Mizri pait
'My father **waxed wrath** and went to Egypt'.

The absence of *-(z)za-* iteratives in Istanuwa Luvian passages available to us may well be accidental. It is more difficult to assume a coincidence in the case of Kizzuwatna Luvian. The Luvian passages of Kizzuwatna rituals feature at least three assured iteratives in *-(s)sa-*: *halalanussa-* 'to purify', *ippadarrissa-* 'to distrain', and *sahhanissa-* 'to oppress with forced labor (vel sim.)'. The *-(s)sa-* iteratives represent a common Luvian, indeed a common Anatolian feature (Melchert 1987: 200), but in Iron Age Luvian texts they are approximately as frequent as the iteratives in *-(z)za-*, and sometimes alternate with them (e.g. IRA-*laza-* vs. IRA-(*sa*)*lasa*, Hawkins et al. 1974: 184). Furthermore, the Iron Age Luvian stem *asaza-* 'to say, speak' appears to have a counterpart *assa-* in Kizzuwatna Luvian (Melchert 1993: 34). These data suggest at the very least that the distribution of the suffix *-za-* was restricted in the Kizzuwatna Luvian dialect.

Another important isogloss linking Empire Luvian and Iron Age Luvian emerges from the analysis of the synonymous Luvian verbs *ā(ya)-* and *izzi(ya)-*. The basic meaning of both verbs is 'to do, make', but when they are accompanied by the reflexive pronominal clitic, they acquire an idiomatic meaning 'to ritually treat, worship'. The same two stems endowed with mediopassive endings (which are otherwise rare in

Luvian) mean not only ‘to be made’, but, secondarily, ‘to become’.[49] All these basic meanings are shared by Hitt. *iē* > *iya*-, the well-established cognate of Luv. *ā(ya)*- (Melchert 1984b: 159-61). The close and non-trivial similarity between the semantic ranges of *ā(ya)*- and *izzi(ya)*- indicates that their meanings must have undergone a convergent development.

Before approaching the relationship between these two roots, it is necessary to explain the origin of the competing stems *ā*- and *āya*- in Luvian. Melchert (1984b: 160) suggested a complicated scenario, according to which the parallel stem *āya*- arose from the contamination of the inherited 3sg. *ādi* vs. 3pl. **yanti*. I deem this historical explanation quite unlikely, since the variants *ā*- and *āya*- occur on the same cuneiform tablet KBo 13.260 and in the same hieroglyphic inscription SULTANHAN, with no morphological distribution in the first case. I would rather suggest a synchronic difference between the perfective/punctual stem *ā*- and the imperfective/iterative stem *āya*-. Thus the sentence (44) presumably refers not to a single harvest of grapes, but rather to a periodical yield, whereas in (45) we are dealing with one act of restoration. The two forms can be formally derived from the Pre-Luvic root stem **yā*- and reduplicated stem **yayā*-, respectively. Although the intervocalic *-*y*- is likely to disappear in Luvian by sound law, in a number of cases it is preserved on morphological boundaries (Rieken 2005/2006). In this case, the functional reason for its preservation

[49] All the meanings except for **āya*- ‘to become’ are illustrated by examples later in this section. For **āya*- (med.) ‘to become’, see e.g. KUB 35.54 ii 41-45.

(or restitution) is obvious: should it drop, the formal difference between the two stems would disappear

(44) SULTANHAN, §§ 23-25, Hawkins 1995: 466
|a-wa/i |wa/i-ia-ni-i-sa |PUGNUS-ri+i-ti-i |tara/i-sa-zi-pa-wa/i |ia+ra/i-ti-i
|a-wa/i |MILLE ti-wa/i-ta-li-na |**á-ia-ti-i**
'The vine will grow, extend (its) branches, and (it) will **produce** 1000(?) *tiwadali*- measures (of wine).

(45) SULTANHAN, § 45, Hawkins 1995: 467
|a-wa/i-tà |á-pi-i |sa_5+ra/i-wa/i-ti-wa/i+ra/i-sá |**á-tà**
|wa/i-su-SARMA-ma-sa-a-ri+i |wa/i+ra/i-ia-ri+i
|sa-na-wa/i-sa-tara/i-ri+i-ha
'But Sarwatiwadas has re-**made** it, by Wasusarmas's help and goodness'.

Thus, although the stems *ā*- and *āya*- probably had different functions, they are clearly genetically related. By contrast, the genetic connection between *ā(ya)*- and *izzi(ya)*- appears to be unlikely. The closest extra-Anatolian cognate of Luv. *ā(ya)*- and Hitt. *iē*- is Toch. A *ya-/ypa*- 'to do, make'. Since Anatolian and Tocharian are two outliers within the Indo-Hittite family, which cannot exhibit common innovations, one must assume that 'to do, make' was the original meaning of Luv. *ā(ya)*-. Yet Ved. *yātú*- and Av. *yātu*- 'black magic, sorcerer' suggest that the derived meaning 'to treat (magically), worship (vel. sim.)' may also go back to Proto-Indo-Hittite. As typological parallels of for this semantic change, one can mention ONorse *gørningar* 'deeds, acts; magical acts, witchcraft' derived from *gørva* 'to do, make'; Skt. *kr̥tyā*- 'deed, act; magic, witchcraft' and Russ. *čary* 'spells'; *čaro-dej* 'wizard' derived from IE. ***k^{w}er* > Skt. *kar* 'to do, make'. The specific syntactic transformations that may have been involved in the semantic development of Luv. *ā(ya)*- are discussed in Rieken (forthcoming).

The story of *izziya-* is very different. All the morphological derivatives of this Luvian verb, such as /itsijatar-/ 'ritual' (MARAŞ 14, § 7), /itsiyana/i-/ 'ritual' (IZGIN 2, § 9) and /itsista-/ 'to honor' (e.g. KARKAMIŠ A1a, § 35), suggest that its primary meaning was 'to worship'. Furthermore, Rieken (forthcoming) plausibly compared the root of this verb with IE. √ *yag'*, which otherwise yields Ved. *yájate* 'he worships, sacrifices' and Gk. ἄζομαι 'I stand in awe, revere'. Thus both the internal and the external comparanda suggest that the specific religious meaning of *izziya-* must be original, while its more generic meaning 'to do, make' must be derived. Unfortunately, the semantic development in this direction does not appear to be typologically common, and therefore one must look for a specific reason why it could occur in certain dialects of Luvian.

I believe that the main factor that has contributed to the semanting expansion of *izzi(ya)-* was folk etymology. Since the original meaning of *izzi(ya)-* constituted a subset of the broad semantic range of *ā(ya)-*, the first verb gradually came to be perceived as the derivative of the second. Such an association, of course, could be established only in those dialects of Luvian that have preserved the derivational suffix *-zza-*. The speakers of these dialect must have processed the form *izzi(ya)-* as the iterative ***izza-* extended by the secondary derivational suffix *-(i)ya-*. Consequently, they would extend the use of *izzi(ya)-* to all the situations where *ā(ya)-* could otherwise be used.

A modern linguist would have a hard time defending this etymology. There are simply no other cases where the *-(i)ya-* suffix is added on top of the etymological iteratives in *-zza-*. On can, however, point out at proposal of the authors of the "New Readings", according to which the affricate element in *izziya-* "could be treated as

equivalent to the to the *-šš-* element of Hitt. *ešša-*" (Hawkins et al. 1974: 187). This was at the time when the same authors entertained an erroneous hypothesis that the Luvian suffix *-(z)za-* represented a direct cognate of Hittite *-ssa-* (Hawkins et al. 1974: 184-86). The refutation of this phonological claim in Melchert 1987 automatically undermines its etymological implications. Nevertheless, a folk etymology that was acceptable for Morpurgo-Davies and Hawkins must have been good enough for Hittite and Luvian bilingual speakers!

But the factor that adds the most weight to the suggested etymological reanalysis is the identical dialectal distribution of *-zza-* and *izzi(ya)-*. Only *ā(ya)-* is attested in Kizzuwatna Luvian (cf. Melchert 1993: 3-4), while the hieroglyphic inscriptions of the Empire period, presumably reflecting the Luvian dialect of Hattusa, show the competition of *ā(ya)-* and *izzi(ya)-* (cf. (46) vs. (47)).

(46) SÜDBURG, § 18, Hawkins 1995: 22
zi/a+a-ti DEUS.*202 *a-pa-ti ANNUS **i(a)-zi/a**
'I **made** this "Divine Eath-Road" in that year'.

(47) EMİRGAZİ § 27, Hawkins 1995: 88
REL-i(a)-sa-pa-wa/i REX zi/a-i(a) STELE PUGNUS-*MI*-na **á**
'But whatever king **causes** these stelae to be firm…'

An independent piece of evidence for the existence of the stem *izzi(ya)-* in its derived meaning in Empire Luvian comes from the form *izziyattari* 'appears', attested in a Hittite shelf-list entry (48). Since the 3sg. med. ind. ending *-ttari* belongs both to the Hittite and the Luvian verbal paradigms, and since cuneiform scribes never used gloss-marks in shelf-lists, we do not have any real way to know whether this form represents a code-switch or a borrowing (the absence of the expected lenition of *–tt-* is a faint

argument in favor of the latter solution). Whatever the right option is, this form obviously cannot be separated from Iron Age Luvian (med.) *iziya-* 'become' (49).

(48) VBoT 133 obv. 7 CTH 276.12 (NH/NS), cf. Dardano 2006: 80[50]
m]ān GIDIM kuedani **iz-zi-ya-at-ta-ri** x[
'If a ghost **appears** to someone…'

(49) KARKAMIŠ A2+3, § 24, Hawkins 2000: 110.
*a-wa/i-sa |DEUS-na-za |CAPUT-tá-za-ha |*366-na-na
|(DEUS) TONITRUS-tá-ti-i |(LOQUI)ta-tara/i-ia-mi-sa **i-zi-ia-ru**
'Let him **be (lit: become)** cursed by Tarhunzas in the sight of[?] gods and men'.

Iron Age Luvian hieroglyphic monuments furnish us with the evidence for a stylistic/sociolinguistic distribution between the synonymous verbs *ā-*/*āya-* and *izzi(ya)-*. Not a single Iron Age Luvian text contains alternating occurrences of the two verbs. None of the seven instances of *ā-*/*āya-* listed in Hawkins 2000: 469 occurs in an inscription commissioned by a palace. This is a statistically significant result given that royal inscriptions constitute the most frequent genre in the Iron Age Luvian corpus. Even more significant are the cases when the two verbs are used in the same idiomatic meaning. Thus *kattan izzī-* (50) in the inscription of Azatiwada, ruler of Que, alternates with *kattan ā-* put into the mouth of Sarwatiwada, servant of Wasusarma (51), in the meaning 'to carry out, provide'. The verb *izzī-* meaning 'to (ritually) treat' in a fragmentary text incised on a stone lion and mentioning a "country-lord" of Carchemish (52) contrasts with *ā-* used in the same figurative meaning in a graffito of a private individual (53).

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[50] Dardano 2006 follows Carruba 1974a in emending *iz-zi-ya-at-ta-ri* as GIŠ.<HUR>- *zi-ya-at-ta-ri* 'gives a sign'. She did not realize that the New Readings, which revealed the existence of the Luvian verb *iz(z)i(ya)-* had rendered Carruba's interpretation unnecessary already thirty years ago.

(50) KARATEPE 1, § 15, Hawkins 2000: 50
|á-mi-há-wa/i |DOMINUS-ní-i |(NEPOS)ha-su-´ |OMNIS-MI-ma
||(BONUS)sa-na-wa/i-ia |CUM-na **i-zi-i-há**
'And I **did** all good things for my lord's family'.

(51) SULTANHAN, § 13, Hawkins 2000: 466
|HWI-pa-wa/i |sa_5+ra/i-wa/i-ti-wa/i+ra/i-ia-´ |wa/i-su-SARMA-ma-sa
SERVUS-ta_5-i |TONITRUS-hu-za-sa |za-a-zi |wa/i+ra/i-ia-zi-´ |CUM-ni
|**á-tà-´**
'And indeed Tarhunt **provided** this assistance for Sarwatiwada, servant of Wasusarma'.

(52) KARKAMIŠ A16a, § 3, Hawkins 2000: 190
...]x REL?-na-´ REL?-na-´ || |DEUS-ni-i-na |**i-zi-i-ti**
'…whatever(?) god (he) celebrates…'

(53) HISARCIK 1, § 2, Hawkins 2000: 483
a-wa/i-mi |MONS-ti-na |ha+ra/i-ha+ra/i-na 9||-ta
(GAZELLA)i+ra/i-wa/i-ti-i |**á-ha**
'I **treated** Mount Harhara nine times(?) with *irwa*-gazelles'.

Yet *izzi(ya)-* 'to do, make' was manifestly on the rise. Thus the late ASSUR letters emanating from the community of Luvian merchants use this verb instead of the expected *ā-/āya-* (54). We are dealing here with a classical pattern of "change from above", i.e. proliferation of a linguistic variable associated with a higher social status. I would like to suggest that the same mechanism governed the spread of the "iterative" marker *-(z)za-* in Iron Age Luvian. We have seen that its appearance in Bronze Age Luvian appears to be restricted to the Hattusa dialect, while Iron Age Luvian inscriptions supply a fair quantity of "iterative" forms. The Anatolian and Indo-European cognates assure the archaic character of *-(z)za-*, but this does not preclude the possibility of its extinction or obsolescence in certain dialects of Bronze Age Luvian. Later, however, it must have reemerged in the Iron Age Luvian written *koine* under the impact of the

prestigious Hattusa dialect. Example (55) provides an independent illustration of its presence in the same corpus of ASSUR letters.

(54) ASSUR b, § 4, Hawkins 2000: 534
|u-nu-**i**-pa-wa/i-mu |1-ti-na |za-na |(“LOQUI”)ma-ra+a-ti-na |CUM-ni
|**i-zi-ia-´**
‘Now **do** this first order/thing for me’.

(55) ASSUR e, § 1, Hawkins 2000: 535
|**á-sa$_5$-za** [|]pi-ha-mi |hara/i-na-wa/i-za-sa-wa/i (“LOQUI”-´)ha-ri+i-ti
‘**Say** to Pihami, (thus) speaks Haranawiza’.

It is easy to see that the use of *izzi(ya)-* is restricted to the same dialectal area of Luvian where the suffix *-zza-* is synchronically attested. Under my scenario, this correlation is functionally motivated. Since *izzi(ya)-* could not be reinterpreted as the cognate of *ā(ya)-* in the Luvian dialect of Kizzuwatna, where the syffix *–zza-* fell out of use, it must have remained restricted to its original meaning ‘to worship (vel sim.)’ and was likely to eventually disappear as a redundant formation. By contrast, once *izzi(ya)-* was accepted as the derivative of *āya-*, it began to gradually encroach upon the pragmatic domain of its shorted equivalent. From the formal perspective, this is essentially the same phenomenon as the replacement of the original *assa-* ‘to say’ with its etymological derivative *assazza-* in Iron Age Luvian. From the functional perspective, *izzi(ya)-* functioned as a “hermit crab”, a lexeme that occupied the semantic niche previously held by a shorter and therefore less salient stem **ā(ya)-*.[51]

[51] The term “hermit crab” was introduced in Heath 1998 with reference to a situation when “[a] grammatical affix undergoing phonetic erosion is sometimes abruptly replaced by a conveniently available lexical stem with which it shares one or more phonological segments”. Our situation depends from this prototypical case in two respects. On the one hand, the object of replacement is not a grammatical affix, but rather a verbal stem with a complex meaning. On the other hand, the replacement is not abrupt, but like every “change from above”, it goes through a stage of sociolinguistic variation.

The starting point of this section was the analysis of two seemingly independent innovations. The innovation of Kizzuwatna Luvian is the elimination of the (etymologically) iterative suffix *-zza-*, while the innovation of Empire Luvian is the gradual lexical replacement of *ā(ya)-* with with its synonym *izzi(ya)-*. I have tried to demonstrate the mutually interdependent character of these two dialectal isoglosses. Whether or not one accepts this part part of my account, the descriptive data adduced in each of the two cases provide further links between Empire Luvian and Iron Age Luvian, separating these two dialects from Kizzuwatna Luvian.[52]

2.7 Other Dialectal Isoglosses. The preceding discussion focused on the dialectal innovations within Luvian that manifest themselves either exclusively in cuneiform texts, or in a combination of cuneiform and hieroglyphic sources. Now I will provide a brief survey of morphosyntactic changes that can be studied only on the basis of Luvian hieroglyphic inscriptions. As before, I limit myself to those innovations that either manifest themselves already in Bronze Age texts, or were projected into the Bronze Age by some scholars.

A variable that exhibits a perfect match with the distribution of Luvian writing systems is presence vs. absence of clause-initial *pā=*. In Luvian cuneiform texts, the usage of this particle largely overlaps with that of *a=*, although unlike the latter, it can occur alone without Wackernagel clitics attached to it (Melchert 2003b: 209, cf ex.

[52] It is worth noting in passing that another innovation of Iron Age Luvian is the replacement of the verb *anniya-* 'to do, carry out' with *kattan izziya-* (or *kattan ā-*). Contrast the Kizzuwatna Luvian example (32) with Iron Age Luvian examples (51) and (54) discussed in this section. The verb *anniya-* is completely absent from Luvian hieroglyphic texts.

(31)). Besides Kizzuwatna Luvian, this particle also occurs in an archaic festival fragment reflecting the Hittite state cult (KUB 35.133 iv 8) and in the Songs of Istanuwa (e.g. KUB 35.39 iv 14, 16). By contrast, it does not appear in either Bronze Age or Iron Age texts written in the hieroglyphic script. The seeming instances of clitic chains beginning with graphic *pa*- in the Iron Age Inscriptions (e.g. KARKAMIŠ A1a § 35, KARKAMIŠ A3 § 21, ALEPPO 2 § 14 etc.) can all be reinterpreted as chains beginning with *appa*= 'then' written with the application of the graphic device known as "initial-*a*-final" (Hawkins 2003: 159-61).

Melchert (1993: 161) lists *pā*= as an allomorph of the contrastive/adversative conjunction =*pa*, which is profusely attested in both Bronze Age and Iron Age Luvian as a Wackernagel clitic. This may create an impression that the spread of =*pa* to clause-initial position possibly represented an innovation of "cuneiform" Luvian dialects. I do not see, however, any reason to treat *pā*= and =*pa* as two synchronic variants of the same morpheme. Melchert (2003b: 208-209) himself implicitly gave up on his earlier analysis when he stressed the functional differences between the two particles. Even if they are historically related, the reconstruction of different ablaut grades *=*pe* vs. **pó*= suggests that they were differentiated already in Proto-Indo-Hittite. Thus there is no way around treating *pā*= as a linguistic archaism that was eliminated in the area of Hattusa by the thirteenth century BC. The generalization of the sentence-initial clitic *a*= in Empire Luvian may be considered together with the generalization of *nu*= in Middle and New Hittite at the expense of the earlier clitics *ta*= and *su*= (thus also Rieken 2006a: 280).

Another widespread feature of early Luvian is the use of the "sentential particle" =*tar* which in some cases is equivalent to Hittite =*san* (Melchert 2003b: 210) This particle, which will be discussed in more detail in 3.8, appears in texts from both Kizzuwatna (1) and Istanuwa (14) guarantee its pan-Luvian status.[53] Nevertheless, it is not attested in the large corpus of Iron Age Luvian inscriptions where =*ta* frequently takes over its function (e.g.. KARKAMIŠ A1a § 35, ALEPPO 2 § 16, etc). The absence of this particle in a smaller corpus of Empire Perod hieroglyphic inscriptions may theoretically be accidental, but comparison with Late New Hittite suggests that it is not. The Hittite particle =*san* came out of use in the second half of the thirteenth century BC, while =*kan* was generalized to all the clauses requiring the use of a "sentential particle".[54] Although we lack a direct proof that this process was triggered by a similar change in Luvian or vice versa, a large number of contact-induced changes in Late New Hittite makes the hypothesis of a parallel but independent evolution less likely (cf. Rieken 2006a: 280).

Melchert (2000: 179-82) reconstructed the subsystem of Bronze Age Luvian plural clitic pronouns 'they, them' that is very similar to one used in some Middle Hittite and all New Hittite texts (see the table below). This reconstruction implicitly assumes dialectal uniformity of the clitic system because the only reliable Luvian form of nom. pl. c comes from the dialect of Istanuwa, whereas all the reliable attestations of acc. pl.

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[54] There is not a single occurrence of "sentential particles" other than =*kan* in the texts that can be attributed to the last Hittite king Suppiluliyama II on historical grounds (Th. van den Hout, pers. comm.).

c. in *=as* come from the Kizzuwatna dialect of Luvian. The Hittite system, however, presumably calques the distribution of Empire Luvian, thus providing a welcome confirmation to the pan-Luvian status of the forms discussed by Melchert.

Table 4: Plural Anaphoric Clitics in Luvian and New Hittite

	Luvian		Hittite	
	common	neuter	common	neuter
nom.	=ada	=ada	=ad	=ad
acc.	=as	=ada	=as	=ad

The innovation of Iron Age Luvian consists in the replacement of *=as* with *=ada* in the accusative of the common gender (cf. Melchert 2003b: 172). The question whether this trivial analogical leveling was in progress already in the thirteenth century BC is unclear. Hawkins (1995: 97) suggested that the object pronoun *=ada* in EMİRGAZİ, § 20 has the common gender plural noun *414.OVIS-*zi/a*, apparently referring to sacrificial sheep, as its antecedent. Although the EMİRGAZİ inscription remains imperfectly understood, the alternative antecedent STELA 'stelae' (n.), is in my opinion more likely.[55] If one accepts the translation given below, there remain no grounds to assume the analogical extension of *=ada* in the late Empire Period . In any event, this process was unlikely to be generalized in the Luvian dialect of Hattusa, since it has no counterpart in contact-induced varieties of New Hittite (Rieken 2006a: 277).

(56) EMİRGAZİ § 19-20, cf. Hawkins 1995: 88
ma-pa-wa/i *414.OVIS-zi/a REL-tá-zi/a STELE ma-lu-wa/i CRUS
*a-wa/i-**tá** ma-na ARHA REL-i(a)-sa-ha CAPUT+SCALPRUM
'But if someone removes(?) the stelae, for which *414-sheep are established as a sacrificial offering…'.

[55] Th. van den Hout informs me that D.Hawkins has independently arrived at similar conclusions about the interpretation of (56) in the course of his ongoing work on EMIRGAZİ blocks.

The Bronze Age Luvian orthotonic forms of first and second person plural pronouns are *anza(s)* and *unza(s)* respectively. The distribution of forms with and without *-s* is not altogether clear, but the available evidence is compatible with the hypothesis that forms with *-s* are nominative or accusative, whereas forms without *-s* are oblique.[56] The occurrence of these forms does not appear to be restricted to a particular dialectal area. Thus acc. *u(n)zas* appears in a Kizzuwatna Luvian passage of the Zarpiya ritual (KUB 9.31 ii 32), dat. *anza* occurs several times in a ritual KUB 35.133 reflecting the state cult of Hatti, while obl. *unza* is contained in a sequence *u-un-za-pí-ya-an-mi*, lit. '(It) is given to me by you', which occurs in one of the Istanuwian songs (KUB 35.142 iv(!) 6-7). In addition dat. *anza* may lurk in the name of an Arzawa general Anzapahhattu (Bryce 2003: 57, 62), if the latter can be analyzed as "let (him) protect us", or something similar.

The Iron Age Luvian forms of the same pronouns, as preserved in hieroglyphic texts, are nom. *u-zu$^{?}$-sa* 'y'all'(KARKAMIŠ A6, § 22), nom.(?) *a-zu$^{?}$-za* 'we' (ASSUR a, § 3; e, §§ 4, 8), nom.(?) *a-zu$^{?}$ -$^{\prime}$-za* 'we' (ASSUR f, § 3), nom.(?) *á-zu$^{?}$-za* 'we' (ASSUR d, § 4), nom.(?) *u-zu$^{?}$-za* 'y'all'(ASSUR c, § 4; ASSUR e, §§ 6, 16, 17), instr. *u-za-ri+i* 'by/from y'all' (ASSUR a, § 4) and instr. *u-za+ra/i^{-i}* 'by/from y'all' (ASSUR a, § 9).[57] In addition, there are attested possessive pronouns *a-zi-* 'our' (e.g. ASSUR f, §

[56] The pronoun *anzas* 'we' used as a nominative lurks in KUB 35.133 iv 13, where 1pl. *huyunni* is attested in the following line. The context is unfortunately fragmentary and therefore my interpretation is tentative. For examples involving other cases, see immediately below.

[57] The instrumental forms of Iron Age Luvian personal pronouns are mentioned in Melchert 2003b: 189. Hawkins (2000: 542a) suggests that *u-za-ri+i* and the other pronominal instrumental forms in

9) and *u-zi-* ‘your’(e.g. ASSUR e, § 7), as well as a likely dative form of the possessive adjective *á-zu$^{?}$-sa$_{7}$-na* ‘our’ (TOPADA, § 26). The nominative interpretation of the forms occurring in the so-called *hatura*-clauses in the ASSUR letters is uncertain; alternatively they can be interpreted as datives.

Melchert (1994: 278-79) derives the 1pl. form /antsunts/ directly from Pre-Anatolian **n̥s-m̥s*, assuming the development **m̥* > **um* > **un* in Hittite. Katz (1998: 143) suggests that *-u-* in /untsunts/ represents a cognate of the Indo-European suffix **-we-* attached to the second person plural pronominal stem *us-* in oblique cases. The disadvantage of both solutions is that they compare Iron Age Luvian with Indo-Hittite, bypassing the Bronze Age Luvian stage. We have seen that the distribution of the stems *anza(-)* and *unza(-)* in second millennium Luvian is pan-dialectal, and so the spread of the *u*-stems in Iron Age Luvian plural pronouns, if it indeed happened, must represent a recent phenomenon.

One could perhaps suggest that the dative form /unts-unts/, the “intensive” reduplicated variant of /unts/ ‘to y’all’, was reanalyzed as /untsu-nts/ at some point in the late second or early first millennium BC. This reanalysis triggered an analogical creation of /antsu-nts/ ‘to us’ and the spread of the *-u-* vocalism to the nominative /untsu-s/ (instead of the original /untsa-s/. The more intensive analogical leveling, attested in the colloquial ASSUR letters, produced the spread of the erstwhile dative forms /antsu-nts/ and /untsu-nts/ to the nominative. The new possessive adjective /antsu-ssa/i-/ was likewise created based on the secondary stem /antsu-/, whereas the synonymous /antsi-/

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the Assur letters are derived from the possessive pronouns. This interpretation is, however, implausible, since none of these forms is accompanied by an overt head-noun.

represents a more archaic formation to be derived from earlier /antz-iya-/. This scenario, however, appears to be exceeedingly complicated. I would like to propose a simpler solution that is based on different phonetic readings of the words in question.

The phonetic value of the sign <zu$^{?}$> (L 432) is extrapolated from Bronze Age seals found in Hattusa, Ugarit and Emar (Hawkins 2005: 298a), but it is not assured for Iron Age inscriptions. In fact, all the Luvian words where the etymological /tsu-/ is to be postulated (e.g. **zuwana/i-* 'dog', **azu(wa)-* 'horse', and **zurni* 'horns') are written with the sign L 448, conventionally transliterated as <sù> (Melchert 1987: 201-02).[58] Marazzi (1990) mentioned a technical possibility that L 432 might be assigned the secondary value <za$_x$> in Iron Age Luvian at some point in the future. An appropriate parallel is provided by the sign L 445, which had only the value <lu> in the Bronze Age, but must be transliterated as <la/i/u> in Iron Age inscriptions. Neverthess, the value <za$_x$> would remain speculative were it not confirmed by combinatory evidence coming from Iron Age inscriptions.

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[58] Melchert (loc. cit.) suggested the value <zú> for L 448, observing that none of the words written with this sign strongly argues for the reading <sù> based on combinatory or etymological evidence. Hawkins (2000: 35-36) remained unconvinced and adduced two forms that, in his opinion, support the reading <sù>. I believe that Hawkins fell short of making a convincing argument against Melchert's proposal. As per Melchert, the value <sú> of the sign having the shape of a horn (L 108) need not be derived from *zurni* 'horns', but rather could be extracted from *suwa-* 'to fill in' through the concept of a cornucopia (cf. KARATEPE 1, § 36 (Hu.) (CORNU+*RA/I*)*su-ra/i-sá* 'abundance'). I forrow Lipiński (2004: 115) in assuming that the phrase *sù+ra/i-wa/i-ni-ti* (URBS) SCRIBA-*li-ya-ti*, occurring in the list of scripts that Yar(i)ri, ruler of Carchemish, professes to have mastered, refers to the "Tyrean", i. e. Phoenician, and not to the Urartian script. The Phoenician name of Tyre was *Ṣūr* (lit. 'rock'), and therefore the derived Luvian adjectival stem must have been /tsurawan(n)i -/. Thus it had nothing to do with *su+ra/i-za-* (URBS), the name of Urartu attested in another inscription of Yar(i)ri-. It would be indeed strange for the Luvian ruler to take pride in his knowledge of the Urartian script, since it was virtually identical to the Neo-Assyrian script that he also professed to know. Since none of the arguments in favor of equating the phonetic values of <su>/<sú> and "<sù>" prroposed by Hawkins is compelling, the new syllabic value <zú> of L 448 must be accepted.

A minimal piece of such evidence comes from the form traditionally transliterated as *a-zu*$^{?}$ *-′-za* (ASSUR f, § 3). The symbol <′> is used to transliterate the sign L 450 in those positions where its phonetic reading <a> is excluded. The discovery of the peculiar graphic device "initial-a-final" (Hawkins 2003: 159-61) makes it possible to account for many occurrences of this symbol as instances of displaced *a* (thus **a-wa/i-tá* in (56) replaced the earlier transliteration *wa/i-tá-′*). What remains are those instances where L 450 is used at the end of a phonetic word not beginning with *a-* by analogy with genuine instances of "initial-a-final" (e.g. spellings like *sa-tu-′* = **a-sa-tu* 'let it be' (SHEIZAR, § 7) triggered spellings like *á-sa-tu-u-′* 'let it be' (SULTANHAN, § 42), and finally, spellings like *tara/i-pi-ru-u-′* 'let him attack$^{?}$' (KAYSERİ, § 16)). In very rare cases, the otiose L 450 crept to the position between the elements of a clitic chain, as in REL-*sà -′-wa/i-sa-′* (ASSUR f, § 9). There is, however, not a single case except for the one discussed here, where L 450 would appear with a zero phonetic value in the middle of a grammatical word.[59]

The alternative reading is *a-za*$_x$*-a-za*. In this case we wind up with a trivial plene writing of the phonetic /antsants/, comparable to e.g. *za-a-zi* 'these' (KARKAMIŠ A1, §4). This would necessitate reinterpreting all the plural pronominal forms of the ASSUR letters as derived from stem /antsa-/ and /untsa-/. Since all the Iron Age Luvian forms containing L 432 are etymologically opaque, it is in fact possible to assume <za$_x$> as the regular value of this sign in the first millennium BC. Under this assumption, the

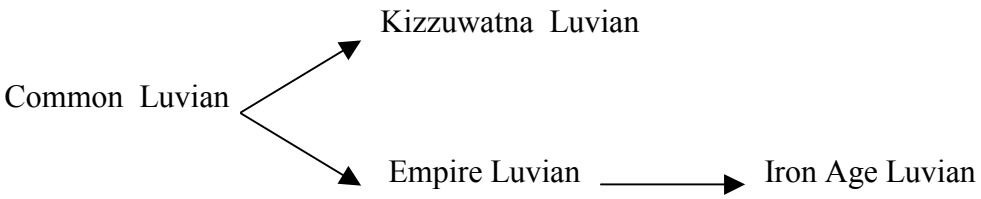
[59] Hawkins (2000: 535) also finds a similar spelling *á-zu*$^{?}$*-′-za* in ASSUR d, § 4, but both the hand copy and the photograph suggest *á-zu*$^{?}$*-za*.

grammatical innovation of Iron Age Luvian consisted in creating new oblique forms with the help of standard endings *-anz(a)* and *-adi*. Since we know that the Bronze Age Luvian clitic *=(m)mas* '(to) y'all, to them' was remade to /=mmants/ in the Iron Age (Melchert 2003b: 172), there are no obstacles to accepting the new dative forms 1pl. /antsants/ and 2pl. /untsants/. The possible spread of these forms to the nominative in Late Luvian of the ASSUR letters is also unproblematic, since the correspondent singular pronouns *amū* and *tū* likewise do not show any formal distinction between the nominative and the dative.

Summing up, the new new value <za_x> of the Iron Age sign L 432 allows me to account both for an otherwise problematic spelling and for the evolution of plural personal pronouns in Iron Age Luvian. There is no more need to project mysterious forms **/antsunts/ and **/untsuts/ in Proto-Luvian, Proto-Anatolian, or Proto-Indo-Hittite.

2.8 Phylogenetic Conclusions. The analysis of dialectal variation within Luvian does not allow me to uphold the traditional classification of Luvian between the "cuneiform" and the "hieroglyphic" dialects. I would like to propose instead the threefold distinction between (Bronze Age) Kizzuwatna Luvian, Empire Luvian, and Iron Age Luvian dialects. The linguistic data are compatible with an assumption that Iron Age Luvian represents a linear descendant of Empire Luvian. By contrast, Kizzuwatna Luvian and Empire Luvian can be rather seen as sister dialects, each with archaisms and innovations of its own. These observations can be summarized in the following stemma:

Figure 2: Luvian Dialectal Phyliation



The most transparent innovations of Empire Luvian, carried over into Iron Age Luvian, are the spread of the nom.pl.c. ending *-nzi* to acc. pl. c. (2.3) and the gradual replacement of *āya-* 'do make; worship; become, appear' by *izzi(ya)-* (2.6). To this one must add the gradual phonological change *l>r* supported by one example in the Hattusa adaptation of the Mastigga ritual and a handful of examples in the texts of the Iron Age. A likely retention of Iron Age Luvian, traces of which can be also observed in Empire Luvian, is the preservation of genitive endings *-assa* and *-assi* (2.4) and of the imperfective suffix *–zza-* (2.6).

In each of the six cases discussed above, the reconstruction of morphosyntactic peculiarities of Empire Luvian is backed by the analysis of cuneiform texts found in Hattusa. Only in the case *izzi(ya)-* is it directly supported by the data furnished by the hieroglyphic inscriptions of the last Hittite kings, while in the other three cases one has to adduce Iron Age Luvian data for comparative purposes. This underscores the importance of cuneiform sources for understanding Empire Luvian and suggests that the label "Hieroglyphic Luvian" must be abandoned as a dialectal designation.

The elimination of the first position clitic *=pa* and the orientation particle *=tar* constitute the "negative" innovations of Empire Luvian (2.7). Both developments cannot be separated from similar morphosyntactic processes occurring in Hittite, but in this case

it is difficult to distinguish between cause and effect. These syntactic changes can be observed only through the study of Luvian hieroglyphic inscriptions, since we lack cohesive cuneiform texts assuredly reflecting Empire Luvian.

The only non-trivial innovation of Kizzuwatna Luvian is the creation of special possessive adjectives marking the plurality of the possessor (and perhaps of a new genitive plural ending). I have suggested that this construction is best taken as a calque from Hurrian (2.5). A "negative" innovation of the Kizzuwatna dialect is the elimination of the genitival forms in favor of possessive adjectives (2.4) and (probably) of the inherited imperfective marker *-zza-* in favor of the synonymous marker *-ssa-* (2.6).

A number of Luvian texts written in cuneiform characters do not show distinct innovations of Kizzuwatna Luvian. Among the pertinent examples there are Luvian passages embedded in Old Hittite rituals and the Songs of Istanuwa. In purely formal terms, this is not a probative dialectological argument, since I am not aware of any forms in the relevant texts that both unambiguously indicate plural possessors and are governed by oblique head-nouns. This is the only grammatical context where Kizzuwatna Luvian shows a categorical "positive" innovation. We have, however, seen in Section 2.5 that the relevant innovation is absent in Iron Age Luvian, and therefore its absence can be projected into Empire Luvian. My account of the origin of specialized possessive forms with plural possessor was crucially dependent on the assumption of a language shift from Hurrian to Luvian. Given that sociolinguistic conditions that could trigger such a shift were probably absent in the western part of Anatolia, the lack of forms in *-assanza*(-) in the "Songs of Instanuwa" must not be accidental. This suggests that no common innovations characterize Luvian texts attested in cuneiform as a whole,

and so the notion of "Cuneiform Luvian" does not correspond to any linguistic taxonomic unit.

There is no doubt that the terms "Cuneiform Luvian" and "Hieroglyphic Luvian" will continue to be used with reference to a corpus of linguistic data recorded using a particular writing system. There is no harm in these designations provided one realizes that they have the same status as, for example, "Alphabetic Ugaritic". Given that the cuneiform and the hieroglyphic scripts render Luvian phonology in two different ways, it is sometimes useful to generalize over a group of texts written in a particular script for purposes of phonological reconstruction. On the contrary, the use of such labels in a dialectological discussion is, in my opinion, counterproductive. One and the same person, Tuthaliya IV, is likely to be responsible both for the text of the YALBURT hieroglyphic inscriptions and for numerous Luvisms embedded in the cuneiform instruction CTH 123.

The alternative terminology adopted in this chapter requires brief sociolinguistic remarks. The phylogenetic tree featuring Empire Luvian and Kizzuwatna Luvian as two primary offshoots of the reconstructed common Luvian obviously represents a simplification. There must have been a number of other Luvian dialects that I cannot address in the same detail solely because they received scanty or no attestation in written sources (some of them were briefly discussed in 2.2). Furthermore, differences between individual Luvian dialects were manifestly not so great as to impede mutual understanding between their speakers. The role of convergence in a continuum of mutually intelligible forms of speech is as important as the role of divergence, which constitutes the reason why wave diagrams are more common than phylogenetic trees in

dialectological studies. Accordingly, I view Empire Luvian and Kizzuwatna Luvian not as results of a primary split, but rather as forms of *koine* formed in the respective polities. This scenario finds confirmation in the fact that the earliest Luvian texts associated with the Hittite core area, passages embedded in CTH 665 and CTH 752, do not show yet any distinct peculiarities of Empire Luvian.

A group of Luvian passages not likely to reflect any sort of *koine* are the "Songs of Istanuwa" and the "Songs of Lallupiya". Poetic texts are naturally resistant to standardization, and dialectal features may even enhance their aesthetic value. On the other hand, there is no guarantee that individual Luvian songs to be performed at Istanuwa or Lallupiya rituals belong to the same original dialect. This is why it is risky to generalize about the place of these fragments on the Luvian dialectal map on the basis of isoglosses gleaned from their individual lines. One can, however, use this corpus as an outlier, in order to argue for or against the pan-Luvian status of particular grammatical features.[60]

The data we have discussed tell us little about the social stratification of Luvian. The discussion of the extent to which the scribes interfered with the grammatical features of Luvian forms they were recording must be postponed till another occasion. For our present purposes it is enough to say that whether we attribute the grammar of Luvian forms, passages, and texts available to us to their authors or to their scribes, we will still be predominantly dealing with the dialects of the elites. Even the ASSUR

[60] This is, of course, not to say that individual Luvian poetic lines embedded in CTH 771-773 are devoid of peculiar grammatical features. See 4.2 for the non-standard ways of using pronomninal clitics in this corpus of texts and Melchert 2003b: 174-75 for a morphological archaism in KUB 35.135.

letters constitute only a partial exception to this generalization. While certain colloquial forms used by their authors deviate from the norm of contemporary texts, merchants involved in international trade between Assyria and New Hittite principalities can be hardly viewed as commoners.

This becomes an important point when we consider the historical relationship between Empire Luvian and Iron Age Luvian. Most hieroglyphic inscriptions of the Iron Age come from the areas that historically belonged to the Kingdom of Kizzuwatna, or lie further southeast. Yet, linguistically speaking, they show common innovations with Bronze Age Luvian of the Hittite core area, and not Bronze Age Luvian of Kizzuwatna. There is no need to appeal to massive population displacement on the wake of the collapse of the Hittite Empire in order to account for this situation (even though this factor may also have played a role). One can rather suggest that the Luwian dialect of Hattusa was also the preferred dialect of the Hittite provincial bureaucracy.

There are independent philological reasons to assume that a large part of the Hittite administration in the capital consisted of Luvian native speakers, as we will see in Chapter 6. When these individuals were installed as governors, deputies, or scribes in the provincial Luvian-speaking centers of the Hittite Empire, their local subordinates might well have perceived them as role models. Accordingly, the dialectal features of their speech could receive a positive valuation and be imitated by others. Thus the social networks of provincial elites were likely to provide a mechanism for the diffusion of dialectal features associated with Empire Luvian already before the fall of the Hittite state. The flight of the Hittite elites after the peaceful abandonment of Hattusa may have

further precipitated this tendency if it was accompanied by their settlement in the former southeastern provinces of the Empire.

The sociolinguistic distribution of synonymous verbs *ā(ya)-* and *izzi(ya)-* 'to do, make; treat, worship' in Iron Age Luvian, discussed in Section 2.6, shows that the same process continued in the Iron Age period. The princes of New Hittite petty states harkened back to the Hittite imperial tradition and some of them were direct descendants of the Hittite royal dynasty. The continuity of scribal tradition between the court of Hattusa and the New Hittite palatial administrations likewise emerges as the most straightforward hypothesis, despite the obvious break in the transmission of the Hittite texts presumably caused by the death of the Hittite language.[61] These factors help to explain why linguistic features characteristic of Empire Luvian came to be generalized in the official discourse of Neo-Hittite rulers. By contrast, private individuals in Kizzuwatna and the Low Land continued for a while to use *ā-*/*āya-* 'to do, make', as they had done in the Bronze Age. The occurrence of *izzi(ya)-* in the ASSUR letters betrays, however, the progressing influence of the standard dialect. [62]

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[61] The most spectacular testimony to the continuity of hieroglyphic scribal tradition in Iron Age Anatolia is the archaizing style of certain late Luvian inscriptions such as TOPADA and especially KARKAMIŠ A 21. In particular, note the reemergence of the sign L 376 used with the value <za> in addition to <zi>, which was clearly reminiscent of Bronze Age scribal practices.

[62] A classical study of a "change from above" is Labov 1966, which discusses the spread of the *r*-pronouncing variety as the prestige dialect in New York City after World War II. The prestige of the *r*-less pronunciation in the 19th century New York City arguably had a degree of support from the similar feature of the British Received Pronunciation and from the prestigious New England dialect. The end of American cultural dependence on Great Britain and the growing impact of the national mass-media in the 20th century raised the prestige of the "standard American" variety. I would like to argue that the incorporation of Kizzuwatna into the Hittite Empire likewise created favorable conditions for the positive valuation of dialectal features associated with Empire Luvian.

Finally one has to address the linguistic distance between the postulated *koines* of Hattusa and Kizzuwatna. The small number of relevant morphosyntactic isoglosses defining each of the two dialects is not compatible with their independent development for more that several hundered years. But what is even more significant is the contact-induced nature of most morphosyntactic innovations posited for Empire Luvian and Kizzuwatna Luvian. The new acc. pl. c. ending *-nzi* in Empire Luvian and the elimination of *–zza-* imperfectives in Kizzuwatna Luvian are the only two dialectal developments for which an explanation in terms of language contact does not impose itself. It is a well-known fact that linguistic changes in a bi- or multilingual environment may proceed at a quicker pace than among the monolinguals.[63] Thus the Luvian-speaking part of central and Eastern Anatolia emerges as a relatively homogeneous linguistic environment in a period before the formation of the new *koines* in the multiligual settings of Hatti and Kizzuwatna.

[63] I do not make here a distinction between the situation of language shift, triggering imperfect second language acquisition, and the situation of language maintenance in a bilingual environment triggering imperfect first language acquisition. The first scenario can be suggested for Kizzuwatna, while the second one in my opinion was more likely in the case of the Luvian speakers of Hattusa, but both could boost the speed of language change in the respective areas.

3 LUVIANS IN WESTERN ANATOLIA?

3.1 Introductory Remarks. Unlike the Luvian presence in Central Anatolia, which, are confirmed through the range of textual materials discussed in the previous chapter the existence of Luvian speech communities in the western part of Asia Minor represents a much less trivial claim. The potential Luvian occupation did not have a long-lasting impact on the history of these areas. None of the Iron Age Luvian texts has been located in situ along the Aegean coast of Asia Minor. After the hiatus of the "Dark Ages", Lydian and Carian inscriptions begin to emerge there by the mid-first millennium BC. Therefore, the proponents of the western Luvian homeland or westward Luvian migrations have to rely almost exclusively on Bronze Age sources. Nevertheless, the view that some Luvians were present in western Anatolia is enjoying unanimous support among scholars, who differ only in its sociolinguistic interpretation. Thus Bryce (2003: 31) hypothesizes that "a great number of Luvian settlements in western Anatolia were probably Luvian foundations, or re-foundations, like Apasa, predecessor of classical Ephesos, Beycesultan, and perhaps also Troy VI". On the other hand, Hutter (2003: 265-270) stresses the presence of non-Luvian elements in the western part of Asia Minor and specifically objects to speculations about the ethnicity of the Trojans.

While the recent decades have seen a surge of interest in the connections between Luvians and western Anatolia, an alarming trend in recent scholarship is the aprioristic approach to this problem transparent in the work of several Indo-Europeanists. Indicative of this approach is a bold statement at the very beginning of Beekes 2003a: "It is generally assumed that western Asia Minor was to a large extent – if not completely – Luwian". On the next page of the same article one encounters a declaration of a similar kind: "It is generally accepted that the country of the (classical) Lydians was originally Luwian-speaking". Beekes makes a sole reference to Melchert (2003a: 22) in support of this claim, even though the modality of Melchert's statement is quite different: "Circumstantial evidence suggests that classical Lydia was Luwian-speaking … though evidence for possible Luwian substrate in Lydian remains sparse". Another instance of the same trend is the rhetoric of Högemann (2003: 9), who casually asserts: "Denn Troja, so können wir heute sagen, gehörte zum Luwischen Sprachgebiet", and uses this unsubstantiated assertion as a basis for his further conclusions.

The sociological reasons for this situation are manifold. On the one hand, the Luvian linguistic dominance in western Anatolia was and remains an unquestionable premise for those arguing for Luvian substrate in Greek. The hypothesis of a Luvian substrate in Greek may now have a dubious reputation, but its basic presuppositions have been firmly imprinted in the collective memory of the scholarly community. On the other hand, several Indo-Europeanists look for the Luvian homeland in western Anatolia because it fits their ideas about the trajectory of Indo-European migrations to Asia Minor. Yet another group of scholars, who are interested in cultural contacts between Greece and Anatolia in the 2nd millennium BC but unwilling to ascribe them to the

agency of the distant Hittites, uncritically invoke Luvians as the only other Bronze Age Anatolian ethnic group whose language is reasonably well known. As a result, philological arguments advanced for the Luvian presence in the Aegean in the late second millennium BC are frequently accepted without critical evaluation. I am not aware of a research work that examines these arguments in their entirety.

This academic climate has influenced the genre of the present chapter. In addition to the discussion of positive facts pertaining to the status of Luvian in western Anatolia, it contains the refutation of inconclusive arguments that have exaggerated the Luvian presence in this region. The reasons of space and internal coherence have forced me to limit myself to the analysis of the publications reflecting the "mainstream" academic discourse and belonging to scholars with background in Anatolian studies. In order to emphasize what we actually know about the region under consideration, I will pay more attention than usual to the survey of primary historical sources.

Before we move to the heart of the matter, brief remarks of methodological nature are in order. First of all, when one addresses the status of Luvian in western Anatolia, one must consistently distinguish between notions of social/cultural dominance and linguistic dominance. In a context of ancient societies, the socially or culturally dominant code was likely to be chosen as the main medium for written texts, whereas one of the ways for us to determine the linguistically dominant code is to assess patterns of interference that occur in the same written texts. My analysis of asymmetrical bilingualism in the Hittite Empire exemplifies this type of reasoning. Since the written materials emanating, likely or assuredly, from Bronze Age western Anatolia are very limited in number and in scope, the analysis of their substrate-induced features may be

less fruitful. Therefore, these sources are more useful for determining the culturally dominant language(s) of the area than for discussing the local vernaculars.

The second methodological point concerns the distinction between Luvian and Luvic proposed in Melchert 2003b: 177, fn. 7. If prudence dictates that we do not label Carian a dialect of Luvian, then a putative ancestor dialect of Carian, which was likely spoken in the southwestern part of Asia Minor in the Late Bronze Age, cannot be called Luvian either. This implies, in its turn, that in dealing with isolated Luvic forms coming from the western part of Asia Minor, one must not prejudge the issue by labeling them Luvian, since they may well turn out to be Proto-Carian, Proto-Lycian, or even belonging to a Luvic vernacular that is not otherwise attested. Only the analysis of specific innovations peculiar to a particular Luvic language can provide a positive reason for a more narrow attribution of the respective forms.

In the absence of positive evidence, Occam's razor must remain our last resort in evaluating socio- and ethnolinguistic scenarios. It means, for example, that we have to avoid postulating contact episodes supported by linguistic, but not historical evidence, if the same linguistic data can be harmonized with alternative pieces of historical evidence, resulting in the reconstruction of different contact episodes. Thus the Luvian borrowings into Lydian need not be attributed to prehistoric Luvian migrations if one can account for them within the context of the Hittite dominion over western Anatolia. Occam's razor must also prompt us to minimize migration trajectories. Thus, unless linguistic or archaeological evidence for Lydian migrations emerges, it is easier assume that Lydian speakers lived in the same region in the second millennium BC as they did a millennium later. Since the considerable part of the Bronze Age kingdom of Arzawa emerges as

Caria in the Classical period, the view that the Luvic ruling elites of Arzawa were of Carian extraction should be preferred to the assumption that they represented newcomers from the central part of Anatolia.

The rest of this chapter is organized as follows. Section 3.2 is devoted to the political history of the kingdom of Arzawa, the primary candidate for a Luvian state in western Anatolia in the contemporary Hittitological discourse. Arzawa personal names analyzed in Section 3.3 are shown to be at least equally compatible with an alternative hypothesis, according to which the native language of Arzawa aristocracy was proto-Carian, while a part of the population spoke proto-Lydian. The status of Hittite and Luvian as official languages of western Anatolia in the period of Hittite dominion is addressed in Section 3.4. Section 3.5 tackles inconclusive historical and philological arguments for the Luvian linguistic dominance in Arzawa, while Section 3.6 accomplishes the same task with respect to the kingdom of Wilusa/Ilion. In Section 3.7, I will discuss the controversial problem of "Trojan Lycians" and suggest a tentative solution that does not require equating Homeric Lycians with Luvians of cuneiform sources. Determining the nature of linguistic contacts between Luvian and Greek and their likely geographic setting constitutes the task of Section 3.8. The scenario of ethno- and sociolinguistic developments in western Anatolia that emerges from the previous discussion will be presented in the concluding section 3.9.

3.2 History of Arzawa at a Glance. The Hittite sources refer to the central part of western Anatolia as the Arzawa region (the variant *Arzawiya-* is likewise attested in

early sources).[1] Its location in western Anatolia, commonly accepted since Garstang and Gurney 1959, is supported through a number of identifications between the toponyms located in or near this region and attested in Hittite transmission on the one hand and their classical descendants on the other hand. Thus Apasa, the capital of Arzawa in the fourteenth century BC, appears to correspond to classical Ephesos, while the nearby town of Millawanda (Milawata) was identified with Miletos (Easton and al. 2002: 97-98). The decipherment of the KARABEL rock inscription, located in western Anatolia and mentioning the kingdom of Mira, which was shown to occupy roughly the same territory as the earlier kingdom of Arzawa, has provided a definite confirmation of Arzawa's westward location (Hawkins 1998). A territory located across the sea from Arzawa is known as the kingdom of Ahhiyawa. In what follows, I will unequivocally assume its identification with the Mycenean civilisation, as argued in Hawkins 1998: 30-31.[2]

Arzawa is mentioned several times in the annalistic literature of the Hittite Old Kingdom as a direction of Hittite military expeditions. According to the annals of

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[1] The most recent survey of Arzawa political history is Bryce 2003: 44-73; 78-84, while Heinhold-Krahmer 1977 can be consulted for a more detailed discussion. Unfortunately, S. Heinhold-Krahmer wrote her book at the time when the consensus about paleographic datings of Hittite texts had not yet been reached. As a result, some of her chronological assumptions are no longer valid.

[2] A detailed discussion of the "Ahhiyawa problem" is obviously beyond the scope of the present work, which is devoted to the languages of Anatolia. For our purposes it is enough to say that the comparison with Gk. ’Αχαιοί "Achaeans" implies that Ahhiyawa could be perceived as an ethnic rather than purely geographic term and consequently transferred to different areas where Greek population groups were socially dominant. An example of such a transfer is the Anatolian toponym Hiyawa, an aphaeresized form of Ahhiyawa, which will be discussed in 3.8. Pace Hajnal (2003: 40-42), this toponym no more undermines the association of Ahhiyawa with Mycenaean Greece than the toponym New England should deflect one from locating England in Europe. For the critical discussion of Hajnal's approach to the Ahhiyawa problem, see Simon 2005: 478

Hattusili I (CTH 4), a pillaging raid undertaken by this king against Arzawa coincided with the Hurrian invasion and the uprisings in the Hittite core area (de Martino 2003: 36-38). A different account of a raid against Arzawa by the same king or by his son Mursili I (CTH 13) is too fragmentary to fully understand its details, but apparently the hostilities with the Hurrians likewise put an end to this enterprise (de Martino 2003: 138-140).

A story from the so-called "palace chronicle" (CTH 9) addresses the punishment of a certain Nunnu from the town of Hurma who embezzled gold and silver which he "found" in Arzawa (Dardano 1997: 32-35). Bryce (2003: 47) and several other scholars interpret this episode as a reference to the collection of tribute, which would imply the vassal status of (a part of) Arzawa with respect to the Hittite Old Kingdom. It is, however, equally likely that Nunnu was the head of another pillaging expedition. An intermediate solution is also possible: what the Hittites could view as a collection of tribute could represent a plunder pure and simple in the eyes of the Arzawa natives. Whatever might be the solution of this particular problem, scholars agree that Hittite failed to exercise a stable control over western Anatolia in the Old Kingdom period. Nevertheless, the available sources mention no local leaders that were able to put up effective resistance against the Hittite aggression. In all probability, the term Arzawa was used in this period as a broad geographic designation, rather than the name of a particular polity.

Arzawa emerges for the first time as a unified state in the fifteenth century BC. The fragmentary *res gestae* of Arnuwanda I (CTH 143) describe an expedition against Arzawa that this Hittite king undertook together with his father-in-law and co-regent

Tuthaliya I.[3] This expedition resulted in the defeat of Kupantakruntiya, "the man of Arzawa", who succeeded, however, in escaping from the battlefield (Carruba 1977: 166-68).[4] Although Arnuwanda I did not refer to his Arzawan adversary as a king in his annals, the reasons for this were probably propagandistic.

The composition attributed to Arnuwanda I and known as the Indictment of Madduwatta (CTH 147) may retroactively describe an earlier episode involving the same adversary and "His Majesty's father" Tuthaliya I. This letter mentions an attack that the unreliable Hittite vassal Madduwatta undertook without a command from Hattusa against the same Kupantakruntiya, "the man of Arzawa".[5] In the ensuing battle, Madduwatta found himself utterly defeated and had to flee for his life, while Kupantakruntiya took possession of his palace and his property. Only the intervention of Tuthaliya I, who sent his general Piseni against "the man of Arzawa", restored the *status quo* (Beckman 1999: 156). In a later period, Madduwatta befriended Kupantakruntiya

[3] In this publication, I will consistently use Tuthaliya I and Tuthaliya II for the kings that are sometimes agnostically numbered as Tuthaliya I/II and Tuthaliya II/III. Although it is possible that the Tuthaliya who was the Great Cup-bearer of Zuzzu, king of Kaneš represented a remote ancestor of the Hittite kings and, as such was mentioned in the offering lists, there is no evidence that he actually exercized kingship anywhere, and assigning him a number would be accordingly inaccurate (cf. the discussion in 5.1 below). By contrast, I accept the arguments of Miller 2004: 7-9 for the likely short reign (or co-regency) of Tuthaliya TUR (or III), son of Tuthaliya II and brother of Suppliluliuma I. This allows me to retain the traditional designation Tuthaliya IV for the thirteenth-century ruler of the Hittite Empire.

[4] There is no textual support for the claim of Bryce (2003: 62) that Kupantakruntiya was captured, but subsequently escaped. The expedition of Tuthaliya I against Arzawa is also mentioned in his own annals (Carruba 1977: 156-58), but the relevant context is unfortunately very fragmentary.

[5] The same individual is frequently referred to as Kupanta-Kurunta in Hittitological literature. Note, however, that the stem-form of his name is *Kupanta-*^{d}LAMMA*-ya* (Goetze 1927: 172). For Kruntiya as a possible Hittite reading of the Sumerogram ^{d}LAMMA, see Hawkins 2005: 290. Note that the Akkadographic spelling *ku-ru*^{o} for the first syllable of Kruntiya reflects no more than a graphic convention corresponding to the phonological /kr-/ or /k^{w}r-/. Runtiya, the Iron Age variant of the same theonym, can be most easily explained through the simplification of a consonant cluster. The name of the Arzawa prince previously referred to as Piyama-Kurunta has been likewise rendered as Piyamakruntiya in this work.

and even offered him his daughter in marriage, but informed Arnuwanda I that this marriage deal represents a ploy to lure Kupantakruntiya out of his country and kill him (Beckman 1999: 157). The new Hittite king apparently agreed with this plan.[6] It is clear from the two mutually complementary Hittite accounts that Kupantakruntiya exercised control over a significant part of western Anatolia and posed a potentially serious threat to the western frontiers of Hatti.[7]

The reverse side of "the indictment of Madduwatta", where his transgressions continue to be enumerated, contains the following laconic statement: "Madduwatta transgressed (his) oath to the father of My Majesty and took the whole land of Arzawa for himself" (Goetze 1927: 24, cf. Beckman 1999: 158). Should one infer from this statement that Madduwatta succeeded in eliminating Kupantakruntiya and installed himself as a new king in Arzawa? Or was the transition of power accomplished by peaceful means? Whatever the answer is to these questions, Madduwatta ended up accumulating the territory that probably surpassed the domain of Kupantakruntiya. For a while he played a double game with Hatti, assuring Arnuwanda I of his loyalty, but at the same time further extending the size of his realm, sometimes at the expense of other Hittite vassal states. We learn from the end of the preserved part of CTH 147 that the sphere of his interests eventually came to include Alasiya, normally identified with Cyprus (Bryce 2005: 135-136).

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[6] Bryce (2003: 52) erroneously attributes this correspondence to Tuthaliya I.

[7] It is worth remembering that the king of the western Anatolian principality of Mira had the same name in a later period, and therefore we may be dealing with a dynastic name. This argument, however, need not be pushed too far, since there may have been no sharp boundary between the names of the kings and those of the other nobles in the western Anatolian world.

The reconstruction of what happened further depends on how one interprets the genre of "the indictment of Madduwatta", only the first tablet of which has been preserved. It is unlikely that the Hittite foreign office took pains to catalog the treacherous acts of a vassal merely as a reference guide for his future moral improvement. In my opinion, the compilation of this document signaled a definite break between Hatti and Madduwatta. We know from Mursili II's account of his later campaign against Uhha-ziti, king of Arzawa, that the declaration of a war against this country was accompanied by the dispatch of a letter describing the transgressions of Uhha-ziti (Goetze 1933b: 46). CTH 147 may have served the same purpose.

Unfortunately, we do not know whether the putative Hittite campaign against Madduwatta had any success. The fact that the later Hittite documents do not mention Madduwatta's name, and even the text of CTH 147 was apparently not copied in the Empire period, may indicate that the Hittite court had no reasons to brag about this conflict. On the other hand, we will see in the following section that the name of Kupantakruntiya reemerges in connection with western Anatolia during the reign of Tuthaliya II. We have no direct proof that this name belonged to the same king of Arzawa as discussed above, or even to his relative, but if this is the case, then the lineage of Madduwatta must have failed to retain the throne in this western Anatolian kingdom.[8]

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[8] The alternative interpretation of CTH 147 is also theoretically possible. Professor Bryce makes the following remaks in his email from July 2007: "The 'Indictment' seems to me more designed to win Madduwatta over by pointing out to him the benefits he has received in the past from Hittite support, and the extreme forbearance both Arnuwanda and his 'father' Tudhaliya had shown in the face of considerable provocation. This sort of approach foreshadows that of a number of vassal treaties. It's part of the stock in trade of Hittite diplomacy". Note, however, that the colophon to CTH 147 does not refer to this text as a treaty, but merely labels it "the first tablet of the offense of Madduwata" (Beckman 1999: 160).

The power of Arzawa reached its climax in the early fourteenth century BC. At this time the Egyptian pharaoh Amenhotep III contacted ^{d}U-taradu (= Tarhuntaradu), king of Arzawa, and asked for his daughter in marriage. This request apparently came as a surprise to Tarhuntaradu, who demanded its written confirmation. Both this letter and the reply of the Egyptian pharaoh have been preserved in the Amarna archives (CTH 151 and CTH 152). Rost 1956 remains the principal edition of both documents, even though many new interpretations of individual passages have emerged in the last fifty years. A particular controversy is concerned with the clause *nu haddusas=sa* KUR-*e igait*, literally 'also/even the land of Hattusa froze'. Starke (1981) viewed it as a metaphoric description of a peaceful situation in Hattusa, while many other scholars interpreted it in an opposite way (cf. e.g. Bryce 2003: 56 (with ref.): 'the country Hattusa is paralyzed').

If the second interpretation is correct, this is likely to be an oblique reference to multiple attacks against the land of Hatti that occurred during the reign of Tuthaliya II and resulted, among other things, in the destruction of Hattusa. The misfortunes that had befallen the Hittite kingdom during this period were summarized one hundred and fifty years later in a decree of Hattusili III (CTH 88), quoted at length in Bryce 2005: 146. If we follow this relatively late source, the king of Arzawa had its share in pillaging the Hatti lands "and made Tuwanuwa and Uda his frontier". Given that Tuwanuwa is identified with classical Tyana (del Monte and Tischler 1978: 447) and thus was located

in the eastern part of the Lower Land, it appears that the incursions of Arzawa spread over the whole southern part of the Hittite core area.

Tuthaliya II and his son Suppiluliuma I gradually succeeded in recovering the lost territories. Nevertheless, Arzawa remained a formidable adversary throughout the first part of the fourteenth century BC. The res gestae of Suppiluliuma I (CTH 40) mention the defeat of a Hittite army led by Himuili at the hand of a certain Anzapahhaddu, prince or general of Arzawa (Güterbock 1956b: 80). The apparent cause of this conflict was yet another incursion of Arzawa troops, which resulted in a mass transportation of the Hittite subjects to the west. Hittites, in their turn, used the Lower Land as a base for their own successful raids against western Anatolia (cf. Houwink ten Cate 1966), but the decisive victory over the western enemy was not achieved at that time.

The Hittite campaign against Arzawa that brought about its definite subjugation occurred in the third and fourth years of the reign of Mursili II and is described in his annals (CTH 61). The refusal of Uhha-ziti, king of Arzawa, to hand over the Hittite refugees triggered the full-scale invasion of western Anatolia led by Mursili II in person. The ailing Uhhaziti had to flee Arzawa and died soon thereafter, while Mursili II established a vassal kingdom of Mira in the conquered territory (cf. Goetze 1933b: 72).[9] In the same campaign Mursili II secured the vassal status of the Seha River Land, another coastal state in western Anatolia (Goetze 1933b: 66-72). The kingdom of

[9] The annals of Mursili II refer to Mashuiluwa as "the king of Mira" already in the period before the fall of Uhha-ziti (Goetze 1940: 38). If this is not an anachronistic designation, one can hypothesize that Mashuiluwa had been originally installed as a ruler of a small frontier principality, whose borders were later extended to incorporate the core of the Arzawa kingdom.

Hapalla likewise reduced to vassal status as a result of the same campaign lay further inland.

It is important for our further discussion that the end of western Anatolian independence was not accompanied by major dynastic changes in this area. The annals of Mursili II inform us that the former king Manapa-^{d}U was allowed to keep the throne of the Seha River Land, after he repented of his former transgressions and assured the Hittite king of his future loyalty.[10] Furthermore, we know from the Alaksandu treaty (CTH 76) that Mashuiluwa, whom Mursili II installed upon the throne of Mira, was related by blood to the royal house of Arzawa (Beckman 1999: 90). We also know that Mashuiluwa came to Hatti as a refugee and was important enough to be given in marriage a daughter of Suppiluliuma I (Goetze 1933b: 72). Whether Mashuiluwa was a brother of Uhhaziti, as Starke (1997a) plausibly hypothesized, or his more distant relative, it is clear that he was chosen in an attempt to accommodate the local population.

Nevertheless, the kingdom of Arzawa ceased to exist under such a name, perhaps because the Hittites viewed it as inciting nationalistic feelings. From now on it was again a mere geographic designation. The reference to "the lands of Arzawa" (KUR.KUR.MEŠ ^{URU}*Arzawa*) in the early thirteenth century Alaksandu treaty (CTH 76) appears to preserve this broad definition of the toponym. The treaty mentions "the four kings of the lands of Arzawa", whose names suggest that they ruled in Mira-Kuwaliya,

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[10] The hapax legomenon ^{m}*Ma-an-pa-*^{d}LAMMA (Laroche 1966, #742) is probably an anticipatory scribal error for ^{m}*Ma-na-pa-*^{d}U, as per Bryce 2003: 36, fn. 12.

Seha River Land, Hapalla, and Wilusa (Beckman 1999: 90, cf. Bryce 2003: 35-36). This corresponds to all the western Anatolian territories controlled by the Hittites at the time when the treaty was concluded.

The political history of Mira and the Seha River Land within the fold of the Hittite Empire was marked by several rebellions against the Hittite domination. Although we lack direct information about the background of individual insurgents, such as Piyamaradu, É.GAL.PAP and ^{d}U-naradu, the simplest hypothesis is to assume that they belonged to the royal families of Arzawa and Seha River Land. Just as the Hittites used Mashuiluwa's claim to the throne of Arzawa in order to promote their own dominion in the region, so the kings of Ahhiyawa, who vied with the Hittites for the control of western Anatolia, could rely on the ambitions of the local princes as a tool for the attainment of their own goals. We know that, after Mursili II conquered Arzawa, at least one of the sons of Uhha-ziti attempted to find refuge in Ahhiyawa (Goetze 1940: 66, 221).[11] Starke (1997: 453), following Mellaart 1986, proposed that Piyamaradu, the most famous among the western Anatolian rebels and the one who demonstrably used the territory of Ahhiyawa as a base for his operations, was the son of Piyamakruntiya and thus the pretender to the throne of Arzawa. It is indeed unlikely that the Mycenaeans would have accepted the risk of a full-scale conflict with Hatti over their support of Piyamaradu unless they believed in the legitimacy of his cause, or at least in his credibility in western Anatolia. The text known as "the Sins of the Seha River Land"

[11] According to Goetze's reconstruction, the king of Ahhiyawa eventually handed Piyamakruntiya to the Hittites, but the relevant context is fragmentary and not conducive to definite conclusions. Even if this did happen, there are no positive grounds to believe that Piyamakuruntiya was handed over together with all his family members.

(CTH 211.4) appears to refer to the hopes of another insurgent, ^{d}U-naradu, to obtain support from Ahhiyawa (Bryce 2005: 304).[12]

In spite of all the rebellions, Mira and Seha River Land continued to be ruled by the same dynastic lines up to the end of the thirteenth century BC. The recently deciphered KARABEL Inscription mentions the three generations of the thirteenth-century rulers of Mira: Kupantakruntiya, Alantalli, and Targasnawa (Hawkins 1998). The above-mentioned text CTH 211.4, probably to be attributed to Tuthaliya IV, concludes with the restoration of the lineage of Muwa-UR.MAH in the Seha River Land.

The written history of both regions comes to its end at about the same time as the written history of the Hittite Empire. Arzawa, again to be interpreted as a geographical rather than political entity, appears alongside Hatti in an inscription of Ramses III among the countries destroyed by the Sea Peoples (Bryce 2005: 333). There is, however, one document that seems to indicate that a western Anatolian state achieved approximate parity with the Hittite Empire in the last years of its existence. The fragmentary letter KBo 18.18 (CTH 186.4), written by a king of Hatti and addressed to a certain Parhuitta, whose titles are lost in a lacuna, is concerned with the affairs of Wilusa/Troy.[13] The elaborate greeting formula of this letter is of a type that was common in the correspondence between kings of an equal rank. Pace Steiner (1998: 173), the Luvoid name Parhuitta belonging to the addressee of this letter almost certainly precludes his identification as a king of Ahhiyawa, but it is not clear which other

[12] See Güterbock (1992: 240-41) for the philological justification of this proposal.

[13] The name ^{m}*Pár-hu-it-ta* can be also read as ^{m}*Maš-hu-it-ta*, but the first reading is more likely, since *pa+ra/i-HWI+ra/i-sa*$_{8}$ (PORSUK § 8) appears to represent a later variant of the same name.

member of the club of "great kings" could have taken a keen interest in western Anatolian affairs. It seems therefore reasonable to follow Hawkins (1998: 20-21) in assuming that one of the western Anatolian kings, perhaps the king of Mira, came to be treated by the last ruler(s) of the weakening Hittite Empire as their social equal.

3.3 Arzawa as Multiethnic Society. In what follows, I will discuss the corpus of personal names appearing in Hittite cuneiform sources that are associated with the kingdom of Arzawa, its descendant, the vassal kingdom of Mira, and the Seha River Land. The inclusion of the last polity is dictated by its likely location on the western coast of Asia Minor, in the vicinity of the kingdom of Mira. Since the location of Hapalla remains somewhat uncertain, and in any event it was located farther to the east, I have decided to neglect the few dynastic names associated with this kingdom in my analysis. The personal names associated with Wilusa, whose ethnolinguistic constitution may have been very different, will be addressed in 3.6.[14]

Table 5: Prosopography of Arzawa

Name	Position	Characteristic Mention
Alantalli (1)	Arzawa general	KUB 14.4 i 8, KUB 14.6 8
Alantalli (2)	King of Mira	Bo 86/299 iv 36
Anzapahhaddu	Arzawa general	KUB 14.4 i 7, 25

[14] The inclusion of several names in the table below is based on a historical interpretation. Thus I assume, as discussed above, that rebels mentioned in connection with Mira and Seha River land were not outsiders, but rather belonged to the extended ruling families of the respective kingdoms. Furthermore, I assume the western Anatolian origin of Mapili and Zuwahallati, who were placed in charge of performing purification rites on Mashuiluwa, king of Mira, together with NÍG.GA.GUŠKIN, who is explicitly connected with Arzawa in a different text (cf. Hutter 2003: 237). By contrast, I have not included Madduwatta in this list, because the principality where he had been born, and which was subsequently annexed by Attarsiya, man of Ahhiya, might as well have been situated on the southern coast of Asia Minor.

Alli	Arzawa female ritual practitioner	KUB 30.65 ii 9
Addaya (^{m}Ad-da-a)	Arzawa male ritual practitioner	Bo 3483, Otten 1973b: 82
É.GAL.PAP	Western Anatolian insurgent	KBo 4.7 iii 6-8
Kupanta-^{d}LAMMA (1)	King of Arzawa	KUB 14.1 i 45-46
Kupanta-^{d}LAMMA (2)	King of Mira	KBo 4.3 i 12-15
Maddunani	Arzawa male ritual practitioner	KUB 7.54 i 1
Mapili	Arzawa female ritual practitioner	KUB 5.6 iii 22
Mashuiluwa	King of Mira	KBo 3.4 iii 23
Manapa-^{d}U	King of the Seha River Land	KBo 3.4 iii 21
Masturi	King of the Seha River Land	KUB 23.1 ii 16
Muwa-UR.MAH	Father of Manapa-^{d}U	KUB 14.15 iv 19
NÍG.GA.GUŠKIN	Arzawa female ritual practitioner	KBo 31.6 iii 14
Paskuwatti	Arzawa female ritual practitioner	KUB 9.27 i 1
Piyama-^{d}LAMMA	Arzawa prince	KBo 3.4 ii 21-23
Piyamaradu	Western Anatolian insurgent	KUB14.3 i 51 et passim
Pipiriya	Messenger of the King of Mira	KUB 23.87 16
Tapalazunauli	Arzawa prince	KBo 3.4 ii 54, 67, 71
Targasnawa	King of Mira	Hawkins and Morpurgo-Davies 1998
^{d}U-naradu	Western Anatolian insurgent	KUB 23.12 8
^{d}U-taradu	King of Arzawa	VBoT 1 i 2
[^{d}I]M-tapaddu	Arzawa male ritual practitioner	516/z, Otten 1973b: 82
Uhha-LÚ	King of Arzawa	KBo 3.4 ii 19
Uhhamuwa	Arzawa male ritual practitioner	HT 1 ii 17
Ura-^{d}U	Brother of Manapa-^{d}U	KUB 19.49 i 2-4
Zapalli	Arzawa general	KUB 14.4 i 9, KUB 14.6 8
Zuwahallati	Arzawa female ritual practitioner	KUB 5.6 iii 22

The name-giving patterns in Bronze Age western Anatolia have never been an object of a separate study, perhaps in view of the limited material available. This task, however, gains urgency after the preliminary publication of a letter found in the Ortaköy archives (Süel 2001). This letter, dictated by a Hittite vassal Uhhamuwa and addressed to the king of Hatti, contains an intelligence report about the convention of potentates in the town of Happuriya. The names mentioned are Kupantakruntiya, Tarhunnaradu, three

sons of Kupantakruntiya called Masturi, Piyamaradu, and Kupantazalma respectively, Uhhawaranu, and Hulliyazalmanu. The toponyms mentioned in the letter leave no doubt that it refers to the events that occurred in Western Anatolia (Süel 2001: 672).

It is easy to see that most of the names occurring in this document resemble fully or partially those adduced in Table 5. This resemblance, however, is not conducive to personal identifications in most cases. The majority of texts found in Ortaköy were written during the reign of Tuthaliya II (Süel 1998).[15] This, in my opinion, immediately precludes the identification of Piyamaradu and Masturi with the historical figures that were active in the thirteenth century BC. The cases of Kupantakruntiya and Tarhunnaradu are more complicated. One can theoretically assume that Kupantakruntiya I, king of Arzawa, had a long reign that spanned the reigns of Tuthaliya I and Tuthaliya II of Hatti. This would imply that Madduwata's conquest of Arzawa either happened just in the Hittite imagination or represented a brief historical episode. On the other hand, the Ortaköy document does not contain any indications as to the position of Kupantakruntiya, while the only king of Arzawa that is known to be a contemporary of Tuthaliya II is Tarhuntaradu. Can the spelling Tarhunnaradu occurring in our document represent a Hittite adaptation of this royal name? In any event, one probably has to assume that Tarhunnaradu was not one of the sons of Kupantakruntiya, who are mentioned separately in the same letter.

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[15] Süel's (2001) attempt to equate the Piyamaradu mentioned in the Ortaköy letter with the western Anatolian insurgent that was active in the early thirteenth century BC appears to be strictly *ad hoc*. The language of the "Tawagalawa Letter" (CTH 181), the most important document mentioning Piyamaradu, is clearly New Hittite. For its historical dating, see Bryce 2003, 76-77, fn. 57 with ref.

Thus one cannot say whether the published Ortaköy letter contains a reference to one or two kings of Arzawa, or to none. Given the present state of our knowledge, one cannot even affirm that any of the names mentioned therein belonged to a member of the Arzawa royal family, and this is the reason why they do not appear in Table 5. We must remain hopeful that the systematic publication of Ortaköy texts will eventually bring more clarity to this issue. There are, however, enough grounds to assume that the names discussed here reflect the western Anatolian cultural setting.

Both the names in Table 5 and those emerging from the Ortaköy document leave no doubt that the ruling elites of Arzawa belonged to the Anatolian cultural milieu. The elements like *atta* 'father', *muwa-* 'strength, *piya-* 'give', *tapala-* '?', *targasna-* 'donkey', *ura-* 'great' are well attested in Hattusa onomastics, and all of them but the first one, which is synchronically Hittite, are Luvic.[16] The variants ^{d}U-*ta-* and ^{d}U-*na-* stand for *Tarhunt(a)-* and *Tarhun(n)a-*, the Luvian and Hittite names of the Storm-god respectively. The complement ^{d}LAMMA-*ya*, occasionally appearing in the stem-form of the "first" Kupanta ^{d}LAMMA, indicates that this Sumerogram denotes the Luvian protective deity Kruntiya, as argued above. The spelling É.GAL.PAP-*ma* in KUB 6.41 iii 48 confirms the identification between the Sumerogram PAP and Luvian *zalma-* 'shield, protection' (Melchert 1988b: 241-43). A number of suffix elements, such as *-alli*

[16] Even in the first case, it remains possible that the stem **atta-* 'father' existed in Proto-Luvic and could be used as a basis for personal names, whereas *tata/i-* represents a lexical innovation. Alternatively, this name may belong to the Proto-Lydian substrate, whose existence is defended below on independent grounds. Althougly the attested Lydian common noun for 'father' is *taada-*, the Lydian names attested in Greek transmission and containing the element **atta-* are very numerous (Zgusta 1964, § 119). The most salient example of its survival in western Anatolia is the Hellenistic Attalid dynasty of Pergamon.

and *-ili*, likewise find the clearest parallels in Luvian (Melchert 2003b: 195). The frequency of Luvic elements in Arzawa onomastics has been signaled already in Laroche 1959: 10, and this conclusion has fully stood the test of time.

Many scholars, including myself, have interpreted Laroche's analysis as an unquestionable proof of **Luvian** presence in the kingdom of Arzawa (cf. Yakubovich forthcoming[2]: 134). It is however not *a priori* certain whether the Luvic linguistic elements discussed above are Luvian in the narrow sense, or rather represent a Western Anatolian language, such as, for example, Proto-Carian. One may object that the whole question is moot, because we do not know enough about Carian to claim that it had separated from Luvian already at that early stage. Yet, I intend to show below that one or two morphemes contained in the Arzawa onomastic material may show specific isoglosses with Carian, as opposed to Luvian. Laroche, who did not live to see the final decipherment of Carian, obviously could not address this problem. But now that Carian has been shown to represent a Luvic language spoken on the territory that included the southern part of the historical kingdom of Arzawa, the burden of demonstration rests with those who advocate the spread of Luvian names to Western Anatolia, as opposed to assuming the continuity of an indigenous Carian tradition.

Yet, before venturing into comparative discussion, it is appropriate to concentrate on the differences between the personal names that were popular among the ruling elites of Hatti vs. Arzawa. One may legitimately wonder whether they reflect the peculiarities of the local dialect(s), or merely the local fashion. In a number of cases the first hypothesis is preferable. Thus the element *uhha-* present in the names *Uhha*-LÚ and *Uhha-muwa* appears to represent the variant of *huhha-* 'grandfather' characterized by

the loss of the initial "laryngeal". The Arzawa royal name *Uhha*-LÚ, presumably standing for *Uhha-ziti*, can be compared with a witness name *Huhha-ziti* attested in a Middle Hittite land grant KBo 5.7 (Laroche 1966, § 385).[17] *Uhha-zalma* mentioned in the Ortaköy document finds a perfect counterpart in *Huhha-zalma* appearing in the same document KBo 5.7 (Laroche 1966, § 384). Although the variant **Huhha-muwa* is not directly attested, *Uhha-muwa* can be analyzed as an auspicious name "having the strength of the grandfather". It was carried by an Arzawa ritual practitioner and by a Middle Hittite official who was the author of the Ortaköy letter. The context of the letter makes it likely that he was a ruler of a vassal kingdom located on the western periphery of the Hittite state. The third Uhhamuwa known to us is a thirteenth century augur mentioned in oracular inquiries. The origin of this individual is unknown, but the importance of augury in western Anatolian religion would be compatible with looking for his birthplace in Arzawa or its whereabouts.[18] While the second component of *Uhha-waranu* is etymologically opaque, the appearance of this name in the Ortaköy letter likewise connects it with the western part of Asia Minor.

Van den Hout 2003 cogently objected on semantic grounds against interpreting the name *Maddunāni* as a Luvian compound "brother of the wine". He suggested instead that it may be connected with the western Anatolian toponym *Maddun(n)as(s)a*, and

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[17] *Uhhaziti* is also the name of a Hittite prince witnessing the Ulmi-Tessub treaty (Laroche 1966, § 1412.2, van den Hout 1995: 48). In this case we are probably dealing with a borrowing of a western Anatolian personal name in the period after the annexation of Arzawa.

[18] See Hutter 2003: 236-37 and Bawanypeck 2005a: 298-302 for the role of augury in Arzawa rituals. Compare also the name of another thirteenth century augur Masturiyandu (Laroche 1966, § 784, van den Hout 1995: 259), which contains the onomastic element Masturi otherwise known only from western Anatolia.

segmented the common element *Madd-un-*, which, according to him, corresponds to Μηον-/Μαιον- < **mai-won-* serving as a derivational base of the Greek name of Maeonia. This etymology crucially relies on the early date of the conditioned change *y>d* in the history of Lydian, but there is independent evidence in support of such a conclusion (cf. Section 3.5 below). Under the new analysis, *Maddunāni* emerges as an original ethnic name "Maeonian".[19] For our purposes, however, it is more important that it displays a sound change *y>d*, which did not occur in the history of Luvian.

Another set of personal names reveals an internal variation between the stems *pa-* and *pahh(a)-* 'to protect' in the dialect(s) of Arzawa. The personal name [^{d}I]M-*tapaddu* = **Tarhunta-paddu* 'Let Tarhunt protect (him)' should be contrasted with *Anza-pahhaddu* 'Let (him) protect us'.[20] The names of such structure have close parallels in Luvian, cf. e.g. ^{d}U-*manaddu* 'let the Storm-god see (him)' (Laroche 1981, § 1279a).[21] Melchert (1993: 162) has already suggested that the 3sg. impv. *paddu* occurring in the

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[19] I am less sanguine about the connection between the name *Madduwatta* and the toponymic element discussed in this paragraph. CTH 147 informs us that a certain Attar(is)siya, man of Ahhiya, drove Madduwatta out of his original kingdom (Beckman 1999: 154). At the end of the preserved part of the Indictment of Madduwatta, Attar(is)siya is mentioned in connection with an attack against Cyprus (Beckman 1999: 160). Unless one assumes that Attar(is)siya held sway over the whole of the Mycenaean world, it appears to be preferable to locate his power base somewhere in Southern Anatolia, perhaps in Caria or Pamphylia. This would imply that Madduwatta's country of origin was likewise situated in the southern part of Asia Minor, and preclude his native ties with the classical Maeonia.

[20] The element *anza* 'us' can also be seen in the western Anatolian name *Anz-unniya*, presumably meaning 'lead us!' (Laroche 1966, §94).

[21] Compare further the Iron Age Luvian names *Astu-alamanza* 'Let there be a name (to him)' (KELEKLI, § 2) or *Aza-tiwada* 'Sun-god, love (him)' (KARATEPE 1, § 1). In these cases, however, one could suspect that the predicative structure of Luvian personal names is due to recent contacts between Luvian and West Semitic speakers in Syria. Such an explanation is obviously unavailable in the case of western Anatolian personal names, and therefore one has to reconstruct a common Luvian pattern of personal names containing finite verbal forms. Fur the semantics of ^{d}U-*manaddu*, compare the Arzawa name *Manapa-*^{d}U, which C. Melchert (pers. comm..) explains as 'Tarhunt, see him'.

Istanuwa songs may have a meaning ‘let him protect’, but its context was not conducive to definite semantic conclusions. The analysis of western Anatolian personal names allows us to flesh out this verbal root, which does not seem to be attested in the Luvian dialects of central and eastern Anatolia.

Another group of Arzawa personal names that should be studied together is *Tarhunn-aradu*, *Tarhunt-aradu*, and *Piyam-aradu*. Since no Bronze Age Anatolian word can begin with *r*-, one has to isolate *-aradu* as their second component.[22] All the names containing this element are connected with the western part of Asia Minor. Melchert (apud Adiego 2007: 333 and pers. comm.) proposed that Luvic *aradu*- means ‘devotee’ and is derived from **arada*- ‘religious community (vel sim.)’, itself a derivative of **ara*- ‘associate’ (cf. Hitt. *ara*- ‘id.’).[23] The names *Tarhunt-aradu* and *Piyam-aradu* would then mean ‘devotee of Tarhunt’ and ‘given devotee’, respectively.

The idiosyncratic linguistic features reflected in western Anatolian personal names must be explained through the speech habits of the local population. It is possible to demonstrate that these features have parallels in Lydian and Carian, the languages that were spoken along the Aegean coast of Asia Minor in the Early Iron Age. One of the phonological peculiarities of the Lydian language is the loss of word-initial “laryngeal(s)”, reflected as *h*- in Hittite and Luvian (Melchert 1994: 361). The development **huhha*- > **uhha*- postulated for the Arzawa dialect shows precisely the

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[22]This falsifies Huxley’s (1961: 20-21) comparison between the last morpheme of Piyamaradu and Tarhuntaradu and the first morpheme of the name of the legendary Cretan king Rhadamanthys.

[23] For the Luvian suffix *-ta*-/*-da*- forming abstract nouns, see Melchert 1998b: 368-72.

same process.[24] The situation with the reflexes of intervocalic "laryngeals" in Lydian is more complicated. Melchert (2004b: 143) now suggests deriving the Lydian abstract suffix *-oka-* from IH. **-eh₂V-*.[25] The preservation of intervocalic *-hh-* in *uhha-* and *Anza-pahhaddu* would be consistent with Melchert's hypothesis. Yet a sound law that combines the unconditional loss of a word-initial fricative with its unconditional fortition in intervocalic position would be hard to justify in terms of phonetic naturalness. Perhaps the intervocalic "laryngeals" began to disappear at a later stage than their word-initial counterparts in the ancestor dialect of Lydian, and this accounts for the attested change in progress *pahhaddu* > *paddu* 'let him protect'.[26]

The western Anatolian onomastic element *-aradu* has been recently discussed in Schürr 2002. The author has arrived at the conclusion that the Carian proper noun *msn-ord* contains the reflex of *-aradu* as its second component. He also notes that it is also attested in Greek transmission as Μασανωραδος and adduces numerous parallels for the development *a>o* in the history of Carian.[27] Thus there are no obstacles to deriving the

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[24] The phonetic realization of Anatolian "laryngeals" cannot be discussed here in detail. My personal preference is to analyze word-initial *h-* in Hittite and Luvian as a velar or uvular fricative /x/ or /χ/. If this is correct, the Lydian development can be characterized as a progressive lenition /χ/>/h/>∅ (vel sim.), which makes it all the less trivial. For the first stage of this lenition, compare a similar development in the history of Kurdish. The widely followed alternative analysis, which assumes the existence of one or two pharyngeal phonemes in Proto-Anatolian, would be likewise compatible with my conclusions.

[25] Note, however, the skepticism of Gérard 2005: 71, fn. 437 about this idea and cf. Gérard 2005: 90 on the derivation of Lyd. gen. pl. **-eh₂-om* > *-ãv*.

[26] Alternatively, the forms *pahhaddu* and *paddu* can be seen as dialectal outcomes of the earlier /pax-tu/ (in secondary contact). I find it difficult to believe that the forms *paddu* and *pahhaddu* are morphologically distinct (e.g. 3sg. vs. 3pl.). The example of other Anatolian languages indicates that the contact-induced loss of "laryngeals" was always generalized throughout the paradigm.

[27]The development *a>o* in Carian certainly had additional licensing conditions. Since the result of this change is usually rendered as ω in the Greek transmission of Carian personal names, I am inclined to

Carian name from **massan-aradu* 'devotee of god'.[28] The base noun *-arada* constitutes the second part of the Carian pace name Μασανωραδα. Schürr (ibid, fn. 14) also compares the first component of a Carian name Κβονδιασσις, with the first components of Bronze Age names *Kupanta-kruntiya* and *Kupanta-zalma*.[29]

An indirect confirmation of the high status of Proto-Carian in western Anatolia comes from the analysis of Carian loanwords in Lydian onomastics. The name Κανδαύλης, which according to Herodotus (1: 7) was carried by the last Lydian ruler of the Heraclid dynasty, was reinterpreted as a borrowed title eventually related to Luv. *hantawata/i-* 'king' (cf. Szemerényi 1969: 980-81).[30] Yet, the hypothesis that this name was directly borrowed from Luvian requires one to assume a sound change *t>l*, which is otherwise unattested in loanwords in Lydian.[31] Adiego's (2007: 10, 364, 372) reconstruction of the Carian noun *kδou-* < **hantawa-*, meaning 'king', opens now a possibility that Lyd. Κανδάυλης represents an adjectival derivative of this noun. Γύγης, the alleged murderer of Candaules and the first king of the Mermnad dynasty, had a name that was ostensibly related to Luvian *huhha-* 'grandfather' and characterized by

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think that it was limited to the Carian long *a*. This subsumes both the case of primary *ā* reflecting Proto-Anatolian length and secondary *ā* from lengthening in accented position (thus also Adiego 2007: 258). This problem, however, requires additional investigation.

[28] Adiego (2007: 333 with fn. 6) does not attempt to account for the final *-u* in Arzawa personal names in *–aradu*, but accepts their comparison with Carian forms in *-ord* proposed by Schürr.

[29] The last comparison is, in my opinion, not assured. Cf. Adiego 2007: 334.

[30] Following the arguments of Szemerényi (loc. cit.), I reject the traditional translation of Κανδαύλης as 'dog-strangler' (Gusmani 1964: 274 with ref.), which is based on a rather arbitrary interpretation of the line Ἑρμῆ κυνάγχα Μηονιστὶ Κανδαῦλα (Hipponax 4). The vocative Κανδαῦλα in this line need not represent the "Maeonian" translation of κυνάγχα, but Candaules may simply have been used as the "Maeonian" equivalent of Hermes.

[31] For the sporadic alternation *t ~ l* in the inherited stratum of the Lydian lexicon, see Yakubovich 2005/2006: 86-87.

the "non-Lydian" fortition of the initial *h*-. Adiego (2007: 384-85 with ref.) suggested that the name of Gyges has an immediate Carian origin, alluding to Car. PN. *quq* ~ Gk. Γυγος and Car. PN. *dquq* ~ Gk. Ιδαγυγος. The reflection of the initial "laryngeal" as a voiced stop /g/ in this group of names indeed appears to be restricted to Carian and Lydian, while the cognate Lycian name is Κουγας (Zgusta 1964, § 717). Finally, one must compare also Lyd. PN. Μουσατης (Zgusta 1964, § 987a) with Car. PN. *mwsat*- (Adiego 2007: 386). If both names are related to Luv. *Muwaziti*- (Laroche 1966, § 480), then the Lydian name must have been borrowed from Carian, since the components of this compound are unmistakably Luvic. A different form of the same name Μο(υ)σητα is attested in Pisidian (Zgusta 1964, § 987).

There is, of course, no proof that these onomastic borrowings from Carian into Lydian all go back to the Bronze Age. In the case of Gyges, there is in fact some evidence to the contrary, since the related element in Arzawa names was *uhha*-. But one should not rule out the possibility that linguistic contacts between Carian and Lydian lasted for a long stretch of time and had different effects on particular personal names depending on the historical period. [32]

The explanation for Lydian and Carian elements in Arzawa personal names need not be uniform. In the case of the contact-driven "psilosis" in *uhha*-, and perhaps in the instance of the similar word-internal change in *pa*-, we are likely dealing with an instance of phonetic adaptation accompanying an imperfect acquisition of the Luvic

[32] Plutarch mentions the presence of Carians in Lydia as allies to Gyges (Pedley 1972:7). For Carian fragmentary inscriptions found in Sardis, see Adiego 2007: 27-29.

onomastic stratum by Lydian native speakers.[33] It is also possible that both Luvic and Lydian speakers have inherited this feature from an unknown *Maddunāni* may represent an original Lydian name, but the analysis of this isolated example does not entail far-reaching conclusions about the rest of the corpus.[34] By contrast, the names in *-aradu* appear to contain Carian elements. This opens a possibility that these names are genuinely Carian, and that the other Arzawa names traditionally considered as Luvian merely contain Luvic lexical elements inherited by the Carian language.[35]

Thus the preliminary analysis undertaken above is consistent with the ethnolinguistic profile of western Anatolia conjectured in Schürr 2002: 171: "In dem Gebiet von Arzawa wird das Proto-(Lyko)-Karische damals schon heimisch gewesen sein, wenn auch vielleicht nicht als einzige Sprache: das von den südanatolischen Sprachen stark abweichende Lydische käme auch in Frage, weiter im Osten vielleicht das Luwische". This theory cannot be strictly proven given the state of our knowledge, but it is more economical than the available alternatives. The Luvic personal names of Bronze Age western Anatolia provide no arguments in favor of Luvian westward migrations.

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[33] It is also, in principle, possible that both Luvic and Lydian speakers living in Arzawa have inherited this feature from an unknown pre-Indo-European substrate of western Anatolia. This supposition, however, is rather gratuitous as long as there is no independent evidence for the existence of such a substrate.

[34] The most likely candidate for a reverse case of a Lydian name going back to an attested Arzawa prototype is *Sabλa-*, possibly related to Zapalli in Table I (Gusmani 1964: 189). Unfortunately, the Anatolian etymology of this Lydian name remains unclear.

[35] If the name *Manapa-*^{d}U indeed contains the demonstrative *apa-*, as proposed by Melchert, then we are dealing here with an Anatolian archaism lost by Iron Age Carian, which appears to have generalized the proximal demonstrative *s(n)-* (Adiego 2007: 319-20). It is not clear, however, whether this loss had already taken place by the Late Bronze Age.

3.4 Linguistic Contacts between Arzawa and Hatti. The conclusions of the previous section may leave an impression that the western part of Asia Minor experienced little influence from the east in the Late Bronze Age. The further analysis of Lydian personal and divine names of assured or likely foreign origin prompts a modification of this view. The name list in Table 6 does not pretend to be exhaustive, but rather represents a selection of Lydian proper nouns having the most straightforward parallels in Luvian sources. Carruba 1959: 401-3 can be consulted for a wider range of comparisons that are reliable to varying degrees.

Table 6: Lydian Names of Likely Luvian Origin

Lydian Name	Attestations	Luvian name	Compared in:
PN. Tiwda-	Gusmani 1964: 220	DN. Tiwada-	Carruba 1959: 403
PN. Walwe-	Gusmani 1964: 52	walwa- 'lion'	Carruba 1959: 403[36]
PN. Katowa-	Gusmani 1964: 146	PN. ka-tú-wa/i-	Carruba 1959: 402
DN. Śãnta-	Gusmani 1982: 94	DN. Santa	Gusmani 1982: 94
DN. Kufaw-	Gusmani 1982: 68	DN. ku-AVIS-pa-pa-	Gusmani 1982: 68
DN. Mariwda-	Gusmani 1964: 163	DN. marwaya- (pl.)	Melchert 2002: 242

The majority of the forms in Table 6 can be identified as Luvic loanwords on phonological or semantic grounds. The stems *walwa-* < *walkuwa-* and *marwaya-* < **markuwaya-* show a specifically Luvic development of labiovelars after liquids.[37] If Lyd. *ciw-* < **diw-* 'god' is an inherited word, the different outcome of this Anatolian

[36]See Lehrman 1978 for the meaning and etymology of Luvian *walwa-*, while Carruba's contribution in this case was limited to a formal comparison between Lydian and Luvian onomastic elements. Lydian *walwe-* is probably derived from a possessive adjective **walwaya-*, lit. 'belonging to a lion'.

[37] At least in the case of Luv. *walwa-* ~ IE. $*w_{\mathring{o}}lk^{w}o$- 'wolf', one must reconstruct a voiceless labiovelar in Proto-Anatolian. For the origin of the Luvian theonym *marwaya-*, lit. 'dark', see Melchert 1993: 142; in this word, too, the reconstruction of Anat. *-k^{w}- is at least likely. While the voiced labiobelars are normally preserved in Luvian, the comparison between these two examples allows one to tentatively propose that their articulation was simplified in Luvian consonant clusters after the liquids.

root in *Tiwda-* suggests that this name likewise has been borrowed. Since the god Santa is closely associated with the Marwaya-deities in the Luvian text KULULU 2, as well as in the Lydian burial inscription 4a, the simplest hypothesis is to assume that both theonyms have been borrowed as a group. Since Kubaba is originally a Syrian goddess, she cannot represent a part of the inherited Anatolian pantheon. The list of Luvic borrowings can be extended if one considers Lydian names attested in Greek transmission. Thus Carruba (1959: 402) plausibly compares a Lydian personal name Οὐρπαλος with the Luvian name Warpalawa, which is also attested as Urballā in Assyrian sources (Hawkins 2000: 432).

None of the lexemes adduced above has an assured Carian parallel. In some cases, this is surely due to accidental gaps in our attestation of Carian onomastics, but even if the relevant Carian names are identified in the future, this will still leave open a question of whether we are dealing with common Luvic heritage or recent Luvian borrowings. The second explanation is preferable at least in the case of Kubaba, a Syrian goddess that was unlikely to enter the westen Anatolian pantheons before the second half of the second millennium BC (cf. Hutter 2003: 272-73).

The presence of Hittite borrowings in western Anatolian onomastics, limited as it is, provides an additional argument in favor of the second alternative. Thus the western Anatolian masculine name ^{d}U-*naradu* mentioned in the previous section represents a "Hittitized" variant of the western Anatolian name ^{d}U-*taradu* attested some hundreds years earlier. According to Herodotus (I 7), Greeks referred to the Lydian king Candaules as Μυρσίλος, and one of the ways to interpret this statements is to assume

that this was a throne name of the ruler whose title was **hantawa*- 'king'.[38] In this case we are probably dealing with a transparent adaptation of the Hittite dynastic name Mursili (cf. Zgusta 1964, § 995).[39] This hypothesis finds a degree of support in the existence of the Lydian name Μυταλις (Zgusta 1964, § 997). While its prototype Muwatalli ultimately has a Luvian origin, it is Muwattali II, king of the Hittite Empire, who is probably responsible for the popularity of this name throughout Iron Age Anatolia.[40] A Lydian word for 'ruler', recorded as λαίλας by Hesychius, has been plausibly analyzed as a reflex of Hittite *lahhiyala*- 'warrior' (Gusmani 1964: 275 with ref.).[41] Finally, the name of the legendary Mysian king Τηλεφος, who allegedly lived at the time of the Trojan War, has been compared with the Hittite dynastic name Telibinu of Hattic origin (Gindin 1999: 248 with ref.).

The names and titles adduced above appear to represent cultural loanwords. The contact episodes responsible for the spread of Hittite forms to the Aegean must be connected with the Hittite cultural and political dominance over western Anatolia in the Late Bronze Age. We have, however, seen in the previous chapters that Hittite society

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[38] Compare the account of Nicolas of Damascus (F. 47), according to which the last Heraclid king was called Adyattes or Sadyattes (Pedley 1972: 16). Alternatively, one can hypothesize that Μυρσίλος reflects a Lydian patronymic formed from Μύρσος, who was indeed a father of Candaules according to Herodotus (I 7). Under the first interpretation, Herodotus coined the name Μύρσος based on Μυρσίλος, which he interpreted as a patronymic. Note that most Lydian names attested in the same passage of Herodotus appear to be fictional.

[39] The same name Μυρσίλος belonged to two famous Lesbian Greeks, a tyrant of Mytilene opposed by the poet Alcaeus and a historian. In this case, however, we are likely dealing with a variant of a better-attested Greek name Μυρτίλος.

[40] Cf. the Carian (legendary) name Μότυλος (Zgusta 1964, § 976). For the attestations of the cognate name in the eastern part of Anatolia in the Iron Age, see Laroche 1966, § 837.

[41] Lyd. λαίλας is unlikely to represent an Anatolia cognate of Hitt. *lahhiyala*-, since the regular possessive suffix in Lycian is *-l(i)-*, not **-*la*-.

was to a large extent bilingual and Luvian native speakers were probably in the majority among the Hittites. This prompts one to wonder whether the likely Luvian borrowings into Lydian can be accounted for with reference to the same contact episodes. In order to answer this question one should discuss in more detail the scribal traditions of Arzawa as a testimony to the sociolinguistic attitudes of the local elites.

It is appropriate to begin this discussion with the analysis of the Arzawa letter VBoT 2. Its author, king Tarhuntaradu, ruled before the conquest of Arzawa by Mursili II, but the document is nevertheless written in Hittite. It order to better appreciate the language of this document, it is useful to contrast it with the imperfectly learned Hittite of VBoT 1, a letter sent to Tarhuntaradu by the Egyptian pharaoh. Starke 1981 has plausibly argued that the non-standard features of this text reflect linguistic interference with Egyptian. By contrast, VBoT 2 does not display any obvious contact-induced features. The Hittite language of this document is perfectly idiomatic, and in some cases even colloquial. As an example, one can consider the rhetorical question given below:

(57) VBoT 2 7-9, CTH 152 (MH/MS), Rost 1956: 329
nu mān handān ammel DUMU.MUNUS-*YA* sanhiskisi nu=tta *UL* imma pihhi pihhi=tta
'If you are earnestly asking for my daughter, will I not really give (her) to you? (Of course,) I will give (her) to you'.

Melchert (1985: 185) uses this example as a showcase illustrating the asseverative meaning of the focus particle *imma*. The usage of rhetorical questions and asseverative particles is usually disfavored in formal compositions written according to pre-existent templates. Thus one arrives at an inescapable conclusion that someone at the Arzawa court, be it the king Tarhuntaradu or, which is more likely, his scribe, had a native or near-native command of Hittite. Unfortunately, this isolated text would not

allow us to say how widespread this ability was among the Arzawa elites. In purely political terms, one can explain the choice of Hittite as a language of diplomatic correspondence between Arzawa and Egypt by assuming that Egyptian scribes would not be able to read a letter written in the local vernacular, while Arzawa scribes in that period were not sufficiently versed in Akkadian. This explanation leaves open a possibility that the local Luvic dialect ("Proto-Carian" or something similar) was used at the court of Arzawa for all the other purposes except for handling foreign affairs.

In order to further investigate the status of Hittite in Arzawa, one has to turn to the Arzawa rituals preserved in the royal archives of Hattusa. The table below enumerates all the texts whose authors are explicitly identified as Arzawa ritual practitioners.[42] All these individuals, with the possible exception of Tapalazunauli, who may be or not be the same person as the Arzawa prince, son of Uhhaziti, have already been included in Table 5.[43] There is, of course, certain ambiguity about whether the designation "man/woman of Arzawa" refers to the polity known under such a name, or to western Anatolia in a broad sense. The first interpretation, however, appears to be preferable. The witch-doctor Ashella is identified as a man of Hapalla in KUB 9.32 obv 1, although Hapalla is normally thought to constitute a part of "the greater Arzawa".

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[42] Compare a more inclusive approach of Hutter 2003 and Bawanypeck 2005b, who classify a number of religious texts as Arzawa rituals on the basis of their functional and compositional similarity with those enumerated in Table 6. While their attributions are quite plausible, I have adopted here the minimalist approach in order to obtain an absolutely reliable starting point for further discussion. Note, however, that the inclusion of further texts treated in the aforementioned sources as Arzawa rituals would in no way impact the conclusions of this section.

[43] The editions cited below in the right column of the table give one a general idea about the content of the respective texts; for a detailed survey of secondary literature one should consult the online CTH under the appropriate numbers.

This is just one example of a general trend to identify ritual practitioners with reference to the cities or states from which they are coming, rather than to the more abstract geographic areas.

Table 7: Arzawa Ritual Practitioners and Their Compositions

^{f}Alli	CTH 402	Jakob-Rost 1972
^{m}Adda	Bo 3483, unpublished	mentioned in Otten 1973b: 82
^{m}Maddunani	CTH 425.A	Bawanypeck 2005a: 126-36
^{f}NÍG.GA.GUŠKIN	Shelf list entries KBo 31.6 iii 11-15	Dardano 2006: 182
^{f}Paskuwatti	CTH 406	García Trabazo 2002: 447-65
[^{m}Tapalazu]nauli	CTH 410.C (i 1 - ii 17), 424	Souček 1963
^{m}Tarhuntapaddu	516/z, unpublished	mentioned in Otten 1973b: 82
^{m}Uhhamuwa	CTH 410. A, B (ii 43 - iii 13), C (ii 18 ff.)	García Trabazo 2002: 467-75

The narrative structure of the Arzawa rituals is similar to that of other texts composed by (or on behalf of) the Anatolian witch-doctors. The passages that prescribe the sequence of ritual actions alternate with incantations to be uttered at the appropriate time during a ritual. A number of deities appearing in these texts have obvious Luvian connections. Besides the *marwaya*-deities appearing in (2) one has to mention the tutelary deity *ulilіyassi* playing the key role in the Paskuwatti ritual against sexual impotence. This divine name must be analyzed as a borrowed Luvic possessive adjective 'one of the meadow'. A likely Hittite avatar of the same deity *ŠA labarna ulilіyas* ^{d}LAMMA 'Labarna's tutelary deity of the meadow' is attested elsewhere (van Gessel 1998, II: 695). The adjective *hulliti*- referring to a type of bread in KUB 7.54 i 6 (CTH 425.A) is derived from the name of the goddess Hulla with a Luvic suffix (Starke 1990: 187).

An important fact about this body of literature is that, in contrast to the ritual texts from Kizzuwatna, it does not contain any vernacular passages. The only lexeme

marked with a Glossenkeil in this corpus, *padumma-* 'foot (of a bed)' cannot represent a Luvian foreign word, since it contains the Hittite derivational suffix *-umna-* > *-umma-* and is provided with the Hittite ablative ending (cf. CHD, P: 247). The unmarked Luvic forms (58) and (59) refer respectively to a deity and a ritual, and therefore can be regarded as technical borrowings, or perhaps convenience-driven code-switches. This observation may be of little consequence as long as we are dealing with the narrative parts of the ritual script, but the absolutely consistent use of Hittite in numerous incantations is in sharp contrast with the abundance of Luvian passages that are embedded in Kizzuwatna rituals and reflect situational code-switching to the local vernacular. On the whole, the observed sparing usage of foreign elements is reminiscent of Hittite texts coming from the Hittite core area.

(58) KUB 24.11 ii 7-8, CTH 402.C (MH/NS), Jakob-Rost 1972: 34
nu[(pattesni tapusza)] 1 NINDA.SIG *ANA* ^{d}*mar-wa-ya-an-za* parsiya[44]
'She breaks a thin bread for *marwaya*-deities at the side of the pit'

(59) KUB 7.54 i 2-4, CTH 425.1.A (NH), Bawanypeck 2005a: 128
mān=kan ŠÀ KARAŠ.HI.A ÚŠ-an kisari UN.MEŠ-tar
ANŠE.KUR.RA.HI.A GUD.HI.A KALAG.GA-za akkiskittari nu
SÍSKUR *mu-u-ra-an-za* iyanzi
'If a plague arises in the army and people, horses, and men are dying in large numbers, they perform the *mura*-ritual'.

The interpretation of these facts depends on the transmission history of the Arzawa rituals, for which one can reconstruct two different scenarios. On the one hand, it is possible to hypothesize that they were originally collected and/or compiled by Arzawa scribes, and then copied for the Hittite royal archives after the annexation of

[44] Restored after KUB 24.9 ii 26.

Arzawa. This scenario would be similar to the one envisaged by Miller 2004 for certain Kizzuwatna rituals. On the other hand, one can conjecture that certain Arzawa ritual specialists practiced at the court of Hattusa, or at least visited it, which allowed the Hittite scribes to record their lore. This alternative scenario is similar to what one has to reconstruct in the case of the attendant woman Kuwatalla. Although this female practitioner had strong ties with Kizzuwatna, as one can infer from numerous Kizzuwatna Luvian incantations embedded in her rituals, she is also mentioned as the recipient of the land grant KBo 5.7 (CTH 223) issued by Arnuwanda and Asmunigal (Starke 1985: 79 with ref.).[45]

The absence of internal references to "Arzawa tablets" in the religious compositions found in Hattusa pleads in favor of the second scenario. The first scenario is particularly unlikely in the case of Alli, whose ritual for a bewitched person (CTH 402) is available in several Middle Script copies. If these tablets were recorded in the independent kingdom of Arzawa, one has to assume that the Hittites physically transported them to Hattusa after the annexation of western Anatolia. Nevertheless, since the ductus of the Arzawa letter is similar to that of the contemporary Hittite texts found in Hattusa, we cannot use paleographic considerations in order to completely rule out this option. On the whole, one must recognize that the first scenario cannot be

[45]The third logical possibility, namely the collection of Arzawa rituals as a result of field work conducted by the Hittite scribes in western Anatolia after its annexation, appears to be unlikely on historical grounds. Miller 2004 and Christiansen 2006 have succeeded in showing that the main mechanism of creating new rituals in the Empire period was the creative adaptation of pre-existing written texts rather than the collection of the oral folklore.

completely ruled out at the present time, and it remains to explore the consequences of each of the two options for the status of Hittite in western Anatolia.

If one assumes that the Arzawa rituals were locally recorded, one is forced to conclude that Hittite was the main if not the only written language in this kingdom. Ritual scripts can be seen as the opposite of diplomatic letters, since this is a genre intended primarily for internal consumption. Furthermore one must reckon with the fact that the Hittite scribes working at the court of Arzawa were quite competent in their art. By contrast, one cannot make any conclusions regarding the language in which the respective religious ceremonies were normally performed. If the use of local vernaculars was systematically disfavored in the Arzawa chancelleries, all the incantations may have been systematically translated into Hittite at the moment of their recording.

If one prefers to think, as I do, that the same group of ritual scripts reflects the best practices of visiting sorcerers coming to Hattusa from the west, one obviously gains no new insights regarding writing in western Anatolia, but one can instead learn a great deal about the linguistic attitude of the local ritual practitioners. We know that the Hattusa scribes had no prejudice toward intersentential code-switching because they faithfully recorded the Luvian and Hurrian incantations contained in Kizzuwatna and Syrian rituals. Thus the Arzawa witch-doctors must have performed in Hittite, at least when they were practicing in Hattusa. Was it because they did not attribute any ritual significance to the language of their performance and simply wanted to accommodate the preferences of their patients? Or was it rather homage to the high status that Hittite enjoyed in the country of their origin? In any case, one would have to conclude that the choice of language for the incantations had no metaphoric significance. The idea that the

local deities are to be addressed in the local languages apparently had little following in western Anatolia.

How then should one explain examples (59) and (59)? If the pattern of using foreign words in Arzawa rituals represents a projection of the Hittite situation, a possible hypothesis is to assume that *mar-wa-ya-an-za* and *mu-u-ra-an-za* are specifically Luvian formations. Either Arzawa scribes or Arzawa practitioners at the Hittite court imitated the Hittite pattern of embedding Luvian words in the Hittite context. A formal consideration that may vindicate this scenario is the specifically Luvian direct case neuter singular extension *-za* in *mu-u-ra-an-za* and the dative plural ending *-anz(a)* in *mar-wa-ya-an-za*. The Carian situation may be too difficult to assess at the present time, but Lycian, at least, shares none of the two innovations.[46]

Another argument advanced for the use of Luvian in this part of Asia Minor is the existence of the local hieroglyphic texts. This piece of evidence is not direct because all the four monumental texts available to us consist of personal names and ideograms, thus precluding a direct identification of their underlying language. The name *ku-pa-ia* appearing on the LATMOS inscription and accompanied by the title MAGNUS.REX.INFANS may represent an abbreviation of Kupantakruntiya, the vassal king of Mira (Peschlow-Bindokat 2002). Targasnawa, king of Mira and grandson of Kupantakruntiya, commissioned the KARABEL inscription (Hawkins 1998). SIPYLOS 1 mentions a certain Kuwalanamuwa, a name that is otherwise born by a Hittite prince at

[46] Melchert, forthcoming[4], tentatively argues for the existernce of the neuter singular extension *-s* and the dative plural ending *-οτ* in Carian alphabetic inscriptions. If confirmed, this identification may tip scales toward the interpretation of *marwayanza* and *mūranza* as Proto-Carian foreign words.

the time of Mursili II and the commissioner of HANYERİ and İMAMKULU inscriptions (cf. Bossert 1954: 144-47). SIPYLOS 2 contains the name of a palace attendant ("eunuch") Zuwalla, who is otherwise unknown (Güterbock and Alexander 1983). To this one must add the "Tarkondemos" digraphic seal, which, as we now know, belonged to Targasnawa, king of Mira (Hawkins and Morpurgo-Davies 1998). The content of all these inscriptions is limited to personal names and logographic titles, and none of them contains phonetically spelled forms that force their attribution to a particular language.[47]

None of the hieroglyphic inscriptions discussed above appears to predate the conquest of Arzawa by Mursili II. Therefore, the choice of the writing system must reflect, first and foremost, the political dominion of Hatti over the kingdom of Mira. If the rulers of Mira tried to imitate the traditions of the Hittite court, it was only natural for them to follow the pattern of epigraphic code alternation that was familiar to Hattusa scribes. Cuneiform script was mostly used for writing on clay tablets, while hieroglyphs were carved in stone. If the commissioner of SIPYLOS 1 has been correctly identified, we have the ready example of a Hittite official whose inscription could provide a model for the local rulers. I will argue below in 5.8 that the Anatolian Hieroglyphic Script originated in Hattusa, in the Hittite and Luvian bilingual environment. The rigid association between this script and the Luvian language was established only in the last

[47] For the sake of completeness, one has also menion the imitation(?) of an Anatolian hieroglyphic seal found in Metropolis (Schachner and Meriç 2000) and a genuine hieroglyphic sealing found in the area of Eskişehir (Darga and Starke 2003). I am grateful to Z. Simon for turning my attention to these finds.

decade of the existence of the Hittite Empire.[48] If the scribes of western Anatolian monumental inscriptions learned their trade in the Hittite capital, they were likely to be proficient in Hittite as well as in Luvian, but we have no way of knowing whether they associated their written output with any of these two languages.

Summing up, it is tempting to extrapolate the bilingual environment established for Hattusa of the Empire period to the circles of the western Anatolian literati. We do not have a way to estimate a number of Hittite and Luvian speakers that served at the court of Arzawa and later at the courts of Mira and Seha River Land. Even a small number of influential officials would, however, be sufficient to trigger the borrowings of Hittite and Luvian personal names and titles into the local vernaculars, since lexical borrowings from a culturally dominant language do not require intensive language contact.[49] The apparently larger number of Luvian loanwords in the vernaculars of Western Anatolia correlates with my reconstruction of asymmetrical bilingualism in the Hittite empire. More Luvian than Hittite names made their way to Lydian because more Luvian than Hittite names had currency in the Hittite Empire during the last centuries of its existence.

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[48] The hieroglyphic epigraphs to the gods at YAZILIKAYA, where most of the phonetically written divine names seem to be Hurrian, constitute, must be considered as an exceptional phenomenon (cf. Hawkins 2003: 141). In this case, the use of the Hurrian language must have represented a theological statement coming directly from the Hittite court and therefore YAZILIKAYA epigraphs have no bearing on the issue of scribal traditions.

[49] See, for example, the discussion of Russian borrowings into southwestern Pomo discussed in Thomason 2001: 72-73. The context for this borrowing was the presence of about one hundred Russian colonists in Northern California during a period of some thirty years in the early nineteenth century AD. The borrowings are words for ‘cat’, ‘spoon’, ‘sack’, ‘wheat’, ‘wild mustard’, ‘milk’, ‘coffee’, ‘tea, ‘dishes’, ‘apple’, ‘socks’, and ‘letter/book’.

The mediation of Hittite and Luvian scribes at the court of Arzawa and its successor states may constitute one of the reasons why many of the attested names of the local kings and high officials have such a Luvian outlook. It is possible that in those cases where Proto-Carian morphemes forming the respective names exhibited slight phonetic differences from their Luvian cognates, the local scribes would attempt to standardize them in accordance with the Hittite-Luvian literary norm. The same process may have been carried further in the Hittite chancellery, where Hittite forms would be occasionally preferred to their Luvian cognates. Can this tendency account for the fact that the theophoric name of an anti-Hittite rebel in the Seha River Land was written ^{d}U-*naradu* = **Tarhunnaradu* in a Hittite source, a spelling that invokes associations with the specifically Hittite name of the Storm-god?

The data discussed in this section cause me to believe that a quest for a Luvian substrate in Lydian must be abandoned. Instead of that we have limited evidence for a Hittite-Luvian superstrate in Lydian, which can be explained through the first cultural and then political dominion of the Hittite state over the western part of Asia Minor. This stratum of borrowings should be distinguished as a matter of principle from a different layer of Carian loanwords in Lydian, some of which may have been borrowed in the first millennium BC, while others may go back to the Arzawa period. Unfortunately, establishing a precise lexical distribution between the Luvian and the Carian superstrates in Lydian may prove to be an impossible task because the two donor languages must have been very close to one another in the second millennium BC.

3.5 Historical Evidence for Luvians in Arzawa? It is time to contrast our linguistic conclusions with the alleged historical and philological arguments adduced for the presence of large Luvian population groups in western Anatolia. The most frequently cited among these arguments is the appearance of Arzawa in the late version of the Hittite Laws. A geographic name that appears to correspond to Arzawa in their old version is Luviya, an Anatolian region from which the name of the Luvian language is derived.

(60) KBo 6.2.i.36-7, CTH 291.1.a.A (OS), cf. Hoffner 1997: 29-30
[*takku* LÚ.U_{19}].LU-*an* LÚ-*n=a=ku* MU[NUS-*n=a=ku* ^{URU}*Hattusaz kuiski* LÚ ^{URU}***Luīs*** *tā*]*yezzi n=an ANA* KUR *Luwi*[*ya p*]*ēhutezzi*
'[If a **Luvian**] abducts a free person, man or woman, [from the land of Hatti], and leads him/her away to the land of Luviya…'.

(61) KBo 6.3 i 45-46, CTH 291.1.b.A (OH/NS[?]), cf. Hoffner 1997: 30
takku LÚ.U_{19}.LU-*an* LÚ-*ann=a=ku* MUNUS-*n=a=ku* ^{URU}*Hattusaz kuis*[*ki*] LÚ ^{URU}***Luwiyaz*** *tāyezzi n=an ANA* KUR ^{URU}*Arzawa pēhutezzi*
'If a man abducts a free person, man or woman, from the land of Hatti (or**) from the land of Luviya**, and leads him/her away to the land of Arzawa…'.[50]

The alternation between (60) and (61) has led a number of scholars to conclude that Luviya and Arzawa referred to the same entity already at the time when the Laws were first compiled. Thus Hoffner (1997: 171) adopts the view that Luviya / Arzawa had political connections with the Hittite Old Kingdom in such a way that Hittite legal claims were enforceable on its citizens. There is, however, no indication that the

[50] This translation implies the disjoined syntax in the sentence under consideration, since the subject *kuiski* LÚ separateds from one another the coordinated nouns ^{URU}*Hattusaz* and ^{URU}*Luwiyaz*. The similar syntactic pattern can, however, be observed in the following paragraph of the Laws, e.g. KBo 6.2 i 39 [*takku*] *Hattusi=pat* LÚ ^{URU}*HATTI* LÚ ^{URU}*Luīn kuiski tāyezzi* '[If] a Hittite abducts a Luvian man in the land of Hatti itself…' In this case, the direct object LÚ ^{URU}*Luīn* splits apart the subject phrase LÚ ^{URU}*HATTI kuiski.*

toponyms Luviya and Arzawa are interchangeable in the Old Kingdom period. While the Old Script version of the Hittite Laws portrays Luviya as a land under Hittite jurisdiction, Arzawa appears in the annals of the first Hittite kings as a target of their pillaging raids, as indicated in 3.2.

It follows that the replacement of Luviya with Arzawa in KBo 6.3 may reflect the political conditions of the time when this manuscript was copied. This is the position of Itamar Singer, who reminds me about the likelihood of Arzawa control over the Lower Land in the early 14th century BC when the western enemy of Hatti "made Tuwanuwa (classical Tyana) and Uda (classical Hyde) his frontier" (KBo 6.28 obv. 8-9 as quoted in Bryce 2003: 56). I would like, however, to argue against a direct identification between Luviya and Arzawa even in this period. In order to understand why the Laws have been modified, one has to discuss the philological history of our passage.

The restoration of the nominative LÚ ^{URU}*Lu-i-i*š 'Luvian man' in KBo 6.2 i 36 is based on the occurrence of the accusative LÚ ^{URU}*Lu-i-in* in a very similar passage in the following paragraph of the Old Script version (KBo 6.2 i 39). The later version replaces it with LÚ ^{URU}*Lu-i-ya-an* in the same passage (KBo 6.3 i 48). Based on the proportion LÚ ^{URU}*Lu-i-in* / LÚ ^{URU}*Lu-i-ya-an* = LÚ ^{URU}*Lu-i-iš / X*, most editors emend LÚ ^{URU}*Lu-ú-i-ya-az* to LÚ ^{URU}*Lu-ú-i-ya-aš*! in KBo 6.3 i 45, thus achieving the identical translation of both versions, except for the alternation Luviya / Arzawa. This approach, however, does not explain why the original term Luviya is preserved in the rest of KBo 6.3 (i 11, 53, 59), and replaced with Arzawa only in the problematic context discussed above.

I agree that ^{URU}*Lu-ú-i-ya-az* in KBo 6.3 i 45 arose either as an error of perseveration triggered by the preceding ^{URU}*Hattusaz*, or through the anticipation of ^{URU}*Luwiyaz* in the following paragraph. I believe, however, that this error has been made before the replacement of Luviya with Arzawa. The copyist of (61) faced a sentence that, on the literal reading, had an infelicitous interpretation: "If a man abducts a free person, man or woman, from the land of Hatti (or) from the land of Luviya, and leads him/her away to the land of Luviya…" Being unable to correct the error of his predecessor, and confounded by the fact that the free person is led to the same land of Luviya from which he has been abducted, the scribe inserted Arzawa as a new target of his relocation. The choice of the new toponym presumably reflected the political realities of the time when KBo 6.3 was copied. We have seen that forced transportations of the population of the Lower Land to Arzawa were common during the rule of Tuthaliya II and Suppiluliuma I.[51]

Thus the replacement of Luviya with Arzawa in the fourteenth century version of the Hittite Laws could have had a double motivation. On the one hand, it was probably prompted by the desire of the scribe to make sense of a confusing passage. On

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[51] This, of course, still leaves a problem of how the law could be practically enforced in such a case. The apodosis of the discussed sentence gives the head of the household a right to confiscate the abductor's own estate in retaliation for the forced transportation of his family member (Hoffner 1997: 30 with fn. 45). If we suppose that Arzawa was still an independent state at the time when KBo 6.3 was copied, one can perhaps hypothesize that the Hittites felt justified to transport to Hatti the perpetrator's family and slaves caught in a punitive raid. Alternatively one can view it merely as the scribe's wish, which was not practically implemented. The same legal clause, however, could acquire much significance in the period immediately after the annexation of Arzawa. If the relatives of the abducted family members were familiar with the Hittite legal system, they may well have used it in order to seek material compensation, either in form of real estate, or as their share in transportees. Speculations on this subject need not be carried further, since one is running the risk of projecting the modern picture of legal codes as widely known prescriptive sources into the Bronze Age.

the other hand, it was likely to be inspired by a persistent political problem of the time when the new version of the Laws came into being. The process of modifying Hittite documents for reasons of political expediency can be further illustrated by the following examples:

(62) KUB 24.4+ 30.12 obv. 16-17, CTH 376.C (MS.), Lebrun 1980: 161
nu kuriwanas KUR.KUR-*TIM kue arahzanda / Hurlas* KUR-*e* KUR ^{URU}*Kizzuwatni* KUR ^{URU}*Arzauwa nu hūmanza sullē*[*t*]
'The independent lands that (lie) around (us) – Land of the Hurrians, Kizzuwatna and Arzawa – each has become disrespectful'.

(63) KUB 24.3 ii 26-28 CTH 376.A (NS), Lebrun 1980: 161
nu kuriwana[*s* KUR.KUR-*TIM kue*] *arahzanda*! KUR ^{URU}*Mittanni* KUR ^{URU}[*Arzauwa*] *nu hūmanza sullēt*
'The independent lands that (lie) around (us) – Mittanni, and Arzawa – each has become disrespectful'.

(64) KUB 24.4+ 30.12 obv. 21-22, CTH 376.C (MS.), Lebrun 1980: 161
[*n*]*u=ssan hinkan kūrur kāstan ANA* KUR ^{URU}*Mittanni* [*ANA*] KUR ^{URU}*Kizzuwatni Ù ANA* KUR ^{URU}*Arzauwa tarnatten*.
'Turn death, war, (and) hunger against Mittanni, Kizzuwatna, and Arzawa'!

(65) KUB 24.3 ii 32-34 CTH 376.A (NS), Lebrun 1980: 161
nu=ssan hinkan kurur gastan idālun tapassan ANA KUR ^{URU}*Mittanni Ù ANA* ^{URU}*Arzauwa tarnatten*.
'Turn death, war, hunger, (and) the evil plague against Mittanni and Arzawa'!

Sentences (62) and (64) are taken from a Middle Script version of a prayer to the Sun-goddess of Arinna, while sentences (63) and (65) are extracted from the adaptation of the same prayer completed at the time of (and attributed to) Mursili II. We know that the kingdom of Mitanni encompassed the bulk of the Hurrian lands, and therefore those scholars that share the view that the names Luviya and Arzawa refer to the same geographic area could use the replacement of *Hurlas* KUR-*e* in (62) with KUR ^{URU}*Mittanni* in (63) as a typological parallel. It is worth noting, however, that KUR

^{URU}*Mittanni* already appears in the Middle Script passage (64), which means that in this case the editing process predictably resulted in the standardization of geographic terminology. By contrast, the elimination of KUR ^{URU}*Kizzuwatni* attested in (65) and reconstructed for (63) must have had a political motivation. At the time when the Middle Script version of the prayer was produced the kingdom of Kizzuwatna may have been the vassal of Mitanni, while the period that elapsed between the compilation of the first and the second versions saw its complete integration into the Hittite Empire. Under such conditions, mentioning Kizzuwatna among the foes of Hatti would obviously amount to a politically incorrect statement, and the new editor of the prayer struck it from the list.

It is true that prayer is intrinsically more amenable to editorial variations as a genre than law code. Nevertheless, there are enough instances where the fourteenth century version of the Hittite Law Code shows substantive innovations in comparison with its Old Hittite antecedent. Thus KBo 6.2 ii 6 contains the provision: "If a herdsman [takes] a free woman (in marriage), she will become slave for three years". The correspondent passage KBo 6.3 ii 25-26 features a different protasis: "If an overseer or a herdsman elopes with a free woman and does not give a brideprice for her, she will become slave for three years" (Hoffner 1997: 43). The reason for the change becomes clear once one considers the previous clause KBo 6.3 ii 23-24 protecting the social status of a legitimate wife in a mixed marriage and having no counterpart in KBo 6.2 (Hoffner 1997: 42). If the ancient editor of KBo 6.3 was empowered to alter the letter and the spirit of the laws in those cases where their original sense was quite clear, one cannot

deny the possibility of his interference aimed at making sense of an otherwise confusing passage.[52]

We will see in 5.4 that the Old Hittite version of the Laws is compatible with the identification of Luviya with the Lower Land of later sources. I have tried to show above that the fourteenth century version of the Laws does not contradict this identification. It is reasonable to assume that the scribe of KBo 6.3 was aware of political connections between Arzawa and the Lower Land that existed in his lifetime. It would be, however, unwarranted to extend this connection to all the occurrences of *Arzawa*/*Arzawiya* in the Hittite texts, or to claim that it must reflect an ethnic affinity between the two countries. Arzawa was a geographical term in the broad sense, and the name of a political entity in the narrow sense. In the absence of reference to "the language of Arzawa" in the available sources, there are no grounds for believing that this term was ever associated with a particular speech community.

A recent attempt to find the name of Luviya in Egyptian transmission, if successful, could have an impact on the likely location of this region. Two Egyptologists, Hourig Sourouzian and Rainer Stadelmann, claim to have found this toponym on a stone fragment that originally belonged to the podium of a colossal statue of Amenhotep III ("Colossus of Memnon"). The podium apparently contained a list of foreign lands that allegedly submitted themselves to the Egyptian pharaoh. It would be more likely that Amenhotep III could be aware of the existence of Luviya if this region

[52] One can compare further the so-called "parallel version" of the Hittite Laws (KBo 6.4), which contains substantive innovations in virtually every paragraph of the text, and is provided with a separate translation in Hoffner 1997. The redaction of this New Hittite text must be related to a later period than that of KBo 6.3.

had access to the sea. Regrettably, the photograph of the relevant fragment included in Sourouzian and Stadelmann 2005 appears to undermine the conclusions of this preliminary publication. The toponym under discussion, written in a quasi-syllabic transliteration known as "group writing" and normally used for transmitting foreign words in Egyptian texts, can be transliterated as *ra-'a$_2$-wa-na* in the system of Hoch 1994. While the group *ra* could perhaps be occasionally used with the value *ru*$_x$, there is no indication that the value *'u$_x$* was ever attached to *'a$_2$* (Hoch 1994: 506, 509). Therefore one cannot agree with the claim that this word "liest sich *r/lawana* oder *r/luwana* und könnte als erste Schreibung für das immer noch rätselhafte Volk der Luwier stehen" (Sourouzian and Stadelmann 2005: 82). Only the first of the two readings is likely and, given that the nature of the *-na* extention remains unexplained, it requires a very vivid imagination to believe that this word has anything to do with Luviya.[53]

An even more recent attempt to locate the name of Luviya in Mycenaean sources is likewise not convincing. Widmer 2006 has analyzed Myc. *ru-wa-ni-yo* (KN X 7706+8108) as an ethnic name derived from **Luwano-* 'Luviya'. The context of the fragmentary Knossos tablet does not support this conclusuion, which is based exclusively on the comparison with the putative **r/luwana* of Sourouzian and Stadelmann 2005. Once we recognize that the identification of Egyptian *ra-'a$_2$-wa-na* with Luviya is groundless, Widmer's hypothesis must be abandoned. In purely formal

[53] I am grateful to Prof. J. Johnson (Chicago) for her useful advice pertaining to the reading of this Egyptian word.

terms, there is more merit in Widmer's comparison of Myc. *ru-wa-ni-yo* with the Hittite geographic name ^{URU}*lu-wa-na*^{KI} that is applied to the town located at the border of Hatti and Kizzuwatna (del Monte and Tischler 1978: 252). Yet, the geographic and cultural distance between Mycenaean Crete and central Anatolia renders this identification equally unlikely. The meaning and etymology of Myc. *ru-wa-ni-yo* remain unclear.

A different line of argumentation for an extensive Luvian presence in western Anatolia is connected with the history of the kingdom of Lydia, which was situated in the same region in the Iron Age. The Lydian language belongs to the Anatolian family but does not show the characteristic innovations of the Luvic subgroup. Therefore the proponents of the linguistic dominance of Luvian in the western part of Bronze Age Asia Minor must assume Lydian migrations in the late second or early first millennium BC. No historical account of such migrations is extant, and archeological arguments in its support do not appear to be forthcoming. Nevertheless, a handful of philological arguments have been adduced to corroborate this view.

The most widely quoted among these arguments has to do with a new etymology of the geographic name Lydia, independently proposed in Beekes 2003a, Gérard 2004 and Widmer 2004. Gérard and Widmer state, while Beekes implies, that the original name of the country was **lūda*, while Lydia can be seen as its adaptation in the Greek milieu, just as the name of Lycia represents an adapted form of the Bronze Age Anatolian toponym Lukka. All the three authors rely on the Lydian sound law *y* > *d* / {V, #}__ V (Melchert 1994: 364 with ref.), which allows them to reconstruct **lūda*- < **lūya*- (Gérard) or **lūda*- < **luwida*- < **luwiya*- (Beekes) for the history of Lydian (Widmer admits both possibilities). The only difference between the two derivations is

concerned with the relative chronology of the consonant fortition and the syncope. The authors identify the reconstructed proto-form **lūya-* (Gérard) or **luwiya* (Beekes) with the toponym Lu(vi)ya attested in the Hittite Laws.[54]

Van den Hout 2003 and Melchert 2007 have provided independent arguments pleading for the early date of the sound change *y* > *d*. Van den Hout has suggested that its final stage is already reflected in the western Anatolian place-name *Maddun(n)-as(s)a* as well as the western Anatolian personal names *Mad(d)un-āni* and (less likely) *Maddu-watta*, which are all attested in Hittite sources. A form of the same root without a sound change may have been preserved in Greek transmission as Μῆον-/Μαιον-, from which the country name Maeonia is derived. Melchert has explained Mycenean *mo-ri-wo-do* and Classical Greek μόλυβδος 'lead' as borrowings from Lyd. **marwiya-* > **marwida-* > **mariwda-* (vel sim.) 'dark (metal)'. The crucial intermediate stages are not attested in both cases, and therefore neither of the two etymologies is absolutely assured, but they are phonetically consistent with one another. If one accepts them as a working hypothesis, this would imply that the change *y* > *d* must have occurred before the Late Bronze Age, while the borrowing of the geographic name Lu(vi)ya into Lydian could not help being relegated to an even earlier period. The same conclusion follows from the fact that the toponym Luviya falls out of use after the Old Hittite period.

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[54] I find it difficult to follow Gérard (2004: 129, fn. 26) in his claim that OS *Lu-ú-i-ya* must be read *Lūya*, since I am not aware of any instance where the graphic sequence *I-YA* would unambiguously correspond to the phonetic [ja] in Old Script texts. It is, however, quite likely that abl. *Lu-ú-ya-az* reflects a synchronic syncopated variant of the same toponym.

By contrast, the toponym Lydia or its cognate forms do not seem to occur in historical sources predating the seventh century BC. The Iliad is silent about the Lydians, even though Carians are mentioned there 2 times, Maeonians – 3 times, Mysians – 5 times, Paeonians – 7 times, Paphlagonians – 4 times, Thracians – 17 times, and Lycians – 49 times. Herodotus (7.74) and Strabo (e.g. 13.1.8) explicitly inform us that Lydians were formerly called Maeonians (Beekes 2003b: 15-16). The emergence of the name Lydia coincides in time with the political events that brought the Mermnad dynasty to power in this region. The inscriptions of Assurbanipal mention an alliance that this seventh century Assyrian king concluded with Gu(g)gu, king of Luddi, who can be securely identified with Gyges, king of the Lydians (Pedley 1972: 82-83 with ref.). The attestations of the toponym Lydia in Greek sources begin with Alcaeus and Sappho in the late seventh century BC (Beekes 2003b: 48).[55]

Another noteworthy fact about this toponym is its complete absence in indigenous Lydian inscriptions, which can be contrasted with several attestations of *śfard(V)*- 'a Sardian' and *śfardẽt*- 'Sardian (adj.)' (Gusmani 1964: 202-203). Absence of evidence does not constitute evidence of absence, and in this case one cannot exclude a possibility that the country name Lydia does not appear in Lydian texts for purely accidental reasons. Nevertheless, the data at our disposal conjure up an image of a particular ethnic or social group **luda*- that rose to the position of power in Sardis together with the Mermnad dynasty and whose name was subsequently reinterpreted as a

[55] The Biblical account mentions *lwd* as one of the sons of Shem (Gen 10.22). It is well-known, however, that the final edition of the Catalogue of Nations in Genesis 10 could not have been accomplished before 650 BC, since it includes *gmr* 'Cimmerians' and *'šknz* misspelled for **'škwz* 'Scythians', the two ethnic groups that invaded the Near East at different points in the 7th century BC.

more general ethnonym *luddu*-/ Λύδοι in a foreign environment.[56] In any case, the gap of one thousand years between the attestations of Luviya and Lydia, with a demonstrable and non-accidental hiatus in between, fatally undermines the significance of this comparison for ethnolinguistic reconstruction of the situation in the second millennium BC.[57]

Another philological argument in support of Lydian migrations from northwestern Anatolia has been advanced in Beekes 2003b: 13-15. Beekes believes that the early Lydian history is transmitted to us in disguise as the history of the Mysians, who were the northern neighbors of the Lydians in the classical period. Strabo (12.8.3) discusses an ancient theory according to which Mysians were of Lydian origin, and attributes this view to Xanthos the Lydian and Menekrates of Elaea. He adds that the language of the Mysians represents a mixture of the Lydian and the Phrygian languages and posits the area around mount Olympus in northwestern Anatolia as the original homeland of the Mysians. The subsequent Mysian migration to the sources of the river Caicos is connected, according to Strabo, with the Phrygian invasion of Asia Minor.

A number of onomastic comparisons discussed in Beekes 2003b appear to lend a degree of support to the connection between the Mysian and the Lydian languages. Thus the name of Δάσκυλος, father of Gyges according to Herodotus (1.8) and Nicolas

[56] This reconstruction is compatible with the traditional comparison of *luddu*-/ Λύδοι with Lat. *līber* 'free', Gk. ἐλεύθερος 'free' and OHG. *liut* 'people' (cf. Gérard 2004: 129-30). The main problem with this etymology is the lack of inner-Anatolian comparanda.

[57] As long as the phonetic correspondences beween Lu(wi)ya and **lūda* are accounted for, it is impossible to falsify this linguistic comparison. One can hypothesize, for example, that a group of transportees abducted from Luviya and settled in the heart of Arzawa preserved its ethnic, but not lingustic identity, and subsequently rose to prominence. But the hypothesis of an accidental similarity of the two toponyms remains equally plausible.

of Damascus (90), has been compared with the place name Daskyl(e)ion, which is found several times in the northwest of Asia Minor and may well reflect the pre-Phrygian stratum of toponymy. A Phrygian inscription found in Daskyleion on the southern coast of the Sea of Marmara mentions a man called Manes (Beekes 2003b: 19). An identical name is found in several Lydian inscriptions (Gusmani 1964: 163).[58] These and other facts already prompted Neumann (1999) to conclude that "auch nördlich von Lydien, in Mysien und dann wohl auch in der Troas das Lydische – oder eine ihm nahverwandte idg.-anatolische Sprache – geherrscht hat – vor dem Eindringen der Phryger und anderer aus dem Balkan herübergekommener Ethnien". As long as our knowledge of the Mysian language is limited to a handful of proper nouns attested in Greek transmission, this hypothesis cannot be considered proven, but Strabo should be given the benefit of the doubt.

There is furthermore an argument in favour of the supposition that Mysians had held sway in the same region where the Lydian kingdom was later established. Yar(i)ri, eighth century Luvian ruler of Carchemish, lists *mu-sá-za* (Mysia), *mu-sà-ka-za* (Mushki/Phrygia), and *su+ra/i-za* (Urartu[?]) as Anatolian peoples that had heard the glory of his name (Hawkins 2000: 124). If we assume that he enumerated the major Anatolian powers going from west to east, Mysia emerges as the largest western Anatolian political entity of his time. It is tempting to equate the kings of this state with the "Heraclid" dynasty that had been ruling Sardis for five hundred and five years before

[58] Note, however, that the name Manes is also attested in Carian transmission (Adiego 2007: 381).

the Mermnads came to power according to Herodotus (1.7). The Mermnad revolution may have brought Lydians to power in Sardes, yet Strabo (13.4.5) indicates that pockets of the people who called themselves Mysians continued to inhabit the neighborhood of this city up to the Roman period.

By contrast, there are absolutely no grounds to believe that the mention of Mysian migrations by Strabo (12.8.3) actually refers to the early ethnic movements of the Lydians. It is perfectly possible from the logical perspective that two related ethnic groups, the "proto-Lydians" and the "proto-Mysians", originally occupied adjacent areas in the western and northwestern parts of Asia Minor, respectively. The events of the early Iron Age brought Mysians under the Phrygian power and made them settle in a part of the area that was originally inhabited by the "proto-Lydians". Nevertheless, the Greek historians and geographers consistently separate these two ethnic groups, while the tradition related in Strabo 12.8.3 does not go beyond asserting the common origin of the two peoples in remote antiquity, and even this is presented as an anecdote that Strabo himself does not endorse.[59] The Greek authors who recognize that the name of the Lydians is innovative claim that they were formerly called Maeonians, as does Strabo in 13.1.8 and 13.4.5. It has already been mentioned that both Maeonians and Mysians appear in the Iliad, with no indication that their names refer to the same ethnic group.

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[59] Starke (1997b: 384) observes with reference to the ethnonym *mu-sá-za* in the inscription of Yariri mentioned above that "die Identifizierung von *Musazza-* mit der lydischen Sprache, deren einheimisch-lydische Benennung übrigens bisher nicht bekannt ist, durchaus Wahrscheinlichkeit für sich beanspruchen kann". *Mu-sá-za*, however, is not the name of the language but rather the name of the people known as Mysians from Greek sources. The genetic identity of their language represents an altogether separate issue.

The argument for the southward migrations of the Maeonians likewise does not stand close scrutiny. Beekes (2003b: 10-13) attempted to revive the old comparison of Maeonia with the Bronze Age country name *Mā(s)sa* (for the spellings of which, see del Monte and Tischler 1978: 264-65). He suggested analyzing *Mā-(s)sa* as a toponym in *-ssa* similar for example to Tarhuntassa and referred to Starke 1997a for the location of this country in the northwest of Anatolia. None of these claims is, however, compelling. The comparison between *Mā-(s)sa* and /Mā-jones/ rests on similarities between the initial two-phoneme sequences in both segments, while the details of the morphological derivation of the Greek form remain unclear. The variant *Māsa* occurs considerably more frequently than *Māssa* and therefore is unlikely to be regarded as a simplifying spelling of the latter. The precise location of this country is likewise a matter of debate, with an equal number of arguments pleading for northwestern and southwestern parts of Asia Minor (Hawkins 1998: 29-30).

Beekes (2003b: 10) explicated the driving force behind his reasoning when he wrote: “In recent years a conviction has grown that in western Asia Minor, in Hittite times, Luvian was spoken … This raises the question, of course, where the speakers of Lydian, which is linguistically rather deviant, … lived”. I have tried to demonstrate in the last three sections that the arguments for an extensive Luvian presence in western Anatolia do not stand close scrutiny. Once we recognize that Beekes’ initial premise is not supported through empirical evidence, it is no longer necessary to look for an answer to his question.

3.6 Ethnicity of the Trojans. The arguments for a Luvian presence on the Aegean coast would never have gained such publicity as they enjoy today were it not for the problem of "the language of the Trojans". Calvert Watkins and Frank Starke stand out among the scholars who have attempted in the last decades to trace the linguistic and cultural connections between the Luvian-speaking world and northwestern Anatolia. Their efforts fueled an interest for Luvian studies on the part of classicists, which was fading after Leonard Palmer's theory of Luvian substrate in continental Greece had been widely rejected. For this Watkins and Starke deserve the gratitude of other Anatolianists, whether or not one is willing to agree with their conclusions.

At the same time one must recognize that the discussion of the ethnicity of the Trojans rests on an even shakier foundation than the debate about the ethnic constitution of the kingdom of Arzawa. In the latter case one can at least rely on a small but cohesive corpus of local personal names and on a number of texts that presumably emanate from the area. In the instance of northwestern Anatolia our resources are limited to three personal names, three theonyms, and two toponyms attested in Bronze Age cuneiform sources. Going somewhat ahead, one can observe that none of these eight elements is demonstrably Luvian or even Luvic, and most of them defy linguistic identification. The rest of the information must be supplied from the Greek poetic account of the Trojan War, whose final redaction probably postdates the historical events underlying the narrative by about five centuries. Finally, the ongoing excavations of Bronze Age Troy have failed to yield a single monumental inscription, and the epigraphic evidence at our disposal consists of a sole Hieroglyphic Luvian seal found in Troy, whose owner cannot be identified with any known historical figure.

The goal of this section is to survey the main arguments that have been advanced for or against the extensive Luvian presence in the northwestern part of Asia Minor. It is appropriate to begin this account by outlining the history of the relevant area, as it emerges from Bronze Age Anatolian sources. I will assume without further debate that the place name Wilusa / Ulusa / Wilusiya attested in cuneiform texts refers to the same town (and its surrounding area) as the classical toponym Ἴλιος, and that the two proper nouns are ultimately cognate.[60] Hajnal (2003: 28-32) discusses the linguistic side of this comparison, while Easton et al. (2002: 98-101) should be consulted for geographic argumentation. It is fair to say that the majority of scholars now endorse this equation, while those who disagree with it do not offer an alternative identification of Wilusa.

The earliest mention of Wilusa in Hittite historical sources links it with Tarwisa, a toponym frequently identified with classical Troy (cf. del Monte and Tischler 1978: 408). The annals of Tuthaliya I (CTH 142) mention KUR ^{URU}*Wilusiya* and KUR ^{URU}*Tarwisa* as two place names concluding a long list of western Anatolian lands that formed the so-called "Assuwa coalition", but were eventually defeated (Carruba 1977: 158). One must suppose that, from the perspective of the author of this text, the two lands were adjacent but not identical. This functional difference does not have any counterpart in the Iliad, where Ἴλιος and Τροίη normally refer to the town and the surrounding area respectively (Güterbock 1986: 40). Hajnal (2003: 43) plausibly

[60] See del Monte and Tischler 1978: 484 for the attestations of this toponym. The variant *Wilusiya* is limited to the Middle Hittite annals and represents an archaic formation comparable to *Arzawiya* vs. later *Arzawa*.

concludes that the Homeric epic preserved the names of the two adjacent toponyms, but conflated their referents. The only other possible occurrence of the toponym Tarwisa comes from the ANKARA Bowl (Hawkins 1997). This artifact of uncertain provenance, which will be discussed in 5.8, contains a reference to an expedition by a certain Tuthaliya, probably to be identified with Tuthaliya IV, against the land *Tara/i-wa/i-za/i*.

By contrast, Wilusa emerges in several more documents, of which the best-preserved and the only well-dated one is the vassal treaty concluded between Muwatalli II, great king of Hatti, and Alaksandu, king of Wilusa (CTH 76, recently translated in Beckman 1999: 87-93). The historical preamble to this text contains a statement about the alleged submission of Wilusa to Hatti in the times of the Old Kingdom. The veracity of this information is subject to a serious doubt, since the same preamble, if correctly reconstructed, asserts that Wilusa was always at peace with Hatti in the past, which is plainly contradicted by CTH 142. On the other hand, the name of the king Kukkunni, whose friendly relations with Suppiluliuma I are meant to epitomize the perennial peaceful coexistence between Hatti and Wilusa in the discourse of the treaty, surely represents an authentic detail. Unfortunately, the subsequent part of the preamble, which could contain a narrative about the "re"-submission of Wilusa to Hatti, is almost completely lost. Perhaps the kings of Wilusa had to accept the vassal status as a result of western campaigns of Mursili II.

The early days of the reign of Muwattalli II saw a Hittite expedition to northwestern Anatolia, apparently undertaken at the request of Alaksandu in order to assist him against his enemies. In addition to the fragmentary account in the Alaksandu treaty, we learn about this event from a letter sent by Manapa-^{d}U, king of the Seha River

Land, to the Hittite court (CTH 191). Manapa-^{d}U informs his addressee that the Hittite army marched through his territory on the way to Wilusa, and then mentions his own illness, presumably as a reason for his non-participation in this expedition (Houwink ten Cate 1985: 38). This text provides crucial support for the identification of Wilusa with Troy, as a country lying beyond the Seha River Land, but it is not helpful for determining the adversary of the Hittites. A passage from the Tawagalawa Letter (CTH 181) may hint at an answer to this problem. Trying to persuade the king of Ahhiyawa to stop providing support to the rebel Piyamaradu, the Hittite king urges him to reason as follows: "The king of the land of Hatti and I were at enmity because of that matter of the city of Wilusa, but he persuaded [me in th]at matter and so we became reconciled, [and] for us enmity is not permitted" (Cohen 2002: 126-27).

The majority of scholars are now of the opinion that the author of the Tawagalawa letter was Hattusili III (Bryce 2005: 290 with ref.). It is therefore difficult to assume that "that matter of the city of Wilusa" refers to same conflict as one described in the Alaksandu treaty. The discussed passage, however, unambiguously indicates that the rulers of Ahhiyawa had a stake in the Wilusa affairs, and it is perfectly possible that they attempted to intervene with them on several occasions. Judging from what we know about the history of the other western Anatolian states, this intervention could take the form of supporting pretenders to the throne of Wilusa against the ruling king. One such episode may have taken place in the reign of Muwattalli II and required a

dispatch of Hittite military force, whereas a different case probably occurred early in the reign of Hattusili III and was resolved by diplomatic means.[61]

Yet another political upheaval in Wilusa is mentioned in the so-called "Milawata Letter" (CTH 182). The Hittite king, now identified with Tuthaliya IV, urges his unidentified vassal to turn over to him king Walmu, who was to be reinstated on the throne of Wilusa, which he had formerly occupied (Beckman 1999: 145).[62] Again, one may doubt that a political struggle in the distant Wilusa would lead to a direct intervention of the Hittite sovereign unless one assumes that the foes of Walmu relied on another regional power and/or enjoyed its support. One must follow Bryce (2005: 361) who takes this episode as a further possible instance of Ahhiyawa's meddling in western Anatolian affairs. A century of the "Great Game" played between Hatti and Ahhyawa in the western part of Asia Minor, in which Wilusa played a pivotal role, probably supplied at least a part of the historical background for the epic tradition that culminated in the Homeric epic and the cyclic poems.

Wilusa is probably mentioned for the last time in the fragmentary letter to the king Parhuitta (CTH 186.4), which was briefly discussed in 2.2. The exact dating of this document is impossible, but it conjures up a picture of the weakened Hittite state that has to flatter its former vassals with greetings that befitted social peers. The ductus of

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[61] The hypothesis of Bryce (2005: 225) that Muwattalli II dispatched an army to Wilusa in response to an attack by Piyamaradu is based on a very particular understanding of CTH 191 (cf. Houwink ten Cate 1985: 50-51 for the available options). In my opinion, it is not certain and is even unlikely that the initial part of the letter mentioning the Hittite expedition against Wilusa and its subsequent part devoted to Piyamaradu's raid against Lazpa and its aftermath should be considered as one connected narrative. Cf. now similar remarks in Bryce 2006: 184-85.

[62] See Hawkins 1998:19 for an updated discussion of the dating and the geographic setting of the Milawata Letter.

the letter is at least compatible with the assumption that we are dealing with Late New Script. As for its content, one can only say that Wilusa emerges as a setting for violent events. Given the state of political disintegration and anarchy that marked the end of the Bronze Age throughout the Near East, this is of course not surprising.

The Alaksandu treaty is the only Hittite text that supplies us with information about the religion of Wilusa. The List of divine witnesses to this treaty representing the Trojans (KUB 21.1 iv 27-28) opens with the Wilusean Storm-god of the Army (*ŠA* ^{URU}*Wilusa* ^{d}U KARAŠ), a deity that had a counterpart in the state cult of the Hittite Empire.[63] The name of the second deity is lost in a lacuna, while the third one is preserced as …]⌜*x*⌝*-ap-pa-li-u-na-aš* (where the *x* sign ends in a double vertical stroke, thus being compatible with the reading <a>). What follows is the stereotypical enumeration of male deities, female deities, mountains, rivers and springs (the last two elements are reconstructed). The list concludes with a reference to ^{d}KASKAL KUR *ŠA* ^{URU}*Wilusa*. The exact meaning of the term ^{d}KASKAL KUR is debatable, but it refers to a topographic feature in the Bronze Tablet and seems to be connected with water.[64] After the excavators of Troy succeeded in discovering a cave leading to a water reservoir underneath the town, many scholars accepted the identification of ^{d}KASKAL KUR with 'underground watercourse', suggested first in Gordon 1969.

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[63] See van Gessel 1998, v.2 782-83 for the textual occurrences of ^{d}U KARAŠ. The Hittite texts where this deity appears include the Hukkana treaty and the annals of Mursili II.

[64] See van Gessel 1998 v.2: 678-79 for the textual occurrences of ^{d}KASKAL KUR, and the secondary literature cited in the respective entry for a discussion about the nature of the underlying installation.

As was mentioned above, none of the proper names associated with Wilusa in Hittite texts has a clear Luvian etymology. By contrast, two of them have likely Greek cognates. The name of the Trojan king *Alaksandu* is routinely compared with Gk. Ἀλέξανδρος since the twenties of the last century, and the structure of this name (lit. "protector of men") suggests that it is Greek in origin.[65] The connection between the divine name *Appaliunas* and Gk. Ἀπόλλων < Ἀπέλλων has been discussed in much detail in Beekes 2003c. The author has concluded that in this case we are dealing with a reverse situation, namely the borrowing of an original Anatolian theonym into Greek. On the whole, this comparison must be considered less secure than the previous one because we are not completely certain about whether the theonym is fully preserved in cuneiform. If, however, it holds, it is hard for me to see why the Early Greek form **apelyon*-, reconstructed by Beekes on the basis of Doric Ἀπέλλων, Cypriote *to-i-a-pe-i-lo-ni* (ICS 215, b 4) and Mycenean [*a*]-*pe-ro*$_2$-*ne* (KN E 842.3), could not yield Trojan *Appaliuna*- with the same vocalic substitutions that manifest themselves in the case of Alaksandu.[66] One must keep in mind that Apollo represents a common Greek deity, whereas]⌜*x*⌝-*ap-pa-li-u-na-aš* is isolated in the Anatolian milieu. It is also easier to envisage that the athematic stem **apelyon*- was borrowed with a secondary

[65] For the history of the controversy surrounding this identification, which was resolved through the discovery of the name *Alexandros* in Mycenaean sources, see Szémerenyi 1998: 276-85.

[66] Watkins (1995: 149) plausibly hypothesizes that Appaliuna was a personal god of Alaksandu. The comprehensive discussion of Beekes 2003c is beyond the scope of this work. I would like, however, to point out that I am not averse to the view that the name of Apollo has a substrate origin in Greek. I merely believe that, in the absence of independent supporting evidence, the temptation to equate the Pre-Greek substrate language and the language of Wilusa must be resisted.

thematization than to accept that an erstwhile thematic noun was borrowed into Greek as a consonantal stem.[67]

These remarks are, of course, not meant to imply that the Trojans were ethnically Greek. Personal names can be borrowed for a variety of reasons, including prestige, and Alaksandu may have been begotten in a mixed dynastic marriage, as Latacz (2004: 118) speculates. The prestige-driven borrowing of foreign gods, of which the worship of Apollo among the Romans would provide just a random example, is also quite common. My claim does not go beyond asserting that, if one wishes to use the scanty onomastic evidence available from cuneiform sources for the debate about "the language of the Trojans", Luvian does not emerge as the most likely candidate. Having this conclusion in mind, one can proceed to the analysis of the arguments advanced in Watkins 1986 and Starke 1997a in support of the connections between the Luvians and the Trojans.

Watkins 1986 arose out of a conference paper in which the author was asked as a linguist and an Indo-Europeanist to address the question of "the language, or the languages, of the Trojans" (Watkins 1986: 45). It would be fair to say that the nature of the question predetermined the nature of the response. Watkins had to use the pieces of evidence that he knew beforehand to be not conducive to the final solution of the Trojan problem and, to his credit, recognized their inconclusive character. Accordingly, my

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[67] As per Güterbock (1986: 34-35), it is also possible that the name *Kukunni* represents an adaptation of Gk. κύκνος 'swan'. A certain Kuknos, in fact, was known to the Greek tradition as a Trojan ally slain by Achilles (Watkins 1986: 49). In this case, however, it is probably more likely that the name has an Anatolian origin, while its association with the Greek word for 'swan' is due to a folk etymology.

remarks below are not directed against the answer provided by Watkins, but rather against the views of some of his followers, who interpret his answer as a proven theory.

The starting point of Watkins' reasoning is the analysis of several Trojan personal names occurring in the Iliad. Laroche (1972: 126, fn. 32) had already suggested that the name of the Trojan king Πρίαμος might represent a foreign transmission of Luvian *p(a)riya-muwas*, lit. 'foremost in strength'.[68] Unfortunately, this comparison remains isolated and can be contrasted with several names of high-born Trojans that have transparent Greek etymologies. This is the reason why Laroche immediately retracted his suggestion on methodological grounds. Watkins, however, claimed to have found an indirect confirmation of Laroche's etymology of Priam in the "Anatolian" name of his son Paris, also known as Alexandros. He took Πάρις as a hypochoristic formation corresponding to the name of a Hittite scribe *Pari*-LÚ (Laroche 1966, § 942). While the non-Greek character of the name Paris is very likely, its etymology suggested by Watkins strikes one as arbitrary. It is enough to observe that no account is given for the anaptyctic vowel in Πάρις vs. its absence in Πρίαμος.

Another Trojan name discussed in Watkins 1986 is Ἄσιος Ὑρτάκου υἱος (N 771). Watkins plausibly connected Ἄσιο- with Myc. *a-si-wi-jo* on the assumption that both personal names are derived from a western Anatolian toponym attested as Assuwa in cuneiform sources. With regard to the patronymic Ὑρτάκου, he offered a comparison with Hitt. *hartagga-* 'bear[?]' (Watkins 1986: 54). Whether or not this is a

[68] See Starke 1997a: 458a for the phonetic elaboration of this etymology.

correct analysis, I do not believe that it sheds light on the Luvian-Trojan connections. The etymology of the toponym Assuwa remains unclear,[69] while Ὑρτάκου cannot represent the Luvian cognate of Hitt. *hartagga-* < IH. *xr̥tk'o-* 'bear', since the Indo-Hittite palatalized tectal stops are not reflected as stops in Luvian. Thus the Luvian etymology of king Priam remains as isolated as it was before, and nowadays one can fully subscribe to Laroche's reservations on its account.

Another argument for the affinity between the Luvians and the Trojans advanced by Watkins (1986: 58) is the implicit reference to Wilusa as one of the Arzawa lands in the Alaksandu treaty (cf. Beckman 1999: 90 [A iii 31 ff.]). The parallel passages in the treaties of Mursili II refer, however, only to three Arzawa lands, Mira, Seha River Land, and Hapalla (cf. Beckman 1999: 71 [rev. 2 ff.], 80 [A iv 20 ff.]). This suggests that the Hittite concept of the Arzawa lands was rather vague, and could be adjusted for reasons of political expediency. Since Alaksandu enjoyed an equal rank with the three other western Anatolian vassal kings, his demesnes of all the four were listed as a part of the same broad geographic entity. The attempts to draw ethnolinguistic implications from this decision appear to me far-fetched, especially if one accepts my arguments for the linguistically mixed character of the Arzawa population presented in 2.3.[70]

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[69] Starke (1997a: 475, en. 93) connects Assuwa with Luv. *āssu-* (sic!) 'horse'. This etymology is, however, phonetically problematic since the Luvian word for 'horse' was probably *azu(wa)-* (cf. Melchert 1987: 202).

[70] Differently Bryce (2006: 120): "That Wilusa is not consistently referred to as an Arzawan kingdom does not mean that is was not considered a regular member of the Arzawan complex or make it any less likely that it had a significant Luvian element in its population".

The final piece of evidence, which is probably responsible for the high citation index of Watkins 1986, is the discovery of the toponym Wilusa in a line from a song of Istanuwa (66). Watkins also hypothesized that the same toponym could be reconstructed in example (67), whose initial line clearly contains a poetic formula similar to (66). From the perspective of our present knowledge, the last suggestion appears to be somewhat less plausible, since the preceding part of CTH 766, containing pregnancy conjurations, demonstrably emanates from the area of Kizzuwatna. By contrast, the Istanuwian Songs reflect the oral tradition of the northwestern part of the Luvian-speaking area, which was situated reasonably close to Troy. It is obviously very frustrating that the isolated poetic line does not allow us to tell whether the protagonists of the song were Trojans or not, what was the direction of their travel or the purpose of their visit. But in any case the lexical recognition made by Watkins, perhaps supported by the Homeric formula Ἴλιος αἰπεινή 'steep Ilios' reminiscent of *alati ... Wilusati*, indicates the existence of contacts between the dwellers of Wilusa and the Luvian population groups living along the banks of the Sakarya River.

(66) KBo 4.11 rev. 46, CTH 772.1 (NS), Starke 1985: 341
ah-ha-ta-ta a-la-ti a-ú-i-en-ta ú-i-lu-ša-ti
'When they came from high[?] Wilusa'.[71]

(67) KUB 35.103 rev. 11-14, CTH 766 (MS), Starke 1985: 223

a-a-la-ti-⌜it⌝-ta a-ah-ha LÚ-is a-ú-i-ta [	'When a man came from high …'
GÌR.MEŠ-ta-du tar-ú-e-ya i-iš-ša-ra-d[u	His legs are firm[?], his arms are …
du-ú-wa-za-an ti-ya-am-mi-in du-ú-pí-t[a	He beat the wide[?] earth
ša-ar-ra i-⌜x⌝-la tar-ši-i-ta	He *tarsi*-ed X'.

[71] Cf. Starke 1990: 603 for a different interpretation of *ala-* in this passage as 'sea', which I consider less likely.

I believe, however, that the examples provided above have no more relevance for determining the native language(s) of the denizens of Wilusa than the other considerations adduced in Watkins 1986. Would the prominent, indeed the pivotal role of Troy in the Homeric Epic represent a convincing argument for the Greek ethnicity of the Trojans? The answer is negative in spite of the fact that the Iliad portrays Hector and several other Trojan characters with much sympathy, and in spite of a number of scenes where Achaeans converse with their Trojan enemies without interpreters. There are even more reasons to subscribe to Watkins' (1986: 62) sober conclusion: "if the Luvians had a song or epic lay about Wilusa, it does not follow that Wilusa spoke Luvian".

Starke 1997a, which represents the other widely cited paper exploring arguments for the Luvian ethnicity of the Trojans, took its inspiration from the discovery of a bronze seal with an Anatolian hieroglyphic inscription during the 1995 excavation season in Troy. Since the century of previous excavations in Troy had yielded no pre-Greek epigraphic monuments, one can understand the emotional significance of this find for the archaeological community. At the same time, it is rather obvious that the discovery of an isolated inscription made on an easily transportable object and containing no information about the place where it was made tells us very little about the language of the area where it has been found. Thus, four seals inscribed with Anatolian hieroglyphs have been found on the territory of Israel, but Singer (2006a: 738-39) justly dismisses these finds as probative pieces of evidence for stable Luvian population groups in Canaan. The Canaanite seals were never treated as sensational discoveries because much more numerous inscribed objects in Semitic languages shed light on the ethnolinguistic situation in Bronze Age Palestine. In the case of Troy, where such

evidence is absent, the 1995 discovery has been blown out of proportion and has triggered an increased interest for research questions that scholars were poorly equipped to face.

The main merit of Starke's article lies, in my opinion, in the exploration of the political history of Bronze Age Anatolia. The political connections between Wilusa and the Hittite Empire, discussed in much detail in Starke 1997a and briefly addressed at the beginning of this section, provide a sufficient explanation for the emergence of a hieroglyphic seal in Troy. The author's attempts to draw inferences about the *Sprachsituation* in Wilusa and the surrounding area are considerably less convincing. Many of Starke's arguments reiterate those of Watkins 1986 and need not be addressed once again. It is necessary, however, to discuss the significance of the variation between the forms *Wilusa* and *Wilusiya*, which finds a parallel in the similar variation between *Arzawa* and *Arzawiya*. The variants provided with the *-iya-* suffix, which are older in both cases, must be taken, according to Starke, as Luvian possessive adjectives 'Wilusean (land)' and 'Arzawean (land)' respectively. By contrast, the Lydian language, spoken in western Anatolia in the early first millennium BC, used a different possessive suffix *-l(i)-*.

I regard Starke's argument as an important indication of an original Luvian mediation of Hittite contacts with western Anatolia. One must conclude that in the earlier phase of these contacts the Hittites had only superficial information about Arzawa and Wilusa, and therefore borrowed foreign designations for the respective countries. Once the contacts became more intimate, the Hittites learned the correct names of their vassal territories. In a similar fashion, the traditional Romanization of the

Chinese capital *Peking* is probably based on the Cantonese pronunciation of this toponym [pakkiŋ] and reflects the usage of the old British-run Chinese postal system, which was based in Hong Kong. The current Romanization Beijing is based on the Mandarin norm [peitʃing] and reflects the English speakers' awareness of the official dialect of the People's Republic of China, which is also spoken in the Chinese capital.

The role of the Luvians in the transmission of western Anatolian toponyms to the Hittites need not amaze us if we remember that the Luvians populated the Lower Land and (part of) the Sakarya river basin, and thus were the western neighbors of the Hittites. I cannot follow Starke (1997a: 459a) in his aprioristic claim that the Luvian suffix of the adjective *Wilus-iya* must reflect the language of Trojan ambassadors coming to Hattusa. After all, the only occurrence of this variant in the Hittite corpus is found in a context of a military showdown, while the diplomatic documents consistently show a more recent spelling *Wilusa*! Given a multitude of possible scenarios of how the Hittites could initially expand their geographic knowledge, it is better not to speculate further on this subject. But the limited evidence available to us suggests that the diplomatic exchange between Wilusa and Hattusa contributed to the elimination of the Luvoid form rather than to its proliferation. Therefore the form *Wilusiya* can tell us nothing about the northwestern Anatolian vernacular.

The final part of Starke 1997a dwells on the differences between the social organization of the Greeks and the Trojans. Starke stresses the family-like representation of the Trojan aristocracy in the Iliad, where a very large number of the city's defenders are portrayed as Priam's relatives or in-laws. A close parallel to this arrangement is the

structure of the Hittite court, where many officials bore a title DUMU.LUGAL 'son of the king' (Bryce 2002: 27, cf. Beal 2004: 149). Whether the same situation characterized the Luvian courts of Kizzuwatna and Arzawa, is strictly speaking unknown. The point, however, is that, even if it did, there are no reasons to claim that the prominent role of the extended royal family in the affairs of state singled out the Luvians as an ethnic group within Anatolia. It is easy to subscribe to Starke's (1997: 466) final assertion that "eine "homerische Welt gibt es – zumindest in der Ilias – offensichtlich nicht, vielmehr lebte Homer in Schnittpunkt zweier Welten, einer griechischen und einer anatolisch-*luwischen*", - except for the last word, which I italicized.

The conclusions of this section are predominantly negative. It must be frankly stated that my opposition to the theories linking the inhabitants of Wilusa with the Luvians does not imply a better candidate for "the language of the Trojans". Both the Thracian hypothesis of Gindin 1999 and the Lydian/Mysian hypothesis of Neumann 1999 are largely based on the analysis of Trojan personal names and toponyms attested in Greek transmission. Since both Thracians and Lydians/Mysians likely lived in the northwestern part of Asia Minor in the Early Iron Age, it is impossible to tell whether the appearance of the respective proper names in the Homeric epic and the other Greek sources reflects a historical memory of the distant past or is later embellishment. The same, of course, holds for most Greek names of the Trojan characters, such as Hector, Andromache, or Deiphobos.[72] In purely theoretical terms, the Luvian hypothesis has one

[72] This discussion is based on the plausible but unproven assumption that the kernel of the plot of the Iliad reflects the historical events of the Late Bronze Age (see Hajnal 2003: 54-59 for the relevant

potential advantage over its rivals. If one could indeed show that a considerable portion of Homeric names of the Trojans are Luvian, this stratum would be assuredly archaic, since no Greek rhapsode of the early first millennium BC would have reasons to insert them in the text of the epic. Unfortunately, Priam's name is still the only one in this group for which a plausible Luvic etymology has been suggested, and even this etymology implies a hypocoristic shortening (Starke 1997a: 458a).[73]

One can agree in principle with Bryce (2006: 120) that no positive evidence that negates the likelihood of Luvian presence in Bronze Age Wilusa has yet been produced. But an empirical support for this hypothesis is lacking. Now that various views on the ethnicity of the Trojans have been clearly stated and their limitations have been made obvious, the lesson to be learned from this discussion is probably that of Wittgenstein: whereof one cannot speak, thereof one must be silent. Additional data are required in order to carry forward research in this area.

3.7 Lycians in Western Anatolia. The discussion below is meant to represent an optimistic counterpart to the pessimistic conclusions of the previous section. Although

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discussion). If one assumes that an eighth century author used the antiquated geographical setting and archaic poetic formulae in order to describe fictional events, this, of course, would further undermine the relevance of Homeric diction for ethnolinguistic reconstructions.

[73] An additional ethnic group that represents a possible candidate for the Bronze Age population of Wilusa is the Tyrrhenians (Tyrsenoi). Herodotus (1:94) narrates a story of the famine-driven resettlement of Tyrrhenians from northwestern Anatolia to Italy. This story finds confirmation in the similarity of the Etruscan language and the language of an inscription found on Lemnos in 1884. Beekes 2003b, the latest comprehensive attempt to defend the Anatolian homeland of Tyrrhenians/Etruscans, suggests that their migration may be relevant to the origin of the legend about the flight of a group of Trojans to Italy, which is best known from Virgil's Aeneid. Nevertheless, the author wisely abstains from advocating a direct equation between the Trojans and the Tyrrhenians, which would have no linguistic support whatsoever.

the Iliad does not bear witness to the presence of Luvians in Troy, it provides limited evidence for the presence of Luvic population groups in the Troad. Even though this topic may be only tangentially related to my present research, which is concerned mainly with Luvians per se, I find it necessary to address it in some detail because other scholars have already used the relevant facts in their discussions of alleged Luvian migrations.

The principal subject of this section is the identity of the Homeric Lycians, a group of Trojan allies that are mentioned more frequently in the Iliad than Carians, Maeonians, Mysians, Paeonians, Paphlagonians, and Thracians taken together. Bryce (2006:146) justly observes that we are not given any credible motive or incentive that would have brought these fierce warriors from the historical Lycia, far-off as it was from the epic war theater. To this one must add that the epic Lycians appear to be divided with respect to their country of origin. While a large group, led by Glaukus and Sarpedon, had apparently arrived from the southern Anatolian region known as Lycia in the classical period and identifiable through the river-name Xanthos (e.g. Z 172), another Lycian champion, Pandarus, is introduced as an inhabitant of Zeleia, a town in northwestern Anatolia (B 824-27, Δ 91,103). Neither the prominent role of the Lycians in the Iliad, nor their heterogeneous origin, makes sense in the historical context of the classical period. Therefore, one must assume that this information reflects earlier geopolitical arrangements.

Many philologists, beginning with the Greek scholiasts, have tried to account for this contradictory information, but the discovery of Bronze Age Anatolian texts brought a new dimension to the debate. A number of scholars claimed to have found

confirmation for the presence of Lycians in northwestern Anatolia in Hittite sources. Thus, Macqueen (1968: 175) suggested an identification of Homeric Lycians with the Lukka-people of cuneiform sources, whose core area, according to him, was situated close to Troy. Gindin (1998: 196-223) carried this idea further, assuming that Homeric Lycians represented a "west Luvian" population group, which occupied different parts of western Asia Minor in the Bronze Age, and whose designation Lukka was cognate with the "east Luvian" toponym Luviya. Jenniges 1998 likewise accepted the idea that the Iliad contains memories of the vast Lukka-lands, athough he preferred to look for them in Cilicia, Lydia, or Lycaonia. Simon (2006: 321-22) assumes the existence of two different Lukka-lands, one located in southwestern Anatolia, and another one situated in the vicinity of Wilusa. On the other hand, Bryce (2006: 137, 144-50), while accepting the original connection between Sarpedon and Lukka/Lycia, believes that the Lycian origin of Pandarus represents a later interpolation reflecting the southeastward ethnic movements of some other peoples through Anatolia in the early Iron Age. The controversial identity of the "Homeric Lycians" necessitates a fresh look at the history and the geography of the Lukka Lands.[74]

The earliest attestation of this population group has been claimed for the Annals of Tuthaliya I (Bryce 2003: 74). The first preserved toponym in the list of the Assuwa coalition, which has been already mentioned in the previous section, is …]*uq-qa* (KUB 23.11 ii 14, Carruba 1977: 158). Since this list concludes with the countries of

[74] For a list of attestations of the toponym Lukka in the Hittite texts, see del Monte and Tischler 1978: 249-50.

Wilusiya and Tarwisa, the restauration [*L*]*ukka* would provide a striking confirmation to the reality of the "Trojan Lycia", a supposed homeland of Pandarus. Such a restoration, however, is not the only possible, and probably not the most likely possibility. The annals of Arnuwanda I, son of Tuthaliya I, twice referred to an otherwise unknown land *ar-du-uq*[… in connection with a raid against Arzawa that this Hittite king had undertaken together with his father (KUB 23.21 obv. 18, 21, Carruba 1977: 166, 168). It is formally possible to reconstruct a toponym *Arduqqa* on the basis of *ar-du-uq*[and]*uq-qa* (del Monte and Tischler 1978: 40 with ref.), while the spatial and temporal proximity of the events described in the two fragments make me prefer this reconstruction to [*L*]*ukka* in KUB 23.11 (cf. Starke 1997a: 456a with en. 91).

The first real attestation of Lukka in Hittite sources occurs in a Middle Hittite prayer to the Sun-goddess of Arinna that was later adapted for the needs of Mursili II (CTH 376.C = KUB 24.4).[75] Lukka is mentioned there alongside Arawanna, Kalaspa and Pidassa as a land that has become independent and has stopped paying tribute to the Hittites (Lebrun 1980: 162). This complaint should not be taken too literally, since the Hittites had a propensity for referring to the territories of their neighbors as their historical possessions. Nevertheless, it is sufficient to demonstrate that Lukka was not a part of the Hittite kingdom at the time of the composition of CTH 376.C. Since the other countries in this passage appear to be grouped with Lukka on the basis of their rebellious

[75] Bryce (2003: 75) appears to disregard the difference between Mursili II's prayer to the Sun-goddess of Arinna (e.g. CTH 376.A) and its Middle Hittite prototype. For the correct assessment of the relationship between the two texts, see Singer 2002: 44-45.

character rather than their mutual geographic proximity, KUB 24.4 is useless for the discussion of Lukka's location.

The Akkadian letter EA 38 addressed by the king of Alasiya to the pharaoh Akhenaten, a contemporary of Suppiluliuma I, has more interesting geographic implications. The king of Alasiya complains about the damage that the raids of the "land of Lukki" have caused to his country. The apparent purpose of this letter was to pacify the Egyptian pharaoh, who may have accused his correspondent of aiding and abetting Lukka in its raids against Egypt (Bryce 2003: 75, Bryce 2005: 335). The territory of classical Lycia would be a plausible starting point for pillaging expeditions against Egypt and Alasiya, commonly identified with the island of Cyprus or part thereof, whereas northeastern Anatolia is too remote from the geographic setting of the letter to be considered seriously. We can also infer from this Amarna text that the Lukka-lands enjoyed at least de-facto political independence, which enabled them to pursue their piracy.

Every major king of the Hittite Empire, beginning with Mursili II, mentioned Lukka at least once in a context that implies the political instability in this region. Mursili II preserved the name of Lukka as a hostile country in his adaptation of the Middle Hittite prayer to the Sun-goddess of Arinna (Singer 2002: 52-53). Muwatalli II obliged Alaksandu, king of Wilusa, to offer him personal support if he went on a military campaign from the lands of Lukka, Karkisa, Masa, or Warsiyalla (Beckman 2000: 89-90). Formally speaking, the easiest way to interprete this passage is to assume a reference to possible assembly points of Hittite and allied forces. Yet, the fact that none of the countries in this list is known as a part of the Hittite Empire or a Hittite

vassal state, while the Arzawa lands located close to Wilusa are not included in it, makes such an analysis dubious. Therefore I prefer to take Lukka and the other lands mentioned in this context as the potential first objectives of the military campaign (i.e. "(beginning) from the land of Lukka…").[76]

The res gestae of Hattusili III (CTH 82), which mention Lukka several times in a context of hostilities, are too fragmentary to decide whether this region appears as aggressor or as victim (Gurney 1997: 138). It is significant, however, that they consistently refer to it as KUR.KUR.MEŠ ^{URU}*Lu-uq-qa* 'Lukka lands', thus implying a political fragmentation of this area. In the Tawagalawa-letter (CTH 181), the Lukka-men are said to have made simultaneous advances to a Hittite king, commonly identified with Hattusili III, and to Tawagalawa, brother of the king of Ahhiyawa (Bryce 2003: 77). Taken at the face value, this implies that they did not consider themselves subordinate to any of the two regional powers.

An instruction of Tuthaliya IV (CTH 255) exhorts the officials to guard the borders against possible incursions from Azzi, Kaska or Lukka lands (von Schuler 1967: 24). The YALBURT hieroglyphic inscription of the same king commemorates the "destruction" and plunder of Lukka. The SÜDBURG inscription of Suppiluliyama II likewise refers to the subjugation of Lukka, mentioned in one list with Wiyanawanda, Tamina, Masa, and Ikkuna (cf. Hawkins 1995: 22, §4). The same inscription possibly

[76] Pace Bryce (2003: 76), I do not see how this treaty arrangement can be taken as an argument against Lukka's location in the southwest of Asia Minor. Alaksandu was obliged to appear in person with his troops in the case of a military engagement with "western barbarians". By contrast, in the case of a conflict with any of the powers of the East, Alaksandu's treaty obligations were limited to sending an expeditionary force, but his personal participation was not required (cf. Beckman 1999: 90).

indicates that the said lands were rebellious under the former kings (Melchert 2006: 292 with fn. 5). A letter from Ammurapi, the last king of Ugarit, to the king of Alasiya contains a complaint about Ugarit's vulnerability in the conditions when all its troops are in Hatti and all its ships are in Lukka (Bryce 2005: 333). Apparently the Hittites ordered their vassal Ammurapi to assist them in their operations in Lukka with his naval force.

It is the YALBURT inscription that provides a crucial argument for identifying (the core of) the Lukka-lands of Hittite sources with Lycia of the classical period. Poetto (1993: 75-82) has seen that the toponyms (MONS) *pa-tara/i*, VITIS, *pi-na*-*416, *á-wa-ra/i-na-´*, and *TALA-wa/i* marking the itinerary of Tuthaliya IV correspond to Παταρ(η)ίς, Οἰνόανδα, Πίναρα, Ἄρνα, and Τλῶς of Greek sources. All of the Greek toponyms are known to refer to Lycian locations, and the last three have attested counterparts in the Lycian language, *Pinale*-, *Arñna*-, and *Tlawe/i*-, respectively. If my reconstruction of the sequence of blocks in the YALBURT inscription is correct, then the statement about the destruction of Lycia and the mention of Oinoanda (blocks 9+15) is immediately followed by the destruction of Pinara and the expedition against Arna/Xanthos (blocks 12+13).[77] One may conclude that Tuthaliya IV invaded Lycia from the north and then moved down the course of the Xanthos River.

Pace Simon 2006, the textual sources of the Bronze Age do not justify the separate existence of a different Lukka-land in northwestern Anatolia. The inventory

[77] For the latest edition of YALBURT, see Hawkins 1995: 68-70. I suggest that Block 9 of the YALBURT inscription can be directly joined with Block 15, which in its turn can be directly joined with Block 12. Then one winds up with the following reading: *a-wa/i lu-ka*(REGIO)-⌜*zi/a*⌝ FEMINA.INFANS-*zi/a* INFRA (*85)REL-*zi/a-tá a-wa/i-mu* *509.BOS.OVIS *510-*ti* x x DARE 'The women and children of Lukka KWAZA-ed down and gave[?] me transportees[?], oxen, and sheep in full measure'. The direct join between blocks 12 and 13 is commonly accepted.

text KBo 16.83+ (CTH 242.8) does mention the silver tubes delivered by the Lukka-people next to other artifacts coming from the northern Anatolian cities, but there are no grounds to believe that the luxury items in Hittite magazines were arranged or inventorized based on the geographic principle. The mention of Lukka in the Alaksandu treaty does not imply that this territory belonged to the kingdom of Wilusa, but merely singles it out as a potentially troublesome area in the western part of Anatolia. Finally, we have seen that the alleged participation of the Lukka-peoples in the Assuwa coalition is entirely based on an unlikely restoration. In the absence of evidence to the contrary, Occam's razor prompts one to assume that the borders of the Lukka core area were geographically contiguous. In sum, we have positive philological arguments for the presence of Bronze Age Lukka settlements in classical Lycia, but not anywhere else in Asia Minor or beyond it.

Hittite texts contain no mention of Lukka kings. We have evidence of trade between Hatti and Lukka, since the local artifacts are mentioned in Hittite inventory texts (del Monte and Tischler 1978: 250), but no treaties were concluded between the two countries. This suggests that the Hittite kings did not regard Lukka as a state and reinforces the impression that this land was politically decentralized (cf. Bryce 2003: 40-41). If Lukka was not the name of a state, it may either have represented a purely geographic term, such as Arzawa in a broad sense, or it may have had ethnic connotations. The attestations of this term as an ethnic name in sources from Egypt vindicate the second hypothesis. We have already seen that an Amarna letter mentions the raids of the Lukka people against Alasiya, but the same Lukka (ru_2-ku_2) people appear some 150 years later in a Karnak inscription of Merneptah, where they are

portrayed as members of a marauding coalition forged by a Lydian chieftain Meryre. Other members of the same coalition were Sherden (*ša-r-d-n*), Shekelesh (*š-k-ru$_2$-ša*), Ekwesh (*'a$_2$-qa-wa-ša*) and Teresh (*tu-ri-ša*), which are familiar names of the "Sea Peoples" (cf. Bryce 2005: 336).

If it is possible to talk about the Lukka people, it is legitimate to wonder about the language, or languages, this people spoke. Bryce (2003: 43-44) was of the opinion that it was Luvian, and went so far as to claim that Lukka Lands can be metonymically used for all the Luvian-speaking regions of Anatolia. The last claim is, of course, demonstrably false, since the area of Hattusa, which was largely Luvian-speaking in the thirteenth century BC, was not considered one of the Lukka lands.[78] As for the first claim, it requires further clarifications in light of Melchert's distinction between the Luvic group of languages and the Luvian languages in the narrow sense. Given that all the autochthonous languages attested in and around Lycia are Luvic, the assertion that the Lukka people must have spoken a Luvic dialect appears to be uncontroversial. It remains to be seen which Luvic dialect, if any, among those known to us, represents a likely descendant of the Lukka vernacular.

The most natural hypothesis is, of course, to assume that the Lukka people of the Late Bronze Age spoke a form of Proto-Lycian. There is enough evidence that both of the Luvic dialects attested in the Lycian inscriptions of the classical period, Lycian A (or simply Lycian) and Lycian B (or Milyan) contain archaisms that were eliminated in

[78] Simon (2006: 320-321) states specific objections to Bryce's interpretation of certain Hittite contexts as referring to "Lycians in the broad sense".

Luvian, and therefore cannot be regarded as its direct descendants (cf. Melchert 2003b: 175).[79] The relationship between these two dialects requires, however, additional discussion.

There are at least three phonological innovations that occurred in Lycian but not in Milyan.[80] These are **s>h* (except next to certain consonants), **w>Ø* before syllabic resonants, and **k'>t*. Compare, for example, the possessive suffix Lyc. *-ehe/i-* vs Mil. *-ese/i-*, the suffix of ethnic adjectives Lyc. *-ñne/i-* vs. Mil. *-wñne/i-*, and Lyc. *ti* vs Mil. *ki* 'who'.[81] I am not aware of opposite types of correspondences, which would illustrate phonological innovations of Milyan with respect to its close relative Lycian. In all the three cases cited above, Carian shares the archaisms of Milyan, cf.. *oton-os-n* 'Athenian (acc. sg.)', *kbd-yn-ś* 'Kaunians (acc.pl.)', and the etymological relative pronoun *k̃i* functioning as a linker in nominal phrases (Adiego 2007: 371, 377, 392). The morphological innovation that unites Milyan with Carian, as opposed to Lycian, is the extended conjunction Lyc. B *sebe* ~ Car. *sb* 'and', contrasted with Lyc. *se* (Adiego

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[79] In particular, the presence of the dat. pl. ending *-e* and the contrastive particle *=me* in Lycian B falsifies the claim of Starke (1997a: 476, fn. 108) that this dialect, unlike Lycian A, represents a direct descendent of Luvian

[80] I will use the term Milyan throughout the rest of my dissertation as an attempt to avoid prejudging the issue of the relationship between this language and Lycian A. At the same time, I must stress that the traditional alternative name Milyan is selected *faute de mieux* and that the hypothesis that the homeland of the speakers of this language was located in the region of Milyas in the northeastern part of Lycia lacks any foundation whatsoever.

[81] For the first two examples, see e.g. Lyc. A *ẽnehe/i-* vs. Lyc. B *ẽnese/i-* 'maternal' (Melchert 2004a: 116) and Lyc. A *xbidẽñni* vs. Lyc. B *xbidewñni* 'Kaunian' (Melchert 2004a: 135). For the last comparison, see Adiego (2007: 243).

2007: 411).[82] Therefore one can entertain a hypothesis that Milyan occupied an intermediate position between Lycian and Carian in the continuum of the Luvic dialects of western Anatolia.

The available sociolinguistic evidence, for all its indecisive character, appears to plead for the intrusive status of the Milyan language in Lycia. The number of Lycian monumental inscriptions approaches two hundred, and they are spread across the whole territory of classical Lycia. By contrast, only two Milyan inscriptions are available to us, and one of them is a poetic text incised on the Xanthos stele (TL 44), which also features a long prosaic text in Lycian A and a short Greek elegy. It is reasonable to assume that the Lycian part of the inscription was meant to accommodate the linguistic competence of the population of Xanthos, Greek was chosen as the *lingua franca* of the day, while Milyan represented the native language of the Lycian ruler Kheriga, commissioner of TL 44. Melchert (2003a: 15, fn. 9) suggested that the name *Xeriga* / *Xariga* may etymologically mean simply "the Carian" and this etymology is compatible with the existing Carian-Milyan isoglosses.

Thus there are no obstacles to assuming that the dialect of the Lukka-people represents an ancestor of Lycian (A). We have seen that all the Bronze Age sources at our disposal are compatible with Lycia as the local homeland of this ethnic group and the linguistically homogeneous character of classical Lycia, contrasted with the lack of

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[82] I connect Lyc. *se*= with Hitt. *taksan* 'together', on the assumption that both forms go back to **tk'son* 'together'. This reconstruction is based on the hypothesis of David Testen, presented at the 217th Annual Meeting of the American Oriental Society in San Antonio. David Testen, however, concentrated on the possible Indo-European cognates of the Hittite form and did not discuss the Lycian data. For the denasalization of Lyc. **sẽ*= in a clitic formation, cf. the Lycian clitic sequence **m*=*ẽ*=*ti* > *m*=*e*=*ti* (Melchert 2004a: 19-20).

Lycian monuments outside its borders, supports this identification. Furthermore, the hypothesis that the toponyms Luviya and Lukka are cognates linked by regular sound correspondences between "east Luvian" and "west Luvian" does not hold water, since the correspondence between Luvian *-w-* and Lycian *-k-* is not attested elsewhere (cf. Melchert 2003a: 14 fn. 6). Therefore one cannot prove on linguistic grounds that the proper noun Lukka represents a Luvic ethnic heritage and the hypothesis that it was borrowed from the pre-Indo-European population of Lycia remains just as possible.[83]

Should one then take the Lycian presence at Troy reported in the Iliad as a mere legend? I do not think that this pessimistic conclusion is necessary. While a theory of Lukka migrations from north to south in the Late Bronze Age does not receive any support from textual evidence, it is possible that some Lukka population groups moved from Lycia in the northward direction in the period after (or shortly before) the collapse of the Hittite Empire. We know that the late thirteenth and early twelfth century BC was marked by extensive population movements, which originated in the Aegean and western Anatolia and were recorded in Egyptian historical texts as the Sea People invasions (Bryce 2005: 334-40). We have seen that Merneptah explicitly mentioned Lukka as one of the population groups engaged in pillaging raids in those troublesome times. The Homeric epic provides indirect evidence that, while some Lukka groups were raiding Egypt, others established themselves in the area of Troy.

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[83]For a recent attempt to derive the toponym Lukka from IE. √*leuk* 'shine', see Simon 2006: 315-16. In my opinion, this etymology is formally possible but semantically rather arbitrary. If correct, it supports the assumption that the toponyms Luviya and Lukka are etymologically unrelated.

The expansion of the Lukka peoples outside their core area helps to account for the etymology of classical Λυκαονία, which must have corresponded to the Lower Land and/or Pedassa of Late Bronze Age sources, and probably to Luviya of the earlier period. This territory was separated by the Taurus Mountains and a distance of some two hundred kilometers from the Lukka-lands corresponding to the classical Lycia. In the thirteenth century BC it lay within the fold of the Hittite Empire, to the northwest of Tarhuntassa. Since neither the Ulmi-Tessub treaty, nor the Bronze Tablet refer to Lukka as the northern neighbour of Tarhuntassa, there are no grounds to surmise that this territory was not considered a Lukka-land in a geographic sense by the time of the composition of the Tarhuntassa-treaties.[84] Nevertheless, from a purely linguistic point of view, Lycaonia can be straightforwardly derived from Luv. **lukka-wani-* 'inhabited by Lukka' or 'belonging to Lukka' (Jenniges 1998: 41 with ref.).

I suggest that the etymology of Lycaonia may reflect the invasions of the Lukka people that marked the end of *pax hethitica* in the southern part of Bronze Age Anatolia. The fact that both Tuthaliya IV and Suppiluliyama II allocated a prominent place in their *res gestae* to the description of their victories over Lukka suggests that the last Hittite kings regarded the Lukka-lands among their most formidable opponents. The SÜDBURG inscription of Suppiluliyama II includes Lukka in the same list of hostile nations as Ikkuna, a location identified with the Hellenistic Iconium, lying at the border of Lycaonia and Isauria, and the present-day Konya. This implies that Suppiluliyama II

[84] The geographic association between the Bronze Age Lukka and the classical Lycaonia, still defended in Carruba 1996, was based on a quite arbitrary reconstruction of the *res gestae* of Hattusili III (see Bryce 1974: 397 for the details). While it was perhaps acceptable as a hypothesis before the publication of the Bronze Tablet and the YALBURT inscription, it hardly has any merit nowadays.

had to fight against a large coalition that stretched from Lycia to parts of Lycaonia (cf. Hawkins 1995: 54-55). It is possible that the Lukka-people held an upper hand in this coalition and came to exercise a political dominion over Lycaonia after the collapse of the Hittite Empire. This hypothesis is consistent with the fact that this area yielded no Luvian inscriptions of the post-Empire period.

To be sure, the Lukka presence in the area of Troy need not have been so conspicuous as their presence in Lycaonia, although it was perhaps less ephemeral than their presence in Egypt. The Homeric tale of a Lycian chieftain Pandaros holding sway in a town of Zeleia may well reflect the existence of permanent Lukka bases in the Troad in the Dark Ages. In fact, the Lycian ethnicity of the Homeric Lycians has better philological support than the putative Luvian ethnicity of the Homeric Trojans. Thus the father of Pandarus is called Λυκάων in the Iliad, and one is tempted to interpret this name as an indirect reference to Pandarus' ethnic or geographic origin (cf. Jenniges 1998: 141). The name Πάνδαρος has been compared many times with the Lycian adjective *pñtreñni/e-*, although the implications of this comparison for the etymology of the name are not fully clear (cf. Neumann 2007: 278-79). The name Σαρπηδών, lit. 'having a high position' or 'living in a high place', may have been originally Carian rather than Lycian, since the prefix *šar-*, common in Carian personal names, corresponds to Lydian *hri-* and Milyan *zri-* < **sarri-* (Adiego 2007: 261).[85] This, of course, is not difficult to reconcile with the professed Lycian identity of this warlord, since coalitions

[85] The second part of Sarpedon's name may be related to Luv. LOCUS-*ta*$_{4/5}$-*wa-za* and Lyc. (A) *pddẽn-* 'place'. Huxley (1961: 21) suggests a different segmentation of the same compound, which is, however, not conducive to understanding its meaning.

of the Lukka buccaneers may have included not only Lycians per se, but also those more adventurous among their neighbors.[86]

A possible instance of a Lukka toponym in the northwestern part of Asia Minor is the name Δαινις applied to Greek Ἐλαία, a town in the delta of the Caicos river. Neumann (apud Gusmani 1986: 162) reconstructed this toponym in the passage belonging to Stephanus Byzantius: Ἐλαία πόλις τῆς Ἀσίας Ἀἰολική … ἣ Κίδαινις ὠνομάζετο 'The Aeolian town Elaea (situated) in Asia … which was called Kidainis'. According to Neumann, ἣ Κίδαινις ὠνομάζετο can be emended to ἣ καὶ Δαινις ὠνομάζετο 'which was also called Dainis'. He suggested that Gk. Ἐλαία, lit. 'olive-tree', represents a calque from Luvian *daini-* 'oily'. As Melchert (2003a: 11 with fn. 4) justly observes, Luv. *daini-* (cognate with Hitt. *sakan* 'oil, fat') shows historical changes that are not typical of Lydian, and this precludes the hypothesis that we are dealing here with an otherwise unattested Lydian cognate of the Luvian word. If we put trust in our early Byzantine source and accept Neumann's emendation, we must also accept that the town Dainis, probably situated in the historical Seha River Land, received its name from Luvic speakers, or else that Lyd. **daini-* 'oily' represents a Luvic loanword. Pace Melchert, however, there is nothing specifically Luvian about the irregular sound change */s/>/t/ or the lenition of voiced velars, which are both attested in Lycian (cf. Lyc. *tawa*

[86] At this point, it is appropriate to observe that, if the presence of Lukka people around Troy is postulated on independent grounds, one can argue that the Luvic name of Priam belongs to the same stratum. While this suggestion is admittedly quite speculative, I do not see why it can be considered inferior to the widely publicized attempts to derive the name of the legendary Trojan king directly from Luvian.

'eyes' vs. Hitt. *sakuwa* 'id.').[87] Therefore one can entertain a possibility that the town Dainis represented an actual Lukka foundation, which was later renamed by the Greeks. Could it be one of the historical facts behind the legends of "Trojan Lycians"?[88]

It is difficult to go beyond this. We may never learn whether the Lukka tribes penetrated the Troad when Wilusa was still a loyal Hittite vassal, or rather availed themselves of the vacuum of power caused by the collapse of the Hittite Empire. It is not clear whether they were faithful allies of the Trojans, as the Iliad portrays them, or rather one of the factors that contributed to the abandonment of Troy in the late second millennium BC. We may not even be sure that Troy existed at the time when Lycians were present in the area: the themes of the Trojan War and conflicts with Lycians may have been secondarily conflated in the Homeric epic. But, unless some new overwhelming evidence emerges, the migrations of Lycians from their homeland in southern Anatolia to the vicinity of Troy should be taken the way the Iliad describes

[87] Note the lack of word-initial devoicing in the Greek toponym, which can be also observed in δέπας 'cup', a Luvic lexical borrowing into Greek to be discussed in the following section. The possible Lycian comparandum of the latter word, *tabahaza* 'inhabitants of heaven[?]', shows the word-initial voiced stop, while its Luvian cognates are ambiguous. In any event, word-initial devoicing in the Anatolian languages represents a contact-induced feature spreading through lexical diffusion (cf. Melchert 1994: 20), and therefore its presence or absence cannot be used as an argument for the genetic identification of a particular lexeme.

[88] The area of Dainis must have belonged to the Seha River Land in the Late Bronze Age. Therefore one can suggest as an alternative that Dainis represents an Arzawa foundation, and its name goes back to a Proto-Carian word for "olives". I consider this alternative somewhat less likely because of the greater time distance and because we do not really know whether the relevant sound changes occurred in the history of Carian.

them, and not reinterpreted as a recollection of Luvians or another ethnic group migrating from north to south.[89]

3.8 Linguistic Contacts between Luvian and Greek. The Luvian presence in the Aegean has traditionally been seen as the main trigger of linguistic interference between Luvian and Greek. The purpose of this section is to reexamine the evidence adduced in favor of such contacts and to discuss their alternative setting. I intend to show that the role of Luvian as a source of lexical borrowings and a trigger of structural interference has been seriously exaggerated in Greek philology. Furthermore, I will discuss historical evidence that has been recently adduced for the early interaction between the Luvians and the Greeks along the southern coast of Asia Minor.

It is very difficult to argue against the theories of Luvian substrate or adstrate in Greek because there are no "standard" variants of such theories. As a rule, individual neophytes, usually representing Classical Studies, adduce isolated proper nouns of Luvoid appearance attested in Greek sources in support of their views, and then make vague claims about the availability of additional data. Indicative of this approach is Huxley 1961, a small monograph that refreshingly does not dwell on the decipherment of Linear A. The author reminds us that "many place names in mainland Greece are

[89] The assumption of Lukka migrations at the end of the second millennium BC implies that the definition of Lukka lands as "a loose geographical designation for southwestern Anatolia, used for a group of ethnically and culturally related communities and clans" (Singer 1983: 208) requires some fine-tuning. The assumed vague geographic boundaries of the Lukka-lands may reflect scholarly uncertainty in dealing with the problem of Trojan Lycia or the etymology of Lycaonia. Once we recognize that these toponyms may reflect the secondary expansion of the Lukka tribes, the narrow identification between Lukka of Bronze Age sources and Lycia of classical sources becomes less problematic.

plainly non-Greek", but cautions the reader against assuming that all the toponyms endowed with suffixes –νθο-, -σσο- / -ττο-, or –ηνη are of substrate origin. One of the reasons is that "many pre-Greek names in the Aegean islands may have been introduced in the Middle Bronze Age by Carians, or by Luwians from Crete, or by Luwians from Western Asia Minor" (p. 40). Two proper nouns are cited as an illustration of this claim: a Lesbos town name Μυτιλήνη, alledgedly derived from the Luvian PN. *Muwatalli-* and a Samos PN 'Ιμβρασος related to Luv. *imrassa* 'of an open field'.

Between the two etymologies suggested above, the second one is more convincing than the first one, but this is not the point of the discussion.[90] The author, if I understand him correctly, does not claim that all the pre-Greek suffixes have a Luvian origin, but the reader is left with an impression that nouns with such suffixes are somehow more likely to be Anatolian. The two proper nouns cited as examples are, however, classified as Luvian based on their roots, rather than their suffixes, and such a small sample cannot lead to statistical generalizations about the origin of Aegean forms in -ηνη- or -ασ(σ)ο-. The proponents of early Luvian presence in the Aegean must present a substantial list of local toponyms and personal names with Luvian lexical etymologies before attempting to collect suffixes that may be indicative of the Luvian stratum of borrowings.

A more recent but equally unconvincing attempt to argue for a specific structural isogloss between Greek and Luvian comes from one of the leading Anatolian scholars

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[90] It is worth pointing out in passing that none of the forms, if indeed of Anatolian origin, pleads for contacts specifically with Luvian. The Hittites appropriated *Muwatalli-* as a dynastic name, while Car. PN *(i)β(a)rs(i)-* (Adiego 2007, 360, 366, 367) is the likely source of Gk. PN 'Ιμβρασος.

and therefore deserves more detailed discussion. In a sequel to his essay about the language of the Trojans, Watkins (1995: 150-51) asserted the Greek Wackernagel clitic ταρ and the Luvian Wackernagel clitic =*tar* display non-trivial functional similarities and concluded that "[i]t is tempting to see in this an areal feature common to both languages at the geographical point of their contact". One must stress that the sentential particle =*tar* is not attested in any other Anatolian language and therefore, if Watkins is correct at this point, we are facing a direct trace of Greek and Luvian bilingualism preserved in the Homeric tradition. In what follows, however, I intend to show that the analysis of Watkins does not hold water, and indeed represents a model example of how one should not approach the topic of language contact.

The Luvian Wackernagel clitic =*tar*, attested in the Kizzuwatna and Istanuwa dialects, represents a functional equivalent of the Hittite clitic =*san*. Prototypically, both particles indicate a superposition of one clause argument with respect to another one, or to the speaker. Hittite =*san* is frequently used in combination with the preverbs/postpositions *ser* and *sarā*, or in the same constructions where these forms may otherwise occur. Secondarily, the same particle is frequently used as an indicator of contiguity or close proximity between the two arguments, thus being semantically close to Luv. =*tta* and Hittite =*kan*. This description does not, of course, constitute an exhaustive functional definition of =*san* or =*tar*, which does not seem feasible given the present state of our knowledge. Nevertheless, it is possible to show that the majority of occurrence of =*tar* in well-understood Luvian passages display close functional similarities with the Hittite usage of =*san*, as described in CHD, Š: 127-55.

Example (68=1) provides a starting point for the functional identification between =*san* and =*tar*, since its second clause finds a precise equivalent in HT 1 i 31 LÚ.MEŠ*lūlahiyas=san huprus kuyēs ishiyantis* 'who tie on Lulahian belts'. Example (69) is almost as ostensible given the fact that the Luvian preverb *sarri* represents a cognate and a functional equivalent to Hitt. *ser*. In (70), the use of =*tar* with *tuwa*- with reference to placing one object on top of another can be compared with the synonymous Hittite pattern =*san* … *tai*-/*tiya*- (CHD, Š: 136). The construction =*tar*… *ta*- in (71) has an obvious counterpart in Hitt. =*san* … *tiya*- (CHD, Š: 136), where Hitt. *tiya*- 'to step on, stand' is cognate with Luv. *ta*- 'id.'

(68) KUB 9.31 ii 22-24, CTH 757.B (NS), Starke 1985: 53
^{d}An-na-ru-um-mi-en-zi aš-ha-nu-wa-an-ta ku-in-zi wa-aš-ša-an-ta-ri
^{d}Lu-u-la-hi-in-za-aš-**tar** hu-u-up-pa-ra-za ku-in-zi hi-iš-hi-ya-an-ti
'*Annarummi*-gods, who wear bloodied (clothes), who tie on Lulahian belts…'

(69) KUB 35.88 iii 13, CTH 765.1.A (NS), Starke 1985: 227
ša-ar-ri-wa-**tar** DUMU-in wa-al-li-it-ta
'She lifted up the child'.

(70) KUB 35.103 rev. 4-6, CTH 766 (MS), Starke 1985: 222
za-am-pa-ku-wa DUMU-ni-in wa-al-li-in-du ša-an-na-i-in-du
pa-wa-an-**tar** a-an-ni[-i] ⌜ti⌝-i-ta-ni du-ú-wa-an-du
'Let them raise and overturn$^{?}$ this child! Let them put him upon his mother's breast'.

(71) KUB 9.31 ii 25-26, CTH 757.B (NS), Starke 1985: 53
pa-a-**tar** a-ap-pa za-aš-ta-an-za aš-tu-um-ma-an-ta-an-za-ta
at-tu-wa-la-hi-ti ni-iš da-a-ad-du-wa-ar
'Do not step again to these gates with evil'!

With these preliminary considerations in mind, one can now turn to the Luvian examples that are thought to provide a link between the Greek and the Anatolian usage of =*tar*. The significance of example (72=32), according to Watkins, lies in the

formulaic sequence *kuis=tar*, which is cognate with τίς ταρ attested many times in the Iliad. There are, however, no reasons to think that the relative pronoun *kuis* conditioned the occurrence of *=tar* in this example. This is, in fact, the only Luvian formula where the two elements co-occur, while KUB 9.6 i 23 (Starke 1985: 112) can be contrasted for the onset of another counter-magic formula, beginning with the same pronoun *kuis* but featuring no *=tar*. The factor that triggered the presence of a sentential particle in (72) is the *dativus incommodi* 'to the patron of the rituals'. The comparable (derived) function of *=san* encoding the overt expression of a beneficiary in the clause structure is well established in Hittite (CHD, Š: 152-154).

(72) KUB 9.6 iii 12-14, CTH 759.2 (LNS), Starke 1985: 115
ku-iš-**tar** ma-al-ha-aš-ša-aš-ša-an-za-an EN-ya a-ad-du-wa-la a-an-ni-ti
a-an DINGIR.MEŠ-in-zi a-ah-ha na-a-ta-at-ta ta-ta-ar-ha-an-du
'Whoever does evil with respect to the patron of the rituals, let the gods break him like reeds'.

As for the Luvian verb *mammana-* co-occurring with *=tar* in (73) and a number of similar examples, it can be compared with the Hittite phrase *=san ... sakuwa har(k)-/ epp-* 'to keep an eye (on smth.)' (CHD, Š: 143b). In fact, 'to keep an eye' appears to represent a more appropriate translation of the verb in (73) than 'to regard with favor', proposed in Melchert 1993: 134. These are not, however, the semantic nuances of the Luvian predicate that are responsible for the appearance of *=san*, but rather its argument structure. In all probability, casting a glance on something was conceptualized as an event triggering contiguity between the actor and the goal, and so the local particle encodes the fact that this goal is present among the syntactic valencies of the predicate.

(73) KUB 35.16 i 9-12, CTH 761.3.A (NS), Starke 1985: 93
[mal-ha-aš-ša-aš-ši-iš-pa-]**tar** EN-aš a-pa-a-aš-ša-a-an-za
[wa-aš-ši-na-an-za a-an-nu-un-n]a-an-za ma-a-am-ma-an-na-ad-du

> [hu-it-wa-la-hi-ta-ti an-na-r]u-um-ma-hi-<ta>-ti a-ra-ya-a-ti [uš-ša-a-ti ap-pa-ra-an-ta-ti] a-ra-a-ti ma-aš-ša-na-aš-ša-an-za-ti [wa-aš-ša-ra-hi-ta-ti]
> 'Let the [ritual] patron keep an eye on his [body] and *annunna*- with (respect to) [life], virility, long [years, future days], (and) [favor] of the gods'.

So much for the Luvian data. The Greek particle ταρ has been frequently analyzed as a sequence of the clitic conjunction τε 'and' and the syncopated form of the particle ἄρα, which prototypically denotes immediate succession in time. The analysis τ'ἄρ is certainly preferable in those cases where a coordinative conjunction is expected on independent grounds, while the syncope of ἄρα can be seen as the product of a sandhi with the following words beginning with a vowel (e.g. B 584). On the other hand, there are cases where the segmentation of ἄρ remains likely on structural grounds, even though the syncope of ἄρα is not sandhi-motivated (e.g. οὔτ'ἂρ in E 532). This opens a possibility that the particle ταρ, to be postulated in those cases where the coordinative conjunction τ' would appear otiose, nevertheless results from the grammaticalization of τ'ἄρ by analogy with other contexts, such as those mentioned above.

This "grammaticalized" ταρ frequently occurs in the Iliad in the position after the interrogative pronoun τίς (A 8, B 761, Γ 226, etc.). τίς ταρ is normally thought to express a transition between the question and the preceding narrative and is usually translated as 'who then?' This meaning of ταρ is compatible with the original semantics of ἄρ(α) but has nothing to do with the function of Luv. *=tar*. Another group of contexts in which Watkins postulated ταρ features this particle in line-initial sequences ῥίγησὲν ταρ ἔπειτα 'thereat he shuddered' (Λ 254), κώκυσὲν ταρ ἔπειτα 'thereat she

shrieked' (Σ 37), θάμβησὲν ταρ ἔπειτα 'thereat she was awestruck' (Γ 398), and γήθησὲν ταρ ἔπειτα 'thereat he rejoiced' (N 353). It is significant that in all these cases =ταρ is immediately followed by ἔπειτα 'afterwards', which it appears to reinforce. Thus the semantics of ταρ is again quite similar to the semantics of ἄρ(α), and one can even argue that the first was chosen for metric reasons, simply because the second one would not have fit the hexameter. On the other hand, the comparison of these passages with the Luvian imperative *mammana=tar* 'regard with favor (?)' ventured by Watkins (1995: 150) is invalid, since in this case the local particle *=tar* conveys information about the semantics and the argument structure of the verb *mammana* instead of being used as a sentence connector. In addition, its place with respect to the verbal form is not fixed, as illustrated by (73).

We have seen that the comparison between Gk ταρ and Luv. *=tar* can be refuted on purely descriptive grounds. Yet this problem also has a methodological dimension. The attempt of Watkins 1995 to use isolated pieces of linguistic evidence in order to find support for a particular historical model represented an uphill task from the very beginning because no contact episode is likely to result in the borrowing of a single particle. If one wishes to make a case for Greek and Luvian bilingualism along the western coast of Asia Minor in the Late Bronze Age period, one has to operate with a set of shared but not inherited innovations in the two languages, which mutually corroborate each other.

In what follows, I will take a positive approach to linguistic interference between Luvian and Greek, concentrating on those contact-induced phenomena that I

consider certain or likely. We know that intensive contacts in a situation of language maintenance are likely to result in numerous lexical borrowings, and perhaps in a diffusion of typologically common structural features. In a situation of language shift, one expects to observe partial restructuring of the target language. If none of these processes can be ascertained, the hypothesis of intensive contacts falls apart.

The only likely lexical borrowing from Luvian into Mycenaean identified so far is Myc. *di-pa-* 'a kind of vessel'. This word, attested later as Gk. δέπας 'cup' was compared with CLuv. *tappas-* and HLuv. (CAELUM)*ti-pa-s*° 'sky' (Melchert 2003b: 184 with ref.). The peculiar semantic shift 'sky' > 'cup', reflecting the naive image of the sky as a cup covering the flat Earth, is supported by the Luvian sign CAELUM that graphically represents a bowl (Hawkins 2000: 26), as well as by the Hittite cognate *nēbis-* which besides 'sky' can indicate a ritual object made of metal or of flour (Neu 1999: 621-22). As one can see from the above comparison, the Luvian word for 'sky' displays a specifically Luvic assimilatory denasalization. Thus we can be sure that the Mycenaean word could not have been borrowed from Hittite, but only from Luvian or a closely related tongue. Yet, since Liw. *tappas-*/ *ti-pa-s*° is not directly attested with the meaning 'bowl', the Anatolian origin of Myc. *di-pa-* remains hypothetical.

This isolated and uncertain borrowing can be contrasted with five words borrowed by Mycenaean from Semitic, according to the conservative count of Bartoněk (2002: 492). Our limited knowledge of Mycenaean vocabulary leaves hope that more Luvian and Semitic loanwords will be identified in the future, but even now one can get an estimate of the proportion. If the Semitic borrowings into Early Greek can be explained, as they usually are, by intensive trade contacts, there is even more reason to

suggest the same explanation for the borrowing of the Luvian word for 'sky, *cup'. These trade-driven loanwords can be contrasted with likely Mycenaean borrowings from the unidentified Aegean substrate or adstrate, the selective presentation of which by Bartoněk (2002: 490-91) contains eighteen items.

Three to four more loanwords can be gained by extending the search for Luvian borrowings into Greek into the Iron Age period. Thus Pegasos (Πήγασος), the horse carrying the lightning and thunderbolt for Zeus, is probably a Greek avatar of the Luvian Storm-God of Lightning (*pihassassa/i-*), chosen by the Hittite king Muwatalli II as his personal divine patron (Hutter 2003: 269 with ref.). HLuv. *tarwana/i-* 'justice, judge' may have been adopted into Greek as τύραννος 'tyrant', but this hypothesis is hard to reconcile with an alternative scenario, according to which the Greek word was borrowed from the same source as Ugar. /zuranu/ 'prince' and Hebr. *srn* 'a title among the Philistines' (for an attempt see Yakubovich 2002: 111-2 with ref.).[91] Melchert (1998a) plausibly compared Gk τολύπη 'ball of spun wool, ball of wool to be spun, globular cake' with Luv. *taluppi-/*taluppa-* 'lump, clod'. HLuv. *tuwarsa/i-* 'vineyard' has been compared with Gk. θύρσος '*thyrsus*, wand wreathed in ivy', but the irregular

[91] The Indo-European etymology of *tarwana/i-* is unknown, but if the Luvian word is indeed related to its Greek and Semitic counterparts, then it is likely to represent a source of borrowing for semantic reasons. In all probability, 'justice' is the original meaning of the word under discussion, while 'judge' represents a type of metaphor known from English 'justices'.

correspondence of word-initial stops suggests that this may be instead a common borrowing from a third source.[92]

These loanwords are clearly no match to several hundred Greek words of (likely) substrate origin collected, for example, in Furnée 1972. They can be rather compared with the small stock of likely lexical borrowings from or via Hittite into Greek, such as Hitt. *eshar* 'blood' vs. Gk. ἴχωρ 'blood of the gods', Hitt. *huhubal* 'a percussion instrument' vs. Gk. κύμβαλον 'cymbal', Hitt. *kuwanna(n)*- 'copper ore' vs. Gk. κύανος ''dark-blue enamel, lapis lazuli etc.', Hitt. *kubahi*- 'a head gear' (< Hurrian) vs. Gk. κύμβαχος 'crown of a helmet', Hitt. *kursa*- 'hunting bag' vs. Gk. βύρσα 'leather, hide'.[93] There are no reasons to think that the speakers of Greek and Hittite occupied the directly adjacent areas in the second millennium BC, but these borrowings must be rather considered in the context of trade-driven cultural contacts in the Eastern Mediterranean, similar to the contacts between the Greeks and the Phoenicians, but on a lesser scale.

It is true that the Greek dialects and the Indo-European Anatolian languages share a number of structural similarities that are not likely to be coincidental (see most lately Högemann 2003: 6-9 with ref.). None of them, however, seems to be restricted to

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[92] A similar correspondence between the Greek aspirate and the Luvian non-aspriated dental stop is attested in Gk.λαβύρινθος 'royal palace in Crete, compared with the Carian toponym Λαβρυανδα (cf. the discussion in 1.2).

[93] Hitt. *eshar* 'blood' corresponds to Luv. *ashar*, which is a phonetically unlikely borrowing source for source for Gk. ἴχωρ. Hitt. *kuwanna(n)*- 'copper ore' is presumably distantly related to Lith. *švìnas* 'lead', which would indicate that its Luvian putative cognate would contain an initial afftricate *z*-. In the other cases, the assumption that the words listed above were borrowed from Luvian rather than Hittite is possible, but gratuitous, since none of them is actually attested in the Luvian corpus.

Greek and Luvian. These isoglosses can be divided into two small groups: those shared by Greek and most other Anatolian languages, and those restricted to Greek and Lydian.

To begin with the first group, Proto-Greek, and Common Anatolian famously share the constraint on the word-initial occurrence of *r*-, although *r*- secondarily emerges in Iron Age Luvian after the simplification of certain consonant clusters (e.g. **Kruntiya*- yields *Runtiya*-). This constraint, perhaps caused by a common linguistic substrate, also extends itself to Hurro-Urartian and Hattic. The East Ionic iteratives marked by the suffix -σκε- have no direct counterpart in the other Greek dialects, where the function of -σκε- is opaque, but they can be compared with the use of Hittite -*ske*- and Hattusa Luvian -*za*- marking the imperfective aspect (Watkins 2001: 58). The fact that the functional equivalent of this suffix has not been identified in Lydian as yet may have to do solely with our poor knowledge of this language. Even if it was synchronically absent in Lydian, this must be an innovation, since there is every reason to reconstruct -*sk'e*- as a common Anatolian imperfective marker.

The most likely candidate for a dialectal Greek sound change triggered by contacts with Lydian is East Ionian psilosis (the loss of word-initial *h*-). Oettinger 2002 compared this process with the loss of word initial "laryngeals" in the history of Lydian, and this explanation becomes all the more likely once one accepts a similar substrate-driven change in Arzawa personal names (cf. the discussion in 3.3). By contrast, Luvian "laryngeals" are relatively stable and show an optional loss only in the labial environment. A more controversial example concerns the structure of Greek personal names. The Lesbian adjectival patronymics in -ιος, perhaps secondarily diffused into the other Aeolic dialects, contrast with genitive case nouns used as patronymics elsewhere

in the Greek-speaking area (Watkins 2001: 58). This dialectal suffix can be functionally compared with Lydian adjectival patronymics in *-la/i-*. While adjectival patronymics in **-assa/i-* are known in Hieroglyphic Luvian and Lycian, the use of the patronymic genitive, which I reconstruct as **-osso*, is also common in these languages, and so they would have been less likely triggers of the morphosyntactic remodeling in Aeolic. On the other hand, one cannot exclude that the Aeolic forms reflect an archaism because the suffix **-iyo-* forming possessive adjectives assuredly goes back to Proto-Indo-Hittite and its use with personal names is apparent, for example, in Latin *nomina* in *-ius* or in the Old Persian dynastic name *Haxāmaniš-iya-* 'Achaemenid' (DB I 7).

Specific isoglosses between Lydian and the Greek dialects of the Eastern Aegean, if proven, would not be surprising in view of the geographic proximity of the respective languages to each other. The absence of specific isoglosses between Luvian and the same Greek dialects would represent yet another argument against the linguistic dominance of Luvians in western Anatolia. Nonetheless, it remains necessary to decide what was the most likely locus of limited lexical contacts between Greek and Luvian. Given the Hittite-Luvian cultural influence on Bronze Age western Anatolia, especially in the period of *pax hethitica*, it is perfectly possible that Greek colonists in Milawata/Miletos, or another Greek outpost on the eastern coast of the Aegean, borrowed isolated Luvian words, which later made their way to the other Greek dialects.[94] I would like, however, to present arguments for the existence of a different

[94] See Mountjoy 1998 for the archeological discussion of Greek-Anatolian contact zone situated along the western coast of Asia Minor in the Late Bronze Age. Note especially that the area with the high

interface zone situated along the southern coast of Asia Minor. This coastline lies closer to the Luvian core area and, at least on the Cilician plain, the presence of Luvians is attested both in the Late Bronze Age and in the Early Iron Age. What one needs to demonstrate is the presence of Greeks in the same place and at the same time.

We know from archaeological data, such as the motley cargo of the sunken ship found near Ulu-burun, that international trade thrived along the coast of Southern Anatolia in the Late Bronze Age. Unfortunately, textual data pertaining to the Mycenaean presence in this area are rather scarce. The Greeks are mentioned for the first time in connection with the island of Cyprus in about 1400 BC in the Indictment of Madduwatta (CTH 147). We learn from this text that Attarsiya, man of Ahhiya and the mysterious "man of Piggaya" attacked Alasiya/Cyprus, apparently with an assistance of Madduwatta (Beckman 1999: 160). The earlier part of the text mentions that Madduwatta had succeeded in reducing the town Dalawa/Tlos to a vassal status and so he likely used the Lukka-lands as a power base for this expedition (Bryce 2005: 135). Should one assume that the Anatolian possessions of Attarsiya were situated somewhere nearby, in southern Caria or perhaps in Pamphylia? This claim cannot be proven, but there exists a distinct possibility that the Mycenaeans established their presence in a reasonable proximity to Cyprus before embarking on an expedition against this island.

The intercourse between the Lukka people and Tawagalawa, brother of the king of Ahhiyawa, is mentioned in CTH 181 (Bryce 2003: 77). This episode apparently

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proportion of Mycenaean pottery comprises the southern part of this zone, stretching approximately from classical Miletos to the island of Rhodes. This observation squares well with the data of cuneiform sources that do not mention any permanent Mycenaean settlements on the northwestern and central western coast of the Aegean, but portray Milawata/Miletos as an Ahhiyawa protectorate.

culminated with Tawagalawa's personal visit to the Lukka-lands. The treaty between Tuthaliya IV, king of Hatti, and Sawoskamuwa, king of Amurru (CTH 105) contains a provision that "no ship [of] Ahhiyawa may go to him" (KUB 23.1 iv 23, Beckman 1999: 107). The anaphor in this sentence presumably refers to the king of Assyria, with whom Hatti was then at war (Bryce 2005: 309). Unfortunately, the reconstruction "no ship [from] Ahhiyawa may go to him" remains likewise possible and therefore this sentence does not directly prove that Mycenaean ships were involved in trade with the Levant.

A new direct mention of the Greeks in connection with Lycia comes from two recently published Akkadian excerpts written about 1200 BC. The Hittite king Suppiluliyama II and a Hittite court official Penti-Šarruma instruct Ammurapi, king of Ugarit, to ship PAD.MEŠ (metal ingots(?)) to Hiyawa-men (LÚ.MEŠ *Hi-ya-ú-wi-i*) in Lukka (Singer 2006b: 250 with fnn. 30, 31). Singer plausibly hypothesizes that the Hiyawa-men mentioned in this letter were probably merchants or representatives of a Mycenaean state awaiting the ingot-laden Ugaritian ships in some port of Lycia. He further stresses the convergence between this piece of philological evidence and the actual metal cargo on board of the ships that sank off the Lycian coast in the Late Bronze Age (ibid: 258). Thus the data at our disposal suggest that ports in southwestern Anatolia could be used as trading stations where Mycenaean merchants would exchange their ware for goods coming further from the East. The evidence is admittedly minimal, but so is the linguistic evidence for contacts between Mycenaean and Luvian.[95]

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[95] As a hypothesis, I would like to suggest that the early Greek presence in Pampylia might be reflected in the stipulation of the Bronze Tablet stating that "if the king of Hatti … seizes the land of

More can be said in defense of the Greek presence on the southern coast of Asia Minor in the Early Iron Age. Brixhe 2002 discusses archaic divine epithets in the Pamphylian dialect of Greek that have direct counterparts in Mycenaean. Thus Διϝια used in a Perge inscription as an epithet of Artemis can be compared with the divine name *di-u-ja* / *di-wi-ja* found on the Mycenaean tablets from Pylos. The title Ϝανασσα-Περγαια- 'Lady of Perge' used with reference to the same goddess closely parallels the Mycenaean and Homeric usage of *Ϝανασσα- 'Lady' as a divine title. A larger list of phonological, morphosyntactic and lexical isoglosses between Cypriote and Pamphylian dialects of Greek on the one hand, and Mycenaean and Arcadian dialects of Greek on the other hand, is given in Brixhe 1976: 146-147. These similarities suggest that the "Achaeans" represented the likeliest population group to initiate the Greek colonization of Pamphylia.[96]

It is less clear whether the early Greek colonization of Cilicia, which likewise must have occurred in the Early Iron Age, had a long-lasting impact on the local sociolinguistic situation. In the eighth century BC, the date of the earliest monumental inscriptions found in Cilicia, Phoenician and Luvian were the two written languages in

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Parha by force of arms, then this too will belong to the king of Tarhuntassa" (Beckman 1999: 115). Parha of the cuneiform sources has been shown to correspond to the city of Perge, the most important Greek settlement in Pamphylia in the first millennium BC. While the independent status of Parha may be ascribed to the activity of the Lukka tribes, the mention of Hiyawa people in connection with Lukka in cuneiform sources does not allow one to exclude that the Greek colonization of Parha/Perge had begun already in the Bronze Age. At the present time, we do not have enough data to choose between these two alternatives.

[96] It is, however, not possible to agree with Brixhe 1976: 147, according to whom Ahhiyawa of Hittite sources can be equated with Pamphylia. While some occurrences of the geographic name *Ahhiya(wa)* may indeed point to southern Anatolia, the Hittites were likely to allot the title of the Great Kingdom of Ahhiyawa only to the Mycenaean confederacy as a whole or to its most prominent member.

this area. The memory of the Greek settlers, however, probably lived on in the Luvian name of the kingdom centered in Adana. Sentences (74) and (75), belonging to the recently found ÇINEKÖY inscription, refer to this kingdom as Hiyawa, a name that corresponds to *dnnym* 'Adaneans' in the Phoenician version of the same inscriptions but is obviously reminiscent of the Hiyawa-men that have now emerged in Ugaritic sources.[97] In addition, the first editors of the inscription had already seen the connection between Hiyawa and Ὑπαχαιοί "Sub-Achaeans", a term that, according to Herodotus (7.91), represents the Greek way of referring to the original inhabitants of Cilicia (Tekoğlu and Lemaire 2000: 981). Thus the toponym Hiyawa, possibly yielding Que and Hume (i.e. /xuwe/) in Assyrian and Babylonian sources respectively, must represent a truncated variant of Ahhiyawa.[98]

(74) ÇINEKÖY § 3, Tekoğlu and Lemaire 2000: 968.
[ARHA-ha-wa/i la+ra/i-a-nú-ha **hi-**]**ia-wa/i-za**(URBS)
TERRA+*LA*+*LA*-za || |(DEUS)TONITRUS-hu-ta-ti |á-mi-ia-ti-ha
|tá-ti-ia-ti |DEUS-na<-ti>
'[I made prosper] the land of **Hiyawa** by (the grace of) Tarhunt and my paternal god(s)'.

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[97] Hajnal (2003: 41) discusses a tantalizing possibility of reconstructing ^{URU}*Hiya*[*wan*] in the res gestae of Arnuwanda I (KUB 23.21 obv. 6, CTH 143). This fragmentary toponym occurs in a list of cities one line below ^{URU}*Adaniyan* "Adana". The only other reconstruction of the same toponym I can suggest is ^{URU}*Hiya*[*snan*], but the town Hiyasna was apparently located in the vicinity of Hattusa (cf. del Monte and Tischler 1978: 107-108). Hajnal's reconstruction would imply, in my opinion, that the Greeks had settled in Cilicia already in by the late fifteenth/early fourteenth century BC. Prudence, however, dictates that we do not take such a radical conclusion for granted before this reconstruction is independently confirmed.

[98] The early date of the Ugaritic attestation suggests that the aphaeresis in Hiyawa, as opposed to Ahhiyawa, cannot reflect the sound law of (colloquial) Iron Age Luvian, but rather must be regarded as an irregular change in a borrowed word, similar to one attested in Tawagalawa if this name indeed reflects Gk. **Etewoklewes* (Laroche 1966, § 1315). It is worth noting in passing that the identification between Que and Hiyawa precludes the earlier comparison of Que with the toponym attested as *qdy* in Egyptian transmission and denoting one of the lands destroyed by the "Sea-peoples" according to the account of Ramses III (Hawkins 2000: 39a with fn. 18). The geographic location of the land *qdy* must be considered unknown.

(75) ÇINEKÖY § 7, Tekoğlu and Lemaire 2000: 968.
|**hi-ia-wa/i-sa**-ha-wa/i(URBS) |su+ra/i-ia-sa-ha(URBS) |"UNUS"-za
|DOMUS-na-za |i-zi-ia-si
'**Hiyawa** and Assyria have become one house'.

The names of the two Hiyawa kings known to us are compatible with the Greek origin of the local dynasts. Lipiński (2004: 120-122) suggested that the Hiyawa royal names Luv. *á-wa/i+ra/i-ku-* = Phoen. *'wrk* and Luv. *wa/i-ra/i-i-ka-* = Phoen. *w*[*ryk*], attested in KARATEPE and ÇINEKÖY bilinguals respectively and lacking plausible etymologies either in Semitic or in Luvian, can be explained from Greek. The first one, according to him, finds a perfect correspondence in the common aristocratic Greek name Εὐαρχός lit. 'well-ruling', while the second one closely resembles *wo-ro-i-ko* /wroiko-/, the name born by Cypriot kings of Amathus in the 5th and the 4th centuries BC (cf. Gk. ῥοικός 'crooked'). The second comparison is less secure than the first one, but both are likely.[99] By contrast, Azatiwada, vizier of Awarku, has a perfectly Luvian name, which allows one to hypothesize that Awarku and Wr(a)ika were traditional throne names, while the respective kings ruled over a predominantly Luvian population and may even have lost Greek as their native language.[100]

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[99] The fact that the second name is attested in Neo-Assyrian transmission as Urikki does not necessarily indicate that its underlying shape was /wrīka-/ (vel sim.), as per Lipiński 2004. The Assyrian renderings of Luvian names frequently exhibit irregular contractions cf. e.g. Halparuntiya, king of Gurgum known as Qalparunda in Assyrian sources. Note that Urikki's name has the graphic variant *U-ri-ya-ik-ki* in the inscriptions of Tiglath-Pileser III (Tadmor 1994: 293). Hawkins 2000: 44, writing before the discovery of the ÇINEKÖY inscription, erroneously identifies Urikki with Awarku. This erroneous identification, in its turn, prompted Tekoğlu and Lemaire 2000 to assume that Awarku and Wr(a)ika represent two variants of the same name, in spite of three independent graphic discrepancies between these short words (cf. Lipiński 2004: 119).

[100] At the same time, one can hypothesize that the sense of a separate cultural identity provided the early Hiyawa kings with an incentive to cultivate the written use of Phoenician at the expense of

But the figure that truly ties up the arguments for the early Greek settlement of Pamphylia and Cilicia is that of Mopsos (Μόψος). According, to the Greek tradition, summarized in Vanschoonwinkel 1990, this seer, who lived at the time of the Trojan War and managed to defeat Calchas in an open contest in Colophon in an early part of his career, ended up leading the Greek colonization of both Pamphylia and Cilicia.[101] The Greek toponyms of the respective part of Asia Minor confirm the data of the written sources. Thus Pliny (*Hist. Nat.* 5.96) informs us that the ancient name of Pamphylia was Mopsopia, while two Hellenistic towns in Cilicia were called Mopsuestia and Mopsucrene respectively. The Mycenaean name *mo-qo-so-* attested in both Knossos (De 1381.B) and Pylos (Sa 774) represents an earlier form of the same anthroponym, although it obviously refers to different individuals. The shape of this name in the second millennium Greek must be reconstructed as **mok^{w}so-*.[102]

The earliest attestation of this Greek name in Anatolian sources is probably found in the Indictment of Madduwatta (CTH 147). KUB 14.1 rev. 75 contains the name ^{m}*Mu-uk-šú-uš* in a fragmentary context that unfortunately defies reconstruction (Goetze

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Luvian at the time when the Mycenaean writing had been forgotten, while the Greek alphabet had not yet been invented. At least in the case of the Karatepe complex, one can claim that the Phoenician inscriptions were given more prominence than their Luvian counterparts. The text survives in two Luvian and three Phoenician copies, and the blocks inscribed with Luvian hieroglyphs – if indeed found in situ – had not even been installed in a proper order (Payne 2005: 124-125 with ref.).

[101] Vanschoonwinkel 1990 maintains that the accidental coincidence between the Anatolian and the Greek names of the "Mopsos" family prompted the legend about the eastward wanderings of Mopsos of Colophon. This conclusion perhaps represented a viable hypothesis at the time it was made but it is no longer plausible after the discovery of the ÇINEKÖY inscription furnished scholars with independent evidence for the early Greek presence in Cilicia. My interpretation of Mopsos as an original Greek name in all of its attestations generally follows Oettinger 2007.

[102] Nicholas of Damascus mentions a variant of the same name Moxos in connection with Lydia. A different Mopsos, born in Thessaly, participated in the expedition of the Argonauts and died on the way back in Africa according to the Greek tradition (Vanschoonwinkel 1990: 193-94).

1927: 36). Ten lines later, however, CTH 147 embarks on the topic of Attarsiya's expedition against Alasiya/Cyprus assisted by Madduwatta and this strengthens the hypothesis that *Muksu-* likewise refers to a Mycenaean leader. The names of Alaksandu/Aleksandros and Awarku/Evarkhos testify to the fact that Anatolian *u*-stems represented a common, if not the only way of rendering Greek thematic stems.

Absolutely convincing references to Mopsos as an ancestor of the Hiyawan kings can be found in the KARATEPE and ÇINEKÖY bilinguals. Crucial for establishing the history of this name is the irregular correspondence between the Luvian stem *Muksa-* and the Phoenician stem *mpš* seen in (76) and reconstructed in (77). Oettinger 2007 justly observes that, if we were dealing with a genuine Anatolian name containing a *$*k^w$*, it would have been written **Mukussa-* or **Mukussu-* and not *Muksa-* and *Muksu-* as it is in our documents. On the other hand, if we assume the name *Mok^{w}so-* to be of Greek origin, then the phonological correspondences are easy to explain: the labiovelar was delabialized before *s* in the transmission from Greek to Anatolian. To this one can add that the Phoenician form lends itself to a similar explanation: it was borrowed from Greek in a later period, when the development *$*k^w$>p$* has already taken place.

(76) KARATEPE 1, § 57, Hawkins 2000: 56
(Luv./Ho.) ma-pa-wa/i (CRUX)pa+ra/i-na-wa/i-tu-u
(LITUUS)á-za-ti-wa/i-tà-ia **mu-ka-sa-sá**-há-´ DOMUS-ní-i
(DEUS)TONITRUS-hu-ta-[ti] DEUS-na-ti-há
'And let them build much for Azatiwada and for the house of **Muksa** by (the grace of) Tarhunt and the gods'.
(Phoen.) w-brbm y'bd l-'ztwd w-l-bt **mpš** b-'br b'l w-'lm
'And by many they will serve Azatiwada and the house of **Mopsos** by the grace of Baal and the gods'.

(77) ÇINEKÖY § 1, Tekoğlu and Lemaire 2000: 968, 994
(Luv.) [EGO-mi] wa/i+ra/i-i-[ka-sá x-x-x-x(-x) (“INFANS”)ni-]mu-wa/i-za-sa [mu-ka]-**sa-sa** || |INFANS.NEPOS-si-sà |hi-ia-wa/i[-ni]-sá[(URBS)] |REX-ti-sa |(DEUS)TONIT[RUS]-hu-t[a-sa SERVUS-ta$_4$-sa]
‘[I am] Wr(a)ika, son of [X], grandson of **Muksa**, Hiyawan king, [servant] of Tarhunt.
(Phoen.) ’nk w[ryk bn …] ’šphṭ **mpš** [mlk dnnym] hbrk b‘l
‘I am Wr(a)ika, [son of X], descendant of **Mopsos**, [Hiyawan king], steward of Baal’.

It is not clear whether INFANS.NEPOS-*si-sa* ‘grandson’ in the Luvian version of ÇINEKÖY § 1 is to be taken literally, as an indication that Mopsos was a grandfather of the king Wr(a)ika, or one should rather follow the Phoenician version and assume, as does Oettinger, that Mopsos was his more remote ancestor. In any event, however, there are no reasons to claim that the Hiyawan king Muksa/Mopsos mentioned in a seventh century text is the same individual as Muksu mentioned in connection with southwestern Anatolia some seven hundred years earlier. Neither is it necessary to believe that either one of the two figures must be directly identified with Mopsos of the classical Greek tradition, even though such identification remains a possibility in the case of the Cilician Mopsos. It is enough for me to hypothesize that **Mok^{w}so-* constituted a common dynastic name in the Greek colonies in Asia Minor in the Late Bronze Age and the Early Iron Age, and that the Greek legends conflated several homonymous rulers into a single founding figure.

One must hope that further discoveries will shed more light on the early history of the Greek settlements along the Mediterranean coast of Anatolia. But even now one can claim that the Greek presence in this area was substantial enough to be responsible for occasional borrowings from Luvian into Greek. It goes without saying that individual Luvian words could follow different paths to the Hellenic milieu, but some of the forms

discussed earlier in this section appear to have passed through the southern rather than the western coast of Asia Minor on purely philological grounds. Thus the name of the winged horse Pegasos appears for the first time in Hesiod's Theogony, a work that is heavily influenced by Hurrian and West Semitic cosmogonic traditions (Güterbock 1946: 100-115).[103] Luv. *tarwani-* 'ruler, judge' infringed on the functional domain of the earlier **hantawati-* 'king' after the concept of a political leader ruling through his justice gained prominence in the Syro-Palestinian area in the Early Iron Age (cf. Pintore 1979). By contrast, there are no Luvian lexical borrowings into Greek that would support an Aegean contact zone.

3.9 Summary. I would like to summarize the conclusions of this chapter by presenting a scenario of ethnolinguistic changes that were likely to occur in the western part of Asia Minor in the Late Bronze Age and the Early Iron Age. The reconstruction of ethnolinguistic history tends to be an unwelcome task when few written texts are available from the region. I have no illusions about the provisional character of my account, whose individual elements are bound to undergo refinement as long as our understanding of Anatolian languages improves and new historical sources come into light. Nevertheless, a cohesive and outwardly confident discourse has an advantage of

[103] The adaptation of Near Eastern creation myths among the Greeks cannot be discussed here in detail (for the latest treatment of this topic see López-Ruiz 2006). For our purposes it is enough to state that the important role of Mount Casius (modern Kel Dağ located near the mouth of Orontes) in Hesiod's Theogony reflects a kind of geographic knowledge that is more compatible with the direct borrowing of the Syrian cosmogonic tradition by the Greeks than with its multi-step transmission through Anatolia. In the latter case, one would have expected Mount Casius to be replaced with a topographic feature lying closer to the Greek mainland.

providing a convenient reference point for future research. This is the reason why I will accompany my historical narrative with fewer understatements and equivocations than one finds in the analytical sections of this chapter, which are cross-referenced below.

Among the Anatolian ethnic groups known to us, the Lydians were the first to settle in western Anatolia, in the area lying between the valleys of Maeander and Caicos. The Lydian language shares not only the genetic innovations of the Anatolian group but also certain features that characterize the Anatolian Linguistic Area, such as the devoicing of etymological word-initial voiced stops and the proliferation of possessive adjectives. These areal innovations, and especially the phonological one, suggest that the Proto-Lydian speakers and the other Indo-European Anatolians encountered a similar type of non-Indo-European substrate. The Lydians were able to establish their social dominance in the area and induce the language shift of the local population, but they failed to create a centralized state. It is possible that the northern neighbors of the Lydians, living to the north of Caicos in Classical Mysia, were their close linguistic relatives (3.5).

In a later period, perhaps in toward the end of the third millennium BC, the Luvic population groups began to spread westward along the Mediterranean coast. The Lycians stayed on the southern coast of Asia Minor, in a relative proximity to the Luvian home area. The group that reached the Agean and settled in the area south of the Maeander valley later became known as the Carians. By the fifteenth century BC, the warlike Carians succeeded in extending their territory to the north of Maeander and subjugating Lydian tribes. They founded the kingdom of Arzawa, whose name probably derives from an old geographic term that predated the formation of a centralized state in

this region (3.2). One of the considerations that possibly catalyzed the creation of the Arzawa state was the necessity to check the Hittite and the Mycenaean penetration into the southwestern part of Asia Minor. While the elites of Arzawa had Luvic names, and possibly retained Carian as their native language, the common population in the northern part of Arzawa continued to speak Lydian (3.3). If the kingdom of Arzawa extended far enough to the east, it may also have incorporated some Luvian speaking areas.

The rulers of Arzawa were eager to join the club of Near Eastern kings exchanging letters and diplomatic gifts with their royal "brethren". They availed themselves of the Hittite language and the cuneiform script for their diplomatic correspondence and probably had to invite scribes from Hatti to carry it out (3.4). This did not, of course, preclude them from pillaging the Hittite territory when a suitable occasion offered itself (3.2). A part of the Hittite kingdom that was particularly vulnerable to their attacks was the Lower Land, known as Luviya in the Hittite Laws. The forced transportations from the Lower Land to Arzawa could bring some Luvian elements to the western part of Anatolia, but we have no way of knowing how long it took them to become assimilated (3.5).

The kingdom of Arzawa fell to the might of the Hittites and was divided into a number of vassal states during the reign of Mursili II in the mid-fourteenth century BC. Nevertheless, the local Carian aristocracy was able to retain its position of power under the supreme sovereignty of the Hittite king (3.2). The period of Hittite dominion over the western part of Asia Minor brought about further cultural syncretism between the two regions. Arzawa rituals were copied in Hattusa, while hieroglyphic script was introduced to western Anatolia (3.4). The Carian and Lydian vernaculars were never

used for written documents at the courts of Mira and Seha River Land, and the local rulers must have continued to rely on imported scribes for their correspondence. Since all the Hittite scribes in this period were bilingual in Luvian, and for many of them Luvian was the native language, the Hittite-Luvian bilingualism must also have been the norm among the western Anatolian literati (3.4). One can speculate that the Luvian and Proto-Carian languages were still mutually understandable in the period under consideration and this fact contributed to the intensity of contacts between Hatti and Arzawa.

Nothing positive can be said about the vernacular of the vassal kingdom of Wilusa, whose cultural contacts with the Mycenaean world were probably limited to the level of the elites. It is unlikely that the Carian expansion extended thus far northwards; Lydian presence is possible, but not supported by positive data. The Luvians living in the area of Istanuwa were familiar with this city, but no more than that. If the kings of Wilusa had their own chancellery, Hittite and Hattusa Luvian emerge as the only likely candidates for the local written languages, but it is equally likely that they had none (3.6).

The collapse of the Hittite Empire in about 1200 BC changed the sociolinguistic situation in western Anatolia in many respects. The Hittite and Luvian languages lost their prestige status, the written tradition in the area was discontinued, and the urban civilization suffered a general setback in the region, as illustrated, for example, by the abandonment of Troy. On the other hand, the Phrygians and other population groups of Balkan origin used the vacuum of power to migrate to Anatolia from the northwest. The invaders from the Balkans gave their name to the classical

Mysia, even though the original inhabitants of the region probably avoided complete linguistic assimilation (3.5). Finally, the western Anatolian region could not help but be affected by the wanderings of the Sea Peoples. While some population groups, such as the Etruscans, probably left the Anatolian peninsula during this period, the Lukka tribes extended their sphere of influence. The Lukka wanderings of the Early Iron Age left their trace in the Homeric account of the "Trojan Lycians" (3.7).

The Greek colonization of Asia Minor, initiated already in the Bronze Age, continued at a quicker pace after the collapse of the Mycenaean states. While the Greeks founded their first colonies in the area of classical Miletos, they gradually expanded eastward along the Mediterranean coast into classical Pamphylia and Cilicia. The visits of Greek ships to these regions may have been sporadic in the Late Bronze Age, but one must reckon with their permanent presence in the southern coastal areas of Asia Minor by the beginning of the first millennium BC. The Greek colonists in Pamphylia succeeded in establishing their linguistic dominance in this region, but in Cilicia they found themselves surrounded by, and perhaps eventually assimilated to the Luvian-speaking population (3.8). Cilicia represents the only geographic area where Luvians and Greeks can be shown to have coexisted. The closest neighbors of the Greeks in southwestern Anatolia were the Carians.

Carian cultural influence on the area of classical Lydia may have continued well into the first half of the first millennium BC (3.3). The period of Hittite dominion over the region likewise left traces in its religion and culture (3.4). The "Heraclid" rulers of Sardes were possibly of Mysian origin and a number of Mysians settled in the Sardes region at the time of their rule (3.5). A different ethnic group, called Maeonians in early

Greek sources, came to power in Sardes in the early seventh century BC (3.5). Under the rule of the new Mermnad dynasty the kingdom came to be known as Lydia and the first inscriptions in the Lydian language began to appear. Although the name of the first Mermnad king Gyges is of Carian origin, Lydian appears to have been the language of both the elites and the common population during this period.

The ethnolinguistic reconstruction suggested above leaves little space for speculations about the linguistic dominance of Luvian on the Aegean coast of Asia Minor. Instead of assuming large-scale Luvian westward migrations, one can now operate with ethnic movements of the Luvic peoples, which brought the Proto-Carian speakers to the southwestern tip of the Anatolian peninsula. Luvians proper appear in my scenario as the eastern neighbors of Carians and Lydians, perhaps occasionally transported as a labor force to the Arzawa core territory. After the Hittite conquest of Arzawa, Luvian speakers probably emerge as educated officials representing the Hittite Empire in the western Anatolian vassal states, or as their local disciples. I have found no reason to assume any presence of the Luvian language in the region after the collapse of *pax hethitica*.

The conclusions of this chapter are not as revolutionary as they may appear at the first glance. Our present knowledge of the Carian language is poor. There is no way to quantify the difference between Luvian and Proto-Carian, nor can we say with certainty whether Carian sides with Luvian or Lycian on most isoglosses that separate the two languages. It is Luvian, rather than the Carian of the alphabetic inscriptions, that remains our main guide to the understanding of lexical material emanating from Arzawa. Therefore the claim that the Arzawa aristocracy spoke Proto-Carian rather than “western

Luvic" does not advance our understanding of its language very far. I hope, however, that it undermines pointless speculations about the mysterious Luvian tribes that came to the Aegean under uncertain circumstances, held sway in the region for a period of time, and then disappeared without a trace. In this sense it contributes to our better understanding of Anatolian ethnic history.

4 PREHISTORIC CONTACTS BETWEEN HITTITE AND LUVIAN: THE CASE OF REFLEXIVE PRONOUNS

4.1 Introductory Remarks. It is a well-known fact that both the Hittite and the Luvian languages belong to the Anatolian group of the Indo-Hittite (Early Indo-European) phylum. It is also commonly accepted that the Hittite language of the Empire period underwent partial restructuring under the influence of the Luvian vernacular, and borrowed a large number of Luvian lexemes. The question about the extent of linguistic contacts between Hittite and Luvian in the interim period appears to be more controversial, and is tied up with the discussion of the Hittite and Luvian core areas. As mentioned above, Bryce 2003 put forward a hypothesis according to which the local homeland of the Luvians was located in western Anatolia, while their presence on the Central Anatolian Plateau can be accounted for by assuming eastward migrations in the second millennium BC. If we follow the communis opinio according to which the local homeland of the Hittites stretched along the upper and middle course of the Halys river (Melchert 2003a: 15), Bryce's suggestion logically implies a gap in Luvo-Hittite contacts spanning the period between the collapse of Anatolian genetic unity and the migrations that brought Luvians back to Central Anatolia.

We will see in Chapter 5 that the existence of such a gap does not appear to be borne out by the linguistic evidence. Melchert 2005 has been able to detect dozens of Luvian lexical borrowings attested already in Old Hittite texts. Luvian personal names appear on the Old Assyrian business tablets written in Kaneš, which was clearly a part of the Hittite core area, in 20th-18th centuries BC. Luvian incantations were occasionally embedded into Old Hittite magic rituals, and the country of Luviya is mentioned in the Old Hittite Laws as a land under Hittite jurisdiction, although we do not have any evidence that Hittite kings ever extended their dominion to Western Anatolia before the Empire period. These arguments, taken together, provide a weighty cumulative evidence for geographic adjacency between Hittites and Luvians that extended back to the prehistoric period. One must, however, emphasize the statistical nature of such argumentation, whose individual elements remain vulnerable to attacks by devil's advocates. Lexical borrowings may occur between geographically distant languages, itinerant Luvian merchants could occasionally cross the Anatolian peninsula in search of lucrative trade, while the Hittite conquest of Western Anatolia in the Early Old Kingdom period may theoretically represent a short-lived episode that happened not to be reflected in the preserved part of Hittite annalistic literature.

The borrowing of grammatical morphemes provides evidence of a completely different kind. The grammatical interference of different linguistic codes must be conditioned by a bilingual environment, which alone may skew the language acquisition process in a large population group. In societies that have no access to mass media and do not enjoy benefits of universal public education, a situation of pervasive language contact could arise only between the geographically adjacent dialects. Therefore, it is

enough to prove a single episode of grammatical borrowing in order to draw conclusions about the geographic proximity between the two ancient languages at the time it took place.

The purpose of this chapter is to build up a case for a prehistoric borrowing from Luvian (or Luvic) into Hittite that transformed the system of Hittite reflexive pronouns. In Section 4.2, I am going to discuss the development of reflexive pronouns in Luvian, which can be accounted for without assuming external influence. In Section 4.3, I will shift my focus to Palaic and Lydian, the two Anatolian languages that appear to have preserved a more archaic set of reflexive pronominal clitics. Section 4.4, constituting the key part of my account, will be dedicated to the analysis of the situation in Hittite. I am going to argue that the Hittite reflexive particle *=z(a)* resists internal derivation from any of the attested Proto-Anatolian clitics, but can be explained as an early adaptation of the Luvic pronominal clitic **=ti/*=di*. In Section 4.5, I intend to dwell on a sociolinguistic situation that could render such an adaptation possible, and to construct a relative chronology combining the postulated contact episode with the relevant internal developments within the history of Hittite.

4.2 Development of Reflexives in Luvian. The Iron Age Luvian textual material is better understood than its Bronze Age counterpart, and therefore provides a

convenient starting point for the discussion of Luvian reflexives. The system of Iron Age Luvian pronominal clitics can be summarized in the following table:[1]

Table 8: Iron Age Luvian Pronominal Clitics

	nom.	**acc.**	**dat.**	**refl.**
1Sg	(none)	=mu	=mu	=mi /=mu
2Sg	(none)	=du > =ru	=du > =ru[2]	=di > =ri
3Sg	=as (c.)/=ada (n.)	=an (c.)/=ada (n.)	=du > =ru	=di > =ri
1Pl	(none)	=anz(a)	=anz(a)	=anz(a)
2Pl	(none)	=mmanz(a)	=mmanz(a)	=mmanz(a)
3Pl	=ada	=ada	=manz(a)	=mmanz(a)

The accusative and dative pronominal clitics are bound by non-local antecedents,[3] and occupy syntactic positions that are otherwise reserved for the nouns in accusative and dative case respectively. The function of the (so-called) reflexive clitics is much less trivial and will be described in some detail below.[4]

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[1] All the forms in the squares below are actually attested in Iron Age Luvian texts. See Morpurgo-Davies 1980/1981:89 fn. 3 for the attestations of the rare second person pronominal, reflexive and non-reflexive, clitics. The formal peculiarities of Luvian plural clitics will not be addressed in this section.

[2] The rhotasizim **d>r* was probably a sound change in progress in Iron Age Luvian, whose implementation could depend on a socioloinguistic register. The exact picture here is difficult to assess since the conservative spelling could have skewed the phonetic distribution of original vs. rhotacized forms in Hieroglyphic writing. For the general phenomenon of rhotacism in Iron Age Luvian see Morpurgo-Davies 1982/1983.

[3] Constituents are said to be locally bound if they are coreferential with another constuent of the same clause and expressed by a functional word. Constituents are said to be non-locally bound if they are coreferential with a constituent of a different clause and expressed by a functional word. The lexeme that occurs elsewhere in the text, and needs to be retrieved for the correct interpretation of a bound constituent is referred to as its antecedent. English reflexive and anaphoric pronouns are used for the expression of locally bound constituents, and non-locally bound constituents respectively.

[4] The functional distinction between the first and second person reflexives *=mi* and *=di* and their (mostly) non-reflexive counterparts *=mu* and *=du* has been cogently argued in Melchert 1988a: 41-42, while a similar distinction between 3sg. *=di* (reflexive) and 3sg. *=du* non-reflexive has been commonly accepted since the dawn of Luvian studies. The semantic analysis given below is, however, my own.

Contrary to what one might expect, Luvian reflexive clitics do not appear to denote locally bound direct objects. A periphrastic phrase headed by a noun *adari-* 'person, self' is used in this function.[5] This construction could be occasionally grammaticalized, as illustrated by the appearance of the subject clitic *=as* in (2). Although Watkins-Garrett rule proscribes subject clitics in transitive clauses, it may not have applied in this case because *adari-* was perceived as a reflexive marker rather than a full-fledged direct object.

(78) MARAŞ 4, § 13-15, Hawkins 2000: 257[6]
|wa/i-tá VIR-ti-i-zi-i ("PES")pa-ti-zi |*ARHA*
("MANUS+CULTER")REL+ra/i-ha-´
|(INFANS)ni-wa/i+ra/i-ni-zi-pa-wa/i-za |("*474")u-si-na-si-zi-i |i-zi-i-ha-´
|wa/i-**mi-i |á-mi-na ("COR")á-tara/i-i-na** |á-pa-ara/i
|BONUS-li-ia-nu-wa/i-ha
'I cut off the men's feet and made children eunuchs to us, and thereby I exalted **myself**'

(79) KARKAMIŠ A2, § 5, Hawkins 2000: 109[7]
*a-wa/i-sa *a-mu ka-tu-wa/i-ia kar<-ka>-mi-si-za(URBS) REGIO
DOMINUS-ia **"COR"-tara/i-na** POST-ni a-tá BONUS-li-ia-ta
'But for me, Katuwa, the Karkemisian country-lord, he raised **himself** behind'.

In a few cases reflexive pronouns are used for locally bound indirect objects. The rarity of such forms is probably conditioned solely by the nature of our corpus, since I know of no other way to convey the same meaning in Luvian.

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[5] On the meaning and etymology of *atari-* see Yakubovich 2002: 194-97, van den Hout 2002a, and Yakubovich, forthcoming[2].

[6] All the Iron Age Luvian texts quoted here and below are cited according to the names given to them in Hawkins 2000, or a later *editio princeps*. I have modified the transliteration and translation of several passages.

[7] I accept the translation of this passage suggested by C. Melchert in a personal communication, as opposed to a less satisfactory translation by Hawkins, quoted in Yakubovich 2002: 195.

(80) MARAŞ 4, § 9-10, Hawkins 2000: 256
|wa/i-**ti-i**a-ta |NEG$_2$-a-ha |tá-ti-i-sa |NEG$_2$-a-ha AVUS-ha-sá |sá-ta
|wa/i-**mi-i**a-tá |EGO ^{I}TONITRUS.HALPA-pa-CERVUS$_2$-ti-ia-sa |sá-a-ha
'Neither (my) father, nor my grandfather "allowed it **to himself**", but I Halparuntiyas "allowed it **to myself**".

In a significantly larger number of cases, a reflexive pronoun stands for the locally bound possessor of a verbal complement, usually a direct object. Thus, in example (78) above the reflexive clitic *=mi* duplicates the possessive pronoun *ami-* 'my' (and not the direct object *atari-* 'self'!), while in example (81) below the reflexive replaces the missing possessive pronoun **apassa/i-* 'his'. This usage must be considered together with the other cases of possessor raising in Luvian, which probably serves the communicative purpose of foregrounding.[8] In the case of nouns and free pronouns, the raised constituent normally appears in the dative, as in (82). This distribution allows one to treat reflexive pronouns in (77) and (81) as a subset of dative reflexives.

(81) KARKAMIŠ A1b, § 2-3, Hawkins 2000: 92
*a-wa/i-**ti** a-mi-i-sa VIR-ti-i-sa REL-i-ta REL-i-ta || |á-ta$_5$-ma-za
i-zi-i-sa-ta-i |*a-mu-pa-wa/i-ta || |BONUS-sa$_5$+ra/i-ti CUM-ní i-zi-i-sa-ta-i
'Wherever my husband honors **his own** name, he shall also honor me with respect'.

(82) KULULU 5, § 10, Hawkins 2000: 486
wa/i-**tu-u** [á-ta$_{4/5}$-ma-za ARHA] DELERE-nú-tu-u
'Let them destroy **his** [name]'.

Another large group of examples comprises the cases where Luvian reflexive clitics appear to have no correspondence in the sentence logical form. So far as one can judge, the sole purpose of their usage is stylistic. Thus, in example (83), the king intones

[8] For the general cross-linguistic discussion of possssor raising as a syntactic mnifestation of foregrounding see Mel'čuk 2001: 204-7.

his intent to ultimately benefit from setting up the gods' statues, and therefore uses the reflexive pronoun *=m(i)*, whereas the same pronoun is omitted in a very similar context in (84), where no such intent is overtly stated. This syntactic pattern can be taken as a subset of a more general phenomenon that Indo-Europeanists call "ethical dative". It is used with reference to dative pronouns that have no place in the clause argument structure, but indicate a party which is presumed to be emotionally involved in a situation.[9] The usage of reflexive ethical datives brings about the identification of this party with the clause subject.

The development of dative pronouns with a reflexive function into reflexive ethical datives is closely paralleled by certain American English dialects (mostly spoken in the Midwest and the South), where oblique personal pronouns are used with ditransitive verbs denoting a self-directed transfer to an agent (e.g. *I bought me a gun*) but also with transitive verbs that do not require a beneficiary (e.g. *I ate me a possum*). It is remarkable that the reflexive/emphatic usage of personal pronouns never extends to direct objects in these dialects.[10]

(83) KARKAMIŠ A11b, § 17, Hawkins 2000: 101
*a-wa/i-**m**a-tá |za||-ti-i |("PODIUM")hu-ma-ti |(SOLIUM)i-sà-nú-wa/i-ha
I established them (i.e. the gods) on this podium

---

[9] Compare the following Latin example: *Hic mihi quisquam misericordiam nominat* 'Someone here is mentioning compassion' (Sall. Cat. 52.11). The ethical dative *mihi*, lit. 'to me', reflects the speaker's indignation towards mentioning compassion. In Attic Greek, 2sg. ethical dative *=τοι* was grammaticalized as a particle used in direct speeches with the general meaning 'let me tell you, mark you, look you' used in those cases where special attention of the person addressed is desired.

[10] I owe this information to Rod Edwards, a native of North Carolina pursuing graduate studies in the Department of Linguistics at the University of Chicago, who has a native proficiency in one of such dialects.

(84) KARKAMIŠ A23, § 10, Hawkins 2000: 119
*a-wa/i-ta (DEUS)ku+AVIS-pa-na |kar-ka||-mi-si-za-na(URBS)
MAGNUS.DOMINA-sa$_5$+ra/i-na |POST-ni |SOLIUM-nu-wa/i-ha
I re-established Kubaba, queen of Karkamiš

The "ethical dative" usage of Luvian reflexives underwent a secondary grammaticalization in two distinct groups of cases. The first group comprises nominal sentences with first/second person subjects. Since the present tense verbal copula normally does not find an overt expression in Luvian, and since the use of free subject pronouns is optional there in all contexts, the ethical dative reflexives emerge as the only obligatory way of expressing the subject of a nominal predicate.[11] Thus we would not know the subject of the first clause in (9) if not for the reflexive pronoun *=ri*. This functional device would be, however, redundant in the case of third person subjects in nominal clauses, since these are always expressed either by nouns, or by subject enclitic pronouns, as in (87).[12]

(85) KARKAMIŠ A1b, § 1, Hawkins 2000: 92
EGO-**mi-i** ^{I}BONUS-ti-sa ^{I}su-hi-si-i REGIO-ní DOMINUS-ia-i-sa
|BONUS-mi-sa || FEMINA-ti-i-sa
'I am BONUS-*tis* the Country-lord Suhis' dear wife'.

(86) ASSUR f+g, § 11-12, Hawkins 2000: 536
wa/i-**ri+i-i** |ku-ma-na |ha-tu-ra+a wa/i-za |ni-i-´ |ma-nu-ha |*ARHA*-´
|("*69")sa-si-^{i}
'When (thou**)** are to write, do not abandon us by any means'.

---

[11] For the account of Luvian connective clitics in nominal sentences as etymological ethical datives see Eichner 1974: 68. The reservations of Melchert (1988a: 42) are unfounded in view of (83) and similar examples.

[12] This is a corollary to Watkins-Garrett rule, according to which the third person subject enclitic pronouns cannot be dropped in clauses with unaccusative predicates.in all the Anatolian languages. For a detailed discussion of this rule, in its application to Hittite, see Garrett 1996.

(87) KARATEPE 1, § 60 (Hu.), Hawkins 2000: 56
ní-pa-wa/i-**sa** ^{I}CAPUT-ti-sá
'Or (if) he (is) a prince'.

The second group is limited to certain telic verbs, which are homophonous with verbs denoting states. The only verb belonging to this group which can be discussed without resorting to comparative evidence is **asa*- (normally written with a logogram SOLIUM). Its meaning with and without the reflexive particle is 'to sit down' and 'to sit, live' respectively.[13] One can hypothesize that the telic marker in (88) and similar cases represents a further development of the "ethical dative" function of the reflexive pronouns, stressing the agency of the subjects, because telic verbs tend to be closer to prototypical transitives than their stative counterparts (Hopper and Thomson 1980: 252). The English clause *He thought to himself*, which can be used with reference to individual acts of thinking, but not to one's permanent convictions, provides an approximate parallel to the usage of Luvian reflexives in this function.

(88) IZGIN 1, § 2, Hawkins 2000: 315
wa/i-**mi**-ta-´ mi-i-´ |tá-ti THRONUS-tara/i-ti REL SOLIUM-ha
'When I sat **down** on my father's throne...'

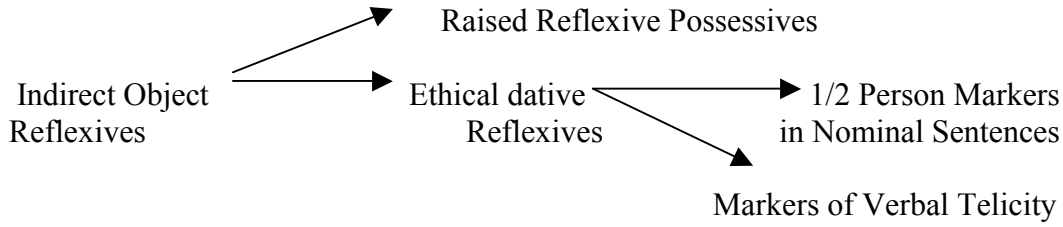
(89) KARATEPE 1, § 24 (Hu.), Hawkins 2000: 51
|á-*TANA*-wa/i-sa-wa/i(URBS) || |REL-ti |(BONUS)wa/i+ra/i-ia-ma-la
|SOLIUM-*MI*-i
'... so that Adanawa might dwell (lit. sit) peacefully'.

---

[13] Hawkins (1992: 262) convincingly argued that Luv. *muwa*-, acconpanied by reflexive pronouns represents a precise functional equivalent of Hitt. *=za ... tarh*- 'to overcome, conquer'. Unfortunately, the meaning of Luv. *muwa*- without reflexive pronouns cannot be clearly determined out of context, even though the suggestion that it is close to that of Hitt. *tarh*- 'to be powerful, dominate' remains likely.

Based on the discussion above, the reconstructed development of reflexive pronouns in Luvian can be summarized in the following tree:

Figure 3: Development of Reflexives in Luvian



Thus, although the pronouns functioning as indirect object reflexives represent but a small proportion of all the clitics *=mi/=di* attested in the Luvian corpus, they can be taken as a logical starting point for further semantic developments within this group, which vindicates its traditional designation as reflexive clitics. The next step is to compare the results of our semantic reconstruction with the system of pronominal clitics traditionally reconstructed for Proto-Indo-European.[14]

Table 9: Proto-Indo-European Clitic Pronouns

	acc.	**dat.**	**acc. refl.**	**dat. refl.**
1Sg	*=me	*=moi	*=me (or *=swe?)	*=moi (or *=swoi?)
2Sg	*=te	*=toi	*=te (or *=swe?)	*=toi (or *=swoi?)
3Sg	*=se	*=soi	*=swe	*=swoi

[14] Cf. Meier-Brügger 2000: 209 and Fortson 2004: 129-30. I am not convinced by attempts to assign the primary reflexive function to *=*s*- in Proto-Indo-Hittite. The comparison between Hittite *=se* and Gathic *=hōi* 'to him' assures the reconstruction of *=*soi* as a dative non-reflexive (anaphoric) clitic. The fact that the reflexes of *=*soi* acquired a reflexive meaning in several branches of Anatolian and Indo-European need not reflect anything more than the recurrent typological tendency to form new reflexive pronouns based on the original personal and anaphoric pronouns. If dat. *=*soi* was an anaphoric pronoun, it becomes impossible to deny the original naphoric status of acc. *=*se* belonging to the same paradigm, although direct comparative evidence is lacking in this case. Although Cowgill (1965: 169) attempted to reconstruct the reflexive tonic pronoun **swé* corresponding to the enclitic *=se*, Iranian, which is the only Indo-European group where the pronominal stems *=*s*- and **sw*- are contrasted, shows a clear difference in their meaning. Note, however, that if one prefers to think that *=*s*- was both reflexive and anaphoric on the earlierst reconstructable level, thus projecting the result Stage 1 into Proto-Indo-Hittite, this has no impact on the rest of my conclusions.

The reflexive stem *sw-*, which definitely existed in Late Indo-European, does not appear to have any clear counterparts in Anatolian. Whether this represents a common Anatolian innovation, or special reflexive clitics emerged at a stage of Indo-European that postdates the separation of Anatolian, one must assume that Proto-Anatolian had different means to express the co-reference between the subject and the other arguments within a clause. Proto-Luvian indirect object reflexives *=*mī* (1 sg.) and *=*tī/=dī* (2/3 sg.) represent a straightforward phonetic outcome of the Indo-European clitics *=*moi* 'to me' and *=*toi* 'to thee' respectively, while the subsequent contraction of long vowels in these forms probably reflects a common tendency toward eliminating long vowels in Indo-European clitics.[15] Therefore one can advance a hypothesis that the ancestor dialect of Luvian extended the usage of dative pronominal clitics to those instances when they were bound by the local antecedent. This development can be summarized in the following tableau:

Table 10: Development of Luvian Clitics (Stage 1)

	nom.	**acc.**	**dat.**	**(dat.) refl.**
1	(none)	=mu	=mi →	=mi
2	(none)	=tu/=du	=ti/=di →	=ti/=di
3	=as (c.); =ada (n.)	=an (c.); =ada (n.)	=si →	=si

Melchert (2003b: 204, fn. 31) suggested the next step when he wrote: "The introduction of the enclitic forms *–mu*, *-tu*, and *–tu* as datives (in Luvian– I.Y.) would have severely restricted the use of those with *i*-vocalism, leading to their synchronic

[15] Thus the Indo-European accusative clitics *=*me* 'me' and *=*te* 'thee' are to be probably taken as "irregular" contracted variants of the stressed pronouns *mé̄*, *té̄*. Compare also Greek particles δή vs. =δε and =μαν/=μην vs. =μεν. Note that Luvian *plene* spellings preserved in cuneiform texts militate against the assumption that all the secondary long vowels were always contracted in this language in unstressed positions (Melchert 1994: 278)

analysis as reflexives".[16] The Luvian forms *=mu* (1sg.) and *=du* (2sg.) must be taken as the reflexes of the Indo-Hittite accusative clitics **=me* and **=te*, whose vocalism was modified by analogy with independent pronouns *amū* 'I' and *tū* 'thou'. The merger of dative and accusative first/second person pronominal clitics in Luvian finds a functional parallel in the system of the plural nominal declension, where the accusative ending **-ans* > *-anz(a)* spread to the dative in prehistoric times. This clitic merger failed, however, to be implemented in the third person because of an earlier enclitization of the demonstrative pronoun **o-* in the nominative and accusative cases, resulting in the creation of a new anaphoric clitic (nom. sg. m. *=as*, acc. sg. m. *=an* etc).[17] Since this pronoun was marked for case in the singular in a similar way to singular nouns and adjectives and did not bear any phonetic resemblance to the oblique anaphor *=si*, it was immune to further case mergers within the clitic system.

Table 11: Development of Luvian Clitics (Stage 2)

	nom.	**acc.**	**dat.**	**(dat.) refl.**
1	(none)	=mu →	=mu	=mi
2	(none)	=tu/=du →	=tu/ =du	=ti/=di
3	=as (c.); =ada (n.)	=an (c.); =ada (n.)	=si	=si

[16] Melchert cites Luvian clitics in transliteration, rather than phonetic transcription, within this quote. We know that this form underwent lenition and was pronounced as /du/ (vel sim.) in Common Luvian, both due to the fact that the consonant is never doubled in Luvian cuneiform orthography and because it underwent rhotacism in Iron Age Luvian. The phonetically distributed allomorphs *=tu* and *=du* (resp. *=ti* and *=di*) have to be assumed for the earlier stages of the language, on which see Section 5 below. On the phenomenon of Luvian lenition, see Morpurgo-Davies 1982/3.

[17] This new enclitic stem was restricted to the nominative and accusative in all the Anatolian languages except for Lycian and Milyan (we lack information about Carian). In the Lycian and Milyan languages the innovative dative form *=i* 'to him/her/it' and locative adverb *=ije* 'therein, thereon' arose secondarily (cf. Melchert 2004a: 26-28, 116).

The final change that one needs to assume in order to account for the common Luvian stage is the spread of the second person singular dative clitics, both reflexive and non-reflexive, to the third person. Apparently, all the Luvian dative clitics came to be characterized by the opposition first/non-first person. C. Melchert (pers. comm.) suggests that a possible functional motivation for this change was disambiguation between reflexive and non-reflexive dative clitics throughout the singular paradigm. To be sure, there were different ways to achieve the same goal, for example creating the analogical dative non-reflexive clitic **=*su*. Yet the spread of =*di* and =*du* from the second to the third person was favored due to the pre-existence of the Luvian plural clitic =*manz(a)* '(to) you, to them; (to) yourselves, to themselves'. By contrast, the accusative clitic 2sg. =*tu/=du* failed to spread to the third person because the anaphoric forms =*an/=ada* 'him/her/it' and =*ada* 'them' had a paradigmatic support from their nominative counterparts. I will have more to say about this process when we discuss the development of Hittite clitics.

Table 12: Development of Luvian Clitics (Stage 3)

	nom.	**acc.**	**dat.**	**(dat.) refl.**
1	(none)	=mu	=mu	=mi
2	(none)	=du	=tu/=du ↓	=ti/=di ↓
3	=as (c.); =ada (n.)	=an (c.); =ada (n.)	=tu/=du	=ti/=di

The first person clitics underwent further changes in the individual dialects of Luvian. The late Luvian inscriptions bear witness to the spread of =*mu*, at the expense of =*mi*, to the first person reflexives, as the following example shows:

(90) KARATEPE 1, § 63-4 (Hu.), Hawkins 2000: 57
ARHA-wa/i-ta "*69"(-)i-ti-wa/i || (LITUUS)á-za-ti-wa/i-tà-sá á-ta$_5$-ma-za
PORTA-la-na-ri+i zi-na wa/i-**mu**-ta || á-ma-za á-ta$_4$-ma-za a-ta tu-pi-wa/i

'I will delete Azatiwatas's name from this gate, and will incise my **own** name'.[18]

The system of the Bronze Age Luvian texts of Kizzuwatna origin conforms to the distribution of Stage 3, although our evidence here is virtually limited to the third person clitics. Once we consider the Luvian poetic fragments embedded into Istanuwian rituals, we wind up with a number of first person clitic pronouns that deviate from this distribution. On the one hand, *=mu* is attested as a reflexive ethical dative (91), and, on the other hand, *=mi* is attested in the non-reflexive function (92).[19] While the first example is reminiscent of late Luvian (90), the second one lacks obvious parallels within Anatolian. It is to be stressed that the clitic *=mu* also occurs with the meaning 'me' in the same corpus of texts, as in (93).

(91) KUB 25.136+ iv 15'-16', Starke 1985: 327
[za-a-**m**]**u** ^{GIŠ}i-lu-u-wa za-a-**mu** ^{GIŠ}hi-i-lu-u-[wa zi-i-la a-ru]u-u-wa a-ú-i-ha
'I came to [these] *iluwa*-trees, (and) [then] to these [hig]h *hilu*[*wa*]-trees'.

(92) KBo 4.11 Obv. 54-5, Starke 1985: 341
du-uš-ša-ni-ya-al-la-aš-**mi** a-ia-tar pa-a-i-u
ḫaḷ[-d]a-**me-i**t-ta[20] du-wa-an-ta[21] w[a-]ạ-šu pád-du
'Let *dussaniyala-* grant **me** *ayatar*, let him protect[?] well **my** *halda- duwanta-*.

---

[18] The interpretation of Luv. *zin* as an instrumental case of the deictic pronoun *za-* 'this' was argued for by Petra Goedegebuure at the 6th International Congress of Hittitology, held in Rome in September 2005.

[19] Compare also the sequence [(*u*)]nza=*piyan=mi taban* in KUB 35.135 iv 7 which, if correctly parsed, represents a passive sentence '*Taba-* is given to me by you'.

[20] I assume that *ḫaḷ*[*-d*]*a-me-it-ta* stands for /halda=mi=tta/, and that the sign ME was used here for purely opportunistic reasons, as a simple grapheme requiring only two strokes, as opposed to five strokes necessary for writing MI. Compare the writing of *=mi* in the previous line and note the absence of the phoneme /e/ in Luvian.

[21] The exact meaning of *duwanta* remains unknown. As a speculation, I would like to suggest that this word may be connected with Hitt. *tuwān* 'hither', *tuwān parā* 'hither, up to now'. Note that the similar form *tu-wa-a-an-ta* is attested at least twice in the Hittite corpus although its meaning cannot be elucidated from the context (HEG, T: 491).

(93) KUB 35.39 iv 7-8, Starke 1985: 330
šu-um-ma-al-la-an-na-**mu-u**r[22] har-la-a pár-la-a hu-u-i-ia-ad-da
'*Summallanna*-s fled me *harla parla*'.

If we assume for the sake of argument that the Istanuwian songs represent a uniform Luvian dialect, one of the ways to account for this development is to hypothesize that =*mi* and =*mu* were on their way to becoming free allomorphs or graphic variants. Perhaps the ongoing functional extension of =*mu* brought about the occasional hypercorrect usage of =*mi* in this dialectal area.[23] A system involving free variation between different pronominal clitics is unlikely to be stable, and one can make a prediction that one of the two variants would eventually emerge as a winner in this competition. Yet we will see in the following section that such variation has other parallels in Anatolia, and thus represents an expected stage in the realignment of the clitic system. In any event, the function of =*mi* in (92) is unlikely to represent a linguistic archaism, since the spread of =*mu* to dative reflexives would be hard to explain unless one accepts its earlier spread to dative non-reflexive clitics.

4.3 Situation in Palaic and Lydian. We have seen in the previous section that the sequential reconstruction of the Luvian clitic pronominal system implies the existence of the third person reflexive pronoun =*si* at an intermediate stage, even though

[22]I am following Carruba 1970: 77 in interpreting *šu-um-ma-al-la-an-na-mu-ur* as /summallanna=mu=r/, where =*r* is a sentential particle. My syntactic analysis of this sentence differs, however, from one suggested by Carruba.

[23] Alternatively, one can hypothesize that the clitics =*mi* and =*mu* underwent a phonetic merger into =*mə* (vel sim.) in the Istanuwian dialect, while examples (92) and (93) reflect the inconsistent application of the historical orthography.

it is neither synchronically attested in Luvian, nor can be reconstructed for Proto-Indo-Hittite. The existence of such a pronoun in some other Anatolian languages would obviously yield further support to my diachronic scenario.

The data of the alphabetic Luvic languages do not contribute anything to our reconstruction of Luvian clitics both due to the incomplete attestation of the relevant forms and due to their innovative character. Therefore we have to consider the situation in the closest external relatives of Luvic, namely Palaic and Lydian. The system of Palaic singular pronominal clitics, so far as known to us, can be summarized in the following table:[24]

Table 13: Palaic Pronominal Clitics

	nom.	**acc.**	**dat.**	**dat. refl.**
1	(none)	*=mu	=mu	?
2	(none)	=tu[?]	=ti[?], =tu[?]	=ti , =si
3	=as (c.); =ad (n.)	=an (c.); =ad[?] (n.)	=tu	*=si

This table reflects, among other things, our imperfect understanding of the Palaic language. The forms marked with question marks occur in less clear contexts and their exact meaning is, therefore, somewhat uncertain. Yet, even if we limit our analysis to the passages for which we have a fully adequate interpretation, we can show that Palaic has undergone the innovations equivalent to the Luvian Stage 1 and Stage 2, as well as, partially, those of Stage 3. The third singular dative clitic *=tu* 'to him' occurs in a well-understood clause *a=tu pīsa* 'Give it to him!' (KUB 35 165 Rev. 24'). This

[24] All the Palaic examples discussed below can be found in transliteration in Carruba 1970. The translation is my own, unless indicated otherwise *ad locum*. Since Sturtevant's Law was rather inconsistently applied to Palaic orthography, I will use the transcription *=ta*, *=ti*, *=tu*, as if the respective clitics had not undergone the lenition. This convention does not imply any claim about the actual pronunciation of the respective clitics, which could have varied depending on their phonetic environment.

meaning of *=tu* (stage 3) is difficult to account for, unless one assumes its earlier usage as the second singular dative clitic (stage 2).[25]

Once we shift our attention to pronouns with *–i* vocalism, we see that the implementation of stage 3 innovations in Palaic was not consistent. All the occurrences of *=ti* in our corpus appear to denote the second person. Beginning with the reflexive function, we have assured attestation of *=ti* as the second person reflexive ethical dative, as in (94), and as the second person subject marker in a participial clause, as in the second clause of (95). In the last case, this interpretation of *=ti* is supported by the parallel clause *mān=as marhanza* 'If he comes as a guest[?]...' (KUB 35 165 Rev. 24'), which occurs in the same ritual. Quite suprisingly, we also encounter a non-reflexive *=ti* meaning 'to thee' in the first clause of (95) and in (96). Carruba (1970a: 74, 1972: 28-9) took these clitics in both of the last two cases as reflexive ethical datives, and consequently left them without translation, yet given the fact that we are dealing here with religious invocations, the reference to their divine addressee fits the contexts of both passages much better.[26] In the case of (95), my interpretation is further supported by the parallel clause *a=an=ta tabarnas zibarwātai takkuwāti* 'The tabarna arranges it for Zibarwa' (KBo 19.152 I 15'-16'), which shows that the verb *takkuwa-* can occur with a dative complement.

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[25] Similarly Melchert 1984a: 35.

[26] The insight that Pal. *=ti* functions only as dative and reflexive of the second singular pronoun 'thee' belongs to Melchert (1994: 218). Melchert (ibid.) credits Kammenhuber (1955: 360ff.) with this interpretation, but the scrutiny of the relevant passage indicates that Kammenhuber viewed *=ti* as a clitic variant of the nominative *tī* 'thou'.

(94) KUB 25.165 Obv. 15 (Invocation to Zabarwa), Carruba 1970b: 14[27]
ku-i-ša tu-ú wu_u-(la)-ši-na-aš ka-a-ar-ti a-**ti**-a-pa-an az-zi-ki-I
'Whichever bread pleases thy heart, eat that one'.

(95) KUB 35.165 Obv. 7-8 (Invocation to Zabarwa), Carruba 1970b: 14[28]
[x] za-pár-wa-a-ša-an-pa-**ti** ták-ku-wa-a-ti ma-a-an-**ti** mar-ha-a-an-za ma-a-a-an-**ti** [x]-ia-an-za ę-pa a-ri-e
'(He, i.e. the king) arranges[?] the *zabarwasa*- offering **for thee**. When **thou** come as a guest[?], when **thou** are …-ed, lift them up!'.

(96) KUB 35.165 Obv. 10-11 (Invocation to Zabarwa), Carruba 1970b: 14
ki-i-at ta-ba-ar-na-aš hu-wa-ar-ni-na-i sa-pa-u-i-na-i
a-**ti**-it-ta ši-ri-an pa-ri-na-at ša-li-iq-qa-at
'Here *tabarna huwarnina*-es and *sabawina*-es.
(He) *parina*-ed and *saliqqa*-ed the *siri*- **for thee**'.

The main problem of this interpretation is the necessity to posit a "backward" innovation undoing the effects of Stage 2 in the case of the second person pronominal clitics. We have seen that one needs to reconstruct *=*tu* 'to thee' in Palaic for structural reasons. This problem is further complicated by the likely existence of such a clitic in a different passage belonging to the same text. The interpretation cited below belongs to Melchert (1984: 35), who stresses the necessity of the second person oblique pronoun in an utterance hinting at the reciprocal relationship between the divine addressee and the ritual patron. The variation between =*ti* and =*tu* is reminiscent of the similar variation between =*mi* and =*mu* meaning 'to me' or 'to myself' in various dialects of Luvian (see the previous section). The details of the backward extension of =*ti* remain somewhat

[27] For the essentially correct interpretations of this sentence, see already Carruba 1972:29 and Starke 1990: 73.

[28] For the interpretation of *marha*- 'to present oneself, come as a guest' and the related forms, see Yakubovich 2005a: 120-21, fn. 40.

unclear, as is the case with =*mi* in Istanuwian Luvian, but it will be important for our conclusions that we never observe the spread of =*ti* beyond the second person singular.

(97) KUB 35.165 Rev. 9'-10' (Invocation to Zabarwa), Carruba 1970b: 19
gạ-a-ni-**du-u**t-ta ku-iš a-ni-it-t[i] ma-aš-ta a-ni-i-ia-ši a-ni-ia-kụ-an-ta
ta-ba-ar-na-ni MUNUS$_{}$tạ-wa-na-ni
'As much as thou do (for one) who does it **for thee**, do it for the king and the queen'.

Finally one must mention the suggestion by Watkins (1978: 309), who argued for the existence of the dative clitic *=*ta*, lit. 'to thee', in a different Palaic text.

(98) KBo 19.153 iii$^{?}$ 4'-5' (Invocation to Zabarwa), Carruba 1970b: 23
nu-ú ^{d}za-pár-wa$_{a}$ ša-me-ri-iš ša-me-ri-i[š] ha-la-iš-**ta** ni-i pur-ta-hi-eš-**ta** ni-i
'Now, Zabarwa, *sameri-*, *sameri-*. (There is) no *halai-* **therein**, (there is) no *purtahhi-* **therein**'.

Watkins himself was of the opinion that =*ta* was a second person non-reflexive clitic, since he followed Carruba in assuming that the usage of =*ti* was strictly reflexive, while =*tu* always referred to the third person. Accordingly, he translated the second clause as '(there is) no *halai-* to thee, (there is) no *purtahhi-* to thee'. The context is consistent with such an interpretation, but does not force it. An alternative possibility that is likewise consistent with the available context is to take =*ta* as a sentential particle. Since the existence of such a particle in Palaic is now established on independent grounds (cf. examples (96) and (97) above), whereas the needed slot in the system of pronominal clitics is already taken by =*tu* and =*ti*, I prefer the second alternative.

The Palaic reflexive clitic =*si* does not appear to be restricted to a particular person or number. The lack of the assured attestations of =*si* (or any other reflexive clitic) with third singular subjects must probably be ascribed to chance, but we have it

attested as a marker of the second singular (99-100) and third plural (101) reflexive ethical datives. This is certainly an innovation with respect to Proto-Anatolian where the *s*- clitic stem was restricted to the third person singular. The extension of the original third singular reflexives to other persons and numbers is a common cross-linguistic phenomenon, and the spread of *=si* in Palaic is specifically paralleled by the situation in Old Church Slavic, where the cognate clitic *=si* functions as the generalized dative reflexive.

(99) KUB 35.165 Rev. 9' (Invocation to an unknown deity), Carruba 1970b: 19[29]
la-la-an-ta ku[-iš] ta-ar-ta-an ma-ri-iš-ši ma-aš-pa-**ši** mu-ú-ši
'(Thou), who crush the curse and the (evil) tongue, how much (thou) will satiate/enjoy **thyself** !

(100) KUB 35.165 Obv. 21-24 (Invocation to the Sun-god), Carruba 1970b: 16[30]
[(nu-ku)] pa-aš-hu-ul-la-ša-aš ti-[ia-]az ta-ba-ar-ni LUGAL-i
pa-a-pa-az-ku-ar ti-i [(a-an-na-)]az-ku-ar ti-i iš-ka[n]u-u**š-ši**-ia-am-pí ti-i
a-ri nu-u**š-ši**-ia-am-pí ti-i [(a-ru-u-)]na-am-pí ti-i ú-i-te-ši
[A[?]].A-an-ta-na-an ti-i ú-i-te-ši
Now, *Faskhullassas Tiyaz*, to *tabarna* the king thou are indeed the father (and) the mother. Now anoint him, and exalt him! Thou will both build/see him high (and) build/see him strong[?].

(101) KUB 32.18 i. 7' (Myth), Carruba 1970b: 8[31]
[a-]ta-a-an-ti ni-ip-pa-**ši** mu-ša-a-an-ti a-hu-wa-an-ti ni-ip-pa-aš
ha-ša-an-ti
'They eat, (but) do not have enough, they drink but do not quench their thirst'.

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[29] My translation of this sentence follows Melchert (1984a: 34-36), although the latter took *mūsi* as an imperative 'enjoy', and not present/future 'thou will enjoy'. For the justification of my translation see Yakubovich, 2005: 117.

[30] For the detailed discussion of this sentence and its cultural implications see Yakubovich 2005a.

[31] For the clause division in this sentence see Yakubovich 2005a: 120 (with fn. 36).

The evolution of =*si* towards the generalized reflexive was probably in progress in Palaic at the stage of its written attestation. This is clear from the fact that =*si* and =*ti* are in competition in the second person. One can further hypothesize that the "backward" extension of =*ti* to non-reflexive forms could have represented a chain shift triggered by its being gradually pushed out of the reflexive paradigm. Yet the preservation of the Wackernagel clitic =*si* as such, compared with its complete loss in the attested varieties of Luvian, must be regarded as an archaism. We have reconstructed the third person reflexive *=*si* for the Luvian Stages 1-2, and this reconstruction receives an indirect support from our Palaic data.

The Palaic developments corresponding to Luvian Stage 3, as well as the changes in progress reconstructed for the stage of Palaic attested in written sources, are illustrated in the table below.[32] It goes without saying that the picture presented here is not complete and may undergo further refinement once new data become available.

Table 14: Development of Reflexives in Palaic

	nom.	**acc.**	**dat.**	**dat. refl.**
1	(none)	*=mu	=mu	?
2	(none)	=tu?	=tu ↓	← =ti =si
3	=as (c.); =ad (n.)	=an (c.); =ad? (n.)	=tu	*=si ↑

The direct reflexes of the reconstructed third person reflexive =**si* can be found in Lydian. The small corpus of Lydian texts does not contain ritual invocations, or other contexts that would require the extensive use of the second person. Our knowledge of Lydian pronominal clitics is limited to the first and the third person pronouns:

[32] Here and below, the suggested order of grammatical changes corresponds to the increasing intensity of shading.

Table 15: Lydian Ronominal Clitics

	nom	**acc.**	**dat.**	**dat. refl.**
1	(none)	=m	=m	=m
2	N/A	N/A	N/A	N/A
3	=aś/=ad	=aν/=ad	=mλ	=is /=ś, =iτ /=τ

The Lydian clitic =*mλ* represents a secondary formation based on a dative plural clitic =*mś* 'to them' (Carruba 1969: 44-45).[33] Other pronouns, however, are likely to continue Proto-Anatolian clitics. The allomorphs =*is* and =*iτ* frequently take the place of =*ś* and =*τ* respectively in the position of a syllabic nucleus. Since Lydian lost most of its word-final vowels, at least in writing, the clitic =*m* can phonetically be derived from both *=*mi* < *=*moi* and *=*mu*.[34] The same, *mutatis mutandis*, is true of Lyd. =*is* /=*ś*, except that only =*si*/=*se* < *=*soi* is attested in the other Anatolian languages. The forms =*iτ* /=*τ*, however, can be derived only from *=*ti* < *=*toi* and not from *=*tu* since the grapheme *τ* stands for an affricate /ts/ (vel sim.), which represents the regular outcome of the Proto-Anatolian cluster */tj/ (Gusmani 1969).[35] Thus =*τ* before a vowel emerges as a

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[33] Carruba did not provide a precise proportion that would render this analogy possible. In my opinion, the dative singular nominal ending *–λ* and the reconstructed dative plural nominal ending *-*ś* (=Hitt. *–as*) had to play a crucial part in this development (i.e. [(nominal) *-*ś* /*-*λ* = (pronominal) -*mś* : x] ⇒ [x = -*mλ*]). This analogy was subsequently obfuscated by the spread of the genitive plural ending *-*(a)n* to dative plural in Lydian.

[34] Melchert (1994: 379) conjectured that word-final *i*-diphthongs were originally contracted to **e* in Lydian, but the development *=*toi*>*=*ti* is required for my derivation of the reflexive =*τ*. In the absence of contrary, I will assume a special "law of finals" according to which *i*-diphthongs were contracted to **i* in word-final position in Lydian. Alternatively, one can of course claim that the vocalism of Lyd. *=*ti* was influenced by the Luvian clitic *=*ti*/*=*di.*

[35] Gusmani (1969) did not make correct conclusions about the origin of Lyd. =*(i)τ*, and argued that it goes back to the combination of the sentential particle =*(i)t* < *=*ta* and the subject clitic pronoun =*ś*. The non-existence of the subject pronoun =*ś* in Lydian has been meanwhile demonstrated in Melchert 1991, which prompted Melchert to reinterpret Lyd. =*(i)τ* as the combination of =*(i)t* < **ta* and the reflexive marker =*ś*. Such interpretation, however, would be equally difficult to maintain, since the sentential particle =*(i)t* is normally placed after all the pronominal elements in a clitic chain (e.g. 4b.4 *f=ak=mλ=t*, 24.20 *ak=ad=t*). The clitic sequence 11.12 *f=ak=mλ=at=av* cannot be used as a cogent

regular reflex of the Anatolian sandhi variant *=t(i)y* (e.g. *ak*=τ=*ad* < **a=ku=t(i)y=ad*), while *=(i)τ* in other positions can be seen as an analogical generalization of this variant. The direct reflex of *=ti* in Lydian would be ***=t*, but the preservation of this variant would have resulted in an undesirable homonymy with another Wackernagel clitic reflecting the Proto-Anatolian sentential particle **=ta.*[36]

The reflexive clitic *=m* is prominent in Lydian ownership inscriptions, where it functions as the first person marker in nominal sentences (Melchert 1991: 138, fn. 14). This explanation is superior to the account of Gusmani 1971, deriving *=im* from the Indo-European copula **esmi* 'am', since neither Lydian, nor the other Anatolian languages normally employ the present stem copula.

(102) 75, Gusmani 1986: 154[37]
sivãmli=**m** atelis
'**I** (belong) to Siwamis, (son) of Ates'.

(103) 104, Gusmani 1986: 158
artymali=**m**
'**I** (belong) to Artemis'.

The reflexive function of the clitic *=is* /*=ś* was first argued for by Meriggi (1963: 23-26), while Melchert (1991: 136-41) adduced new arguments in favor of this interpretation. The reasoning of both scholars was essentially negative, in that they

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counterexample against this generalization until one proves that *=at=* may represent an allophone of the sentential particle *=(i)t.*

[36] The idea that Lyd. *=(i)τ* continues earlier *=ti* has been already argued in Shevoroshkin 1967 and Carruba 1969, although Russian and Italian scholars suggested a different phonetic account of this development.

[37] Here and below, I refer to the numbers of Lydian texts assigned to them in Gusmani 1964 and Gusmani 1986. The transliteration of Lydian forms follows the conventions adopted by C. Melchert for his online corpus of Lydian texts available for searching and browsing as a part of the TITUS database (titus@uni-frankfurt.de).

argued against the interpretation of *=is /=ś* as a subject clitic, rather than demonstrating its reflexive semantics. One must, however, keep in mind that a significant proportion of reflexive clitics functioned as reflexive ethical datives in Anatolian, and we have no reasons to think that the situation in Lydian was any different in this respect from the rest of the Anatolian languages. Given our poor knowledge of the Lydian lexicon, it is would be preposterous at the present time even to hypothesize about those fine stylistic changes that the addition of an ethical dative would contribute to each particular utterance. The only thing one can hope to accomplish is to show that *=is /=ś* does not have a place in the argument structure of (104-105) and similar sentences. Only in the case of (106) can one go somewhat further. Melchert (1991: 140-41) makes a plausible suggestion that the final part of this curse formula addresses the misappropriation of a certain piece of property. In this case *=is* 'for himself' appears to function as a reflexive *dativus commodi*.

(104) 10.3-4, Gusmani 1964: 254
dum=mλ=**is** sellis weśfa=k woraś dacal
'In addition, the *serli*-official and the living[?] son *daca*-ed him'.

(105) 23.18-19, Gusmani 1964: 260
ak=**ś** qis ẽmν ẽtamν uν bawcvaśod
'And whoever attempts[?] to overwrite[?] my decree[?]...'

(106) 24.7-8, Gusmani 1964: 260
ak=mλ=**is** qis citollad bitaad buk mλ=**is** fakarsed qik
'Whoever applies[?] to it *citolla-* or cuts off anything from it **for himself**'.

In all the cases where the reflexive *=is /=ś* can be found it appears to be bound by a third person singular subject. Not so the reflexive *=iτ /=τ*, which is also attested in sentences containing first person plural predicates. Unfortunately, the meaning of sentences (109) and (110) remains completely obscure, but if we are right in identifying

the Lydian verbal ending *-wv* as a direct reflex of the Anatolian first plural preterit marker *-*wen* (Melchert 1994: 336 with ref.), this should suffice for excluding the possibility of third singular subjects in these sentences.

(107) 2.2-4, Gusmani 1964: 251
eśś wãnaś mru=k bλaso=k=**iτ** qid katavil laqrisa=k=in qid ẽtośrś ak=ad karolid sabλalid
'This tomb, and stele, and the *bλaso-* that he made **for himself**[?], and the dromos that they have installed[?], belong to Karo son of Sabla'.[38]

(108) 54.2-4, Gusmani 1964: 268
ak=ad qis fisqãnt buk=aś fẽdanoλt fak=**τ**=ad kabrdokid
'Whoever destroys them, or *fẽdanoλ*-s, or *kabrdoki*-es them **for himself**[?].

(109) 13.4, Gusmani 1964: 256
kot=**τ**=in aśfã=k ces**wν** aśtrkot midaτad
(Translation not attempted)

(110) 13.5, Gusmani 1964: 256
kud=**τ**=in atvãν nak fasi**wν** afaλaλ=k
(Translation not attempted)

If we assume that Lydian *=iτ /=τ* < *-*ti* is cognate with Luvian *=di* and Palaic *=ti*, then we must conclude that this pronominal clitic was originally bound by the second person singular arguments. Its spread to the third singular slots in the reflexive paradigm is reminiscent of Stage 3 posited for common Luvian. Unfortunately, the second singular and plural dative non-reflexive clitics are not attested in the Lydian corpus, and so we cannot say positively say whether or not the merger between the second and the third person clitics in Lydian was as systematic as it was in Luvian. Linguistic reconstruction suggests, however, that it probably was. The Lydian dative third person plural clitic *=mś* is presumably cognate with Hitt. *=smas* and Hier. Luv.

[38] For the analysis of *ẽtoś-rś*, cf. Melchert 2004b: 147, end note 14 with ref.

=manz(a) that functioned a both second and third plural dative clitics.[39] If Carruba is right in viewing Lyd. *=mλ* as an analogical formation based on Lyd. *=mś*, it would not be unreasonable to expect that the singular dative clitic *=mλ* kept the homonymy between the second and third persons that characterized its plural counterpart *=mś*. This, in its turn, triggered the spread of the second person reflexive *=τ* to the third person, even though this change was still in progress in the historical period. If my grammatical observations about (109-110) are correct, one has to assume that the generalization of *=τ* as a reflexive clitic eventually went beyond 2/3sg, and this form penetrated into the reflexive plural paradigm. The scarcity of the relevant data does not allow me to trace the extent of this development.[40]

The reconstructed development of Lydian singular clitics that is analogous to the Lydian Stage 3 is represented in the table below:

Table 16: Development of Reflexives in Lydian

	nom	**acc.**	**Dat.**	**dat. refl.**	
1	(none)	=m	=m	=m	
2	*(none)	?	*=mλ	*=iτ /=τ ↓	
3	=aś/=ad	=av/=ad	=mλ	=iτ /=τ	=is /=ś

[39] The most direct parallel to the Lydian form is CLuv. *=mmas* 'to them'. Unfortunately, we do not seem to have any attestations of the homonymous second person plural pronoun, even though this gap is no doubt accidental.

[40]The spread of the 2/3sg. reflexive clitics to the plural paradigm need not appear typologically odd since the same process can be observed in the history of Hittite (compare the following section).

4.4 Development of Reflexives in Hittite. The syntax of the Hittite reflexive particle *=z(a)* was not uniform throughout the history of the Hittite written language.[41] While some functions are attested already in the Old Hittite texts, certain other functions emerge only in the Middle Hittite period. Since the temporal classification of Hittite texts cited below is achieved based on paleographic and historical grounds, we avoid the danger of circularity discussing the evolution of their grammatical features.

Hittite, unlike Luvian, uses the *=z(a)* particle in order to mark all types of locally bound syntactic arguments. Its usage as a direct object reflexive is attested several times in the Old Hittite period, as in (111). This syntactic pattern probably represents a Hittite innovation, as per Boley (1993: 209). The most suggestive example of an indirect object reflexive *=z(a)* in the Old Hittite corpus is probably (112).

(111) KUB 31.143 ii 23, CTH 733.II.2, OH/OS, Neu 1980: 186[42]
unud=wa=**z**
'Adorn **thyself**'!

(112) KBo 22.2 i 13-14, CTH 3, OH/OS, Otten 1973: 6
nu=**zza** DUMU.NITA.MEŠ karti=smi peran mēmir
'The sons said **to themselves** in their hearts (i.e. thought to themselves)'.

In the remainder of the Old Hittite examples *=z(a)* functions as a reflexive ethical dative. Boley (1993: 205) suggested that the Hittite reflexive particle was used in such cases to mark "a general, unspecific reference to the subject's active involvement,

[41] There is no doubt that the phonetic realization of the Hittite reflexive particle was [ts], as per Kühne 1988 and Yoshida 2001. The transliteration *=z(a)* is retained here solely in order to make this chapter more accessible to a broad range of Hittitologists.

[42] Here and below, the Hittite examples will be cited in bound transliteration with elements of transcription. Thus, all the word-initial stops are transcribed as voiceless, while all the word-final stops are transcribed as voiced. No difference is made in this respect between the Hittite clitics and tonic words: for the justification of this approach see Section 5 below. In accordance with Sturtevant's rule, all the single and double intervocalic stops are transcribed as voiceless and voiced respectively.

interest, intent, or mental effort, as the case may be, in the verbal content".[43] This definition may look fuzzy and intuitive, but it would be difficult to come up with a better one based on a corpus study, since the ethical dative *=z(a)* has no place in the argument structure of the respective sentences. I will limit my illustration of this case to (113), which represents an almost exact equivalent to the Palaic sentence (101). One can see that the distribution of reflexive clitics in the two languages is precisely the opposite, in that *=si* occurs only in the first clause in Palaic, but *=za* occurs only in the second clause in Hittite. The probable reason for this is not the grammatical difference between Hittite and Palaic, but rather stylistic preferences of individual scribes.

(113) KUB 17.10 i 19'-20', CTH 324, OH/MS, Mazoyer 2003: 44
edēr n=e *UL* ispiyēr eguyēr=ma n=e=**za** *UL* hass[i]kkir
'They ate but could not get enough. They drank but could not quench their thirst'.

In a number of instances, the ethical dative *=z(a)* could be re-interpreted as a raised reflexive possessor. An illustrative example is (114), where one could argue that *=z* doubles the Akkadographic *=ŠU* 'his own'. Yet the issue of raised reflexive possessives cannot be separated from the general question of possessor raising in Hittite. Güterbock 1983 has established that non-reflexive possessors cannot be rendered by dative clitics in Old Hittite/Old Script texts, and it would be indeed remarkable if reflexive possessives displayed a divergent behavior in this respect. Therefore I prefer to interpret *=z* in (114) as a true reflexive ethical dative, which otherwise accompany quite

[43] Ivanov and Gamkrelidze 1984: 1/361, fn. 1 try to formalize this intuition invoking the notion of subject-oriented version. Unfortunately the grammatical category of version, commonly recognized in Kartvelian studies, is only making its way into the western typological literature. For a recent attempt to define this category in cross-linguistioc, discourse-functional terms, see Anderson and Gurevich 2005.

frequently the verb *ep-* 'to take' (Boley 1993: 61). For the same reason I deem it very unlikely that *=zza* in (112) doubles the possessive pronoun *=smi* in the modifier phrase. The rise of possessor raising in Middle Hittite presumably went hand in hand with the disappearance of possessive clitics.

(114) KBo 25.34 I 22' CTH 627 OH/OS, Neu 1980: 90
ta=**z** *AŠAR=ŠU* e[pzi]
'He t[akes] his (own) place'.

The two functions of *=z(a)* that can be viewed as grammaticalized ethical datives represent innovations within Hittite, but have exact parallels in the Luvian usage of reflexive pronouns. Hoffner (1969) discovered a rule according to which *=za* was used in the nominal sentences from the Middle Hittite period onwards to mark the first or second (as opposed to the third) person of the subject (115-116). This rule is not applicable to the Old Hittite texts, where *=za* is uniformly absent in the nominal sentences (117-118). "Hoffner's rule" in Middle and New Hittite is obviously reminiscent of the Luvian rule illustrated by examples (85-86).

(115) HKM 1 Rev. 11-12, MH/MS, Alp 1991: 120
nu=**za** *PANI* ^{LÚ}KÚR mekki pahhassanuwanza es
'Be very much on guard against the enemy!'

(116) HKM 17 Obv. 5-6, MH/MS, Alp 1991: 142
Kuitman=wa=**za** wēs nuwa ^{URU}Hattusi eswen
'When we were still in Hattusa'

(117) KBo 6.2 iii 18, CTH 291.I.A, OH/OS, Hoffner 1997: 67
nu=wa=nnas=za mimmanzi LÚ.MEŠ *ILKI*-wa sumes
'They refuse us (saying): "You are corvée-laborers" '.

(118) KUB 26.35 6', CTH 39.5, OH/OS, del Monte 1981: 208
[zi]k attas=mis es *ug=a* DUMU=tis eslit
'Be t[hou] my father and let me be thy son!'

The telicizing function of Hitt. *=za* is likewise attested beginning with Middle Hittite. The examples below all feature the verbal root *es-*/*as-* 'to sit', which is presumably cognate with Luv. **asa-* hidden under the logogram in (88-89). Examples (119) vs. (120), both belonging to the end of the Middle Hittite period, illustrate the contrast between the stative *es-* 'to reside' and its telic counterpart *=za* (...) *es-* 'to occupy'. In Old Hittite, however, the contrast between state and change of state was not formally expressed (121-122). This discovery belongs to Craig Melchert, who has also been able to demonstrate that the formal oppositions *kis-* 'to happen' vs. *=za* (...) *kis-* 'to become', *tarh-* 'to be powerful, to be able' vs. *=za* (...) *tarh-* 'to overcome', *sak-* 'to know' vs. *=za* (...) *sak-* 'to learn', and probably *sup-* 'to sleep' vs. *=za ... sup-* 'to fall asleep' likewise arose secondarily within the history of Hittite.[44]

(119) KBo 10.12 iii 35'-36', CTH 49.II, MH/NS, del Monte 1986: 138
LÚ.MEŠ KUR ^{URU}Amurri=ya=kan kuyēs ŠÀ-*BI* KUR ^{URU}*HATTI* asanzi
'The men of Amurru who reside (lit. sit) in Hatti...'

(120) HKM 10 Obv. 4-5, MH/MS, Alp 1991: 134
^{m}Pihinakkis=**za** mahhan ^{URU}Lisipran ēskittari
'When Pihinakki occupies Lisipra'.

(121) KBo 17.1+25.3 I 30', CTH 416.I.A, OH/OS, Neu 1980: 6
^{NINDA}sarrui=m[(a=ss)]an ERÍN.MEŠ-az ēszi
'The army is sitting on top of the *sarruwa*-bread'.

(122) KBo 17.15 Rev. 19'-20', CTH 645.VI.C, OH/OS, Neu 1980: 74
LUGAL-uss=a ^{É}mākziyaz wizzi ^{GIŠ}huluganni=ya esa
'The king comes out of the *makzi*-house and sits down in the carriage'.

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[44] This discovery remains unpublished. I am familiar with it from the handout of a guest lecture that Craig Melchert gave at the University of California in Berkeley on February 13, 1998. Some of the descriptive data used by Melchert can be found in Boley 1993.

A set of non-trivial syntactic changes involving reflexives, which all resulted in an increasing structural isomorphism between Hittite and Luvian, call for an explanation through language contact. One can either hypothesize that the morphosyntactic evolution of Middle Hittite triggered a similar development in the Luvian dialect of Hattusa and its surrounding area, or assume the calquing of the Luvian patterns by the Hittites. The paucity of original Luvian texts predating the suggested contact period does not allow us to answer this question directly, but the data of other Anatolian languages provide substantial indirect evidence in favor of the second scenario. The presence of pronominal linkers in Palaic (95) and Lydian (102-103) nominal sentences necessitates an assumption that Hoffner's rule represented a "Non-Hittite" Anatolian innovation.[45] In other words, the reflexive ethical datives *=*mi* and *=*ti* (vel sim.) were grammaticalized in Anatolian as first and second person markers in nominal sentences, in a period shortly after the separation of Hittite. If so, then (85-86) and similar examples represent an inherited linguistic pattern within Luvian, while the emergence of a similar pattern in Middle Hittite must be viewed as a contact-induced phenomenon.[46] Occam's razor

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[45] A hypothetical claim that not only Luvian, but also Palaic and Lydian have calqued "Hoffner's rule" from Hittite must be rejected on historical grounds. The western part of Anatolia, where Lydian was spoken in the first millennium BC, was unlikely to be ever settled by a large number of Hittite native speakers, and this precluded the development of a Hittite-Lydian bilingual linguistic environment where such a calque could originate.

[46] Functional considerations provide an additional argument for the contact-driven character of Hoffner's rule in Hittite. If we assume that reflexive clitics were grammaticalized as person markers in order to compensate for the lack of an overt subject in a nominal sentence, then one must recognize that the Luvian clitics *=mi* and *=di* fit in much better with this function than their Hittite counterpart *=z(a)*, which could not convey the difference between the first and the second person. The mechanical calquing of a useful Luvian syntactic pattern into Hittite would help to account for this asymmetry. Compare, however, the following footnote.

prompts me to extend the same explanation to the rise of the telicizing function of *=z(a)* in New Hittite.

A formal change in the expression of Hittite plural reflexives must be added to these functional distinctions. While the older language generalized the usage of *=z(a)* to clauses with plural subjects, as in (112) above, the clitics *=nnas* 'to us' and *=smas* 'to you / them' emerge as optional plural reflexive markers by the end of the Middle Hittite period, and become a norm in this function in Late New Hittite. This is again reminiscent of the situation in Luvian, where the plural enclitic personal pronouns also serve as reflexives (Melchert 2003b: 190, cf. Table 8). At the same time, there are no assured examples of singular personal pronouns serving as reflexives in Middle or New Hittite.[47] Such a random pattern of redistribution would be quite difficult to motivate in functional terms if we were dealing with an internally motivated syntactic change. By contast, (123-124) and similar examples involving plural clutics receive a natural explanation if one assumes that they were calquied from the Luvian usage. On the other hand, the consistent usage of *=za* as a singular reflexive in Middle and New Hittite was supported by the functional ambiguity of its perceived Luvian equivalent *=ti*, which was used with both 2sg. and 3sg. antecedents. [48]

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[47] Boley (1993: 198) claims that *=ta* 'to thee' can be substituted for *=za* once in a while, particularly in imperatives, but fails to provide *ad locum* any examples in support of her opinion. C. Melchert (pers. comm.) suggests that the frequent expression *le*(*=wa*)*=tta nāhi* translated in CHD, L-N: 340b as 'do not be afraid for yourself' must be rather taken as a transitive clause 'let it not affrighten thee'. An independent reason for this reinterpretation is the oddity of an imperative accompanied by the prohibitive particle *le* (cf. Oettinger 1979: 410, fn. 29).

[48] Note, however, that Middle Hittite did not mechanically calque the Luvian distribution of reflexive pronouns, and kept the particle *=z(a)* with 1sg. subjects. Thus, *=z(a)* can be defined as a singular reflexive clitic used for all persons in late Hittite. This creative adaptation, resulting in a more economical

(123) HKM 19 Obv 9-10, MH/MS, Alp 1991: 159[49]
nu=wa=**smas**=kan *ŠA* ^{URU}Kasipura halki$^{HI.A}$-as zikkanzi
'They are stealing the grain of Kasipura'.

(124) KUB 1.1 iii 4, CTH 81, NH/NS, Otten 1981: 16
[(nu=**nn**)]**as** DUMU.NITA.MEŠ DUMU.MUNUS.MEŠ iyawen
'We made sons and daughters'.

The conclusions we have made so far correlate with the profound Luvian lexical influence on Middle Hittite, and square well with the evidence pointing to the physical presence of Luvians in Hattusa in the fifteenth and fourteenth centuries BC (cf. Watkins 2004: 574). Thus the structural convergence between the two languages during this period can be placed in a larger sociolinguistic context. Melchert (2003b: 204, fn. 31) has already expressed a cautious suggestion that certain aspects of the Hittite usage of reflexives may be explained as a borrowing from Luvian, and the comments made above do not represent any more than a further elaboration of this hypothesis. They are meant, however, to set a stage for the discussion of an earlier contact episode, which also involved reflexives, and was indeed responsible for the formation of the Hittite *=z(a)* particle.

The set of Old Hittite pronominal clitics can be summarized in the table below:

Table 17: Hittite Pronominal Clitics

	nom.	**acc.**	**dat.**	**refl.**
1Sg	(none)	=mu	=mu	=z(a)
2Sg	(none)	=tu/=ta[50]	=tu/=ta	=z(a)

system of functional oppositions, but complicating the interpretation of nominal sentences in comparison with Luvian, no doubt bears witness to the fact that Hittite was still a living language at the moment of this contact.

[49] I believe that the stem *zikki-* 'to steal, plunder' occurring here and in HKM 27 Obv. 7 should be separated from the homographic *zikki-* 'to put, place' and taken as an iterative of *taye-* 'steal'. Differently Alp 1991: 314.

3Sg	=as/=ad	=an/=ad	=se	=z(a)
1Pl	(none)	=nas	=nas	=z(a)
2Pl	(none)	=smas	=smas	=z(a)
3Pl	=e/=e	=us/=e	=smas	=z(a)

A number of formal features of pronominal clitics are more archaic in Hittite than they are in Luvian. Hitt. *=ta* '(to) thee' may be directly derived from the Proto-Anatolian accusative clitic **=te* 'thee'.[51] Hitt. *=ad* 'it' directly reflects Anat. **=od*, while Luv. *=ada* 'it' owes its final vowel to the analogical influence of other neuter pronominal forms ending in *-a*. Hitt. *=smas* '(to) you, them' directly reflect Anat. **=smos*, while Iron Age Luvian *=mmanz(a)* '(to) you, them' betrays the influence of the Common Luvian nominal dat./acc. pl. ending **=anz(a)*. The discrepancy between Hitt. *=nas* and Luv. *=anz(a)* 'us' can be most easily explained by assuming a secondary cliticisation of the tonic pronoun *anza(s)* 'we, us'.[52]

Once we account for these formal distinctions, the initial evolution of Hittite and Luvian clitics is amenable to a uniform interpretation. My reconstruction of structural changes in Hittite leading to the partial merger of dative and accusative clitic pronouns is identical to the Luvian Stages 1 and 2. Assuming the traditional Indo-European proto-form **=moi* and **=soi*, this reconstruction will look as follows:[53]

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[50] The synchronic distribution between the allomorphs *=ta* and *=tu* in Hittite is morphologically conditioned. The variant *=tu* occurs before the clitics *=z(a)* and *=san*, while *=ta* occurs before *=kan* and in chain-final position. On the likely diachronic interpretation of this distribution, see 4.5 below.

[51] For the change **e>a* in Hittite posttonic open syllables see Melchert 1994: 137-38.

[52] Compare the change in the vocalism of 1sg.acc. clitic **=me* > *=mu* in Proto-Anatolian that was triggered by the stressed forms of the 1sg. pronoun.

[53] Eichner (1974: 31-32) proposed the reconstruction **=mei* 'to me' and **=tei* 'to thee' for Proto-Anatolian, trying to account for the vocalism of Hittite possessive clitics *=mis* 'my' and *=tis* 'thy'.

Table 18: Development of Hittite Reflexives (Stage 1)

	Nom.	**acc.**	**dat.**	**(dat.) refl.**
1	(none)	=mu	=mē →	=mē
2	(none)	=te/=de	=tē /=dē →	=tē /=dē
3	=as (c.); =ad (n.)	=an (c.); =ad (n.)	=sē →	=sē

Table 19: Development of Hittite Reflexives (Stage 2)

	nom.	**acc.**	**Dat.**	**(dat.) refl.**
1	(none)	=mu →	=mu	=mē
2	(none)	=te/=de →	=te/ =de	=tē /=dē
3	=as (c.); =ad (n.)	=an (c.); =ad (n.)	=sē	=sē

At this moment, it may be appropriate to recall that the processes analogous to the Luvian stages 1 are 2 can be also postulated for the ancestor dialects of Palaic and Lydian. This allows us to view both stages as a common Anatolian innovation. Nothing precludes a relative chronology according to which all the sound changes and analogies that occurred in Luvian, Palaic and Lydian, and are responsible for the formal distinctions between these languages and Hittite, postdate the implementation of these functional changes. Therefore one can assume that the two tables given above contain the provisional reconstruction of the actual Proto-Anatolian forms. The internal reconstruction of Luvian given in section 2 should be modified accordingly.

Once we move to the Luvian stage 3, we can observe that an analogous change was not consistently implemented in Hittite. Hittite, alone of all the Anatolian languages, preserves the dative anaphoric clitic *=se* < **=soi* 'to him', which indeed serves a basis for reconstructing this element in Proto-Anatolian. If we recall that the changes of stage 3 failed to consistently materialize in Palaic or Lydian either, we have no choice but to

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Eichner's claim that Hittite possessive clitics arose out of the historical dative clitics has been meanwhile undermined by the fact that the extension of the old accusative clitics to the dative represents a common Anatolian phenomenon, whereas the cliticization of possessive pronouns is a specifically Hittite development.

assume that a merger between the second and third person singular clitics in individual Anatolian languages postdates the common Anatolian stage. Luvian, Palaic/Lydian, and Hittite all participated in this process, but the scope of their involvement in it was different in each of the three cases. Hittite generalized the reflexive *=z(a)*, but failed to extend the dative clitic *=tu*/*=du* 'to thee' to the third person. Palaic, and probably Lydian, went the opposite way, unifying the shapes of 2sg. and 3sg. dative clitics, but failing to implement the similar changes in the reflexives paradigm. Luvian did both.

The extension of the second person pronominal forms to the third person is not a common typological phenomenon, and it becomes even more puzzling once we assume that it happened several times in different branches of Anatolian. One has to look for peculiarities of the common Anatolian pronominal system that could trigger this process on such a large scale. The only element that qualifies as a suitable starting point for the analogical spread of this merger is the common Anatolian plural clitic **=smos* '(to) you, to them'. To be sure, the common Anatolian status of this clitic was challenged in the past, but the close functional parallelism between Hitt. *=smas* '(to) you, to them' and HLuv. *=manz(a)* '(to) you, to them' pleads in favor of this solution.[54] One may in fact try to project the existence of such a form back into Indo-Hittite, since

[54] For a detailed discussion of homonymous second and third person pronominal forms in Indo-European see Katz 1998: 234-53. The author comes to the conclusion that the synchronic identity between such forms represents a historical accident in all the instances treated in his dissertation, and specifically suggests two different etymologies for Hitt. *=smas* '(to) you' and Hitt. *=smas* 'to them', the latter being cognate with HLuv. *=manza* 'to them'. He is not able, however, to provide a phonetic account for HLuv. *=manz(a)* 'to you', and is therefore forced to assume that we are dealing with an extension of a third person form to the second person within Luvian (ibid. p. 241). He suggests further as an alternative that the second person forms *=smas* and *=manz(a)* may be in fact cognate, in which case they "both represent a true, and not purely Luvian, extension from the third to the second person" (ibid. p. 241-42). I believe that this last alternative is to be preferred, since it alone provides us with a foundation for explaining further changes within the system of Anatolian singular clitics.

the oblique plural clitics Tocharian A *–m* and Tocharian B *–me* represent a perfect phonological match to Anat. *=*smos* and can be used with reference to all the three persons ('(to) us / (to) you /(to) them').[55] This argument, however, cannot be pursued here in any more detail since the linguistic reconstruction beyond the Anatolian level does not constitute the topic of this dissertation.

Since Proto-Anatolian plural clitics could function both as personal pronouns and reflexives, the analogy triggered by these forms could likewise target both reflexive and non-reflexive clitic pronouns. In practice, it targeted both, but in different languages and at different times. The analogy that may have occurred early in the history of "non-Hittite" (or perhaps Luvo-Palaic) can be described by the proportion *=*(s)mas*/*=*(s)mas* ~ *=*tu*/ *X*. In prose, the formal identity between the clitics meaning 'to you' and 'to them' triggered the functional extension of *=*tu* 'to thee' to the third person, at the expense of the original clitic *=*sē* 'to him'. Another application of the same type of analogy resulted in the functional spread of 2sg. reflexive =*di* to 3sg in Luvian. In Palaic, the analogy possibly went in the opposite direction and the etymological third singular reflexive =*si* is attested in imperative sentences implying the underlying second singular subject. In this case, however, the appeal to an analogical influence of plural

[55] Katz (1998: 156, 247) suggests that Toch. A =*m* / B =*me* referring to the third person do go back to the clitic *=*smos*, whereas its first and second person counterparts go back to the aphaeretized forms of stressed pronouns **n̥sme* 'us' and **usme* 'you' respectively. This reconstruction entails formal problems concerned with the vocalism of Tocharian B, and in addition there is no obvious advantage in deriving Tocharian oblique clitics from Late Indo-European stressed object pronouns, and disconnecting them from oblique clitics in Anatolian. In my view, one can reconstruct the system of Indo-Hittite dative/accusative plural clitics as =*nos* (1pl.) / =*smos* (2pl.) / =*smos* (3pl.), and assume that Tocharian generalized the second/third person form to all persons. The Late Indo-European 2pl. clitic *=*wos* 'you' can be explained as an innovation based on stressed forms and obtained through a proportional analogy of the type *nōs* / =*nos* ~ *wōs* / X.

forms may be unnecessary since the spread of 3sg. reflexives to other persons and numbers is typologically common. In Lydian, the plural clitic *=mś* influenced the form of its singular counterparts, which led to the creation of a wholly new morpheme *=mλ* 'to him' (perhaps also 'to thee'). This etymology provides an important confirmation of a general claim that Anatolian plural clitics could influence the structure of Anatolian singular clitics. A different analogy, which probably occurred late in the history of Lydian, brought about the extension of the original second person reflexive *=τ* to the third person. This clitic eventually came to be perceived as a generalized reflexive marker and began to spread across the board.

The only clitic the spread of which at Stage 3 remains formally unaccounted for is the Hittite reflexive *=z(a)*, phonetically /ts/, which is routinely reconstructed as **=ti* (Kimball 1999: 191 with ref., EDHIL: 1019). There is simply no form in the Proto-Anatolian reflexive paradigm that could develop into Hitt. **=ti* >*=z(a)* according to the standard sound laws. And yet, the connection between the Hittite *=z(a)* and the Luvian pronominal clitic *=di* belongs to the common stock of knowledge of Anatolianists at least since Laroche 1959. In view of the compelling evidence for the common origin of Luvian *=di* and the Indo-European second person dative clitic, presented above and supported by parallels from the other Anatolian languages, only two solutions remain possible. One must either reject the connection between Hitt. *=z(a)* and Luv. *=di* altogether, or assume that Hitt. *=za* was derived from Indo-Hittite **=toi* or Anatolian **=tē* with the help of changes other than sound laws.

The success of the first approach would be contingent upon finding alternative plausible cognates of Hittite *=z(a)* in Anatolian or Indo-European. At the present time,

however, I am not aware of any alternative etymological suggestions backed by the adequate semantic analysis of *=z(a)*. The claim of Carruba (1964: 429-30) that *=z(a)* should be connected with the Indo-European demonstrative stem **to*- stumbles upon the lack of any Anatolian inflected forms that can be related to this Indo-European stem, and in any event is not helpful for tracing the inflectional prehistory of *=z(a)*.[56] Josephson's assertion that Hittite *=za* should be identical with 3rd sg. dat. *=sa* of the possessive stem *si/a*- 'his' (Houwink ten Cate and Josephson 1967: 137) does not take into consideration the actual pronunciation of *=z(a) as* /ts/. The scholars who studied *=z(a)* in the subsequent years tended to abstain from suggesting extra-Anatolian cognates of this Hittite particle. One can mention Neu's confession: "Die Gemeinanatolische Partikel **-ti*, auf die heth. *–z* und 'mediopassives' *-ti* zurückgehen, vermag ich bisher noch nicht an Indogermanisches anzuschliessen." (Neu 1968: 145), and Oettinger's verdict: "Zur Etymologie lässt sich nur sagen dass *-z* auf uranatolisch **–ti* von offenbar sehr ähnlicher Bedeutung zurückgeht. Dessen Herkunft ist unklar." (Oettinger 1997: 412). The absence of plausible alternatives is not due to the lack of interest for the origin of *=z(a)* on the part of Anatolian scholars, but rather due to objective difficulties with finding suitable Indo-European reflexes of Indo-Hittite ***=ti*, a putative direct ancestor of Hitt. *=z(a)*.[57]

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[56] Carruba (1969: 45-6) attempted to corroborate his earlier suggestion by adducing the Luvian clitic *=du* 'to him', allegedly derived from Indo-European **=to(i)* (vel sim.) built on the demonstrative stem **to*-. This suggestion is phonetically unlikely given the change of non-final **oi* to *ī* in Luvian, as per Melchert (1994: 279). Note in addition that Carruba has not presented any arguments that would motivate the replacement of the inherited **=soi* with **=toi* in the prehistory of Luvian.

[57] An exception to this tendency is Josephson's (2003) recent attempt of to connect Hitt. *=za* with the Vedic demonstrative pronoun *syá/tyá*-, on which see Klein 1998 and Kupfer 2003: 219-43. This etymology is not based either on a close phonetic match (Josephson has to explain *-a*- as a secondary

The second approach is exemplified by the recent work of Elisabeth Rieken. Rieken (2004: 183) was the first scholar to explicitly connect both Hittite *=z(a)* and Luvian *=di* with the Late Indo-European *=toi* 'to thee'.[58] Rieken was well aware of the fact that the direct reflex of *=*toi* would be Old Hittite **=*te*, just as *=*soi* 'to him' developed into *=se* in old Hittite (Kimball 1999: 214). Therefore she proposed that *=*toi* had changed to *=*ti* already in Proto-Anatolian, and attributed this change to the analogical influence of the nominal dative-locative ending *-*i*. This suggestion can be viewed as an extension of an earlier proposal by Melchert (1994: 218), who explained the vocalism of Palaic *=ti* 'to thee' as a result of analogical leveling triggered by the dative-locative nominal ending.

Rieken's approach has much to recommend itself from the functional point of view. Now one can hypothesize that *=*ti* > *=z(a)* originally functioned in Hittite as the second singular reflexive, while its spread to the third singular represented the first stage in its proliferation. This could be yet another proportional analogy motivated by the homonymy of the second and third plural reflexive clitics (*=smas* / *=smas* ~ *=z(a)* / *X*), and parallel to the spread of *=di* in the ancestor dialect of Luvian. Later, however, the reflexive *=z(a)* was generalized from the third singular to all the other persons and numbers, and ousted even those plural reflexive clitics that were responsible for its original spread. This typologically common process finds an incipient parallel in the

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deictic element), or on similarities in the basic meaning of both morphemes. The issues related to the Luvian particle *=ti* have been completely ignored in this article.

[58] Rieken gave credit for this suggestion to Melchert (1994: 218), but the claims of the two scholars were in fact substantially different. Melchert limited his analysis to the etymology of Palaic *=ti* 'to thee' (cf. below), which he does not connect with Hitt. *=za* or Luv. *=di* anywhere in the *Anatolian Historical Phonology*.

spread of Lydian -*τ* to the first plural, with the provision that the relevant examples are genuine. The tide reversed in the Middle Hittite period, when the plural reflexive clitics *=nas* and *=smas* were reintroduced from the non-reflexive paradigm under the direct impact of Luvian.

As for the formal side of Rieken's proposal, it appears to be significantly more problematic. Unlike Melchert's suggestion regarding the origin of Palaic *=ti*, which can be corroborated by the identical vocalism of the reflexive *=si* in Palaic, a would-be analogy leading to the development of *=ti* in Proto-Anatolian loses its credibility in the face of the preservation of *=se* 'to him' in Old Hittite. The paradigmatic leveling could not have been selectively applied only to some members of the rhyming group of dative clitics (**=mē* /**=tē* /**=sē*). It is even less credible that it was applied to **=tē* after this pronoun was specialized as a reflexive in Proto-Anatolian (stage 2), but failed to be applied to the true dative anaphor **=sē*. As a matter of fact, we can observe the effects of an analogy that changes *=se* into *=si* in the history of Hittite, but this process occurred by the end of the Old Hittite period, and obviously has nothing to do with the putative Proto-Anatolian change discussed in this paragraph (cf. Melchert, 1994: 218).

If the development **=tē* > **=ti* cannot be explained either through sound law, or by analogy, one may try the third option offered to us by the comparative method. The form **=ti* could be borrowed from an Anatolian dialect where the change **toi* > **ti* was phonetically regular or analogically motivated. All the Anatolian languages other than Hittite probably qualify as possible sources of borrowing according to this formal criterion, but Luvian also does it on sociolinguistic grounds. On the one hand, we have abundant evidence for the structural influence of Luvian on Middle and Late Hittite,

which includes the specific case of reflexives discussed earlier in this section. On the other hand, we have enough data to posit intensive lexical contacts between the two languages in the prehistoric period. Neither of the two kinds of evidence is available in the case of Palaic or Lydian, and so they can be eliminated as sources of borrowing by Occam's razor.

The most likely scenario for the development of reflexives within Hittite is represented below:

Table 20: Development of Hittite Reflexives (Stage 3)

	nom.	**Acc.**	**Dat.**	**(dat.) refl.**
1	(none)	=mu		=mē
2	(none)	=te/ =de		=tē/=dē ↓
3	=as (c.); =ad (n.)	=an (c.); =ad (n.)	=sē	=tē/=dē

Table 21: Development of Hittite Reflexives (Stage 4)

	nom.	**Acc.**	**Dat.**	**(dat.) refl.**
1	(none)	=mu		=m**i**
2	(none)	=te/ =de		=t**i**/=d**i**
3	=as (c.); =ad (n.)	=an (c.); =ad (n.)	=sē	=t**i**/=d**i**

Table 22: Development of Hittite Reflexives (Stage 5)

	nom.	**Acc.**	**Dat.**	**(dat.) refl.**
1	(none)	=mu		=ti/=di
2	(none)	=te/ =de		=ti/=di ↑
3	=as (c.); =ad (n.)	=an (c.); =ad (n.)	=sē	=ti/=di

It is very likely that the implementation of Stage 3 in Hittite was motivated not only by the proportional analogy (=*smas* / =*smas* ~ *=*tē* / *X*), but also by the similar change in the territorially adjacent Luvian dialects. As was already mentioned above, the spread of second person clitics to the third person, whatever be its motivation, is typologically unusual, and so when one observes a cluster of such changes in a group of closely related dialects, an areal explanation should be seriously considered. The Luvian

language, where the innovations of Stage 3 were implemented most consistently, could generate a "linguistic wave" that would spread across the continuum of already differentiated Anatolian dialects triggering similar functional changes, but on a smaller scale. This scenario would, however, remain a mere possibility, if we did not have independent evidence for the formal convergence between Hittite and Luvian reflexive clitics. Now that such evidence is available, the interpretation of Stage 3 in areal terms must be preferred to assuming a set of typologically similar, but unrelated changes.

The separation of formal and functional convergence between Hittite and Luvian reflexives represents to some extent an artifitial methodological device. It may be possible to merge Stages 3 through 5 on the assumption that the spread of *=*tē*/=*dē* across the reflexive paradigm went hand in hand with its phonological modification. The convergent innovations are listed separately mainly in order to stress that the borrowing of the *–i* vocalism could not predate the functional extension of *=*tē*/=*dē*. If we assume the opposite order, we could expect that 3sg. clitic *=*sē* 'to him(self)' would likewise undergo the convergent change to **=*si*, which is flatly contradicted by the Old Hittite evidence.

4.5 Grammatical Borrowing: When and Why? I am keenly aware of the fact that the claim about an isolated contact-induced formal change in the pronominal system of any language is strong enough to look suspicious. Critics may wonder if the argumentation by exclusion provides a sufficient justification for assuming foreign

influence of what is frequently regarded as the most stable part of the core vocabulary.[59] Fortunately for my account, there is an independent confirmation that this part of the vocabulary was not so stable in the prehistory of Hittite as a purist might think. It comes from the analysis of the clitic complex *=(t)tu=za* attested from the Middle Hittite period onwards.[60]

(125) HKM 71 Obv 9-10, MH/MS, Alp 1991: 254
namma=**tu**=za UGULA NIMGIR.ERÍN.MEŠ halzissanzi
'They call **thee** "overseer of military heralds" (a high-ranking military title)'.

(126) HKM 56 Obv 11-12, MH/MS, Alp 1991: 224
nu=**ttu**=za=kan kāsa sanza
'I am now angry **with thee**'.

One can see from the example above that *=tu* represents an allomorph of the Hittite clitic *=ta* '(to) thee'. It could be used both for direct and indirect objects, as in (125) and (126) respectively. The factor conditioning the synchronic choice between the allomorphs *=tu* and *=ta* is the presence vs. absence of the particles *=z(a)* or *=san* immediately to the right (the combination *=(t)tu=za* occurs approximately five times more frequently than *=(t)tu=(s)san* does). It is clear that the origin of such a distribution cannot be phonetic, nor can one find a plausible source for the analogical extension of

[59] The general claim that pronouns are never or extremely rarely borrowed was falsified long ago (see Thomason 2001: 83-84 for a set of examples). It remains nevertheless a descriptive fact that Indo-European personal pronouns are resistant to borrowing from unrelated or distantly related languages.

[60] I am grateful to Y.Gorbachov (University of Chicago), who was the first to indicate the importance of the allomorph *=tu* for my argument. Note that the sequence *=tu=za* is attested in a late copy of the Old Hittite Telibinu proclamation (KUB 11.5 Rev. 2).

=tu, since a clitic of such a shape is not otherwise attested in Hittite.[61] The assumption of a Luvian borrowing into Middle Hittite would be equally gratuitous, unless one can explain why the borrowed form is used exclusively in a position before two paricles inherited from Old Hittite.

Nothing, however, contradicts the assumption that the variant *=tu=* had existed already in Old Hittite, exactly with the same distribution that is attested in Middle and Late Hittite. We simply lack passages featuring the second person clitic in front of *=za/=san* in the Old Script texts. This is probably to be explained by the absence of letters and the paucity of treaties written on the earliest Hittite tablets available to us, since these two textual genres display the largest concentration of second person forms in a later period, and dominate among the sources of attestation of *=(t)tu=za*. In the absence of positive evidence, it is more logical to assume that Middle Hittite has inherited an old distribution, than to posit an innovation for which we cannot account.

Once we relegate the problem to the prehistoric period, it receives a likely explanation in terms of language contact. Hittites had apparently adopted not only individual Luvian reflexive clitics, but also the whole sequence **=tu=ti* in lieu of the inherited **=te=tē*. A factor that no doubt facilitated this contact-induced change was the close genetic similarity between Hittite and Luvian and, more specifically, the phonetic resemblance between the relevant pronominal forms. The same factor had to be at play in the borrowing of the Old Norse third-person plural pronouns into the Anglo-Saxon

[61] F. Josephson suggested that Hitt. *=tu*(*=za*) represented a relic accusative clitic, whose function was otherwise taken over by the original dative clitic *=ta* (Houwink ten Cate and Josephson 1967: 136-7). This hypothesis is falsified by the direct correspondence between Hitt. *=ta* and the Indo-European accusative clitic *=te*.

dialects (cf. Old Norse *θeir* / *θeim* / *θeira* 'they / them / their' with their Old English equivalents *hīe* / *him* / *hiera*). Later the clitic *=tu* came to be perceived as an allomorph of *=ta*, and its usage was extended to the position before *=san*, perhaps for the reason of partial phonetic similarity between *=z(a)* and *=san*.

The parallel between the prehistoric contacts between Hittite and Luvian on the one hand, and the historical contacts between Old English and Old Norse on the other hand, can be carried beyond this particular episode. Dawson 2003 has convincingly argued that the defining factor in the lasting impact of Norse on the structure and basic lexicon of the English language was not so much the number of Danes that settled in England, or the long period of contacts, as the genetic and typological similarity between the two languages that would enable the speaker of one language to understand the other language without learning to speak it. She appropriately refers to the convergence triggered by this type of contact as koineization, and stresses the fact that in such conditions it is frequently difficult to draw a line between borrowings *sensu stricto* and the contact-driven modification of linguistic items that had been already available in the target language. This approach helps to explain why the Norse presence in medieval France, or the conquest of England by the assimilated French-speaking Normans failed to result in a comparable structural convergence: the mutually incomprehensible

character of Romance and Germanic languages precluded the formation of a new *koine*.[62]

If we assume that Proto-Hittite and Proto-Luvian population groups lived side by side in sufficient numbers and intensively communicated each in their respective language at some point shortly after their genetic separation, it is easy to envisage the situation when a new generations of speakers would perceive these two closely related dialects as stylistic varieties of the same code, and could draw on either of them in the process of language acquisition. If the speakers of Hittite were in the majority in a given area, it is reasonable to expect that Hittite elements would predominate in the *koine* of this area, but it does not impose any restrictions on the classes of words that could be adopted from Luvian. A very general prediction that can be made is that formally simpler and functionally more transparent forms would have better chances to enter the new *koine*. Thus one can hypothesize that the sequence *=*tu*=*tē* would be given preference over *=*te*=*tē* in order to differentiate two phonetically similar clitic pronouns. The explanatory force of such an account should not overestimated: we cannot make exact forecasts about elements that would be borrowed into a *koine* in a particular contact situation. The point of comparison with medieval England is rather to stress that basic lexical items can be easily adapted from various sources in a context of koineization.

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[62] The only member of Swadesh's hundred-word list that was borrowed into English from French is *mountain*, an item of short supply in southern England. The words belonging to this list that were either borrowed from, or experienced the influence of Old Norse include at least *die*, *egg*, *give*, and *sky*.

We do not have historical records that would shed light on the early convergence between Hittite and Luvian. One may, however, try to place it within a relative chronology of phonological and morphosyntactic changes that occurred on the way from Proto-Anatolian to Hittite. While the relative chronology does not directly translate into the absolute chronology, a significant number of changes that occurred between the postulated contact episode and the oldest attested stage of the Hittite language would preclude the hypothesis that the reconstructed koineization of Hittite was connected with the expansion that resulted in the creation of the Hittite Old Kingdom. We have already seen that the generalization of Hitt. *=z(a)* as a reflexive particle co-occurring with all types of subjects (stage 6) represents one of such changes. The relative chronology of other developments is contingent upon the interpretation of the Hittite medio-passive extension *–di* (with a synchronic variant *–d*).

The following inventory of Old Hittite medio-passive verbal endings, with their traditional grammatical interpretation, is extracted from Kassian 2002:

Table 23: Old Hittite Medio-passive Conjugation

	Present		**Preterit**		**Imperative**
	Sg	**Pl.**	**Sg.**	**Pl.**	**Sg.**
1	*-ha*; *-hari*;	*-wasta* (1x)	*-ha**d***	N/A	N/A
2	*-ta* (1x)	*-tumari* (1x)	*-ta**d***	N/A	*–hu**d***
3	(I) *-ta*; *-tari* (II) *-a*; *-ari*; *-ani*	*-anta*; *-antari*	(I) *-ta**d*** (II) *–a**di***	*-anta**di***	(I) *–taru* (II) *–aru*

One can see that the present and preterit medio-passive endings have an identical first part for each person/number, but differ with respect to their extensions. According to received wisdom, the second part of Old Hittite present endings is zero or *–ri* (rarely *–ni*), while the preterit endings are extended by the elements *–di* or *–d*. This distribution is somewhat modified in the later history of Hittite, where we encounter

present endings *–tadi* (2 sg.), *-wastadi* (1 pl.) and *-tumad* (2 pl.) alternating with the variants in *–ri*. At the same time, the extension *–ri* remains restricted to the present tense throughout the history of Hittite (Neu 1968: 24-30).

The lack of strict association between the dental extension and the preterit tense was confirmed through my examination of the Old Script corpus. Contrary to the established opinion, the form *suppiyahhadi*, occurring in the script of an Old Hittite ritual, should be interpreted as a present tense verb:

(127) KBo 25.112 ii 14'-15', OS, CTH 733.II.4, Neu 1980: 191
LUGAL-uš=**za** šuppiyahha**di** *ANA* [hal]pudi mānhānda māldi kē=a *QATAMMA*
'The king purifies **himself**. As he chants before the [*hal*]*pudi*-altar, so also (he chants) these things in the same way'.

The first components of Hittite medio-passive endings, marking person and number, have, in their majority, a good pedigree going back to a set of reconstructed Indo-Hittite inflectional markers labeled as "perfect", "stative", or "proto-middle" by different scholars and reflected in the perfect and medio-passive conjugation of various Indo-European languages.[63] The equation between the Hittite medio-passive extension *-ri* and the Indo-European element *–r* with an identical function, augmented by the *hic et nunc* particle *–i*, is likewise well established (Yoshida 1990). By contrast, the indicative extensions *–di*/*-d* lack direct counterparts in Indo-European, and must be considered a Hittite or Anatolian innovation.[64] Of the two variants, *-di* is the more archaic one.

[63] See Jasanoff 2003: 1-29 for a survey of previous opinions about the reconstructed meaning of this conjugation, and the rest of the book for Jasanoff's own views.

[64] Pedersen (1938: 110), followed by Oettinger (1997: 417), connected Hitt. *–di/-d* with the Indo-European imperative suffix **–dhi*. This etymology remains very likely for the Hittite 2sg. middle

According to the suggestion of Kuryłowicz (1964: 69), Hittite 3sg. preterit *–ta-d* represents a combination of the old medio-passive and the new active preterit ending. This attractive hypothesis also allows one to explain 1sg. pret. *-had* and 2sg. pret. *–tad* as **–hadi* and **-tadi* (attested in later Hittite texts), which had undergone paradigmatic leveling. This analogical development, in its turn, could bring about the general confusion between the extensions *–di* and *–d*, which came to be perceived as two synchronic variants of the same morpheme, and were eventually associated with present and preterit respectively in later Hittite.[65]

As for the medio-passive extension *–di*, its origin is not to be sought in the verbal morphological inventory. Neu (1968: 145) connected this morpheme with the pre-Hittite reflexive clitic **=ti/=di*. The stranding of the original Wackernagel clitic to the post-verbal position has several parallels within Indo-European, but the suffix *–s'a/-s'* marking the Russian reflexive voice and going back to the common Slavic Wackernagel reflexive clitic **=sę* provides a particularly close analogy. Example (49) cited above can serve as an instance of a syntactic construction in which such a stranding

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imperative ending *-hu-d*, even if it requires the assumption of an irregular apocope (for which cf. Latin *dic* 'say!', *fac* 'do!', and *duc* 'lead!'). Carruba (1992a: 15-31) linked *-di* with medio-passive infinitive suffixes Ved. *–dhyai* and Gk. *–σθαι,* and boldly postulated the existence of an Indo-European medio-passive suffix **-dh-* with various language-specific formal extensions and functional restrictions. The common handicap of both theories is the necessity to invent more or less artificial analogies that would account for the typologically unlikely spread of dental suffixes from peripheral forms to the indicative.

[65] Alternatively, one can hypothesize that the variant *–d* was always due to the apocope of the earlier *–di*, or to its analogical reanalysis in preterit forms. This hypothesize, however, appears less adequate for the purpose of explaining the complementary distribution of *–di* and *–d* in specific preterit endings in Old Hittite. In addition, if Pal. *šar-ku-ta-at* (KUB 35.165 Obv. 6) is indeed a medio-passive form, as per Kammenhuber 1959, then the *–d* extension represents a common Anatolian innovation, whereas the *–di* extension must be exclusively Hittite.

might have originated.[66] Neu's approach allows one to explain why the extension *–di* does not appear to have been restricted to a particular tense in Hittite.

Neu's suggestion was not immediately accepted by all scholars. In recent years, however, it received a striking confirmation from the analysis of Iron Age Luvian sentences with an element *–si* appended to verbal endings. The medio-passive character of such forms is not immediately clear in each and every context, but can be unambiguously inferred from the comparison between (128) and (129), where *–si* alternates with *–ru* (3sg. impv.) within the paradigm of the passive verb *iziya-* 'to become'.

(128) ÇINEKÖY , §7, Tekoğlu and Lemaire 2000
|hi-ia-wa/i-sa-ha-wa/i(URBS) |su-ra/i-ia-sa-ha(URBS) |"UNUS"-za
|DOMUS-na-za | i-zi-ia-**si**
'Que/Hiyawa and Assyria became one house'

(129) KARATEPE §53 (Hu.), Hawkins 2000: 55
REL-pa-wa/i za ("CASTRUM")há+ra/i-ní-sà-||za i-zi-ia-**ru**
(DEUS)BONUS-sa (DEUS)VITIS-sá-há
'Then let this fortress become (one) of the Grain-god and the Wine-god'.

Oshiro (1993: 54) was the first one to link the Luvian medio-passive marker *–si* with the Palaic Wackernagel clitic *=si*, which, as we have seen above, probably had a reflexive meaning. This idea found further development in the work of Rieken (2004: 183-84), who drew a direct parallel between the spread of Hitt. **=ti*/*=di* and Luvian *=si*

[66] For the reconstructed duplication of the Wackernagel accusative anaphoric clitic in other positions in the history of Lycian compare the account of Garrett 1991. Alternatively, one can envisage the scenario according to which Wackernagel clitics were first attached to medio-passive forms in verb-initial sentences of the type described in Sidel'tsev 2002. What speaks against such a solution is the rarity of this syntactic type in the original Hittite compositions.

to the post-verbal position, thus vindicating Neu's theory.[67] There is, however an important difference between the relative chronologies of the two syntactic processes. The spread of Luv. *=si* must have occurred before Stage 3, which effectively eliminated this Wackernagel clitic. The rarity of verbal forms in *–si* in Iron Age Luvian texts, together with their complete absence in Kizzuwatna Luvian, bears witness to the vestigial character of this formation. On the contrary, the stranding of Hitt. **=ti/=di* must have postdated Stage 3, and probably Stages 4/5 as well. Otherwise, it would be very difficult to explain why the second person clitic **=tē/*=dē* was generalized as a medio-passive marker, and then underwent an irregular contraction to **=di* under the influence of a Luvian clitic that never had this function.

The formal relationship between the Wackernagel clitic **=ti* and the verbal extension *-di* in Hittite should be discussed with reference to Proto-Anatolian lenition. According to the conventional formulation of this sound law, Proto-Anatolian voiceless stops were voiced after accented long vowels, or between two unaccented vowels (cf. Melchert 1994: 60 with ref.). Adiego 2001 succeeded in unifying the two conditions suggesting that Proto-Anatolian lenition occurred between two unaccented morae. The lenition's effects are best preserved in the verbal system of Luvian, while in Hittite it was obfuscated by a number of subsequent analogical changes. Nevertheless, occasional synchronic alternations within Hittite verbal paradigms (e.g. *ā́gi* '(s)he dies' vs. *akkánzi* 'they die', presumably modeled upon the ablaut of acrostatic stems, such as *wḗgun* 'I

[67] A more remote parallel is the creation of the Lydian emphasizing particle *=ś*, which can be analyzed as the original reflexive marker *=ś/=is* stranded from the expected second position, as per Melchert 1991.

wished' vs. *wekkánzi* 'they wish') vindicate the existence of a phonologically conditioned lenition at the earlier stages of the Hittite language.[68] The distribution of the clitic allophones *=*tē*/*=*dē* etc., reconstructed for Pre-Luvian and Pre-Hittite in the tables above, was presumably governed by the laws of lenition. The voiceless variant would be favored in a position after another consonant, illustrated by (120), while the lenited variant would be preferred in a position between the unstressed vowels of the clitic chain.

This distribution must have been alive in Hittite till the moment when *=*ti*/*=*di* became licensed in postverbal position and was specifically associated with the medio-passive conjugation. Since all the unextended medio-passive markers ended in unstressed vowels, the variant =*di* was automatically chosen in this environment. Later in the history of Hittite, the laws of lenition lost their synchronic status, and all the second-position clitics generalized the unlenited allomorphs. This is clear from the orthographic variants with consonant doubling, such as =*tta* and =*ttu*, which occur in positions where lenition is otherwise predicted.[69] This analogical generalization was not applied, however, to the medio-passive extension –*di*, which presumably had already

[68] For synchronic alternations between voiceless and voiced stops within Hittite verbal paradigms see Kimball 1999: 279-81. Unfortunately, none of these cases can be shown to represent an original acrostatic stem, where the lenition is conditioned by the preceding extended grade of a root vowel. The example of the verb 'to wish', where an acrostatic ablaut can be reconstructed for independent reasons, is synchronically less compelling, since the alternation between voiceless and voiced stops appears to have lost its original morphological conditioning and become sporadic in this case (cf. Oettinger 1979: 17). I would like, however, to argue that whatever analogical explanations one can suggest for synchronic cases of lenition in Hittite, they would make sense only if this process was phonetically conditioned in the original set of cases.

[69] Numerous variants such as *namma=tu=za* (for the expected **namma=ttu=za*) in (125) must be regarded as instances of simplified spelling. This phenomenon, briefly discussed in Yoshida 1998: 607, deserves much fuller investigation aimed at determining its licensing conditions.

lost the synchronic connection with its original source. By contrast, Luvian has generalized the lenited variant of the Wackernagel pronominal clitics (*=di* > *=ri*). This fairly late development was not shared by the closely related Lycian language, which patterns with Hittite in preserving the voiceless variant *=ti* (Melchert 2004a: 65).

The final accord that brings us to the stage attested in the earliest Hittite texts is the affricativization /t/>/ts/_/i/, accompanied by the apocope of *–i* in word-final position.[70] The posited sound change must have occurred after the lenited variant **=di* was wiped out of the Hittite clitic system, because otherwise **=ti* would have been retained under analogical pressure. The fact that this sound change failed to occur in the case of the medio-passive extension *–di* refutes the contention of Yoshida (1998: 614) that both **t* and **d*, as opposed to **dh*, were palatalized before the high front vowel. Note that, even if we make an unlikely assumption that Hitt. *=z(a)* and Hitt. *–di* are not related, we still have to admit that affricativization was a fairly late change because it applied to the clitic *=ti/=di* borrowed from Luvian. It would require a vivid imagination to believe that IH **dh*, which did not otherwise yield reflexes distinct from **d* in any of the attested Anatolian languages, was preserved in Pre-Hittite at such a late stage.[71]

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[70] Cf. Kimball (1999: 191-92). I find it difficult to believe that the apocope of *–i* was also regular in a position after *d*, since the preservation of the medio-passive extension *–di* militates against this assumption. In my opinion, the apocope in the imperative suffix *–dhi* must be viewed as one of those irregular shortenings that frequently occur in imperative forms.

[71] The philological considerations adduced by Yoshida 1998 in favor of the sound change */d/>/dz/_/i/ do not convince me. It is true that some verbal forms in *–*ēzzi* are sometimes spelled with *-ēzi/-ezi* in Old Hittite, but, in those cases where we have enough data (e.g. *iē(z)zi* 'he makes' or *pehude(z)zi* 'he brings') this spelling appears to be less frequent than *–ēzzi/-ezzi* (Kassian 2002: 99, 116). In such a situation, I prefer to think that the shorter variants *-ēzi/-ezi* do not testify to the existence of a separate phoneme /dz/ but rather represent yet another instance of simplified spellings. This is precisely the explanation adduced by Yoshida 1998 for occasional Old Hittite 3sg. verbal forms in *–nuzi*

The observations made above can be summarized in the following relative chronology:

1. Hittite borrows Luvian *=*ti*/=**di*.
2. Hitt. *=*ti*/=**di* is generalized to all persons and numbers.
3. Hitt. =*di* spreads to the postverbal position, where it looses its clitic status.
4. The variant =*ti* is generalized in the second position.
5. /t/ > /ts/ /_/i/; /tsi/ > /ts/ /_#.

It is impossible to formally prove that the clitic =*ti*/=*di* was borrowed into Hittite from a variety of Luvian that had already differentiated from the other Luvic dialects, and not from Proto-Luvic or even a different Luvc dialect. Yet, in the absence of evidence for close linguistic contacts between Hittite on the one hand, and Lycian, Milyan, and Carian on the other hand, the continuity of linguistic interference between Hittite and Luvian remains the only plausible hypothesis. It is also impossible to exclude that some of the postulated changes (e.g #2 and #3) occurred simultaneously. But the sheer complexity of phonological and morphosyntactic evolution that postdated the discussed contact episode prompts one to posit a period of several hundred years between the adaptation of Luv. *=*ti*/=**di* and the stage of Hittite attested in the Old Script texts. Prehistoric contacts between Hittite and Luvian (or Luvic) are probably to be dated back to the late third millennium BC.

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occurring in free variation with -*nuzzi* The argument that the sign IZ is too simple to be omitted by less diligent scribes is not compelling because, after all, it takes more effort to write even a three-stoke sign than to write nothing!

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SOCIOLINGUISTICS OF THE LUVIAN LANGUAGE

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5 COEXISTENCE BETWEEN HITTITE AND LUVIAN BEFORE 1350 BC.

5.1 Introductory Remarks. If the Hittite and the Luvian speakers occupied the same or the adjacent territories already in the prehistoric period, as they apparently did up to the collapse of the Hittite Empire in about 1200 BC, it is appropriate to inquire about how each of the two groups perceived itself and its neighbors. One may also try to investigate the nature of geographic and/or social boundaries that separated the two groups from each other, as well as the extent of Hittite-Luvian bilingualism at various points in the second millennium BC. The treatment of these subjects will constitute the main topic of the rest of the present dissertation.

I will divide my subsequent discussion into two chapters arranged in chronological order. The present chapter addresses the status of Luvian and Hittite in Anatolian states that predate the formation of the Hittite Empire. The written sources provide an uneven coverage of the long time period treated herein, and therefore my discussion of individual points in time and space must focus on the sociolinguistic implications of particular types of data, which may lack parallels with reference to other spatial and temporal points. The tests I am using include prosopographic analysis, the study of lexical borrowings, code-switching, and structural interference, direct

assessment of historical information, and the analysis of acronymic values assigned to Hieroglyphic Anatolian syllabograms. By contrast, the study of the sociolinguistic situation in the Hittite Empire can rely on the simultaneous application of several tests that yield convergent results. This period will be discussed in much detail in Chapter 6.

There is a broad consensus regarding the linguistic dominance of Luvian in many parts of Central Anatolia in the Middle Bronze Age. The controversial issue is the status of Hittite in the period under consideration. The opinions representing the two extremes in the treatment of this problem are those of Güterbock 1956a and Steiner 1981. According to H. Güterbock, the distribution between Hittite and Luvian-speaking areas was mainly geographic. When he writes that "Hittite was not only the written, but also the spoken language in the Old Kingdom, and remained the spoken language in the central area even in the New Kingdom" (p. 138), it is clear from the general context of this statement that Hittite, according to him, was the **main** spoken language in the respective areas. G. Steiner, on the other hand, maintains that "in spite of the use of the "Hittite" as the official written language in the country of Hatti the rulers and the "ruling class" of the "Old Kingdom" were by no means "Hittites", but for the most part probably Hattians" (p. 167). He specifies elsewhere that Hattic was "the language proper of both the main part of the population and the rulers of the country" (p. 166). Hittite in the Old Kingdom (and, presumably, also in the subsequent period) functioned mainly as the language of written communication.[1]

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[1]The main difference between these views and the earlier theory of Rosenkranz 1938, which will be discussed in the following chapter, is Steiner's reluctance to view Hittite as the socially dominant

These two scholars approached the sociolinguistic situation in Bronze Age Anatolia from two very different perspectives. The convictions of H. Güterbock must have been derived from his experience in interpreting Hittite cuneiform texts. Few, if any of the scholars working in the field of Hittite philology maintained that Hittite scribal tradition was entirely alloglottographic. The claim that the authors of Old Hittite compositions were native speakers of Hattic is particularly implausible, since Hittite does not appear to show any traces of structural interference with Hattic. While the development of Middle and New Hittite was clearly influenced by its contacts with Luvian, many of the contact-induced changes described in this and the following chapter receive the most natural explanation under the assumption of language maintenance. "The changes in Hittite during more than three centuries of its attestation are more than is consonant with a purely written language" (Melchert 2003a: 13).

Steiner's reasoning, on the other hand, is mostly based on onomastic considerations. The name of the Hittite language *nasili*/*nisili*/*nesumnili* is derived from the town name Kaneš/Nesa, but there is little continuity between the names of Kaneš denizens, known to us from Old Assyrian sources, and the names of Hattusa aristocracy preserved in Hittite transmission. Steiner (1981) justly observes that the assimilated population groups normally shift to the language of their surrounding communities before giving up their distinct personal names. He alludes to the example of Late Bronze

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dialect. The adoption of Hittite/Nesite as the chancellery language in Hattusa had, according to Steiner, less to do with its prestige than with its status of a *lingua franca* in Central Anatolia of the Colony period. This is the weakest part of Steiner's theory. In my opinion, the supposed Hattic elites of Hattusa would not need Hittite as a language of international communication, because Akkadian had fulfilled this role remarkably well in the Colony period and continued to do so in the Old Kingdom period, at least in certain functional domains. Therefore, the gradual shift from Akkadian to Hittite as the main written language of the Old Kingdom does not make sense unless it was dictated by nationalistic concerns.

Age Babylonia, where the Kassite invaders used Akkadian as their official language but retained their non-Semitic theophoric names (p. 158). Therefore, the scenario according to which the ruling class of Hattusa preserved the Hittite/"Nesite" language but shifted to Hattic personal names is, in Steiner's opinion, very unlikely.

It is fair to say that the views of Gerd Steiner have had no resonance in the mainstream Hittitological literature. The idea that Hittite was never natively transmitted in Hattusa runs so much against the basic unspoken assumptions of Hittite philologists that the arguments adduced in its support were silently dismissed. Consequently, Steiner's vague claim about the preponderance of Hattic personal names in the Hittite Old Kingdom has never been tested. This is rather unfortunate, since even if one does not agree with Steiner's solutions, the questions that he has raised deserve an honest discussion before one addresses the status of Luvian in the Hittite kingdom. In what follows, I will present a scenario that both assumes the presence of Hittite native speakers in Hattusa and takes into account the (partial) onomastic discontinuity between the Colony period and the Hittite Old Kingdom.

The oldest historical text preserved in the archives of Hattusa is the *res gestae* of Anitta (CTH 1). This narrative, which describes the events of the Colony period, refers to Pithana, the father of Anitta, as "king of Kussara" (Neu 1974: 10). On the other hand, Hattusili I, the first Hittite monarch who certainly ruled from Hattusa, likewise refers to himself as "man of Kussara" (de Martino 2003: 30). This allows scholars to talk about the "Kussara dynasty" that first came to power in Kaneš/Nesa as a result of Pithana's conquest, and then established itself in Hattusa in the Old Kingdom period. This term need not imply that Hattusili I was the direct descendant of Anitta, or even

that the two individuals were close blood relatives. Forlanini (1995: 129-31) speculates that a certain Tuthaliya identified as the "Great Cup-bearer" (*rab šaqê*) of Zuzzu, king of Kaneš in Kt j/k 625 2-3, may have been the same individual as the Tuthaliya mentioned in the Hittite offering list for the Royal Ancestors (KUB 11 7 i 10-12). Whether or not this identification will stand the test of time, it is likely that Anitta and the first Hittite kings originally belonged to the same clan, and this is the reason why the *res gestae* of Anitta were kept in the archives of Hattusa.

The origin of Anitta's name is unclear, but the name of his father Pithana is decidedly non-Indo-European, since the combination "stop+laryngeal" was proscribed in the Hittite inherited lexicon. The same goes for the name of Tuthaliya, the semi-legendary patriarch of the Hattusa branch of the Kussara dynasty. Thus there are no indications that the "Kussara dynasty" was of Hittite origin, and I propose that the members of this clan originally spoke a non-Indo-Hittite language.[2] It is, however, possible that during the period when they used Kaneš/Nesa as their capital, they underwent linguistic assimilation and shifted to the Hittite language, while keeping (some of) their traditional names.

These considerations allow me to turn Steiner's arguments upside down. Some of the non-Indo-European names of the Hittite rulers may hearken back to their Kussara heritage, while the high status of the Hittite/Nesite language at the court of Hattusa

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[2] The statement of Anitta's *res gestae* (CTH 1) that Pithana did not harm the inhabitants of the conquered town of Nesa but "made them mothers and fathers" has generated many speculations in the secondary literature (Bryce 2005: 36 with endnotes 82 and 83). As Bryce (ibid.) justly observes, there is no need to interpret it as bearing on Pithana's ethnicity, since this turn of phrase could simply be used as a metaphor for Pithana's benevolent treatment of Nesa's denizens.

reflects the sociolinguistic situation in Nesa, the previous capital of the Kussara dynasty. Names such as Tuthaliya may actually prove to be archaisms retained in spite of the language shift to Hittite, thus conforming to the typologically common pattern. Since the original language of the "Kussara dynasty" is unknown to us, it would be very difficult to segregate the stratum of Kussara personal names from those borrowed from Hattic (particularly so if the language of the Kussara elites was related to Hattic). But the claim that the majority of the Old Kingdom notables used Hattic personal names cannot be proven. Although some of the names attested in the Old Kingdom sources are assuredly Hattic, their number is inferior to that of the assured names of Luvian and Hittite origin attested in the same group of texts. As for the discontinuity between the onomastics of Nesa and Hattusa, it reflects the difference in the social status of individuals whose names are attested in the respective corpora. The Old Assyrian documents from Nesa mention natives belonging to all social strata, whereas the Old Hittite texts concentrate on the royal family and its immediate entourage.

Thus there are no compelling arguments against the assumption that Hittite/Nesite was the spoken language among the social elites of Hattusa. The extent to which it was used by the lower classes in Hattusa and its surrounding area will be discussed separately with reference to individual historical periods, since this issue is tied up with assessing the spread of the Luvian language. Without anticipating this discussion, I will only say that Güterbock's vision of the geographic divide between Hittite-speaking Central Anatolia and Luvian-speaking Southern Anatolia represents a simplification. The distribution between the two groups of speakers also had a social component.

The rest of the chapter will be organized as follows. In Section 5.2, I will present the onomastic evidence for linguistic contacts between Hittite and Luvian in the Colony period. Section 5.3 will be devoted to to the analysis of early lexical borrowings from Luvian into Hittite that can shed light on the relative status of the two languages in the early second millennium BC. The conclusions of these two sections will be explored in Section 5.4, where I will discuss the likely location of the land of Luviya mentioned in the Hittite laws. Section 5.5 will explore the combination of historical and linguistic evidence in order to address the spread and status of Luvian in the Hittite Old Kingdom, while Section 5.6 will accomplish the same task with respect to the Early New Kingdom period. In Section 5.7, I will attempt to reconstruct the sociolinguistic situation in the Kingdom of Kizzuwatna and discuss the origin of Kizzuwatna rituals found in the royal archives of Hattusa. The topic of Section 5.8 is the sociolinguistic background of the invention of the Anatolian Hieroglyphic Script. Section 5.9 will summarize the conclusions of this chapter.

5.2 Luvians in Old Assyrian Sources. The earliest written documents coming from Anatolia are related to the period of extensive Assyrian trade with this region (20th-18th centuries BC). The *kārum* of Kaneš (present-day Kültepe) was the main hub of long distance trade during this time, even though smaller Assyrian emporia had also been established in other Anatolian cities.[3] The Old Assyrian dialect of Akkadian was the

[3]All the names of Luvian appearance discussed below except for one (Hutarla) appear on the tablets that are thought to emanate from the Kaneš area. This conclusion is, of course, conjectural with

only written language used in Asia Minor during this period, whether the author of a text was an Assyrian merchant or a local individual. We can glean, however, some knowledge about the local vernaculars from the analysis of numerous indigenous personal names and more rare lexical borrowings occurring in these documents.[4] Garelli 1963 represents the latest attempt to systematically investigate the ethnic elements represented in the Anatolian city-states of the *kārum* period based on the study of the local onomastics.[5] One of his conclusions is the presence of a limited number of Luvic names in the Old Assyrian documents.

Much has changed in the field since Garelli's work. Besides a large number of new texts published in the last forty-five years, one must stress a progress in Anatolian linguistics. The better understanding of phonological changes that separate Hittite and Luvian from Proto-Anatolian enables one to distinguish between Anatolian archaisms and dialectal innovations in our corpus. Thus Garelli (1963: 139) characterizes the onomastic element *nana/i-* 'brother' as "Hittite-Luvian", but now we know that the Hittite word for 'brother' was *negna-* (CHD, L-N: 428-31). It is furthermore possible to reconstruct pre-Anatolian **neg'no-* 'brother', of which Hittite *negna-* and Luv. *nana/i-*

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respect to the individual pieces coming from illicit excavations, but Kültepe is the only location where the illicit hunt for Old Assyrian tablets has assuredly taken place.

[4] For the most updated list of Anatolian lexical borrowings in Old Assyrian texts, see Dercksen 2007. The majority of these loanwords appear to be Hittite, while *hinissannum* (a vessel), *kulitannum* (a vessel), *upatinnum* 'royal land grant', and *targumannum* 'interpreter' are likely to havea Luvian origin. See 6.2.5 for the likely Luvian origin of Hitt. *hanissa(nni)-* (a vessel) and 5.3 for the Anatolian comparanda of Akk. *upatinnum*.

[5] Carruba 1983: 84-87 can be consulted for the concise *Forschungsgeschichte* of Anatolian onomastics. It is appropriate to single out the contribution of Laroche 1966, which contains the largest printed corpus of Anatolian names attested in Old Assyrian transmission that is available to date. Unfortunately Laroche's treatment of "les noms kanisiens" is not based on systematic discrimination between the Hittite and the Luvian components within this stratum.

would represent regular reflexes (cf. Watkins *apud* Melchert 1994: 256). Therefore, if the occurrence of *nana/i-* 'brother' in our corpus is confirmed, this element must be taken as a Luvic dialectal form. An opportunity to apply better linguistic methodology to a larger group of names prompts me to undertake a new corpus study.

On the other hand, a mere glance at the recent catalog of the Old Assyrian texts (Michel 2003) is enough to realize that the definitive study of the onomastic data contained in these sources is not possible at the present time. While nearly all of about five thousand documents stored in European and American collections have been published in cuneiform, and most of them have been also edited in transliteration, the majority of some twenty thousand tablets coming from regular excavations in Kültepe remain unpublished. Several scholars entrusted with the publication of particular groups of Kültepe tablets have established collaboration and made the provisional transliterations of their texts mutually available to each other. J.G. Dercksen, one of the members of this collaboration, compiled a database of personal names occurring in Old Assyrian sources available to him and kindly granted me access to this file. While this opportunity has significantly extended the range of data at my disposal, it has at the same time rendered more difficult the precise delineation of my corpus. Therefore the names discussed below must be seen as a representative selection of the Luvic onomastics in the *kārum* documents rather than its exhaustive representation.

An obvious difficulty of studying personal names attested in foreign transmission is the impossibility of independently establishing the language to which a particular item belongs. This may create the situation where one's preconceived ideas about the origin of particular personal names may influence their understanding. The

only way to break this vicious circle is to study the onomastic corpus of a particular period as a system. Thus a scholar of Luvian is tempted to derive the hypocoristic *Im-ra-a* /Imrāya/ (MAH 16552.13) from *Immara-ziti* or a similar theophoric name referring to the Tutelary Deity of the Open Country (**Immara-Kruntiya*-). The analysis of the *kārum* documents shows, however, that no *Imra*-compounds attested in this corpus show a distinctly Luvic second component, whereas the name *Im-ri-mu-ša* (AKT 1 7.27) is similar to *E-wa-ri-mu-ša* (e.g. TC 1 109.6,12) and *E-[r]a-mu-ša* (Kt 94/k 959). The last three names can be interpreted as alternative attempts to render Hurrian /Evri-muža/ 'the lord is right'. Furthermore, Garelli (1963: 156) plausibly analyzes *Im-ri-a-ri* as /Evri-ari/ 'the lord gave'. Therefore it is quite likely that *Im-ra-a* represents a secondary hypocoristic from a Hurrian compound involving /evri/ 'lord'.

Another example of the same ambiguity is the name of *Ha-ar-pá-tí-wa*, vizier of Kaneš (cf. Donbaz 1989b: 88). The Luvic theophoric names containing the element *Tiwa(d)*- 'Sun-god' are attested in Old Assyrian sources, while the Hittite official *Yaratiwa* is known from a Maşat letter (HKM 103.2). On balance, however, the Hurrian etymology appears to be preferable. The first part of *Ha-ar-pá-tí-wa* probably contains a reference to the Mesopotamian god Harab, who otherwise frequently appears in Hurrian theophoric names from Nuzi, but not in Luvian onomastics. It is, therefore, better to read this name as *Harba-tiwe* 'the word of Harab' on the assumption that the last part of this compound is Hurr. *tiwe* 'word, thing'. A further example of a Hurrian name in our corpus containing the same theonym is *Ha-ar-pá-tal* (Kt c/k 1055.20), which must be segmented as *Harb-adal* 'Harab is strong'.

In view of these difficulties it is appropriate to divide the Luvoid names occurring in our corpus into several groups.[6] The first group includes those forms whose Luvic origin is, in my opinion, assured. In order to qualify as a member of this group, a nominal form should either display a phonetic innovation peculiar to the Luvic subgroup, or contain two roots that occur in Luvian but not in Hittite. In addition, we must be able to account for every morpheme of the forms under consideration in terms of Luvian grammar. A further desirable condition, which is more difficult to formalize, is the presence of formal or semantic parallels to a given name within the Luvic onomastic corpus.[7]

Table 24: Assured Luvian Names in Old Assyrian Sources

A-lá-al-mì-šar	Witness	ICK 1 72.24	Not edited
Ha-wa-wa-šu	Recipient of silver	Kt m/k 36.3	Unpublished
Ha-wi-li-a	Recipient of silver	Sch. 22.35	Garelli 1964: 127
Ku-ul-zi-a	Bride	KTS 2 6.4	Donbaz 1989a: 21
Mu-a-na-ni	Wife of a debtor	ICK 1 115.9	Rosen 1977: 75
Mu-tá-li-a	Dignitary	Kt s/t 92.7	Donbaz 1993: 132, fn.9
Pu-na-mu-wa-tí	Donor of a slave couple	WAG 48/1464.6	Lewy 1937: 107
Pu-nu-wa-šu	Keeper of the tablet	Kt d/k 2.6	Unpublished
Ru-wa-tí-a	Frontier guard	Kt g/t 36.10	Bilgiç 1964: 128
Ru-tí-a	Owes copper	Kt 94/k 833	Unpublished

[6] Here and below, the term Luvoid is used in its traditional sense "having Luvian appearance" and, unlike the term Luvic, does not refer to a particular taxonomic unit. The adjective Luvoid will be frequently used with reference to Anatolian names because, as argued below, the Luvic character of many of them can be asserted only with a certain degree of probability.

[7] All the tables containing Luvian names attested in Old Assyrian sources are organized identically. The first column contains a name in transliteration, while the second one contains information about the person bearing such a name, as revealed by a particular document where it is attested. The third column contains an Assyriological label of the respective document, which is either its excavation or museum number or the reference to its autograph. Most of the abbreviations present in this column are deciphered in Michel 2003. The last column contains a bibliographic reference to the source where the respective document has been published in transliteration. Since this section is not meant to represent a prosopographic study, I have not attempted to collect different attestations of identical names, but the likely phonetic variants of the same name are listed separately.

Tí-wa-li-is	Father of a dignitary	Kt s/t 92.12	Donbaz 1993: 132, fn.9
Tí-wa-tí-a	Dignitary	Kt s/t 92.8	Donbaz 1993: 132, fn.9
Wa-šu-na-ni	Merchant	ICK 1 71.14	Larsen 1967: 61
Wa-áš-na-ni (same as above)	Transporter (same person as above?)	TC 2 37.22, 30, 32	Ichisar 1981: 348
Uš-na-ni (same as above)	Recipient of copper	TC 3 104.12	Not edited
Wa-wa-lá	Female debtor	CCT 1 11.7,16	Eisser and Lewy 1930: 24
Wa-wa-li	Merchant	KUG 41.2	Hecker 1966: 104

The following roots and stems contained in this table display specifically Luvic sound changes *alal(i)-* 'to wish' (cf. Hitt. *ilaliya-* 'id.'), *Gulza-* '(personified) Destiny' (cf. Hitt. *gulsa-* 'id.'), *Tiwad-* 'Sun-god' (cf. IH *dyew-* 'day-sky' and Hitt. *siu-* 'a god'), *asaza-* 'to say' (contains the suffix *-za-* cognate with Hitt. *-ske-*), *nana/i-* 'brother' (cf. the discussion above), *wawa-* 'bull' (cf. IH. $g^{w}ow$- 'id'), *Ru(wa)ntiya-* 'protective god' (cf. Akkadographic *kurunta*, Hawkins 2005: 290).[8] The roots typical of Luvian but not of Hittite are *hawa/i-* 'sheep' (Hitt. UDU-*u-*), *wasu-* 'good' (Hitt. *assu-*), *muwa-* 'might (or sim.)' (no established Hittite equivalent),[9] and *puna-* 'all' (Hitt. *humant-*). Following Melchert (2003a: 16, with fn. 10), I assume that the adjectival suffixes *-alli-* and *-ili-*

[8] The last element deserves particular interest because it reveals a simplification of the word-initial **kr-* some seven centuries before the latter is attested in the Akkadographic spelling. Rather than assuming that Kurunta is a historical writing, one should perhaps ascribe this difference to dialectal variation in second millennium Luvian.

[9] The noun *muwa-* and its derivative *muwattalla/i-* are attested several times in Hittite (CHD, L-N: 314-17). Nevertheless, it is reasonable to assume that they represent assimilated Luvian borrowings rather than inherited formations. On the one hand, *muwattalla/i-* 'mighty' appears to contain a Luvian suffix (Melchert 2005: 455-56). On the other hand, Luvian features a number of derivatives from the same root, such as *muwita-* 'progeny', *nimuwiza-* 'son' and *muwa-* 'to be powerful, conquer', which have no counterparts in Hittite. To this one must add the complete absence of *muwa-* and its derivatives (apart from proper names) in Old and Middle Script Hittite texts.

have a Luvian origin.[10] It is furthermore likely that the suffix *-iya-* in *Gulziya-*, *Tiwadiya-* etc. is related to the Luvian suffix *-iya-* forming possessive adjectives, but this argument need not be pushed too far, since the identical hypocoristic suffix is attested with names of Akkadian and Hurrian origin.

The nouns in Table 24 display a high degree of internal cohesion. The elements *puna-*, *wasu-*, *muwa-* and *nana/i-* occur two or more times in different compounds, which vindicates the correct segmentation of the respective lexemes. The names *Hawiliya-* and *Wawali-* are semantically and structurally similar, while forms such as *Ta-ar-ga-ša-an*, lit. 'donkey (Hitt./Luv.)', (TC 1 87.18) or *I-me-ri-im*, lit. 'sheep (Akk.)', (TIM 7 190.9) confirm the hypothesis that names occurring in the Old Assyrian documents can be derived from the faunistic lexicon. The pair *Gulziya-* and *Tiwadiya-* corroborates the existence of hypocoristic formations based on Luvian theophoric names. The feminine name *Alalmisar* "Désirée" appears to be isolated in our corpus, but its relation to the Luvian masculine name *Alalimi-*, which was later extremely popular among the Hittites (Laroche 1966, § 22) is, in my opinion, beyond any reasonable doubt. [11]

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[10] As per Melchert (loc. cit.), the suffix *-ili-* sometimes represents an adaptation of the Hattic derivational suffix *-il-*. The suffix, however, forms derivatives only from Hattic roots, whereas the Luvian suffix is attached to Hittite and Luvian bases.

[11]The Luvian origin of *Wali-asazu* (ICK 3 57.5, 20), advocated in Carruba 1992b: 253, is very problematic, since the nouns of the structure "speaking praise" or "exalted speech" do not have obvious parallels in Luvian and the derivative *asazu-* from Luv. *asaza-* 'to speak' is not attested elsewhere. The two-word interpretation *Wa-li a-ša-sú* 'Wali, his wife' is, in my opinion, preferable. This segmentation has been already suggested as a possibility in Hecker et al. 1998: 373, but the authors operated with a different translation 'Wali (and) his wife', which causes syntactic difficulties.

A collection of names featuring Luvoid lexical elements that are isolated or occur in combination with Hittite/Hurrian elements is presented in Table 25. The Luvian status of these names is likely to varying degrees, but not assured. One must realize that it is frequently difficult to discriminate between Luvian onomastic material and archaic Hittite names if the forms in question do not show distinct phonetic innovations of either of the two languages. Thus, the Kültepe personal names containing the Luvian theonym Sanda (*Santahsu* and *Santahsusar*) are likely to be of Luvian origin; yet one cannot exclude the theory that Sanda, also attested in Lydia, was a common Anatolian deity that later fell out of favor among Hittite worshippers. Even in those cases where isolated short morphemes appear to display distinctly Luvic innovations, one must not discard the possibility that we are dealing with a homonymous segment representing a different language. Thus if the name Zuwa should be compared with Luv. *zūwa-* 'food', its initial consonant probably represents a language-specific reflex of IH. **g'y-* (Melchert 2003b: 195). Alternatively, the same name can be analysed as the archaic nominative case of Luv. *zuwan(i)-* 'dog'. Nevertheless, since this element does not occur in characteristically Luvic compounds, the Luvian etymology of the name Zuwa mentioned in Garelli 1963: 141 is, in my opinion, no more than a possibility.

Table 25: Likely Luvian Names in Old Assyrian Sources

A-ra-mu-wa	Recipient of a ring	Kt o/k 103.6	Albayrak 2006: 113
Ha-wa-a	Recipient of silver	Kt b/k 176.3	Gül 1990: 52
Hu-tá-ar-lá	Author of a letter found in Alişar	OIP 27 27.3	Gelb 1935: 43
Hu-tár-lá-ni	Mayor	ICK 3 57.1	Hecker et al. 1998: 372
Ku-lá-na-lá	Messenger	Kt g/t 36.16	Bilgiç 1964: 128
Ku-lá-na-ah-šu-šar	Wife of a debtor	Kt 89/k 282.3	Unpublished
Ku-ul-zi-a-ar	Indentured servant	KTH 22.3,5	Eisser and Lewy 1930:152
La-[ba]-ar-na-aš	Witness	Kt 88/k 713.3	Donbaz 1993: 145

Pu-na	Merchant	Sch. 17.5	Garelli 1964: 117
Ša-tá-a[h-š]u	Debtor	TC 1 99.4	Eisser and Lewy 1930: 242
Ša-tá-ah-šu-šar	Debtor	ICK 1 24.A3, B 3,5	Rosen 1977: 48
Šu-pì-lá-áp-ra	Recipient of silver	KUG 8.7	Hecker 1966: 13
U-pá-tí-a-ah-šu	Recipient of a sheep	TC 3 191.16	Ulshöfer 1995: 315
Ú-ra-ni	Transporter	MAH 16552	Garelli 1965: 26
Ú-ra-nu-ma-an	Father of a witness	Kt d/k 30a:2	Unpublished
Ú-ra-a	Father of recipients of silver	Sch. 22.38	Garelli 1964: 127
Ut-ni-ah-šu	Witness	Liv 8.16	Eisser and Lewy 1930:8
Wa-at-ni-ah-šu	Mentioned in a letter	Kt m/k 179 20	Unpublished
Wa-lá-áp-ra-a	Father of the recipient of a sheep	TC 3 191.22	Ulshöfer 1995: 316
Wa-ša-tap-ra	Witness	Kt 89/k 383 2	Donbaz 1993: 134
Wa-tá-áp-ra	Witness	CCT 1 6c.13	Eisser and Lewy 1930: 20
Zi-tá	Recipient of copper	Kt 90/k 176.18	Michel and Garelli 1997: 270
Zi-tá-ni	Owes gold and silver	Kt 94/k 833	Unpublished
Zu-ú-a	Witness	ICK 1 137.8	Not edited in translit.
Zu-a-ni-a	Witness	CCT 1 7a.19	Eisser and Lewy 1930: 52

Some elements occurring in Table 25 have already been discussed in connection with Table 24. This includes *hawa/i-* ‘sheep’, *muwa-* ‘might (or sim.)’, *gulza-* ‘(personified) Destiny’, and *puna-* ‘all’. Additional elements occurring in this table can be compared with the Luvian nouns *hutarla/i-* ‘servant’, *ku(wa)lan-* ‘army’, *Santa* ‘War-god’, *ubadi-* ‘demesne’, *ura-* ‘large, great’, **wadni-* ‘country’, **dabra-* ‘rule’, *zida/i-* ‘man, human’, *zuwa-* ‘food’, and *zuwan(i)-* ‘dog’. The asterisked forms are not directly attested in the Luvian texts, but their reconstruction as Luvian is secure and will be discussed in the following section. The phonetic shape of the last four nouns

renders impossible the hypothesis that they represent Anatolian archaisms lost in Hittite if, of course, their segmentation and meaning have been correctly established.[12]

The linguistic attribution of the other morphemes occurring in Table 25 is more problematic. The suffix *-ni* in *Hudarla(n)ni* and *Zida(n)ni* can be compared with the scarcely attested Luvian diminutive *-anna/i-* (Melchert 2003b: 196), but a similar suffix can be also attached to names of Akkadian origin, from which it could be extended to Anatolian names.[13] The element *ara-* may be related to Hitt. *ara* 'allowed (action), *fas*' or to Hitt. *arāi-*/*ariya-* 'to rise', but its Luvian cognates do not impose themselves. Pace Melchert (2003a: 16-17), there is no reason to think that the common suffix *-hsu* is specifically Luvian. The stem-forming elements *-hsu* 'offspring' and *-hsusar* 'female offspring' can be compared with Hitt. *hassu-* 'king' and **hassusara-* 'queen'. 'Offspring' was probably the original meaning of *hassu-* in proto-Anatolian, which was preserved in Luv. (NEPOS)*ha-su-* 'progeny, descendant', while in Hittite the same term underwent the semantic raising to *'prince' and then 'king', as per HED, H: 245.[14] The element *suppi-* 'pure' is synchronically Hittite, while its likely Luvian equivalent *washa-* will be discussed below. The suffix *-man* in *Uranuman* may represent in this case a

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[12] The spelling variation between *tá-áp-ra* and *lá-áp-ra* indicates problems in rendering Luv. *dabra-* 'rule' by the native speakers of Hittite, where word-initial devoicing may have occurred earlier (cf. Melchert 2003a: 18-19). Luv. *zida/i-* 'man, human' lacks a convincing etymology, but the Hittite and Luvian word-initial *z-* cannot be derived from the same source, and therefore this lexeme must reflect a specifically Luvian phonetic development. Luv. *zuwa-* 'food' has been discussed above, while Luv. *zuwan(i)-* and Hitt. *kuwan-* 'dog' shows different phonetic reflexes of the etymological **k'won-* 'dog'.

[13] Note, however the direct correspondence between *Zi-tá-ni* in Table 2 and the assured Luvic name *Zidanni* attested in a later period (Laroche 1966, § 1554).

[14] It is possible that this semantic development was pre-Hittite, as per Watkins 1995: 8-9. This does not, however, preclude the possibility that the original and the derived meanings of *hassu-* coexisted in the Hittite of the Colony period.

Luvian suffix deriving action nouns (Melchert 2003b: 197), but the most common usage of the element *-man* in our corpus is deriving Hittite adjectives from toponyms.[15] The origin of *wa(sa)-* in *Wasa-dabra* / *Wa-dabra* / *Wa-labra* is uncertain; the hypothesis that it represents an irregular shortening of Luv. *wasu-* 'good' is possible but *ad hoc*. The suffix *-ar* in *Gulziar* is likewise unclear.

A number of Luvoid lexical elements deserve a separate discussion due to their relatively frequent attestations. The morpheme *wani-*, which usually occurs as the second member of a compound, can be analyzed in two alternative ways. On the one hand, it may be related to the Luvian word *wana/(i)-* 'woman' discovered in Starke 1980. In defense of this hypothesis one can say that several names in Table 26 below are demonstrably feminine, while numerous Hittite names in the Old Assyrian corpus contain the second element *-kuni*, the possible Hittite cognate of Luv. *wana/i-* 'woman'.[16] On the other hand, the same element can be interpreted as the Luvian adjectival suffix *-wanni-* (Melchert 2003b: 197-98). Under both analyses, the morpheme in question emerges as a specifically Luvic formation, and the likely Luvic origin of several elements with which it shares the compound reinforces this conclusion.[17]

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[15] Cf. e.g. *Lawanduman* (ICK 1 117.3), *Usunuman* (ICK 1 35b. A1,B10), and *Hubisnuman* (b/k 260.A2,19, B4,9) derived from the toponyms Lawanda, Usuna, and Hubisna, respectively. Cf. further Laroche 1969: 257-58.

[16] Cf. e.g. Hittite female names *Siwas-kuniyan* (Kt n/k 73.6,9) and *Suppi-kuni* (KTH 20.2), which can be translated as 'god's woman' and 'pure woman' respectively. Note that Luv. *Washu-wani*, lit. "pure woman" would represent a precise equivalent of the second Hittite name.

[17] The name *Ala-wani* probably contains a reference to the Anatolian goddess Ala, literally 'the lofty one' (if this goddess has a Luvian origin). The initial element of *Ani-wani* is possibly related to Luv. *anna/i-* 'mother'. On *washa-* 'sacrifice (vel sim.)', see the discussion below in this section.

Table 26: **Colony Period Names with the Element –*wani***

A-lá-ú-a-ni	Author of a letter	TC 3 123.1	Not edited
A-ni-wa-a-ni	Author of a letter	Kt 94/k 1389.2	Unpublished
A-wa-wa-ni	Wife of a priest	Kt n/k 32.11	Donbaz 1989b: 76
Ha-az-za-wa-ni	Relative of Was(u)nani	TC 2 37.31	Ichisar 1981: 348
Wa-ni-i	Wife of Huzuru	Kt k/k 14 A.9, B.5	Donbaz 1989b: 82
Wa-áš-hu-wa-ni	Witness	Kt d/k 23a: 2	Unpublished

The element -*nani* 'brother[?]' has already been mentioned in connection with the name Muwanani. Interestingly enough, this is a feminine name, which prompts one to interpret it as an exocentric compound "one who has the strength of her brother" (or something similar). Alternatively, one can hypothesize that **nana/i*- in this period functioned an undifferentiated word for 'sibling', whereas *nanasri*- 'sister', attested in Iron Age Luvian, represents a later formation. There is also a third option to be considered, namely identifying -*nani* with the Hurrian element that is abundantly attested in Nuzi names (Gelb 1943: 237-38). The last solution has obvious disadvantages in the case of Muwanani, but may have more to recommend itself if we take into consideration other names with the same final element collected in Table 27. The first elements of these names are obscure or have numerous interpretations; and none of them imposes itself as a Luvian morpheme. Therefore, the Luvian origin of names collected in Table 27 remains questionable.

Table 27: Colony Period Names with the Element –*nani*

Tù-za-na-ni	Slave	CCT 5 20a 5	Kienast 1984: 124
Ha-ma-na-ni	Witness	Liv 8.5	Eisser and Lewy 1930:8
Ha-me-iš-ta-na-ni	Owner of a package (in a deposition text)	CCT 5 9b.5,8,13, 17,26	Not edited
Ma-lá-na-ni	Mentioned in a letter	Kt m/k 179 12	Unpublished
Ša-lá-na-ni	Recipient of a robe	Kt m/k 22.8	Unpublished
Ša-ni-ša-na-ni	Father of an official	Kt s/t 93 obv. 3	Donbaz 1993: 132 fn. 9
Tí-li-na[-ni]	Recipient of silver	MAH 19616.11	Garelli 1959: 48
Tù-a-li-ša-na-ni	Unclear	Kt s/t 93 rev. 3	Donbaz 1993: 132 fn. 9

The occurrences of the element (-)*washa/e/i*-, which may occur both at the beginning and at the end of a compound, as given in Table 28. As the second element, it frequently co-occurs with divine names, such as Gulsa, Maliya, possibly Ala and Lilaya, and this distribution prompts its comparison with Luv. *washa*- 'sacrifice (vel sim.)' (cf. Melchert 1993: 263, Hawkins 2000: 153b, and especially Hutter 2003: 257). The word-initial variant *washa*- has the appearance of a base-noun, but the word-final variant -*washi* or -*washe* can be identified with the derived adjective *washaya*- 'sacred', so that the theophoric names in question receive the interpretation 'Sacred to Maliya', etc. Neither the morpheme *washa*-, nor the elements with which it co-occurs in the same compound name display Luvic phonetic innovations, but the morphological relationship between *washa*- and *washaya*- is peculiar to the Luvic subgroup. Therefore, if my morphological analysis is correct, at least the theophoric names ending in -*washe/i* should be understood as Luvian.

Table 28: Colony Period Names with the Element *–washV*

A-<lá>-wa-áš-hi	Wife of Atapila	TC 3 238a.5	Rosen 1977:145
Ku-ul-ša-wa-áš-he-e	Wife of a debtor	Kt m/k 170.4	Unpublished
Li-li-wa-áš-hi	Wife of a debtor	Kt d/k 34a.1	Unpublished
Ma-da-wa-áš-hi	Addressee of a letter	BIN 6 52.2	Not edited
Ma-lá-wa-áš-hi	Witness	KUG 3.13	Hecker 1966: 4
Ma-li-wa-ah-ší Ma-li-wa-áš-ha Ma-li-a-wa-áš-hi	Woman, acts as a debt collector	Schmidt 1a.1,12 Schmidt 1b.5	Eisser and Lewy 1930:19
Ma-li-ì-wa-áš-he	Recipient of silver	I 604: 21-22	Hecker et al. 1998: 190[18]
Ma-lá-wa-áš-hi-na	Divorced woman	TC 1.100.11	Eisser and Lewy 1930:4
Ma-wa-áš-hi	Female debtor	CCT 5 48b.3 (env).10	Rosen 1977: 119

[18] The editors read this name as *Ma-li-ni-wa-áš-he*, separating it from the other Luvoid names of a similar shape.

Ú-uš-ha-ta	Messenger	MAH 16206	Garelli 1965: 20
Uš-hu-pá	Creditor	KTH 28.5,9,12 (env).3,6,12	Eisser and Lewy 1930: 187
Wa-áš-hu-pá	Market inspector	CCT 5 26a.2	Kienast 1984: 140
Wa-áš-hu-ru	Male, addressee of the letter	KTK 19.2,23	Yankovskaya 1968: 131-32

There is no question that the number of Luvoid names in Old Assyrian sources is inferior to the number of names with the distinctly Hittite outlook. Thus the single occurrence of the Luvian name *Alalmisar* contrasts with numerous attestations of the names *Ilali(ya)*, *Ilaliska(n)*, *Ilaliyahsu*, *Ilaliyalka* and *Ilaliuman*, which contain the Hittite stem *ilaliya-* cognate with Luv. *alal(i)-* 'to wish'. One or two isolated instances of theophoric names with the Luvic element *Tiwa(d)-* are no match to the cluster of Hittite theophoric names *Siwaskuniyan*, *Siwasmi*, *Siwanala*, and *Siwanuman*, each one attested several times. The elements *-asu* and *-aswe/i-*, presumably related to Hitt. *assu-* 'good' (Laroche 1966: 321) eclipse the rare occurrences of the Luvic element (-)*wasu*(-). The second element *-niga*, very frequent in feminine names from Kaneš (Laroche 1966: 306-308), cannot be separated from Hitt. *nega-* 'sister', whose Luvian equivalent would be **niya-*. Thus, although my list of Luvic personal names differs in many respects from the one adduced in Garelli 1963, I fully concur with his general conclusion: "Le facteur louvite ne semble donc pas poser d'un très grand poids à Kültepe". Given that Kültepe/Kaneš/Nesa was the city from which the name of the Hittite language has been derived, it would be indeed strange if the situation were any different (cf. Alp 1993: 188).

At the same time, the prosopographic data that are reflected in the tables above indicate that individuals with Luvian names were not outsiders to the Kaneš area. Some

of them, e.g. Mutaliya and Tiwadiya, held important positions at the court of Kaneš, others, like Kulziya or Malawashina, were apparently married to local citizens. The witnesses or those individuals who received small amounts of various commodities, either as loans or as payment for rendered services, must likewise represent the local milieu, on the assumption that the relevant documents had been compiled in the same *kārum* of Kaneš where they were later found. To be sure, some of the Anatolians mentioned in Tables 24-28, such as Wasunani or Wawali, were professional merchants, who need not have resided in Kaneš in order to conduct transactions with their Assyrian partners. But the majority of these people must have lived side by side with the Hittites, and there was no clear difference in the social status of the two groups.

The combinatory analysis of Anatolian onomastics reinforces the same impression. Names such as *Suppi-labra* or *Kulsa-washe* appear to represent hybrid compounds, the first part of which is Hittite, while the second one is ultimately Luvic. A slave-owner with the Luvian name Punamuwatti could not maintain his slaves in times of hardship, and therefore entrusted them to a certain Walkuwa, whose name is transparently Hittite (its Luvic equivalent would be Walwa, lit. 'lion'). A woman with the Luvic name Muwanani was married to a man with the Hittite name Isputahsu (phonetically /spudahsu/).[19]

[19] The reconstruction of the initial consonant cluster in this name is assured through the variant *Šu-pu-da-ah-šu* (Kt o/k 53.3). On the simplification of clusters *sC-* in Luvian, see Melchert 1994: 271. The fact that one of the Kizzuwatna kings was also called Isputahsu does not prove the Luvian origin of this form, since Hittite population groups may have been present among the Anatolian settlers of Kizzuwatna (cf. 5.7 below).

This haphazard distribution makes me wonder whether the Hittite or Luvian character of individual names attested in Old Assyrian sources can define the ethnicity of the respective individuals. It is, of course, impossible, to exclude beforehand that a number of Luvians settled in the Kaneš area and constituted an ethnic minority in this region already in the Colony period, but there are no positive arguments in favor of this conjecture. In particular, one must be careful about not making such an inference from the claim of Carruba (1992b), who connected the OAss. *nuwā'um*, the designation of indigenous Anatolian population in documents from Kaneš, with **Luwa*-, the reconstructed name of the Luvian-speaking area (cf. 5.4 below).[20] If we follow Carruba's etymology, the correspondence *n*- ~ *l*- requires one to assume that the Assyrians acquired the term Luwa through Hurrian mediation, and thus it represents a foreign ethnic designation borrowed from another foreign ethnic designation. On the semantic side, one must then hypothesize that Hurrians or Old Assyrians extended this name to all the Indo-European Anatolian ethnic groups, since otherwise one cannot explain why it was indiscriminately used in the Kaneš area, with no distinct term for the Hittites. Therefore, the term *nuwā'um* is not useful for determining the languages spoken in and around Kaneš.

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[20] Edzard 1989 attempted to explain *nuwā'um* as an adjectival building referring to "people, who are saying *nu*=", i.e. the Hittites. Petra Goedegebuure points out to me that this etymology is not tenable because the clause-demarcational particle *nu*= was not generalized until Middle Hittite. CAD, N/2: 356-57 implicitly connects *nuwā'um* with Standard and Neo-Babylonian *nu'u*- 'rude, uneducated, brute, stupid'. The possible etymological connection between these two words does not speak against the Anatolian origin of *nuwā'um* because what had originally been used as an ethnic name could be eventually reinterpreted as a pejorative designation, as it happened with the English word *vandal*.

As an alternative, one can hypothesize that Hittite native speakers residing in Kaneš borrowed a number of Luvian personal names.[21] The condition that would be necessary and sufficient to license this process would be the high prestige of Luvian culture among the Hittites. We will see in the following section that a number of Luvian political and administrative terms are attested in the earliest Hittite compositions and this furnishes us with independent evidence for a high status of Luvian in the Hittite core area at some point before the beginning of the Hittite written tradition. Therefore the borrowing theory is probable, although again not provable. The compromise scenario, assuming both the limited presence of Luvian native speakers in the Kaneš area and the limited proliferation of Luvian onomastic patterns among the Hittite native speakers, probably has the best chances of corresponding to reality. But, whichever ethnolinguistic reconstruction one may choose, the presence of Luvic onomastic elements side by side with their Hittite counterparts provides an additional argument for contact between the two languages in the first centuries of the second millennium BC.

5.3 Luvian Superstrate in Old Hittite. The chronology of the literization (*Verschriftlichung*) of Hittite is a debatable subject. According to the traditional point of

[21] We have seen in Chapter 4 that structural interference between the two languages in prehistoric period requires one to reconstruct a widespread Hittite-Luvian bilingualism in Central Anatolia. By contrast, the borrowing of onomastic elements from Luvian into Hittite does not require such far-reaching assumptions. In fact, one does not need to know a foreign language in order to be acquainted with the names that are popular among its speakers. Thus, American English never went through a stage of intensive contacts with Russian and has a fairly restricted number of Russian lexical loanwords among its common nouns. Nevertheless, a number of Russian female names (Natasha, Sonya, Tanya, Vera etc.) are quite popular in the USA, and their use is not restricted to families claiming Russian descent. One of the reasons for this popularity is the prestige of classical Russian literature, which is known to the Americans mostly from English translations.

view, the North Syrian cuneiform script was adapted to the Hittite language in connection with the Syrian campaigns of Hattusili I (Neu and Rüster 1989: 15). If one follows the Middle Chronology, as the majority of Hittitologists do nowadays, these historical events must be dated to the second half of the 17th century BC (Bryce 2005: 68).[22] But the relevance of Hattusili's raids for the choice of Hittite as the standard vehicle of written communication in Hattusa was always a matter of belief. Although a number of Hittite texts contain self-attributions to Hattusili I, some of them may represent translations made long after the death of this monarch, just as is frequently assumed in the case of the Anitta text (Neu 1974: 132 fn. 3).[23] On the other hand, all the Old Kingdom documents for which the chronological coincidence of composition and tablet must be postulated are written in the Akkadian language.[24] In view of this uncertainty, one must take seriously the hypothesis independently advanced in Popko 2007 and van den Hout, forthcoming^2, according to which Hittite started to replace

[22]Note, however, that Neu and Rüster (loc. cit.) follow the Low Chronology and date the respective events to about 1550 BC.

[23] Neu (1974: 132-35) has suggested that CTH 1 goes back to the Hittite archetype written during Anitta's lifetime and stresses the fact that the language of this text does not resemble translationese. I do not think that this argument is compelling. The events described in Anitta's *res gestae* were likely to live on in oral tradition, and so an Old Kingdom scribe must have had little trouble translating them from Akkadian into idiomatic Hittite. On the other hand, we have several hundred written documents from Nesa dating back to the Karum 1B period, which was roughly contemporaneous with Anitta's reign, and they are uniformly written in Akkadian.

[24] S. Košak (following the observation of J. Miller) indicates in the online version of the *Konkordanz der hethitischen Keilschrifttafeln* (under CTH 7) that the ductus of the Siege of Ursu text describing a military campaign of Hattusili I (CTH 7) is similar to the ductus of the Tigunani Letter (Salvini 1994), but is different from the conventional Old Script. Since the Tigunani Letter almost certainly represents an original tablet inscribed at the time of Hattusili I, one can advance a hypothesis that both this text and CTH 7 reflect the standard Hittite ductus of the seventeenth century BC. This implies, in its turn, that all the available Hittite texts written in the conventional Old Script belong to the second part of the Old Kingdom (although their originals may have been written earlier). This scenario will be discussed in more detail in van den Hout, forthcoming^2 (for the earlier remarks compatibe with the same conclusion see Miller 2004: 463-64, fn. 773).

Akkadian as the main written language in Hattusa only from the reign of Telibinu onwards, in about 1500 BC.

It remains, however, the fact that a group of Hittite texts exhibit linguistic peculiarities that do not occur in the compositions postdating 1400 BC based on internal references. The most salient of these features is the use of sentence-initial particles *ta*= and *su*= alongside *nu*=. Others include the local particle =*an*, the conjunction =*a* used as the marker of the new topic (Rieken 2000), and the clitic nom.pl.c. =*e* 'they'. The language of these documents is referred to as Old Hittite, and it is commonly assumed that they reflect the spoken norm of the Hittite kingdom before the reign of Tuthaliya I. The discussion of the date when Hattusa scribes began to write in Hittite may have repercussions for determining the lifetime of Old Hittite as a written language, but its status as a vernacular of the Hittite Old Kingdom, which was also used for writing at least in the later part of its existence, is not in danger of being redefined.[25]

It was widely believed for many years that Luvian influence on Hittite was minimal in the Old Kingdom period. The refinement of Anatolian historical phonology and morphology has enabled scholars to detect a large number of Luvian lexical

[25] The integrity of the so-called "Old Script" texts, that is to say the corpus of tablets that were actually written in the Old Kingdom period, is somewhat more controversial. Its main characteristic features are small horizontal intervals between signs, the absence of word spaces and occasional ligatures (Neu 1980: XIV-XV). These differences are real, but (except for ligatures) non-discrete. By contrast, the shape of Old Script signs is essentially defined negatively, i.e. through the absence of characteristic Middle Script innovations (cf. Popko 2007: 577). The consistent use of the logogram ^{d}IM for the Storm-god is a typical feature of the Old Script orthography, but this logogram may also appear in later texts alongside the numerical spelling ^{d}10=^{d}U. On balance, the kernel of the Old Script corpus can be easily recognized based on its ductus, especially if the originals or the photographs of the respective texts are accessible, but there is no sharp boundary between Late Old Script and Early Middle Script. Fortunately for my task, the copyists of Old Hittite texts are not known for replacing Hittite words with their Luvian equivalents, and therefore the distinction between Old Script original and later copies is not very essential for the study of lexical interference in the Hittite Old Kingdom.

borrowings that had entered Hittite before 1400 BC. Melchert 2005 includes a list of some 75 certain or likely Luvian loanwords in Old Hittite, eleven of them occurring in Old Script texts.[26] This group is not semantically homogeneous. Many of the items belonging to it pertain to the culinary sphere, some possibly represent hunting terminology. In what follows, however, I would like to concentrate on political, administrative, and ideological terminology borrowed from Luvian into Old Hittite. The analysis of this group of words may have far-reaching consequences for determining the status of Luvian in the early second millennium BC.

Few Hittite words have generated so much secondary literature as did the royal title *tabarna-* / *labarna-*. Soysal 2005 includes a convenient collection of the attestations of this lexeme in various Anatolian languages. Besides Hittite, it occurs in Hattic, Akkadian, Palaic, Luvian, and possibly Hurrian, invariably with reference to Hittite kings. The Telibinu proclamation (CTH 19) mentions the existence of a king called Labarna, who was a predecessor of Hattusili I on the Hittite throne, although the authenticity of this account is not assured (cf. Bryce 2005: 65). Whatever position one takes with respect to the historicity of Labarna I, it is clear that the title *tabarna-* /*labarna-* was applied to the rulers of Hatti throughout the Old Kingdom period. The oldest datable document containing this title is the Akkadian letter of Hattusili I

[26] This number should be taken only as a rough estimate, not only because the Luvian origin of individual words in the list is not absolutely assured, but also because the Old Hittite status of individual compositions used for its compilation is doubtful. Thus the Instruction for Temple Officials (CTH 264) is assumed to be Old Hittite in Melchert 2005, but this text, so far as I can judge, does not contain Old Hittite linguistic features, while the distribution of the clitics *=asta* and *=kan* observed there is specifically Middle Hittite (cf. Oettinger 1976: 67-70). On the other hand, the instructions as a Hittite literary genre do not seem to predate the reign of Tuthaliya I.

addressed to a ruler with the Hurrian name Tunib-Tessub (Soysal 2005: 193, fn 12 with ref.).

The controversy begins with the assessment of the relationship between this lexeme and Luv. *tabar-* 'to rule, govern' (Melchert 1993: 207). The scholars that assume that the two forms are not related frequently take *tabarna* / *labarna-* as a borrowing from Hattic. It is worth noting, however, that very few arguments against the Luvian derivation have been advanced so far, and none of these arguments holds water. The most ingenious objection is that of Tischler (1988: 355), according to whom the original form of the title must have been *labarna-*, because this would render possible the explanation of *tabarna-* through secondary contamination with *tabar-* 'to rule, govern'. Unfortunately, the distribution of the variants *tabarna-* and *labarna-* in Anatolian texts speaks against the scenario of contamination. Thus Luvian, where the contamination must have had originated, consistently uses *labarna-* in cuneiform texts, whereas Hittite has both variants throughout the history of its attestation, and Hattic knows only *tabarna-* ~ *tawarna-*. On the other hand, I am not aware of a royal title in any language of the world that has changed its sound form under the influence of folk etymology, and I suspect that most rulers would have regarded persistent attempts to corrupt the pronunciation of their titles as *laesio majestatis*.[27]

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[27] Soysal (2005: 190, fn. 7) indicates that *tabar-* 'to rule' has no Indo-European etymology that is universally agreed upon. This observation is, in my opinion, correct but essentially orthogonal to the problem of *tabarna-*/*labarna-*'s derivation. It is obvious that a word with no established etymology may serve, nevertheless, as a derivational base for other formations. The claim of Soysal (2005: 193) that the alternation between spellings *ta-ba-ar-na* and *ta-wa$_a$-ar-na* in Hattic texts pleads for the presence of a characteristically Hattic /*f/ sound in this lexeme is not compelling, since the sound in question is more likely to be interpreted as /*β/ or /*v/ (cf. the regular spelling of *tabarna-* with the <ba> sign in Hittite).

The alternation between *t-* and *l-* in the Hittite title has been convincingly accounted for in Melchert 2003a: 19. One has independent evidence that the etymological **d-* was occasionally rendered as **l-* in Hittite borrowings from Luvian. Thus Hitt. *allappahh-* 'to spit' represents a borrowing from Luv. */dapax-/, which is attested as Kizzuwatna Luvian *tappa-* 'spit' with eventual initial devoicing. In a similar fashion, when the royal title under discussion was borrowed from Luvian into Hittite, its pronunciation was [daβarna-] or something similar. Far from modifying this title under the influence of folk etymology, the Hittites have made every effort to faithfully render its pronunciation in cuneiform orthography, sometimes using the two competing transliterations *ta-ba-ar-na-* and *la-ba-ar-na-* in the same composition. On the other hand, the Hattic speakers assimilated this title to their phonology, hence its consistent spelling with the initial *ta-* in Hattic texts. Later in the history of Luvian, the areal word-initial devoicing was extended to the base root *tabar-*, but not to the derivative *labarna-*, which was by that time perceived as a Hittite title.

The details of the morphological derivation of *tabarna- ~ labarna-* have been elaborated in Yakubovich 2002b. I argued in favor of the intermediate Luvian stem **dabara-* 'power (*vel sim.*)', from which the Hittite title was derived in the same fashion as the Luvian theonym ^{d}*Immarn(a)/i-* (van Gessel 1998: 184-85) is derived from Luv. **immara-* 'open country' (cf. Melchert 1993: 89). At that time I was not aware of early second millennium Anatolian personal names *Wa-dabra- ~ Wa-labra-* and *Suppi-labra-* discussed in the previous section, which tip scales in favor of a slightly different reconstruction **dabra-*. The later form **dabara-*, continued, for example, in Lyc. PN Dapara = Λαπαρας (TL 6.1), arose by analogy with **dabr̥-* > **dabar-* / _C. While the

external parallels of the root under consideration are not assured,[28] the phonetic and morphological shape of *tabarna-* ~ *labarna-* is fully accounted for under the suggested Luvian derivation, which also happens to be semantically plausible.

If one wishes to argue that the title under discussion is a Hattic loanword, one has to present a derivational analysis that would be phonetically, morphologically, or semantically superior to the one suggested above. As of today, this task is not accomplished. Soysal 2005, the latest attempt to breathe life into the Hattic etymology of *tabarna-*, has to content himself with the interpretation of this title as *ta=par=na* "the thousand *na*", without being able to explain the meaning of the element *=na*. Furthermore, he recognizes that the alternation *t-* ~ *l-* in Hittite cannot be accounted for from the structure of Hattic, and therefore suggests that the Hittites would occasionally replace the initial <ta> with <la> in order to get rid of the "feminine" associations of the title *tabarna-*. These associations, according to him, stem from the existence of the Hattic masculine prefix *te=*, whose feminine counterpart was *le=*. My objections to the view that the Hittite royal title underwent deliberate corruption have been already formulated above, but the claim that the Hittites eliminated the undesirable connotations of the Hattic loanword by replacing what looked like a Hattic prefix with what looked like a different Hattic prefix is particularly implausible. The adaptation of borrowed

[28] I suggested in Yakubovich 2002 that **dabra-* and the related words may have a non-Indo-European, "Minoan" origin, dwelling in particular on the similarity between the Carian place-name Labryanda and Gk. λαβύρινθος (Myc. *da-pu$_2$-ri-to-*), the name of the palace of Cretan kings. A different approach is adopted in Melchert 2003b: 19, where **dabar-* (sic!) 'power, powerful' is connected with MHG *tapfer* 'massive, firm'.

words is motivated always, without exception, by the structure of the target language.[29] Thus, the Luvian etymology of *tabarna*-/*labarna*- represents the only viable hypothesis regarding the origin of this title.

The next Luvian borrowing in Old Hittite to be discussed is *ubati*- /ubadi-/, whose attestations are collected in Starke 1990: 195-96. The original meaning of this term was probably 'demesne, territory', but it can be most clearly seen in later Hittite texts. By contrast, the early attestations of Hitt. *ubati*- in the Zukrasi-text (CTH 15) and the so-called "Palace Chronicles" (CTH 8) support its derived meaning 'military unit', presumably the contingent of troops levied from a particular territory (cf. de Martino 2003: 111 with fn. 307). Its immediate origin is Luv. *upatit*- /ubadid-/ 'demesne, territory' attested as a Glossenkeil word in cuneiform texts, as well as in the Iron Age hieroglyphic inscription TELL AHMAR 1 § 8 (Hawkins 2000: 240). The rare <ba> sign (HZL 205), whose occurrence in Hittite appears to be limited to loanwords, underscores the borrowed character of Hitt. *ubati*-. In addition, one must note that the suffix *-ti* is uncommon in Hittite, whereas the Luvian stem **upatit*- is formed with the productive *-it*- suffix based on the abstract noun **upata*-, which is also formed according to a productive model (Melchert 1993: 243). In all probability, the Luvian nom./acc. sg. **ubadid* > **ubadi* was reanalyzed in Hittite as an *i*-stem.

The earliest attestations of the stem under discussion are found in the Old Assyrian documents of the colony period. The form *ú-pá-tí-im* is found twice in Kt v/k

[29]For those who do not find the above arguments sufficient, it might be worth mentioning that Hitt. *tuhkanti*, a title frequently used with reference to the heir apparent to the throne and commonly assumed to represent a Hattic borrowing, does not have a by-form ***luhkanti*, even though the feminine connotations of this title would be equally undesirable.

152, but the extended stem *ubadinnu-* is by far more common. Dercksen 2004, which contains the most recent discussion of the meaning of this lexeme, concludes that it "appears to denote a royal land-grant, provided by the king to high-ranking officials, and consisting of houses and land" (op. cit: 155). Dercksen believes that this term could not be applied to privately owned estates, since it never appears in the deeds for the sale of land. A number of contexts support the metaphoric usage of *ubadinnu-* with reference to a legal body (op. cit: 153). Presumably it consisted of a group of people associated with a particular piece of land, and thus the secondary personification of *ubadinnu-* offers a partial parallel to the semantic development of *ubati-* in Old Hittite. Since the documents containing the term *ubadinnu-* refer to the institutions of the kingdom of Kaneš, it is likely that it reflects not the original Luvian form /ubadid-/, but rather the Hittite loanword *ubati-*. If this conclusion is correct, the stem under discussion provides us with the earliest attestation of lexical contacts between Luvian and Hittite.

It is now generally agreed upon that Luv. /ubadid-/ is derived from the verbal root /uba-/ attested in both cuneiform and hieroglyphic transmission. This verb was frequently confused in the past with the phonetically similar /uppa-/ 'to bring'. The common Anatolian status of /uppa-/ is assured through its frequent attestations in both Hittite and Luvian, while /uba-/ has cognates in Lycian and Carian, but not in Hittite. The meaning of /uppa-/ is well established, but scholars differ in the basic meaning they assign to /uba-/. Melchert (2004c) reconstructed it as 'to dedicate, present, grant, furnish', whereas Yakubovich (2005b) opted for the different semantic reconstruction

'to found, establish'.[30] On balance, one must recognize that there are passages favoring both interpretations. The two particularly clear contexts, which are respectively supporting the first and the second of the competing semantic reconstructions are given below:

(130) KUB 35.133 ii 29-30, CTH 765 (LNS), Starke 1985: 280
^{URU}Ha-at-tu-ša-ya ap-pa-ra-an-ti-en a-ri-in an-na-ru-ma-hi
hu-u-⌜it⌝-wa-la-a-hi-ša-ha⸣ **ú-pa**
'**Grant** to Hattusa future time, virility, and vitality'.

(131) ARSLANTAŞ (Tell Ahmar) § 2, Hawkins 2000: 246.
a-wa/i ha-ta-ta-na(URBS) || URBS-*MI*-ni-na "1"-ti-i ("ANNUS")u-si-i
("AEDIFICIUM")**u-pa-ha-´**
'I **founded** the town Hatata in one year'.

The graphic confusion between Luv. /uba-/ 'to grant; to found' and Luv. /uppa-/ 'to bring' in hieroglyphic texts complicates the semantic reconstruction. Nevertheless, whichever meaning of /uba-/ one chooses as the basic one, it provides a plausible starting point for the derivation of *upatit*-. If one begins with the interpretation 'to grant', one can hypothesize, as Melchert does, that *upatit*- originally meant 'land grant'. This reconstruction finds a degree of support in the usage of *ubadinnu*- in Old Assyrian texts. If one assumes that the original meaning of /uba-/ was 'to found' one can adduce Lat. *fundus* '(1) bottom, foundation; (2) piece of land, farm, estate' as a parallel for the semantic derivation of *upatit*-.[31] By contrast, the derivation of Hitt. *ubati*- from *uppa*- 'to

[30] In his presentation at the 19th UCLA Indo-European Conference, V.Ivanov compared Luv. /ubadid-/ with Toch.B *wepe* 'corral (vel sim.) on the assumption that both forms are derived from IH √*webh* 'to weave'.

[31] Compare also Bactrian βονο καδγο, literally "base house" used with the meaning 'family estate' (Sims-Williams 2000: 187). The first element of this idiom represents a lexical cognate of Lat. *fundus*. Whether the similar semantic development in Latin and Bactrian should be viewed in purely

bring' is impossible not only on phonetic, but also on semantic grounds. The Luvian origin of this technical term is thus vindicated.

A number of Luvoid forms occur in the Old Hittite version of the mythological text about the disappearance of Telibinu (CTH 324.I.A). Among those, the irreversible binomial [*n*]*ūs tummantiyas* (KUB 17.10 iv 33) has received particular attention in recent literature. This pair appears in a list of positive concepts that are suspended from a tree in a *kursa*-bag as the symbol of reconciliation between Telibinu and the universe. As one can see in (132) below, most of these items denote various aspects of prosperity (cf. Hoffner 1998: 18, §§ 29-30).

There is no doubt that the stem *tummantiya*- is derived from Luv. *tummant*- 'ear', which displays the specifically Luvic simplification of the etymological word-initial *st*-cluster. There is, however, no consensus regarding the precise meaning of this derivative. As for *nū*-, Rieken (2006b) cogently argues that the consonantal extension -*t*- in dat. sg. *nū-t-i* represents a morphological trait that is not typical of the inherited Hittite lexicon, but finds close parallels in Luvian. Nevertheless, the etymology of this word remains a matter of debate, and therefore the attempts to define its meaning are usually linked to the discussion of the quasi-synonymous *tummantiya*-. The latest edition of the Telibinu myth interprets [*n*]*ūs tummantiyas* as 'le respect et la gloire' (Mazoyer 2003: 80, 107). On the other hand, Melchert (2003a: 20), who specifically discusses this collocation as a Luvian borrowing into Old Hittite, assigns to it a different meaning 'compliance and obedience'. Finally, Kassian and Yakubovich (2007) tentatively

typological terms, explained as an Indo-European archaism, or ascribed to the eastward diffusion of Roman legal terminology is hard to say, although I am personally inclined toward the first solution.

translate the same collocation in a late prayer to Telibinu (KUB 24.1 iii 10, CTH 377) as ‘power of hearing and understanding’.

(132) KUB 17.10 iii 27-35, CTH 324.I.A (OH/MS), Mazoyer 2003: 51-52.

^{d}Telipinus=za LUGAL-un kappūit	‘Telibinu took care of the king.
^{d}Telipinuwas piran ^{GIŠ}eya arta ^{GIŠ}eyaz=kan	In front of Telibinu stands an *eya*-
UDU-as ^{KUŠ}kursas kankanza n=asta anda	tree. From the *eya*-tree hangs a
UDU-as Ì-an kitta n=asta anda halkias ^{d}GÌR-as	lambskin *kursa*-bag . In it lies Sheep
GEŠTIN-as kitta n=asta anda GU_4.UDU kitta	Fat. In it lies the Growth of Grain
n=asta anda MU.KAM.GÍD.DA DUMU.MEŠ-	and Wine. In it lies Cattle and Sheep.
latar kitta n=asta anda $SILA_4$-as mīus halugas	In it lie Longevity and Progeny.
kitta n=asta anda **[nu]-** ⌜**ú**⌝**-uš**	In it lies the Gentle Message of the
tu-u-ma-an-ti-ya-aš kitta n=asta anda ^{d}x-x	Lamb. In it lies ***nu*** and ***tummantiya***.
KI.MIN [n]=asta anda kunnas wallas kitta	In it lies (?). In it lies the Right
	Shank.

Each of the three competing interpretations has advantages and disadvantages of its own. Mazoyer’s translation probably best fits the context under discussion, but is not illuminating for the etymology of *nū*-. Kassian and Yakubovich attempt to explain *nū*- ‘power of hearing’ as a borrowing from Hurr. *nu(w)i*- ‘ear’. While this suggestion is semantically satisfactory from both the synchronic and from the diachronic perspectives, the contraction *nu(w)i*- > *nū*- remains without a real explanation, even on the assumption of Luvian mediation. Luvian shows many instances of the *a*-vowel syncopated after a glide (Melchert 1994: 275-76), but I am not aware of any such case involving the Luvian *i*-vowel. Melchert’s translation, on the other hand, squares well with the etymology of *nū*- that has been recently proposed in Rieken 2006b, where this noun is derived from IE. √ *neu* ‘to nod.’ Indo-European comparison is admittedly a shaky basis for determining the semantics of an Anatolian lexeme, but the Luvian origin of Hitt. *nū(t)*-, supported by its cooccurrence with *tummantiya*-, clearly represents the best available hypothesis.

Another irreversible binomial of Luvian origin that occurs in the same text is *salhanti- mannitti-* (4).[32] The appearance of the deity Immarni derived from Luv. *immara/i-* 'open country' in front of the idiom under consideration underscores its Luvian origin. From the formal perspective, the preservation of /ti/ in *mannitti-* is not compatible with the laws of Hittite historical phonology (one would expect the palatalized ***mannizzi-* or something similar). The same holds for *salhianti-*/*salhalti-*, at least if one accepts its derivation from the *-ant-* adjective proposed in Melchert 2003c: 135 (the by-form *salhitti-* may reflect the influence of. *mannitti-*).

(133) KUB 17.10 i 10-12, CTH 324.I.A (OH/MS), Mazoyer 2003: 43-44.
[d]Telipinus=a arha iyannis halkin **[d]Im-mar-ni-in ša-al-hi-an-ti-en ma-an-ni-it-ti-en** ispiyatarr=a pēdas gimri wēllui.
'But Telibinu went away (and) carried away the grain, ***Immarni-*, *salhiyanti-*, *manitti-*** and satiety to the open country (and) to the meadow'.

Since the attestations of the common gender noun *salhanti-* / *salhitti-* and *mannitti-* are limited to direct cases, it is equally possible to assume the underlying mutation stems *salhianta/i-* and *mannitta/i-*. Melchert (1994: 55) recognizes the connection of the first noun with Hitt. *salli-* 'large' and suggests its tentative translation 'growth'. As a possibility, one can reconstruct the ingressive Anat. **sḷ̥xē-* 'to grow', the derivational base of Luv. **salhiant-* 'growing'. It is furthermore tempting to assign the meaning 'increase' to *mannitta/i-* and assume that it is in some way related to *ma-*

[32] Mazoyer (2003: 52), following the previous editors of the Telibinu myth, reconstructs the sentence that immediately follows example (3) as *n=asta* [*an*]*da* [*sal-ha-a*]*n-t*[*i-i*]*š m*[*a-an-ni-it-ti-iš ispiyatar=ra kitta*]. Unfortunately, I have not been able to recognize the traces of [*sal-ha-a*]*n-t*[*i-i*]*š m*[*a-an-ni-it-ti-iš*] neither on the autograph KUB 17.10, nor on the photograph of the respective tablet available in the Mainzer Photoarchiv.

'much' (on which see Melchert 1987: 184, fn. 9). Unfortunately, the precise details of the derivation in this case are even less transparent.[33]

The verb *sarlai-* 'to exalt' likewise had entered the Hittite language by the end of the Old Kingdom period, at least it its second meaning 'to let prevail' (CHD, Š: 273-74). The Luvian origin of this verb is clear not only from the shape of its derivatives (*sarlaim(m)i-* 'exalted', *sarlatta-* 'praise offering'), but also from the form of its derivational base. The adjective *sarli-* 'uppermost, superior' is only sporadically attested in Hittite, but has the perfect match in HLuw. SUPER+*ra/i-li-* 'id' and Lyd. *serli-*/*selli-* 'id.' (cf. Melchert 1993: 191). Hittite normally uses in the same meaning a more archaic adjective *saraz(z)i(ya)-*, which contains an unproductive suffix. By contrast, the suffix *-li-* in *sarli-* can be taken as the syncopated variant of the productive Luvian suffix *-ili-*, which one frequently encounters in Luvian loanwords in Hittite (cf. Melchert 2003a: 16, fn. 10).

All the lexemes given above have been already treated as Luvian loanwords in the previous literature. I would like to add to this list the Hittite noun *udnē* 'land', which is attested beginning with the *res gestae* of Anitta and was normally written phonetically in Old Script texts. This was synchronically a neuter *i*-stem, which has the exceptional ending *–ē* in nom./acc. singular and plural (in later Hittite the *e*-vocalism was analogically extended to the oblique cases). Puhvel 1980 plausibly hypothesizes that

[33] Note the existence of rare adjectival forms of unknown meaning and possibly Luvian origin [*m*]*anni-* (1x) and *mannai-* (2x) in late Hittite texts (CHD, L-N: 161-62, 163a). One wonders if any of these formations may be related to Lat. *magnus* < **mъg'no-* 'large'. It seems wise, however, to refrain from further speculations of this subject till the meaning of the above adjectives is clarified on independent grounds.

Hitt. *udnē* 'land' is ultimately related to Hitt. *watar* / *weten*- 'water'. A parallel for such a semantic development within Anatolian is the derivation of Luv. *hapata/i*- conventionally translated as "river-land" from Luv. *hapa/i*- 'river' (Melchert 2003b: 196). Arm. *getin* 'ground, land, going back to the virtual **wedeno*- or **wedēno*-, probably illustrates the possibility of the same model of semantic derivation in Indo-European. No doubt, it was restricted to the mountainous areas, where river-valleys separated from each other by mountain ridges would be perceived as separate "countries".

The closer parallels to Hitt. *udnē* are, however, available in the Luvic langiages. Hawkins (2000: 97b) indicates that the Luvian neuter stem REGIO-*ni* 'country', which is always logographically written in hieroglyphic texts, is to be read **udni*. Being in full agreement with Hawkins's root etymology, I would prefer a slightly different reading *wadni* because this is the way the Luvian word appears as the second component of the toponym *Kizzu-wadni* (with a variant *Kizzu-wadna*).[34] Lyc. *wedri*<**wedni* 'land' represents a *tertium comparationis* within the Anatolian family.[35] If one takes the Lycian word as a close relative of Hitt. *udne*, as I believe one should, this represents one more argument in favor of reconstructing the original full grade of its root.

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[34] Cf. del Monte and Tischler 1978: 211-13 for the attestations of this geographic name and Laroche 1979: 67 for its etymology.

[35] This idea ultimately goes back to Laroche (1979), who assumed that Lyc. *wedri* need not mean 'town', since Gk. πόλις 'town' corresponds to Lyc. *teteri* in the Xanthos trilingual. There is no consensus about the precise meaning of *wedri*, but even if it denotes 'town (with the surrounding area)', as per Neumann (2007: 422), its connection with Hitt. *udne* appears to be semantically plausible.

A phonological argument pleads against the assumption that Luv. **wadni* 'land' represents a genetic cognate of Hitt. *udnē*. The Hittite word does not show the expected assimilation of */-Tn-/ to /-nn-/ (Melchert 1994: 160). All the other Hittite forms containing the cluster /-Tn-/ are suspect of being Luvian loanwords on independent grounds. Besides Kizzuwatna, one can mention Hitt. *huitar*/*huitn*- 'wild animals', also attested as the Luvian foreign word *hu-u-i-tar-ša* (Melchert 1993: 83), Hitt. *kattawatnalli*- 'vengeful' containing the Luvian suffix -*alli*-, and the Tarhuntassa toponym $^{\text{HUR.SAG}}$*Huwatnuwanta*.[36] This problem finds immediate solution if we assume that Luv. **wadni* 'land' was likewise borrowed into Hittite in the prehistoric period. The preservation of */Tn/ clusters is a well-known feature of the Luvian language (Friedrich 1960, § 379c). Thus the Anatolian name *Wadniahsu* (Kt m/k 179.12), which was discussed in the previous section, may have been formed in the Hittite milieu despite the fact that it contained the Luvian first element. At some later point, the new collective **udnēi* > *udnē* '*Gelände*' was formed within Hittite according to the model described in Oettinger 2000: 183, while the base word gradually fell out of favor, perhaps because it looked too similar to its Luvian prototype.

None of the borrowings discussed above was used with reference to social institutions that were peculiar to the Luvians. All of these lexemes were fully assimilated

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[36] The attempt of Oettinger 2000 to explain the preservation of /-dn-/ in by the secondary character of this cluster is logically faulted. Hitt. *udnē* could not be formed as a secondary collective based on **wedni*- because the cluster assimilation **wedni*- > **wenni*, if ordered before the collective derivation, would have already eliminated the phoneme /d/ from the underlying representation of this lexeme. The suggestion of Puhvel (HED: H, 353) and Kloekhorst (EDHIL: 934) that only **-tn*- undergoes assimilation in Hittite, whereas **-dn*- does not, is phonologically unnatural, since the phonemes of the first cluster, in comparison with the phonemes of the second one, have one less distinctive feature in common.

semantically and denoted essential administrative and ideological concepts of the Hittite Old Kingdom. It is known, however, that administrative and ideological terminology is prototypically borrowed from socially and culturally dominant languages, respectively. Thus, the words for *country* or *parliament* came to Middle English from Old French, the language of the English elites after the Norman Conquest, while words for *angel* or *bishop* penetrated into Old English from Early Romance within the context of the Christianization of northern Europe. When terms belonging to these semantic domains undergo transfer merely for the sake of their exotic character, their meaning usually remains confined to the description of civilizations where they originally had currency. At most, one can expect their restricted metaphoric use accompanied by a degree of semantic devaluation in the domestic context. It is rather unlikely, for example, that the words *sultan*, *czar*, or *Mikado* will ever become used in the English-speaking world as titles of supreme rulers, although, as Victor Friedman reminds me, Americans use terms such as "energy czar" or "the sultans of swing".

This brings us to the conclusion that the facts discussed in this chapter will receive the most natural linguistic explanation if we assume that Luvians had exercised cultural or political dominance in Anatolia in the period before the formation of the Hittite state. Unfortunately, we do not have direct historical evidence that can corroborate this conclusion. The reconstruction of the most likely geopolitical scenario that can account for the distribution of Luvian loanwords in Old Hittite requires us to discuss first the geographic location of the land called Luviya in Hittite sources.

5.4 Location of Luviya. The Hittite Laws represent the only text where the toponym Luviya is explicitly mentioned. There is no doubt that the language of the earliest preserved version of the Laws is Old Hittite, but the precise date of its composition is debatable. Different views on this subject are summarized in Hoffner 1997: 229-230. Since the absolute chronology of the Old Hittite language remains a controversial topic, historical rather than linguistic consideration appear to be the most reliable guide to solving this problem at the present time. So far as I can judge, the only historical argument advanced for the composition of the Old Hittite version of the Laws during the reign of Mursili I is the mention of *ABI* LUGAL 'Father of the King', commonly identified with Hattusili I in § 55 of the Laws (Hoffner 1997: 66-67). The relevant passage, however, stands out from the rest of the text in view of its descriptive character, and therefore is likely to represent the interpolation from a different source. By contrast, the frequent juxtaposition between previous legal practices in the kingdom of Hatti and new regulations, exemplified by example (7) below, can be better understood within the context of legal reforms of Telibinu I, and therefore I am inclined to give preference to this later date.[37]

One first encounters the mention of Luviya in § 5 of the Laws dealing with the murder of a merchant. In comparison with the regular homicide, this offense was punished by a much heavier fine, perhaps because killing a foreign merchant could lead to a disruption in international trade. The inhabitants of Luviya and Pala were obliged to

[37] It is, of course, theoretically possible that the Hittites (Nesites) had legal codes even before the reign of Mursili I, and that this monarch set about to reform the old regulations. It is unlikely, however, that the kingdom that called itself Hatti and included the land of Luviya was in existence before the reign of Mursili's father, Hattusili I, although example (136) refers to the former regulations in such a kingdom.

restore the plundered property in addition to paying a fine, while the population of Hatti was apparently exempt from this obligation. Many scholars assume that Hitt. *unattalla-* represents the Anatolian word for 'merchant' corresponding to the Sumerogram ^{LÚ}DAM.GÀR, and consequently believe that the Hatti culprits were responsible for the delivery of the merchant's body for its proper burial.[38]

(134) KBo 6.2 i 3-6 CTH 291.1.a.A (OS), Hoffner 1997: 19.
takku ^{LÚ}DAM.GÀR kuiski kuēnzi 1 *ME* MA.NA KÙ.BABBAR pāi parna=ssē=a suwayezzi takku *INA* KUR Luwiya nasma *INA* KUR Palā 1 *ME* MA.NA KÙ.BABBAR pāi āssu=ssett=a sarnikzi nasma *INA* KUR ^{URU}*HATTI* nu=zza unattallan=pat arnuzzi
'If anyone kills a merchant, he shall pay 100 minas of silver and he shall look to his house for it. If it is in the lands of Luviya or Pala, he shall pay 100 minas of silver and replace his goods. If it is in the land of Hatti, he will only deliver *unattalla-*'.

The other relevant contexts of the Hittite Laws juxtapose Hatti and Luviya without mentioning the land of Pala. The general topic of §§ 19-21 of the Laws is forced transportation from Hatti to Luviya and vice versa. The examples below unambiguously show that "men of Hatti" and "men of Luviya" were contrasted as different ethnic groups, rather than inhabitants of distinct geographic areas, since they allow us to infer the existence of "men of Hatti" living in the land of Luviya and vice versa. One can easily see that the abduction clauses invariably favor the "men of Hatti" over the "men of Luviya", but grant legal protection to both groups. Since it is unthinkable that the Hittite Laws would contrast the Hattians and the Luvians without mentioning the

[38] The word *unattalla-* occurs only in this context, and lacks obvious etymology. The spelling with a single *-n-* complicates its comparison with Hitt. *unnai-* 'to lead'. C.Melchert (pers. comm..) suggests as an alternative that it may represent a Luvian borrowing reflecting the earlier **usnatalla-* 'salesman'. The validity of this hypothesis depends on whether *unattalla-* does mean 'merchant' and whether the development *–sn-* > *-n-* can be proven for the history of Luvian.

Hittites, one can assume that the expression "men of Hatti" was already applied to the speakers of the Hittite language during this period. The fact that the Laws make persistent references to the ethnicity of transportees and their abductors appears to imply that the crime under discussion could be perceived as a vestige of ethnic warfare, not to be tolerated in the new political situation.

(135) KBo 6.2.i.36-38, CTH 291.1.a.A (OS), cf. Hoffner 1997: 29-30
[takku LÚ.U_{19}].LU-an LÚ-n=a=ku MU[NUS-n=a=ku ^{URU}Hattusaz kuiski LÚ ^{URU}Luīs tā]y̯ezzi n=an *ANA* KUR Luwi[ya p]ēhutezzi̯ [ishas=sis=an] ganeszi nu É-er=set=pat arnuzzi
'[If a Luvian man] abducts a free person, man or woman, [from the land of Hatti], and leads him/her away to the land of Luviya, and his overlord recognizes him, (the abductor) shall forfeit (lit. "deliver") his own house'.

(136) KBo 6.2.i.39-41, CTH 291.1.a.A (OS), cf. Hoffner 1997: 30
[takku ^{URU}]Hattusi=pat LÚ ^{URU}*HATTI* LÚ ^{URU}Luīn kuiski tāy̯ezzi n=an *ANA* KUR Luwiya pehutezzi karū 12 SAG.DU pisker kinun=a 6 SAG.DU pāi parna=ssē=a suwayezzi
'[If] a Hittite man abducts a Luvian man in the land of Hatti itself,[39] and leads him away to the land of Luviya, formerly they gave 12 persons, but now he shall give 6 persons, and he shall look to his house for it'.

(137) KBo 6.2.i.42-44, CTH 291.1.a.A (OS), Hoffner 1997: 31
[takku] ARAD LÚ ^{URU}*HATTI IŠTU* KUR Luwiyaz LÚ ^{URU}*HATTI* kuiski tāy̯ezzi n=an *ANA* KUR ^{URU}*HATTI* uwatezzi ishas=sis=an ganeszi nu=ssi [1]2 GÍN KÙ.BABBAR pāi parna=ssē=a suwayezzi
'If a Hittite man abducts a male slave belonging to a(nother) Hittite man from the land of Luviya and leads him here to the land of Hatti, and his owner recognizes him, (the abductor) shall pay him 12 shekels of silver, and he shall look to his house for it'.

(138) KBo 6.2.i.45-47, CTH 291.1.a.A (OS), Hoffner 1997: 31
[tak]ku ARAD LÚ ^{URU} Luwiumanas IŠTU KUR Luwiyaz kuiski tāy̯ezzi n=an *ANA* KUR ^{URU}*HATTI* uwatezzi ishas=sis=an ganeszi nu=zza ARAD-*ŠU*=pat dāi sarnikzil NU.GÁL

[39]The translation "If someone abducts the Hittite (or) Luvian man in the land of Hatti itself…" is syntactically more straightforward but makes less sense from the legal point of view, since the crime described in (136) appears then to subsume the one described in (135), despite the fact that these two clauses prescribe different punishments.

> 'If anyone abducts the male slave of a Luvian national from the land of Luviya and brings him to the land of Hatti, and his owner recognizes him, (the owner) shall take only his own slave, there shall be no compensation.

I find it difficult to agree with Bryce (2003: 29) when he asserts that these clauses "need not mean that Hatti exercised any form of political or administrative control over the region covered by the term Luviya". The hypothesis that examples (135-138) represent a kind of diplomatic treaty between the two countries appears to be strictly *ad hoc*. It is true that the treaties between Hittites and their neighbors frequently prescribe the extradition of civilian captives, but they allot no role to the initiative of private individuals in these matters. The clauses under discussion, on the other hand, empower the victims of abduction to demand direct satisfaction from those who have kidnapped their slaves or dependents. Assuming that we are dealing with enforceable provisions, one has to conclude that Hatti and Luviya were under the same jurisdiction at the time of the composition of the Laws. The fact that example (136) mentions the penalty reduction, which has numerous parallels in the other clauses of the Hittite Laws, and presumably reflects the legal reforms of Telibinu, further reinforces the same conclusion. Finally, Hoffner (2002: 187) is no doubt correct in his claim that the asymmetrical treatment of Hittites and Luvians in the passages under discussion would be incompatible with a parity treaty.

If we accept that Luviya constituted a part of the Hittite Old Kingdom populated predominantly, although not exclusively, by the Luvians, this result provides us with the first step for determining the geographic location of this territory. The range of Anatolian regions where Luvian appears to have been spoken in the historical period were outlined in 2.3. Among those, the area of Hattusa can be immediately excluded,

since this area is called Hatti in (134-138). The area of Kizzuwatna is also a highly unlikely candidate, since it had split off from the Hittite kingdom by the reign of Telibinu, who negotiated with the local king Isputahsu as with his equal. Many scholars, including Hoffner (2002) and Bryce (2003), have insisted on the identification of Luviya with Arzawa on the basis of the late version of (135), where Luviya is replaced with Arzawa in one of the two instances (KBo 6.3 i 46). This identification, however, leads to paradoxal results. One has either to assume with Bryce that the relevant paragraphs of the Hittite Laws represented a sort of international treaty, a position that was criticized immediately above, or to follow Hoffner in his historically unsubstantiated assumption that Arzawa represented an integral part of the Hittite Old Kingdom (cf. the historical discussion in 3.2). Since both approaches are, in my opinion, untenable, the replacement of Luviya with Arzawa must be considered within the context of the historical period when KBo 6.3 was compiled and of the redactional history of the relevant passage. I believe that the account of this alternation that I have presented in 3.5 renders redundant further speculations about the mutually interchangeable character of the two terms in the Old Kingdom period.

Thus we are left two Luvian-speaking areas: the Konya Plain corresponding to the Lower Land and Pedassa of Hittite sources and the Sakarya river basin where the town of Istanuwa was apparently located. The choice between these two options is not so straightforward, but there are considerations that prompt me to conclude that at least the Konya plain must have been included in the Old Hittite definition of Luviya. This area, which lies within easy reach of the valley of Kızıl-Irmak, remained firmly within the fold of the Hittite kingdom, even at the time of its relative weakness under Telibinu

(Bryce 2005: 104).[40] A consideration that may be relevant for this discussion is the absence of the geographic term Lower Land (KUR *ŠAPLITI*) from the Hittite texts that predate the reign of Suppiluliuma I. It is possible that this quasi-synonym eclipsed Luviya in the conditions when the old term stopped being descriptive enough, perhaps because new Luvian territories came under the Hittite control or because more Luvians settled in the Hittite core area.[41]

Another consideration that lends a degree of support to the proposed location of Luviya is its etymology. I suggest that Luviya represent a derivative of Luv. **lūwa-* 'plain', the reflex of IH. **lóuko-* 'plain, field' and the cognate of Ved. *loká-* 'open space, world', Lith. *lãukas* 'field', and NEngl. *lea* 'meadow'. The voicing **lóuko-* > **lóugo-* exemplifies the common Anatolian lenition of stops between two unstressed morae (Adiego 2001), while the subsequent development **g* > *Ø > **w*/*u*__ finds a parallel in Luw. *tuwatar(i)-* < **dhughə₂ter-* 'daughter'. As typological parallels for the suggested semantic development, one can mention *Polska* 'Poland' or *Poljane* (self-designation of an East Slavic tribe that lived in the present-day Ukraine), both derived from Slav. **polje* 'field'. More to the point, the country name Pedassa, which was applied to (a part of) the same territory as the historical Luviya under my hypothesis, can

[40]As the Hittite kingdom expanded to include the Sakarya river basin (and we do not know precisely when it happened), they may have extended this term to their new subject territory. This is, however, not very likely, since the Hittites had an understandable tendency to name river valleys after the respective rivers.

[41] Note that KUR *ELITI* / KUR UGU-*TI* 'Upper Land' likewise does not occur in Hittite sources predating the Deeds of Suppiluliuma. The contrast between the Upper Land and the Lower Land is also present in the Mesopotamian geographic tradition, and both terms can be found in the Old Assyrian texts of the Colony period (Günbattı 1997: 146 with ref.). It is not clear, however, whether this parallelism reflects the continuity of geographic tradition. As Jared Miller reminds me, geographic designations of this type are typologically common, ranging from the Scottish Highlands to the European Netherlands.

be compared not only with Hitt. *pēda-* 'place' but also with Gk. πεδίον 'plain', and the second comparison is more satisfactory from the semantic perspective. It is possible that 'plain' was one of the original meanings of Hitt. **péda-* or its Luvic cognates. Tracing origins of isolated toponyms is an unwelcome task, and one must allow for the possibility that the place-name Luviya is non-Indo-Hittite in origin (cf. Melchert 2003a: 14, fn. 2). But if my etymology happens to be the correct one, it is clearly more compatible with looking for Luviya on the Central Anatolian plateau, than in the valleys cutting through its surrounding mountains.

Furthermore, the most natural hypothesis is to assume that the Hittites/Nesites used the term Luviya with reference to the territory where they first came into contact with the Luvian population. We have seen in 5.2 that the Luvian presence in the town of Kaneš must be postulated for the *kārum* period, while the whole of Chapter 4 was devoted to demonstrating structural interference between Hittite and Luvian in prehistoric times. Both conclusions require that the local homeland of the Luvians be located in the vicinity of the Hittite core area. The early Hurrian presence in Kizzuwatna, which left its impact on the structure of the local Luvian dialect, precludes one from considering this region as the Luvian *Urheimat* in spite of its lying reasonably close to Kaneš/Nesa. By contrast, the territory to the southwest of the Kaneš shows less Hurrian influence and may be considered the starting point for the Luvian penetration to Kizzuwatna.

Finally, the early and extensive Luvian presence in the area to the west of Kaneš makes perfect sense from the geopolitical point of view.[42] We know that the powerful kingdom of Purushanda was situated on the Konya plain in the early second millennium BC.[43] The king of Purushanda was the only Anatolian sovereign who was likely referred to by the title Great King in a tablet predating Anitta's reign (TTC 27, Larsen 2002: 157). The situation apparently changed with the Hittite conquests of Anitta, which culminated in the surrender of the king of Purushanda. Anitta received from him as a gift an iron throne, probably to be interpreted as a regional symbol of supreme authority, and took him back to Nesa as a privileged vassal (Bryce 2005: 39). It is probably at this point that Anitta, who had carried the title *rubā'u-* 'King' in the early part of his career, assumed the title *rubā'u- rabū-* 'Great King', conveying his new ambitions to the supreme power over the whole of Asia Minor (cf. Garelli 1963: 64).[44]

The old contradictions between the Hittites and Purushanda left their trace in the Hittite literary tradition. Nur-dahhi, king of Purushanda, emerges as the main Anatolian adversary of the Akkadians in the Hittite narrative about the deeds of Sargon I, known as

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[42] Cf. already Mellaart (1981: 142): "I. Singer's reconstruction of the ethno-political-linguistic pattern during the Kultepe period … is most instructive. In this he places the kingdoms of Purushanda and Salatiwar conquered by Anitta of Kussar on the Luvian-speaking territory, which would account for Luwiya, part of the Old Kingdom State of Hatti in the Law Code, placed on a par with Pala, northwest of the Halys river".

[43]Barjamovic 2005 plausibly argues against the traditional identification of / with the site of Acem Höyük on the shore of the Salt Lake, and relegates it to the very western part of the Konya Plain. The conclusions of Dr. Barjamovic are important for defining the western borders of the Luvian core area and I hope to address them in more detail after the publication of his dissertation.

[44] The use of the title 'Great King' in Kaneš was not consistent. Thus, king Zuzzu, who ruled Kaneš after Anitta, is titled *rubā'u-* 'King' in Kt 89/k 370 35, but LUGAL.GAL 'Great King' in Kt 89/k 369 1. It is significant, however, that the title 'Great King' was never used in Kaneš before the reign of Anitta.

the *šar tamhāri* epic (CTH 310).[45] Pace Bryce (2005: 25), I strongly doubt that this tradition is based on historical facts. None of the numerous monumental inscriptions left from the time of Sargon I, king of Akkad (*circa* 2334-2279 BC) refers to his military expedition against Anatolia. The conquest of Anatolian lands by the Old Akkadian ruler is mentioned for the first time in the Old Assyrian composition about the exploits of this king excavated in Kaneš in 1958 and edited in Günbattı 1997 and van de Mieroop 2000. This text contains the names of Kaneš, Hatti, and Hutura, a town that was probably situated close to Purushanda, but the name of Purushanda is not mentioned here either.

Some of the historical details of the *šar tamhāri* epic do not match the Anatolian setting of this composition. Archi 2000 has convincingly argued that the original name of Sargon's epic opponent was Nawar-tahe, to be interpreted as "man of Nawar" in the Hurrian language. It is hard for me to believe that Hurrians claiming their connection with the kingdom of Nawar established themselves on the Konya Plain by the twenty-fourth century BC (cf. Richter 2004: 290-291). In addition to this, G. Torri turned my attention to Sargon's crossing of the Tigris in an episode that precedes his engagement with Nur-dahhi. It would have been logical for the Akkadian king to cross the Tigris on his way to a Hurrian land in the Zagros mountains, but it would have been quite a detour if the goal of his campaign had been Asia Minor. These arguments suggest that the *šar tamhāri* epic as known today represents a creative adaptation of an earlier tale about

[45] The name Nur-Dagan, frequently cited in connection with this text, appears in the later versions of the same story and represents a false Semitization of **Nawar-tahe* > *Nur-dahhi*, as argued in Archi 2000.

Sargon's expedition against the Hurrians, whose setting was transposed to central Anatolia for reasons of political expediency.

I believe that the hostility of the Hittites to the kingdom of Purushanda explains the innovative setting of CTH 310. The deeds of Sargon I described in this epic represent a mythical backward projection of the historical deeds of Anitta, whose military campaigns likewise resulted in the submission of Purushanda.[46] These conclusions, however, make sense only on the assumption that the Hittites perceived Anitta's conquests as deeds of epic proportions long after the respective events had taken place. Rieken 2001 has convincingly argued that although the Hittite version of the *šar tamhāri* epic bears traces of deliberate language manipulation aimed at achieving its more archaic outlook, the date of this composition is no earlier than Middle Hittite. But if the events of the Anitta's reign indeed put an end to the power of Purushanda and launched the period of Hittite/Nesite dominion in Central Anatolia, the Hittites may have perceived them as very significant even three or four centuries after Anitta's death.[47]

If we assume, following Singer (1981: 130), that Luvian was the linguistically dominant language in the kingdom of Purushanda, the Luvian borrowing in Old Hittite

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[46] A later episode involving a showdown between Hatti and Purushanda is referred to in the fragmentary texts KBo 3.46+ and KBo 3.28 (cf. Dardano 2004: 239-41 with ref.). A short-lived revolt against Mursili I or, less likely, Hattusili I brought about the complete destruction of the town of Purushanda. I believe, however, that this episode alone would hardly provide grounds for the creation of a pseudo-historical epic.

[47] Van De Mieroop (2000: 159) comes to somewhat different conclusions when he writes: "If the Hittite rulers continued to maintain an association with the foreign Sargonic rulers throughout their history, this seems to indicate a persistent refusal to identify with their surroundings". In my opinion, the choice of Sargon as the protagonist of the *šar tamhāri* epic reflected no more that his being an epic stock figure throughout the Near East. It is the selection of Sargon's adversary that finds explanation in terms of the Hittite national ideology.

discussed in the previous section receive a natural explanation as vestiges of the Luvian superstrate. The kings of Kaneš could have drawn upon the administrative and ideological terminology of their Purushanda neighbors. In this sense, one can reformulate the proposal of Stefanini (2002: 791-2), who suggested on etymological grounds that the title *labarna-* / *tabarna-* could originally mean 'governor/steward' and interpreted it as the original title of the governors of Kussara, reflecting their subordinate position to the rulers of Kaneš. Under my interpretation, a King of Purushanda could have bestowed the same title of Luvian origin upon a ruler of Kaneš or Kussara in exchange for his formal submission.[48] The retention of the old vassal titles by independent rulers is a relatively common phenomenon, which can be illustrated by the SUKKAL.MAH dynasty of Elam or the Ottoman sultans, not to mention the fictional but more widely known case of the stewards of Minas-Tirith.[49]

On the whole, assimilated linguistic borrowings normally outlive the political arrangements that have caused them. Thus the anti-French sentiments nourished by English political elites for a good half millennium did not contribute to the elimination of French loanwords that had penetrated the British Isles after the Norman Conquest. In a similar fashion, there are no reasons why the Luvian administrative terminology must have disappeared from the Hittite language after the kings of Nesa imposed their

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[48] The exact location of Kussara remains unknown up to now, although the Assyrian documents of the Colony period appear to indicate that it was situated to the west of Kaneš (Forlanini 2004a: 301 with fn. 19).

[49] My proposal regarding the original function of *tabarna-*/*labarna-* is strictly conjectural. As an alternative, one can suggest that the Luvian word for 'ruler' underlies the auspicious name of Labarna I, while the subsequent kings reinterpreted it as a title in the same way as the Roman *cognomen* Caesar was extracted from the name of Julius Caesar to become a title of Roman emperors.

dominion upon the Luvian kingdom of Purushanda. On the contrary, it remains likely that the incorporation of a part of the Luvian-speaking area into the Hittite Old Kingdom contributed to the preservation and further proliferation of Luvian cultural influence throughout its territory, even though this influence assumed different forms.

5.5 Luvians in the Hittite Old Kingdom. The Deeds of Anitta, whose final episode features the peaceful submission of the king of Purushanda, conclude with the following statement "But when I came back to Nesa, I brought the man of Purushanda with me. Now, when he goes into the inner chamber, he sits before me at right" (Goedegebuure 2003: 319). This passage provides a possible scenario of how the Luvian-speaking individuals could make their way to the Hittite/Nesite court. Unfortunately, the paucity of historical documents pertaining to the Colony period precludes one from arguing that this episode reflects a pattern, and in any event I argued in 5.2 that the proportion of Luvic personal names in the Kaneš documents appears to be relatively small.

We wind up in a very different situation once we move to the period when Hattusa had become the capital of the Hittite Old Kingdom. It is a well-known fact that Hattusa lay outside the Hittite core area in the region that was at least partly populated by non-Indo-European Hattic speakers. In the Colony period, it was the center of an independent kingdom, which waged war against Kaneš and eventually suffered complete destruction at the hands of Anitta's soldiers. Anitta took pride in having its territory planted with weeds and proscribed the successive kings from re-settling it under the threat of an imminent punishment by the Storm-god (Bryce 2005: 38). His successors

did not heed his advice. Hattusa was rebuilt as a seat of the Kussara dynasty at some point before the reign of Hattusili I.[50] The circumstances under which this happened are not directly reflected in historical sources, but there is little doubt that the foundation of the new capital must have drawn upon all the resources of the fledgling Hittite kingdom, and as a consequence its population must have been multiethnic from the very beginning.

Since our knowledge of Old Kingdom prosopography is virtually limited to the Hittite royal family, one cannot even try to estimate the proportion of the Hittite/Nesite native speakers in the newly populated Hattusa. One can, however, state with confidence that Old Hittite was clearly not a moribund language as evidenced by the three or four centuries of its subsequent linguistic evolution attested through written texts. Furthermore, the degree of structural interference between Hittite and Luvian in the period under consideration was slight, especially in comparison with subsequent developments. In Chapter 6, I intend to show that the contact-driven restructuring of New Hittite finds its explanation in the shifting balance between native speakers of Hittite and Luvian in Hattusa. This explanation does not make sense if one assumes that the overwhelming majority of Hattusa denizens already were Luvian speakers before the formation of the Hittite Empire.

It has been already observed that the discontinuity between the onomastics attested in Kaneš and Hattusa may represent an artifact of our limited evidence.

[50] The mention of Hattusa in connection with "the Father of the Old King" in the historical part of the Story of Zalpa (KBo 3.38 Obv. 19-20) precludes the traditional theory, still upheld in Bryce 2005: 68, which ascribes the re-foundation of Hattusa to Hattusili I. For the relevant discussion, see Beal 2003: 24-25 and Forlanini 2004b: 253-54.

Although the suffixes *-uman*, *-ahsu*, *-ahsusar* and *-niga/-liga/-lga*, which characterize personal names of Kaneš denizens as a group, are either completely absent or left only isolated traces in Hattusa onomastics, given the restricted corpus of personal names attested in Old Hittite sources, it is impossible to say whether they had never been present in Hattusa or simply fell out of fashion at some point in the Old Kingdom period. But the fact that no ruler of the Hittite Old Kingdom, with the likely exception of Alluwamna, has a name with a Hittite etymology requires explanation.[51] It turns out that the royal names of this period fall into two main categories: they are either non-Indo-Hittite or Luvic.

The Hattic stratum of personal names is most clearly represented by Telibinu, presumably named after the homonymous Hattic deity. The names Hattusili, Mursili, and perhaps Tahurwaili may have been formed with the Hattic adjectival suffix *-il* (Soysal 2004: 221).[52] The name Huzziya lacks an obvious etymology, but the earliest Huzziya known to us was the king of Zalpa defeated and captured by Anitta (Bryce 2005: 38). If we follow the *communis opinio*, according to which the town of Zalpa was located in the Black Sea region near the mouth of Kızıl-Irmak, the non-Indo-European

[51] On Alluwamna, see Laroche 1969: 258. Its suffix *-mna-* is Hittite, but its root is unknown. The royal name Ammuna likewise lacks a convincing etymology.

[52] It is, however, remarkable that the Luvian language was likewise endowed with an adjectival suffix *-ili-*, which could also be used for deriving attributes from toponyms. Although it is quite unlikely that the Old Hittite names such as Hattusili or Karahnuili, derived from toponyms lying in the Hattic-speaking area, represent Luvian formations, the existence of Luvian *-ili-* may have contributed to their survival in the Hittite milieu.

ethnicity of its population and its ruler is very likely.[53] The usurper Papadilmah, mentioned in Hattusili's testament, has the name of an inscrutable etymology, which, however, has no chances of being Indo-Hittite.

The presence of the Hattic component in the Hittite regal onomastics must have an explanation in the history of the period between the collapse of the *kārum* trade and the reign of Hattusili I. Perhaps the members of the Kussara dynasty who survived the destruction of Kaneš were involved in intermarriages with Hattic elites in order to maintain their power base in the north during the Dark Age. At any rate, we know that these attempts did not result in the linguistic assimilation of the royal family as a whole, since Hittite, and not Hattic, eventually emerged as the standard written language of the Hittite Old Kingdom. On the other hand, some of the royal names that are traditionally interpreted as Hattic may in fact reflect the Kussara cultural heritage of the Hittite rulers, as argued in the introduction to this chapter. Unfortunately, no attempt to discriminate systematically between these two groups can be made at the present time, since the corpus of Old Kingdom names is small, our knowledge of Hattic is still very imperfect, and the original native language of the "Kussara dynasty" is unknown.

The Luvic names of the Old Hittite kings have received less attention in the scholarly literature, presumably because non-specialists can more easily mistake them for Hittite names. Nevertheless, given the present state of our knowledge, the two groups should be formally kept apart. Thus, if Labarna indeed represents an auspicious name of

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[53] Note also the cult of the deity Huzziya in the town of Hakmis belonging to the Hattic cultural sphere (van Gessel 1998, 1: 175).

Hattusili's predecessor, it must be derived from the title *tabarna-*/*labarna-* of Luvian origin, as argued in 5.3. The sociolinguistic significance of this foreign name is, however, limited, since *tabarna-*/*labarna-* was also borrowed into Hittite as a common noun. More interesting is the case of the name Hantili, which literally means 'first' in Luvian, whereas Hittite employs the more archaic adjective *hantezzi-* in the same meaning. The name Zidanta cannot be separated from Luw. *zida/i-* 'man', while Hitt. *pesna-*, *pisena-* 'man' provides an etymology for the name Piseni, which is likewise attested in Old Hittite (Laroche 1969, § 1023). The name Muwattalli contains the suffix *-alli-* of Luvian origin (Melchert 2005: 455-56), while the base *muwa-* 'might (vel sim.)' does not appear in Hittite texts as a common noun before the Empire Period and probably represents a Luvian loanword.

All four of the individuals who inaugurated royal names of Luvic origin, i.e. Labarna I, Hantili I, Zidanta I, and Muwattalli I, came to power through marriage and/or murder. Hattusili I referred to himself as "son of the brother of the *tawananna*", and this implies that if Labarna I was his predecessor, he was his aunt's husband. On the other hand, the Tale of Zalpa (CTH 3) portrays the "grandfather of the king" as a Hittite ruler, and if one follows Beal 2003 in identifying "the king" of this story with Hattusili I, one gets an impression that Labarna I inherited the throne as a son-in-law of the preceding king. Hantili I was married to Harapsili, sister of Mursili I, and came to power by murdering his brother-in-law (Bryce 2005: 100). Hantili I, in turn, fell victim to the plot of his son-in-law Zidanta I, who had previously aided and abetted him in his plot against Mursili I (Bryce 2005: 101). Muwattalli I is known to have murdered the preceding king Huzziya II, and his relation to the Hittite royal family is unclear (Bryce 2005: 114-115).

This characterization does not apply to Hantili II and Zidanta II, who may have inherited the Hittite throne from their fathers. Once a particular name was established as a part of the royal onomastic repertoire, it could be given to a Hittite prince irrespectively of his ethnic origin. But one remains under the impression that none of the Old Hittite kings with new Luvic names was born into the Hittite royal family. They would rather represent the privileged social group of the second rank, suitable for marrying royal offsprings and capable of carrying out coup d'états. But why were Luvic names so popular among this group? Should one assume that they acquired universal prestige among the Hittite speakers in Hattusa? Should one attribute them instead to the high proportion of Luvian native speakers in Hattusa and the surrounding area? Or should these names imply that the members of the Hittite royal family were in the habit of marrying prominent Luvians or promoting them at the Hittite court, as a way of cementing ties between various parts of the kingdom? It is difficult to make a clear-cut choice between these three options, which need not be mutually exclusive, but one can comment on the relative plausibility of each of the three.

The preference for Luvic names on the part of the Hittites living in Hattusa would signal the increasing social or cultural dominance of the Luvian language. This scenario would be hard to justify from the historical point of view as the main reason for the discontinuity between Kaneš and Hattusa names. The previous two sections have been largely devoted to the exposition of arguments for the high status of Luvian in the Colony period, and yet the Hittite names were predominant in Kaneš/Nesa. After that time, the social status of Luvian could have only changed for the worse. The kingdom of Purushanda lost its privileged status in Anatolia, and the Hittites succeeded in

conquering large tracts of Luvian-speaking territories. If anything, one would expect that the Hittites would maintain their onomastic tradition under such circumstances. It is, of course, possible that individual Luvic names would acquire popularity among the Hittites for specific reasons, not related to the general sociolinguistic situation. Thus the names of Hantili II and Zidanta II could hearken back to those of their royal predecessors Hantili I and Zidanta I, as argued above.

There is more to say in defense of the increasing proportion of Luvian native speakers in Hattusa in comparison to Kaneš. As mentioned before, Hattusa was probably re-founded as an administrative center of the Hittite kingdom, and Luviya, as one of its provinces, was likely to supply a sizeable part of the new capital's population. The occurrence of Luvian names in Hattusa onomastics was not limited to the king's close relatives. A senior cup-bearer with the Luvic name Zidanni is mentioned in Old Kingdom land grants (Laroche 1969, § 1554), while a Luvian woman Tiwatawiya appears as a transferred commodity in another such grant (Laroche 1969, § 1351). This is, course, not much evidence, but the only reason why we cannot continue this list is our extremely poor knowledge of the Old Kingdom prosopography. For example, I am aware of only three officials of this period, whose names are linguistically Hittite. Besides Alluwamna, son-in-law of Telibinu I, and Piseni, son of Hantili I murdered by Zidanta I, I can only mention the Hittite courtier Ilalium(m)a, a contemporary of Hantili

I (Laroche 1969, § 446).[54] Yet, the large number of Luvian speakers in the Hittite capital would not be sufficient to explain how they penetrated to the highest levels of power. Old Hittite was clearly not a moribund language, as discussed above, and if the Hittite kings wished to obtain native attendants or to find native consorts for their relatives, they would have no difficulties with procuring such.

Thus one has to explore the last remaining alternative, implying that the rulers of the Hittite Old Kingdom undertook conscientious efforts to integrate foreign elements into the ruling class (sometimes to their own disadvantage, as they would lose their lives at the hands of the new attendants or in-laws). Granted, there are no historical texts that can shed direct light on how the ethnic diversification was implemented. One can, however, find an indirect confirmation of this policy in the analysis of metaphoric code-switching in rituals reflecting the Hittite state cult.

Multilingual speakers may switch between different codes for a variety of reasons. This can be done in order to signal their multiple identities (metaphoric code-switching), in response to situational factors (situational code-switching), due to their inability of generating coherent discourse in their choice language (incompetence-driven code switching), or completely subconsciously, without an intentional meaning or obvious causation (convenience-driven code switching).[55] Similar factors may be

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[54] Although the name Piseni is usually compared with Hitt. LÚ-*as* = *pesnas* 'man', which is lexically distinct from Luv. *zita/i-* 'man', it unexpectedly shows a change in stem vocalism that resembles the *i*-mutation.

[55] See Winford 2003: 116 for an attempt to define the difference between situational and metaphoric code-switching in oral discourse, and Winford 2003: 108 for the discussion of incompetence-driven code-switching. Convenience-driven code-switching represents an unmarked category, which is

responsible for the production of multilingual texts (or texts in multiple languages) in a particular epigraphic community. The difference between situational and metaphoric code-switching, somewhat murky in the case of oral communication, tends to be more clear-cut when we are dealing with written texts. Situational code-switching involves variation between codes depending on the formally definable parameters, such as the genre of a text or the way of its execution. By contrast, metaphoric code-switching depends on the factors that may not be defined based on the linguistic context alone. The edition of a Greek text accompanied by the Latin apparatus and the French and English bilingual road signs in Québec would represent model examples of the first and the second kind of code-switching in the written discourse, respectively.

The religious rituals reflecting the official state cult of the Old Kingdom period provide us with instances of code-switching between Hittite, Luvian, and sometimes Palaic. The relevant texts are KUB 35.133+ (Hittite and Luvian) and items collected under CTH 752 (Hittite, Luvian, and Palaic).[56] Since these rituals reflect the earliest known attempts at rendering Luvian discourse in writing, it is important to understand the motivation behind this decision. It appears that code-switching in the texts under consideration has both the situational and the metaphoric component.

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usually addressed when people analyze code switching from the formal perspective; it will be discussed in more detail in 6.4.4 in connection with the sociolinguistic situation in the Hittite Empire. Thomason 2001 introduces a further distinction between code-switching and code alternation. The latter refers to the use of two or more languages by the same speaker, provided that each of the two languages is consistently used throughout a particular conversation.

[56] Laroche (1971) booked KUB 35.133 under CTH 772, thus implying that this is one of the Istanuwian rituals. Starke (1985:271) has convincingly argued that this Late New Script text should rather be considered together with the Old Script passages mentioning the *asusala*-people, and therefore this text has been moved to the entry CTH 665 in the online version of the *Catalogue* (cf. the discussion in 2.2 above).

As an example, let us consider a ritual fragment KBo 19.155 that contains passages in Hittite (bold), Luvian (italic), and Palaic (unmarked).[57] Although the text under consideration is preserved in a Middle Script copy, the prominence of Palaic passages tips the scales in favor of the hypothesis that its original was Old Hittite. There is no doubt that this text, which mentions the title of *tabarna* twice, must reflect the state cult of Hattusa. The form *memahhi* 'I say' reconstructed in line 16 suggests that the Hittite passage belongs to the prescriptive part of the ritual followed by a Palaic incantation. It is reasonable to assume on structural grounds that the Luvian passage preceding the Hittite lines represents another incantation.[58] Therefore, one can argue that the shift between the Hittite narrative and the Luvian/Palaic direct speech of ritual practitioners represents an instance of situational code-switching. But how can one explain the alternation between Luvian and Palaic incantations in the same text? The simplest hypothesis is that they appear side by side in order to increase the efficacy of the ritual, but the exact metaphoric significance of shifting from Palaic to Luvian and then back to Palaic cannot be appreciated based on this fragment alone.

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[57] Starke (1985: 38) advocates a somewhat different distribution between Luvian and Palaic passages in this fragment, insisting that lines 1-3 are Luvian and claiming that lines 4-7 can be either Luvian or Palaic. The Palaic character of line 7 is, in my opinion assured through the occurrence of the contrastive clitic *=ma*, which is replaced with *=pa* in Luvian. The form *hantili*(-) in line 3 is definitely not Hittite, but *hantili-* may represent an Anatolian archaism not attested elsewhere in Palaic through sheer accident. The restoration of the clitic complex [*n*]*ū=ku* (Carruba 1970b: 26, fn. i) assures the Palaic character of line 17.

[58] The noun *huitumar-sa* 'life', restored in line 13, would be very appropriate in an entreaty for the well- being of a ritual patron (cf. the use of the same word in KBo 13.260 iii 18, as well as numerous occurrences of Hitt. *huiswatar* 'life' in similar contexts).

(139) KBo 19.155, CTH 752 (MS), Starke 1985: 41-42

1'.]x-an[?]
2'.]x-ah-ha-ši ha-tar[-
3'.]x ha-an-ti-l[i(-)

4'.]x-at-ta-an-ti-iš[
5'.]a-ru-uš šu-wa-ru-u[š
6'. t]a-ba-ar-na-aš MUNUS t[a?-wa?-na?-an?-na?-aš?
7'. UR]U Ha-at-tu-ša-ma x[

8'. w]a$_a$-ti-i-la-kat wu$_u$-ú-uz-za-an[-ni-kat
9'.]**x-ta-pa-a-at-ta a-ú-in-t[a**
10'.]**x-šu-un-na-wa-an-ti-en-zi t[a?-**
11'.]**wa-ar-pa-i-in-zi hi-⌜iš⌝[-**
12'.]**x-ta-a-an-ta** [
13'. **hu-i-]⌜tu-mar⌝-ša** [

14'.]*NINDA har-ši x*[
15'.]*x mar-nu-an*[-
16'. *me-]e-ma-⌜ah⌝[-hi*

17'. nu-]ú-ku x[
18'.]i-tu-ú(-)x[
19'. n]a-di-i-en-ta[
20'.]x-šu-ú-ri-it[-

21'. t]a-ba-ar-na[-aš
22'. n]a-di-pí ku-t[a?-
23'.]x-a-ar-ha-an[(-)
24'. h]u-wa-ar-na-as(-)x[
25'. p]al-li-iz-za-a[

26'.]a-al-li-x[
27'.]x(-)x[

Another Hittite ritual containing incantations in both Luvian and Palaic is CTH 752.A-D. Although it is assigned the same catalog number as the fragment (139)

discussed above, there are grounds to believe that (139) belongs to a different text.[59] This ritual, whose main purpose appears to be placating the Storm-god, is preserved in both Old Hittite and Middle Hittite copies. Regrettably, no complete edition of this ritual is currently available, and so one has to rely on publications dealing with its individual parts. The most transparent Palaic incantation contained therein (752.B iii 11-13) is cited and analyzed in Yakubovich 2005a: 117-18. Starke (1985: 38) asserts that the fragment 752.A ii 22-25 is written in Luvian, and this claim can now be confirmed through the newly joined fragment of 752.A ii 22-23, which contains the unambiguous acc.sg. *-assin* belonging to a Luvian possessive adjective.[60] It is more difficult to confirm the claim of Starke (ibid.) that the incantation 752.A ii 1-7 is written in Palaic, but the words beginning with *na-di-* bear a vague resemblance to the forms found in lines 19 and 22 of fragment (139).[61] Once again, we are facing a question about the metaphoric significance of including both Luvian and Palaic direct speech passages in the same ritual.[62]

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[59] Cf. the list of joins and duplicates belonging to the ritual CTH 752.A-D in Groddek 2002: 47 and Groddek 2004: 226, where KBo 19.155 is not mentioned.

[60] See Starke 1985: 40 for the transliteration of the original Luvian fragment and Groddek 2004: 226 for the transliteration of the joined piece.

[61] See Starke 1985: 39 for the transliteration of 752.A ii 1-7.

[62] It is less clear whether the fragment KBo 19.152 likewise features code-switching between Luvian and Palaic, as claimed in Starke 1990: 595-96. The fragment under discussion, which is overwhelmingly Palaic, contains line 7' *ha-am-šu-uq-qa-la-a-ti har-t*[*u-wa-a-ti* 'with/by/from great-grandfathers and ancestors'. Both of the preserved nouns are attested in Luvian and unattested in Palaic, but they do not show any phonological or morphological developments that would be specific to Luvic. Therefore, one cannot exclude the possibility that they are actually Palaic words, in which case we wind up with the first attestation of the Palaic ablative-instrumental ending.

In the case of Palaic, we are lucky to have an idea of how the practice of using vernacular incantations may have originated. The Palaic incantation mentioning bread offering (CTH 751) was recited as a part of the Hittite festival of Zaparwa, the head of the pantheon of Pala (CTH 750, cf. Laroche 1971: 134 with fn.1). CTH 751 contains invocations to several Palaic gods, presumably listed in order of decreasing significance. It also mentions ritual actions performed by the *tabarna*, thus indicating that we are dealing with a ritual incorporated into the Hittite state cult. A number of fragmentary Palaic texts collected in CTH 754 likewise invoke Zaparwa, while later his cult found its place in the Hittite AN.TAH.ŠUM festival (Haas 1994: 611). The incorporation of Palaic gods in the Hittite pantheon together with the language of their worship shows a high degree of ethnic awareness on the part of the Old Kingdom rulers. So far as we can judge, Palaic indigenous society was never literate, and so one has to assume that the officials of the Hittite Kingdom undertook conscientious efforts to adapt the worship of Palaic gods to the needs of the state cult. The scribes who were responsible for accomplishing this task must have been bilingual in Hittite and Palaic.[63]

It is theoretically possible that the use of Luvian in Old Hittite religious rituals had likewise been originally introduced in an effort to address the gods of the Luvians in their usual language. This conclusion, however, finds no support in the available textual evidence. The Old Hittite festival CTH 665 containing extensive Luvian passages is

[63]A more striking example of the same tendency is, of course, a large number of Hattic and Hittite bilingual texts found in the archives of Hattusa. The Hattic religious literature does not reflect an attempt to integrate individual indigenous gods into the Hittite pantheon, but was transmitted as a result of a comprehensive religious reform that led to a complete merger of Hattic and Hittite official cults. On the traditional propensity of the Hittites toward religious syncretism, see Klinger 1996: 16-24.

performed for the Storm-god and the Sun-goddess of Arinna, the divine couple presiding over the traditional pantheon of Hatti. The ritual 752.A-D, whose Hittite part can be understood reasonably well, focuses on pacifying the Storm-god and does not even mention any other deities. The general context of the fragment (139) is hard to reconstruct, but the shift from Palaic to Luvian in line 9 without any Hittite intermission speaks against the hypothesis that the relevant passages have different addressees.

This is why I propose that a different metaphor underlies the use of Luvian in Old Hittite religious literature. Rather than underscoring the diversity of the Hittite pantheon, the texts under consideration stress the multiethnic character of the Hittite society united by the common state cult.[64] This metaphor could operate both at the level of the liturgical corpus as a whole (hence the alternation between compositions addressing the same supreme gods in Hittite vs. Luvian), and at the level of individual texts, in which case we are dealing with metaphoric code-switching of the sort described above. The juxtaposition of Luvian and Palaic incantations need not have been grounded in the actual religious performance observed by the scribes, but may represent a result of deliberate manipulation on their part. The compilation of rituals such as CTH 752.A-D may have involved copying incantations found in the rituals for Palaic or Luvian deities, with preference to those that were most compatible with the cult practices of Hattusa.

Situational code switching between the matrix language narrative and the embedded foreign quotations is not restricted to the Hittite Old Kingdom. As more or

[64] As a parallel to this pattern of code-switching, one can mention a tradition existing in the Russian Orthodox church. During the Easter service, the priest is entitled to perform a part of the Gospel readings in all the languages of the Christian tradition he happens to know. This part of the liturgy is meant to metaphoricly underscore the ecumenical character of the Christian religion.

less random examples from the same millennium, one can mention Old Hurrian spells against snake and scorpion bites recorded and annotated by Old Babylonian scribes (Prechel 2001) or Northwest Semitic and Cretan magic formulae embedded in an Egyptian medical papyrus of the fourteenth century BC (Steiner 1992). We will see more examples of this kind when we discuss the use of Luvian conjurations in Kizzuwatna rituals in 5.7. But these are magic utterances collected for their practical value and intended for private use. As for the metaphoric code-switching elevated to the level of state cult, it appears to have no parallels in the Ancient Near Eastern milieu. It conjures up the image of a state that did not shy away from displaying its multiethnic character. If my analysis of multilingual religious texts is justified, one can claim, without sounding too modernistic, that the Hittites of the Old Kingdom period were among the first champions of ethnic diversity known to us through written sources.

To be sure, Luvian passages occupy a rather modest place in the written discourse of the Hittite Old Kingdom. As long as its written use remained a metaphoric gesture, there could be no domain in which it functioned as a dominant vehicle of written expression. In this respect, the situation in the Old Kingdom was markedly different from one in the Hittite Empire, where writing in Luvian came to be associated with monumental inscriptions. The parallel with a region like Québec, where English and French enjoy an equal status in all the functional domains, would likewise be grossly inaccurate. So far as we can judge, the metaphoric use of Luvian was limited to a handful of officially sanctioned incantations, and Luvian failed to acquire reputation as a language fit for creative writing in the Old Kingdom period.

Nevertheless, the languages of pariah communities never enjoy even this kind of recognition.[65] Given that the Luvian language was conscientiously promoted to an official status in the religious sphere, it is unbelievable that the Hittites would hinder the social advancement of individuals for whom it was the mother tongue. The leaders of Luvian communities who submitted themselves to the rulers of Hattusa might as well be treated in the same way as Anitta had once treated the "man of Purushanda". Thus the gradual accumulation of Luvian speakers in the new Hittite capital was probably matched by the integration of the "men of Luviya" into the Hittite/Hattic aristocracy. Once in Hattusa, these provincial potentates would have a strong incentive to shift to Hittite, but they could keep their original names as badges of ethnic identity. Some of them, or their descendants, would eventually become Hittite kings, through plot, marriage, or a combination of both.

5.6 Status of Luvian in the Early New Kingdom. The transition from the Old Kingdom to the Early New Kingdom in Anatolia cannot be defined through the emergence of a new dynasty (Bryce 2005: 122). Scholars accept the division between these two periods of the Hittite history based on two factors. On the one hand, the rulers of the early New Kingdom (*circa* 1400-1350 BC) embarked on a series of offensive campaigns aimed at reasserting the status of Hatti as a major Near Eastern power. It is

[65] There are numerous states, including the present day Republic of Turkey, where all citizens are guaranteed equal rights, while certain widely spoken languages are completely disenfranchised in the official sphere. By contrast, I cannot think of a state, ancient or modern, where a particular language would be metaphorically used as a solidarity tag in the official discourse, whereas its speakers would be denied legal protection.

during this period that the practice of military raids against western Anatolia was reintroduced after a long break, while the kingdom of Kizzuwatna in southeastern Anatolia ended its alliance with Mittani and returned to the fold of the Hittite state. On the other hand, the early New Kingdom period witnessed a surge in the literary activities of the Hattusa scribes. The royal bureaucracy compiled the instructions regulating the duties of various state officials, while the lore of reputed witch-doctors that were practicing or had practiced in various parts of Anatolia was collected and deposited in the palace archives. Both the Hitttite language and the cuneiform ductus of the Early New Kingdom documents shows a number of innovations in comparison with the texts of the preceding period.

At the same time, one should not overestimate the drastic character of the changes that mark the transition to the Early New Kingdom period. Our knowledge of the history of the late Old Kingdom after Telibinu is extremely meager. A handful of fragmentary treaties with Kizzuwatna, some seals, and numerous formulaic land-grants are all we have at our disposal to discuss the political history of Hatti between the reigns of Telibinu and Tuthaliya I. It follows that some of the innovations observable in the early fourteenth century BC may represent the results of the preceding development. As far as the sources for the ethnolinguistic history of Anatolia is concerned, the situation is even more difficult. The gap in the attestation of administrative documents containing a statistically significant amount of Anatolian personal names spans the period between the demise of Assyrian trade colonies and the early fourteenth century BC. Therefore, the temptation to connect the ethnolinguistic changes first recorded for the early New Kingdom with the political history of the same period must be resisted.

With these reservations in mind, one can present the arguments for the Luvian linguistic dominance in the central part of the early New Kingdom. The evidence is threefold. Prosopographic analysis suggests that names of Luvian origin were more popular than those consisting of Hittite elements. The study of prescriptive texts emanating from the royal chancelleries pleads for the conclusion that Luvian was understood by the bulk of the Hattusa population. Finally, the scrutiny of Middle Hittite dialectal innovations indicates that all of them can be interpreted in terms of structural convergence between Hittite and Luvian.

The clearest piece of onomastic evidence comes from the land-grant of Arnuwanda I bestowed upon the hierodule Kuwatalla. The deed of transfer (KBo 5.7, CTH 223) contains some sixty reasonably well-preserved personal names.[66] Only a portion of these names can be identified with respect to their underlying language, but the absolute majority of forms for which such identification is possible are Luvic. The nineteen Luvic names in the table below constitute about one third of the entire corpus. Most of them belong, likely or assuredly, to the members of the transferred households, but the last four belong to the high-ranking witnesses of the transaction. These names have been selected based on the presence of typically Luvic stems, *ala/i-* 'high', *kuwalan-* 'army', *muwa-* 'might (vel sim.)', *tapara-* 'rule', *uzzi-* 'wish', *wana/i-* 'woman', *zalma-* 'protection (vel sim.)', *zamman-* (meaning unknown), *zita/i-* 'man'.

[66] For the list of personal names occurring in this and other royal land grants, see Riemschneider 1958: 379-80. The new edition of Hittite and Akkadian texts belonging to this genre is now in preparation by G. Wilhelm.

This list could be somewhat extended by the adding Luvian names that can be identified based on their suffixes.

Table 29: Luvian Names in the Kuwatalla Land-grant

^{m}U-ru-wa-an-ta-zi-t[i-iš]	Serf	obv. 2
^{m}Hu-u-ha-za-al-ma	(Unclear)	obv. 6
^{m}Ku-wa-la-na-al-la	(Unclear)	obv. 6
^{m}Hu-uh-h[a-z]i-ti-iš	Serf	obv. 9
[^{f} …]-hu-uz-zi-i-iš	Female serf	obv. 10
[^{m}…]x-zi-ti-iš	Barbarian (*dampūpis*)	obv. 19
[^{m}]A-ri-in-na-zi-ti-iš	Stable-boy (UMMEDA ANŠE.KUR.RA)	obv. 23
[$^{m/f}$]Mu-u-wa-at-ti-iš	(Unclear)	obv. 24
[$^{m/f}$]A-li-ih-ha-an-ni-iš	(Unclear)	obv. 52
[^{m}M]u-li-ya-zi-ti-iš	Maker of Hurrian clothes	rev. 3
^{f}Za-am-na-ú-ya-aš	Female serf	rev. 5
^{m}Zi-i-ti-iš	Old male serf	rev. 6
^{m}Ti-wa-ta-pa-ra	Serf	rev. 28
^{f}Zi-dan-du-uš	Female serf	rev. 35
^{f}Tu-ut-tu-wa-ni-iš	Old female serf	rev. 36
^{m}Hal-pa-zi-ti	Chief Wine-bearer	rev. 51
^{m}Ka-r[i-ya$^{?}$-z]i-ti	*antuwasallis*	rev. 52
[^{m}…š/t]a-zi-ti	Chief Shepherd	rev. 53
^{m}Nu-un-zi-ti	Overseer of 70 royal butlers	rev. 54

The only assured Hittite name occurring in the document under consideration is that of Suppiluliuma, scribe on wooden tablets, whose function in the transaction is not altogether clear. The name of Inar, the scribe of KBo 5.7, may be either Hittite or Hattic. The association between these non-Luvic names and the scribal profession may well be coincidental, but their small quantity is surely not. While it is true that Kuwatalla may be identified with the female ritual practitioner born in Kizzuwatna (cf. 2.2), the lands that she received were probably located in the Hittite core area, since Hittite officials are mentioned as their previous owners. The fact that none of the transferred serfs had an

unambiguously Hittite name signals a definite break with the onomastic tradition known to us from the *kārum* documents.

Another important source for study of the early New Kingdom onomastics is the collection of letters found in the fortress of Tapigga (modern Maşat-Höyük). This fortification was situated on the northern periphery of the kingdom as a part of the protective line against the Kaska tribes. The bulk of personal names appearing in the Maşat-letters belong to relatively low-ranking individuals, such as provincial scribes, military officers, or even local farmers. Out of some one hundred sixty names represented in this corpus, only about twenty five, or less than fifteen percent, can be formally identified as Luvic. These are: Aliwanatti, Arma-LÚ-i, Hatipa-LÚ, Hilamna-LÚ, Hilanani, Huidudduwali, ^{d}KAL-ya, ^{d}KAL.LÚ, Gapisuwa-LÚ, Mar(r)uwa, Muwa-LÚ, Nani, Partahula-LÚ, Sarla-^{d}KAL, Tarhumuwa, Tarhunpihanu, Tarpa- ^{d}KAL-a, Tiwa-LÚ, Ushaliya, Walwa, Walwanu, Yaratiwa, Yarra-LÚ-i, Zarniya-LÚ, Zilapiya, Zuwanna.[67] They contain the Luvic elements *ala/i-* 'high', *(k)runtiya-* 'Tutelary deity', *marwa-* 'dark', *muwa-* 'might', *nana/i-* 'brother, *piha-* 'lightning', *sarla/i-* 'superior', *tarpa/i-* 'attack (vel sim.)', *tiwa(d)-* 'Sun-god', *wanatti-* 'woman', *washa-* > *usha-* 'sacrifice (vel sim.), *zita/i-* 'man', *walwa-* 'lion', *zila* 'future (?)', *zuwanna/i-* 'dog'.[68]

The lower frequency of Luvic names in the Maşat-letters in comparison with CTH 223 has a variety of explanations. On the one hand, one must reckon with the

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[67] For the complete list of Maşat personal names, see Alp 1991: 51-109.

[68] The interpretation of many of the names adduced above crucially depends on the uniform reading of the Sumerogram LÚ as *zita/i-* in the position of the second member of a compound PN. Although the LÚ also has the reading *pesna-* in Hittite texts, the element *pesna-* 'man' is never attested as the second member of a nominal compound, and therefore our reading seems justified.

possibility of the survival of old Hattic names in this northerly region. In fact, many of the names in this corpus belong to the Kaskeans rather than the Hittites, which makes their non-Indo-European provenance all the more likely (cf. Alp 1991: 52). On the other hand, a number of scribal names in the same corpus are transparently Akkadian (Alp 1998). Such names, in all probability, do not convey information about the ethnic origin of the respective individuals, but merely project their image as literati. What unites the Maşat corpus and CTH 223 is the rarity of personal names containing specifically Hittite elements. One can only mention Ilali, Piseni, and Tarhuni, the last two belonging to high-ranking officials.

Hittite instructions for court officials supply us with information about the social status of various Anatolian languages in the Early New Kingdom period. A passage that received special attention in the recent secondary literature apparently refers to situational code alternation among the royal bodyguards. If the restoration of H. Güterbock and Th. van den Hout is correct, a "gold-spear-man" receives an order from the palace in Hittite, which he transmits in Luvian to ordinary spearmen. Watkins (2004: 574) plausibly hypothesizes that this code alternation reflects social hierarchy at the court of Hatti, where the native speakers of Hittite tended to occupy higher positions than the Luvians. Singer (2005: 448-451) approaches the same passage from a somewhat different perspective, arguing that the military represented a specific channel for the infiltration of the Luvian native speakers into Hattusa. In support of his view, he cites the military terms of Luvian origin ^{LÚ}*duyanalli*- 'second-in-command' and ^{LÚ}*tarriyanalli*- 'third-in-command' occurring in the same instruction.

(140) IBoT 1 36 iv 42-46, CTH 262 (MH/MS), Güterbock and van den Hout 1991: 38

42. mahhan=ma dun[nakesna/i]x[ ]
43 wizzi nu ANA LÚ.[ŠUKUR.GUŠKIN$^{?}$]li [kis]san
44. halzāi udan[du=war=at]
45. LÚ.ŠUKUR.GUŠKIN=ma [ ]x *ANA* LÚ.MEŠ.ŠUKUR luwili
46. kissan halzā[i]x

But when [there is a call to the] inner chamber […] comes and calls to the [gold-spear-$^{?}$]man in [Hittite$^{?}$] thus: "Let them bring it". But the gold-spear-man calls out to the spearmen in Luvian thus: ["…"].

It is indeed likely, in my opinion, that the majority of soldiers serving in the Hittite capital in the early fourteenth century BC were native speakers of Luvian. There are, however, no compelling reasons to think that they constituted the only or even the main source of the influx of the Luvian population to Hattusa. The Middle Hittite instruction for gate-keepers indicates that "the men of the fire", presumably the personnel responsible for heating the palatial complex, are also to be addressed in Luvian.[69] The content of the message is admittedly enigmatic, but the most interesting thing about it is that it is rendered in the Hittite language! This fact, stressed already in Otten 1953, must indicate that the potential readers of the instruction were expected to be Hittite and Luvian bilinguals and to have no difficulties with translating this utterance back into Luvian.

(141) KBo 5.11 i 21-24, CTH 263.A (MH/NS), Otten 1953: 22.

namma=z LÚ.MEŠ pahhuenas EGIR-an kappūizzi
na=at parā tiyanzi nu ^{LÚ}NI.DUH luwili kiss[an]
tezzi uwat pahhunit <<tezzi uwat IZI-it>> mar[set$^{?}$]
pahhasnuwan LUGAL-it pahsanuwan ēs[ten]

[69] Pecchioli Daddi (1982: 146) remains agnostic about the function of LÚ.MEŠ *pahhuenas*. Cf. the discussion of ^{LÚ}*pahhurula-* 'fire-tender' in CHD, P: 18.

> 'He counts "the men of fire". They step forward. The gate-keeper says in Luvian: "Please,[70] be careful with the evil[?] fire, be careful with the king!"

Two additional occurrences of the word *luwili* can be found in KBo 30.187. H. Otten and Ch. Rüster, the editors of KBo 30, stress the similarities between this fragment and CTH 262 (Instruction for the Royal Bodyguard), while Groddek (2002: 256) lists this fragment under CTH 763 (Fragments of Hittite Rituals with Luvisms). I believe that this fragment belongs to the Instruction for the Gate-keeper (CTH 263), who is, in fact, explicitly mentioned in iii 4 by his function ^{LÚ}NI.DUH. Line ii 10 of the same fragment reads *luwili halzāi* 'he calls in Luvian', while iii 1 reads *namma luili ki*[*ssan*...] 'he then says[?] thus in Luvian'. The subject of these clauses is probably the gate-keeper himself, who then appears to use the Luvian language at least on three separate occasions in the text of the instruction.

Another illustration of the currency that the Luvian language enjoyed in the Early New Kingdom Hattusa comes from the contrast between Hurrian and Luvian invocations to Ishtar-Sawoska and Piringir embedded into a Middle Hittite hippological instruction. It is natural that one chose to address in both of these languages the pair of gods who, from the Hittite viewpoint, were associated with the pantheon of Kizzuwatna.[71] The Hurrian invocation is, however, transcribed in the text, whereas the Luvian one is translated. One must assume that both invocations had to be uttered in

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[70] I suggest that the *uwat* may represent a shoertened form of the collocation *uwat duwaddu* that appears several times in the Maşat Letters, invariably accompanying requests. For a particularly similar context, cf. HKM 6 rev. 24. Apparently we are dealing with a modal element reinforcing the request, but the translation 'please' is conjectural.

[71] For the close association between Pirinkir and Ištar-Sawoska in Kizzuwatna rituals, see Miller 2004: 366-67.

their original languages, but the scribe did not expect the Hurrian language to be widely known in the educated Hittite milieu, which largely consisted of Hittite and Luvian bilinguals.

(142) KUB 29.55 i 5-10, CTH 285.1 (MH/MS), Kammenhuber 1961: 150[72]

5. nu ^{d}Pirin[kir ^{d}*IŠTAR*]
6. halzihhi nu hurlīli[kissan…]
7. *iš-ši-ya-na-a-ša pa-a-a*[*h*$^{?}$*-ri*$^{?}$*-e*$^{?}$…]
8. ^{d}*Pí-ri-in-kir*$_{8}$ ^{d}*IŠ*[*TAR*…]
9. luwili=ma=at kis[san…]
10. *ANA* ANŠE.KUR.RA.HI.A anda assu[li…]
11. ardumat […]

‘(Then) I invoke Piringir [and Sawoska. I say] in Hurrian [as follows]: “[Come] with goodness to the horses, Pirinkir and Sawoska”. And [I say] it in Luvian as follows: “Come (lit. “stand”) with goodness to the horses!” ’.

In order to flesh out my interpretation of *luwili*-passages translated into Hittite, it is useful to contrast them further with the presentation of Hattic foreign words in the same Hittite instructions. I assume that by the beginning of the New Kingdom Hattic was no longer spoken in the Hittite capital, but certain Hattic utterances continued to be perpetuated in the court protocol as homage to tradition. Accordingly, the written fixation of Hattic code-switches could be helpful to their potential addressees only when accompanied by their interpretation and vice versa.

(143) IBoT 1 36 i 64-66, CTH 262 (MH/MS), Güterbock and van den Hout 1991: 12
māhhan=ma LUGAL-us arahza paizzi n=asta 1 DUMU.É.GAL ^{É}halentuwaz parā wizzi nu hattīli *ta-ha-ya* halzāi *ta-ha-ya-an*=ma=za hattili ^{LÚ}ŠU.I halzissanzi
‘When the king goes out, one palace attendant goes out of the palace and calls out in Hattic: “*Tahaya*!”. *Tahaya* (is how) one calls the barber in Hattic.

[72] Here and below, the italicized words and phrases in syllabic (narrow) transliteration are used for rendereing passages in the embedded language in citations displaying code-switching or code alternation.

(144) KBo 5.11 i 5-10, CTH 263.A (MH/NS), Bossert 1944: 16
nu *INA* É.GAL-*LIM* kuyēs ser sēsanzi n=at parā tīanzi
^{LÚ}NI.DUH=ma=as=kan ha[tti]li lamnit halzissai
^{LÚ}*wi$_i$-in-du-uq-qa-ra-am* ^{LÚ}SAGI-as
^{LÚ}*zu-u-lu-u-we$_e$-e* $^{LÚ\ GIŠ}$BANŠUR-as
^{LÚ}*ha-an-ti-ip-šu-wa$_a$-a* ^{LÚ}MUHALDIM-as
'Those who sleep above in the palace come forward and the gate-keeper calls them by their (professional) names in Hattic: *finduqqaram*/wine-bearer, *zulufe*/waiter, *hantipsufa*/ cook…'

Luvian foreign words and phrases are almost never glossed in Hittite texts in a similar fashion (for the only exception known to me see (147) below). This would indeed have been redundant if the intended audience was bilingual in Hittite and Luvian, as indicated above. But from the purely communicative perspective, the citation of Luvian utterances in the source language would have been as efficient in the bilingual setting as their translation into Hittite. Furthermore, it would have been supported by the earlier tradition of embedding Luvian code-switches in Hittite religious literature (see the previous section). The preference for the Hittite rendering of Luvian code-switches in Early New Kingdom administrative texts may indicate that Hittite was perceived as the preferred language of written expression in the early fourteenth century Hattusa.

The Early New Kingdom instructions also mention two utterances that are to be made specifically in Hittite. In both cases they can be classified as phatic expressions that convey the air of authority. The palace attendants in (144) probably accompanied their order to the crowd to move to the side by appropriate gestures, so that even someone with no knowledge of Hittite could understand it. The gate-keeper's call in (146) does not serve as a prelude to conveying a real message, but rather aims at waking up the attendants sleeping in the palace before the roll is called in Hattic. The use of

Hittite for these commands as an enhancer of their authoritative character is consistent with the image of Hittite as the language of the ruling elites.

(145) IBoT 1 36 iii 63-65, CTH 262 (MH/MS), Güterbock and van den Hout 1991: 30
mān ^{GIŠ}hulugānnaza=ma nēari nu 1 ^{LÚ}*MEŠEDI IŠTU* ^{GIŠ}ŠUKUR *ANA* ^{LÚ}*MEŠEDUTIM ANA* DUMU.MEŠ É.GAL=ya iskidahhi nu {^{URU}nisili} kissan tez[zi] tapūsa
'But if (the king) returns by cart, then one guard gives a sign with a spear to the guards and to the palace attendants and says the following (*added*: in Hittite): "to the side!"'.

(146) KBo 5.11 i 2-4, CTH 263.A (MH/NS), Bossert 1944: 16
^{LÚ}NI.DUH=kan *IŠTU* KÁ.GAL katta tiyezi nu nāsili kissan tezzi halugas halugas
'The gate-keeper steps down from the gate and speaks in Hittite as follows: "Message, message!"'

The linguistic evolution of Middle Hittite represents the topic of Melchert, forthcoming[3]. Middle Hittite is defined in Melchert's paper as the language of the historical documents postdating the reign of Zidanta II and predating the reign of Mursili II. The period under consideration spans approximately the last quarter of the fifteenth century to the first three quarters of the fourteenth century BC and embraces the end of the Old Kingdom, the Early New Kingdom and the very beginning of the Hittite Empire (reign of Suppiluliuma I). Mechert's analysis yields eight innovations, five of which are categorical, while three show an intermediate stage of synchronic variation. I would like to argue that in all of the eight cases the Middle Hittite innovations can and that in most of these cases they should be described as contact-induced

The categorical innovation observed in all the Middle Hittite historical texts is the replacement of *=e* by *=at* as the form of the enclitic animate nominative plural pronoun. This non-trivial development yielded the complete isomorphism of Hittite and

Bronze Age Luvian inflection of the enclitic pronominal stem *=a-*, as observed in Rieken 2006a and shown in Table 4 (Section 2.7). Another categorical innovation, which was gradually implemented in the Middle Hittite texts, is the required use of the reflexive particle *=za* in nominal sentences or with the verb 'to be' in the first and second persons.[73] I have endeavored to demonstrate in 4.4 that this development makes sense only if analyzed as contact-induced. The elimination of the contrastive (non-geminating) particle *=a* and the generalization of its synonym *=ma* in certain Middle Script texts represents a rather straightforward development, which may well have been caused by internal factors. Nevertheless, this change increased the structural similarity between Hittite and Luvian, where only one contrastive particle *=pa* was in use (cf. Rieken 2006a: 280).

The two categorical innovations that have not been discussed so far within the context of contact linguistics concern Anatolian postpositions. Two opposite developments can be observed in this area. Old Hittite *katta* 'with' begins to be replaced with *kattan*, while the Old Hittite postposition *andan* 'in(side)' is replaced with *anda*. Although each of the two changes can be treated as analogical in isolation, since a number of Hittite postpositions end both in *-a* and in *-an*, a simultaneous analogical leveling in two opposite directions within the same grammatical class is rather unlikely to be caused by internal factors. This change, however, receives a straightforward explanation as an adaptation to the Luvian pattern. The Luvian cuneiform texts are poor

[73]The categorical character of this innovation does not extend New Script copies of Middle Script texts, where some variation in the usage of *=za* can be observed (cf. Kassian and Yakubovich 2007: 435-36).

in the relevant contexts, but the hieroglyphic inscriptions of the Iron Age period contain numerous attestations of the postpositions CUM-an = /katan/ 'with' and *a-ta* = /anta/ 'inside', whereas INFRA-*ta* = /kata/ and *a/á-ta-na* /antan/ are always used as preverbs (cf. Payne 2004: 29-30, 36).[74] As expected, the preverbs *andan* and *katta* also survive in Middle and New Hittite.

The gradual innovation consisting of the confusion of nom.pl. -*es* and acc. pl. -*us* in the common gender has been already discussed in 2.3. We have seen that this phenomenon first appears in a text that must have been composed or edited by a Luvian native speaker (CTH 404 I.1.A) and that it reflects a similar merger in the Luvian dialect of Hattusa and its surrounding area. It is not clear whether the confusion between -*es* and -*us* ever characterized the written output of the Hittite native speakers in the Early New Kingdom period. The grammaticalization of the new distribution between these two forms in Late New Hittite will be discussed in 6.3.2. The discussion of the confusion between *ūk* 'I' and *ammuk* 'me' likewise can be postponed till 6.3.3, since the extension of *ammuk* to the nominative can be first observed in the Maşat letters reflecting the transitional point between Middle and New Hittite. For our present purposes, it is enough to say that the absence of the parallel confusion between *zik* 'thou' and *tuk* 'thee' rules out the hypothesis of the complete collapse of case distinctions in the

[74] An interesting complication of the above distribution is the occasional use of the postposition *andan* with the allative meaning 'into' in Neo-Hittite texts (Salisbury 1999: 68-69). This pattern does not represent retention because only *anda* could be used as the allative postposition in Old and Middle Hittite. As C. Melchert (pers. comm.) suggests to me, we may be dealing here with an analogical process triggered by other preverbs, e.g. *peran/āppan tiya-* 'to step forward/behind.

pronominal paradigm, while the identical asymmetry between the inflection of 'I' and 'thou' in Luvian vindicates the contact-driven character of the Hittite change.

The synchronic variation between the accusative plural clitics *=as* and *=us* 'them' was more widespread in Middle Hittite. A number of Middle Script manuscripts including the Indictment of Madduwatta (CTH 147), a counter-magic ritual CTH 443, and a hippological text CTH 286.2 show a synchronic distribution between the archaic variant *=us* reserved for the position after *nu=* and its innovative equivalent *=as* appearing in all the other cases. Melchert (2000: 179-82) has shown that *=as* 'them' represents the standard form in Luvian cuneiform texts, but the temptation to explain Hitt. *=as* as an unmediated borrowing from Luvian must be resisted. The direct transfer of grammatical morphemes from Luvian into Hittite would have no parallels not only in the Early New Kingdom but also in the Empire period, when Luvian influence on Hittite became even stronger. On the other hand, the Middle Script manuscript of the Mastigga ritual with traces of Luvian interference (CTH 404 I.1.A) shows the preference for *=as* in all the environments, although *=us* occasionally occurs in this text. Several of the later manuscripts of the same ritual show the restitution of *=us* in all positions (cf. Miller 2004: 215). Therefore, it is difficult to deny that the use of *=as* in Middle Hittite texts is connected in some way with Luvian influence.

I am glad to accept the solution of this problem offered to me through a personal communication by Petra Goedegebuure. The variant *=(a)s* must have originally developed as the sandhi variant of *=us* in a position after the clitics conjunctions *=ma*,

=a, and *=(y)a*.[75] The only example of the plural clitic *=as* in the Old Script corpus, KBo 20.26 18 [LÚ.MEŠ]*hāpes karū=ma=(a)s tarkuanzi* '(As for) the *hapi*-men, they are already dancing', features the analogical extension of *=as* in this position to nom. pl. (its motivation was the necessity to avoid the sequence **=ma=e*, which could be easily contracted into *=ma* with the complete loss of the pronominal element).[76] The analogical pressure of the *=us* forms led to the appearance of *=m(u)=us* instead of *=ma=(a)s* in certain Middle Script texts (cf. Neu 1983: 5, fn. 16 for the examples). But the influence of the Luvian pronominal clitic *=as* eventually tipped the scales in favor of the perseverative assimilation to *=ma=(a)s*. The situation in which Luvian functioned as a trigger of the analogical leveling in Hittite finds a close parallel in the generalization of the verbal suffix *-(i)ya-* discussed in 6.3.4.

It is unlikely that the phenomena discussed in Melchert, forthcoming[3] exhaust the list of Middle Hittite innovations. One must hope that the publication of new texts, especially the tablets from Ortaköy, will help Hittitologists to describe additional linguistic changes pertaining to the same period. But the fact that none of the changes observed so far is demonstrably independent of Luvian influence remains striking. It is important to keep in mind that Melchert's paper was not concerned with Luvian at all, and therefore cannot exhibit a methodological bias toward contact-induced changes. The pattern of structural interference it reveals corroborates the hypothesis that the majority

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[75] Cf. Kammenhuber 1961: 185, fn. c, where the synchronic correlation between acc.pl. *=as* and *=ma*/*=ya* in CTH 286.2 is indicated, but this observation is not followed by diachronic discussion.

[76] Neu (1983: 5, fn.16) adduces an additional example of acc.pl. *=as* in Old Hittite, which turns out, however, to be false. C. Melchert (pers. comm.) indicates that KUB 29 iii 8 is to be read *heyawes=(s)mas sal*[*lanuskir*] 'the rains made you (pl.) grow'.

if not all the Hittite speakers living in Hattusa were Luvian bilinguals, which was initially advanced based on the analysis of code alternation.

The main difference between the patterns of asymmetrical bilingualism that can be reconstructed for the Early New Kingdom vs. the Hittite Empire lies in the social status of Luvian. The number of Luvian foreign words in Middle Hittite compositions coming from the Hittite core area is small. Thus the extensive corpus of the Maşat letters contains a single Luvian form acc.sg. ^{GIŠ}*murtanza* '(a tree)' (HKM 72.35). In this period, one can hardly talk about the Hittite and Luvian intrasentential code-switching in the written output of the royal chancellery. Luvian must have been perceived as the language of the common population, to be avoided in the official written communication unless absolutely necessary.

On the other hand, the term Luviya was no longer used after the Old Kingdom period, perhaps because the Luvian or Luvic population groups became linguistically dominant in most parts of the kingdom. Neither can one observe any assured examples of the metaphoric code alternation between Hittite and Luvian passages in the official compositions of this period emanating from Hattusa. What is more important, the scribes use Hittite even for rendering the content of the *luwili*-passages, as in (141) and (142). These facts are likely to be related. While Luvian had apparently not yet become the unmarked vehicle of communication in the Early New Kingdom, it had already lost the status of a regional language of some prestige, which it enjoyed in the Old Kingdom. Thus one can say that the early fourteenth century BC represents the lowest observable point in the sociological history of the Luvian language in Hatti. Ironically, this was also the period when the largest amount of Luvian textual material was added to the Hattusa

archives. This was the consequence of adopting the Kizzuwatna rituals into the Hittite ritualistic tradition.

5.7 Status of Luvian in Kizzuwatna. The territory of Kizzuwatna lies in southeastern Anatolia. Its core area coincides with the Cilician Plain and the valleys of the Seyhan and Ceyhan rivers, and it is separated from the Hittite core area by the Taurus range. In the early eighteenth century BC (Middle Chronology), part of this territory belonged to the principality of Ma'ama ruled by a king with the Hurrian name Anum-Hirbi.[77] The trade network of Assyrian merchants did not extend itself to the Cilician plain or the adjacent territories; the main road to Kaneš bypassed it from the north, going through the town of Hahhum on Upper Euphrates and the Anti-Taurus passes. Forlanini (2004a: 251) explains this fact through the trade monopoly enjoyed by the Syrian merchants in the region that lay between the Syrian Gates and the Cilician Gates. Its unfortunate consequence is the scarcity of onomastic data pertaining to this region in the Colony period.

Southeastern Anatolia does not appear among the targets of Anitta's offensive campaigns, which were all directed toward the west and the northwest, along the Assyrian trade routes. Perhaps Anitta was careful to avoid a direct conflict with the Syrian kingdom of Yamhad, whose rulers may have regarded Cilicia as a sphere of their interests. The situation changed at the time of Hattusili I, who apparently chose the rich Syrian towns as the primary objective of his pillaging raids. Although we do not have

[77] For the discussion of the geographic extent of Anum-Hirbi's kingdom, see Miller 2001.

direct information about the activity of Hattusili's troops in Cilicia, it is unlikely that he neglected to avail himself of the resources of this fertile agricultural area during his Syrian campaigns. The same can be said about Hattusili's successor Mursili I, who eventually succeeded in taking Aleppo, the capital of Yamhad, which triggered the collapse of the whole kingdom.

As is the case with Arzawa, there is no evidence either for the stable control of Kizzuwatna on the part of the Hittites during the Old Kingdom Period or for the presence of strong local leaders capable of mounting opposition to the Hittite aggression.[78] The peculiarity of the Kizzuwatna case lies in the possibility of connecting the raids of Hattusili I and Mursili I with the Anatolian migrations to this area. We have seen in 2.7 that the Hurrian occupation of Kizzuwatna must have predated the coming of the Luvians to this region because the Kizzuwatna Luvian possessive construction with plural possessor was explained as a product of the imperfect learning of the Luvian grammar by the Hurrian native speakers. Furthermore, the close similarities between Empire Luvian and Kizzuwatna Luvian indicate that Luvians had reached southeastern Anatolia no more that several hundred years before their texts were recorded. The southeastern expansion of the first Hittite kings could have provided an appropriate

[78] The sole piece of evidence traditionally adduced in favor of the Hittite administration of Kizzuwatna in the Old Kingdom period is an old Hittite land grant found at Tarsus (Beal 1986: 424-25 with ref.). There is, however, no positive evidence that this text refers to the transfer of real estate located in southeastern Anatolia. On the other hand, none of the land grants excavated in Boğazköy appears to predate the reign of Ammuna, i.e. the approximate point when Kizzuwatna begins to be referred in Hittite sourses as an independent polity. Therefore, I conclude that the Tarsus land grant is no more probative of the Old Kingdom rule over Kizzuwatna than the Luvian seal found in Troy is indicative of the Luvian linguistic dominance in northwestern Anatolia. Both documents may have been brought to the area of their discovery several centuries after they had been produced.

social context for the settlement of Hittite and Luvian population groups in the area to the south of the Taurus range.

The weakening of the Hittite kingdom under the successors of Mursili I brought about the formation of rival polities on its fringes. The Telibinu Proclamation (CTH 19) mentions Adaniya in a list of lands that became hostile to Hatti during the reign of Ammuna (mid-sixteenth century BC, Middle Chronology). This toponym, to be ultimately identified with the modern city of Adana, refers to the region that was to become Kizzuwatna (Bryce 2005: 102). Several decades later, the Hittite king Telibinu recognized the independent status of Kizzuwatna by concluding a parity treaty with the local King Isputahsu.[79] The name of Isputahsu is Hittite, as argued.above in 5.2, but the name of his father Pariyawatri is Luvian. The toponym Kizzuwatna (also spelled Kizzuwatni) may represent a Hittite-Luvian hybrid **kez-watni* if its original meaning was "a country on this side (of the mountains[?])".[80] These proper nouns speak in favor of the mixed Hittite-Luvian culture of the Kizzuwanta political elites and indirectly support the link between the Hittite expeditions against Syria and the Indo-European colonization of southwestern Anatolia.

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[79] The Hittites, in their usual fashion, retrospectively interpreted the parity treaties concluded with Kizzuwatna as a sign of its subjugation to Hatti. The preamble to the Akkadian version of the Zunassura (Sunaššura) Treaty states that Kizzuwatna was "of the land of Hatti" before it shifted to the Mitanni side. The scholarly interpretations of this statement range from "(on the side) of the land of Hatti" to "(part) of the land of Hatti" (cf. Bryce 2005: 139 with en. 62 and Miller 2004: 353).

[80] Historically speaking, this term may represent a Luvian adaptation of the original Hitt. **kez-udne*. My suggestion implies that the term Kizzuwatna represents a creation of Hittites and Luvians who settled in this region, and not a term for a foreign country coined in Hattusa. It is different from the hypothesis put forward in Weeks 1985: 12, according to which *Kizzuwatna/i-* is to be derived from "**kez wetenaz* = 'cisaquinus' ". I do not think that Lat. *cisaquinus* 'on this side of the water' represents an adequate rendition of Hitt. *kez wetenaz*, lit. 'from this water'.

There is, however, no philological indication that the Kizzuwatna scribes used either the Hittite or the Luvian language for writing cuneiform. In order to prove this contention, one would need to identify Hittite tablets written in the Kizzuwatna ductus. There is, in fact, a group of tablets found in Hattusa but written in the late Old Babylonian or Middle Babylonian peripheral ductus, which contain the Akkadian versions of treaties between Hatti and Kizzuwatna (Klinger 2003: 238-39, Miller 2004: 526-527). It is possible that the diplomatic protocol of the time included the exchange of treaty tablets written in the two countries concluding the agreement, as a measure of preventing discrepancies in the text of the treaty available to both sides. Therefore, the simplest explanation of the abnormal ductus is to conclude that we are dealing with tablets prepared in the Kizzuwatna capital Kummanni.[81] There are, however, no extant tablets written in the Hittite language that display the same ductus.

Nor do we have compelling historical grounds to assume that either Hittite or Luvian underwent literization (*Verschriftlichung*) in Kizzuwatna. If one follows the hypothesis advanced in 5.3, according to which Hittite became the main chancellery language in Hattusa during the reign of Telibinu, then the state of Kizzuwatna may have been formed at a time when Akkadian remained the preferred language of written transactions in Anatolia. There were few incentives for the kings ruling in Kummanni to imitate the nationalistic reforms of their Hattusa rivals in the subsequent period. We

[81] Miller (2004: 526) also mentions a Hurrian fragment KUB 47.41, found in Hattusa but written in the Middle Assyrian ductus. The content of this fragment, however, gives no indication that this text was extracted from the Kizzuwatna archives. With Miller (2004: 527), I consider improbable the assumption that both the Old Assyrian and the Old/Middle Babylonian ductus were used in the Kizzuwatna chancelleries.

know that Kizzuwatna became a vassal of the Hurrian state of Mitanni in the fifteenth century BC because the treaty between Idrimi, king of Alalah and Pa/illiya, king of Kizzuwatna was signed under the authority of Parrattarna, king of Mitanni (Bryce 2005: 117). Under such conditions, it is more than likely that the educated elites of Kizzuwatna likewise gravitated toward the high culture of Syria and Mesopotamia and preserved Akkadian as their main chancellery language. It is also possible that some of the Kizzuwatna scribes wrote in Hurrian, the language of the social elites of the Mitanni kingdom, although this language must have been reserved for special kinds of compositions, mostly of religious nature, as it probably was in Mitanni.[82] But the shift to writing Hittite, if it ever took place, must have occurred in the fourteenth century BC when Kizzuwatna was definitely incorporated into the Hittite state.

A different assessment of the sociolinguistic situation in Kizzuwatna is attempted by Miller (2004: 256), who writes: "[T]he scribes of what must have been the state archives of Kizzuwatna, perhaps in Kummanni, would have learned their craft from a combination of Hattusan and North Syrian scribes. They would have produced during this period of time texts in Hurrian and Luwian, probably the spoken languages of the region, and perhaps Akkadian and Hittite, the languages of interregional contact and cultural transmission". Later the Hittite scribes "gained access to the archives of Kizzuwatna, some portion of which they copied for the archives of Hattusa". Miller's

[82] Compare the observations of Wilhelm (1996: 180) regarding the usage of Hurrian in the Mitanni kingdom: "L'espoir de retrouver de nombreux textes en langue hourrite en provenance du cœur de l'empire mitannien n'est ainsi plus fondé. Il faut rappeler qu'une œuvre littéraire typiquement hourrite, le Conte de Kešši, existe aussi en version akkadienne, sur en fragment trouvé à Tell Amarna, en provenance peut-être de Mitanni. Il est donc possible que dans le royaume de Mitanni, sous l'influence de la culture scribale akkadienne dominante, la plupart de la littérature ait été composée en akkadien".

scenario is largely based on his analysis of the Kizzuwatna rituals found in the Hittite state archives, which are normally written in Hittite and sometimes contain Luvian passages. He persuasively argues that the prototypes of many of these texts must have been first recorded in Kizzuwatna itself, while later the Hittite scribes could copy them from the archives of Kummanni. The main proof of this state of affairs is a number of references to "Kizzuwatna tablets" in the texts of the respective compositions.

A fact on which Miller does not comment is the Hurrian character of all the rituals that are mentioned in the Hittite texts in connection with the Kizzuwatna archives. Thus the *ambassi*- and *keldi*-offerings were to be performed in Kummanni "according to a wooden tablet" on the occasion of Mursili II's aphasia (Miller 2004: 513). The text KBo 21.37++ likewise mentions the *ambassi*-offering immediately followed by the *keldi*-offering "which is not performed according to the ancient tablet of Kizzuwatna" (Miller 2004: 516). Both *ambassi*- and *keldi*- are well-established Hurrian technical terms. Finally, the birth ritual KBo 17.65++ contains a reference to the Fertility Festival accompanied by the following remark: "[H]ow they celebrate the festival is recorded on a writing-board, and it is (in) Kizzuwatna" (Miller 2004: 518). The same text, however, prescribes that the AZU-priest must officiate in Hurrian and mentions twice a separate tablet with the Hurrian incantations.[83]

[83]The only composition with Luvian incantations that appears in J. Miller's discussion of internal textual references is Tunnawiya's Ritual of Impurity (Miller 2004: 519-22). This text, however, is irrelevant for the issues discussed in this section because the incantation tablets mentioned in it are not linked to Kizzuwatna. In fact, Miller (2004: 452-58) argues against the Kizzuwatna origin of Tunnawiya's rituals.

It is indeed very likely that Kizzuwatna functioned as a transit point for the transmission of Hurrian written texts from Mitanni and Syria to Hatti. The "liberation" of Kizzuwatna in the early fourteenth century BC triggered religious reforms in the Hittite kingdom, such as the adlocation of the Deity of the Night from Kizzuwatna to Samuha (Miller 2004: 350-56). The Early New Kingdom was also the period when the Hurrian religious texts were added to the Hittite archives in prodigious quantities, and many of the rituals they describe, such as those collected in Haas 1984, were clearly meant to be a part of the Hittite state cult. It is tempting to assume that the adaptation of Hurrian religious literature during this period was connected with the expansion of Kizzuwatna official cults, even though the definite proof of this hypothesis is lacking at the present time.[84] In addition, all the known Hittite queens of the Early New Kingdom period had Hurrian names, and several scholars have ascribed this fact to the influence coming from or through Kizzuwatna (Klengel 1999: 110-11 with ref.). One of the kings of this period, probably Tuthaliya II, is referred to on several occasions by the Hurrian name Tasmisarri (Bryce 2005: 430, note 91). Thus we are again dealing with Hurrian influence in the official sphere. These facts, however, can be discussed here only briefly

[84] The verification or falsification of this hypothesis must come from the analysis of texts that are being excavated in Hittite provincial centers. Thus the recently initiated excavations at Kayalıpınar have already yielded a Hurrian tablet fragment mentioning Kizzuwatna and Alalah (Wilhelm 2006: 233). If the identification between the cite of Kayalıpınar and the Hittite town Samuha is confirmed, and if additional Hurrian texts are found in these excavations, one has to investigate whether their origin may be connected with the adlocation of the Kizzuwatna religious cults to Samuha. One also needs to undertake the analysis of numerous Hurrian religious texts that were found in Ortaköy and remain unpublished up to now, in order to establish their origin through internal references. This task will become particularly interesting if compelling evidence is presented for the identification between the site of Ortaköy and Sapinuwa of Hittite sources, since Sapinuwa occupies an important place in several Hurrian religious compositions found in Hattusa (Haas 1984: 10).

because the status of Hurrian in the Hittite kingdom does not constitute the main topic of the present work.

Once we turn to texts with Kizzuwatna Luvian passages, it is easy to see that none of them reflects the official religious practices of the court of Kummanni. The rituals of Zarpiya, Puriyanni, and Kuwatalla/Silalluhi, whose pragmatics was recently discussed in Hutter 2003: 252-254, do not refer to the king or the queen. Zarpiya's ritual (CTH 757) deals with "broken years" and continuous dying in the land. Puryanni's ritual (CTH 758) is directed against impurity within the house. It is more difficult to generalize about the purpose of the compositions attributed to Kuwatalla and Silalluhi (CTH 759-62), but they all appear to be concerned with the well-being of an unspecified "ritual patron". Such rituals could be performed without state sponsorship, simply at the request of individual patients, and would not even need to be confined to a particular geographic area or political entity.

This essentially private character of Kizzuwatna Luvian rituals, combined with the lack of evidence for Luvian literacy in Kizzuwatna, leads me to consider an alternative scenario, according to which the respective texts were first recorded in Hattusa. Instead of assuming textual migrations, I reconstruct the peregrinations of itinerant ritual practitioners, undertaken in pursuit of lucrative contracts. A direct confirmation of my scenario comes from the land grant KBo 5.7 (CTH 223), bestowed by Arnuwanda and Asmunigal upon the attendant woman Kuwatalla and discussed in the previous section. Already Otten (1953: 91) saw that the combination of the name Kuwatalla and her title ^{MUNUS}SUHUR.LÁ warrants the identification of this individual with the famous female ritual practitioner. Apparently, the Hittite king and queen were

among Kuwatalla's patients and lavishly rewarded her for the services rendered, or simply recognized the importance of keeping this reputed witch-doctor in Hatti.

The transmission of ritualistic tradition from Arzawa to Hatti may represent a typological parallel to the reconstructed state of affairs. We have seen in 3.4 that there is no positive evidence for the written transmission of rituals in western Anatolia and that the ritual of Alli (CTH 402) appears to have been recorded before the annexation of Arzawa. I concluded that the most likely scenario for the literization of Arzawa ritualistic literature was the interaction between visiting ritualists from Arzawa (or their disciples) and scribes at the court of Hattusa. In that case, my conclusions had no support from historical sources and therefore were bound to remain hypothetical. The case of Kuwatalla allows me to flesh out the same scenario for the literization of Luvian rituals from Kizzuwatna.

Finally, one can add a piece of linguistic evidence pointing to the written fixation of a Kizzuwatna ritual in Hattusa. The case in point is the Mastigga ritual CTH 404.1A, whose author is identified as "woman of Kizzuwatna". Although this ritual does not contain Luvian incantations, both the Luvian gloss *tānita* to the Hittite technical term ^{NA4}*huwāsi*$^{HI.A}$ (147) and the morphological interference found it the manuscript KBo 39.8 (CTH 404.1.I.A) that was discussed in 2.3 suggest that its linguistic background was Luvian. Yet, it emerged from the same discussion that the native dialect of the scribe responsible for KBo 39.8 or its prototype was not Kizzuwatna Luvian, but rather the ancestor dialect of Empire Luvian! This does not make sense if we assume the Kizzuwatna origin for the idiosyncrasies of this manuscript, but has a simple explanation on the assumption that CTH 404.1 was first recorded in Hattusa. If the main language of

Mastigga's performance (or Mastigga's oral tradition) was Luvian, it was only logical for the Hittite administration to entrust the task of recording this performance/tradition to a Luvian native speaker living in Hattusa. When this scribe concocted the Hittite written adaptation of the Luvian ritual, the main source of interference naturally was his own dialect, not that of Mastigga.[85]

(147) KUB 10.76 5-7+KUB 12.59 iii 7-9, CTH 404 1.II.B (MH/NS), cf. Miller 2004: 99
kuis=war=at weteskit ^{NA4}huwāsi$^{HI.A}$ ta-a-ni-ta kinuna=war=at=kan kāsa lagāri
'Whoever built them, *huwasi*-stelae, now they are toppling'.[86]

If the Kizzuwatna Luvian texts were indeed recorded in Hattusa, one can assume that the Kizzuwatna scribes were not responsible for their idiosyncratic features. Therefore, one can use the code-switching occurring in this corpus to draw conclusions about the sociolinguistic attitudes of the Hittite scribes and the Kizzuwatna ritual practitioners. Before doing this, however, one must briefly comment on the role played by the scribes in the compilation of the respective texts.

From the perspective of the Hittite bureaucracy, the purpose of recording rituals that were not related to the official state cult may have been both descriptive and prescriptive. Originally, it was probably a way of registering ritual practitioners and thus protecting the king and the state against unknown magic. The Hittite rulers considered

[85] Miller (2004: 241, 253) argues that none of the extant manuscripts of CTH 404.1 can be seen as the original from which the other manuscripts were ultimately copied. This need not, however, imply that the missing proto-text must be sought in the lost archives of Kizzuwatna. The simpler hypothesis is to assume that the proto-text was simply discarded from the archives of Hattusa at some point after several adaptations of it had been made.

[86] The cited interpretation of this clause follows the personal communication of H. Craig Melchert (differently Miller 2004: 99 and Yakubovich 2005b: 430). This is the only example known to me where the Luvian gloss accompanies a Hittite expression (for the general issue of the relationship between glosses and foreign words in cuneiform texts, see the discussion in 6.4.1 below).

the threat of witchcraft very seriously, as one can see, for example, from the concluding paragraph of the Telibinu Proclamation (CTH 19), which prescribes that every person who knows magic be delivered to the royal court, presumably for questioning (Hoffmann 1984: 55). At some point in the Early New Kingdom period, a more efficient policy came into being. The descriptions of magic rituals deemed useful were added to the state archives of Hattusa in order to ensure their transmission to the next generations of practitioners. This transmission, however, was not perfect, since the scribes frequently interfered with the text of the rituals in order to adapt them to particular occasions. Miller 2004 and Christiansen 2006 have shown that the later development of Mastigga and Ambazzi traditions, respectively, was entirely due to the creative efforts of the literati. For many Empire court officials, the Anatolian ritualistic tradition apparently represented a set of prescriptive texts, which could and should be modified according to the changing circumstances.[87]

The linguistic features of the Mastigga ritual against the domestic quarrel (CTH 404.1) betray the active role of the Hattusa scribes in its initial compilation. The direct speech of Mastigga is rendered in the same type of contact-induced Hittite as the narrative passages. This is, of course, in line with the general tendency of Early New Kingdom literati to avoid code switches to Luvian in their written discourse. On a different level, one may wonder, as did Jared Miller, whether the scribe at all

[87] In some cases, the scribal adaptations of the old "private" rituals made their way to the official Hittite cult. Thus, Christiansen 2006 has shown that the Hattusa scribes transformed the Ambazzi ritual CTH 391.1 into a separate composition CTH 391.2, which features the king as the ritual patron (cf. 6.4.2. below). This is to be expected, since the scribes employed in the palatial administration must have subordinated their creative projects to the interests of the state.

interviewed Mastigga or simply based the ritual script on his general knowledge / personal recollections. This is an example of a prescriptive composition. On the other hand, different Luvian texts, such as the rituals of Zarpiya or Kuwatalla, contain embedded direct speech passages in Kizzuwatna Luvian. Since Hattusa scribes were unlikely to have the native command of this dialect, one must assume that the Kizzuwatna ritualists dictated the respective passages word-by-word and insisted on their exact rendering. Numerous mistakes reflecting the interference of Empire Luvian that were discussed in 2.3 and 2.4 demonstrate that the scribes were not always up to this task but, like the proverbial pianist, they were doing their best. What prompted them to discard their prescriptive attitudes in this case and to accept the rules of the game dictated by the ritualists?

I believe that the editors' desire to partake in the ritual power of the Luvian language must have been the main reason behind this decision. A language or dialect need not have a high social or cultural prestige in order to be considered suitable for magic. Thus the Demotic Magical Papyri contain spells that the Egyptians believed to be Nubian, even if Jacco Dieleman suspects that they "might be merely a collection of garbled or made up sounds". The Nubian language was never culturally dominant in Egypt, but the powerful qualities of Nubian magic are mentioned in the Egyptian priestly discourse (Dieleman 2006: 70). Other examples of using languages of low prestige for magic incantations, which were already mentioned in 5.5, include the West Semitic and Cretan spells embedded in an Egyptian medical text (Steiner 1992) or the use of Hurrian incantations against snake and scorpion bites in the Old Babylonian milieu (Prechel 2001). The Hattusa scribes likewise might have had little respect for

Kizzuwatna Luvian, but they probably felt that if the magic incantations were rendered in Hittite or even in the local variety of Luvian, they would lose some of their original efficacy.[88]

The hypothesis that I am advocating implies a variety of scribal attitudes toward the Kizzuwatna rituals in the Early New Kingdom period. The development of the Masigga tradition appears to have been guided by prescriptive concerns from the very beginning of its written fixation, while the scribes responsible for recording the Kuwatalla tradition strove toward descriptive accuracy. As a consequence, the Mastigga scribes ignored the linguistic component of the original oral performance, whereas the Kuwatalla scribes transmitted verbatim the Kizzuwatna Luvian incantations embedded in it. It is difficult to say with certainty what caused this difference, but the availability of the real ritual practitioners for an interview may have been an important factor influencing the scribal treatment of the respective traditions.[89]

The reasons that caused the Kizzuwatna ritualists to emphasize Luvian as the language of their oral performance must be addressed separately. The answer that Luvian was their native language is hardly exhaustive because the ritual practitioners of Hatti, whether Luvian or not, apparently used Hittite spells or at least did not mind their

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[88] It is worth noting in passing that the same type of attitude underlies the recitation of Romani incantations in their original language among certain Eastern European population groups other than the Gypsies in the nineteenth century AD (cf. e.g. Leland 1962: 87). Although the Gypsies were universally regarded as pariah minorities in this period, their magic was held in high esteem.

[89] Alternatively, one may assume that the Kizzuwatna rituals displaying code-switching were simply recorded at an earlier period than the Mastigga rituals and similar texts. This would, however, imply that the Hittites began to record the "private" rituals of Kizzuwatna witch-doctors before they turned to their equivalents emanating from Hatti itself, since code-switcjing is generally avoided in the ritualistic literature that is explicitly attributed to the domestic practitioners. (as discussed immediately below).

spells being recorded in Hittite. If the conclusions of the previous section are correct, and Luvian was linguistically dominant in the central part of Hatti in the Early New Kingdom period, one would expect that Luvian native speakers constituted a large proportion of the local witch-doctors, but this does not seem to be reflected in their compositions. There are occasional exceptions, such as the metaphoric switching to Luvian in one invocation to the Storm-god embedded in the Tunnawiya ritual (CTH 409), but these are few and far between.[90] The ritualists of Arzawa origin likewise appear not to have attributed great significance to the language of their performance, as seen in 3.4.

This attitude can be contrasted with the metaphoric code-switching in the Zarpiya ritual (CTH 757). This text begins to invoke the god Santa and his retinue in the Hittite language, but the ritualist switches to Luvian toward the end of the performance. Some formulae used in the Hittite and the Luvian incantations are nearly identical, to the extent that their analysis provided a key to the initial understanding of the Luvian grammar (cf. (148) vs. (149) below). Thus there is no clear functional distribution between the two languages in this text. The physician Zarpiya apparently believed that placating Santa in both Hittite and Luvian might increase chances of the god's positive response. This is precisely the type of linguistic behavior that we observe in the multilingual state-sponsored rituals of the Old Kingdom period. The alternating use of

[90] The case of the "Songs of Istanuwa" (CTH 773) is special because these poetic passages were not cited completely on the preserved tablets. We only find references to their initial lines of the songs that should have been performed during the Instanuwa festival, while the full text of the respective songs was expected to be familiar to the readers of the tablets. It would have been certainly more difficult to identify the Luvian songs if their initial lines had been cited in Hittite. Therefore, code-switching in the written text of CTH 773 must be taken as convenience-driven and devoid of metaphoric significance.

two Anatolian languages cannot represent the artifact of Hittite scribes who recorded Zarpiya's performance and must have been rooted in the sociolinguistic situation in Kizzuwatna at the time when Zarpiya launched his professional career.

(148) HT 1 i 29-31, CTH 757.A (MS), Starke 1985: 50-51
ehu ^{d}AMAR.UTU katti=ti=ma=tta ^{d}Innarawantas$^{!}$ uwa<n>du
ēshanuwanta kuyēs wēssa<n>ta $^{LÚ.MEŠ}$Lūlahiyas=san huprus kuyēs
ishiyantis
'Come, Santa! Let the *Innarawant*-deities come with you, who wear bloodied (clothes), who have tied up Lulahiyan belts'.

(149) KUB 9.31 ii 22-24, CTH 757.B (NS), Starke 1985: 53
^{d}Ša-an-ta-aš LUGAL-uš ^{d}An-na-ru-um-mi-en-zi aš-ha-nu-wa-an-ta ku-
in-zi wa-aš-ša-an-ta-ri ^{d}Lu-u-la-hi-in-za-aš-tar hu-u-up-pa-ra-za ku-in-zi
hi-iš-hi-ya-an-ti
'Santa the king, *Annarummi*-gods, who wear bloodied (clothes), who tie on Lulahian belts…'

Another example of metaphoric code-switching points to the special sociolinguistic situation in Kizzuwatna at the time when it had already been annexed to the Hittite Empire. The festival fragment CTH 479, preserved in a fourteenth-century copy, contains separate provisions regarding the ritually significant acts that are to be performed in Hatti and Kizzuwatna on particular days. Thus, on the sixteenth days of the festival, the king and the queen of Hatti had to have their bowel movements at dawn in order to please the gods, while their representatives in Kizzuwatna had to wait till sunrise. For our purposes, however, it is more significant than two different verbs describe the same physiological process in the Hatti and Kizzuwatna settings. The Hittite verb *sakniya*- is used with reference to the Hittite king and queen, while the Luvian foreign word *katmarsi*- is applied to the Kizzuwatna officials. The author of the ritual was apparently aware of the higher prestige of Luvian in Kizzuwatna in comparison with

Hatti, even though one can surmise that his attitude toward the Kizzuwatna ways was ironic.

(150) KUB 30.31 i 1-6, CTH 479.1.A (NS), Lebrun 1977: 95
kuitman=kan ^{d}UTU-uš nawi ūpzi nu LUGAL MUNUS.LUGAL
^{URU}Hattusi **sakniyanzi** n=at=za arhayan ešandari mahhan=ma=kan
^{d}UTU-uš ūpzi apiya=ma *INA* ^{URU}kizzuwatna *INA* É.^{d}IM ^{É}šinapsi=ya
kat-mar-ši-it-ti
'While the sun has not risen yet, the king (and) the queen **defecate** in Hattusa, and they sit down (to do it) separately. But when the sun rises, then one **defecates** (Luv.) in Kizzuwatna, in the temple of the Storm-god and the *sinapsi*-temple'.[91]

In my opinion, it was precisely the absence of language planning aimed at promoting Hittite as the official language of Kizzuwatna that ensured the positive attitude toward multilingualism in this region before it was annexed to Hatti. If the local elites perceived Akkadian and to a lesser extent Hurrian as languages fit for writing, as argued above, then both Hittite and Luvian must have been relegated to vernacular status. On the other hand, neither Akkadian nor Hurrian represent native languages of the Kizzuwatna upper classes, and only a small group of literati were likely to acquire them as second languages. Under such conditions, the Hittite and Luvian population groups that established their dominant position in Kizzuwatna in the seventeen or sixteen centuries BC could continue to sponsor the oral performance of magic rituals in

[91] A different interpretation of the same passage is offered in CHD, Š: 47a "Before the sun rises, the anoint the king (and) queen in Hattusa, and they sit themselves apart; but when the sun rises, there(?) in "Kizzuwatna", in the temple of Tešsup, in the *šinapši*-building they (?) *k.*". Note, however, that the other passages of CTH 479 describe parallel ritual acts peformed in Hatti and in Kizzuwatna (cf. KUB 30.31 iv 1-2 vs. 7-9 or KUB 30.31 iv 20-21 vs. 27-28, Lebrun 1977: 101). Therefore, the reinterpretation of *sakniyanzi* in a sense "they anoint" probably has to entail the reinterpretation of *katmarsitti* along the similar vein. At present, I do not see how the last reinterpretation can be accomplished, and therefore I retain the original translation of (150). If independent evidence for *katmarsi-* meaning 'to perform the anointment ritual' (or something similar) is forthcoming in the future, this will vindicate the interpretation of the CHD. But even in this case, my sociolinguistic conclusion regarding the playful use of the Hittite and Luvian synonyms in connection with Hatti and Kizzuwatna will still remain valid.

their native languages. Hittite would have no obvious advantage over Luvian in this market, but the metaphoric code-switching between the two languages might be considered suitable for addressing deities worshipped by both ethnic groups. The table below summarizes my hypothesis about the differences between the functions of individual languages in Kizzuwatna vs. Hatti and Arzawa in the Early New Kingdom period.

Table 30: Multilingualism in Fourteenth Century Anatolia

	Ling. dominance	Social Dominance	Cultural Dominance
Kizzuwatna	Luvian	Luvian, Hittite	Akkadian, Hurrian
Hatti	Luvian	Hittite	Hittite
Arzawa	Lydian, Carian	Carian	Hittite

The sociolinguistic situation in early nineteenth century Hungary represents an approximate parallel to what I reconstruct for Kizzuwatna. Unlike the Austrian part of the Habsburg Empire, where German replaced Latin as the main administrative language already in the late 1700s, Hungary kept Latin as its official language until 1844. To a large extent, this was due to the efforts of the Magyar nobility, which justly feared that the nationalistic reforms coming from Vienna might ultimately threaten their own position. The cultural dominance of Latin, which had no native speakers, was perceived as less detrimental for the development of Hungarian culture than the proliferation of German in the administrative sphere. In fact, the first half of the nineteenth century witnessed the formation of the Hungarian literary language, as we know it today, as well as the emergence of Magyar nationalism. Hungarian first acquired the status of the official language in 1844 and after a brief hiatus, caused by the defeat of the Hungarian independence movement in 1849, its official status was permanently reasserted in 1867.

The fate of the Kizzuwatna dialect of Luvian was less fortunate. We have concluded in 2.8 that the annexation of Kizzuwatna to Hatti eventually brought about the extension of the Empire Luvian koine to the newly "liberated" territories. But the incorporation of Kizzuwatna rituals into the royal archives of Hattusa was likely to play a role in fostering the tolerant attitude of the Hittite elites toward multilingualism in the official sphere. Had it not been for this fact, both Hurrian and Luvian could have been marginalized as forms of written expression in the Hittite Empire, and as a consequence we would know much less about these languages nowadays. The faithful rendering of code alternation between Hittite and Luvian in the Kizzuwatna ritual tablets may have paved the way both to the frequent code-switching in the written texts of the Empire Period and to the acceptance of Luvian as a written language.

5.8 Linguistic Background of Anatolian Hieroglyphs. The development of the Anatolian hieroglyphic writing represented a long process. Some of the motifs that formally resemble the later Anatolian signs can be traced back to the images appearing on the cylinder seals of the Colony period. Thus Mouton 2002 has cogently argued for the association of the stag and the thunderbolt with the Protective God and the Storm-god, as depicted on the "Cappadocian" glyptics. Later, both signs evolved to become the logographic representations of the respective deities. In other cases, one can posit a formal link between certain elements of the glyptic iconography and the later hieroglyphic signs. For example, the same author discussed the connection between the "rod with balls" appearing as an attribute of gods and humans on the early second millennium seals in both Anatolia and Mesopotamia and the hieroglyphic sign L 153

<nu>, even though the functional development of this motif remains a matter of conjectures.

Yet it does not seem possible to treat the pictographic inventory of the "Cappadocian" glyptics as a semiotic system because no direct connection between the function of seals and their elaborate iconography can be perceived.[92] The situation changed in the Old Kingdom period, when the now dominant stamp seals came to feature the little group of well-recognized auspicious signs in their middle part (the periphery was normally occupied by the cuneiform inscription).[93] The most frequent among them were VITA (L 369), a sign reminiscent of the Egyptian "ankh" symbol, and BONUS (L 370), the sign denoting abundance whose precise origin is uncertain (Hawkins 2003: 166). This message interestingly resembles the reference to abstract auspicious concepts, such as *'pzwn'* 'abundance' or ŠPYR 'good(ness)' on the seals of the Sasanian notables (see e.g. Gignoux 1978: 51-63).[94] In some cases, a small number of additional signs could be also used in this period. Thus the bulla of Isputahsu, King of Kizzuwatna shows the additional signs TONITRUS and REX, presumably alluding to

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[92] The attempt of Alp (1968: 281-301) to interpret the pictographic elements of the Konya-Karahöyük stamp seals, which probably go back to the end of the Colony period, as an early form of writing must be deemed unsuccessful. For its critique, see Boehmer and Güterbock 1987: 36-40.

[93] For the inventory of hieroglyphic symbols appearing on the Old Kigdom seals, see Mora 1991. The author concludes that "[n]on si può parlare a nostro avviso di inoizio della scrittura geroglifica anatolica (nel significato attribuito al sistema di scrittura in uso dall'età imperiale ittita in poi) nei secoli XVII-XVI" (ibid: 22). At the same time, she concedes that the pictograms of this period were used in order to convey semiotic messages and thus represented true signs (ibid:20).

[94] This parallel between the Hittite and Sasanian seals appears to be typological rather than areal, since the invocation of abstract concepts is not typical of Babylonian and Achaemenid seals.

the fact that the Isputahsu seal belonged to a king ruling by the authority of the Storm-god, or something similar.[95]

The next stage, achieved in the Early New Kingdom period, was the development of a rudimentary writing system, which included phonetic (syllabic) signs in addition to the logograms. The kings of Hattusa, from Tuthaliya I onwards, used the digraphic seals containing their names and titles recorded in the Anatolian hieroglyphs in the middle surrounded by one or more rings of the cuneiform rendering the same name.[96] Thus the name of Satatuhepa, wife of Tuthaliya II, was rendered as *sà(-)tà-tu-ha-pa* and placed next to her title MAGNUS.DOMINA on the two sealings of a royal seal found in Maşat-Höyük (Mora 1991: 22). The short texts such as this do not yield direct evidence as to whether the relevant seals should be considered bilingual as well as digraphic. On the one hand, the cuneiform legends consisting entirely of personal names and Sumerographic titles can be read either in Hittite or in Akkadian, or even in Luvian. On the other hand, the hieroglyphic legends were likewise limited to (semi-) phonetically written personal names and logographic titles and therefore likewise can be read in any appropriate language (cf. Hawkins 2003: 140). To this one must add a group of sealings belonging to high officials, which appear to predate the Empire period on stylistic grounds (see their representative selection in Boemer and Güterbock 1987: 43-

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[95] Cf. Carruba (1974b: 88-90) for an unconvincing attempt to read TONITRUS.REX phonetically as Taruhsu, the alleged by-name of Isputahsu. According to Houwink ten Cate 1992: 250 (with ref.), the same group of signs can be read as Tarhuntassa, in spite of the absence of the determinative REGIO and the lack of attestations of Tarhuntassa in written sources before the reign of Muwattalli II.

[96] The hieroglyphic renderings of the names of the New Kingdom rulers are collected in Boehmer and Güterbock 1987: 80. For the digraphic seal impression mentioning Tuthaliya I, see Otten 2000.

46). Unlike the royal seals, the specimens of this group show the hieroglyphic signs without their cuneiform equivalents.

The earliest hieroglyphic inscriptions that contain isolated phonetically written Luvian words and can be assuredly dated are FRAKTİN and ALEPPO 1 (cf. Hawkins 2000: 19a). The former is a group of inscriptions accompanying the reliefs of King Hattusili III and Queen Puduhepa, while the latter mentions Talmi-Sarruma, King of Aleppo, who, like Hattusili III, was a grandson of Suppiluliuma I. Thus the first half of the thirteenth century BC represents the first period when we can talk with confidence about Luvian hieroglyphic texts. The later half of the same century witnessed the creation of large monumental inscriptions written in Luvian, such as YALBURT, SÜDBURG, and the EMİRGAZİ altars. The association between the Luvian language and the hieroglyphic script was firmly established by the end of the Empire period.

There is but one assuredly Luvian hieroglyphic text, whose possible Early New Kingdom date is seriously debated. The ANKARA bowl, published in Hawkins 1997 and again in Hawkins 2005, refers to the victorious expedition of a certain Labarna Tuthaliya against the city of Tarwiza. Since the annals of Tuthaliya I (CTH 142) tell us that this Hittite king fought against the Assuwa coalition, which included Wilusiya and Tarwisa, and since the later Hittite texts do not mention the toponym Tarwisa, Hawkins (1997, 2005) hypothetically suggested that Tuthaliya Labarna of the ANKARA bowl is to be identified with Tuthaliya I and that the artifact under discussion can be dated back to the early fourteenth century BC. This dating, as he justly observed, “would make it an extraordinary document of high significance for the development of the Hieroglyphic script”. Indeed, the ANKARA bowl inscription represents a cohesive text with a large

number of phonetically written Luvian forms, which stand in stark contrast with the formulaic seal inscriptions of the Early New Kingdom period.

Leaving for the moment the discussion of the writing system, I would like to argue that the internal references of the ANKARA bowl do not bear out its early dating. If Tarwiza is indeed to be identified with Tarwisa of the cuneiform sources, and by extension with the classical Troy, then we know that this toponym was preserved far beyond the Bronze Age. This opens the possibility, duly considered by Hawkins as an alternative, that the king in question is Tuthaliya IV, who ruled in the second half of the thirteenth century BC. The text known as "the Sins of the Seha River Land" (CTH 211.4) refers to the military expedition of Tuthalia IV to Northwestern Anatolia, which would provide an appropriate historical context for "smiting the land of Tarwiza". What clearly tips the scales in favor of this later date is the mention of king Maza-Karhuha in the text inscribed on the ANKARA bowl. Since the god Karhuha was worshipped mainly in Carchemish, it is difficult to envisage such a name of a Hittite vassal king in the period when Carchemish remained firmly within the fold of the Mitanni Kingdom. Pace Hawkins (2005: 200), the military campaigns of Tuthaliya I against Mitanni, which are retrospectively mentioned in a thirteenth-century treaty, cannot alone justify the hypothesis that this king controlled Carchemish for an extended period of time (cf. Bryce 2005: 140).[97]

[97] It is unlikely that Maza-Karhuha was a viceroy of Carchemish, whose names are generally well known. It is, however, possible that another Syrian or Anatolian vassal king used the theonym Karhuha as a part of his own name in the period after the gods of Carchemish were incorporated into the Hittite pantheon.

The early dating of the ANKARA bowl becomes even less likely once we take into consideration the sociolinguistic situation of the Early New Kingdom, as reconstructed in 5.6. We have seen that the use of the Luvian language in official written discourse was systematically discouraged in the early fourteenth century Hattusa. Hittite was the standard language for writing on clay tablets (for most textual genres), while Akkadian remained an acceptable alternative for inscriptions on durable materials, such as the sword dedicated by Tuthaliya I to the Storm-god after a victory over Assuwa (Ünal et al. 1991). Incising a Luvian inscription on a silver bowl, which was clearly made for the use of the elites, would represent an obvious *faux pas* under such conditions. One can, of course, speculate that the Luvian language may have had a different status at the court of Maza-Karhuha than in Hattusa, but this would add an additional unsubstantiated argument to the already problematic theory.

Finally, the Luvian hieroglyphic script, as it emerges from the seals of the Early New Kingdom period, does not give the impression of an elaborate system capable of rendering complex messages. The renditions of royal names or the names of high officials can be fairly described as rebus writings that hint at their phonetic shape as opposed to conveying them according to a standard convention. Thus the spelling MONS.*TU* of the name Tuthaliya consists of the image of the homonymous sacred mountain and the phonetic indicator hinting at its first syllable. By contrast, the spelling PURUS.FONS.MA_x of the name Suppiluliuma contains the logographic rendering of the toponym Suppiluli (lit. “pure spring”), enhanced by the phonetic indicator MA_x hinting at the last syllable of the royal name (cf. Güterbock 1998b: 203). It appears that the scribes were facing the task of inventing a new rebus each time they had to deal with a

new personal name. This is not what we observe in the first millennium hieroglyphic texts, where the majority of royal names were rendered phonetically. The simplest way to account for this distribution is to assume that the consistent conventions of syllabic hieroglyphic writing had not yet been developed in fourteenth century Anatolia.

These three considerations, taken together, militate against the fourteenth century date of the ANKARA bowl inscription. In what follows, I will assume that the Hattusa seals represent the first specimens of Anatolian hieroglyphic writing available to us. But what prompted the Hittite rulers of the Early New Kingdom to introduce the new script in addition to the ubiquitous cuneiform for rendering their official signatures? I believe that this decision was primarily dictated by nationalistic concerns. It has been already mentioned that the cuneiform periphery of the royal seals could in principle be read in Akkadian as well as in Hittite and there was no easy way to resolve this ambiguity within the cuneiform script. One could, of course, phonetically render the common nouns that were part of the royal title, such as "son" or "king", but this would make the legends much longer and, in addition, would run afoul of the common practice of writing these words as Sumerograms in Hittite texts. The radical alternative was the invention of an entirely new writing system, whose indigenous character would be clear even to an illiterate person.[98] The choice of this solution could be triggered by the pre-existence of auspicious symbols decorating the central part of Old Kingdom seals.

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[98] Cf. Neumann (1992: 27): "Demnach könnte bei der Schöpfung der Hieroglyphen das Streben eine Rolle gespielt haben, in einem mehrsprachigen Land breitere Schichten unmittelbar anzusprechen – mit Hilfe eines neuen Mediums, bei dem jedermann wenigstens einen Teil der Zeichen sofort verstand, nicht nur Schriftgelehrte".

The transition from Akkadian to Hittite as the main language of written expression in Hattusa was a gradual process, which began early in the Old Kingdom period. Certain genres of texts, such as the ritualistic literature pertaining to the official state cult, had been routinely recorded in Hittite at least since the reign of Telibinu, as argued in 5.3. Certain other types of documents, such as royal land grants (*Landschenkungsurkunden*), were always compiled in Akkadian in the Old Kingdom period, but came to be executed in Hittite in the Early New Kingdom (van den Hout, forthcoming). Finally, the bulk of the translation of Mesopotamian epic literature from Akkadian and Hurrian into Hittite appears to have been undertaken in the thirteenth century BC (cf. the discussion under 6.4.3 below). The nationalistic reforms within the sphere of seal production fit well within the general pattern described above. Their only peculiarity was that the shift to the national language was accompanied in this case by a shift to the national script.

Thus, my hypothesis implies the original vague association between the Anatolian hieroglyphic script and the Hittite language, or at least the lack of its original rigid association with Luvian. A different viewpoint is presented in Hawkins 1986. The ideas presented in this paper ultimately echo Güterbock (1956c: 518), who answered the question "von wem und für welche Spache wurde die Bilderschrift entwickelt" with "von den Luwiern, für das Luwische, in Luwischen Landen". Hawkins specified that the "Luvian script" was probably invented in the Aegean area, while the Hittites borrowed it from their western neighbors. This conclusion largely stemmed from the observed structural similarities between the Anatolian hieroglyphic writing and the Aegean scripts, such as Linear A and B. In particular, Hawkins acknowledged the dominance of

the syllabic signs of the CV type in the Aegeo-Anatolian area, as against the Cuneiform CV+VC/CVC type. Hawkins 2003: 166-169 advocates essentially the same view, although this discussion makes clear that the Aegeans syllabaries can be viewed only as triggers for the development of the "Luvian" script, not as its direct prototypes. Since the kingdom of Arzawa was closer than Hatti to the Minoan and Mycenaean cultural sphere, this is where, Hawkins claims, the Anatolian hieroglyphic writing probably originated.

In my opinion, the similarities discussed by Hawkins are all of the stadial and typological, rather than areal, kind. "The pictographic-Hieroglyphic character common to the Aegean and Anatolian script" reflects a stage passed by every original (non-borrowed) script. "[T]he same range and type of logograms drawn from the same spheres of material world" attested in both scripts bear witness to the social and economic similarities between the Aegean and the Anatolian states of the second millennium BC. Finally, the preponderance of the CV signs represents an unmarked property of syllabic scripts, be it the Ethiopian or the Kharoshthi syllabaries. Furthermore, there are a number of languages featuring only or mostly open syllables, and this is why the Optimality Theory and a number of other constraint-based phonological frameworks assume that open syllables are inherently less marked than their closed counterparts. Therefore, the syllabaries that develop from logographic systems were likely to give preference to CV signs at a certain stage of their development, just as children normally begin their first language acquisition with CV syllables. It is the elaborate system of VC and CVC signs characterizing the cuneiform syllabaries that should be analyzed as an exceptional areal feature.

Although Neumann (1992: 26, fn. 3; 27, fn 5) rejects foreign influence on the Anatolian hieroglyphic script and regards Kizzuwatna, and not Arzawa, as the most likely area where it could be created, he concurs with the hypothesis of Güterbock 1956c that this writing system must have been of Luvian origin. Neumann's main argument in favor of Güterbock's hypothesis is the etymological analysis of individual hieroglyphic signs. Thus he acronymically derives the arrow-shaped sign L 376, which had the value <za/i> in the Empire period, from the Luvian proximal demonstrative pronoun *za*-, whose Hittite counterpart was *ka*-. In a similar fashion, he follows Hawkins 1986 in deriving the phonetic value <u> of the sign L 105 = BOS, graphically the head of a bovine, from the Luvian form that he reconstructed as **uwau*-'cow'< IE. **g*^{w}*ou*- 'id.' It is obvious that only Luvian speakers could invent the Luvian acronymic values for logographic signs.

Out of the two examples cited by Neumann, only the first one holds water. The archaic inscriptions BOĞAZKÖY 1 and 2 lack any unambiguously phonetic signs, but contain L 376 functioning as a demonstrative. For these inscriptions, one can perhaps entertain the logographic value L 376 = HIC, on the assumption that the cross-cultural metaphoric use of an arrow as a pointing device was also known in Bronze Age Anatolia. If one takes this step, there is no way around accepting Neumann's claim that L 376 acquired its syllabic value in the Luvian-speaking milieu. The situation with the BOS sign is, however, more complicated. The earliest attested phonetic value of the variant of BOS that represents the body of a bull and is now transcribed BOS$_2$ (L 106) is

<mu(wa)>.[99] Although the developed hieroglyphic script distinguishes between L 105/106 <u> and L 107 <mu>, this must be a secondary differentiation because L 107 is derived from L 105 with the diacritic L 391 = <mi>.[100] On the other hand, the expected reflex of *g^w- in Luvian is *w*-, as in *wana/i-* 'woman' < *gwon°* (Melchert 1994: 239).[101] Therefore, (BOS.ANIMAL)*wa/i-wa/i-* must represent the full phonetic rendering of Luv. *wawa(/i)-* 'cow', and this lexeme could hardly serve as a basis for the acronymic reading <mu> ~ <u>. In all probability, the phonetic values of L 105-107 simply reflect various renderings of the bellowing of the bulls and the mooing of the cows.[102]

In order to place Neumann's argument in a proper perspective, one must also consider those cases where the phonetic values of Anatolian hieroglyphs appear to be acronymically derived from Hittite lexemes. Neither Hawkins, nor Neumann addressed this issue, perhaps because both scholars had been convinced beforehand about the original association between the Luvian language and the hieroglyphic script. One case in point is that of the foot-shaped sign L 90, which represents the logogram for 'foot'

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[99] See, for example, the archaic sealings Boemer and Güterbock 1987, #117 and Herbordt 2005, #259. Although Herbordt 2005: 4 dates these sealings by the 15th century BC, I do not see obvious reasons why they need to predate Early New Kingdom. For the frequent use of the BOS sign with the value <mu> in Anatolian glyptics, see Hawkins *apud* Herbordt 2005: 428b.

[100] Differently Hawkins *apud* Herbordt 2005: 429a: "[S]ince *mu* properly consists of *u*+*mi*, if *mi* is omitted, as frequently, mu becomes indistinguishable from *u*". The chronological distribution of the readings <u> and <mu> of L 105-106 speaks against this scenario.

[101] One cannot exclude the possibility of an optional contraction **wawa->uwa-* in the Luvian dialect of Hattusa. This contraction, however, was unlikely to become a norm because the Iron Age dialect of Luvian consistently shows (BOS.ANIMAL)*wa/i-wa/i-* 'bull, cow'.

[102] Compare the similar case of L 110= <ma>, graphically a ram's head, which cannot be derived either from Luv. *hawi-* 'sheep' or from Hitt. GUD-*u-* 'id.' (on the assumption that the latter represents a cognate of IE. *pek'u-* 'small cattle'). Can this syllable transcribe the bleating sound? Cf. e.g. Gk. μηκάζω 'bleat' and Arm. *mak^{h}i* 'sheep' of onomatopoeic origin.

(PES), is used as a determinative for the verbs of motion, and has the phonetic value <ti>. Hitt. *tiya-* 'to step, to walk' appears to represent a perfect bridge between the logographic and the phonetic values of this sign, whereas no Luvian lexemes rendered or determined through L 90 begin with *ti-*. Another suggestive case is that of L 391, which consists of four vertical strokes and has the logographic value <4>. The same sign can be used as a phonetic indicator MA_x accompanying a logogram (cf. Güterbock 1998b: 203), but its only syllabic value in the phonetically spelled lexemes is <mi>. Hitt. *meu-*, *miu-* 'four' (CHD, L-N: 308) represents a more straightforward basis for the acrophonic derivation of <mi> than Kizzuwatna Luvian *maw(V)-* 'four' (Melchert 1993: 145). A devil's advocate can, of course, argue that the root vocalism of the Luvian numeral 'four' may have varied depending on a dialect, but there is no independent evidence in favor of such an assumption.

The following example should be discussed in more detail because it requires a re-evaluation of the currently accepted transliteration of Luvian hieroglyphic texts. Rieken, forthcoming, has shown than the sign L 41, traditionally transcribed as <tà>, is normally used for marking the etymological dental stops in the position of lenition. The most salient exception to this generalization is the Luvian verb 'to take', which is commonly transliterated as ***tà-* but transcribed as **/ta-/ on the assumption that it represents a direct cognate of Hitt. *dā-* 'take'. Since Luvian, unlike Hittite, consistently implemented the fortition of word-initial dental stops, there is no obvious reason why

the initial consonant of this root could undergo lenition in any dialect of Luvian.[103] Therefore one may legitimately wonder whether the above-mentioned phonetic reconstruction of the Luvian verb 'to take' is warranted.

As it turns out, it is not. On the one hand, different dialects of Luvian support the existence of the Luvian verbal root *la-* 'take'. The competing verbal stems *la-* and *lala-* 'to take' are well attested in the Kizzuwatna dialect (Melchert 1993: 120, 121), while the derived noun *lalama/i-* 'receipt' occurs as a *Glossenkeil* word in texts emanating from Hattusa (Melchert 1993: 122). With HEG, L-M: 1, I believe that this root is etymologically unrelated to Hitt. *dā-* 'take', but rather represents a cognate of Hitt. *lā(i)-* 'loose, take off' (differently EDHIL: 804).[104] On the other hand, it is commonly accepted that L 41 can be used in the Luvian texts with the logographic value CAPERE 'to take'. The contexts that prompted the introduction of this logogram/determinative are those where the verb 'to take' is represented fully or partially in phonetic spelling, which is invariably *la(-la-)*, never ****ta-*. The relevant contexts were collected in Hawkins 2000: 264b and are cited below:[105]

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[103] For the inconsistent rendering of the etymological **d-* in prehistoric borrowings from Luvian into Hittite, see the discussion of the Hittite title *tabarna-* / *labarna-* in 5.3 above.

[104] For Hitt. **lā-* as the original *hi*-conjugation verb, see Oettinger 1979: 67. The semantic reanalysis of Luv. *la-* as 'to take' possibly originated in the construction *arha la-* 'to take off, remove'. A factor that likely contributed to this reanalysis was the undesirable homonymy between Luv. *ta-* 'to stand' and **ta-* 'to take', which led to the gradual disappearance of the second verb. Using the phonological jargon, one can characterize this case as a "pull shift".

[105] One cannot say with certainty whether the sequence CAPERE(-)*la* contains a logogram extended by the phonetic complement or a determinative followed by the full phonetic spelling in each particular case because of the ambiguity between variant stems *la-* and *lala-*. Only in (22) is the full phonetic spelling of the reduplicated stem assured.

(151) MARAŞ 4, § 4, Hawkins 2000: 256
|a-wa/i-ta |i-la/i/u-wa/i-si-na(URBS) |INFRA-ta |CAPERE(-)la-ha
'I captured the city Iluwassi'

(152) MARAŞ 4, § 12, Hawkins 2000: 257
|wa/i-ta |i-la/i/u||[-wa/i-si-na(URBS) REL(?)...] |[INFRA-ta] |CAPERE(-)la-ha
'[When?] I captured the city Iluwassi'

(153) MARAŞ 1, § 10, Hawkins 2000: 263
|wa/i-mu x x x |x-tara/i-za^{-i} |PRAE^{-i} |("CAPERE")la-la-ta
'Before me they brought …'

(154) MARAŞ 3, § 8, Hawkins 2000: 268
[...] "REL"-sa |ARHA "CAPERE"(-)la-||na POST+ra/i-ta [... ...]x-ti-ti
'(He) who shall [desire?] to take away […] in the future'

(155) BOHÇA, § 2-3, Hawkins 2000: 479
|wa/i-ta |(DEUS)TONITRUS-hu-ti |za-ri+i |(BONUS)wa/i-su-wa/i-i
|wa/i-mu |TERRA-REL+ra/i-zi |SUPER+ra/i |"^{l}CAPERE"(-)la/i/u-na-´
|pi-pa-sa-i
'Here I am agreeable to Tarhunt, he grants me to take over the territories'.

(156) BOHÇA, § 9, Hawkins 2000: 479
|wa/i-mu |"TERRA"-REL+ra/i-zi SUPER+ra/i |"CAPERE"(-)la/i/u-na
|pi-pa-sa-ia
'He grants me to take over the territories'.

In a limited number of cases, the Luvian verb *la-* 'to take' appears in hieroglyphic texts without a determinative:

(157) İSKENDERUN, § 6, Hawkins 2000: 259
za-pa-wa/i ^{l}la+ra/i+a-ma || |á-ta$_5$-ma-za |ni-sa |wa/i-na-ha |la-si
'Do not take away$^{?}$ this name "Larama" '.

(158) MARAŞ 13, l. 2-3, Hawkins 2000: 277
...-p]a$^{?}$ SUPER$^{?}$ x-wa/i$^{?}$-||ta |*ARHA HA*$^{?}$ la-ha |za-pa-wa/i ...
' …. I took away, and this…'

(159) BOHÇA, § 13, Hawkins 2000: 479
| ⌜a$^{?}$⌝-wa/i |za-ti-i |"TERRA"-sa-REL+ra/i-i |za-ti-i |LOCUS-ta$_5$-ti-i
1×CENTUM (ANIMAL)GAZELLA la-ha
'In this territory (and) in this place I took hundred gazelles'.

The alternation between the phonetic spelling *la-* and the logographic spelling CAPERE in two parallel passages of the KÖRKÜN inscription is particularly revealing. It appears that Luv. *la-* 'to take' can be spelled as a logogram CAPERE, both with and without a phonetic complement.

(160) KÖRKÜN, § 8, Hawkins 2000: 173
na-na-si-pa-wa/i-ta INFANS.*NI* || |REL-sá |ARHA CAPERE-i
'(He) who takes it away from Nanassi (or) the child …'.

(161) KÖRKÜN, § 11, Hawkins 2000: 173
|za-pa-wa/i-tu-ta (VITIS)wa/i-ni-na |REL-sa |ARHA la-i |na-na-si
|INFANS.*NI*-na (NEPOS)ha-ma-si (NEPOS)ha-ma-su-ka-la
'(He) who takes this vine away from Nanassi, (or) the child, (or) the grandchild, (or) the great-grandchild….'.

The next obvious step is to wonder what the obstacles are to accepting the transliteration CAPERE and the phonetic reading *la(la)-* in all the cases where L 41 stands for the verb 'to take'. This issue, to my knowledge, was last addressed in Morpurgo Davies 1987: 211-212, fn. 17, who writes: "Hawkins and I … have already pointed out that it would be possible to read all *ta-* forms as logographic on the assumption that the sign no.*41 must be read as CAPERE and not as *tà*. If so, the normal reading of the root would be *la-* (as in Cun. Luwian). The objection is that for *41, the taking hand, a *tà* syllabic value is certain – and it would be difficult to understand the origin of this value if the verb was not *ta-*, but *la-*. It is of course conceivable that an earlier *ta-* verb in existence at the time when the syllabary was created was replaced by a *la-* verb due to phonetic change or lexical replacement." It is clear from this quotation that Anna Morpurgo Davies was, like other scholars, firmly convinced of the primordial rigid association between the Anatolian hieroglyphs and the Luvian language.

Once we distance ourselves from this unproven assumption, it is easy to arrive at a satisfactory scenario for the evolution of the sign in question. L 41, iconographically a taking hand, was originally used as a logogram CAPERE for the predicate 'to take'. At some early point in the history of the hieroglyphic script, the Hittite verb *dā-* 'to take' provided a basis for the acronymic derivation of the phonetic value <da> (vel sim.), which is conventionally transliterated as <tà>.[106] We can already see this phonetic value on the sealings of the Early New Kingdom ruler Arnuwanda I. The logogram CAPERE was used in this period without phonetic complements indicating its root. After the convention of reading the hieroglyphic texts in Luvian came about, CAPERE became secondarily associated with Luv. *la(la)-* 'to take' and this led to the rise of the (semi-)phonetic spellings CAPERE(-)*la*. But the phonetic values of the Anatolian hieroglyphs had been already fixed by this time, and so the reading <tà> of L 41 remained unaffected.

It emerges from the above discussion that the phonetic component of the Anatolian hieroglyphic script was originally developed in the mixed Hittite and Luvian-speaking environment. The Luvian language inspired the equation L 365 = <za/i>, while Hittite was behind the readings L 41 = <tà>, L 90 = <ti>, and probably L 391 = <mi>. For many other phonetic signs, one cannot tell whether Hittite or Luvian forms were used in deriving their phonetic values because the relevant lexemes are attested in both

[106] One need not use this derivation as an argument for the preservation of the distinctive feature [±voice] in word-initial position in fourteenth-century Hittite. Note that L 100=<ta> is acronymically derived from Hitt./Luv. *targasna-* 'donkey', which was likely to begin with an etymological voiced stop (Melchert 2003b: 195-96 with ref.). It is possible that <ta> and <tà> underwent a secondary differentiation already within the system of the hieroglyphic script.

languages. Thus both Hitt. *pāi-*/*piya-* 'give' and Luv. *piya-* 'id.' could motivate the value <pi> of L 66, graphically a giving hand. In fact, one need not choose between these two options because the person responsible for introducing this phonetic value could be bilingual in Hittite and Luvian.

The sociolinguistic setting of Hattusa in about 1400 BC, where the majority of the population was already Luvian, while Hittite enjoyed political and cultural prestige, makes the Hittite capital the most likely venue for the invention of the Anatolian hieroglyphic script. Hattusa is also the place where the earliest hieroglyphic inscriptions containing phonetic signs were found. Thus there is no more reason to speculate about Arzawa or Kizzuwatna as a place where the indigenous Anatolian writing system must have originated. The hieroglyphic texts found in each of these two regions chronologically postdate their Hattusa antecedents and can be seen as results of cultural diffusion.

Thus, my answers to Güterbock's questions are very different from his own: Anatolian hieroglyphs were invented in Hattusa, in the mixed Hittite and Luvian environment, for writing Anatolian names and titles on durable objects, which had previously been inscribed in Akkadian. The linguistic associations of the hieroglyphic script were originally vague. As Hawkins (2003: 140) aptly observes, even though the names and titles inscribed on seals are attributable *to* a language, these texts are not *in* a language. There is no *linguistic* way to show that their language is either Hittite or Luvian. In practice, this means that certain population groups may have given them a different linguistic attribution from one that had been originally intended. While the court literati probably expected that the hieroglyphic titles were to be read in Hittite, the

same titles could have received the Luvian interpretation among the common people of Hattusa. This interpretation was particularly likely given that many names of the local high officials were, after all, Luvian in origin.

The extent to which the new script came into private use in the Hittite kingdom depends on the unsolved problem of wooden waxed boards, which were quite popular in Late Bronze Age Anatolia (Symington 1991). A large group of scholars are of the opinion that they were sometimes used for the writing of the Anatolian hieroglyphic script (see lately Uchitel 2005: 55).[107] A different group of scholars (e.g. Marazzi 1994) continue to maintain that wooden boards were always used for writing cuneiform. Although chances of finding a Hittite wooden board with traces of signs preserved on it are rather slim, the discovery of Late Bronze Age private letters or business transactions recorded on different media conducive to tracing hieroglyphic signs, such as lead strips, may eventually contribute to the resolution of this controversy.

Pending this or similar archaeological evidence, the considerations that follow must be regarded as speculative. But if the Anatolian hieroglyphs were indeed used for private records, this could provide an appropriate context for the emergence of their secondary association with the Luvian language. According to the reconstruction that I will present in the following chapter, the bulk of the Hattusa denizens in the Empire period were Luvian speakers, who at best learned Hittite as their second language. If

[107]The claim that all the Anatolian wooden boards were inscribed in the hieroglyphic script has, in my opinion, nothing to recommend itself. We know that this writing implement was also used in Mesopotamia, in particular in Assurbanipal's library (Parpola 1983). Compare also the Kizzuwatna wooden boards inscribed with Hurrian rituals, which have been mentioned in the previous section. But it is easier to draw hieroglyphic images on wax than on clay, and wooden boards, originally designed for writing in the cuneiform, may have secondarily contributed to the proliferation of the new writing system.

some of them appropriated the hieroglyphic script, presumably enticed by its iconicity, they had no reason to use it for writing Hittite. The first private documents possibly represented formulaic business notes, where the use of syllabic signs was limited to proper nouns, just as on Hittite seals. The Iron Age KULULU lead strips (Hawkins 2000: 506-11), where all the phonetic complements are perfectly redundant, give a good idea of what such documents might have looked like. When the phonetic complements and the full phonetic spellings eventually appeared, they could have only reflected the Luvian language used for dictating the respective business records.

The creation of a full-fledged phonetic script might, in its turn, have given rise to new kinds of hieroglyphic texts, such as private letters. Once again, we do not have any specimens of such documents from the Empire period, but their appearance need not have been different from that of the Iron Age ASSUR letters (Hawkins 2000: 534-37). Eventually, the Luvian language associated with the hieroglyphic script might have become the preferred vehicle of all-purpose written communication outside the palatial sphere. This would explain why the last Hittite rulers accepted Luvian as the language of their monumental inscriptions. The real choice was in favor of the Anatolian hieroglyphs, deemed suitable means of nationalistic self-expression, whereas the Luvian language probably came along as a part of the package deal. It must have been easier for the hieroglyphic scribes to design the monumental inscriptions if they could use the familiar linguistic conventions, while the rulers had no reasons to insist on using Hittite.

We will see in 6.4.4 that the thirteenth-century kings of Hatti, unlike their predecessors, did not shy away from code-switching to Luvian in their own public discourse.[108]

I must repeat at the risk of seeming tedious that the circulation of Luvian hieroglyphic texts in the private sphere in the thirteenth century BC represents a plausible but archaeologically unproven hypothesis. By contrast, the Hattusa origin of the Anatolian hieroglyphs follows from the archeological evidence taken at face value and finds support in the internal analysis of the script. Thus, whatever one thinks about the evolution of the Hieroglyphic script in the Hittite Empire, there is no reason to believe that the Hittites borrowed it from anyone else in the Early New Kingdom period.

5.9 Summary. Below I will attempt to summarize the sociolinguistic results obtained from the analysis of the linguistic and historical data discussed in the present chapter. Its main conclusion is the symbiosis of the Luvians and the Hittites in central Anatolia attested throughout most part of the second millennium BC. This conclusion contradicts the views of Güterbock (1956a), who attempted to draw a stable geographic boundary between the habitats of the two population groups. One of its corollaries is the necessity to discuss the sociological history of Hittite and Luvian as two interrelated issues.

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[108] Note the difference between this explanation and the hypothesis of van den Hout 2006: 235, according to which the choice of Luvian as the language of public monuments directly reflected the "alleged solidarity" of the Hittite kings with the common population of the Empire. Even if the desire to please the common people was one of the factors involved in this decision, the choice of the Hieroglyphic script was a more efficient way to achieve this goal. The illiterate spectators would hardly have been able to figure out the underlying language of the inscriptions, but everyone could see the difference between the hieroglyphs and the cuneiform signs.

The likely homeland of the Luvians is the area known as Luviya in the Hittite Laws. Contrary to the scholarly *communis opinio* that identifies (part of) Luviya with Arzawa, I have presented arguments for its identification with the region known as Lower Land in the Akkadian and Hittite sources (5.4). This area was adjacent to the Hittite-speaking town of Kaneš/Nesa, which functioned as a hub of the Old Assyrian commerce in Asia Minor. Politically, however, the kings of Kaneš/Nesa had powerful rivals in the face of the kings of Purushanda, who ruled in the western part of the Central Anatolian Plateau (5.4). In the Colony period, the Hittites living in Nesa were exposed to Luvian influence both through the likely presence of Luvians in the area of Kaneš (5.2) and as a result of Luvian political dominance in central Anatolia. The first type of contact triggered structural interference of the sort discussed in 4.4-4.5, while the second one resulted in the borrowing of Luvian lexemes belonging to the administrative and ideological sphere (5.3).

The socio-political set-up in Asia Minor changed after the new Kussara dynasty came to power in Nesa at some point in the 18th century BC. Anitta, the second king of this dynasty, embarked upon the campaign of military conquests, which culminated with the submission of the king of Purushanda, and assumed the title 'Great King" (5.4). Although the Kussara dynasty was probably non-Indo-Hittite in origin, it must have undergone linguistic assimilation in Nesa (if not before the conquest of Nesa) and shifted to the Hittite language (5.1). Therefore, Hittite probably replaced Luvian as the socially dominant language in Anatolia in the wake of Anitta's conquest. At the same time, Akkadian must have maintained its culturally dominant position as the only written language in use during this period.

The collapse of the system of Assyrian emporia in Asia Minor was followed by the "Dark Age" that left no written records. When the written sources begin to be compiled again in the second half of the 17th century BC, the Kussara dynasty appears to have abandoned Nesa and established Hattusa as their capital. The previous socially dominant language in Hattusa and its surrounding area must have been Hattic, but now it was mainly used as the language of religious tradition. The new rulers settled the capital with the Hittites and the Luvians, perhaps alongside certain other ethnic groups. The Hittites, now called "men of Hatti", continued to occupy the dominant position in the kingdom, but the Luvians "men of Luviya" were allotted legal protection as the ethnic group of second rank. This reversal of the original social roles can be compared with the position of the Medes vis-à-vis the Persians in the Achaemenid Empire. The number of Hittite kings with Luvian names speaks in favor of frequent intermarriages between Hittite and Luvian elites in the Old Kingdom, and certainly indicates that no stigma was attached to Luvian ethnicity (5.5).

The early history of the Hittite Old Kingdom is marked by numerous raids to southeastern Anatolia and Syria. It is tempting to connect these expeditions with the ongoing migrations of the Anatolian population groups in the southeastward direction. Both Hittites and Luvians settled to the south of the Anti-Taurus range, but Luvians were probably in the majority. The linguistic analysis of the Kizzuwatna dialect of Luvian suggests the presence of a Hurrian substrate in this region (2.7), and so the Hurrians emerge as (part of) the original population of southeastern Anatolia. The weakening of the Hittite kingdom in the 16th century BC led to the formation of the

independent state of Kizzuwatna, which subsequently fell within the sphere of influence of the Hurrian kingdom of Mittani (5.7).

The cultural dominance of Akkadian in Anatolia underwent erosion already in the Old Kingdom period, when certain genres of texts began to be recorded on clay tablets in the local languages. While in most cases it was Hittite, the code alternation between Hittite, Luvian, and Palaic is attested in Old Hittite incantations. The use of these languages in the Hittite state cult must have served as *e pluribus unum* type metaphor (5.5). Akkadian continued to give up its positions under the nationalistic pressure in the Early New Kingdom period, when the new system of Anatolian hieroglyphs has been designed to replace the Akkadian cuneiform, or to be used together with it, for the purpose of writing on durable materials. The first hieroglyphic inscriptions are linguistically ambiguous, while sociolinguistic considerations speak in favor of the assumption that they could be read both in Hittite and in Luvian (5.8).

In early 14th-century Hattusa, Hittite functioned as the official written language in most situations, while its use in oral discourse conveyed the connotations of authoritative speech (5.6). Thus one can say that Hittite was both socially and culturally dominant in the Early New Kingdom. The cultural prestige of Hittite also spread to Arzawa in western Anatolia, where Tarhuntaradu and perhaps some other kings used it for diplomatic correspondence, even though it was not natively spoken in this region (3.4). On the other hand, the term Luviya was no longer used after the Old Kingdom period, perhaps because the Luvian or Luvic population groups became linguistically dominant in most parts of the kingdom. The large quantity of Luvian personal names in Hittite texts composed in the first part of the 14th century BC and the rapid structural

convergence between Middle Hittite and Luvian indicate that the situation in the capital was no exception in this regard (5.6). But the avoidance of Luvian in the written discourse of the Early New Kingdom suggests the deterioration of its social status. The Hittite elites apparently began to perceive Luvian not as a regional dialect of some prestige, but rather as a vernacular used by the common people in Hattusa.

The nationalistic reforms of the Hittite rulers were not followed in the kingdom of Kizzuwatna, where Akkadian probably continued to function as the main chancellery language, while Hurrian enjoyed prestige in the official religious sphere. The multilingual cultural setting of southeastern Anatolia also created favorable conditions for the oral transmission of ritualistic folklore in Hittite and Luvian, the two socially dominant languages of Kizzuwatna. Unlike the witch-doctors of Hatti and Arzawa, who accepted the transmission of their incantations in Hittite and possibly regarded Hittite as the preferred language of ritual performance, the Kizzuwatna ritualists sometimes insisted on the use of Luvian, or the code alternation between Hittite and Luvian, as a way of increasing the rituals' illocutionary force (5.7).

The annexation of Kizzuwatna to the Hittite Empire at some point in the early 14th century BC strengthened the Syrian influence on Hittite culture, and in particular triggered the influx of Hurrian religious literature to central Anatolia (5.7). It is unclear, however, if these events played much of a role in the ongoing shift from Hittite to Luvian in Hattusa and its surrounding area, which in principle does not require external explanations. The modeling of contact between the two languages in the Empire period will represent the main subject of the following chapter.

6 CONTACT BETWEEN HITTITE AND LUVIAN IN THE EMPIRE PERIOD

6.1 Introductory remarks. The second half of the fourteenth century BC was a period of significant changes in Anatolian political geography. After an initial period of instability, which was marked by persistent attacks of various enemies against the Hatti land and the destruction of its capital, Hattusa, the Hittite king Tudhaliya II/III and his son Suppiluliuma managed to recover what had been lost. After Suppiluliuma I became king, he launched a series of offensive campaigns against the Hittites' old rival, the kingdom of Mitanni, which resulted in the direct annexation of large parts of Northern Syria, and in establishing the Hittite protectorate over a number of vassal states in the same area. The victorious Hittites transported a large number of people from Syria and southeastern Anatolia to their heartland, but also brought in the plague that decimated the population of the empire for some twenty years and cost the lives of two Hittite kings. In a sequel to this policy of conquest, Mursili II, the son of Suppiluliuma I, inflicted a definite defeat upon the Hittites' western neighbor, the kingdom of Arzawa, during the early years of his reign, and advanced the area of Hittite domination to the Aegean. In this case, too, extensive forced population movements followed military

action. We learn that a single campaign in Arzawa resulted in the transportation of at least 65.000 of its inhabitants to Hatti (Bryce 2005: 197).

The changes in political geography were accompanied by linguistic changes. The texts composed at the time of Mursili II show a number of innovations in the morphology of the nominal system, which were convincingly analyzed in Rieken 2006a as contact-induced. The result of these innovations was the increased structural isomorphism between the Hittite and Luvian languages. On the orthographic level, one has to signal the sudden proliferation of the "gloss mark"/ *Glossenkeil*, a special cuneiform sign reserved for words that the scribes deemed "non-standard". Most of the lexemes marked by the Glossenkeil belonged to the category of Luvian foreign words, whose number increased substantially in the period under consideration.[1] The scope of these linguistic and orthographic changes has made the scholars set up the boundary between Middle Hittite and New Hittite at the beginning of the reign of Mursili II.

There is an understandable temptation to assume that there was some connection between the vicissitudes of Hittite history and the directions of language change. A number of scholars addressed this issue in the very recent past. Thus van den Hout (2005: 237) cautiously hypothesizes that the outbreak of the epidemic in Hatti in the late fourteenth century BC devastated the Hittite core region and brought about the

[1] A foreign word can be defined for the purposes of the present research as a word-form both the root and the inflectional elements of which originate in a language different from that of its surrounding context. It is formally different from the integrated borrowings that are provided with the inflectional endings of the matrix language. The contrast between integrated borrowings and foreign words cannot be formally established in those cases when the relevant word-forms lack inflectional endings, or when such endings are ambiguous as to their origin. For the sociolinguistic interpretation of Luvian foreign words, see Section 6.4.4 below.

increasing influx of labor force from the peripheral, Luvian-speaking areas. Singer (2005: 446, with fn. 57) stresses the large number of Arzawa transportees brought in on the wake of Mursili II's campaigns. To this, one should add an earlier suggestion of Rosenkranz (1954: 309a), according to whom the transfer of the Hittite capital to Tarhuntassa at the time of Muwatalli II (early 13th century BC) increased the influence of Luvian scribes at the Hittite court. One must, of course, recognize that in the absence of the census data there is simply no way to ascertain the linguistic implications of these facts. We do not know whether the plague hit harder the Hittite or the Luvian-speaking areas, we are not sure about the language of the common people of Arzawa, and the conjecture about the increasing influence of the Tarhuntassa scribes at the court of Hattusa was never supported by prosopographic analysis. One can state, however, that historical facts are compatible with several scenarios of large-scale Luvian migrations to Hattusa and the surrounding area in the Empire period.

Unlike the scenario of Luvian migrations, the concept of language shift in Hattusa in the Empire period does not enjoy unanimous support in modern scholarship. The uncertainty about the sociolinguistic implications of the transition from Middle Hittite to New Hittite can be illustrated by the cautious statement of Melchert (2005: 457): "There are some hints in our bureaucratic documents from Hattusa of a chronological replacement of Hittite by Luvian, or perhaps more accurately of growing Luvian competition with Hittite". Van den Hout (2005: 234) also admits two options when he writes: "I would advocate a largely bilingual Hittite-Luvian society for the thirteenth century BC, where the Hittites politically and militarily dominated the

increasing Luvian speaking, or increasingly Luvian speaking population".[2] The difference between the two options may seem unsubstantial at first glance, but in fact there is a clear divide between them. The growing importance of the Luvian language in Hattusa can either represent a mechanical result of the change in the demographic situation, or imply a shift from Hittite to Luvian as the first language of the same lineages. The first theory clearly precludes the break in transmission of Hittite as a native language; the second theory leaves such an option open.

Singer (2005: 447) emerged as an outspoken opponent of the complete language shift in the Hittite Empire with the following statement: "There is no need to go a step further and to consider Luvian as the only vernacular language of late 13th century Hatti, leaving for Hittite the role of the standard chancellery language. The growing Luvian competition with Hittite should suffice to explain the survival of the former and the vanishing of the latter after the fall of the Hittite capital and its royal archives". He failed, however, to provide arguments against the first scenario, perhaps simply viewing it as unnecessarily complicated. Craig Melchert (2005: 458) summarized the most serious argument advanced so far against the shift to the Luvian vernacular in the Empire period Hattusa when he wrote: "Changes from Old Hittite to New Hittite argue … that the language was being spoken (by someone)". He commented further in a

[2] It is probably fair to say that between the two scholars, van den Hout is more explicit about expressing sympathy toward the theory of language shift in his recent work. Summing up his article, he writes: "The situation originally envisaged by Rosenkranz of Hittite as the standard language for more official and literary purposes, but nobody's first language while Luvian was the real vernacular may be one step further in the possible decline of Hittite".

footnote that the phonological changes, which do occur in New Hittite, represent the best evidence for a spoken language.

One needs to specify, however, the precise meaning of the term "spoken language". It is common knowledge, for example, that Hebrew continued to be used for liturgical purposes in diasporic communities. This usage correlates with a number of regular sound changes, which characterize the Ashkenazic and Sephardic varieties of Hebrew, as opposed to Classical Hebrew. At the same time, there are no reasons to believe that Hebrew was natively transmitted at any stage since the Achaemenid period till its revival in the early twentieth century BC.[3] The radical variant of the shift theory would imply that the sociolinguistic status of the New Hittite language in Hattusa was akin to that of Achaemenid or Hellenistic Hebrew. Hittite remained spoken on particular occasions, but was no longer natively transmitted, while the new vernacular language of the elites, including the king and the members of the royal family, was Luvian.[4]

The last interpretation would be close to the one suggested seventy years ago in Rosenkranz 1938. Hittite was defined there as "Hof- und Amtssprache", largely based on the analysis of Luvian foreign words (p. 282). Unfortunately for the German scholar, he could not avail himself of the linguistic and paleographic stratification of Hittite texts,

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[3] See Schniedewind 2005 for the latest discussion of language shift from Hebrew to Aramaic. Note that this sociolinguistic change represents a potentially good point of comparison with what need to consider in the present chapter, since in both cases we are dealing with closely related languages.

[4] I would like to make it clear that one cannot make any claim about the status of the Hittite Language throughout the Empire. Thus the assumption that Hittite was a purely written language in Hattusa before its abandonment is compatible with the hypothesis that it continued to be natively transmitted in certain parts of Anatolia, such as for example Kaneš or the Upper Land. Only the discovery of provincial New Hittite archives can provide a solid basis for discussing provincial varieties of Hittite in the Empire period.

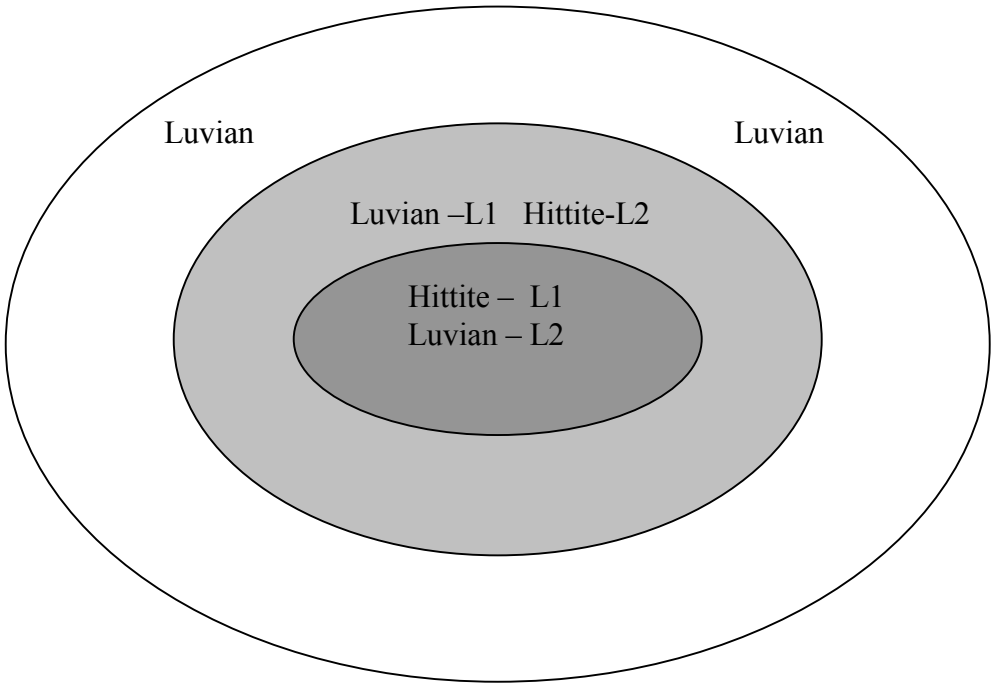
largely achieved after the publication of his article, and therefore he extended his conclusions to all the varieties of Hittite attested in written sources. Once the corpus of Old Script texts had been segregated, it became clear that Luvian words were fully adapted in the Old Hittite language, while "Glossenkeil" was not used at all during this period. Another reason why Rosenkranz's radical position did not have much following is his own change of opinion in later years. In the post-war period Rosenkranz came to believe that the contact-induced features of New Hittite were due to the growing influence of a group of Luvian scribes at the Hittite court (Rosenkranz 1954).

None of the research works mentioned so far has addressed the contact-induced phenomena observable in New Hittite in their entirety, and few have attempted to fit them within cross-linguistic typology of contact-driven changes. In what follows, I will attempt to integrate pieces of descriptive evidence presented by particular scholars, simultaneously refining their data analysis and revising their conclusions in light of typological research. The output of this project is an internally cohesive scenario of linguistic contacts between Luvian and New Hittite.

I will argue for a compromise position that acknowledges the native transmission of New Hittite, stressing at the same time the widespread advances of Luvian as the second language in Hattusa. I will assume a model that divides the inhabitants of Hattusa and its vicinity in the Early Empire period into three groups of people: the native speakers of Hittite that were fully bilingual in Luvian; the native speakers of Luvian that were versed in Hittite to various degrees, and finally the Luvian speakers that had no knowledge of Hittite whatsoever. It goes without saying that only the first two groups of people were among the scribes of Hittite cuneiform tablets, while the existence of the

third group must be extrapolated from the subsequent history of Anatolia. It is presumed that the better knowledge of Hittite corresponded to the higher social standing in Hattusa, but the knowledge of Luvian was common even at the very top of the social hierarchy. The proposed model of assymmetrical bilingualism can be reflected in the following diagram:

Figure 4: Asymmetrical Bilingualism in the Hittite Empire



Although Luvian was universally spoken, there are no linguistic reasons to think that the core of Hittite native speakers disappeared during the years of the Hittite Empire. The available evidence speaks rather in favor of the hypothesis that the ruling classes of Hatti came to regard Hittite-Luvian bilingualism as an important asset. To this one must add that the growing number of individuals who were learning Hittite as their

second language. In fact, one has to assume that the native speakers of Luvian were in the majority among New Hittite speakers, since many structural interference features imposed by contact with Luvian came to be generalized in New Hittite.

In Sections 6.2.1 through 6.2.5, I am going to address the phonetic innovations of New Hittite that can be classified as interference features. Although this part must appear in the beginning of my discussion for structural reasons, the readers should be aware that it is more controversial than the following parts, largely in view of inherent ambiguities between phonetic and graphic phenomena in the analysis of cuneiform texts. Nevertheless, it provides substantial evidence for the native transmission of Hittite in the Empire Period. Sections 6.3.1 through 6.3.5 will be devoted to the morphosyntactic changes in New Hittite that must be explained through the imposition of Luvian structural features. The data discussed in this section constitute a rationale for assuming the widespread acquisition of Hittite as a second language on the part of Luvian native speakers. The topic of Sections 6.4.1 through 6.4.4 is the lexical interference between Hittite and Luvian. It is meant to provide evidence for widespread bilingualism in the highest echelon of Hittite society and to reveal the conflicting attitudes toward language mixing among its different constituents. The concluding Section 6.5 will classify the contacts between Luvian and New Hittite according to the parameters of language contact typology.

6.2 Phonetic Innovations in New Hittite. Given that New Hittite was attested for less than 150 years, the range of phonetic changes proposed for this dialect is

predictably rather narrow. I am not aware of any scholarly work that has systematically addressed their sociolinguistic implications.

The aim of my account below is threefold. First, I would like to discriminate between genuine instances of New Hittite sound changes, and those changes that produce similar effects, but can be best explained by morphological or graphic means. Second, I intend to draw a line of distinction between exceptionless sound laws, obligatory sound changes spreading through lexical diffusion, and optional processes that result in synchronic linguistic variation. Finally, I plan to investigate which of the proposed sound changes are likely to be contact-driven, and which of them can bear witness to the existence of Hittite as a spoken language.

6.2.1 Lexical Diffusion of *i>e*. The majority of diachronic changes and synchronic alternations proposed for New Hittite involves the front vowels /ĕ/ and /ĭ/. The seemingly unpredictable character of these alternations appeared indicative of their complete merger to more than one scholar. I will limit myself to citing the explicit statement of CHD, L-N: xvi: "It is well-known that the vowels *e* and *i* often interchange in the spelling of Hittite words. It is quite likely that the two vowels, still kept distinct in Typical Old Script, began to merge in later Old Hittite, and certainly had completed their merger by the Empire period".

Melchert 1984b strongly disagreed with this point of view. He argued that, more frequently than not, the New Hittite spellings with *e* and *i* are identical to the spellings present in the original Old and Middle Hittite texts. Thus the common stems

ēs- 'to be', *ēp-* 'to take' or *ēd-* 'to eat' are never spelled ****īs-/**īp-/**īd-** in New Hittite texts. In those cases when New Hittite forms are distinct from their predecessors, one can usually perceive a pattern of change that betrays a genuine phonetic development. Only in a small residue of cases must one assume free variation of *e* and *i*, which, according to Melchert, has a morphological explanation.

A by-product of this argument was a number of sound laws proposed for New Hittite. One of them was the "*a*-mutation" in words like *īssa-* > *ēssa-* 'do, make', cited by Melchert (2005: 458) as an argument for the native transmission of Hittite in the Empire period.

Melchert (1984: 153-4) proposed the change *i>e /_ C(C)a* in New Hittite on the basis of seven lexemes. In each of the cases cited below, the spelling with *e* becomes consistent after a certain point in New Hittite, which renders unlikely the hypothesis of a graphic aberration.

Table 31: Lexical Diffusion of *i>e* in New Hittite

īssa- 'to do, make' (Supp.I)	*ēssa-* (Murs. II +)
^{É}*histā-* 'a cult installation' (OS)	^{É}*hestā-* (Murs II, Hatt. III)
titha- 'to thunder' (OS, MS)	*tetha-* (MS +)
mimma- 'to refuse' (Supp. I, Murs. II)	*mem(m)a-* (Hatt. III +)
tammishai- 'to harm' (MS)	*tammesha-* (Murs. II)
tissai- 'to set right' (Hatt. III)	*tiessa-* (Tudh. IV, Supp. II)
widai- 'to bring' (Murs.)	*weda-* (Hatt. III)

Melchert immediately conceded that the explanation by sound law need not have applied to all the cases. He suggested that the verbal forms *mimma-* and *widai-* changed their vocalism by contamination with *mema-* 'speak' and *weda-/wida-* 'build' respectively. This allowed him to restrict the environment for the proposed sound change to the position before obstruents and to concentrate on the lexemes that

underwent change by the time of Mursili II. Melchert suggested that the presence of *–a-* in the next syllable points to a vowel assimilation similar to 'a-mutation' in West Germanic. Nevertheless, he had to recognize that "in view of the limited number of examples for the change, such an assumption remains hazardous at present" (Melchert 1984b: 155).

Rieken (1996: 294-97) did not accept Melchert's explanation, adducing a number of counterexamples to the suggested sound law. Thus, the well-attested lexemes *intaluzzi-* 'shovel', *kistant* 'hunger', *kissan* 'so, this way', and *hissa-* 'thill' are consistently written with *i* in Hittite texts.[5] She suggested that the change *i>e* was not conditioned by the quality of the following vowel, but rather occurred between two coronal consonants (*t/d*, *n*, *s* and *l*). Rieken supported her idea by a dozen additional examples, which appear to illustrate the change *i>e* in the suggested environment. These are *inissan*/*enessan* 'so, thus (distal)', *abenissan*/*abenessan* 'so, thus (medial)', ^{DUG}*hanissa-*/$^{(DUG)}$*hanessa-* 'a type of vessel', *sīna-/sēna-* 'image', ^{DUG}*tissummi-*/$^{(DUG)}$*tessummi-* 'a type of vessel', *hannidalwa-*/*hannedalwa-* 'legal adversary', *halissiya-/halessiya-* 'to encase, overlay', $^{(GIŠ)}$*līdi-*/$^{(GIŠ)}$*lēdi-* 'a type of plant', *lissi/lēsi* 'liver', *sissur*/*sessur* 'irrigation', *sisd-*/*sesd-* 'to prosper'. According to Rieken, this change was sporadic, and most of the lexemes listed above have variants with *i* in New Hittite original compositions (for the first two items, compare Melchert 1984b: 151).

[5] Rieken excluded the hapax *ki-eš-ša-an* (KBo 2.4 iii 17) on methodological grounds. The same explanation presumably applies to *hi-eš-ši* (KBo 12.123 15).

Yet, the number of *e*-spellings in this group is too significant to dismiss them as mere scribal errors.

I will begin the analysis of the postulated sound change *i*>*e* with the cases adduced by Melchert. All of them (except perhaps for *tetha*-) are directly relevant to our discussion from the chronological point of view. Although a number of scattered forms with –*e*- can be seen already on Middle Hittite tablets, the new variant becomes predominant only in the New Hittite period in all of the seven cases. I will argue, however, that the analogical explanation appears to be possible in five of the seven cases (in two cases, this is also the opinion of Melchert). The analogical explanations suggested below are not equally compelling. Nevertheless, the possibility of an analogical account must be exhausted before one proceeds to making far-reaching conclusions about the sociolinguistic significance of the irregular change *i*>*e*.

The forms *titha*- > *tetha*- 'to thunder' and *mimma*- > *me(m)ma*- 'to refuse' contain a synchronic reduplication. Rieken (1994: 296) plausibly hypothesized that the reduplication vowel *e* was gradually replacing *i* in this function during the New Hittite period and adduced *lilhuwai*- > *lelhuwai*- 'to pour out' as an additional example of the same tendency.[6] The trigger of this templatic leveling was, in all probability, *mēma*- 'to speak', one of the most frequent lexemes in the Hittite corpus, which was always characterized by the *e*-vocalism in the first syllable. The analogical development *títha*- > *tētha*- had occurred in the Middle Hittite period since the stem *tetha*- is attested several times in the MS. text CTH 630.A (KUB 32.135+). This change, strictly speaking, lies

[6] Cf. also Melchert's (1984: 153, fn. 125) remarks on *sesha*- 'to arrange, determine'.

beyond the scope of my present investigation. The stems *mimma-* 'to refuse' and *mēma-* 'to speak' fell together in Late New Hittite, presumably as a result of folk etymology that interpreted the verb 'to refuse' as *ver-sagen* (where the Wackernagel clitic *=za*, normally accompanying *mimma- > me(m)ma-* 'to refuse' but not *mēma- > me(m)ma-* 'to say', modifies the base verb just like the prefix *ver-* does in German).[7] It is, however, easier to envisage such a contamination if the distinction between *e-* and *i-* in verbal reduplications was not natively learned by those responsible for the initial confusion between the two stems.

The case of *widai-* 'to bring' is even more striking. Descriptively speaking, this verb underwent contamination with *wede-* 'to build' in the 13th century BC, as a result of which both of them shifted from the *-mi* to the *-hi* conjugation and acquired the stem *weda-*. Oettinger (1979: 373-74) is probably right in assuming that *wede-* 'to build' changed the conjugation pattern for independent reasons, which rendered both stems more similar to one another. The folk etymology that would connect both meanings is conceivable; cf. Russ. воз-водить 'to build, erect', literally "up-lead", formed from the same root as Hitt. *widai-* 'to bring'. Yet, one must repeat that the analogical contamination of two originally independent verbs is unlikely unless the scribes were no longer certain about their pronunciation and morphological properties. It is also worth mentioning the remark of Oettinger (1979: 374): "Die Existenz von *uda-* ("to bring" - I.Y.) verwandter Bedeutung hat bei der Entstehung von *weda-* ("to bring" – I.Y.) sicher mitgewirkt, da *u-* and *we-* in anderen Fällen – synchronisch betrachtet – wechseln

[7] Cf. the observations of Melchert (1984b: 154, fn. 126).

können". This is precisely the factor that is more likely to play a role in the scribal interpretation of a foreign dialect than in first language acquisition.

The development of the ablauting verb *i-iš-ša-i* (3sg.) / *iš-ša-an-zi* (3pl.) into the non-ablauting verb *e-eš-ša-i* (3sg.) / *e-eš-ša-an-zi* (3pl.) cannot be explained by a sound law (cf. Oettinger 1979: 508-9 with fn. 33). I believe this change may have had an analogical component and was partly due to the gradual encroachment of the extended *hi*-conjugation forms in *–es-* on the *–issa-* iteratives.[8] Already in Middle Hittite, one can observe the coexistence of the stems *missa-* and *mies-* 'to grow' (cf. MS. KBo 17.105+ Rs. III 34 *mi-iš-ša-du* vs. MS. KUB. 30.10. obv. 11 *mi-eš-ha-ti*).[9] In New Hittite, the competition between these two stems yielded a hybrid stem *mi(y)ēssa-* attested in KUB 24.2 rev. 16 *mi-eš-ša-du*).[10] The spread of such compromise forms to other stems could be achieved through a proportional analogy of the type *miyanzi* / *mi(y)ēssanzi* = *siyanzi* / (sporadic) s*i(y)ēssanzi* (cf. KUB 3.1 iii 45 *ši-e-eš-ša-an-du* 'let them seal'). The same type of analogy would have yielded ***i(y)ēssanzi* 'they perform', but since the word-initial sequence /iye-/ appears to be limited to the analogical formations in New Hittite,

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[8] For the *hi*-conjugation suffix *–es-* alternating with the more archaic cuffix *-s-* after the Hittite stems ending in *-i* and before the consonantal endings (e.g. *memista* > *memiesta*), see Jasanoff 2003: 119-21, and especially fn. 69. I suggest that the *–es-* suffix discussed here is to be historically analyzed as a thematic vowel *–e-* and a "proto-aoristic" suffix *–s-*, on which see Jasanoff 2003: 174ff. It arose within the history of Hittite as a result of thematization of certain verbal roots ending in *–i*. Cf. the older forms 1pl. *pí-i-ú-e-ni*, 2pl. *pí-iš-te-ni* vs. the younger forms 1pl. *pí-ya-u-e-ni*, 2pl. *pí-eš-te-ni* from the root *pai* 'to give', cf. CHD, P: 41b. I hope to address this issue in more detail in the future.

[9] I am grateful to A. Sidel'tsev for this reference.

[10] I am inclined to follow Melchert (1994: 133) in assuming the lengthening of every stressed *e*. Yet, I do not systematically implement this insight in my transcription in view of many lexemes with the uncertain place of stress. Following the Hittitological tradition, I normally limit myself to indicating the length of those vowels that are consistently written *plene*. In those cases, however, when I explicitly indicate the place of stress, I also indicate the vowel lengthening not expressed in writing.

we wind up with the form *ēssanzi*. Eventually, the stem *ēssa-* (graphically *e-eš-ša-*) becomes generalized throughout the paradigm.[11]

The suggested scenario receives direct support from the Late New Hittite verb *ti(y)ēssa-* 'to set right (vel sim.), which clearly represents an adaptation of the Luvian stem *tissai-* attested as a foreign word in Hittite texts. The complete absence of the spellings ****te-eš-ša-*** militates against the interpretation ****tessa-*** and precludes the explanation of this form through the sound change *i>e*. I believe that we are dealing here with yet another instance of folk etymology. The New Hittite scribes may have interpreted the Luvian stem as an *-essa-* iterative from Hitt. *tāi-*/*tiya-* 'to put, place' and modified it accordingly.

Thus we are left with two New Hittite forms, *hestā-* 'a cult installation' and *tammeshai-* 'to harm', in the case of which an analogical explanation does not impose itself.[12] Neither of these two examples fits the conditions for the sporadic change *i>e*, as formulated by Rieken (1996: 296).

When we turn to the examples adduced in Rieken 1996, it must first be noted that most of them are not directly relevant to our discussion from the chronological viewpoint. Thus the variant *tessummi-* 'a type of vessel' is as frequent as *tissummi-*

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[11] Compare the view of Rieken (1996: 295), who also advocates the analogical origin of *ēssa-*, but does not postulate the intermediate form ***yēssa-***. This is not a purely formal quibble, because my reconstruction prompts me to accept the transcription *halzi(y)essa-* 'to call' and probably *warri(y)essa-* 'to rescue' for Rieken's *halzessa-* and *waressa-*. The graphic representation is, of course, ambiguous in both cases.

[12] Rieken (1996: 296) suggested that NH *tammeshai-* might owe its existence to the analogical influence of a related stem *tamas(s)-*/*tames(s)-* 'to press'. This explanation, however, appears to be problematic on chronological grounds, since New Hittite has nearly generalized the stem *tamass-* (cf. Oettinger 1979: 122).

'id.'in the Old Script texts (Neu 1983: 195-97). The vessel name ^{DUG}*hanissa-* (with the variant ^{DUG}*hanissanni-*) is spelled three times with *e* in the Old Script Corpus (Neu 1983: 48-49). The verb *halissiya-* 'to encase, overlay' is normally spelled with *i* in all periods, with the rare variant *ha-li-eš-ši-ya-* that appears to be distributed between Middle and New Hittite (cf. MS. KUB.57.30 6' *ha-li-eš-ši-ya-an-ta*). In the case of *hannidalwa-* / *hannedalwa-* 'legal adversary', the only potential Middle Script example is possibly spelled with the sign NE (Hoffner 1997: 45 with fn. 127). The nouns *lēsi-*/*lissi-* 'liver' and *sissur*/*sessur* 'irrigation' have only New Script attestations, while the four reliable attestations of *lēdi-*/*līdi-* 'a type of plant' are not sufficient for establishing the chronology of sound change in this case. While the change *sīna-* > *sēna-* 'image' within the history of Hittite is beyond any reasonable doubt, it appears to have started before the New Hittite period (MS KUB 27.38 I 19' ⌜*še*⌝*-e-nu-uš*, 22' ⌜*še-e-nu-uš*⌝, MS$^{?}$ KUB 55.3 obv. 10 *še-na-an*).

Thus we are left with *inissan*/*enessan* 'so, thus (distal)', *abenissan*/*abenessan* 'so, thus (medial)', and *sist-*/*sest-* 'to prosper', which can be added to Melchert's list. In the first two cases, there are isolated occurrences of the forms with *e-* in the texts written in Old or Middle script, but they do not form a systematic pattern.[13] None of these three examples admits of a straightforward analogical explanation. If one adds to this list the forms *hestā-* and *tammeshai-* discussed above, one is tempted to conclude on distributional grounds that the change *i*>*e* in New Hittite is limited to the position before *s*. This formulation will work for all the five examples in question, but appears to be

[13] On the special case of *enessan*/*inissan*, see below.

phonetically suspect, since the environment before [s] is poor in transitional acoustic effects and therefore unlikely to trigger any conditioned vowel change whatsoever. Melchert's original formulation in terms of "a-mutation" can account for four out of the five examples (excluding *sisd-*/*sesd*). The number of counterexamples to the sound law, formulated in either of the ways, will be substantial (cf. the forms *kistant* 'hunger', *kissan* 'so, this way', and *hissa-* 'thill' adduced above).

Since no explanation in terms of sound laws for the New Hittite change *i*>*e* is available, one must assume that it spread through lexical diffusion. The synchronic variation between *i* and *e* before *s* in certain verbal suffixes is attested already in the Middle Hittite period (Melchert 1984b: 134). It is possible that the similarity of the phonetic environment facilitated the spread of this variation to the verbs like *tammishai-* and *sist-*, and then to the other lexemes discussed in the previous paragraph. Likewise it is conceivable that the following low vowel contributed to the generalization of the mid-vowel in some of these lexemes. But, as long as the sound change is not regular, none of these considerations has explanatory status within the Neogrammarian framework.

The sociolinguistic account for the diffusion of *e* in New Hittite will be provided below. For the moment, I will limit myself to an observation that the irregular character of the change *i*>*e* rules out the hypothesis of a purely graphic change. We are lucky to have a set of cases where the sign IŠ (HZL #151) does not convey any information about vowel quality. These are instances where the sequence IŠ-CV is used to render the word-initial cluster /sC-/ (Kassian-Yakubovich 2002, pace Kavitskaya 2002). It is precisely in this set of cases that the IŠ sign is never replaced with EŠ (HZL #331) in New Hittite. This is enough to demonstrate the phonetic reality behind the gradual replacement of IŠ

with EŠ in individual New Hittite lexemes. Another important conclusion that can be made based on the discussion of Rieken's examples is the gradient character of the change *i>e.* The New Hittite development can be viewed as the continuation of an earlier tendency, which was responsible for the Old Hittite variants *tessummi-* and *hanessa-*, or Middle Hittite variants *sēna-* and *tetha-*.

6.2.2 No Sound Change *e>i*. The opposite change *e>i* has been proposed for the thirteenth century Hittite. Melchert (1984: 142-43) postulated it based on the following set of examples.

Table 32: Examples Adduced for *e>i* in New Hittite

neya- 'to lead' (NH)	niya- (Hatt. III +)
kē 'this/these (sg./pl. n)' (NH)	kī (Muw II +)
kēdani 'to this' (NH)	kīdani (Muw II +)
n=e=tta "PART=it/they=to thee" (NH)	n=i=tta (Sup II)

Mechert suggested that this change was limited to /ē̩/ (long closed e), which represents an outcome of Proto-Anatolian short diphthongs **ei* and **oi*.[14] The existence of /ē̩/ in Hittite is not universally accepted (cf. Kimball 1999: 210-11, Oettinger 1979: 535). While there are independent reasons for the existence of such a phoneme in pre-Hittite, this change, so far as I can judge, is the only argument for its persistence in the historical period. On the other hand, it is difficult to imagine that no Hittite scribes would make an attempt to render the opposition /ē̩/ ~ /ē/ in writing if this opposition

[14] I am not convinced that [ē] of OH. *nēa-* 'to lead' must be derived from a diphthong, as per Melchert 1994: 56. Melchert suggests the relative chronology *neyHo- > nē̩Ho > nē̩_o > nē̩a*, arguing that Pre-Hittite *néyo-* would have yielded *ne_o > **na-*, and adducing **pe-ay- > pay-* 'give' as a parallel for the last development. A simpler analysis would be to assume a relative chronology according to which Pre-Hittite **néya-* lost its glide long after the Common Anatolian univerbation of *pe-* and *ay*.

were real.[15] But even if one assumes the existence of [ę]/[ę̄] up to the thirteenth century BC, there will remain enough examples defying the phonetic regularity of the change /ę̄/ > /ī/ (we have *kī* 'this/these' but not ***abī* 'that/those'). Therefore, one must explore alternative ways to account for this Late New Hittite change.

The analogical explanation appears to be perfectly possible in the case of the proximal demonstrative stem *k(a)-*. As Melchert (1984: 143) justly points out, the use of *kī* in the neuter plural nominative can be viewed as the analogical extension of *kī* in the neuter singular nominative, paralleled by similar processes in the other New Hittite pronouns (cf. section 3). The outcome of this change is the system of the Bronze Tablet (Bo 86/299), where we have nom. pl. n. *ki-i* (2x), but dat. sg. *ke-e-da-ni* (2x).[16] The next stage in the proliferation of the stem *kī-* was its sporadic spread to the oblique cases. One can observe this stage in KUB 6.46, the draft of Muwatalli II's prayer to the assembly of gods (CTH 381.B). In this tablet, we find nom. pl. n. *ki-i* (2x) vs. *ke-e* (1x), dat. sg. *ki-i-da-ni* (1x), but *ke-e-d*[*a-aš*] (1x). The same tablet bears witness to the incipient analogical spread of the interrogative stem *kui-* at the expense of *kue-*: nom. pl. n. *ku-e* (4x) vs. *ku-i* (1x); dat. pl. *ku-e-da-aš/-ša* (3x) vs. *ku-i-ta-aš* (1x). The dat.sg. form *ku-i-e-da-ni* (2x), contrasted with *ku-e-da-ni* (2x) in the parallel version KUB 6.45, represents an intermediate stage in this analogical replacement.[17]

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[15] An additional, albeit not decisive, argument against the longevity of Pre-Hittite /ę̄/ is the potential instability of asymmetrical vowel systems. While there are arguments for the existence of /ō/ in Hittite, the existence of two separate phonemes /ō/ and /o̧/ is beyond the limits of credulity.

[16] Otten 1988: 63.

[17] Compare Singer (1996: 126) for the synopsis of the relevant variations.

The other tablet where we can observe more than one example of this leveling is the tablet of assorted rituals KBo 3.8+KBo 7.1 (CTH 390.A), where one finds *ki-i-da-ni* (i 8), *ku-i-da-ni* (ii 3) alongside *ku-e-da-n*[*i* (iii 28), but *e-da-ni* (i 16).[18]. This isolated example does not prove, of course, the correctness of the analogical analysis, but the complete absence of ****a-pí-i-da-ni***, alongside the normal *a-pé-e-da-ni*, in the New Hittite corpus is more telling.[19] In this case, the lack of a suitable model in the paradigm precludes paradigmatic leveling. It is important to bear in mind that this tablet exhibits a number of features indicating that its scribe had a poor command of standard Hittite (cf. Kronasser 1962, § 25 and Oettinger 2004, fnn. 5, 12, 13).

The most instructive text for the study of the other two lexemes is KBo 4.14 (CTH 123).[20] This tablet is responsible for the absolute majority of the attested examples of *niya-* (2sg. pres. *ni-ya-ši* (1x), 3sg. pres. med. *ni-ya-ri* (6x) and *ni-ya* (1x), 3sg. impv. med. *ni-ya-ru* (1x), 3pl pres. med. *ni-ya-an-ta-ri* (1x), see CHD, L-N: 349-50 for the attestations), as well as the curse formula *ni-it-ta* EGIR-*an ú-wa-an-du* 'let them come after thee' (iii 52). At the same time, it is quite consistent in preserving *e* in pronominal stems. Examples are: nom. pl. n. *ke-e* (iii 23), dat. sg. *ke-e-da-ni* (iii 51, iv 48), dat. pl. *ke-e-da-as* i 21, dat. sg. *ku-e-da-ni* iii 64, 72, dat. pl. *ku-e-da-aš* ii 49. It is clear from this distribution that the factors licensing the evolution of both groups are not

[18] The only full edition of this tablet is Kronasser 1961.

[19] There is one isolated instance of gen. sg. *a-pí-il* (KBo 2.13 obv. 12). I do not think that it is possible to make any linguistic conclusions based on this *hapax*, especially given the fact that the reading *a-pé-él* remains technically possible.

[20] Edited in Stefanini 1965.

identical. The sweeping change in the "*ni*-group" becomes much easier to understand if we take into consideration that the eight-stroke sign <ne> (HZL 169) is not used at all in KBo 4.14, being replaced with the two-stroke sign <ni>=<né> (HZL 72) throughout the text! In all probability, we are dealing with a simplified orthography that has eliminated a cumbersome sign NE, and not with a genuine linguistic innovation.[21] On the contrary, the lack of the innovations in the "k-group" may reflect linguistic reality. In spite of the fact that KBo 4.14 is a late text composed by the end of the reign of Tuthaliya IV, the analogical extension of -*i*- in pronominal stems was not implemented in the dialect of its author/scribe, or at least the scribe was aware that it has no place in the "correct" Hittite.[22]

The obvious advantage of the proposed account is the possibility of dispensing with Hittite /ē̯/. Once we recognize that the New Hittite change *e*>*i* subsumes two cases, one of which is analogical, while another one has a graphic explanation, the existence of a separate phoneme providing an input for this putative sound law looses its *raison d'être*. One can safely assume that the words in the left column of Table 32 contained

[21] Compare the opposite phenomenon, namely the usage of the five-stroke sign <en> (HZL 40) instead of the eight-stroke sign <in> (CTH 354). In this instance, the difference in the sign complexity is not particularly striking, and yet the sporadic substitution of <en> for <in> is quite common. The corpus of Luvian cuneiform texts, where the phonemic sequence /en/ is not expected, contains more that fifty instances of the <en> signs. By contrast, there are only three instances of <ne> written for the expected <ni> in the same corpus of texts (the search was performed based on the Cuneiform Luvian database prepared by C.Melchert and available for download at the TITUS Project website, http://titus.uni-frankfurt.de).

[22] See Bryce 2005: 318 (with ref.) for the dating of KBo 4.14, which CTH attributes to Suppiluliyama II.

the ordinary phonemes /e/ or /ē/.[23] The possible existence of /ḛ/ in Pre-Hittite must, of course, be subject to a separate discussion, although at the present time I do not see cogent reasons to accept it either. I am glad to signal that Professor Melchert has independently arrived to similar conclusions (Melchert, Forthcoming[2]).

Another lesson that one can learn from the analysis of the same data is the importance of studying the idiolects of individual Late New Hittite scribes. Thus the scribe of KUB 6.46 partially implemented the analogical leveling in the stems *k(a)-* and *kui-* and used freely the sign <ne>, while the scribe of KBo 4.14, working some sixty years later, preserved the original distribution of forms in pronominal stems and completely eliminated the sign <ne>. It would be obviously inaccurate to attribute the peculiarities of either of these two texts to Late New Hittite as a whole.

6.2.3 Nasal Vowel Formation. We have seen that the evidence for New Hittite sound laws suggested in the previous literature is either slim, or non-existent. It is not my intention, however, to claim that no regular sound changes can be observed in the dialects of individual New Hittite scribes. The best instance of such a change known to me comes again from the draft of the Muwatalli II's prayer (KUB 6.46). The table below

[23] There are no reasons to think that *e* in NH. *neya-* and *n=e=tta* was synchronically long. The stem *neya-* 'to lead' was apparently generalized as recessive in New Hittite, cf. IBoT 3.127 iii 6 *ne-ya-u-e-en*, KUB 24.13 iii 10 *ne-ya-a-ri*, and KUB 9.31 iv 25 *ne-ya-a-ru* with the *plene* on the ending or on the thematic vowel. The element *=e=* was restricted to the medial position within the clitic chain *n=e=tta* in New Hittite and, in the absence of an analogical support, was subject to unstressed vowel shortening (Melchert 1994: 143).

reproduces the findings of Singer (1996: 129), where the discussed tablet is compared with the edited copy of the same text (KUB 6.45).[24]

Table 33: Nasal Vowel Formation in the Draft of CTH 381

KUB 6.45	KUB 6.46
hu-u-ma-an-da-aš	hu-u-ma-a-da-aš (1x, humant- passim)
iš-ta-ma-aš-ša-an-du	iš-ta-ma-ša-du (1x, with *n* 1x)
La-u-wa-za-an-ti-ya	La-u-wa-za-ti-ya (1x)
ši-ip-pa-an-ti	ši-ip-pa-ti (7x, ši-pa-an-ti 1x)
KI-aš	da-ga-zi-pa-aš- (2x)

The scribe of KUB 6.46 has a clear tendency to drop the nasal *n* before obstruents (*t*/*d*, *z*). The temptation to view examples in the right column as instances of simplified orthography, which is otherwise attested in the same manuscript (*ne-pí-aš* for *ne-pí-ša-aš* 'of the sky', 5x), must be nevertheless resisted. The omission of nasals before stops and affricates occurs, albeit more sporadically, in many other New Hittite texts, whereas abbreviated spellings in common nouns are a relatively uncommon phenomenon.[25] With regard to our text, one can observe that *hu-u-ma-a-da-aš* can hardly be considered an abbreviated variant of *hu-u-ma-an-da-aš*, and the omission of *n* in *iš-ta-ma-ša-du* would represent a very foolish abbreviated spelling since it results in a loss of grammatical information. Therefore, one would fare better taking data at their face value and assuming that the scribe of KUB 6.46 (or the person who dictated the text to him) had a peculiar way of pronouncing the syllable-final *n*. The most likely phonetic

[24] For the conclusions regarding the relationship between these two texts see Houwink ten Cate 1968 and Singer 1996: 135-42.

[25] See Carter 1979: 94 for a partial list of word-forms that have variants without a nasal. Note that Carter himself considered it to be an instance of orthographic variation; for a different point of view see Justeson and Stephens 1982.

interpretation of these forms is the nasalized vowel formation [an]>[ã] (Friedrich 1960, § 31, cf. Melchert 1994: 124).

The description in terms of phonological change may give an impression that the dialect of the second document represents a chronologically later stage in the development of Hittite. In a broader perspective, however, this would be a mistaken analysis. The forms without *–n-* begin to sporadically occur already in Middle Hittite (e.g. MS. KUB 9.7. obv. 13 *ne-e-a-za* 'led'). Although the number of *n*-less variants gradually increases in later texts, the contrast between individual tablets of the same period is clearly more striking. Based on the comparison between KUB 6.45 and KUB 6.46, one can conclude that the distinction between the two varieties appears to be stylistic rather than chronological: The tablet that contains many *n*-less forms has been shown to represent a dictated draft, while the tablet with "standard" forms has been shown to represent an edited copy of the same text. Thus the formation of a nasalized vowel in Hittite is amenable to a sociolinguistic rather than historical interpretation. The status of this colloquial marker may be similar to that of the change *–ing* > *-in'* in English. Since the classical experiments of Fischer (1958) and Trudgill (1974), we know that this linguistic variable correlates both with the social class of informants and with the formality of a communicative situation. Peter Trudgill distinguished between four types of input for his experiment: reading word lists, reading text passages, formal speech, and casual speech. Although the educated white-collar employees predictably avoided the colloquial *–in'* forms in reading, they sprinkled them rather liberally in their speech. The working class members occasionally used the *–in'* forms in the reading style, and preferred them in their spoken communication.

The textual history of CTH 381 allows us to reconstruct two different communicative situations. Following Singer (1996: 134), I presume that the scribe of KUB 6.46 recorded the formal speech of Muwatalli II, or a high official acting on his behalf. Therefore, the peculiar phonetic features of this draft are likely to reflect the idiosyncrasies of a person who dictated the prayer to the scribe, perhaps the king Muwatalli II himself.[26] On the contrary, the "standard" forms of KUB 6.45 reflect the linguistic competence of a senior scribe that was in charge of preparing the final version of the prayer. He had a sufficient time to read the draft of the prayer word by word, and therefore his copying can be rather compared to the reading performance of Trudgill's informants. Based on this analysis, the *n*-less forms emerge as exponents of the colloquial style.

The Hittite sources do not allow us to directly relate the frequency of the nasal vowel(s) to social variation. The Hittite texts available to us are thought to be all written by professional scribes, who by definition constituted the most well educated group of Hittite society. KUB 6.46 appears to be rather unusual in preserving the phonetic idiosyncrasies of its author, who in this case also belonged to the Hittite ruling class. Linguistic considerations suggest, however, that the *n*-less forms were considered

[26] It is less likely that they reflect the speech habits of the scribe, as Singer (1996: 129) apparently thought. What speaks against this hypothesis is the variation between the *n*-less forms and their "standard" counterparts in KUB 6.46. If the scribe considered the shorter *n*-less forms to be regular, he would hardly hesitate to use them throughout the text.

negative markers (barbarisms).[27] This assumption is needed in order to explain why the forms with *–n-* continued to be the norm up to the very end of the Hittite Empire, even though the *n*-less forms appear as early as Middle Hittite. The English *–in'* forms represent a good example of a low class/ poor education marker that has been remaining a stable linguistic variable for the last two centuries, both in England and in the United States. The widespread prejudice against the cross-dialectal change *–ing* > *-in'* continues to inhibit the penetration of the natively transmitted suffix *-in'* into the formal, educated speech.

6.2.4 Was New Hittite a Dead Language? It is time to sum up our provisional conclusions. Some of the New Hittite changes, suggested in the previous literature, have received an analogical or graphic explanation. What remains is the change /i/ > /e/ that was spreading through lexical diffusion throughout the New Hittite period, and the stigmatized development [an] > [ã] that existed on the margins of the New Hittite written culture. These two features provide solid evidence for the fact that Hittite continued to be spoken on certain occasions in the Empire period, and not merely used as a tool for the composition of written texts. It remains to be seen whether these data are sufficient to claim that Hittite continued to be natively transmitted into the thirteenth century BC.

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[27] I am using here the term marker in a sense given to it by William Labov (as opposed to indicator). For the concise definitions of indicator, marker, and stereotype with reference to linguistic variables see Wardhaugh 1996: 140.

The answer may appear obvious to those who assume that dead languages cannot undergo phonetic changes. This assumption, however, would be simply wrong. It is easy to show that phonetic changes in any language used for official or liturgical recitations are possible, at least as long as these changes are driven by the structure of the vernaculars spoken in the same community. Depending on whether these changes imitate the vernacular developments or overdo the restoration of the "original" pronunciation, they can be classified as hypocorrections vs. hypercorrections.

There is abundant and incontrovertible evidence for hypocorrection in the languages of tradition. An obvious example is the variation in rendering palatalized velars in medieval Latin, which directly reflects the linguistic history of underlying Romance vernaculars, e.g. /tʃentum/ in Italy, /θentum/ in Spain, and /sentum/ in France. Wright 1982 succeeded in demonstrating that the interference features were even more salient in Early Medieval Latin, whereas the Latin pronunciation as we know it from the liturgical traditions represents a product of Carolingian Revolution (which in this case should be rather called Carolingian Reaction). In this case we are apparently dealing with hypocorrection in diglossic communities, which was mitigated at the point when diglossia evolved into genuine bilingualism.

Nevertheless, the official language need not be close to the vernacular in order to experience phonetic interference. Rubio 2005 discusses the *ondoku* style of reading Classical Japanese literature recorded in Chinese characters, which did not imply translating them into Japanese, but merely adapting their Chinese reading to the phonology and phonotactics of the Japanese language. The parallel with Latin is, of

course, not exact in this case, since the Chinese language continued to be natively transmitted on the mainland, and since the same texts could be read also in Japanese, but these distinctions are not important for our purposes. Chinese *shān* 'mountain' was regularly pronounced *san* in eighth century Japan and long afterwards.

The instances of contact-driven hypercorrection are admittedly less frequent, but a large number of the relevant forms are attested in the corpus of Buddhist Sanskrit. This dialect (or, rather, a set of dialects) owed its existence to the imperfect learning of the standard variety of Sanskrit by the Buddhist Prakrit speakers at some point in the early first millennium AD.[28] It is important to keep in mind that Standard Sanskrit was a dialect without native speakers already by the time of the historical Buddha. Nevertheless, it continued to be transmitted from teacher to student in Brahmanic communities, and gradually gained influence also in the Buddhist milieu. As a result of this, the Buddhist Sanskrit forms underwent progressive convergent development and eventually became phonologically identical to those of the standard dialect.

The transient nature of Buddhist Hybrid Sanskrit makes it usually impossible to speak about the norm within this group of dialects. Different "corruptions" may co-occur with standard forms within the same text. Most of them are hypocorrections, reflecting

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[28] Edgerton (1953: 5) summarized the origin of Buddhist Sanskrit in the following words: "It seems … that at some early times some north-Indian Buddhists abandoned their original principles of using genuine vernaculars, and partly yielded to the prestige of the classical and learned language of their Brahmin neighbors. Yet they made no effort to "translate" into Sanskrit. BHS works, especially the oldest, retain in all parts clear evidences of being based on some form of Middle Indic, only partially, and it seems haphazardly, Sanskritized. This mixture can, in my opinion, never have been spoken as a real vernacular. Yet it existed for centuries as a religious language and seems to have become the prevalent language used by north-Indian Buddhists for religious purposes". For a slightly different opinion, de-emphasizing the language planning on the part of Buddhist speakers, see Brough 1954: 368-69.

the direct influence of Prakrit forms, e.g. BHS. *khudrāka* 'small' vs. Skt. *kṣudraka-* and AMg. *khuḍḍāga-* 'id.'. The hypercorrections, however, are likewise quite numerous. The cases cited below are randomly selected from Edgerton 1953, and accompanied by their number of attestations in Edgerton's corpus.

Table 34: Hypercorrections in Buddhist Hybrid Sanskrit

BHS śista- 'lump of rice' (1x)	Pali sittha-	Skt. siktha-
BHS nirgṛhīta- 'checked' (1x)	Pali niggahīta-	Skt. nigṛhīta-
BHS bharikā- 'wife' (2x)	Pali bhariyā-	Skt. bharyā-
BHS viyūbha- 'arrangement' (1x)	Pali viyūha-	Skt. vyūha-
BHS adhyuṣta- '3½' (1x)	Pali aḍḍhuḍḍha-	Skt. ardhacaturtha-
BHS mṛya– 'die (pres.)' (4x)	Pali miyya-	Skt. mriya-

In all these cases, the anonymous authors of Buddhist Sanskrit compositions attempted to reconstruct the Sanskrit forms based on their Prakrit equivalents. The precise nature of their vernaculars remains unknown, and it is not implied that they were native speakers of Pali; the Pali forms are given merely as an illustration of Middle Indic phonotactics. The false Sanskritization discussed here was not completely haphazard, but rather strove to reverse the actual correspondences between Sanskrit and Prakrit forms that can be observed in other cases. Thus the false restitution of *–bh-* for the original *–h-* and *–k-* for the original *–y-* is driven by frequent instances of intervocalic lenition **-bh-* > *-h-* and **-k->-y-* in Middle Indic.

Proportional hypercorrections of the sort described above are unlikely to be stable, at least as long as the "dead" language preserves its written tradition.[29] Unlike

[29] The scope of hypercorrect changes in "dead" languages may be larger if the relevant texts are transmitted by purely oral means. As an example, one can cite a number of phonetic processes that occurred in the Avestan language, apparently after the break in its oral transmission (de Vaan 2003). Thus the post-Young Avestan lengthening /wi$/ > /wi:$/, as well as /yu/ > /yu:/ is difficult to account for in terms of phonetic naturalness, but it may be explained as an ancient hypercorrection, the aim of which

hypocorrections, which mirror the phonetic constraints common to all the speakers of a particular vernacular, hypercorrections reflect no more than the creative activity of individual second language learners. They do not generate forms that are easier to pronounce, and sometimes do the opposite. Sooner or later the hypercorrect forms are weighed against the authority of earlier texts, and discarded from further use. The number of attestations of Buddhist Sanskrit forms in Table 34 speaks for itself.[30]

Now one has to see whether the phonetic changes attested in New Hittite can indeed be explained as hypocorrections or hypercorrections prompted by contact with Luvian. I believe that such explanation is possible for vowel nasalization, but not for the change *i*<*e*.

The nasal vowel formation in the etymological sequence **an$* in thirteenth century Luvian can be surmised based on the analysis of scribal errors. Luvian cuneiform texts, the bulk of which reflects the earlier stage of the language, usually spell the syllable-final *n*, which implies that it was a real consonant. Nonetheless, the occasional forms without the expected -*n*- are attested in the copies of these texts made by Hattusa scribes. The following list is limited to the cases where -*n*- is omitted before -*z*- in nominal inflection *a-la-a-aš-ša-za* (VBoT 60 i 6), *hu-u-pal-zi-ya-ti-ya-za* (HT 1 ii

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was to prevent the natural place assimilation /wi$/ > /wu$/ and /ju/ > /ji/, or a similar change. As a matter of fact, the sound change */wi-/ > */wə-/ > */g^{w}ə-/ > /gu-/ can be reconstructed for the history of Persian between the Achaemenid and the Sasanian periods, when it was likely to be the main vernacular of the Zoroastrian community.

[30] The case under discussion is not to be confused with hypercorrection in natively transmitted languages, which involves a proportion between the phonetic shape of a word and its perceived phonological structure. The ability to segment speech utterances into strings of phonemes appears to be an innate property of human beings, and so the errors of hypercorrection can be highly systematic and irreversible in this case. In particular, this notion is invoked for explaining perceptually based dissimilation (Blevins 2004: 149 with ref.).

9, KUB 9-31 ii 33), *hu-u-up-pa-ra-za* (KUB 9.31 ii 24), [^{URU}*kap-l*]*a-ú-i-ya-aš-ša-a-za-ti* (KUB 35.30 ii 4), DINGIR.MEŠ-*aš-ša-za-ti* (KUB 35.45 ii 9), *ti-wa-an-n*[*a-al-l*]*i-zi* (KBo 29.38 obv. 7), *ti-wa-an-da-li-zi* (KBo 29.38 rev. 7). Melchert (2003b: 182) plausibly connects this optional development with the similar phenomenon in Hittite. It is interesting that KUB 9.7. obv. 13 *ne-e-a-za* (MS), the earliest Hittite form known to me that can illustrate the nasal vowel formation, occurs in a Kizzuwatna ritual with Luvian passages.

We do not have a way of investigating the behavior of syllable-final *-n* in Iron Age Luvian, since it is not reflected in the Anatolian hieroglyphic script, but the later Luwic languages, Lycian and Milyan, consistently replace *-*Vn*$ with nasalized vowels *ã*, *ẽ*, and *ñ* (Melchert 1994: 293-94). This feature has apparently spread to the Pamphylian dialect of Greek, where ν is consistently omitted in writing before another consonant (Brixhe 1976: 33-35). The most famous example is Pamph. ΠΕΔΕ < **pente* 'five', which mirrors the development of modern Greek, but with an anticipation of some two thousand years (Buck 1955: 60, 63; Watkins 2001: 59). The existence of nasalized vowels *ã* going back to *-*an*$ in Lydian shows that nasal vowel formation was typologically common in Anatolia in the first millennium BC.

Thus we have limited evidence that nasal vowel formation was an optional feature in Empire Luvian, and a direct proof of the generalization of nasal vowels in later Anatolian languages. This opens a possibility that the colloquial nasalization in Hittite represented a hypocorrection, a transfer of the phonetic variation from the Luvian vernacular into the official language. It goes without saying that this is not the only possible solution; in principle, one might as well suppose that the same process was

transferred from Hittite to Luvian. But one cannot use synchronic variation of the type *hu-u-ma-an-da-aš* / *hu-u-ma-a-da-aš* in New Hittite as an argument for the native transmission of New Hittite at the time of Muwatalli II.

As for the change *i>e* in New Hittite, it certainly does not represent a hypocorrection. The most salient difference between the phonological inventories of Luvian and Hittite is the absence of phonemes /e/ and /ē/ in the Luvian language (Melchert 1994: 100, 239). The account in terms of scribal hypercorrection would be possible if there existed a large number of related forms where Hittite /ĕ/ would correspond to /ĭ/ in the vernacular. The correspondences Hitt. /ĕ/ and Luw. /ĭ/ do exist (e.g. Hitt. *nḗbis* 'sky' vs. HLuw. *ti-pa-s*^{o} 'id.', but they are much less numerous than the correspondences between Hitt. /ĕ/ or /ĭ/ and Luv. /ă/. Laroche (1959: 134, § 16) has listed a number of salient pairs illustrating this correspondence, including Hitt. *ēs-* vs. Luv. *ās-* 'to be', Hitt. *ēzz-* / *ad-* vs. Luv. *āzz-* / *ad-* 'to eat', Hitt. *meu-* vs. Luw. *māwa-* 'four', Hitt. *peran* vs. Luv. *parran* 'before' etc. If the vowel correspondences between Hittite and Luvian indeed had served as a basis for hypercorrection, one would expect to find instances where the etymological /ă/ was replaced by the falsely restituted /ĕ/ in Hittite. No systematic replacement of this type has been, however, observed.

Another objection against the hypercorrect change *i>e* in the New Hittite language devoid of native transmission is precisely its lexical distribution. If we imagine that the native speakers of Luvian coined the hypercorrect forms when they learned Hittite as a second language, we do not expect them to be compartmentalized in a few

lexical items. Furthermore, we would expect them to be outnumbered by hypocorrect forms containing *i* instead of the etymological *e*. By contrast, the mid-front vowels /e/ and /ē/, as well as the high front vowels /i/ and /ī/, display a relative stability in New Hittite, while the putative cases of the shift *e>i* have either analogical or graphic explanation.

The considerations adduced above suggest that the New Hittite change *i>e* is not compatible with the usual scenarios of sound changes that postdate language death. One has to assume that Hittite continued to be natively transmitted in the Empire period.

6.2.5. Phonetic Hypercorrection in New Hittite. While every change in a "dead" language is bound to be contact-driven, changes in living vernaculars can be motivated both internally and externally. A number of arguments, derived from both structural considerations and the analysis of individual Hittite lexemes, militate against dissociating the change *i>e* from the situation of language contact between Hittite and Luvian.

The fact that the only phonetic development observable in "mainstream" New Hittite involves a phoneme that was absent in Luvian is remarkable in itself. If I am right in my conclusions that the change *i>e* was lexically conditioned, this increases further the likelihood of its contact-induced nature. The treatment of lexical diffusion represents a controversial topic in historical linguistics. The traditional historical linguists are inclined to regard all the instances of sound changes gradually propagating across the lexicon as yet non-clarified cases of dialect mixture (Campbell 2004: 224). The scholars that try to integrate sociolinguistics with historical linguistics are more cautious in their

conclusions and leave room for lexical diffusion driven by language-internal factors. It is, however, instructive to quote Labov (1994: 542): "This process [lexical diffusion – I.Y.] is most characteristic of the stages of the internal change that has been differentiated by lexical or grammatical conditioning, **or has developed a high degree of social awareness or of borrowings from other systems** ("change from above")".[31]

It is also remarkable that *e* and *i* were in free variation in Middle and New Hittite in certain verbal suffixes, such as the iterative *-isk-/-esk-* (Melchert 1984b: 134, 148). Melchert has persuasively argued that this variation was due to a loss of a morphophonological rule governing the distribution between the two iterative allomorphs (cf. below). Yet even if one accepts this historical explanation, it would seem that Hittite had enough time to level off this variation one way or another. The fact that it did not happen indicates that the variation between *e* and *i* had some sociologuistic motivation, even if we are unable to appreciate it directly in this case. There are, however, instances, which can provide us with a glimpse at the significance of this linguistic variable. If a Luvian loanword into Hittite was endowed with an *e*-vocalism, bilingual speakers could scrarcely perceive it as an unassimilated borrowing. Non-standard sound changes involving borrowings indicate that such sociolinguistic valuation did matter.

The clearest case is the competition between *tissummi-* and *tessummi-* 'a type of vessel' in Hittite (Neu 1983: 195-97). The participial suffix *-ummi-* indicates that this was the original Luvian word that underwent *i*-mutation before it was borrowed into

[31] Bold script is mine.

Hittite. We must transliterate the Luvian source-form as *tissumma/i-*, but already in Old Hittite we encounter a variant *tessummi-* alongside *tissummi-*.[32] There are no phonotactic rules that could trigger the change *tissummi-* > *tessummi-* in Old Hittite and, in formal terms, this variation is irregular. Perhaps it reflects an uncertainty on the part of the Hittites being uncertain as to how to assign the /i/ of Luvian, which undoubtedly had a range of realizations, some of which were closer to Hittite /e/. The later Hittite language, however, generalized the variant *tessummi-*. This can be viewed as a result of deliberate language planning, an attempt to assimilate this loanword. The most efficient way to do it was to introduce a phoneme that did not exist in the source language.[33]

The variation ^{DUG}*hanissa-*/ $^{(DUG)}$*hanessa-* in Old Hittite, has, in my opinion, the same sociolinguistic explanation. The vessel name ^{DUG}*hanissa-* (c.) is commonly derived form the Hittite verb *han-/haniya-* 'to draw (liquids)', but the nature of the suffix remains unclear under this analysis.[34] I suggest that it should be rather connected with Luv. **hanī-* 'to draw (liquids)', and I follow the suggestion of C. Melchert, who indicated (pers. comm..) that it could be derived with the help of the rare thematic suffix

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[32] Neu (1988: 239, fn. 17) plausibly assumed that *tissummi-* is cognate with Luv. *tissai-* 'to fashion' discussed in 6.2.1.

[33]Melchert (1984b: 96) signals the existence of the further variant *tessumme-* (3x) in Old Hittite. Since ME is a two-stroke sign, whereas MI is a five stroke sign, graphic considerations cannot be ruled out in this case.

[34] Cf. the account of HED, H: 76-77, who cites the lemma of this word as *hanessar*, although the *–r* stem is completely unattested in Old Hittite (cf. immediately below). For the criticism of this approach see Oettinger 1980: 593.

-(i)ssa-, synchronically distinctr from the Livian marker of possessive adjectives.[35] This word had been borrowed into Hittite in prehistoric times, and had the thematic inflection in nom./acc. sg. Nevertheless, it continued to be perceived as a foreign word, perhaps because of its unusual suffix. This is why we encounter the indeclinable form II *ha-ne-eš-ša* 'two *hanissa*-vessels' in Bo 3123 ii 8 (cf. Neu 1980: 160), as well as the form *hanissanni*, extended by another Luvian suffix.[36] As in the example above, occasional spellings with *e* in Old Hittite may have reflected phonetic variation in the source language. Besides the indeclinable form *ha-ne-eš-ša*, one has to mention acc. sg. *h*]*a-*[*a*]*-ne-eš-ša-an* (KBo 25.58 ii 3) and the fragmentary $^{DUG!}$*ha-n*[*e* (KBo 20.8 iv$^{?}$ 9). Such spellings, however, spelling became more frequent in Middle Hittite, and the norm in the New Hittite period. In this case, too, we are probably dealing with the generalization of a variant that sounded more "native".

Sometimes, the integration of a Luvian loanword could have been "undone" as a result of more intensive language contacts. This appears to have been the destiny of Luv. ^{GIŠ}*ir(h)ui(t)-* 'basket', discussed in detail in Starke 1990: 198-200. This stem underwent an adaptation already in the Old Hittite period, where it appears as ^{GIŠ}*ērhui-*. The predominant spelling attested in New Hittite is, however, ^{GIŠ}*irhui-*. One must accept Starke's explanation: "In Niederschriften des 13. Jh.s ist es im Anlaut dem k.-l. Wort

[35] Other Luvian nouns that may have been formed with the same suffix are *luwarissa-* 'a topographic feature', *masharissa-* '?', and *parissā-* 'relief$^{?}$'. For the first two words, see Melchert 1993, while the last one appears in a Hittite context in the Song of Release (see Bachvarova 2005 for the latest treatment of the relevant passage).

[36] Neu (1983: 48, fn. 243) assigned the form *ha-ne-eš-ša* to the stem *hannessar*, on the strength of the spelling [II *ha-n*]*e-eš-šar* in the New Hittite duplicate of the same text (KBo 11.41 i 10). I remain unpersuaded by this argument since, in my opinion, the New Hittite copyist could have easily confused the unusual *ha-ne-eš-ša* with *hannessar* 'judgment'.

angeglichen" (ibid. 299). The assumption that we are dealing with exaptation rather than re-borrowing in this case follows from the fact that the Luvian *t*-stem did not make its way into New Hittite.[37]

An instructive case not involving a Luvian lexical borrowing is that of the distal demonstrative pronoun *eni* / *ini* 'yon' (nom./acc. sg./pl. n.) and the distal adverb *enessan* / *inissan* / *enissan* 'so, thus' derived from the same stem. The chronological layout of the forms given below is compiled from the data presented in Goedegebuure 2003: 119, 132, 142, 160.

Table 35: Distribution of Distal Demonstratives in the Hittite Corpus

	OS	MS	MH/NS	Murs II	Muw II	Hatt III	Tudh IV
ini		+	+	+			
eni			+	+	+	+	+
inissan		+					
enissan				+		+	
enessan	+ (1x)			+			+

The Old Hittite attestation of the distal adverb is limited to IBoT 2.121 *e-ne-i*[*š-ša-an* (Goedegebuure 2003: 134). The reconstruction of this form is not absolutely certain, and therefore my account below must be regarded as provisional. Yet, if we take this attestation seriously, it is easy to see that the oldest and the youngest forms in Table 35 pattern together, as opposed to the attestations in between. The forms beginning with the *i*- vowel are limited to the Middle Hittite and the Early New Hittite periods. The "compromise" form *enissan* was used in New Hittite, but appears to be absent in the

[37] Alternatively, one can assume in this case that the origin of the word for 'basket' is Hittite (^{GIŠ}*ērhui*-), while CLuv. ^{GIŠ}*ir(h)ui(t)*- represents a borrowing. This hypothesis appears to run against the general direction of linguistic contacts between Luvian and Old Hittite. Note, however, that under both scenarios the New Hittite change in word-initial vocalism can be ascribed to Luvian influence.

latest texts. Rather than positing a phonological *u*-turn that can be hardly accounted for in terms of sound laws,[38] I suggest that we are dealing with the deliberate restitution of the original pattern in the New Hittite period, against what was perceived as non-normative forms in *i*-. This restitution was driven not by the mechanical copying of the Old Hittite manuscripts (otherwise the form *enissan* would be difficult to explain), but rather by the coexistence of the variants *eni* / *ini* and *enessan* / *inissan* in Hittite speech. At some point in the fourteenth century BC, the form *inissan* underwent stigmatization. Lacking the vocalic marker *e*, it was probably perceived as not sufficiently Hittite.

My sociolinguistic scenario of the New Hittite change *i*>*e* uses the last example as its logical starting point. I assume that by the beginning of the Middle Hittite period a large number of Luvian native speakers had mastered Hittite as their second language. Their acquisition of Hittite was, however, imperfect. In particular, many of them failed to acquire the Hittite vocalic inventory and systematically substituted *i* for the proper Hittite *e* in their pronunciation. The continuum of "Luvianized" dialects was in contact with the natively transmitted Hittite, and presumably was a source of certain borrowed forms such as *ini* and *inissan*. In certain other cases, the dialectal interaction resulted in the loss of morphophonemic rules. Thus, the Old Hittite iteratives to the stems ending in labial or dorsal consonants were normally provided with the suffix *–isk-* (e.g. *appiske-* from *ep-* 'to seize', *zahhiske-* from *zah-* 'to slay'), while the iteratives to

[38] Phonologists sometimes refer to such developments as "the Duke of York movements", having in mind one of the Mother Goose Rhymes: "The great Duke of York, he had ten thousand men, he marched all them up the hill, then marched them down again. And when they are up, they are up, and when they are down, they are down, but when they are neither up nor down, they are neither up nor down". Note that in our case the form *enissan* is precisely "neither up nor down".

the *–ai-* stems normally contained the suffix *–esk-* (e.g. *hatreske-* from *hatrai-* 'to write', *palweske-* from *palwai-* 'to cry etc.').[39] This distribution begins to blur in Middle Hittite, and is completely lost in New Hittite, where the suffixes *–esk* and *–isk* are in free variation (Melchert 1984b: 148). The morphophonemic alternation between *e* and *i* was reinterpreted as dialectal variation. Yet both variants *–esk* and *–isk-* remained acceptable in the formal language in this case.[40]

The direct association of "non-standard" *i*-vocalism with other "non-standard" features is can be deduced from examples discussed in 6.2.2. Thus the draft of Muwatalli II prayer (CTH 381.B) shows the analogical extension of *–i-* in pronominal stems as well as the colloquial nasal vowel formation [an] > [ã]. The tablet of assorted rituals (CTH 390.A) features the same analogical extension combined with a number of morphologically irregular forms (cf. Kronasser 1962, § 25 and Oettinger 2004, fnn. 5, 12, 13). Although analogical processes do not in principle require an external explanation, in this case one can surmise that they were boosted by the natural tendency toward substituting [i] for [e] in the casual speech of Hittite and Luvian bilinguals.

The bulk of the New Hittite forms in *–e-* proved, however, to be able to resist the pressure of the "Luvianizing" dialect. This can be seen especially clearly in the verbal system, where forms like *e-eš-ta* '(s)he was' or *e-ip-ta* '(s)he took' never give

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[39]See Kassian 2002 for the attestation of the relevant forms. Note that the form *pal-ú-i*[*š-ki-iz-zi*] is attested once already in the Old Hittite Corpus (KBo 25.69 ii 6').

[40] One wonders whether the existence of dialectal analogical forms, such as *kuidani*'to whom' and *kīdani* 'to this' discussed earlier in this section, could not likewise be supported by the existence of similar forms in the imperfectly learned Hittite. This, however, remains a mere possibility since the formal explanation appears to be sufficient in this case.

way to ****i-iš-ta*** and *****i-ip-ta***. This, in itself, represents a strong argument for the ongoing native transmission of Hittite in the New Hittite period. But the development *i>e* in individual New Hittite lexemes is even more important for arguing this point. I suggest that we are dealing here with a "change from above", a puristic reaction to what was perceived, rightly or mistakenly, as the contact-induced or simply foreign pronunciation of individual Hittite words. This hypothesis can be directly confirmed in the case of *enessan*, whose Old Hittite spelling was restored in the New Hittite period.[41] If Eichner (1982: 26-28) is right about connecting Hitt. *sist-*/*sest-* 'to prosper' with Hitt. *sesa(n)-* 'fruit, fruit tree' and Ved. *sasá-*, *sasyá-* 'grass, vegetables, fruit, a crop of grain', then the Middle Hittite variant *sist-* should be likewise viewed as a dialectal borrowing that was eliminated in the New Hittite period.

A further support for the suggested scenario comes from contaminations of verbal forms discussed earlier in this section. The complete phonetic blending of *mimma-* > *me(m)ma-* 'to refuse' and *mema-* > *me(m)ma-* 'to say' is easier to account for if the former was perceived as the Luvianized variant of the latter. The same holds for *widai-* > *weda-* 'to bring' vs. *wede-*> *weda-* 'to build'. From the perspective of our knowledge, both verbal pairs are historically unrelated, but Hittite kings had no historical linguists in their retinue. The reconstruction of pseudo-linguistic reasoning in this case is rendered likely by the fact that the full blending of formally different and

[41] It is possible that the New Hittite change *abenissan* > *abenessan* was triggered by analogy with *enissan*> *enessan*. The absence of the similar change in *kissan* is noteworthy. One can hypothesize that the Hittite proximal demonstrative stem *k-* was perceived as sufficiently different from its Luvian counterpart *z-* for its derivatives to be marked by any further changes. I prefer, however, the formal explanation. The analogy between **ḗnessan* and *abḗnessan* could be facilitated by the similar stress pattern, while the stress on the target vowel in **kíssan* would prevent its implementation.

synchronically unrelated lexemes is a counter-intuitive process. We know that, even in those cases when two lexemes have to fall together for phonetic reasons, lexical replacement frequently prevents undesirable homonymy. Compare, for example, the development of Spanish, where the reflexes of Lat. *ubi* 'where' and Lat. *ibi* 'there' have been replaced by unrelated forms *donde* 'there' and *allí* 'there', thus avoiding potential homonymy with Lat. *aut* > *o* and Lat. *et* > *y* respectively (Wright 1982: 20-21).[42]

I must admit that I do not see a clear reason why words such as ^{É}*histā-* 'a cult installation' or *dammishai-* 'to harm' would appear Luvoid to the Hittite speakers. On the other hand, nothing precludes such a scenario, since these two words do not contain morphological elements that would mark them as Hittite and not Luvian.[43] It is perhaps wiser not to speculate about the reasons for the change *i*>*e* in each and every lexeme where it has occurred. The more usual cases of "changes from above" provide here an appropriate point of comparison. One normally cannot account for the choice of loans from a neighboring dialect, but a responsible linguist should at least indicate the dialect they were borrowed from, and to single out a group of loans that appear to belong to this source dialect on independent grounds.

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[42] C. Melchert (pers. comm.) mentions an additional reason why a sociolinguistic account must complement an analogical explanation *mimma-* > *me(m)ma-* 'to refuse'. Thematic verbs with *i*-reduplication formed a productive class in earlier Hittite (for whose origin cf. Jasanoff 2003: 128-32), while verbs with *e*-reduplication appear to have been originally limited to *mema-* and *wewwakk-* 'to request, demand'. The hypothesis that the second class triggered a templatic change in the first one is difficult to accept unless one assumes that *i*-reduplication had a negative sociolinguistic valuation.

[43] The Hittite texts of the thirteenth century BC. exhibit a large number of Luvian borrowings containing the suffix *–sha-*, while the number of genuine Hittite words containing this suffix was smaller (Starke 1979). It is possible that all the words containing *–sha-* came to be regarded as Luvoid in the New Hittite scribal milieu.

My scenario can be summarized in the following proportion *tissummi-* / *tessummi-* = *hista-* / *X*. Knowing that *tissummi-* is a Luvian word whose "native" equivalent is *tessummi-*, the Hittite speakers substituted *hesta-* for the earlier *hista-*, which was perceived as either borrowed or dialectal. The proposed mechanism of proportional hypercorrection is superficially similar to one discussed in connection with Buddhist Sanskrit, but the reconstructed sociolinguistic situation is markedly different. Instead of attributing the changes to the ingenuity of the Prakrit/Luvian speakers trying to compose texts in the imperfectly learned Sanskrit/Hittite language, I ascribe them to the language manipulation of the Hittite native speakers, who were trying to distance themselves from the contact-induced Hittite pronunciation. In terms of Figure 4, the interaction occurs between the Hittite core and the near periphery of Luvians trying to speak Hittite. The contact-induced changes in a situation of language maintenance are expected to spread word by word (Winford 2003: 61-62). The lexical diffusion of the change *i*>*e* fits this theoretical prediction.

The distribution between *i* and *e* in New Hittite appears to be skewed in favor of *e*. In terms of language contact, it means that the standard dialect was able to resist the pressure of imperfectly learned Hittite, and reacted to it by over-extending the use of *e*. Dialectal hypercorrection prevailed over dialectal borrowing. This surprising result must indicate that the correct pronunciation of *e* was regarded as highly prestigious among the New Hittite elites, perhaps even emblematic of "Hittitehood", while its substitution with *i* in certain morphemes was a shibboleth marking half-learned Luvian speakers. As such, it could be similar to the nasal vowel formation, except that the latter probably represented a linguistic variable in Luvian as well as in Hittite.

The most problematic part of my account is the necessity of operating with a variety of Hittite influenced by Luvian that is not directly attested in written records. Yet we will see in the following sections that there is independent evidence for the continuum of imperfectly learned Hittite in the Empire period.

6.3 Morphosyntactic innovations in New Hittite.

The convergence between Hittite and Luvian morphosyntax was a gradual process, which can be observed throughout the history of the Hittite written language, but reaches its culmination in the Empire period. The list of New Hittite morphosyntactic changes to be ascribed to Luvian influence can be found in Rieken 2006a. The present section does not aim to discuss all the contact-induced innovations of New Hittite, but rather focuses on their implications for defining the nature of linguistic contacts between Hittite and Luvian during the relevant period.

In this section, as in the previous one, I will try to distinguish between the contact-driven phenomena that existed on the margins of the Hittite written culture and those that are responsible for the change of the grammatical norm at some point in the development of New Hittite. The boundary between the two groups is not sharp. Even in the case of regular changes one can identify the texts that implemented them fully or partially before they became a general norm, as well as sporadic instances of scribal

hypercorrection. Nevertheless, these two types of change require separate sociolinguistic explanations.[44]

6.3.1 Diffusion of *i*-mutation. We will begin our discussion with sporadic cases of variation between *–a-* and *–i-* stems of Hittite nouns and adjectives. This linguistic variable received the first systematic treatment in Rieken 1994. The author has demonstrated that the distribution of the two competing stems is not completely arbitrary. The irregular *-i-* stems coexist with the original *-a-* stems (or consonantal stems) mostly in the nom./acc. sg./pl. of the common gender, whereas the irregular *–a-* stems tend to infringe upon the etymological *-i-* stems in the oblique cases. For example acc. pl. *ki-iš-ša-ri-uš* (KBo 20.82 iii 10', KBo 32.2 rev. 12') can be contrasted with the regular Hittite stem *kissar(a)-* 'hand, arm', while abl. sg. *la-ha-an-na-az* (KUB 46.47 obv. 22) represents a deviation from the regular stem *lahanni-* 'a type of vessel'. A representative list of stems exhibiting this pattern can be found in Rieken 1994: 44-45. In the discussion that follows, I will concentrate on the "irregular" *i*-stems that have been documented in greater numbers.

Rieken cogently argued that this skewed alternation pattern arose as a result of linguistic interference with Luvian *i*-mutation. This phenomenon, established in Starke 1990, consists of the alternation between the *-a-* stems / consonantal stems and the *-i-* stems in the inflection of certain Luvian nouns and adjectives. The *-i-* stems appear in

[44] Cf. the discussion of Langslow 2002: 42-44 regarding similar distinctions that need to be made in the study of morphosyntactic interference between Greek and Latin.

nom./acc. sg./pl. c., whereas *-a-* stems or consonantal stems characterize the rest of the declined forms. Thus the Luvian adjective *āttuwal(i)-* 'bad, evil' has the following forms attested in Bronze Age texts: nom. sg. c. *āttuwalis*, acc. sg. c. *āttuwalin*, nom./acc. sg. n. *āttuwal(-za)*, nom. pl. c. *āttuwalinzi*, nom./acc. pl. n. *āttuwala*, abl.-inst. *āttuwaladi* (cf. Melchert 2003b: 188). This alternation, unlike its Hittite counterpart, represents a categorical phenomenon: the *-a-* stems/consonantal stems and the *-i-* stems are in a complementary distribution for any given noun or adjective that displays this alternation.

According to Rieken's original hypothesis (Rieken 1994: 46-47), the Luvian *i*-mutation originally made its way into Hittite through lexical borrowing, while later this pattern spread by analogy to the genuine Hittite nouns. She was followed by Melchert (2005: 456), who claimed that the stem alternation *-a-*/*-i-* "becomes part of New Hittite grammar". It is indeed likely that some of the Hittite lexemes exhibiting stem variation represent Luvian loanwords, or are formed with Luvian suffixes. Compare, for example, Hittite $^{(DUG)}$*tapisana/i-*, *tapisena-* 'a type of vessel' that may have been borrowed from the same source as Gk. δέπαστρον 'beaker, goblet (vel sim.)', or *uskiskatalla/i-* 'lookout, watchman' that ultimately contains a derivational suffix *–alla-*/*-alli-* of Luvian origin (Melchert 2005: 456 with ref.). It is, however, highly unlikely that a mechanical analogy would be responsible for spreading the complicated pattern of alternation between the *–i-* and the *-a-*stems from a handful of loanwords across the Hittite lexicon. If anything, one would expect that the Luvian loanwords gradually acquire the more straightforward Hittite inflection.

Another problem of the analogical extension theory is the way the mutation stems are attested in Hittite. The first instances of "irregular" *i*-stems appear already in

the Middle Hittite period, and we have them attested both in the New Hittite original compositions and in the New Hittite copies of earlier texts, but at no point do they acquire normative status, as happened in the history of Luvian.[45] In the overwhelming majority of cases, the original *a*-stems and consonantal stems continue to be used in the direct cases of the common gender. Thus the original compositions of the late 13th century BC contain about 20 instances of the nom./acc. pl. c. ending *–us* attached to thematic nouns and adjectives, but no examples of the ending *–ius* in the same morphological class (McIntyre 1986, compare the following section).[46]

The hypothesis that "irregular" *i*-stems had a lexical distribution can be likewise falsified. Thus the noun $^{\text{LÚ.GUNNI.MEŠ}}$*uski*[*skat*]*tallius* 'guardians of the hearth' (KBo 10.45 iv 16, MH/NS) contrasts with $^{\text{LÚ.MEŠ}}$*uskiskatallus* 'lookouts' (KBo 4.14 iii 10), attested in a text composed by the end of Tuthaliya IV's reign. KBo 39.8, representing the Middle Script manuscript I.A of the Mastigga Ritual against the Domestic Quarrel, contains the mutation forms nom. *isnūris* and acc. *isnūrin* formed from the stem *isnura-* 'a type of vessel', whereas KBo 2.3+, representing the New Hittite manuscript 1.B of the same ritual, uses the regular $^{\text{DUG}}$*isnuras* and $^{\text{DUG}}$*isnuran* at the corresponding places (Miller 2004: 170).

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[45] For the datings of the relevant forms see Rieken 1994: 44-45. Note that KBo 32.2 containing the form *ki-iš-ša-ri-uš* has been re-dated as a New Hittite manuscript in S. Košak's *Konkordanz der hethitischen Texte* available at www.hethport.uni-wuerzburg.de/hetkonk.

[46] Most of the relevant examples are cited in Table 8 below. In addition, compare *arsana(t)tallus* KUB 1.1 i 59, KUB 1.5 i 29, KUB 3.6 ii 12, and *huyattallus* KUB 3.6 iv 4. This count omits pronominal forms *kus* 'these' and *apus* 'those'.

Even more indicative are the cases when the scribes correct the irregular *i*-stem forms. As an example, one can consider the Late New Hittite tablet of assorted rituals KBo 3.8 + KUB 7.1 (CTH 390.A) and its description in the shelf list KBo 31.4+ (CTH 277.2). The scribe of KBo 3.8+ consistently used the form *karadus* 'entrails' (5x) in the ritual script, presumably because it was copied from an earlier version, but replaced it with *karadius* in the colophon (Dardano 2006 113, iv 11). It is possible to argue that the shelf list entry KBo 31.4++ iv 12-28 (Dardano 2006: 102) has been made based on this particular colophon on the grounds that they contain common errors.[47] Nevertheless, the correct form *karadus* has been restored in the shelf list entry (iv 23'). Another example is available in KUB 27.1, the script for Hattusili III's festival for the Ištar of Samuha (CTH 712). The scribe used the irregular acc. sg. *gimrius* in i 7, and the expected acc. pl. *gimrus* from the stem *gimra-* 'field' in the following line i 8 (Wegner 1995: 32). It is reasonable to assume that the latter form was based on the second thought on the part of the scribe, who had yet to use dat./loc. pl. *gimras* in i 10.

The difficulties discussed above make me re-evaluate the sociolinguistic status of the *-a-*/*-i-* alternation in Hittite. It was not a part of the New Hittite grammar, at least in the case of the genuine Hittite lexemes, but rather a part of New Hittite usage in the mouth of certain Luvian native speakers. This conclusion squares well with the general theory of language contact, which predicts that group second language acquisition

[47] KBo 3.8+ iv 11 KBo 3.8+ iv 11 contains an unusual form *ka-ri-e-ra-a-mi*, presumably a corruption of *karābi* 'he devours'. KUB 31.4+ iv 24 emends it with an equally ungrammatical, but somewhat less monstrous *ka-ri-ra-pí*. In addition, the colophon KBo 3.8+ iv 7-16 reverses the order of rituals, as they appear on the tablet, and so does the shelf list entry KBo 31.4++ iv 12-28. Compare the label KUB 30.48 (Dardano 2006: 113), which was apparently copied from a different colophon, since it has the rituals in the right order.

should affect primarily the more stable components of L2.[48] The Luvians that learned Hittite as their second language had fewer difficulties in memorizing the Hittite lexical items and inflectional endings than with unlearning the alternation patterns typical of their L1. Hence we encounter forms like *kissarius* 'hands (acc. pl.)', as opposed to ***issarus* expected in the situation of borrowing. It is crucial, however that there still remained scribes ready to correct the mistakes of the second language learners up to the end of the Hittite written tradition.[49] Some of these scribes may have been Hittite native speakers, while others were perhaps those Luvians that had mastered the Hittite grammar more thoroughly.

My conclusions, if correct, have important practical consequences for studying the sociolinguistic situation in the Hittite Empire. One can assume that the native speakers of Luvian were responsible for the execution of a large group of Hittite tablets, on the grounds that these tablets contain non-standard forms, which display non-trivial contact-induced innovations in their morphological structure. It is important to stress, however, that those word-forms that either were borrowed from Luvian or contain Luvian derivational suffixes cannot be treated as diagnostic. In such cases we may be dealing not with the uncouth Hittite of the Luvians, but rather with the good knowledge of Luvian morphology on the part of the Hittite native speakers.

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[48] The most straightforward formulation of this principle known to me can be found in van Coetzem 2000: 259. Note that van Coetzem uses the term "linguistic contacts under source language agentivity" for the contact situation that others would describe as group second language acquisition or imperfect language learning.

[49] The opposite type of correction is also attested. Thus a New Script copyist of the Anitta text replaced the original acc. sg. *annus* 'mothers' with *annius* in KBo 22.5 obv. 8. This shows that the irregular *i*-stems were not mere nonce creations, and could be actually perceived as correct forms by certain Luvian scribes.

6.3.2 Merger of Nominative and Accusative Plural. The synchronic morphological variation discussed above must be contrasted with those instances when the Luvian influence resulted in the establishment of a new grammatical norm in New Hittite. The paragon example to be discussed in this connection is the evolution of Hittite nominal declension, which, according to Rieken (2006a: 274), is contact-driven. The differences between Old-Hittite and New Hittite paradigms of common gender thematic nouns are summarized in the tables below. The choice of a particular type of stem has been dictated purely by the convenience of presentation, as all the Hittite nouns of the common gender merged the identical cases in all the stem types.

Table 36: Thematic Nominal Endings in Old Hittite

	Sg.	Pl.
Nom.	-as	-es
Acc.	-an	-us
Gen.	-as	-an
Dat./Loc.	-i	-as
Abl	-az	-az
Instr.	-it	-it

Table 37: Thematic Nominal Endings in New Hittite

	Sg.	Pl.
Nom.	-as	-us
Acc.	-an	-us ↑
Gen.	-as →	-as
Dat./Loc.	-i	-as
Abl	-az ↓	-az ↓
Instr.	-az	-az

Table 38: Thematic Nominal Endings in Iron Age Luvian

	Sg.	Pl.
Nom.	-is / -as	-i(n)zi / -a(n)zi
Acc.	-in / -an	-i(n)zi / -a(n)zi
Gen.	-as(sa); -assi	
Dat./Loc.	-i	-a(n)z
Abl./Instr.	-adi	

It is easy to see that the New Hittite paradigm displays the one-to-one structural correspondence with its Iron Age Luvian counterpart. I have tried to show in 2.3 that the innovations of Iron Age Luvian in the sphere of nominal inflection manifest themselves already in the fourteenth century BC in the Luvian dialect of Hattusa. The cumulative evidence of the three unrelated changes renders Rieken's account of Hittite case and number syncretism in terms of language contact completely convincing. The absolute chronology of these mergers is, however, not identical. The genitive plural ending *-an* is exclusively Old Hittite. Melchert 1977 has demonstrated that the functional extension of the ablative was already in progress in Middle Hittite, even though isolated instrumental forms occur in fixed expressions up to the end of the New Hittite period. As far as the merger of nominative and accusative plural endings is concerned, it became widespread only in the New Hittite period.

The exact outcome of this merger had not been clarified for a long period of time. Friedrich (1960: 45) made a vague statement reflecting the knowledge of his time: "Nominativ und Akkusativ des Plurals neigen zur gegenseitigen Ausgleichung". In so doing, he was merely following the tradition of earlier Hittitological scholarship. Thus, Sturtevant (1933: 179) provided the following comment under his sample paradigms: "Plural forms are listed only in their normal values; in general, any form of the masculine plural can be used for any case". We have seen that synchronic variation has its place in the history of New Hittite, but the earlier generation of scholars resorted to this explanation all too frequently.

The New Hittite distribution of *-es* and *-us* was studied in great detail in McIntyre 1986, a brilliant MA thesis, which unfortunately remains unpublished. The

author has demonstrated that, although the merger of nom. pl. c. and acc. pl. c. was universal, the outcome of this merger depended on a particular stem. The nominative ending *–es* was generalized in the ablauting *u*-stem adjectives, stems in *–ant-* (including participles), and the relative pronoun *kui-*.[50] In the non-ablauting *i*-stems the endings *–es* and *–us* remain in competition in both nominative and accusative. The other stems generalized the accusative ending *–us*. With regard to the absolute chronology of this case merger, McIntyre suggests that it was completed by the reign of Hattusili III, while the reigns of Mursili II and Muwatalli II represented the transitional period.

The distribution of the two formally different Hittite nom.-acc. pl. endings depending on a stem type had no functional parallels in Empire Luvian, where the ending *-(n)zi* was presumably common to all the nouns and adjectives. While the merger of the two cases was contact-driven, its outcome was dictated by language-internal analogies. The direction of the analogical leveling is structurally motivated in the case of *u*-stems: nom. sg. in *–awes* was morphologically more transparent than acc. pl. in *–amus* (McIntyre 1986: 20, Melchert 1995: 270). In the other cases it appears to be arbitrary. Such a complex pattern of analogical leveling can hardly be explained as interplay between hypercorrections and hypocorrections, and suggests that we are dealing here with the evolution of a living language.

In this case, the changing norms of the Hittite grammar should be distinguished from the speech habits of the Luvian native speakers, who were ultimately responsible

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[50] Compare also acc. pl. ˹aš-tar-li-te-eš in KUB 19.55 left edge 2 (Milawanda Letter). The stem of this *hapax legomenon* remains unclear.

for imposing the case merger upon the standard variety of New Hittite. Since neither –*es*, nor -*us* bear a close resemblance to their Hieroglyphic Luvian functional equivalent –*nzi*, neither of the two morphemes had a predilection for being generalized in the imperfectly learned Hittite as a result of hypocorrection. Accordingly, one can reconstruct a continuum of dialectal variants where the contact-driven merger of nom. pl. and acc. pl. occurred in various directions.

This theoretical claim can be supported by empirical evidence that comes from the analysis of common gender thematic nouns. Their predicted New Hittite plural nominatives in *-us* are well attested in thirteenth century texts. The following examples, all taken from the original Late New Hittite compositions belonging to the reigns of Hattusili III through Suppiluliyama II, have been collected in McIntyre 1986.

Table 39: Nom. pl. c. in New Hittite Texts

UN.MEŠ-us for *antuhsus ‘men, humans’	KUB 1.5 i 8 (CTH 81), KBo 4.12 obv. 23 (CTH 87), KBo 4.14 ii 32 (CTH 123)
arahzenus ‘neighboring (pl.)’	KUB 26.1 iii 60 (CTH 255)
$^{LÚ.MEŠ}$haliyatallus ‘watchmen’	KBo 4.14 iii 11, 17, 18 (CTH 123)
hanzassus ‘great-grandchildren’ (vel sim.)	KUB 26.43 obv. 65 (CTH 225)
hassus ‘grandchildren’	KUB 26.43 obv. 65 (CTH 225)
ŠEŠ.MEŠ-us for *negnus ‘brothers’	KUB 26.1 iii 59 (CTH 255)
$^{LÚ.MEŠ}$para uwatallus ‘lookouts’	KBo 4.14 iii 18 (CTH 123)
sakuwassarus ‘legitimate (pl.)’	KUB 23.1 ii 11 (CTH 105)
$^{LÚ.MEŠ}$uskiskatallus ‘lookouts’	KBo 4.14 iii 10 (CTH 123)
^{LÚ}SIPAD.HI.A-us (*westarus) ‘herdsmen’	KUB 26.43 obv. 54 (CTH 225)

McIntyre 1986 did not register any instances of the opposite change, namely the extension of *–es* to the plural accusative of thematic nouns, in her Late New Hittite corpus. The unambiguous acc. pl. $^{LÚ.MEŠ}$*ka-e-n*[*i*-]*eš* ‘male relatives’ occurs, however in the treaty between Suppiluliuma I and Hukkana of Hayasa (KBo 5.3 iv 27). McIntyre (1986: 50) hypothesized that this form owed its existence to a hypercorrection made by

the thirteenth-century copyist of the treaty. This explanation is, however, not available for the following example, taken from a Middle Hittite manuscript of the Mastigga ritual against the domestic quarrel. The Sumerographic spelling EME.HI.A-*es*, assured through the duplicate KBo 44.17 i 25, probably stands here for **lales* 'tongues', formed from the thematic stem *lala*-, which is phonetically spelled on the same tablet (nom. sg. *la-a-la-aš*, KBo 39.8 iii 7).

(162) KBo 39.8 i 23-5, CTH 404.1 (MH/MS), Miller 2004: 64
kāsa=wa=tta parā tit[t]anunun mantalliyēs EME.HI.A-es
'I have hereby set out slanderous[?] tongues for thee'.

The accusative noun EME.HI.A-*es* 'tongues' is not the only form indicating the merger of nom. pl. and acc. pl. in KBo 39.8. In addition, nom. pl. *hurtaus* 'curses' (3x, stem *hurtai*-), acc. pl. *idalawes* 'evil' (1x, stem *idalu*-) and acc. pl. *mantallies* 'slanderous[?]' mentioned above (1x, stem *mantalla/i*-) are also attested.[51] As a matter of fact, there is not a single contrasting pair of nom. pl. in *–es* and acc.pl. in *–us* in this manuscript, which was written at the time when the two endings exhibited a consistent functional contrast in standard Hittite. Another unusual feature of KBo 39.8 is the irregular i-stem *isnuri*- for the expected *isnura*- 'a type of vessel'. As argued in 2.3, these facts indicate an advanced degree of interference with Luvian grammar, indicating that the scribe of KBo 39.8 was not a Hittite native speaker

Now it is time to return to the problematic form EME.HI.A-*es*. There is no need to explain it based on the norms of the Late New Hittite grammar, which did not exist

[51] For the places of attestation, see Miller 2004: 168, 171, 179. KUB 39.8 is referred to as manuscript 1.I.A throughout Miller 2004. The stem *hurtai*- is erroneously cited as *hurta*- in Miller 2004: 168. Note that *mantalla/i*- represents a Luvian borrowing (Melchert 1994: 137-38).

when KBo 39.8 was written. One can simply suppose that the form *lales* functioned as the equivalent of Luv. **lalinzi* (nom./acc. pl. c.) in the imperfectly learned Hittite of the Luvian scribe. The reasons for generalizing nom. pl. *lales* at the expense of acc. pl. *lalus* and not vice versa cannot be accounted for and may have been completely idiosyncratic (for example, a syntagmatic analogy to the preceding *mantallies*). There are no grounds to assume that the same pattern of case merger was generalized to all the thematic nouns, and in fact acc. pl. *tu-ek-ku-uš* 'bodies' (iv 18) directly contradicts this assumption. It is risky even to hypothesize that acc.pl. *lales* was a stable form in the idiolect under discussion. Second language acquisition is a gradual process, and the scribe of KUB 39.8 may eventually have learned the formal distinction between nominative and accusative plural, or generalized the accusative case form by analogy with other stems.[52]

There are, however, instances, when the deviations from the Late New Hittite distribution of *–es* and *–us* can be shown to have a more systematic character. A case in point is that of the thematic nouns *huhha-* 'grandfather' and *hanna-* 'grandmother' occurring in coordination in the Royal Funerary Ritual (CTH 450). Although all the preserved tablets of CTH 450 show the typical peculiarities of New Script, linguistic considerations suggest that the kernel of this composition is Old or Middle Hittite (Kassian et al. 2002: 12-13) The idiom "drinking grandfathers and grandmothers" probably refers to a magic act of communion with (deified) ancestors (cf. Güterbock

[52] As an additional possibility, one can hypothesize that the scribe of KBo 39.8 used nom. pl. *lalies* formed from the Luvian mutation-stem *lala/i-*. This would render the discussed type of language interference parallel to one presented immediately below.

1998a). The relevant contexts, given below, represent the only reliable attestations of Hittite words for ‘grandfathers’ and ‘grandmothers’ in acc. pl.

(163) KUB 30.24+ ii 23, CTH 450 (Pre-NH/NS), Kassian et al. 2002: 388
[(EGIR-)]anda=ma huhhis hannis ekuzi
‘Then he drinks the grandfathers and grandmothers’.

(164) KUB 34.66+ iii 49, CTH 450 (Pre-NH/NS) Kassian et al. 2002: 510
EGIR-anda[ ]huuh[is] hannis ekuzi
‘Then he drinks the grandfathers and grandmothers’.

(165) KUB 30.19+ i 42, CTH 450 (Pre NH/NS), Kassian 2002: 484
EGIR-anda[=ma hannie]s huhhies pianzi
‘Then they give (him to drink) grandmothers and grandfathers’.

Examples (163) and (164) feature the accusative plural ending *–is*, which is otherwise attested in the declension of non-ablauting *i*-stems. Melchert (1995: 272) takes this ending as syncopy of the earlier **-i(y)es*, which is attested in (165), if this is not a back-formation or a purely graphic variant. The proliferation of the plural nominative ending **-es* to the accusative is likewise an option for Late New Hittite non-ablauting *i*-stems. The nouns *huhha-* and *hanna-* are, however, not unambiguously attested as *i*-stems anywhere in the Hittite corpus. Furthermore, the noun *huha-* is a thematic stem that does not undergo *i*-mutation in Luvian, and so one cannot argue that the transfer to the *i*-stems in this case represents a direct result of copying the pattern of *i*-mutation.

One way to account for this discrepancy is to reckon with the analogical influence of nom. pl. *annis* ‘mothers’. The noun *anna-* has the parallel stem *anni-* that is attested in the unambiguous acc. pl. *an-ni-uš* (KBo 22.5 rev. 8). This parallel stem owes its existence to the linguistic interference with Luvian *anna/i-* ‘mother’, as per Rieken 1994. Nom. pl. *annis* is attested in a collocation *hu-uh-ha ha-an-ni-iš at-ti-e-eš an-ni-iš* ‘grandfather(s)-grandmothers, fathers and mothers’ (KUB 17.29 ii 6-7). The form *hannis*

'grandmothers' in this example can be explained as a rhyme to the following *annis*. Should one hypothesize that one of the scribes editing the Royal Funerary Ritual learned the form for 'grandmothers' and 'grandfathers' from a similar collocation, and then processed them as *i*-stems?[53] Alternatively one can take *huhhis* and *hannis* as simple contact-driven hypocorrections for *huhhes* and *hannes*, which were again reanalized as *i*-stems. Whichever way one prefers, it is necessary to assume that one of the editors of CTH 450 was a Luvian-dominant bilingual. Note acc.sg. *nadin* 'arrow', used in CTH 450 instead of the expected *nadan* (KUB 39.14 iii 10), which provides additional evidence for this hypothesis.

The final instance of "irregular" case merger in thematic nouns to be discussed here comes from the Maşat letters.[54] The plural accusative form *a*]*n-tu-uh-še-eš* 'men, humans' appears in HKM 89.7. The same form *an-tu-uh-š*[*e-e*]*š* appears in HKM 89 once again (l. 15), but its syntactic function is uncertain. In addition, HKM 89.19 contains acc. pl. [*š*]*u-u*[*l*]*-le-eš* 'hostages', even though in this case one cannot be sure whether we are dealing with a thematic stem.[55] In this case I would hesitate to ascribe the irregular *–es* ending to first language interference. On the one hand, the short letter HKM 89 does not show any traces of the Luvian influence besides the case merger. On

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[53] The only likely attestation of the word for 'grandmother' in the Luvian corpus is SÜDBURG § 13 *506-*na*. For the probable reading of this digraph as *HANA*-na see Hawkins 1995: 41, but we do not have enough data to postulate the presence vs. absence of *i*-mutation in this Luvian word. If we hypothesize that it was *hanna/i-* (vel sim.), then Hitt. nom. pl. *hannis* can be likewise directly explained through the source language interference.

[54] Edited in Alp 1991.

[55] The Hittite word for 'hostage' has two variants *sulla-* and *sulli-*, the last one being attested only in NS texts. The variant *sulli-* is clearly contact-induced.

the other hand, Maşat letters are replete with plural forms endowed with "irregular" nominative and accusative endings. The letter HKM 58 is especially striking in that it contains nom. pl. *hu-u-ma-an-du-uš* (58.14) vs. acc. pl. *hu-u-ma-an-te-eš* (58.5), both from the stem *humant-* 'all, every', which reverse the Old Hittite distribution. One is under the impression that the scribe Ilītukultī deliberately tried to convey the distinction between nom. pl. and acc. pl., even though it did not exist in his spoken idiolect. This would be a rather ingenious example of scribal hypercorrection.

Van den Hout, forthcoming, used text-internal and dendrochronological evidence in order to argue that all the Maşat tablets were written over a short span of time in the later part of the reign of Tuthaliya II (perhaps between 1375-1370 BC). The ductus of the Maşat tablets is Late Middle Hittite and the analysis of their morphosyntactic innovations likewise places these documents at the very end of the Middle Hittite Period (Melchert, forthcoming[3]). It is possible to hypothesize that the merger of nom. and acc. pl. c. found its way from the imperfectly learned Hittite of Luvian native speakers to the standard variety of the spoken Hittite by the end of the Middle Hittite period. This does not mean, however, that the same merger would be immediately accepted as a norm of the written language. Some scribes, better trained in earlier texts, could retain the archaic opposition. Others, like Ilītukultī, could attempt to find idiosyncratic ways to render the same case distinction. Yet others could resort to mechanical hypercorrections, sporadically replacing *–us* with *–es*. The scribe of HKM 89 may have belonged to this last category.

Unfortunately, the role of scribal hypercorrections in the case syntax of Maşat letters cannot be assessed by philological means, since all of these letters are available in

a single copy. An assured case of hypercorrection will be discussed in the following section.

6.3.3 Changes in Personal Pronouns. Rieken 2001 has demonstrated that Boğazköy scribes did not shy away from deliberately archaizing their output, and made in process numerous errors that betrayed their imperfect knowledge of the older varieties of Hittite. I will limit my present account to a case study that is directly related to the topic of linguistic contacts between Hittite and Luvian, namely the hypercorrect use of the first person pronoun *ūk* in New Hittite. Before discussing this problem, one needs to address first the evolution of Hittite personal pronouns. The paradigm fragments given in the tables below illustrate the case merger in the New Hittite pronominal system.

Table 40: Old Hittite Personal Pronouns

	1 sg.	2 sg.	1 pl.	2 pl.
Nom.	ūk	Zik	wēs	sumēs
Acc. – Dat.	ammuk	Tuk	anzās	sumās

Table 41: New Hittite Personal Pronouns

	1 sg.	2 sg.	1 pl.	2 pl.
Nom.	ammuk (ūk)	zik	anzās (wēs)	sumēs (sumās)
Acc. – Dat.	ammuk (ūk)	tuk	anzās	sumēs (sumās)

Table 42: Iron Age Luvian Personal Pronouns[56]

	1 sg.	2 sg.	1 pl.	2 pl.
Nom.	amu	ti	anzanz	unzanz
Acc. – Dat.	amu	tu	anzanz	unzanz

The merger of the nominative and accusative/dative personal pronouns changed the grammatical norm of New Hittite. The form *ūk* 'I' is regularly replaced with *ammuk*

[56] For the representation of plural forms in Iron Age Luvian, see Section 2.7 above.

in many important New Hittite texts, such as the Annals of Mursili II or the Apology of Hattusili III. The preservation of the case distinction in the second person singular both in New Hittite and in Luvian represents a non-trivial feature of both paradigms. Its replication guarantees that the discussed morphological change was contact-induced, as per Rieken 2006a: 276. The direction of merger in New Hittite was predetermined by the outward similarity of Hittite and Luvian acc./dat. case forms, at least in the first person singular and plural. In this case, we do not expect any discrepancy between the initial pattern of merger that arose in the process of second language acquisition, and its outcome in standard New Hittite. What remains to be explained is a large set of exceptions where it may appear that this merger either failed to occur, or was implemented in the opposite direction.[57]

The pronoun *ūk* 'I' is attested as late as the reign of Suppiluliyama II. The *res gestae* of this last Hittite king begin with the Hittite introductory formula, which Laroche (1970) has shown to correspond to the beginning of the badly damaged NİŞANTAŞ inscription, written in Luvian.

(166) KBo 12.38 ii 22-23, CTH 121.II (NH/NS), Güterbock 1967: 76
ūk=za ^{d}UTU-*ŠI* tabarnas ^{m}KÙ.GA.P[Ú]-as LUGAL.GAL LUGAL KUR ^{URU}[Ha]tti
NİŞANTAŞ, Laroche 1970: 94-5[58]

[57] The form *ūk* occurs in the following texts that can be dated to the reign of Tuthaliya IV or Suppiluliyama II on historical grounds: CTH 121, 123, 124, 125, 141, 255.2, 295.2, 524, 525. I am greatful to Theo van den Hout, who allowed me to use his personal card-files for checking this distribution.

[58] I had to significantly update the Luvian transliteration of the discussed passage. Laroche's drawings reproduced on Plates 5 and 6 must be consulted.

*a-mu-wa-mi {SOL$_2$ *277 PURUS.FONS.*MI* MAGNUS.REX}[59] *H*[*ATT*]*I* REX
'I am His Majesty, tabarna, Suppiluliyama, Great King, King of Hatti …'.

Van den Hout (2005: 234) stresses the fact that such a formula is entirely alien to the Hittite annalistic tradition, and hypothesizes that we are dealing here with "a deliberate phrasing of the text according to Hieroglyphic Luvian stylistic patterns by a court scribe intimately familiar with Luvian". Nevertheless, the Hittite scribe chose the archaic subject pronoun *ūk* 'I', and not its Late New Hittite equivalent *ammuk*, in spite of its being phonetically similar to *amu* 'I', which was used in the parallel Luvian formula. This indicates that the variant *ūk*, although discarded from informal communication as a result of language interference, remained in scribal usage as a formal counterpart of *ammuk*.

The case distinction between *ūk* and *ammuk* in New Hittite was either completely forgotten, or viewed as less relevant than this stylistic distinction. This can be seen from the analysis of Muwatalli II's prayer to the assembly of gods through the storm-god of lightning. In the example below, the draft version of the relevant sentence is followed by its edited variant:

(167) KUB 6.46 iv 29, CTH 381 (NH/NS), Singer 1996: 23
[am]mug=a=kan *ANA* ^{m}NIR.GÁL *ANA* ÌR-*KA* ZI-za anda [du]sgai
KUB 6.45 iii 60, CTH 381, Singer 1996: 23
ug=a=kan *ANA* ^{m}NIR.GÁL [*ANA* ÌR-*K*]*A* ZI-anza anda dusgai
'As for me, Muwatalli, thy servant, (my) soul will rejoice.inside (me)'.

[59] The signs in curly brackets form a royal cartouche. The titles MAGNUS.REX and *277 (= *LABARNA*) are written twice, flanking the name PURUS.FONS.*MI* from both sides, while the logogram SOL$_2$ is incised above the rest of the group.

Singer's translation of these sentences into idiomatic English may create an impression that the sentence-initial *ammuk* / *ūk* is a proleptic pronoun in the *casus pendens*. In the Hittite originals, however, the contrastive topic is marked by different syntactic means, namely the raising of the possessor to the position of an indirect object. The literal translation of the same sentences would be "To me, Muwatalli, thy servant, the soul is rejoicing". This means that both *ammuk* and *ūk* in (4) are dative pronouns.

The scribe of the draft version KUB 6.46 used exclusively *ammuk* 'I' throughout the prayer. This shows that the contact-driven merger of *ūk* and *ammuk* had been already fully implemented in his idiolect. The scribe of the edited version KUB 6.45 replaced *ammuk* with *ūk* in three of the five cases, which all cluster in the second half of Column 3. In two instances (iii 41 and iii 74), the replaced forms function as clause subjects, and so the restoration is justified in terms of Old and Middle Hittite grammar. In our case, however, the attempts to use the formal pronoun *ūk* without the knowledge of its original syntactic function brought about a hypercorrection.

Another instance of hypercorrection in the same text is mentioned in McIntyre's thesis, even though the author does not discuss its philological background. The scribe of the first draft of CTH 381 used the correct nom. pl. *humantes* 'all' in KUB 6.46 i 18. Nom. pl. *humandus* appears in the edited copy of the same passage (KUB 6.45 i 17). As was mentioned above, acc. pl. *humandus* came to be ousted by nom. pl. *humantes* in Late New Hittite, as one would expect in the case of an *–ant* stem. The scribe of KUB 6.45 was aware of the archaic forms in *–andus*, but apparently did not know their correct usage.

The principle of scribal hypercorrection helps to account for the innovative use of *ūk* in other texts, the redactional history of which cannot be directly investigated. As an example, one can consider the following passage from the Bronze Tablet:

(168) Bo 86/ 299 ii 31-32, CTH 106.A.1, Otten 1988: 16
31. ūk=ma ^{m}Tuthaliyas LUGAL.GAL kuitman
LUGAL-izziyahhat=pat nawi
32. ūk=ma ^{md}LAMMA-ann=a DINGIR-*LUM* annisan=pat āssuwanni
anda arnut
'Even before I, Tuthaliya, Great King, began to rule, the god brought me and Kruntiya (together) in friendship'.

Both lines 31 and 32 begin with the first person pronoun *ūk*. In the first instance, it is used according to the rules of Old and Middle Hittite grammar, and precedes the royal name and title. This context is similar to one in example 5, and sufficiently formulaic to warrant the use of an archaic formal pronoun. One can hypothesize that the same scribe who was responsible for choosing *ūk* over *ammuk* in line 31 made an identical decision in line 32, being guided by reasons of symmetry. Since the use of *ūk* and *ammuk* in the Bronze tablet is, more frequently than not, consistent with the original case distribution of the two forms, one can call this decision an error of perseveration, as long as one is aware of the fact that the implied standard of good usage has nothing to do with the actual norm of the Late New Hittite vernacular.

The analysis of this example paves the way to the correct understanding of the accusative plural forms ZAG.HI.A-*is* 'borders' occurring in the Bronze Tablet (i 16 and iv 22). We have seen in the previous section that Late New Hittite thematic nouns have generalized the accusative plural ending *-us* to the nominative. Since the standard equivalent of the Sumerogram ZAG 'border' is Hitt. *irha-*, the forms of Bo 86/ 299, which became generally known after the completion of L. McIntyre's thesis, represent

an exception to her generalization. These exceptional forms cannot be treated as linguistic archaisms because *-us* represented the original accusative plural ending, but the knowledge that the scribe of the Bronze Tablet was prone to hypercorrections makes one wonder if they can be explained along similar lines.

A comparison with the Ulmi-Tessub treaty (CTH 106.B.2), a diplomatic text based on the same template as the Bronze Tablet (CTH 106.A.1), confirms the hypothesis of a scribal hypercorrection. Numerous philological considerations, some of which will be discussed later in this chapter, indicate that this one-column clay tablet has undergone less thorough editing than it famous counterpart. While the first occurrence of ZAG.HI.A-*is* in the Bronze Tablet does not have a direct correspondence in the preserved part of the Ulmi-Tessub treaty, in its second occurrence it clearly corresponds to ZAG.HI.A-*us*, as the comparison of (169) vs. (170) is meant to demonstrate. One must assume that the scribe of the Bronze Tablet treated ZAG.HI.A-*is* as an "elegant"equivalent of the colloquial ZAG.HI.A-*us*, but was unaware of the original case distribution between the two forms.

(169) KBo 4.10 rev. 21, 23, 106.B.2 (LNH), van den Hout 1995: 46
nu ^{d}UTU-*ŠI* kuit *A-NA* ^{m}Ul-mi-^{d}U-up LUGAL KUR $^{URU\ d}$U-tassa
ADDIN ZAG.HI.A-us=si kuyēs tehhun … n=at=kan ziladuwa
ŠA ^{m}Ul-mi-^{d}U-up ≈warwalani arha lē kuiski dāi
'What I gave to Ulmi-Tessub, king of Tarhuntassa, and the borders that I set up for him, … let none in the future take it away from Ulmi-Tessub's progeny'.

(170) Bo 86/ 299 iv 19-21, CTH 106.A.1 (LNH), Otten 1988: 26
nu ^{d}UTU-*ŠI* kuit *A-NA* ^{md}LAMMA LUGAL KUR $^{URU\ d}$U-tassa pihhun
ZAG.HI.A-is=si kuyēš tehhun n=as=kan zilatiya *ANA* NUMUN
^{md}LAMMA arha lē kuiski dāi
'What I gave to Kruntiya, king of Tarhuntassa, and the borders that I set up for him, let none in the future take them away from Kruntiya's progeny'.

We have seen that the regular change in Hittite case system was accompanied by sporadic aberrations of two kinds. On the one hand, certain scribes, whom one can suspect on independent grounds of not being Hittite native speakers, implemented the case merger in an idiosyncratic fashion. On the other hand, deliberate attempts at archaizing the text also resulted in irregularities. In the first instance, we are dealing with imperfect language learning, while in the second one we encounter a deliberate language manipulation. The first type of mistakes may predate the establishment of a new grammatical norm, while the second one necessarily postdates it. Having said that, one must recognize that there are many cases where the choice between the two explanations is impossible given our present knowledge. This is to be expected, given our uncertainty about the date and the history of transmission of individual Hittite compositions. In spite of these difficulties, the overwhelming regularity of Late New Hittite paradigms supports the claim that linguistic contacts between Luvian in Hittite resulted in the restructuring, not the relaxation of oppositions within the Hittite system of case endings.

6.3.4 Nominative-Accusative Plural *-as* and Related Matters. A case of the rare and seemingly irregular nominal ending nom./acc. pl. c *-as* deserves special discussion. Friedrich (1960: 43) listed it next to *-es* and *-us* in the unified paradigm of Hittite nominal declension, implying that all the three variants were free allomorphs. On the whole, the early scholars tended to assume the confusion between the oblique plural ending *-as* and the direct plural ending *-es/-us*. McIntyre (1986: 59) made a suggestion that nom./acc. pl. c. *-as* was grammatical only in the class of non-ablauting *i*-stems in New Hittite. She was not, however able to account for a number of forms in *–as* that

appear to represent plural nominatives or accusatives derived from other stems. This prompted her to state that "any conclusions about the nominative and accusative plural *-as* must remain tentative" (ibid: 62).

I believe that the data collected in McIntyre 1986 are compatible with a stronger assumption. None of the forms in *-as* occurring in the original New Hittite compositions requires the syntactic analysis as nom./acc. pl., except for certain forms in *-iyas* derived from non-ablauting *i*-stems. In the overwhelming majority of cases the problematic forms can be analyzed as genitives. Below I will discuss all the forms listed in McIntyre 1986: 54 that appear not to conform to my claim based on their interpretation in the previous literature. In most cases I suggest that these forms were reanalysed as singular or plural genitives.

The correct interpretation of the forms *arahzenas* and *kuirwanas* has been already offered in L. McIntyre's Master's thesis. The adjective *kuriwana-*/*kuirwana-* 'independent' has been attested since Middle Hittite, and represents a Luvian loanword containing the original adjectival suffix *-wana/i-* (HED, K: 266). There are, however, forms seemingly belonging to the same lexeme that do not agree in case with their head nouns or modifiers. These are KUB 24.4 i 16 *kuriwanas* KUR.KUR-*TIM* 'independent lands', and KBo 5.13 iii 25 = KUB 6.41 iii 43-44 *kūs* $^{\text{LÚ.MEŠ}}$*kuirwanas* (cf. dupl. KBo 4.3 ii 19 *kūs* $^{\text{LÚ}}$*kuirwanas*) 'these independent people'. As per McIntyre 1986: 56, these forms are to be taken as singular genitives. Both the possessive construction in KUB 24.4 and the free standing genitive in KBo 5.13 were formed on the model of the common expressions such as *kururas* KUR "country of enmity" i.e. 'inimical country',

or ^{LÚ}*taksulas* "man of treaty" i.e. 'ally'.[60] It is significant, however, that the possessive and the adjectival construction involving the word *kuriwana-*/*kuirwana-* apparently coexisted in the language for some period of time, since KUB 24.4 is a Middle Script text, whereas the Kupanta-Kruntiya treaty recorded in KBo 5.13 and its duplicates was composed at the time of Mursili II. Apparently, we are dealing here with two competing strategies of integrating a Luvian loanword into the Hittite language.

The case of *arahzenas* is syntactically similar, but it is quite different from the sociolinguistic viewpoint. The inherited stem *arahzena-* 'foreign' functions as an adjective in all the Hittite texts available to us except for the tablet KBo 3.4+ containing the ten-year annals of Mursili II, where we find six times the expression *arahzenas* KUR.KUR.(MEŠ) ^{LÚ}KÚR 'foreign inimical lands'. This expression should be contrasted with KUB 14.14 i 28 *tamāi arahzena* KUR.KUR.MEŠ 'other foreign lands', occurring in the "First" Plague Prayer of Mursili II and showing the normal adjectival use of *arahzena-*. In this case, too, McIntyre (1986: 57) takes *arahzenas* as gen. sg, assuming a syntactic remodeling based on the other instances of possessive constructions involving KUR 'land'. But could such remodeling be expected in the case of the common adjective *arahzena-*, which already had an established and productive syntactic function? The answer is yes only if we allow for a scenario of the imperfect language learning. The scribe of KUB 3.4+ could learn the gen. sg.or gen./dat. pl. phrase

[60] For the linguistic discussion of these expressions, see Neu 1979 and compare Yakubovich 2006: 45-46.

arahzenas udneyas 'foreign land(s)s' in the course of his second language acquisition, and process it as a possessive construction "the land(s) of the outside (vel sim.)".

KUB 19.50 iv 19 DINGIR.MEŠ *ha-pí-ra-aš* lit. 'gods of *habira-*', occurring in a list of divine witnesses in the Manaba-Tarhunta treaty (CTH 69), can be contrasted with its usual equivalent DINGIR.MEŠ *habiries* / DINGIR.MEŠ *habiriyas* '*habiri-* gods (vel sim.)', occurring in several other treaties. Apparently, the West Semitic (?) loanword *habiri-* 'outlaw (vel sim.)' could appear either in apposition to DINGIR.MEŠ or as its dependent noun. Accordingly, one can hypothesize that the respective gods were conceived either as patrons of the *habiri*-people, or as having the status of the *habiri-* in the divine pantheon. This syntactic variation involving borrowed and unfamiliar deities is no more surprising than the morphological variation between the stems *habiri-* and *habira-*.[61]

The attestations of Hitt. $^{(LÚ)}$*ispantuzziyala/i-* 'libation bearer' are limited to the Plague Prayers of Mursili II. In three instances, one encounters unusual phrases that appear to contain non-standard variants of this term. These are KUB 14.14 rev. 26. LÚ.MEŠ *iš-pa-an-tu-uz-zi-ya-la-aš-ša te-pa-u-e-eš* 'and the few libation bearers', and KUB 14.8 rev. 39 LÚ.MEŠ *iš-pa-an-tu-uz-zi-la-aš-ša* [*a-aš-š*]*a-an-te-eš* (with a duplicate KUB 14.11 iv 9 [LÚ.]MEŠ *iš-pa-tu-uz-zi-e-la*$^{!}$*-aš-ša* [*a-aš-ša-an-te-eš*] 'and

[61] Beckman 1999 systematically refers to *habiri*-gods mentioned in the lists of divine witnesses as "mercenary gods". It is not clear to me at present whether his translation implies a folk etymology of *habiri*-gods involving *happiriya-*, *happira-* 'town, *marketplace'. Itamar Singer (pers. comm.) objects against such a folk etymology on the grounds that the Anatolian gods thought to represent the fringes of the civilized world would hardly have any "urbane" connotations. I believe that the parallel stem *habira-* lurking in gen. pl. forms represents a straightforward product of "reverse *i*-mutation", that is the reanalysis of original *i*-stems as mutation-stems (cf. Rieken 1994 and the discussion in 6.3.1. above).

the remaining libation-bearers'). It is significant that in two of the three instances the unexpected ending is accompanied by the equally unexpected vocalism of the suffix. This clustering of irregularities makes me think that the copyists of the prayers failed to understand the rare word *ispantuzziyala/i-*. The original *$^{LÚ.MEŠ}$*ispantuzziyales* 'libation-bearers' was reinterpreted as LÚ.MEŠ *ispantuzzilas* '*men of libation-bearing' in KUB 14.8 rev. 39'. The nonce formation (?) *ispantuzzil* 'libation bearing' was formed on the model of abstract nouns such as *tayazzil* 'theft' or *sarnikzil* 'compensation'. The forms attested in the other two discussed loci are then to be taken as different manifestations of scribal compromises between the original phrase and its secondary reinterpretation.

The phrase HUL-*u-wa-aš* …$^{LÚ.MEŠ}$*ha-li-ya-tal-lu-uš* lit. 'watchmen of evil' is contrasted with *a-aš-ša-u*[*-uš* $^{LÚ.MEŠ}$]*ha-li-ya-tal-lu-uš* 'good watchmen' in KBo 4.14 iii 16-18. Stefanini (1965: 45) had every reason to translate this phrase as 'evil watchmen', but I do not think that one is justified in taking the form HUL-*u-wa-aš* as an adjectival attribute, as opposed to the genitive case form of the dependent noun *idālu* 'evil'. Noun phrases with attributive genitives are quite common in Akkadian (cf. e.g. *dajjān kittim* 'judge of justice = just judge', and see von Soden 1995, § 136f), but also occur in Hittite (cf. *linkiyas antuhsas* 'man of the oath = sworn ally').[62]

CHD, Š: 288-89 convincingly explained KUB 14.10 iv 19-20 *nu=kan* ^{URUDU}Z[I.K]IN.BAR-*as* $^{[(G)]IŠ}$*sarpaz kunkūeni* 'we are dangling from the point of a needle' as a predicament uttered by someone being in an extremely dangerous state (cf.

[62] The concept of "Evil Empire", which R. Reagan adopted from the "Star Wars" series and applied to the countries of the Warsaw Pact, was translated into Russian as *imperija zla*, lit. 'Empire of Evil'. The literal translation *zlaja imperija* would have sounded less affected, and therefore would have been less insulting from the perspective of Soviet propaganda.

CHD, Š: 288). The occurrences of this metaphoric expression are limited to prayers. The earlier interpretations assigning the role of a direct object to ^{URUDU}ZI.KIN.BAR = Hitt. *sappigusta-* 'needle' in this context are thus superseded.

MacIntyre (1986: 58) has cogently argued that the plural nominative form ***apās=ma* in KUB 26.12 i 13 was not only suspect on morphological grounds, but also impossible syntactically. I accept the emendation of Otten (1958b: 389), who reads *a-⌜pa-a-at⌝* instead of *a-⌜pa-a-aš-ma⌝*.

When one turns to the nom./acc. pl. forms in *–i(y)as*, one encounters a number of genuine cases that are not amenable to syntactic reinterpretation. The examples adduced in McIntyre 1986: 54 are of mixed probative value, but better examples can be found once we step beyond the corpus of New Hittite historical texts. None of the nominal forms in *-as* given below can represent anything but nom./acc. pl.

(171) HKM 19.5-6, MH/MS, Alp 1991: 150
kāsa=wa=ssan halki$^{HI.A}$-as karū arantes
'Hereby (I am informing you that) the cereals are already ripe'.

(172) KUB 39.14 iii 6-9, CTH 450 (Pre NH/NS), Kassian et al. 2002: 458[63]
SI.HI.A *ŠA* KÙ.BABBAR aramniyass=a kuyēs arha <<an->>danzi *ŠA*
ZABAR aramnis *INA* É.NA$_4$ pēda[n]zi
'Those who have detached the silver horns and *aramniya*-objects,
(namely) the bronze *aramniya*-objects, carry (them) to the stone-house'.[64]

(173) KBo 31.8+ iv 9-10, CTH 276.1 (NS), Dardano 2006: 26
mān LUGAL MUNUS.LUGAL DUMU.MEŠ.LUGAL-ya taknas ^{d}UTU-i

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[63] Note that KUB 39.14 iii 10 contains the irregular *i*-stem ^{GI}*nadi-* 'arrow', which is indicative of the imperfectly learned Hittite.

[64] Since the meaning of the noun *aramniya-* is unknown, it is theoretically possible to interprete its first occurrence as gen. sg. This assumption, however, would imply that the horns are made of silver and *aramniya-*, while *aramniya-* is made of bronze, which is semantically rather improbable.

tarpalliyas pianzi
'When the king, the queen, and the princes give substitutes to the Sun-goddess of the Earth'.

Melchert (1995: 272) tentatively suggests that we may be dealing with the "polarization" or "dissimilation" *–iyes* > *-iyas*. It is well known that the Hittite verbal stems in *–iye-* are reflected as *–iya-* in the thirteenth century manuscripts. Oettinger (1979: 344) suggests, however, that this change in verbal suffixes should be explained as analogical leveling rather than a sound law. The forms like 3 sg. *wemiyezzi* 'he finds' become *wemiyazzi* under the influence of 1 sg. *wemiyami* 'they find' or 3 pl *wemiyanzi* 'they find'. If one accepts this explanation, then examples (171-173) remain unaccounted for. If one assumes that the development *–ye-* > *-ya-* is phonetic, then one must explain why it was systematically implemented in the verbal conjugation, but only sporadically attested in the nominal declension.

My scenario of linguistic contacts between Luvian and New Hittite provides a way to account for this distribution. I reconstruct the optional substitution of *–ya-* for *–ye-* in the imperfectly learned Hittite of Luvian native speakers. This is a refinement of the suggestion made in the previous section, according to which Luvians normally substituted *–i-* for the Hittite *-e-* in the process of second language acquisition. The substitution of *–i-* for *–e-* in a position after *-(i)y-* would have resulted in the likely contraction **-iyi-* > *-ī-* and the change in the syllable structure of a target lexeme. It is significant that the change **-ye-* > **-yi-* > *i* represents a phonetic process that occurred in the history of Luvian (cf. Melchert 1994: 262), and so the similar contraction in the imperfectly learned Hittite can be viewed as hypocorrection. This contraction indeed occurred in several nom./acc. pl. c. endings (see Melchert 1995: 271 for the relevant

examples). On the other hand, those Luvians who were more sensitive to the difference between the two languages, but still failed to internalize the foreign phonemes /e/ and /ē/, chose an alternative pattern of substituting *–(i)ya-* for the input *–(i)ye-* in the nominal plural endings. One can view this pattern, which is directly reflected in examples (171-173), as a type of hypercorrection.

We have learned in 6.2.5 that standard Hittite was resistant to phonetic innovations introduced by second language learners. Consequently, neither of the two substitution patterns was expected to make its way into the natively transmitted variety of Hittite. Both /-i:s/ and /-ijas/ remained marginal variants of the direct plural ending //-i(j)es/. These variants are likely to be more frequent in the manuscripts belonging to Luvian native speakers.[65]

On the contrary, the stem-forming suffix of the "*ya*-conjugation" had two allomorphs, *–(i)ya-* and *-(i)ye-*, which go back to the reconstructed Indo-Hittite ablaut variants **-yo-* vs. **-ye-*. The distribution between these two allomorphs was unstable already in Old Hittite, where one encounters variants *i-ya-mi* vs. *i-e-mi* 'I do, make', *pé-eš-ši-ya-mi* vs. *pé-eš-ši-e-mi* 'I throw', or *ta-a-i-ez-zi* vs. *ta-a-ya-az-zi* 'he steals' (Kassian 2002: 99, 116, 125). The situation in Middle Hittite also remains unstable; compare the alternation between the forms *i-ya-az-zi* and *i-e-ez-zi* 'he does, makes' in the MS copies of the Mastigga rituals (Miller 2004: 169). It is interesting, however, that

[65] At the same time, the temptation to mechanically assign the nom.-acc. pl. endings *–iyas* and *-is* to Luvian native speakers must be resisted. It is possible that in some cases we are dealing with a purely graphic alternation between the signs IŠ and EŠ, or with sporadic attempts to replace the orthographic sequence *i-e* with the sequence *i-ya* inspired by the spread of the *-iya-* suffix in the verbal system of Late New Hittite.

the scribe of KBo 39.8, which, as argued above, displays a number of Luvian interference features, consistently prefers the form *i-ya-az-zi*.

The distribition between the reflexes of **-yo-* and **-ye-* allomprphs was also unstable in Luvian verbal conjugation. Presumably, the regular (non-syncopated) reflex of **-yo-* was *–ya-*, whereas **-ye-* was expected to be contracted to *-i-*, as discussed above. In practice, however, we find both instances of irregular sycope and irregular non-syncopated gorms. Compare, for example, the paradigm of Luv. *ari(ya)-* 'raise etc.': Pres. 3sg. pres. *aritti*, 3sg. pret. *ăritta*, 3pl. pret. *ărinta*, 2g. imv. *āriya*, 3sg. imv. *ariyattu*, 3pl. imv. *arindu* (Melchert 1993: 26-27). Perhaps the suffix *–i-* came to be perceived as a full functional equivalent of *–(i)ya-* in less careful pronunciation. But whatever specific stylistic factors influenced this redistribution, the allomorph *–(i)ya-* could in principle alternate with *–i-* in any position within the finite verbal paradigm

I tentatively suggest that the contact-driven substitution *–(i)ye-* > *-(i)ya-*, supported by the actual existence of the verbal suffix *–(i)ya-* in Luvian, tipped off the shaky balance between the allomorphs in *-(i)ya-* and *-(i)ye-* in the Hittite verbal paradigm, leading to the generalization of the first variant in New Hittite. Since an analogical leveling does not in principle require external motivation, this suggestion cannot be strictly proven. The goal of this discussion is, however, different. I have tried to demonstrate that *even* if we assume that this change is contact-driven, this is not a borrowing of a sound law, but rather an analogical development. An appropriate parallel for this process would be the confusion of the New Hittite iterative suffixes *–isk* and *-esk* discussed in section 6.2.5. The phonological peculiarities of Hittite acquired as L2 could

be accepted into Hittite acquired as L1 only if the Hittite native speakers could interpret them as internal developments. This was only possible when the Luvian accent was skewing the alternations that had already been in existence in Hittite before the relevant episodes of language contact.

6.3.5 Clitic Reduplication. The strict boundary between stable linguistic variables and categorical changes in New Hittite cannot be drawn in each and every case. In this section, we will discuss a contact-induced development that can be neither synchronically attributed to Hittite acquired as L2, nor consistently treated as a new grammatical norm of Late New Hittite.

Goetze (1930: 19-20) indicated a curious development in the New Hittite system of pronominal clitics. The third person subject and direct object clitics *=as*/*=at* appear both on the left and on the right side of the third person indirect object clitic *=si*. According to HW_2, A: 41, the clitic reduplication in this construction does not appear in any documents dated before the time of Muwatalli II, and their conclusion finds support in the analysis of textual attestations. For Goetze, chains such as *n=at=si(y)=at* or *n=as=si(y)=as* were introduced instead of the earlier *n=at=si* and *n=as=si* for purposes of disambiguation. This long-standing theory has been recently challenged. Rieken (2006a: 278) argued that the New Hittite construction with clitic doubling arose as a compromise between the earlier Hittite clitic chains, where the subject and direct object clitics precede the singular indirect object clitics, and the Luvian clitic chains

characterized by the opposite word order.[66] This conclusion can be summarized in the table below:

Table 43: Origin of Clitic Reduplication According to Rieken 2006a

Standard Hittite	Luvian	Late-New Hittite (optional)
n=**as**=si CON-3sg.nom.c.-3sg.dat.	a=du=**as** CON-3sg.dat-3sg.nom.c.	n=**as**=si=**as** CON-3sg.nom.c.-3sg.dat.-3sg.nom.c.
n=**at**=si CON-3sg.dir.n.-3sg.dat.	a=du=**at** CON-3sg.dat-3sg.dir.n	n=**at**=si=**at** CON-3sg.dir.n-3sg.dat-3sg.dir.n

Rieken's explanation of double clitics in terms of language contact is more satisfactory that Goetze's attempts to account for it in terms of disambiguation, even though the two accounts are not mutually exclusive. Strictly speaking, neither /nassi/, nor /natsi/ had exact homonyms in Hittite. One can argue that the clitic *=as* would be almost completely lost in a position after sentence conjuncts ending in *–a* (e.g. *=m(a)=as=si* vs. *=ma=si*), but such a loss would create little functional ambiguity because the appearance of *=as* can be almost always predicted based on the structure of a sentence. Garrett 1990a,b has succeeded in showing that the appearance of a subject clitic in Hittite represented a (usually redundant) way of marking an intransitive clause. Therefore, the morphophonemic opacity of *=as=* should not have represented a source of confusion for the Hittite native speakers. Disambiguation may have played a role in the

[66] The plural indirect object clitics preceded direct object clitics in Hittite as they did in Luvian (cf. Hoffner 1986: 93-94). The permutation of the order of clitics in the related languages is common: cf. Fr. *je le lui donne* vs. It. *glielo do* vs. 'I give it to him', where the relative position of pronominal clitics in French and Italian mimics the situation in Hittite and Luvian respectively. It is interesting that the relative order of clitic pronouns in French varies depending on the person of an indirect object clitic (cf. *je te le donne* 'I give it to thee' vs. *je le lui donne* 'I give it to him'), just like in Hittite it varies depending on its number.

choice between the two competing variants, but it was an unlikely reason for the rise of clitic reduplication.[67]

Rieken's suggestion implies that Luvian native speakers had fewer difficulties with memorizing Hittite clitic complexes than with segmenting them into individual morphemes. In particular, they could fail to recognize subject/direct object clitic pronouns occupying an unusual place in a clitic chain, and compensated by adding them to the right edge of the chain, on the model of their native language. This strategy was no doubt facilitated by the phonetic identity between the Hittite and Luvian clitics *=as* and *=an*.

The doubling of subject and direct object clitics next to *=si=* was an optional morphosyntactic device in Late New Hittite. A great deal of variation with respect to the implementation of this construction can be observed both within individual New Hittite manuscripts and between parallel texts. As an example, let us consider the placement of pronominal clitics in the Bronze Tablet (CTH 106.A.1) and the parallel passages from the Ulmi-Tessub Treaty (CTH 106.B.2).

(174) Bo 86/299 ii 98-99, 106.A.1 (LNH), Otten 1988: 20
n=at katta tuel=pat NUMUN-anza harzi *Ú-UL*=**at=si**=kan arha danzi
'Thy son (and) thy grandson will hold it after (thee). One will not take it away from him'.

(175) KBo 4.10 obv. 8, 106.B.2 (LNH), van den Hout 1995: 22
n=at katta DUMU-*KA* DUMU.DUMU-*KA* harzi *UL*=**at=siy=at**=kan arha danzi

[67] Clitic reduplication is to be distinguished from clitic doubling, i.e. the cooccurrence of clitic with the nominal form to which it refers, as in Spanish *Le tengo mania a ese chico* 'I cannot stand that guy'. Clitic doubling represents a syntactic counterpart (and a diachronic precursor) to morphological head-marking in verbal phrases. Unlike clitic reduplication, it is cross-linguistically common and need to be contact-induced.

‘Thy son (and) thy grandson will hold it after (thee). One will not take it away from him’.

(176) Bo 86/299 iii 32-34, 106.A.1 (LNH), Otten 1988: 22
ANŠE.KUR.RA.MEŠ KARAŠ=ya=tta kuin *ŠA* KUR ^{ÍD}Hulaya *I-NA* ^{URU}*HATTI* É duppas harzi n=**an=si** *ABU=YA* ^{m}Hattusilis arha pissiyat
‘The horses and the troops that the Office of the Hulaya river-land has (registered) for thee(!) in Hatti, my father Hattusili has canceled for him this (obligation)’.

(177) KBo 4.10+ obv. 42-43, 106.B.2 (LNH), van den Hout 1995: 34-36
ANŠE.KUR.RA KARAŠ=wa=ssi kuit *INA* ^{URU}*HATTI ŠA* KUR ^{ÍD}Hulaya É duppas harzi n=**at=siy=at** ^{d}UTU-*ŠI* arha pessiyat
‘The horse(s) and the troops that the Office of the Hulaya river-land has (registered) for him in Hatti, My Majesty has canceled for him these (obligations)’.

(178) Bo 86/299 iii 59-61, 106.A.1 (LNH), Otten 1988: 24
^{d}UTU-*ŠI*-kan mahhan *ŠA* LUGAL KUR $^{URU\ d}$U-tassa *ŠA* DINGIR.MEŠ $^{URU\ d}$U-tassa sahhan luzzi katta ūhhun n=at dassu *UL*=**at=si** tarahhuwas
‘When My Majesty inspected the *sahhan* (and) *luzzi*-services of the country of Tarhuntassa to the gods of Tarhuntassa, they were hard and not for him to bear’.

(179) KBo 4.10+ obv. 40, 106.B.2 (LNH), van den Hout 1995: 34
GIM-an ^{d}UTU-*ŠI INA* $^{URU\ d}$U-tassa uwanun nu *ŠA* DINGIR-*LIM* sahhan ishiūl ūhhun n=at dassesta *UL*=**siy=at** tarahhuwas
‘When My Majesty came to Tarhuntassa, I saw the treaty (about) the *sahhan*-service to the god. It (was) hard, and not for him to bear’.

Each of the three pairs listed above has its own peculiarities. Sentences (174) and (175) show a “classical” correspondence between the chains containing one vs. two object clitics. In (176) vs. (177), the reiteration of the clitic is accompanied by the change in number, and given that the sequence *n=an=si(y)=an* does not appear to be attested in Hittite, this may be more than a coincidence. Finally, example (179) does not contain clitic reduplication, but rather features the reverse order of subject vs. indirect object clitics, which yields a precise calque of the Luvian morphosyntactic pattern.

One can see that the Bronze Tablet shows a lesser propensity towards the use of double clitics than the Ulmi-Tessub treaty. Taken at face value, this argument speaks for the earlier date of the former document, thus supporting the relative chronology of van den Hout 1989.[68] If one wishes to attribute the Ulmi-Tessub Treaty to the time of Hattusili III, one probably has to assume that the avoidance of the sequence *=si(y)=at* in the Bronze Tablet reflects deliberate archaizing efforts on the part of its scribe. This theory is by no means impossible, and even finds a degree of support in the hypercorrect use of *uk* in the Bronze Tablet discussed in 6.3.4.

Whether the difference between the two texts should be explained on chronological or stylistic grounds, it appears not to reflect any categorical distinctions in grammar. On the one hand, the Bronze Tablet contains the double clitic construction *=as=si(y)=as* in (i 88, 89), where *=as* 'them' is the object plural clitic of the common gender. On the other hand, the archaic clitic chain *n=at=si* is attested in KUB 4.10 i 37, ii 15, and ii 17. All these examples belong to the passages that lack direct counterparts in the other text. They demonstrate, however, that both the standard Hittite clitic chains and sequences involving double clitics appear in each of the two compositions, albeit in different proportions.

If one tries to establish a direct relation between this variable and the linguistic background of individual scribes, one will be forced to say that both CTH 106.A.1 and CTH 106.B.2 were written by Luvian native speakers, but the second scribe had a poorer

[68] Compare the linguistic observations of van den Hout (1995: 17) regarding the more archaic usage of sentential particles in the Bronze Tablet.

command of standard Hittite. Furthermore, one needs to assume that a large number of Late Neo Hittite texts, perhaps a majority of them, were written in Hittite learned as L2, since the sporadic use of double clitics in clitic chains containing *=si* 'to him' becomes quite common in this period. Such a hypothesis, however, cannot account for the complete absence of double clitics in a parallel type of clitic chains containing *=mu* 'to me'. Although Luvian grammar prescribes the order *a=mu=at* for the counterpart of standard Hittite *n=at=mu*, no instances of the interference variant ***n=at=m=at* alongside *n=at=mu* are attested in Late New Hittite. In addition, the sequence ***n=an=si=an* does not appear in the New Hittite texts, whereas *n=an=si* is quite common.

An even more striking distribution emerges if one considers the instances of double clitics accompanying the Hittite reflexive particle *=z(a)*. The sequences *=as=z=as* and *=at=z=at* are extremely rare and do not seem to occur at all in New Hittite historical texts.[69] At least in the first case, the simple reversal of the clitic order appears to be no less frequent than clitic reduplication.[70] By contrast, the variant *=an=z=an* becomes a grammatical norm in New Hittite. The frequency of the last form has been stressed already in Goetze (1933a: 5): "Wenn die der partikel vorausgehende Silbe auf *–n* ausgeht, tritt für *-za* **in der Regel** *–zan* an". Friedrich (1960, § 42b) seems

[69] For isolated attestations of *=as=z=as* and *=at=z=at* see HW_2, A: 41). Compare the asymmetry between KUB 23.1 i 36 *na-an-za-an* and KUB 23.1 i 38 *na-at-za* occurring in the same paragraph of the Sawoskamuwa Treaty (Kühne and Otten 1971: 8).

[70] Compare KBo 2.2 i 31 *kuitman=za=as=kan*, KUB 6.41 iii 49 *namma=za=as=kan*, and KUB 23.92 rev. 11 *ABI-ŠU=za=as=kan*. I am grateful to Craig Melchert for turning my attention to these examples.

to have regarded this rule as optional. Kammenhuber (1975-84: 41) chose to consider together the instances of clitic doubling next to *=si=* and *=z(a)=*, thus making an erroneous implication that *=an=z=an* does not come into existence before the reign of Muwatalli II. In fact, the sentence-initial clitic chain *-an-za-an* occurs several times in the annals of Mursili II, whereas the occurrence of *-an-za* without *-an* in this composition is limited there to a single example (KBo 3.4 iv 30 *na-an-za-kán*).[71] The fact that the clitic complex *-za-an* can be analyzed not only as *=z=an*, but also as *=z=san*, where *=san* is a sentential particle, somewhat complicates the matter, but the particle *=san* would appear otiose in most of the relevant contexts.[72]

The normative character of *=an=za=an* in New Hittite follows from the complete absence of the clitic complexes ending in *–an-za* in the texts of this period. By contrast, the clitic complexes ending in *–an-za-an* (with a rare variant *–an-za-at*) occur more than fifty times in the historical texts composed during the reign of Mursili II or later. Even if we make an unlikely assumption that one half of these examples contains the clitic sequence *an=z=san*, we will still wind up with a solid residue of cases where the double occurrence of the clitic *=an* needs to be postulated.

Additional evidence for the normative character of *=an=za=an* comes from the analysis of the Hittite Laws:

(180) KBo 6.2 i 52-53, CTH 291 I.a.A (OH/OS), Hoffner 1997: 32
takku ÌR-as huwāi n=as *A-NA* KUR kūruri an[da] paizzi kuis=an
āppa=ma uwatezzi n=**an**=za apās=pat dāi

[71] Given the isolated occurrence of this example, one cannot exclude that we are dealing here with a scribal error, or with nasal vowel formation of a kind discussed in Section 2.3.

[72] For a list of examples where *–za-an* must be analyzed as *=z=san* see Goetze 1933a: 31.

KBo 6.3 i 60-62, CTH 291 I.b.A (OH/NS[?]), Hoffner 1997: 32
tak[ku ÌR-as hūwai] n=as kururī KUR-e pai[zzi ku]iša=an EGIR-[pa=ma
úwatezzi] n=**an**=za=**an** apās=pat [d]ā[i]
'If a slave runs away and goes into an enemy country, whoever brings
him back shall keep him for himself'

In spite of the fact that the discussed passage in KBo 6.3 is badly mutilated, the traces of *n-an-za-an* are quite clear. The dating of this manuscript is a matter of debate. Although it lacks paleographic innovations typical of New Hittite, Hoffner (1997: 230) argued against its attribution to a Middle Hittite scribe on the grounds that he failed to find evidence of a consistent Middle Hittite ductus or sign shapes in this manuscript. On balance, the reign of Suppiluliuma I or Mursili II, i.e. the transitional period from Middle Hittite to New Hittite, emerges as the most likely reign for the creation of KBo 6.3. The fact that the scribe of this conservative manuscript felt compelled to replace the Old Hittite complex *na-an-za* with *na-an-za-an* would indicate that the clitic sequence *n=an=z(a)* was already ungrammatical at that point, at least in his own dialect.[73]

The same logic that accounts for the contact-driven origin of *=at=si=at* operates in the case of *=an=za=an*. The Luvian reflexive pronoun *=di* (2sg., 3sg.), which is both cognate with and functionally similar to Hitt. *=z*, takes the syntactic position before the enclitic personal pronouns, whereas the reflexive particle *=z* follows enclitic personal pronouns in Old and Middle Hittite (Friedrich 1960, §§ 288, 411). The New Hittite word order represents a compromise between these two syntactic patterns.

[73] For other instances of *-an-za-an* in the New Hittite copies of Old Hittite manuscripts, see Hoffner (1997: 262). I am not aware of any other sequences with double clitics occurring in the New Hittite copies of older compositions.

Thus we wind up with a continuum of contact-induced constructions that were grammaticized to various extents in New Hittite. The chain *=an=z=an* became a new norm replacing the old *=an=z(a)*. The sequences *=as=si=as* and *=at=si=at* were common in Late New Hittite, but continued to coexist with their more archaic counterparts *=as=si* and *=at=si*. The sequences *=as=z=as* and *=at=z=at* are rare, while *=an=si=an* and sequences involving *=mu=* do not seem to be attested at all. This lexical distribution, summarized in Table 44 below, is not motivated in terms of syntactic difference between early Hittite and Luvian, which exhibit consistent distinctions in word order in all of the above-mentioned cases. Therefore, one must assume that the constructions with double clitics are not limited to the variety of Hittite acquired as L2.

Table 44: Lexical Distribution of Clitic Reduplication in New Hittite

standard Hittite	Luvian	Neo-Hittite
=**an**=z(a) 3sg.acc.c.-REFL	=ti=**an** REFL-3sg.acc.c.	=**an**=z=**an** 3sg.acc.c.-REFL-3sg.acc.c.
=**as**=si 3sg.nom.c.-3sg.dat.	=du=**as** 3sg.dat-3sg.nom.c.	=**as**=si(=**as)** (=as is optional) 3sg.nom.c.-3sg.dat.-3sg.nom.c.
=**at**=si 3sg.nom.n.-3sg.dat.	=du=**at** 3sg.dat-3sg.nom.n.	=**at**=si(=**at)** (=at is optional) 3sg.nom.n.-3sg.dat.-3sg.nom.n.
=**at**=mu 3sg.acc.n.-1sg.dat.	=mu=**at** 1sg.dat-3sg.acc.n	=**at**=mu 3sg.acc.n.-1sg.dat.

In my opinion, the distribution outlined above arose as a result of linguistic contacts between the core of the Hittite native speakers and the periphery of the bilinguals that had Luvian as their mother tongue. The chain *=an=za=an* was the first one to be accepted into the standard variety of Hittite because it was not perceived as structurally anomalous. As has already been mentioned, the phonetic sequence /tsan/ can correspond to the combination of enclitics *=z* and *=san*. The particle *=san*, however, was on the way out in the thirteenth century BC, and its morphophonemic properties may

have become opaque. I suggest that the contact-induced clitic complex *–an-za-an* was processed by some of the Hittite native speakers as *=an=zan*, on the model of the original *=an=z=san*. The rules governing the occurrence of Hittite sentential particles are notoriously complicated and, although the generalization of the sequence *=an=zan* at the expense of *=an=za* was clearly an innovation, it was less against the rules of Hittite grammar than the unmotivated doubling of the clitic *=an* would have been.

The claim that the chain *–an-za-an* does not owe its existence to the mechanical copying of Luvian morphosyntactic patterns can be corroborated through the analysis of those cases where the extension of *=an* was applied across the board. Consider the following additional contexts from the Hittite Laws:

(181) KBo 6.2 iii 10-11, CTH 291 I.a.A (OH/OS), Hoffner 1997: 64
takku NÍG.BA LUGAL *ṬUPPÍ* kuiski <harzi> mān=**za** A.ŠÀ.HI.A-na k[arūilin] šarranzi *U* NÍG.BA 2 *QATAM* LÙ ^{GIŠ}TUKUL dāu *U* 1 *QATAM* LÙ.HA.LA-[*ŠU* dāu]
KBo 6.6 i 16-18, CTH 291 II.c.A (OH/LNS), Hoffner 1997: 64-65
takku NÍG.BA LUGAL *ṬUPPU* kuiski harzi mān=**za(=)an** A.ŠÀ.HI.A-an karūilin šarranz *U* NÍG.BA 2 *QATAM* LÙ ^{GIŠ}TUKUL dāi *Ù* 1-*EN QATAM* LÙ.HA.LA-*ŠU* dāi
'If anyone holds a royal grant by tablet, if they divide old land, the man having a TUKUL-obligation shall take two parts, and his partner shall take one part'.

(182) KBo 29.21 12-14 + KUB 29.22 3-5, CTH 292 I.b.B (OH/NS), Hoffner 1997: 101
[takku A.ŠÀ.-an(?) kui]ski luk[kizzi nu]=**za** anda miyanta[n ^{GIŠ}KIRI$_6$.GEŠTIN ēpzi]… *ANA* 1 GIŠ 6 GÍN.[GÍN KÙ.BABBAR] pāi
KBo 6.12 i 17-19, 292 II.b.B (OH/NS) Hoffner 1997: 101
[takku A.ŠÀ.-an(?) kuisk]i lukkizzi nu=**za(=)an** anda [miyantan ^{GIŠ}KIRI$_6$.GEŠT]IN ēpzi … *ANA* 1 GIŠ-*ṢI* [6 GÍN.GÍN KÙ.BABBAR pāi]
'[If an]yone sets fire [to a field] and (the fire) catches a fruit-beari[ng] vineyard … he shall pay 6 shekel[s of silver] for each tree'.

In each of these two cases, a copyist added *–an* to the original *=za*, even though the respective sentences contain an overtly expressed direct object, and therefore do not require object clitics. Rather than taking these examples as instances of the rare proleptic construction, I attribute their origin to the over-application of the tendency illustrated by (180) above. The scribes were so accustomed to replacing the *=an=za* of the old manuscripts with *=an=za-an* that they would occasionally extend this replacement to the cases where *–an-* preceding *=za* was not a clitic pronoun, as in (181), or where it was altogether absent, as in (182). Such a hypercorrection would, however, be possible only if the copyists were processing *=zan* as a unitary morpheme, not as a clitic complex containing the reduplicated object pronoun.

The generalization of *–an-za-an* can be compared from the sociolinguistic point of view with the generalization of the stem forming suffix *–ya-*, discussed in the previous section. In both cases we are dealing, likely or assuredly, with contact-induced phenomena, which established themselves in the grammar of the target language, since they could be interpreted not as borrowings or calques, but rather as internally motivated processes. Both innovations are compatible with Roman Jakobson's old dictum: "A language accepts foreign structural elements only when they correspond to its own tendencies of development". Although this claim was falsified many times with reference to contact-induced changes occurring in situations of language shift, and although it cannot account for all the cases of structural borrowings into a maintained

language, it can be reinterpreted as a probabilistic statement about structural features that can be borrowed more easily in situations of language maintenance.[74]

This explanation does not, of course, exclude that, after this innovation had been accomplished, the speakers that were fully bilingual in Hittite and Luvian could once again process the sequence *–an-za-an* as *=an=za=an*. Once the existence of double clitics was accepted as a part of the native speakers' competence, the door was open to the spread of analogous chains such as *=as=si=as* or *=at=si=at*. These complexes were borrowed from the non-standard Hittite of Luvian native speakers, and used in the second half of the thirteenth century BC as colloquial equivalents of *=as=si* and *=at=si*.

As per Goetze 1930, the reduplicated clitic chains were more transparent morphologically than their archaic counterparts, especially in the case of *=as=si=as*. It is possible that the further development of the language would have eventually resulted in the generalization of the reduplicated variants, but the break in Hittite written tradition relegates the discussion of this question to the area of speculations.

A piece of direct evidence for the variety of Hittite learned as L2 may come from those clitic chains that replicate their Luvian order without recurring to clitic doubling. Besides example (179) cited above (cf. *UL-a=ssi(y)=at* in the parallel version ABoT 57 4 6), the only instance of this construction known to me in Hittite is KUB 14.3 iii 60 *mān=ma=si(y)=at=kan* (CTH 181, Tawagalawa letter). The rarity of this strategy

[74] Van Coetsem (2000: 70) unequivocally endorses this Jakobsonian maxim. Later in the same book, he has to concede that its prediction is not fulfilled in a contact situation that he labels "the extended mode of borrowing" (p. 225).

supports the hypothesis that it is driven by first language interference, but the same factor does not allow me to exclude that we are dealing with mere scribal errors.

Amother piece of evidence of the same kind may lurk in those reduplicated clitics that display mismatch in gender or case. I am aware of three relevant examples: KUB 5.1 ii 4 *na-an-za-at* (CTH 561), KUB 31.106 iii 2 *na-an-za-at* (CTH 124), and KUB 31.102 i 8 *na-aš-ma-at-za-aš-kán* (CTH 275). The small number of attestations makes one wonder if they are not trivial scribal errors or anacoluths, but the fact that they are all concentrated in Late New Hittite compositions renders this hypothesis less likely. The first of the three attestations is the only one where the antecedent of the pronominal clitics is preserved. The coordinated pair of tokens used in the lot oracles, ZAG-*tar* DU_8-*ya* 'Righteousness and Solution' is best served by the plural anaphor *=at*.[75] Thus it appears that the genuine agreement marker is placed at the end, according to the requirements of Luvian syntax, while the preceding complex *na=an=za* was probably not intended to convey any agreement information relevant for the scribe.[76] This would be possible if the Luvian scribe learned this clitic complex as one unit, without realizing the meaning of the individual morphemes. One hopes that the discovery of further examples of a similar kind will help to corroborate this tentative scenario.

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[75] See Ünal 1974, v. 2, p. 52 for the transliteration of the relevant context.

[76] It is formally possible to analyse *=an=* in this example as a marker of the selective agreement with the mascusine noun DU_8 'solution', the second member of the coordinated pair of nouns. Yet the sequence *na=an=za=at* iwould be in my opinion a rather unexpected exponent of anacoluth. The rwo patterns of agreement are more likely to compete within the same passage if a substantial body of texts separates the respective markers, so that the narrator has enough time to forget the strategy he previously used.

6.4 Lexical Interference with Luvian. The presence of Luvian foreign words in Hittite texts has been recognized since the dawn of Hittitology. The early interpretations of the sociolinguistic situation in the Hittite Empire, such as Rosenkranz 1938 and Güterbock 1956a, were based entirely on lexical evidence. Two recent articles, Melchert 2005 and van den Hout 2005, reflect the current state of research on the lexical contacts between Hittite and Luvian. The first paper lists the known Luvian borrowings and foreign words attested in New Hittite, with a breakdown by historical periods, while the second one contains two appendices pertaining to the distribution of orthographically marked and unmarked Luvian foreign words across various genres of Hittite written documents. There is, however, a certain urgency about further research in this field, since Melchert 2005 and van den Hout 2005 disagreed about the sociolinguistic implications of the data they had presented.

The main subject of the disagreement is the attitude of the Hittites toward lexical interference with Luvian. For Melchert (2005: 454), Luvian words and forms might have been used in Hittite texts to lend to a composition a certain literary character. According to van den Hout (2005: 235) these words and forms might have been used because the scribes were unable to express the same ideas using the Hittite language. The first hypothesis implies that the use of Luvian foreign words contained an element of language manipulation, while the second one entails that it was a mechanical result of language coexistence.

In my opinion, the sociolinguistic attitudes of various parts of Hittite society must be analyzed separately. The original vocabulary of individual Hittite texts may tell

us about more or less puristic inclinations of the authors of these texts. The way Hittite scribes reacted to the use of Luvian forms manifests itself most clearly in the analysis of their orthographic and editorial practices. Since it is impossible to discuss the original texts before understanding how they were manipulated in a process of written transmission, we will begin with the latter issue and then proceed to the former one.

6.4.1 Function of the Glossenkeil. Glosses are scribal notes to individual words or passages of the main text that aim at clarifying the pronunciation or the meaning of these words or passages. This function is similar to that of foot- or endnotes of modern printed texts, but in pre-modern cultures the glosses tended to occupy a position within a text. In the case of marginal or interlinear glosses, their epexegetic nature is self-evident, but if a gloss written on the same line as the expression it clarifies, one may need a special orthographic device in order to separate it from the rest of the text. Such a device used in the Mesopotamian cuneiform writing is known as the gloss mark or Glossenkeil. Marking glosses was not the only purpose of this sign in Mesopotamia: it was also commonly used as a divider between words in the same column of a lexical list (Krecher and Souček 1971: 439a). For possible cuneiform shapes of this sign, see Krecher and Souček 1971: 433b; in the Hittite texts it is usually written as either or . I failed to find either chronological or semantic distribution between the two shapes of this sign.[77]

[77] For the interchangeable usage of single and double diagonal wedges accompanying the same lexemes Hattusa see Rosenkranz 1938: 267, fn. 1

The functions of the gloss wedge in Hittite texts remain a matter of dispute. There is broad agreement that, on the one hand, the gloss marks cannot be separated from their homographs used in the Mesopotamian and Syrian cuneiform and, on the other hand, its usage in Anatolia is marked by functional distinctions. I am not, however, aware of any up-to-date publication that would attempt to trace the pragmatic development of this orthographic device within Hittite. V. Souček, who contributed a short note to the *Reallexikon der Assyriologie* about the Hittite glosses, limited himself to the following remark about the origin of words marked with the Glossenkeil in New Hittite: "Das Phänomen ist aus der sprachlichen Entwicklung der Großreichzeit zu verstehen. – Mit echten Glossen haben diese Wörter nichts zu tun".[78]

The history of the Glossenkeil in Mesopotamia lies beyond the scope of the present study.[79] Below, I will address the usage of this orthographic device in Bronze Age Canaan, Syria, and Anatolia. The relative chronology of its attestations suggests that it spread from Syria to Anatolia, and not vice versa. Since the late fifteenth century BC, one can observe the Glossenkeil as a mark of Hurrian glosses in Akkadian texts from Alalah IV (Márquez Rowe 1998: 67, Giorgieri 2005: 94). In the early fourteenth century BC, we find it as a mark of Hurrian glosses in Qatna (Richter 2003: 171-76) and as a mark of West Semitic (and more rarely Hurrian) glosses on the tablets of the Amarna archive (cf. Izre'el 1998). On the other hand, the occurrences of the Glossenkeil

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[78] Krecher and Souček 1971: 440b

[79] I would like, however, to note in passing that nobody among the Oriental Institute faculty members whom I interviewed was able to remember a single instance of this sign in Mesopotamian texts predating the Late Bronze Age. Thus there is no logical necessity to assume that it originated in Mesopotamia, as opposed to the Syro-Palestinian area.

in the corpus of Middle Script texts are limited to three isolated examples (van den Hout 2005: 226-227 with fnn. 58 and 59). The bulk of gloss marks are attested in the New Hittite Period, which begins in the second half of the fourteenth century BC and shortly postdates the Hittite conquest of Northern Syria. These purely chronological conclusions square well with the general direction of borrowing within the cuneiform tradition.

The comparative discussion would be, of course, impossible without discussing first the synchronic function of the Glossenkeil in Anatolia. There is no universal agreement about this issue. For Hawkins (2003: 138), it was used as a device to mark Luvian words in the Hittite texts of the thirteenth century BC. Melchert (2005: 445), ultimately following Schwartz 1938, suggests that the Hittite scribes used the Glossenkeil in the manner of modern "sic!" to call attention to various unusual features. Although van den Hout 2005 does not directly define the function of the Glossenkeil, his position seems to represent a compromise between the former two. Stressing that the majority of the marked forms are Luvian, he nevertheless acknowledges that there are exceptions.

I suggest that Boğazköy scribes placed gloss marks in front of those words and expressions that they deemed stylistically inappropriate in a given context. In the case of foreign insertions, they received a gloss mark if the scribes considered the embedded language to be less formal than the matrix language. The following hierarchy of

formality was commonly accepted: Sumerian/Akkadian > Hittite > Luvian.[80] Although many of the marked forms happened to be vernacular, there was no positive link between the marked forms and the vernacular forms, but rather a stylistic mismatch between the marked forms and those used in the rest of the text. On the diachronic level, this pattern can be derived from placing gloss marks in front of foreign glosses, on the assumption that the glossed forms could undergo ellipsis in the course of the development of writing. I immediately hasten to add that the practical application of this orthographic device left much room for scribal variation. The relevant differences between individual Hittite manuscripts will be addressed in the following section.

It is appropriate to begin my account by discussing the use of gloss marks in Akkadian texts from Boğazköy. There are several examples where they can be interpreted in the etymological sense, as marking glosses, but all of these examples also admit of my interpretation. In example (183), taken from an Akkadian medical text, possibly copied as a school exercise, a technical clause containing derivatives of the root *rabāku* 'to decoct' is accompanied by its approximate Hittite translation. While this is clearly a gloss, this is also an insertion of a clause in a less formal language. By contrast, example (184), taken from the same text, is ambiguous. The sign 𒌍 there can either refer to the whole gloss "I do not know this *ṣalabitu*-tree", or just to the Hittite demonstrative *kūn* used in an Akkadian context. Finally, example (185), although containing a gloss, clearly argues in favor of my definition. Although the Luvian gloss to the Akkadian

[80] This hierarchy is obviously incomplete, since it ignores a number of other languages used in the Hittite Empire, notably Hurrian. For reasons why it is not applicable to Hurrian in the Anatolian context, see 6.4.3.

verbal phrase begins with an Akkadographic preposition *INA*, the Glossenkeil is placed after this preposition, in front of the first genuinely Luvian word.[81]

(183) KUB 37.1 obv. 5-6, CTH 808 (LNS), Köcher 1952: 48
GIM ra-bi-ki ta-ra-ab<-bak> ˹*hu-wa-ar-ti-in* GIM-*an za-nu-uz-zi*
(Akk.) 'Thou decoct (it) like an extract' / (Hitt.) 'One boils (it) like an extract'.

(184) KUB 37.1 obv. 9-10, CTH 808 (LNS), Köcher 1952: 48
^{GIŠ}ERIN ^{GIŠ}ṣa-la-bi-ta ˹*ku-u-un* ^{GIŠ}ṣa-la-b[i-t]a ú-ul i-di ^{GIŠ}dap-ra-a-na
'…cedar, *ṣalabitu*-tree (I do not know this *ṣalabitu*-tree), juniper…'

(185) KUB 37.1 obv. 15-16, CTH 808 (LNS), Köcher 1952: 48
an-nu-ti kà-li-ši-na ina ^{GIŠ}GAZ ta-haš-šal *I-NA* ˹*ma-ma-na*-[*š*]*a-ti*
ba-at-tu-na-a-ti pu-wa-a-ti
'All these (Akk.) thou crush in a mortar / (Luv.) one crushes with *paddur* of *mamana*-'. (Or: 'with *paddur* (and) *mamanasa*-').

As one can see from the example above, the scribe of KUB 37.1 sprinkled both Hittite and Luvian marked forms through the same Akkadian text. This demonstrates the lack of positive association between the Glossenkeil and a particular language and supports the view that its function was primarily negative, namely to mark forms that linguistically do not fit with the rest of the text. On the other hand, the complete absence of marked Sumerograms indicates that the Sumerian forms were well integrated into a formal written discourse

The only example known to me where the Glossenkeil can be interpreted as marking a gloss in a Hittite context is also compatible with my interpretation. In the clause cited below, the Hurrian word *šinahila* derived from Hurr. *šina* 'two' clarifies the

[81] See Wilhelm 1994 for additional examples of Hittite and Luvian "glosses" in Akkadian texts. Unfortunately, the diagnostic texts edited in this monograph are all in a deplorable state of preservation, to the extent that it is frequently impossible to say whether we are dealing with a real gloss, or with a vernacular word/expression embedded in a text.

sense of the Akkadogram *TARTENNUTTI* 'position of the second-in-rank'. We know from the colophon of KBo 3.3 that the scribe of this tablet had a Hurrian name Tadikkanna, and so the hypothesis that we are dealing with a vernacular gloss in this case is quite likely. It is also clear, however, that Hurrian was regarded as a less formal language than Akkadian, even in Hurrian-speaking countries.

(186) KBo 3.3 ii 5-7, CTH 63.A (NH/NS), Klengel 1963: 35
^{m}Abiratas=ma=za ^{m}ÌR.^{d}U-an DUMU-*ŠU ANA* ^{LÚ}*TARTENNUTTI-ŠUNU* ⌜*sinahila IŠKUN*
'Abiradda installed for himself his son, Ir-Tessub, as his second-in-rank '.

When one turns to marked forms in the Hittite texts that are not glosses, there is no way around subscribing to the *communis opinio* that the majority of them are Luvian foreign words. It is also widely known, however, that this correlation is purely statistical. The clearest counter-evidence against the notional identification of marked words with Luvian insertions comes from those cases where the Glossenkeil marks genuine Hittite words. This is clearly the case of Hitt. *sakui-* 'eye', which has the Luvian cognate *tawa/i-*, Hitt. *huwai-* 'run', which has the Luvian cognate *huya-*, Hitt. *duwarni-* 'break', which has the Luvian cognate *lawarri-*, and Hitt. *huwappa-* 'evil', derived from Hitt. *huwapp-* 'to harrow, torture'. Most of the examples cited below have been listed already in Melchert 2005 (445-46) but the list can be continued.

(187) KUB 8.81 ii 8-10, CTH 41.II (MH/MS), del Monte 1981: 216-17
man=kan ^{m}Sunassuras EGIR-an=na arha lē naiskisi ⌜*sākuwa=sse=ssan hardu*
'Do not turn away (from it), Sunassura, (but) let one keep an eye on it'.

(188) KBo 3.4 ii 30-31, CTH 61 (NH/NS), Goetze 1933b: 50
nu=mu ^{m}Uhha-LÚ-is *UL* mazzasta n=as=mu=kan ⌞*hūwais*
'Uhhaziti did not resist me, but fled from me'.

(189) KUB 44.4 rev. 22-23 + KBo 13.241 rev. 10-11, CTH 767.7 (LNS), Beckman 1983: 178
^{NA4}piruni ⸗palhuna pāiweni …*A-NA* ^{NA4}ZÚ ⸖duwarnuman[zi p]āiweni
'We are going to split[?] the rock … we are going to break the obsidian'.

(190) KUB 1.1 i 40-41, CTH 81 (NH/LNS), Otten 1981: 6
nu=mu ⸖hūwappi DINGIR-*LIM*-ni ⸖hūwappi DI-esni parā *UL* kuwapikki tarnas
'She never handed me over to an evil god for an evil trial'.

The Luvian assimilated borrowings marked by the Glossenkeil provide an additional piece of counter-evidence. The forms cited below contain Hittite inflectional endings, such as abl. sg./pl. *–az* (~Luv. *–adi*), dat./loc. pl. *–as* (~Luv. *-anz(a)*), 3pl. pres. *-anzi* (~Luv. *–anti*) and 1 sg. pres. *-mi* (~Luv. *–wi*). In the last two cases, it is even impossible to decide whether we are dealing with a Luvian borrowing or with a Hittite word having a Luvian cognate. It is unlikely that a scribe would make a deliberate effort to Hittitize a native form, and then mark it as a vernacular gloss.

(191) KBo 11.1 obv. 21-22, CTH 382 (NH/NS), Lebrun 1980: 296
[$^{GIŠ.}$]$^{HUR.HI.A}$ ⸗gulzattanazz[iy]a kuit ^{d}UTU-*ŠI* kinun wemiskimi n=at essahhi
'And I will carry out each of the things that I find now on the draft tablets'.

(192) KUB 44.4 rev. 15, CTH 81 (LNS), Beckman 1983: 176
nu=kan *ANA* DUMU.NITA ⸖dumantiyalas anda iyandu
'Let them pour (it) into the ear cavities[?] of the male child'.

(193) KUB 30.27 obv. 10-12, CTH 451 (NS), Otten 1958a: 98
IGI-ziyan UD.KAM-ti kuwapi ⸖lilanzi nu=kan 1 UDU *ANA* ^{d}UTU DINGIR.MEŠ *ŠAMĒ*-ya [s]ipanti
'When they pacify him on the first day, he sacrifices one sheep to the Sun-god and to the heavenly gods'.

(194) KUB 1.1 iv 9-10, CTH 81 (NH/LNS), Otten 1981: 24
ANA MUDI-KA=wa ammuk piran ⸖hūyami
'I am running in front of thy husband', scil. 'I am assisting thy husband'.

The number of Hurrian integrated loanwords marked with the Glossenkeil is not large, but they should be added to the general picture for the sake of completeness. One can cite the noun *kubahi-* 'a type of head-gear', marked in KBo 13.46 obv. 10 and KUB 22.6 iv 3, or the exclamation of approval *nū* marked in KBo 11.14 obv. 7-8 and KUB 57.79 iv 31-33.[82] In both cases there is a formal possibility that these forms could have been borrowed from Hurrian through Luvian. By contrast, the absolute majority of Hurrian words used in Hittite contexts remained unmarked, even in those cases when they preserve specifically Hurrian inflectional endings.[83] Neither Sumerograms, nor Akkadograms, no matter how rare or unusual they were, triggered gloss marks in Hittite texts. These data, taken together, support the claim that the Glossenkeil was neither directly associated with a particular language, nor used as a generalized marker of foreign words in Boghazköy texts.

The only challenge to my definition of the Glossenkeil in stylistic terms comes from (187-190) and similar examples. In the absence of direct access to stylistic judgments of Hittite speakers, we must ultimately recognize the speculative character of our own stylistic judgements in those cases where marked words are taken from the same language as their context. Yet one cannot fail observing that certain descriptive facts about the lexemes in question invariably supply us with **possible** explanations for

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[82] For the likely Hurrian origin of Hitt. *nū-* see Kassian and Yakubovich, forthcoming. For additional examples of marked integrated loanwords of non-Luvian origin, see van den Hout 2005: 226, fn. 53. Also noteworthy is the small fragment KBo 45.268, which contains several gloss marks, perhaps functioning as word dividers, in a Hurrian incantation. I am grateful to Th. van den Hout who turned my attention to this fragment.

[83] For a representative selection of Hurrian words in Hitite contexts see Haas 1998. The relevant examples include both integrated borrowings and Hurrian foreign words.

their stylistically aberrant character. Thus the Hittite form *sakuwa* 'eyes' in (187) would be marked because the Sumerogram IGI was a more common exponent of the notion of 'eye' in Hittite texts. In fact, I am not aware of any other instances where the word for 'eye' would be spelled phonetically in an expression =*san* … *sakuwa hark-* 'to keep an eye (on someone)', while its heterographic equivalent =*san* … IGI.HI.A-*wa hark-* is abundantly attested (CHD, Š: 71a). The copyist could view the use of a Hittite word instead of the expected Sumerogram on the part of the previous scribe as a sign of his poor training.

In other cases, the Anatolian scribes could frown on individual words not because they were written in the wrong language, but because they exhibited unusual grammatical features. Melchert (2005: 445) provides an example of how the two competing Hittite stems *huwai-* (188) and *huya-* (194) 'run' could be both marked as non-standard in the thirteenth century texts. The fact that the first stem is inherited, while the second one is contact-induced possibly explains the sole marked occurrence of *huwai-* contrasting with multiple marked occurrences of *huya-*. Nevertheless, the rare cases like ≈*huwais* illustrate that the archaic forms could be occasionally regarded as stylistically inappropriate. As per Melchert (2005: 446), the same explanation can be advanced for the infinitive ≈*duwarnumanzi* (189), which contrasted with the innovative New Hittite stem *duwarniya-* 'to break'.[84]

[84] In the last case, one can alternatively argue that the gloss mark in front of *duwarnumanzi* represents a mere scribal error prompted by the position of this form within a chain of genuine Luvian infinitives. The text KUB 44.4 Rev. will be discussed in more detail in 6.4.4.

Finally, one cannot exclude that certain perfectly grammatical forms received a mark entirely based on their register. Thus Hitt. *huwappa-* 'bad, evil' in (190) perhaps was viewed as a disfavored synonym of *idālu-* 'evil'. The same manuscript KUB 1.1 has HUL-*lu* (=*idālu-*) 'evil' nine lines later (i 49), whereas a number of other copies of the Apology of Hattusili III preserve *huwappa-* in the correspondent loci (Otten 1981: 68). One can hypothesize that the scribe of KUB 1.1. marked the original *huwappa-* as stylistically inappropriate in its one occurrence, and replaced it with a close synonym in another one. The adjective *huwappa-* represents a synchronic derivative of the verb *huwapp-* 'to spoil, disfigure etc.', and it is possible that is synchronic meaning owed its existence a metaphoric extension of the same type that one can now observe in colloquial English *lame*. If so, there is no wonder that certain Hittite speakers would find it difficult to accept this word as literary.

The comparative evidence indicates that the usage of the Glossenkeil with "foreign words" is not only more frequent, but also more archaic. In order to understand the genesis of this usage, a look at the typological parallels offered by the Akkadian texts from Amarna and Ugarit would be useful. Izre'el (1998: 424-28) provides a complete list of Northwest Semitic foreign words found in the Akkadian Amarna tablets, most of which are endowed with gloss marks. In fifty-seven cases, the Glossenkeil (usually rendered as : in the Semitological transliteration) marks true vernacular glosses preceded by their Sumerographic or Akkadographic equivalents (e.g. HUR.SAG :*ha-ar-ri* 'mountain' or *yi-na-aš-ši* :*na-aš-ša-a* 'he has become elevated'). In sixteen cases, however, the same sign is used in front of Northwest Semitic words that alone convey

the intended meaning (e.g. :*ha-al-ti* ‘I fear’ or :*pa-ni-mu* ‘before them’. I follow von Dassow (2004: 653-54), who hypothesizes that Northwest Semitic glosses were used in order to assist the scribes of the addressee in reading the cuneiform text. Developing the same line of thinking, one can hypothesize that in those cases where a Canaanite scribe either could not immediately remember the Akkadian word, or was too lazy to write it, he could resort to the elliptical use of a foreign gloss without mentioning the word it clarifies. Such an ellipsis, however, was relatively circumscribed because Canaanite scribes could not be certain that their colleagues at the Egyptian court would also be of a Canaanite background.

The distribution of the two strategies in the cuneiform documents found in Late Bronze Age Ugarit was apparently rather different. Kühne (1974: 158-159) stresses the fact that, in sharp contrast with the Amarna documents, glossing Akkadian words with their Ugaritic equivalents was much less common than writing out just the vernacular word accompanied by a gloss mark. Huehnergard (1987: 204-8) substantiates this finding by listing all the occurrences of : in the Akkadian documents from Ugarit that were known to him at that time. The six instances of Sumerograms followed by the Ugaritic glosses (e.g. $^{\text{LÚ.MEŠ}}$DAM.GÀR.MEŠ :*bi-da-lu-ma*) ‘merchants’ contrast with some forty examples of Ugaritic vernacular forms embedded in the Akkadian text (e.g. :*ha-me-ti* ‘wall’ or :*ha-at-ni* ‘son-in-law’). The possible reason for the generalization of the elliptical construction is not difficult to find: the cuneiform documents found in Ugarit were largely written for the internal use of this city-state, and the scribes could be reasonably sure that their output will be read by another Ugaritic speaker.

There was, however, a case where marked foreign glosses would never be converted into marked foreign words in the Akkadian texts from Ugarit. This could never happen if the glossed word was a Sumerogram, while the gloss was in Akkadian. Kühne (1974: 158 with fn. 8) provides a representative list of such glosses, such as *ina libbi* IZI :*i-ša-ti*. One can speculate that the ellipsis of a glossed word in such a case probably immediately resulted in the omission of the respective gloss mark, since the Ugaritic scribes did not see any reason to mark Akkadian words occurring in a purely Akkadian context. Yet, as far as glosses were concerned, they need not all have been vernacular, and could be simply in a language that was reasonably familiar to the scribes. This provides a comforting parallel for the practice of using both Hittite and Luvian forms and expressions as glosses in the same Boğazköy Akkadian texts.

Generalizing the elliptical use of marked forms represents the decisive innovation of Hittite scribes. The sociolinguistic explanations of this phenomenon will be proposed in 6.4.3. Nevertheless one can stress already now that this innovation does not constitute a break in the tradition, but rather a choice in favor of one of the options that were already available in it. Once the glossed words were eliminated, the function of the Glossenkeil underwent reinterpretation along the lines presented above, and its scope was extended to certain Hittite forms occurring in Hittite texts.

The discussion of this section falsifies the direct equation between the marked words and the Luvian foreign words in Anatolian texts. While the great majority of the marked words are Luvian, those that are not have a special value for defining the meaning of the Glossenkeil in cross-linguistic terms. By contrast, the difference between

my definition of the function of the Glossenkeil and one given in Melchert (2005: 445) may appear to be more in emphasis than in substance. Both of us emphasize the difference between the Glossenkeil words and those that surround them, but my definition also implies a degree of prejudice against the marked words in Boğazköy texts on the part of their scribes. I believe, however, that the difference between our definitions is substantial enough to be resolved through an empirical test. The comparison between different tablets representing duplicates or parallel versions of the same text can shed more light on how the gloss marks were treated in the course of textual transmission.

6.4.2 The Glossenkeil and Manuscript Variation. A number of Hittite texts that are both available in multiple copies and preserve a substantial number of Glossenkeil words is limited. When we restrict ourselves to those cases where the history of manuscript filiation is reasonably clear, we are left with the already familiar instance of CTH 381 (Muwatalli's Prayer to the Assembly of Gods through the Storm-god of Lightning). The draft version KUB 6.46, contains three marked words, iv 21 ˹*kulaniitta* 'he exalted (vel sim.)', iv 23 ˹*ziladiya* 'henceforth', and iv 53 ˹*huwayalli*- 'a title of a Sun-god'. The edited version KUB 6.45 has only iii 52 ˹*kulāniitta* corresponding to the first marked word in KUB 6.46, while in the other two instances the gloss marks have been eliminated. In the instance of ˹*huwayalli*-, this change has been accompanied by a lexical replacement.

(195) KUB 6.46 iv 53, CTH 381 (NH/NS), Singer 1996: 29
1 NINDA.GUR$_4$.RA=ma ˹hūwayalli ^{d}UTU-i parsiya[zzi]
'He breaks one thick bread for the *huwayalli-* Sun-god'.

(196) KUB 6.45 iv 56, CTH 381 (NH/NS), Singer 1996: 29
EGIR-*ŠU*=ma 1 NINDA.GUR$_4$.RA kutrui ^{d}UTU-i parsiya
'Thereafter he breaks one thick bread for the Witness Sun-god'.

The equivalent between the two titles is probably not exact. While Hitt. *kutru-* simply means 'witness', the *huwayalli-* is an agent noun that is ostensibly formed with the Luvian suffix from Hitt. *huwai-* 'to run'. This noun can mean either 'runner', with reference to the observable movement of the Sun through the sky, or 'helper', if it is semantically derived from the common Hittite idiom *peran huwai-* 'to assist' (lit. 'to run in front of'), which has an exact counterpart in Luv. *parran huya-*. Given the Hittite equivalent in KUB 6.45, the second option is perhaps more likely. But, whatever option one chooses, it is clear that *kutru-* does not represent the exact translation of Luv. *huwayalli-*, but we are rather dealing here with an attempt to establish an equivalence between the two divine avatars.

In the case of ˹*ziladiya*, the situation is simpler. The scribe of KUB 6.45 simply repeats this word without the Glossenkeil (iii 54). One can hypothesize that the scribe of KUB 6.46 placed a gloss mark in order to indicate that this word is Luvian in origin, while the scribe of KUB 6.45 accepted this word as an integrated borrowing and therefore abstained from marking it in a special way. This case can be contrasted with that of ˹*kulaniitta*, which preserves the Luvian inflectional morphology, and therefore must necessarily be perceived as a foreign element in the Hittite text.

The overall impression that one can glean from the analysis of CTH 381 is that the scribe of the revised version exercised critical judgment with respect to the words that were marked in the draft version. In one case, he replaced an uncommon word with its functional equivalent, in the other case he deleted the mark as unnecessary, and in the third case he kept the Glossenkeil, perhaps because he recognized the alien nature of the word, but could not think of anything better. This tendency toward eliminating, rather than creating, gloss marks in the course of the editorial process can be supported through additional examples, even though they must need be taken from texts with less clear editorial history. The following passage is taken from the Sawoskamuwa treaty:

(197) KUB 23.1 ii 24-28 i 56, CTH 105 (NH/LNS), Kühne and Otten 1971: 10
[^{m}Masd]uris=ma=kan kupiyatin kupta na=an datta kuiš ^{m}NIR.GÁL-is
^{LÚ}*HADANU*=y[a=a]n kuiš DÙ-at nu namma apel DUMU-*ŠU*
^{m}Urhi-^{d}U-uppan*UL* pahhasta ~~nu=kan ˹kupiyatiin˺ kupta~~
'Masturi made mischief. Even though Muwatalli took him and made him his son-in-law, he did not protect his son Urhi-Tessub. ~~(He) made a mischief~~ '.

The origin of the scribal error in this passage must remain a matter of speculations, and my own account here is obviously quite tentative. I suggest that the scribe of KUB 23.1, as he was copying the treaty from an earlier version, decided to transpose a short clause stating that Masturi made mischief from the position after the long explanatory sentence to the position in front of it. Later, however, he got carried away with copying the old manuscript, and repeated the same clause in its original place, which he subsequently had to delete. Alternative accounts are also possible, but they all must reckon with the descriptive evidence that the copyist preferred the version without ˹ to the version with this sign. Although the marked forms were Luvian in origin, it is

not clear from this example whether we should take them as foreign elements or as assimilated loanwords, since the relevant inflectional endings are ambiguous. This fact may have provided the scribe with a justification of his decision to omit the gloss mark.[85]

The main text of the Royal Funerary Ritual (CTH 450) does not feature any marked words, so far as the available manuscripts allow us to judge. There is, however, one such word contained in the so-called ^{MUNUS}ŠU.GI liturgy KUB 39.41, the collection of utterances that this female ritual practitioner and her associates were expected to pronounce at various points in the performance. The relevant sentence in KUB 39.41 has a close counterpart in the main text of the ritual, where a gloss mark is, however, absent.

(198) KUB 39.41 i 9-10, CTH 450 (NS), Kassian 2002: 642-44
[^{f}aras=sis=a tezzi LÚ.MEŠ ^{URU}*HATTI*=war=an] ˹uruhhiyaš widanzi
KUB 30.15 + 39.19 i 31, CTH 450 (Pre-NH/NS), Kassian 2002: 266
[^{f}]aras=sis=a tezzi LÚ.MEŠ ^{URU}*HATTI*=war=an $^{LÚ.MEŠ}$uruhhie[š] wetanzi
'And her female colleague says: "The men of Hatti, the *u*-men, bring him" '.

The relationship of the ^{MUNUS}ŠU.GI liturgy to the main text is unclear. It can constitute either one of the "field notes" of the ritual authors, based on which the integrated text of the ritual was created, or a prescriptive text inspired by the ritual and containing specific instructions for "cunning women".[86] The choice between these two

[85] Note, however, that the other Glossenkeil words occurring in CTH 105, i.e. iii 13 ˹*kukkurniyawar*, iv 20 ˹*tiessaeskisi*, and iv 20, 21 ˹*hudas* also contain Hittite inflectional endings. The omission of gloss marks in front of such words in the process of manuscript editing was a possibility rather than a necessity.

[86] I use the expression "Cunning Woman", suggested to me by R. Beal, instead of the term "Old Woman", which is common in the Anglophone Hittitological tradition. The Hittite equivalent of the

options is tied up with the general discussion about the development of the Hittite ritual tradition, and cannot be made here.[87] It is clear, however, that the first of the two parallel sentences is linguistically more archaic. The stem *weda-* 'to bring' represents a late development of *widai-*, as discussed earlier in Section 2.1, while nom. pl. $^{LÚ.MEŠ}$*uruhhies* '*uruhhi*-men' can be viewed as a hypostasis of gen. sg./pl. *uruhhiyas* 'of *uruhhi*'. Alternatively one can argue that *uruhhiyas* represents a contact driven nom. pl. in *-as*, of a type discussed in Section 3.4, while $^{LÚ.MEŠ}$*uruhhies* can be seen as its later normalized counterpart.[88] Thus, whatever conclusions one makes about the genesis of the Royal Funerary Ritual, one can claim that the sentence in KUB 30.15+ represents an evolved variant of its prototype containing a gloss mark.

There is one seeming exception to the claim that the editors of Hittite texts strove toward eliminating gloss marks rather than adding new ones. The Middle Hittite ritual CTH 391.1, attributed to the female ritual practitioner Ambazzi and conducted on behalf of unidentified patrons, does not contain a single attestation of marked words. The New Hittite adaptation of the same text, administered on behalf of the king and known as

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Sumerographic professional designation ^{MUNUS}ŠU.GI is *hasawas*, and it does not specifically denotate the old age of this female ritual practitioner.

[87] Miller (2004: 469-532) passionately argues for the view that the Hittite ritualistic tradition represents the creation of literati employed at the Anatolian royal courts, which were primarily drawing on their personal memories. Nevertheless, he concedes that in some cases they could resort to interviewing the actual ritual practitioners. In my opinion, the interview scenario is especially likely in the case of the Royal Funerary Ritual, which, on the one hand, involved many different participants and settings, and, on the other hand, had to occur relatively rarely.

[88] Theoretically, one could claim that the variant *ú-ru-uh-hi-ya-aš* represents a corruption of $^{LÚ.MEŠ}$*ú-ru--uh-hi-eš* made by a Luvian native speaker. Such a corruption, however, would be likely only in a situation of oral transmission, whereas the relationship between the two texts cited in (34) implies rather the scenario of scribal editing.

CTH 391.2, features a number of such words. The examples below contrast the sentences that are nearly identical in both texts:

(199) KUB 27.67 iii 30-32, CTH 391.1 (MH/NS), Christiansen 2006: 50-52
[kī=kan GADA-an] mahhan $^{LÚ.MEŠ}$ÁZLAG dannaran anniya[n]z[i]
nu=ssi=kan ^{SÍG}marihsin parkunuwanzi na=a[t harkisz]i
'As the fullers make this linen plain and remove fuzz[?] from it, so that it becomes [white]…'

(200) KBo 13.109 ii 6-8, CTH 391.2 (NH/NS), Christiansen 2006: 155
GADA GIM-an $^{LÚ.MEŠ}$ŠÀ.TAM tannarantan KIN-zi nu=ssi=kan
≈marihsin arha parku<nu>uzzi na=at harkiēszi
'As the chamberlains make the linen plain and removes(!) fuzz[?] from it, so that it becomes white …'

The recent discussion of the Ambazzi ritualistic tradition in Christiansen 2006 provides grounds for re-evaluating these examples. Contra CHD (L-N: 196-7) assuming that CTH 391.1 and CTH 391.2 represent parallel versions of the same ritual, Christiansen argues that the mention of the king as the ritual patron in the latter text forces one to regard it as an individual taxonomic unit. The Hittite Code of Laws did not contain any punishments for plagiarism, and recent research has shown that scribes at the Hittite court did not shy away from compiling new rituals based on the old textual data. As a matter of fact, there are no reasons to think that CTH 391.2 was even attributed to Ambazzi, since her name never appears in KBo 13.109. Although CTH 391.1 was clearly a source of inspiration for the scribe of this tablet, he probably viewed his product as a draft of a new text.

The draft quality of KBo 13.109 can be illustrated by two scribal errors in (38). The scribe was apparently led astray by his own Sumerographic writing KIN-*zi*, ambiguous with respect to the number ('he/they make'), and chose 3 sg. *parkunuzzi* instead of the expected 3 pl. *parkunuwanzi* as the next verbal form. Even in this

ungrammatical form, he has managed to omit a sign. Unfortunately, we do not know whether KBo 13.109 ever provided a *Vorlage* for a more polished edition of the new ritual: unlike CTH 391.1 that is available in three different copies, CTH 391.2 did not yield any duplicates.

Similar considerations should be kept in mind when one compares the tablet KBo 4.10 containing the treaty with Ulmi-Tessub, King of Tarhuntassa, with the Bronze Tablet Bo 86/299 containing the treaty with Kruntiya, king of Tarhuntassa. Although both documents are now booked under CTH 106, we are clearly dealing with two separate treaties,[89] but they have a very similar format and many of their passages can be compared word for word. A handy score of both texts has been published in van den Hout 1995: 22-48. While both KBo 4.10 and Bo 86/299 contain a number of marked words, their proportion in the first document is significantly higher. Among the fifteen marked words in KBo 4.10 that have direct counterparts in Bo 86/299, only six are marked in the latter text. There are no marked words in the Bronze Tablet that would correspond to unmarked words in the Ulmi-Tessub treaty.

The preserved part of the Ulmi-Tessub treaty does not mention the Hittite king by name, and this is one of the reasons why the relative chronology of both documents remains a matter of debate. Van den Hout (1989, 1995) argues that both treaties were concluded during the reign of Tuthaliya IV, and that Ulmi-Tessub was made king in Tarhuntassa after Kruntiya failed to abide by his obligations stated in the Bronze Tablet.

[89] For the discussion of whether Kruntiya and Ulmi-Tessub were different names of the same person see Bryce 2005: 270-271 with references. Regardless of the answer to this question, the two texts discussed here occasionally contain different legal provisions and therefore cannot be viewed as two versions of the same treaty.

Beckman 1999 remains of the persuasion that Ulmi-Tessub's Hittite partner was Hattusili III, father of Tuthaliya IV. There is, however, one parameter that sets up a clear distinction between the two tablets. The Bronze Tablet Bo 86/299 represents the official version of the treaty, which apparently was ceremonially buried after Kruntiya violated its conditions. The clay tablet KBo 4.10 represents the draft of a treaty, whose final version was presumably taken out of Hattusa when the Hittite court abandoned it in the early twelfth century BC.

I suggest that the more frugal use of gloss marks in the Bronze Tablet in comparison with KBo 4.10 has less to do with the relative chronologies of both texts than with their different official status. Even if one assumes that the treaty with Ulmi-Tessub was composed after the treaty with Kruntiya, the Hittite official responsible for its compilation did not work with the Bronze Tablet in hand. Most likely, he was relying on its draft and copied most of the gloss marks that were contained in it. On the contrary, the scribe that was responsible for the execution of the Bronze Tablet or its pre-final version exercised his critical judgment with regard to the marked words. The textual history can, of course, be simplified if one assumes that KBo 4.10 represents an original draft, from which several treaties, including the Bronze Tablet, were eventually derived.[90]

An additional philological argument that can be advanced in support of the suggested scenarios is the treatment of the word *warwalan-* 'progeny' in both texts. The

[90] In connection with the present discussion, one has to mention the little fragment ABoT 57 belonging to CTH 106, which is textually closer to the Ulmi-Tessub treaty than to the Bronze Tablet. The size of this fragment is not conducive to any generalizations regarding the pattern of the Glossenkeil usage.

preserved part of KBo 4.10 contains three attestations of these terms with the Glossenkeil (rev. 22, 24, dat. sg. ≒*wa-ar-wa-la-ni* and rev. 25, erg. sg. ≒*wa-ar-wa-la-na-an-te-eš*. In the Bronze Tablet, these forms are replaced with NUMUN, *wa-ar-wa-la-ni*, and NUMUN-*an-za* respectively (van den Hout 1995: 46-48). In two cases, the Luvian stems were replaced with Sumerograms, and in one case the Luvian ergative ending is replaced with its Hittite counterpart. It is hardly possible to imagine the opposite scenario, assuming that the copyist eliminated two Sumerograms and one Hittite inflectional ending, only to replace them with Luvian words accompanied by gloss marks.

The discussion of the variation between marked and unmarked words in Hittite texts would be incomplete without mentioning the Apology of Hattusili III (CTH 81). The transmission of this famous text, available in at least a dozen copies, is discussed in Otten 1981. The author has endorsed the conclusions of earlier scholars that none of the reasonably well-preserved manuscripts can be seen as the *Vorlage* of the text.[91] Therefore, one cannot directly assess the influence of scribal transmission on the number of words provided with the Glossenkeil. Nevertheless, the comparison between the two best-preserved copies of CTH 81 reveals the striking bias of CTH 81.A toward the use of this orthographic device. The data below are based on a variation table available in Otten 1981: 66-80.

[91] The basic stemma of CTH 81 can be found in Goetze 1925: 3.

Table 45: Variation in the Use of the Gloss Mark in CTH 81

81.CTH 81.A (KUB 1.1+)	CTH 81.B (KBo 3.6+)	
˹ar-ša-ni-i-e-er	ar-ša-ni-i-e-er	'they envied'
˹hu-u-i-ya-mi	hu-u-ya-mi	'I run'
˹hu-u-wa-ap-pi	hu-u-wa-ap-pi	'bad' (dat.-loc. sg.)
˹ir-ma-la-aš	ir-ma-la-aš	'ill' (nom. sg.)
˹ku-pí-ya-ti-in	ku-pí-ya-te-in	'plot' (acc. sg.)
˹dan-na-at-ta (2x)	dan-na-at-ta (2x)	'empty' (acc. pl.)
˹zi-la-du-wa (2x)	zi-la-du-wa (2x)	'henceforth'

There is not a single instance where a word-form is marked in B, but unmarked in A. The instances of word-forms marked in both manuscripts are common, e.g. *tabarha* 'I ruled' (3x), *marhta* 'he presented himself' (1x). So far as one can judge, such words are always non-Hittite in origin, and are frequently endowed with unambiguously Luvian inflectional endings. By contrast, the word-forms that are marked in A but unmarked in B, form a heterogeneous group. The forms *kupiyadin* and *ziladuwa* are assimilated Luvian borrowings, *huyami* and *dannatta* are Hittite forms that probably underwent a contact-induced development, while the rest of the examples are genuinely Hittite. The reason why the Hittite forms are marked is not quite clear, but the fact that HUL-*lu* in A i 49 corresponds to *[huwap]pan* in B may indicate that the scribe of A regarded *huwappa-* 'bad, evil' as a colloquial synonym of *idālu-*.

As was mentioned above, the manuscript from which both A and B stem is not available to us. Consequently one cannot directly see whether it was the scribe of A (or one of his predecessors) to add additional gloss-marks, or rather the scribe of B (or one of his predecessors) deleted some of these marks. In my opinion, however, the second scenario is more likely. The motley array of forms marked in A does not seem to represent the result of a careful editing, but rather a set of forms that might have

appeared suspicious to a scribe at first glance. On the contrary, B seems to reflect the situation after a senior scribe scrutinized the marked words and gave his *imprimatur* to those that he deemed well integrated into the Hittite lexicon. If my scenario is correct, *ziladiya* received the same treatment in Hattusili's Apology as the cognate *ziladuwa* did in Muwatalli's Prayer.

An additional argument in support of my claim stems from the analysis of other variant readings in A vs. B. While both manuscripts display a number of errors of omission, as well as patterns that may betray the idiolects and individual graphic habits of their scribes, B also seems to show a number of variants that reflect deliberate scribal efforts to improve the style of the original manuscript. Thus *abiya pi[di]* 'in the place there' in A iv 63 is replaced with the more straightforward *[abe]dani pidi* 'in that place' in B. In some instances, the ambiguous or elliptical sentences in A find more explicit counterparts in B. Thus A ii 53 informs us that Muwatalli "took" (*epta*) the city of Tarhuntassa, and one has to figure out based on context that the author implies a change of residence and not a military assault, whereas B simply states that Muwatalli built (*wedet*) the city of Tarhuntassa. A iv 17 contains a sentence 'The way she was telling me, (so) it happened', while its counterpart in B spells out 'so' (*QATAMMA-pát*). On the whole, B and the closely related manuscripts C and D appear to have undergone more extensive editorial revisions than did A.[92]

[92] Compare, however, a likely replacement of *huwappan* with HUL-*lu* 'evil' in KUB 1.1 i 49, which was addressed in the previous section.

The conclusions of this section require a brief summary. There is clear and abundant evidence that different copies of the same text and parallel passages of the genetically related texts differ with respect to the usage of the Glossenkeil. The analysis of CTH 381 suggests that gloss marks were used most extensively in the case of drafts, and then were gradually eliminated in the process of editorial work. Glossenkeil-deletion can either affirm the acceptability of the original turn of phrase, or be accompanied by an emendation. The evidence of other texts discussed in this section is less straightforward, but it is compatible with my original conclusions and, on the whole, speaks for them rather than against them. Nevertheless, it imposes two refinements upon the reconstruction of Glossenkeil-transmission. First, we have seen that the instances when marked words are corrected or replaced seem to be less frequent than those cases when the Glossenkeil is simply deleted. Second, a limited number of gloss-marks can be preserved even in the final versions of texts, such as the Bronze Tablet.

Melchert's claim that the Glossenkeil represents a marker of unusual textual features may be descriptively adequate for Hittite texts without redactional history, but it lacks explanatory adequacy, since it tells us nothing about the pragmatics of this sign. Unlike the gloss (sic!), one whose main purposes is to ensure the correct transmission of an unusual textual feature, the Glossenkeil in a Hittite context encouraged the reader to reflect whether a given textual feature is in fact "unusual" and, if so, whether it can be replaced with something more "usual". The observed variability of judgment with regard to the words marked with the Glossenkeil suggests that this editorial mark should be defined in stylistic rather than grammatical terms, and served prescriptive rather than descriptive goals.

6.4.3 The Glossenkeil and Genre Distinctions. I have argued for the definition of the Glossenkeil as a marker of words and expressions that a given scribe deemed stylistically inappropriate for a given context. This definition does not refer to the language identity of the marked form. At this point, however, we can remember that majority of them are either Luvian foreign words or assimilated Luvian borrowings. Furthermore, we have seen in the previous section that the Luvian foreign words in Hittite texts appear to display the greatest degree of stability with regard to the Glossenkeil-marking, whereas integrated Luvian loanwords and Hittite forms showing contact-driven developments are less consistent in this respect. It is time to explore the significance of this correlation for defining the attitude of the Hittite scribes toward lexical contacts with Luvian.

At first glance, the picture may seem clear. The use of the Glossenkeil next to Luvian words in Hittite contexts reveals widespread prejudice toward lexical interference with Luvian. The fact that Luvian foreign words were nevertheless widely used would then indicate that, in the words of Güterbock (1956a: 138), the scribes at times "were not able to rid themselves of their own Luvian idiom". This conclusion conjures up the image of Luvian as a substrate language of low prestige that proliferated due to the sheer number of its speakers. This is the position that, despite some hesitation, is adopted in van den Hout 2005.

There are, however, several considerations that make me opt for a more nuanced approach. First, one needs to explain why the Luvian words in Hittite texts were frequently marked, but relatively rarely corrected. One can certainly believe that

individual scribes used Luvian words because they could not remember their Hittite equivalents, but the idea that none of the editors of Hattusili's Apology could replace the Luvian foreign word *tabarha* 'I ruled' with its Hittite approximate synonym *maniyahhun*, whose stem is used in the preceding clause of the same text, strains credulity. It is also unlikely that the New Hittite copyists of the Middle Hittite Instruction for Temple Officials (CTH 264) were not aware of Hitt. *sehur* 'urine', the cognate and functional equivalent of Luv. *dūr*, which occurs in this text. One must assume the existence of certain factors that mitigated the editorial zeal of the Hittite royal chancellery.

A related piece of negative evidence is the absence of New Hittite words accompanied by their marked Luvian glosses. It is natural to assume that, if the scribe was not sure how to express a particular meaning in the formal language, he could occasionally provide its approximate rendering, and then supply a vernacular gloss for the purposes of disambiguation. This is why we find, with different frequency, West Semitic, Hurrian, Hittite and Luvian glosses to Akkadian texts that originated in Late Bronze Age Syria and Anatolia. The absence of Luvian forms glossing New Hittite words stands in stark contrast to this picture.

Finally, there are a number of Hittite texts written in the late ductus, whose scribes did not resort to gloss marks at all. The salient examples are the rituals attributed to Mastigga (CTH 404), the main text of the Royal Funerary Ritual (CTH 450), and all the shelf-lists (CTH 276-82). Each of these texts has a number of Luvian loanwords, and the first two display contact-driven grammatical irregularities (see Section 3.2). Nevertheless, none of these forms was marked as stylistically inappropriate.

The asymmetry in the use of the Glossenkeil can be extended to whole textual genres. Van den Hout 2005 has been able to show that the distribution of marked and unmarked Luvian foreign words is nearly reversed in the two groups of texts. He summarized his observations in the table below, where the percentage numbers reflect the share of attestations within selected genres in the corpora of marked and unmarked Luvian word-forms. Only selected, particularly characteristic and/or well-represented genres have been included in the table, which is the reason why the percentage numbers in each column do not add up to one hundred.

Table 46: Variation in the Use of the Gloss-matk across the Genres

Genre	Marked	Unmarked
Rituals	7.5%	25.4%
Festival scenarios	7.5%	10.0%
Texts from Luvian milieu	4.6%	15.4%
Annals, treaties, edicts	20.4%	4.6%
Correspondence	7.0%	3.3%
Depositions	5.4%	1.4%
Mythology (foreign)	7.7%	2.0%
Oracle Reports	16.8%	8.6%
Vows	4.6%	3.3%

One can easily see that the texts of the first group show low tolerance towards the Glossenkeil, whereas the texts of the second group use it more promiscuously. Van den Hout (2005: 230) described the two groups as religious vs. more secular texts. Although this is obviously a correct observation (texts from Luvian milieu do not form an independent genre, but rather comprise the same rituals and festivals), it hardly has any explanatory status. In my opinion, the difference between the two groups has much to do with how they developed in the New Hittite period. The texts of the first group continued to be copied and modified, but were rarely recorded or composed from

scratch. The texts of the second group could be dictated to the scribes, derive from their field records, or originate as new literary translations in the Empire period. I believe that the expansion of the Glossenkeil was specifically connected with the frequency of Luvian words in dictated or "stenographed" texts.

The predominantly written transmission of official religious texts in the Hittite Empire is by no means self-evident, but Miller 2004 and Christiansen 2006 represent convincing case studies supporting this scenario. Now we have an ostensible philological proof that the Anatolian literati were engaged in an active process of modifying the old rituals in order to suit the new needs of the royal court. In particular, Jared Miller argues that the bulk of the Kizzuwatna texts found in Hattusa was copied, or even transported from the local state archives after the Hittites had annexed Kizzuwatna. On the other hand, Middle Script copies have been identified for approximately one half of the Hittite rituals containing unmarked Luvian foreign words.[93] This is a high proportion, comparable to that of Old Hittite historical texts available in Old Script copies. Therefore one can suspect that most of the Luvian forms occurring in religious texts were inherited from their Middle Hittite prototypes. There is

[93] Among the rituals with unmarked Luvian foreign words, Middle Script copies/versions are available for CTH 390, 395, 412, 433, 448, 461, 477, 479, 480, 489, 495. Such copies or versions are absent for CTH 391, 398, 409, 425, 431, 450, 457.4, 471, 475, 476, 481. In some cases, the relevant rituals available only in later copies can be attributed to the earlier period on historical grounds (e.g CTH 475, the ritual of Pilliya, king of Kizzuwatna).

independent evidence that Luvian words in Hittite contexts were rarely marked before the Empire period.[94]

By contrast, most of the texts of the second group must have been put in writing in the New Hittite period. Letters and vows were presumably dictated to the scribes, depositions reflect the actual statements of participants in legal cases, while oracle reports contain the records of questions, as formulated by priests. The fact that none of these texts is available in multiple copies (van den Hout 2002b: 864) speaks strongly in favor of their unalloyed character and suggests that the New Hittite ductus of the relevant documents defines the time of their original dictation. The case of the annalistic literature is different, since the texts of this genre were frequently copied, but the time of their composition can usually be determined based on historical cues, and all the annalistic texts relevant for the discussion of Luvian foreign words describe the events of the Empire period. The same holds for the relevant treaties and royal edicts.

Luvian words occurring in the political documents of the Hittite empire must have belonged, in bulk, to the lexicon of the ruling elite. The comparison of the duplicates shows the minimal amount of scribal interference with the texts of this genre, whose authorship is normally attributed to the king.[95] The preparation of new formulaic

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[94] Cf. the twelve examples of unmarked Luvian words occurring in Middle Script texts (van den Hout 2005: 230), contrasting with a single instance of HKM 88.12 ˹*annarā*. The last word can be identified as Luvian on phonological grounds, but, being an adverb, it does not display specifically Luvian inflectional endings.

[95] There is no need to give a uniform answer regarding the actual authors of all the documents attributed to the Hittite kings. The royal authorship seems to be assured for some of these texts, such as the Apology of Hattusili III, which is replete with highly personal details, or the memoirs of Mursili II about the activity of his father Suppiluliuma I (otherwise it would be more logical to attribute this text to

treaties apparently involved a degree of scribal compilation, but it would be far-fetched to assume that the scribes could be responsible for their non-standard passages reflecting the actual policy-making of the Hittite foreign office. Since letters, vows, depositions, and oracular inquiries were recorded on clay tablet only once, any kind of retroactive editing in the texts of these genres would be impossible. The simplest hypothesis is to assume that the Luvian forms occurring in these documents were likewise recorded from oral speech.

An exception to the distribution outlined above concerns some groups of texts, which van den Hout failed to include in his version of Table 46, but discussed elsewhere in his 2005 paper. Thus all the available inventory lists were compiled in the New Hittite period, and it is reasonable to assume that an official in charge of inspecting a depot would dictate such a list to a scribe. Nonetheless, marked Luvian words (24, or 6.2% of all the marked Luvian words) are less densely concentrated than unmarked Luvian words (18, or 9.3% of all the unmarked Luvian words) within this genre. Thus inventory lists unexpectedly pattern with the first group, which includes rituals and festivals, rather than with the second group, which includes depositions and oracle reports. It may be relevant for the solution of this paradox that inventory lists do not constitute cohesive texts and even lack predicative syntax in most cases. Therefore one can hypothesize that the scribes felt less urge to mark the deficient stylistic features of oral dictation when they were dealing with this genre. The denser relative concentration of unmarked Luvian words (10 or 6.6%) vs. marked Luvian words (15 or 3.9%) in another genre featuring a

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Suppiluliuma I). On the other hand, anyone with the appropriate authority could dictate the formulaic *res gestae* of Tuthaliya IV and Suppiluliyama II (CTH 122).

large number of syntactic fragments, namely the administrative texts, supports my provisional conclusions.

The genre that stands out in the second group are mythological texts of Akkadian, Hurrian, and West Semitic origin, which one may expect to have been translated in scholarly circles.[96] Yet the correlation between the presence of marked Luvian words and the late date of the translation seems to hold. Thus the Epic of Manumission (CTH 789), which is known from the Middle Script Hurrian and Hittite bilingual, does not contain any Luvian foreign words at all. As a rule, the mythological texts containing marked words (such as the Epic of Gilgamesh or the Hedammu and Ullikummi stories) are known exclusively from New Script fragments. The availability of Middle Script tablets inscribed with the Akkadian and Hurrian versions of the Gilgamesh epic, and the Hurrian version of the Hedammu myth suggests that this gap is probably not accidental. The only possible exception to the suggested correlation is the myth of Elkunirsha and Ashertu (CTH 342), which contains both marked and unmarked Luvian forms. An unpublished fragment Bo 3300 belonging to this text is labeled as "mh?" in the online *Konkordanz der hethitischen Texte*, but the size of this piece is apparently not conducive to definite conclusions about its ductus.[97]

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[96] From the linguistic point of view, it is interesting to note that the Hittite mythological texts of foreign origin contain few assured examples of Luvian foreign words. The corpus used in van den Hout 2005 contains only 3 sg. pret. *halanzatta* (KUB 36.35 i 11), acc. pl. ⸗*hudanuenzi* (KUB 8.63 iv 13), acc. sg. n. / acc. pl. ⸗*pintanza* (KUB 8.50 iii 20), and 3 sg. pret. ⸗*sappatta* (KUB 8.50 iii 16). These four items contrast with some two dozen instances of marked forms that do not show specifically Luvian inflectional endings, and some of which may be not Luvian at all.

[97] The Middle Hittite fragment KBo 26.100 bears a textual resemblance to KUB 33.105, which belongs to the Kumarbi cycle. Consequently, it is difficult to argue that all the tales belonging to the

The Hurrian and Hittite bilingual represents the only instance where one can talk about the Hittite translation of a foreign mythological narrative. The other mythological texts mentioned in this section are more likely to represent creative adaptations of their foreign versions.[98] Unfortunately, we know nothing about the techniques that were involved in the adaptation of foreign literature by the Hittites. As a possible, but perhaps not the most likely, scenario, one can imagine an intermediate period of oral transmission by storytellers. Alternatively, one can hypothesize that the scribes who were well versed in Near Eastern literature and had extensively studied foreign tales at school were commissioned to create their Hittite versions, which they adapted to the taste of the local public. These highly personal adaptations could then undergo the same editorial scrutiny as oral compositions.

The chronological distribution outlined above adds further support to the claim that gloss marks were deleted, rather than added, in the course of textual transmission, which is consistent with general philological principles of manuscript stabilization. If the situation in our case had been unexpectedly the opposite, one would encounter approximately the same proportion of marked words in all the textual categories, since the later copyists would have compensated for the frugal use of gloss marks on the part of the Middle Hittite scribes.

Kumarbi cycle were translated in the New Hittite period. My intention is only to raise a possibility that particular texts mentioning Kumarbi, such as the myths of Hedammu and Ullikummi, represent Empire period translations.

[98] For the differences between the written Akkadian and Hittite version of the Gilgamesh Epic available to us see Beckman 2003: 43ff. The general lack of close correspondence between Hurrian mythological texts and their Hittite versions is asserted in Salvini and Wegner 2004: 13. Nevertheless, Giorgieri 2001 has succeeded in showing that the Hurrian fragment KUB 45.61 represents a rather close match to the Hittite passage describing the birth of Ullikummi.

The link between the frequency of gloss-marks and the origin of the texts where they are used has profound implications for the pragmatics of the Glossenkeil. Leaving aside the translated literature for the moment, one can observe that this sign reflects not so much the scribal uncertainties about their own linguistic competence, as their stylistic evaluation of oral texts that were dictated to them. The scribes that were recording the dictation had neither time nor authority to interfere with the lexicon of their oral input. They could, however, mark those words that they disliked for stylistic reasons as a reminder to the editors of the text to examine them closely, or simply as a way of denying responsibility for their appearance.[99] The last motivation was presumably decisive in the instance of ephemeral documents, such as court depositions or inventory lists, which were not expected to undergo extensive editing. By contrast, when a scribe saw an awkward form in an older version of a religious composition, he could assume that the previous editors had already accepted it, or they could simply show his respect for a written text hallowed by tradition.[100]

On the other hand, one can understand why the subsequent editors of the tablets were generally hesitant to replace marked words with their stylistically more appropriate synonyms. The majority of texts sprinkled with gloss marks and available in multiple

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[99] A more sophisticated model is also possible. Itamar Singer reminds me that the dictated texts may have been first recorded on wooden tablets, and raises doubts that scribes would have enough time to sprinkle the text with gloss marks at this stage. As an alternative, one can suggest that this was the work of junior editors who were responsible for copying the text from waxed boards to clay tablets.

[100] The hypothesis that the scribes used gloss marks as a puristic reaction to the deficient stylistic features of the texts they had to edit belongs to Theo van den Hout. He communicated it to me when he was preparing the paper that was published later as van den Hout 2005. I regret to say that I initially objected to this idea because I could not understand at that time why the scribes so frequently failed to correct the marked words.

copies represent annals, treaties, and similar political documents dictated either by the king or by high state officials. Tampering with the royal word would imply a heavy liability that few people in the chancellery perhaps were willing to accept. The objective difficulties involved in finding the precise Hittite equivalents of marked Luvian forms may have added to the subjective fears. Much less responsibility was involved in censuring the gloss-marks of the junior scribes and deleting those that did not appear justified enough to their senior colleagues.[101].

The absence of true foreign glosses, written next to words they clarify, in the Hittite texts from Boğazköy need not appear anymore surprising if the scribes were recording their tablets in the language of the dictatation. Although I am not aware of any scholars who explicitly argued to the contrary, the view of Hittite as *Hof- und Amtssprache* would logically imply that at least certain textual genres, such as depositions and oracle reports, were to be translated from Luvian. In this case, one would expect to find vernacular glosses clarifying particularly difficult words within these genres, just as one finds them in peripheral Akkadian texts. The available textual data support the claim that there remained enough people in the thirteenth century BC

[101] C. Melchert (pers. comm.) offers a specific reason why the senior scribes may have been prone to delete some of the original gloss-marks. He plausibly hypothesizes that Hittite native speakers kept the higher positions in the scribal hierarchy of Hattusa and suggests that "the Luvian-speaking scribes who did the drafts marked any forms that they thought might cause problems for their Hittite-speaking superiors. The latter then decided whether the forms could stay without any attention mark (i.e., they figured any scribe could deal with it), could stay, but needed the attention mark kept (because indeed some other reader might stumble over it), or should be replaced with Hittite". It is indeed likely that every foreign word of Luvian origin occurring in a Hittite text would appear suspect to a Luvian native speakers, whereas Hittite native speakers would be better equipped to judge the degree of its integration into the Hittite lexicon

Hattusa who could give evidence in a court of law and formulate oracular inquiries in Hittite.

Another advantage of my approach is the possibility to explain why gloss marks occur so rarely with Hurrian words in the Hittite context. Hurrian unassimilated borrowings are quite rare in the texts likely to have been recorded at the Hittite court in the Empire Period. They most frequently occur in formulaic passages describing ritual offerings or ritual paraphernalia, which ultimately reflect the cultic practices of Kizzuwatna or Northern Syria. The appearance of such passages in New Hittite rituals normally indicates that we are dealing with scribal compilations, as shown by Miller 2004 for the text "When my Forefather Split the Deity of the Night", attributed to Mursili II (CTH 482). Even when we are dealing with the original New Hittite compositions, such as the Ritual of Mursili II against aphasia (CTH 486), the passages with Hurrian words do not display a personal touch and are best taken as scribal insertions (van den Hout 2004: 370-373 and passim). If the primary function of the Glossenkeil was the stylistic evaluation of the oral input, then the absence of gloss marks in such passages squares perfectly with my theoretical predictions.

The conclusions of this section falsify the claim of Güterbock (1956a: 138) that lexical interference between Luvian and Hittite is entirely due to the influence of a group of scribes coming from Kizzuwatna. The texts recorded or composed by Kizzuwatna scribes probably form a core of the group defined as "texts from Luvian milieu". They indeed contain many Luvian (and Hurrian) loanwords, but the frugal use of the Glossenkeil on the part of their copyists sets them apart from the New Hittite secular texts. Another genre where the mediation of Luvian native speakers might have played a

major role is foreign mythology.[102] The edition of the Kumarbi cycle fragments represents one of H. Güterbock's most important contributions to Hittitology, and it is easy to see how this long-term project may have influenced his perception of the Glossenkeil problem. Yet this genre is not representative of New Hittite texts as a whole, since most original texts composed in the Empire period and exhibiting a large concentration of gloss marks are likely to stem from oral dictation or "field records".

It should be emphasized again that the discussed distribution of gloss marks across textual genres has a statistical character, and the association between the Glossenkeil and dictated or recorded texts represents no more than a tendency. In fact, CTH 391.2, discussed in connection with example (200), represents a reasonably clear case where gloss marks were reintroduced by the literati responsible for the creation of a new ritual. The Middle Hittite example in (187) is formally incompatible with the scenario of oral dictation, since the stylistically inappropriate use of Hitt. *saguwa* instead of Sum. IGI.HI.A can be defined only with reference to the orthography. I would argue, however, that the mismatch between certain oral varieties of Hittite and the scribal expectations boosted the use of the Glossenkeil and triggered a shift in its pragmatics. Most foreign words marked in Akkadian texts carry a message: "I do not know how to write it", while most foreign words marked in Hittite texts convey a different message: "You do not know how to say it".

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[102]The problem of the origin of gloss marks in translated literary texts remains loaded with unsolved questions. If one assumes that the authors of creative adaptations were Luvian native speakers from outside Hattusa, valued for their knowledge of the Near Eastern literary tradition but not necessarily for their Hittite style, one can hypothesise that their written output was subject to the same editing procedures as recorded oral texts. Yet, until the emergence of procopographic evidence confirms this hypothesis, it must remain a speculation.

6.4.4 Pragmatics of Code-switching. If the conclusions of the previous section are correct, we must separate the checked puristic inclinations of Hittite and literati from the more promiscuous speech habits of Hittite officials. Keeping in mind that the bone of contention was lexical interference with Luvian, it is reasonable to wonder what caused these conflicting attitudes. In the absence of the relevant anecdotal evidence, one has to rely on common sense and typological parallels supplied by better-known cultures in order to eliminate unlikely explanations.

There are no reasons to think that thirteenth-century scribes frowned on Luvian foreign words because they had a particularly low opinion of Luvian as a linguistic system. The last hundred years of the existence of the Hittite Empire witnessed further functional extension of Luvian in the written sphere. This was the time when the Hatti kings commissioned several monumental inscriptions in stone, written in the Luvian language and using the hieroglyphic script. The case of the NİŞANTAŞ inscription, discussed in connection with example (166), is especially remarkable, since the same text was probably recorded in Hittite cuneiform. The laconic inscriptions on Hittite seals usually do not admit of direct linguistic identification, but the seal of Kunzi-Tessub, king of Carchemish, made shortly before or shortly after the fall of the Hittite Empire, contains phonetically spelled Luvian words (Hawkins 2000: 575).

Van den Hout (2005: 235) suggested that the decision to write Luvian on public monuments must be taken as a display of alleged solidarity with the masses on the part of the Hittite elites, which was a necessary strategy for their survival. While this precise motivation cited remains debatable (see 5.8 and the discussion of the “solidarity” issue at the end of this section), we are manifestly dealing here with an advancement of

Luvian within a particular functional domain. It is not obvious why the scribes of the cuneiform tablets, some of which must have been native speakers of Luvian, would tacitly oppose this policy by treating Luvian as something generally incompatible with the formal written discourse. It is much easier to assume that the scribes who marked Luvian words in Hittite contexts were mainly guided by their opposition to the mixing of the two codes. The years that they spent in schools learning their trade must have helped them to develop linguistic sensitivity, so that they became more willing to draw a line of distinction between the Hittite and Luvian vocabularies than an average bilingual speaker would. The use of Luvian borrowings and foreign words, characteristic of the Hittite oral speech in Hattusa, contrasted with the situational code alternation of the written discourse. The notion of situational code alternation can be illustrated by the dictum attributed to Charles V, king of Spain and emperor of the Holy Roman Empire: "I speak Italian with my lovers, French with my friends, Spanish with God, and German with my horse".[103] If my interpretation is correct, the scribes in thirteenth-century Hattusa were instructed along the lines: "One writes Hittite on clay and metal tablets, and Luvian in stone".

It follows that the whole issue of the function of the Glossenkeil is relevant for discussing scribal attitudes toward foreign words, but not the status of Luvian in Hittite society at large. The linguistic peculiarities of New Hittite texts other than scribal artifacts must be tackled without reference to their orthography. One may, however,

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[103] See Langslow 2002: 39-41 for the discussion of how the notion of situational code-switching can be applied to written texts.

assume that the presence of Luvian foreign words in a written version of such a text indicates that they were already present in its oral prototype. This information provides the only available linguistic input for discussing the attitude of the Hittite elites toward the Luvian language.

We do not need to be surprised at the large number of Luvian integrated borrowings in New Hittite. We have seen that the contacts between Hittite and Luvian date back to the prehistoric period, and already the Old Hittite language features a significant number of Luvian loanwords, including those pertaining to the sphere of religion and social order (cf. Melchert 2005: 53). The extension of this group in a later period may simply correlate with the larger corpus of available texts written in the Middle Hittite and New Hittite ductus.

It is more difficult to find the motivation for the liberal use of Luvian foreign words in New Hittite texts reflecting the speech of high officials. The sentences below are taken from the texts attributed and probably belonging to three Hittite kings: Mursili II, Muwatalli II and Hattusili III. All of these examples feature verbal forms endowed with distinctly Luvian inflectional endings (1 sg. *-ha* and 3 sg. *-tta*). There are no assured examples of Luvian foreign words in the Old Script corpus and only eight or nine Middle Script tablets containing such forms, one half of which are texts of Kizzuwatna origin (van den Hout 2005: 230).

(201) KUB 14.8 obv. 22-24, CTH 378.II, Lebrun 1980: 205
nu=smas mahhan *ABU=YA* apēl [DUMU-*Š*]*Ú* piēsta n=an mahhan pēhuter n=an=kan kuēnnir *ABU=YA*=m[a] ⌜kappilazzatta n=as *INA* KUR Mizri pait
'When my father had given them his own son, and when they had led him away and killed him, my father *became angry* and went to Egypt'.

(202) KUB 6.45 iii 50-53, CTH 381, Singer 1996: 22-23
handan=wa ^{d}U pihassassis EN-*YA* nepisas LUGAL-us UN-an kanista nu=war=an ˹kulānitta nu=war=an=kan assanut nu=war=an=kan mēhunas arnut
'Truly the Storm-god *pihassassi*-, my lord, king of heaven, has honored the man, has *perfected (?)* him, has provided for him, and has brought him to (good) times'.

(203) KUB 1.1 i 25-27, CTH 81, Otten 1981: 6
nu=mu ŠEŠ-*YA ANA* GAL *MEŠEDIUTTIM* tittanut KUR UGU=ya=mu maniyahhanni piesta nu KUR UGU-*TI* ˹tabarha
'(Then) my brother appointed me to the position of Head of Bodyguards and gave me the Upper Land to govern. And I *ruled* the Upper Land'.

The examples adduced above provide compelling evidence for widespread Hittite-Luvian bilingualism among the ruling classes of the Hittite Empire. The Luvian inflectional endings in (201-203) and similar cases are invariably used with the functions that are independently established based on the analysis of genuine Luvian texts as well as Anatolian linguistic comparison. One has to assume that the last Hittite kings and their courtiers were familiar equally well with the inflectional morphology of both languages and could easily establish correspondences between Hittite and Luvian endings.

It is less clear how frequently the Hittites could find the precise lexical counterparts of Luvian foreign words in their own language. One can observe that few of the Luvian lexical insertions occurring in Hittite texts belong to the basic lexicon. Thus the two candidates to the Luvian hundred-word list within this group are *mana*- 'see' and *warwalan*- 'seed'. The former lexeme is limited to one uncertain context (CHD, L-

N: 161b), while the latter is always used in its figurative meaning 'progeny'.[104] These facts speak in favor of the assumption that the Hittite native speakers tended to use Luvian foreign words in those cases when they were dealing with specific concepts whose precise meaning or connotations could not be easily conveyed in Hittite.

The following depends on how we analyze Luvian foreign words in terms of language contact typology. The scholarship on language contact in the contemporary world offers three distinct possibilities. Foreign words can be interpreted as unassimilated borrowings, markers of bilingual code-switching, or markers of "incompetence code- switching".[105] The main functional criterion that allows one to discriminate between the notions of borrowing and code-switching is the degree of use by monolingual individuals. It is assumed that established loans are commonly used by monolingual speakers, whereas code switches tend to be transitory phenomena (Winford 2003: 107). The difference between bilingual code-switching and "incompetence code-switching" lies in the degree of fluency in the matrix language on the part of the bilingual or quasi-bilingual speakers. "Incompetence code-switching" refers to a kind of mixture found in the speech of the persons acquiring a second language (Winford 2003: 108). Formal parameters do not always allow one to distinguish between these three types of foreign insertions, and so social factors must begin to play a role. This

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[104] Note, however, that we are not aware of a Hittite word for 'seed' (an equivalent of the Sumerogram NUMUN) that would be distinct from *warwalan-* . Therefore the distinctly Luvian inflectional forms of this stem may be viewed as an exaptation of an old borrowing.

[105] Here and below, I use the common term "code-switching" for two phenomena to which certain other contact linguists refer by distinct terms "code-switching" and "code-mixing". The latter term is used as a synonym for intrasentential code-switching.

complicates my analysis, but does not make it circular, since a number of sociolinguistic conclusions can already be made based on independent formal tests.

The view that Luvian foreign words in Hittite texts represent unassimilated borrowings has non-trivial sociolinguistic implications. The systematic borrowing of foreign lexical items together with their inflectional morphology in the conditions of intensive language contact is not unheard of, but the source of such borrowings is normally a culturally dominant language. Van Coetzem (2000: 222-28) labels this phenomenon "the extended mode of borrowing", and uses the history of linguistic contacts between Latin and Greek as an illustration of the transition from the "regular" to the "extended" mode. Before the first millennium BC, the geographical distance between Greece and Italy and the lack of stable bilingual communities restricted the number of borrowings from Greek into Latin, and triggered the full morphological adaptation of the borrowed items. By the time of the late Roman Republic the Greek-Latin bilingualism became a common status symbol among Roman elites. Around the same time, literary Latin acquired a cultural status of its own, as compared to the colloquial variety of Latin. One of the ways to mark the "high" language was a large number of Greek borrowings, which preserved, to a large extent, the inflectional morphology of the source language (e.g. acc. sg. f. *-en* for the standard *-am*). The use of such forms could be viewed as code-switching on the part of bilingual individuals, but they were borrowings plain and simple for those Romans who had some command of literary Latin, but not the benefits of bilingual education.

The same phenomenon can be observed in English, albeit in a mitigated form. Thus the noun *octopus* has three competing plural forms, *octopodes*, *octopi,* and

octopuses, reflecting the etymological Greek plural, the adaptation to the semi-productive class of nouns in *-us* of Latin origin, and finally the standard English pattern. The first of the three forms is now regarded as formal to the point of being pretentious, while the third one is colloquial. The formal plural endings borrowed from the classical languages began to penetrate the English lexicon in the Renaissance period, and reflected the assumed familiarity of the elites with the languages of a valued cultural tradition. Nevertheless, they are not indicative of code-switching since the upper classes of English and American society never acquired a native-like fluency in Latin or Greek.

If we extend the same type of analysis to Late Bronze Age Anatolia, this would amount to claiming that the cultural prestige of the Luvian language was steadily increasing in the Empire period, and this resulted in the growing number of unassimilated Luvian borrowings. This would further imply that certain Hittite native speakers remained monolingual in the thirteenth century BC, but learned Luvian inflectional morphology in order to correctly use the borrowed words that characterized the formal/ literary style. There is nothing impossible about such an assumption from a purely historical point of view. Just as the Roman conquest of Greece boosted the contacts between the two civilisations and exposed the upper classes of Roman society to Greek cultural heritage, so the annexation of Kizzuwatna and Arzawa could open to the Hittites the opportunities of better appreciating Luvian high culture.

Unfortunately, linguistic data do not lend support to such a hypothesis. In those cases when the Indo-European languages exhibit the extended mode of borrowing, the

foreign words are normally compartmentalized in the nominal system.[106] The Luvian examples (201-203) and similar cases plainly contradict this tendency. On the other hand, the extended mode of borrowing frequently goes hand in hand with the prestige-driven phonological adaptations within the inherited stratum of the lexicon. Thus, Greek influence on literary Latin brought about the spread of the borrowed phoneme /x/ to genuine Latin words, as notably in *pulcher* 'beautiful'. The Renaissance fascination with Latin resulted in the reemergence of the etymological *-l-* in *fault*, *assault* and several other Middle English borrowings from medieval French, first in writing and subsequently in pronunciation. We have seen in 6.2.5 that New Hittite appears to display the opposite tendency, namely the proliferation of *e*, as a marker of "Hittitehood", at the expense of the etymological *i*.

Neither do we have evidence that Luvian enjoyed cultural dominance in the kingdoms of Arzawa and Kizzuwatna any more than it did in Hatti in the Middle Hittite period. I have argued in 5.7 that Luvian represents an unlikely candidate for a chancellery language at the court of Kummanni. We have seen in 3.4 that Egypt and Arzawa exchanged Hittite cuneiform tablets when the two powers were discussing a possible marriage alliance, but no Luvian tablets from Arzawa are available to us. The case of Hatti and Luvian-speaking kingdoms was clearly not that of Rome and Greece, and it is more than a mere coincidence that the Hittite tablets do not contain any

[106] Some random examples in addition to those cited above are Latinate genitives in *–i* in German (*Christi Geburt*, *St. Petri Kirche*), indeclinable nouns of French origin in Russian (*kafe* 'café', *kabare* 'cabaret'), and foreign plural markers in Persian and Albanian borrowed respectively from Arabic and Turkish.

statements comparable to Cicero's *vincebamur a victa Graecia*, which he made with reference to Greek verbal art.[107]

Finally, the claim about the existence of unassimilated Luvian borrowings in New Hittite methodologically depends on the existence of Hittite monolingual speakers in Hattusa in the thirteenth century BC. An attempt to answer this question by linguistic analysis at this point would inevitably lead to circular reasoning, but one may legitimately wonder if thirteenth-century Hattusa, covered as it was with Luvian public monuments, provided an appropriate habitat for Hittite monolinguals.[108] The cumulative weight of linguistic and sociological arguments that militate against the theory of Luvian as a culturally dominant language makes me discard the hypothesis of Luvain unassimilated borrowings.

The theory that Luvian foreign words reflect in some cases "incompetence code-switching" has more to recommend itself. It is certainly reasonable to assume that not all the authors of Hittite texts found in Hattusa were native speakers of Hittite. It is particularly likely that most of the authors/compilers of Kizzuwatna rituals, which worked in Southeastern Anatolia before its annexation to Hatti, spoke Hittite as L2. The analysis of a ritual for a pregnant woman attributed to a female ritual practitioner Pittei

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[107] Brutus 73.254. This statement, of course, does not deny the existence of Luvian verbal art, for some aspects of which see Melchert 2006. There is, however, no positive evidence that the Hittite speakers considered it worthy of imitation.

[108] It is, of course, possible that Hittite remained the only spoken language in certain provincial areas of the Empire, at the time when it was losing ground in Hattusa. It is equally, possible, however that the kind of Hittite spoken in such an environment lacked Luvian foreign words.

yields a convincing case of code-switching practiced by a Luvian native speaker in the Empire Period.

(204) KUB 44.4 rev. 22-24 + KBo 13.241 rev. 10-12, CTH 767.7 (LNS), Beckman 1983: 178
EME.HI.A EME.HI.A kuwapi=wa paitte[ni] ^{NA4}piruni ≈**palhuna** pāiweni A GAM AG NI *ANA* ^{NA4}ZÚ ˹duwarnuma[nzi p]āiweni UR.MAH GIŠ-ruanzi KI.MIN UR.BAR.RA ≈**patalhauna** KI.MIN ≈**zammanti** DUMU.NITA **lalauna** KI.MIN
'Tongues, tongues, where are you going? We are going to split[?] the rock … we are going to break the obsidian, we are going to cage[?] the lion, we are going to fetter[?] the wolf, we are going to seize[?] the *zammant* male child '.

The draft quality of the one-column tablet KUB 44.4 is clear from the fact that the reverse of this tablet is written upside-down in relation to the text on the obverse, while CTH 767.7 occupies the upper and the lower part of the reverse, being interrupted by three lines belonging to the obverse text (CTH 520). These epigraphic facts correlate with numerous scribal errors and with a truly prodigious quantity of Luvian foreign words, most of which are accompanied by gloss marks. The incantation under discussion contains an equal number of Hittite and Luvian lexemes (the latter are set in bold script). It contrasts with similar incantations attested in a different ritual, which likewise show a degree of Luvian influence (the infinitive *lalawanzi* is derived from Luv. *lala-* 'to seize'), but are fully adapted to the Hittite morphological norm.

(205) KUB 12.62 obv. 10-12, CTH 338 (NS), Beckman 1983: 192
˹EME˺-as EN-as kuwapi pāsi ˹KASKAL-si karipuwan[zi pāimi]. UR.MAH
tarwauwanzi pāimi alili waršuwanzi pāimi DUMU.<LÚ>.U_{19}.LU lalauwanzi pāimi
'Tongue, milord, where are thou going? I am going to devour the road, I am going to cage[?] the lion, I am going to snatch the *alili*-bird, I am going to seize[?] the human'.

(206) KUB 12.62 rev. 3-4, CTH 338 (NS), Beckman 1983: 192
EME EN-as kuwapi pāsi HUR.SAG-i arauwanzi pāimi hāriya appanna pāimi KASKAL-ši karipuwanzi pāimi
'Tongue, milord, where are thou going? I am going to restrain the mountain, I am going to take the valley, I am going to devour the road'.

This situation can be compared with the alternation between Hittite and Luvian incantations within the Kizzuwatna ritual tradition (see e.g. Laroche 1959: 147-50 on CTH 760). One has every reason to assume that in the latter case the Luvian incantations go back to the oral folklore of the native Luvian speakers, while their Hittite adaptations should be studied within the context of scribal language manipulation. Following the same logic, one may hypothesize that CTH 767.7 was recorded from a Luvian native speaker, who tried to communicate in broken Hittite, while CTH 338 represents a Hittite artifact containing the adaptation of Luvian folkloric elements. Alternatively, one may view CTH 767.7 as a first draft of a translation from Luvian into Hittite, while CTH 338 represents a well-edited version of such a translation. This does not, of course, mean that CTH 338 needs to be directly based on CTH 767.7, since similar incantations may have been recorded several times under different circumstances, or even adapted in the Hittite environment before being recorded. But I do not see plausible reasons why a Hittite native speaker would sprinkle a familiar Hittite incantation with Luvian foreign words, and then dictate it to a scribe at the Hittite court.

The ongoing process of translating Luvian passages into Hittite can be independently confirmed through the example below featuring an incantation against

illness that must be uttered *lūli* 'in Luvian'.[109] We know that the majority of *lu(wi)li*-passages embedded into Hittite texts do contain Luvian sentences. The earlier compiler apparently recorded the incantation in its original language in order to preserve its efficacy. A later editor, however, translated its text into Hittite but left the tag *lūli*, either by omission or in hope that the practitioners would translate this incantation back into Luvian. Yet he found himself unable to render in Hittite the difficult word *wašummaniyaulinzi* and mechanically carried it over from the underlying Luvian version.

(207) KBo 12.100 i 3-7, CTH 765.3 (LNS), Laroche 1973: 181
[n]=an lūli kišan hukkiskizzi [M]āla=kan ÍD-i MUŠ.HI.A *IŠ-TU* KUN.HI.A-*ŠUNU* hameinkantat [MU]NUS.MEŠ **wašummaniyaulenzi** anda ^{SÍG}dūtiya hamengantat *ATHUTIM* anda ^{TÚG}seknus hamengantat
'One starts conjuring him thus in Luvian: "The snakes were bound together by their tails in the Euphrates, the *w*.-women are together in the *dudi*-, the brothers are bound together in their robes…" '.

Th. van den Hout turns my attention to an additional case of incomptetence code-switching attested in a direct speech passage embedded into the Tunnawiya ritual (CTH 409). HEG, T: 365-66 discusses alternating collocations KUB 7.53 ii 13 *ti-ya-ni-eš-* ⌜*šu*⌝*-i e-la-ni-eš-ki-mi* and KUB 7.53 ii 17 *ti-ya-ni-eš-ki-mi e-la-ni-eš-ki-mi* referring to a certain magic act (the reading *-šu-i* is confirmed through the duplicate the duplicate KUB 39.65). He indicates that in the first case the Luvian 1sg. verbal form ending in *-wi* is juxtapposed with a Hittite 1sg. verbal form ending in *-mi*, whereas in the second case both forms are Hittite. The Luvian incantation KUB 12.58 i 34-35 embedded in the

[109] Contra CHD,L-N: 73b, I am not convinced that the writing *lu-ú-li* must be taken as a scribal error for *lu-ú-i-li*. A genuine syncope in this adverb is, in my opinion, also possible. Compare the alternating stems *Lu-ú-i-ya / Lú-ya* in the Old Script version of the Hittite Laws (Hoffner 1997: 355).

ritual suggests that Tunnawiya was a native speaker of Luvian, while the structure of the name Tunnawiya "woman from (the city of) Tunna" indirectly supports this hypothesis, since Tunna was located in the Lower Land (Miller 2004: 453 with ref.). It appears that Tunnawi (or a person responsible for the compilation of her ritual), has unadvertedly inserted a Luvian form into her/his imperfectly learned Hittite, but retroactively corrected this slip at her/his first opportunity.

Thus we have seen that "incompetence code-switching" had its place in New Hittite literary culture. I would be skeptical, however, toward the hypothesis that it can account for all the instances of Luvian foreign words in New Hittite texts. It is not possible to prove that the speech of any part of the Hittite elites, as reflected on clay tablets, would show no foreign words. Such a claim, therefore, would amount to saying that the elites in Hattusa were losing their ability to generate cohesive discourses in Hittite in the Empire period. On the assumption that Hittite was a culturally dominant language in Hattusa, the most privileged part of Hittite society would be the last one to give it up. Should one then assume that thirteenth century Hittite was a mere language of tradition, learned for official purposes as L2, but not native to anyone in Hattusa?

Linguistic evidence does not lend support to such a claim. We have seen that a number of non-trivial phonetic and morphosyntactic changes that occurred in the history of New Hittite militate against the hypothesis that this was a language devoid of native transmission.[110] The fact that Hittite and Luvian appear side by side in scribal glosses to Akkadian texts is likewise not conducive to accepting this hypothesis. Nor is it logically

[110] Cf. Melchert 2005: 258.

necessary. Code-switching, as such, need not always reflect imperfect language learning, and L1 can be retained as a matrix language in a situation of "voluntary" code-switching. The only necessary linguistic prerequisite for this behavior is widespread bilingualism in a particular community. It is inevitable that even a fully bilingual individual, no matter how perfect his/her command of both languages is, will find himself able to convey certain meanings more idiomatically in each of the two codes. When the social setting dictates the use of a different code, three options are in principle available: one can resort to foreign words and expressions, integrated borrowings, or paraphrases for rendering the problematic concepts. The choice between these three options will depend on the structural compatibility between the two languages and on the social attitudes of particular individuals and of the community as a whole.

Limited code-switching, or the use of foreign words, appears to represent an unmarked choice in a bilingual setting in comparison with the other two options, at least in those cases when both linguistic identities are positively valued.[111] Assimilated borrowings and paraphrases normally come into play when code-switching is inhibited by either linguistic or social constraints. It has been claimed that linguistic constraints on code-switching have to do with the morphosyntactic incompatibility between the two languages, although the way this incompatibility should be defined remains a subject of

[111] I confess that I have not seen this principle formulated in such a way in the sociolinguistic literature available to me. My conviction about its validity is largely based on personal experience. Russian students and young professionals living in the United States of America, especially those with a background in the sciences, frequently use English as an embedded language in interpersonal communication. Code-switching normally occurs when a conversation addresses concepts that are perceived as alien to Russian culture or the Russian experience of interlocutors. Resorting to assimilated borrowings or paraphrases in such a situation may look humorous or pretentious.

much debate. This argument, however, does not need to concern us for the purposes of the present discussion, since Hittite and Luvian have the same basic word order and a very similar inventory of formally expressed grammatical categories. It is clear that in this particular case the syntactic analysis of a mixed sentence does not create additional difficulties, and therefore the absence of linguistic constraints on code-switching represents an easily predictable result.

The social constraints on code-switching manifest themselves most clearly when bilingual speakers view asserting a particular linguistic identity as one of their communication goals. Thus educated native speakers of Flemish, who are also proficient in English and French, frequently speak English with the Walloons, and view it as a more appropriate strategy of neutrality than switching between Flemish and French. The same speakers tend to switch to their mother tongue when they answer a question that they perceive as ethnically threatening, even if the communication occurs in a bilingual setting (Winford 2003: 122 with ref). This behavior must be studied within the context of the general sociolinguistic situation in Belgium, where Flemish failed to achieve an equal social status with French until the twentieth century, but now is officially used in the same functional domains as French.

There are no reasons to think that the Hittite elites considered themselves threatened by the spread of Luvian. We have seen that the Luvian language had its place in the Hittite state cult already in the Old Kingdom and was used in palace administration already in the Middle Hittite period. At the same time, Hittite remained associated with higher social status in the thirteenth century BC, as the continuum of its imperfect learning by Luvian scribes clearly illustrate. The creation of the Hittite Empire

may have changed the quantitative proportion of Hittite and Luvian speakers, but it did not result in the shifting balance of power. The sociolinguistic situation in modern Belgium, Quebec, or Estonia, where this balance has been radically changed or reversed, does not provide a suitable parallel to our case.

So far I have been trying to avoid the question of whether code-switching in Hittite texts represents a "marker of solidarity". Rather unsurprisingly, sociolinguists tend to focus on those instances of code-switching that require sociological explanations. Thus Southworth (1980: 139-40) tentatively formulated the following rule that governs communication in South India: "If a person who is an ethnic speaker of language X is a participant in an interaction, then other participants who know X will exhibit some structural switching into X. Not to do so would be considered standoffish. The rule would seem to apply regardless of the relative status of the two participants involved". It follows from this description that code-switching represents a sort of politeness strategy. A different pattern is discussed in Myers-Scotton 1993: 117-25. In many African countries, there are large groups of Native Africans that are fully bilingual in the former colonial languages, which continue to be identified with upward social mobility. Intrasentential code-switching evolves here in a type of group-internal interaction, in which bilingual speakers wish to make salient their two positively valued linguistic identities, and thus it can be viewed as a display of social exclusivity. In both cases, however, we are dealing with deliberate choices of an embedded language, which are largely unrelated to the content of communication and express solidarity between the interlocutors.

One cannot *a priori* exclude that the Hittite elites resorted to particular linguistic strategies in order to express alleged solidarity with the Luvian-speaking masses. But could the Hittite court gain much popularity by inserting Luvian words into Hittite documents that were primarily meant for its internal use, such as depositions and oracular inquiries? If anything, reasons of group-internal solidarity would dictate avoiding code-switching with Luvian, which may have been taken as indicative of imperfectly learned Hittite, in such a setting. Neither does linguistic analysis plead in favor of solidarity-driven intrasentential code-switching. Embedded foreign words need to occur frequently enough in a discourse in order for them to be perceived as solidarity tags. The Luvian nouns and verbs, occurring one per paragraph or even less frequently in New Hittite annals and royal decrees, clearly failed to fulfill this function.

I suggest that the bilingual code-switching observable in most Late Hittite texts represents a natural product of the bilingual Hittite-Luvian environment, where both linguistic identities were positively valued, but did not enjoy equal prestige. The choice of Hittite as a matrix language reflects its socially dominant position. In those cases where Hittite was not sufficient to render the intended nuances of meaning, the Luvian language was used. In other words, this was convenience-driven rather than solidarity-driven code-switching. Below I will try to show how this basic assumption can account for the use of Luvian foreign words in (201-203). I hasten to add that my explanations do not have a probative status, but merely represent possible scenarios of bilingual code-switching, which was independently argued for on sociolinguistic grounds.

The Luvian verb *kappilazza-* '~ to become angry' used in (201) is apparently cognate with the possessive adjective *ka-pi-la-li-* 'belonging to an enemy', which

appears in the Iron Age Hieroglyphic inscription TELL AHMAR 1, § 24 (Hawkins 2000: 241). Based on this comparison, one can reconstruct the noun **kappila-* 'enemy, evil-wisher (vel sim.)' and hypothesize that Luv. *kappilazza-* had a specific meaning 'to wax wrath, to become angry to the point of being hostile'. This semantic nuance, of course, matches well the context of (40), where Suppiluliuma I's anger leads to a military expedition against Egypt. It is possible Mursili II deemed that the ordinary Hittite verb *kartimmies-* 'to become angry' was not expressive enough for the given context, and therefore resorted to its more forceful Luvian synonym. [112]

The Hittite word for "ruling" or "governing" is *maniyahh-*/*maniyahhai-* (CHD, L-N, 165-66, 168-69). In (203) it is used together with its Luvian equivalent *tabar-*. The latter stem, however, must have had quite distinct stylistic connotations as a cognate of the Hittite royal title *tabarna-*/*labarna-*. Hattusili III, who ascended the throne as a result of a coup d'état, had obvious reasons to stress the legitimacy of his rule in his public discourse. The Luvian term *tabar-* was more suited to this aim than its stylistically neutral Hittite equivalent.

The Luvian verb *kulani-* does not have an established Hittite equivalent. Melchert (1993: 106) glosses this word as 'bring to (a successful) end'. The context in (202) indicates that we are dealing with a favorable action carried out by a god on behalf of the humankind, while the same lexeme used in KBo II 7 rev. 22 clearly means 'to finish, complete' (Carter 1962: 101). I suggest that we are dealing here with a kind of

[112] Melchert (2005: 457) indicates that Mursili II cites the anger of his father Suppiluliuma I in a first person quote as: *nu=mu kartimmiyaz [kisat]* (KBo 14.12 iv 5). It is possible that Mursili II, or the sribe responsible for the editing "Deeds of Suppiluliuma" knew enough in order not to attribute code-switching to this Hittite king.

polysemy known from Lat. *perficere* ‘to finish, accomplish, perfect’. I am not aware of any Hittite verb that would display the same range of meanings, and so the author of CTH 381 may have decided to resort to a Luvian foreign word for purely semantic reasons. As mentioned above in Section 6.4.2, the preservation of ⸗*kulaniitta* as a marked word in the edited version KUB 6.45 seems to indicate that the senior scribe viewed it as stylistically inappropriate, but did not have anything better to replace it with.

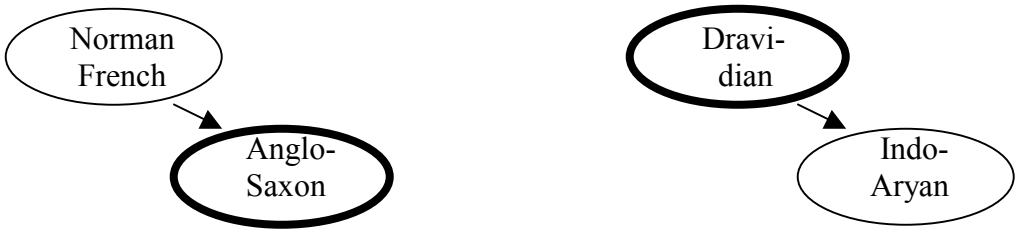
The dearth of linguistic research on convenience-driven code-switching in bilingual environments may reflect the perception of this phenomenon as something trivial to the point of banality. Nevertheless, this type of linguistic behavior must be addressed seriously when it serves as a basis for establishing bilingualism in a particular community. In our case, it appears to indicate that the ruling classes of the Hittite Empire had not only mastered the basics of Luvian grammar, but would use Luvian in order to convey fine shades of meaning that they would not know how to express in the Hittite language.

6.5 Typological Interpretation. The fundamental opposition between the two modes of transfer in language contact is that of borrowing vs. imposition. Both types of transfer suggest a degree of knowledge of both the source language and the recipient language, but borrowing normally occurs when the recipient language is linguistically dominant, i.e. more familiar to a particular individual, whereas imposition occurs in the opposite situation. Another way to refer to the same dichotomy is to say that borrowing

occurs under conditions of recipient language agentivity, whereas imposition occurs under conditions of source language agentivity. As a consequence, borrowing primarily affects the less stable components of the recipient language, while imposition primarily affects the more stable ones (cf. van Coetsem 2000: 60, 62).

A pair of juxtaposed examples may help to clarify this fundamental opposition. It is well known that the contacts between Normans and Saxons in medieval England resulted in a borrowing of numerous French lexical items into English, whereas the contacts between the Aryan invaders and the native Dravidian population in Bronze Age India resulted in the imposition of Dravidian phonological and grammatical features upon Indo-Aryan. In the first case, the agents of the change must have been the speakers that were more proficient in the recipient language (Anglo-Saxon) than in the source language (Norman French), while in the second case, the change must have been introduced by the individuals who were more proficient in the source language (Dravidian) than in the recipient language (Indo-Aryan). In the figure below the transfer agents are marked by the highlighted ovals.

Figure 5: Borrowing (left) vs. Imposition (right)



In the prototypical case, borrowing occurs in a situation of language maintenance, while imposition occurs in a situation of language shift. Thus the Anglo-

Saxons were able to maintain their own language, even though they borrowed a number of French words for reasons of prestige, whereas the bulk of Dravidians in Northern India abandoned their mother tongues and shifted to Indo-Aryan. This correlation prompted certain scholars (e.g. Guy 1990: 48) to claim that the agency of native speakers vs. second language learners defines the opposition of borrowing vs. imposition. There are, however, reasonably clear instances when contacts in a situation of language maintenance trigger heavy structural changes in natively transmitted dialects. The case in point that has perhaps caused more discussion in scholarly literature than any other one is the Turkish structural influence on certain dialects of Asia Minor Greek, which is discussed in Thomason and Kaufman 1988: 215-22. Although the inhabitants of small Greek enclaves in the middle of the Ottoman Empire managed to keep their mother tongue, they had to use Turkish each time they conducted business outside their communities. Under such circumstances, one can hypothesize that a large number of Greek native speakers were bilinguals. Several centuries of stable bilingualism resulted in the imposition of Turkish structural features upon the local variety of Greek. In particular, one can observe the replacement of the inherited inflectional paradigm of nominal declension with an agglutinative pattern in the Cappadocian dialect of Greek.

Instances of lexical borrowing in a situation of language shift have likewise been identified. Thus the Bayaka pygmies of the Central African Republic adopted a Bantu language from their neighbors, but their language Aka retains many indigenous lexemes that have direct cognates in genetically unrelated languages spoken by other pygmy population groups (Duke 2001). The Malol dialect of an Austronesian language Sissano

retains words for ‘dog’ and ‘coconut’ that do not occur in the other Sissano dialects. Oral history indicates that the speakers of Malol descended from (Papuan) One speakers, who fled the coast during a communal dispute and settled in a Sissano-speaking village (Ross 1991: 124). Both the Malol and the Aka speakers presumably retained the vocabulary items of their genetic ancestors as a badge of identity, but from the synchronic point of view these retentions are not any different from ordinary loanwords.

The refined set of correspondences between the varieties of language contact events, their causes, and their results, reflected in Table 47 below, is adapted from Ross (1991: 127). Our present task is to determine how the linguistic contacts between Hittite and Luvian in the Empire period fit within this classification.

Table 47: Types of Transfer in Language Contact

	Borrowing		Imposition	
Dominant lang. of bilinguals	Recipient language		Source language	
	I	II	I	II
Agents of change	**Native speakers**	**Non-native speakers**	**Non-native speakers**	**Native speakers**
Reason to adopt change	**Prestige**	**Emblematicity**	**Imperfect learning**[113]	**Communicative simplicity**
Motivation to resist change	**Emblematicity**			**Emblematicity**
Domains of transfer	**Words, Morphemes**	**Words**	**Phonology, morphosyntax**	**Morphosyntax**
Examples	**Norman French > Anglo-Saxon**	**“Pigmy” > Aka**	**Dravidian > Indo-Aryan**	**Turkish > Asia Minor Greek**

[113] According to Ross 1991, the motivation to adopt changes in the case of Imposition I is communicative need. This is, however, a clear logical mistake. Communicative need provides the rationale for language shift, while imperfect language learning accounts for imposition effects in L2.

We have seen that Luvian assimilated loanwords in New Hittite continue the trend that could be already observed in earlier periods (cf. 5.3). It is difficult to say how many of them were borrowed after the mid-fourteenth century BC, as opposed to simply not being attested in texts from earlier periods. The qualitatively new phenomenon in the area of lexical contacts, which is but scarcely attested in Middle Hittite, is intrasentential code-switching practiced by Hittite native speakers (6.4.4). Code-switching, unlike borrowing, requires an advanced degree of bilingualism in a linguistic community, and so one can conclude that Hittite monolinguals or near-monolinguals were uncommon in Hattusa in the Empire period. This implies, in its turn, that Hittite was no longer a linguistically dominant language in this place and time, and so one cannot talk about recipient language agentivity.

Among the few examples of intrasentential code-switching that one can glean from Middle Script texts, about one half are found in texts that originate in Kizzuwatna, and only one (*akkurriyai)* belongs to a text emanating from the Hittite court (van den Hout 2005: 230). It is reasonable to conclude that code-switching originated in the Luvian-speaking milieu and penetrated first official Hittite texts in the context of imperfect second language acquisition. Only in a subsequent period did the Hittite native speakers borrow this strategy, which they no doubt found useful in communicating with their Luvian subjects. The social motivation for Old Hittite borrowing and New Hittite code-switching must have been very different.

Thus one can see that the classical scenario of Borrowing I, which must have characterized the contacts between Hittite and Luvian in the Colony period, was no

longer applicable to the Hittite Empire.[114] Consequently, one cannot claim that Luvian lexical items continued to enjoy special prestige during this period, even though one can suppose that the ruling elites of Hatti regarded Hittite-Luvian bilingualism as an important asset. As for the attitude toward mixing the two codes, it was defined not by nationalistic sympathies or concerns, but rather by one's educational background. The professional scribes regarded intrasentential code switching as mildly annoying (6.4.3), while the other Hittite speakers were ready to switch codes for convenience reasons (6.4.4).

A number of morphosyntactic innovations of New Hittite can be safely defined as imposition effects. I have tried to show, however, that many of them are far too creative to resemble changes imposed upon a language without native transmission. This holds in particular for the New Hittite redistribution of *–es* and *–us* endings in nom./acc. pl. c. (6.3.2) and for the selective pattern of clitic reduplication in New Hittite (6.3.5). Thus one has to conclude that the basic transfer type responsible for these innovations was Imposition II rather than Imposition I. The absence of clear imposition effects on standard New Hittite phonology squares well with the theoretical prediction about the domain of transfer in the case of Imposition II.

There are, however, other facts indicating that Imposition I likewise played role in the development of New Hittite. A number of its non-standard grammatical features,

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[114] Van Coetzem 2000 uses the term "neutralization" with reference to a contact situation that cannot be defined either in terms of source language agentivity or in terms of recipient language agentivity, since the respective speech community is symmetrically bilingual. It is not clear to me whether the notion of "neutralization" can be applied to the conditions of asymmetrical bilingualism, similar to those discussed in the present chapter.

such as nominal mutation stems (6.3.1) or plural accusatives in *–(y)as* (6.3.4) receive the simplest explanation when taken as indicative of imperfect learning on the part of Luvian native speakers. On the other hand, we have abundant evidence for puristic correction, including hypercorrection, in New Hittite texts. The clearest instance of this tendency is the use of the first person pronoun *uk* alongside *ammuk* (6.3.3), while the lexical diffusion of *e* at the expense of *i*, if indeed contact-induced, illustrates the unusually broad scope of this phenomenon (6.2.5).

I have tried to resolve this paradox by introducing a two-step analysis. The continuum of interlanguages reflecting the imperfect learning of Hittite by Luvian native speakers must be studied within the framework of Imposition I. The selective adaptation of imperfectly learned structural features into the natively learned variety of Hittite must be described as Imposition II. The main difficulty of this analysis lies in the necessity to reconstruct certain traits of Hittite learned as L2 that are scarcely attested in the available texts, for example the systematic substitution of *i* for the etymological *e*. This difficulty, however, need not make my analysis less credible. We know that phonological interference, i.e “accent”, represents the stereotype of imperfect language learning. The pupils coming from a Luvian-speaking background could get away with confusing nominal stems, but the Luvian accent was probably viewed as incompatible with high administrative positions. On the other hand, certain Hittite native speakers may have attempted to distance themselves from the Luvian accent by hypercorrecting in doubtful cases, a trait that could then be imitated by others as a mark of elegant pronunciation.

The combination of Imposition I and Imposition II probably underlies the majority of the language contact cases that historical linguists usually treat within the

framework of Imposition I. Among the speakers of modern Indo-Aryan or Ethiosemitic languages, there are not only the descendants of Dravidian or Kushitic speakers, but also the scions of Aryans and Semites who imposed their language upon the indigenous population of the respective areas. More recent results of Imposition I followed by imposition II are certain partially restructured vernaculars, such as Afrikaans or Brazilian Portuguese.[115] Our case, however, has at least two distinct peculiarities. First, we are fortunate to be able to identify a particular language that triggered the majority of contact-induced changes in New Hittite. Second, the acquisition of Hittite by Luvian native speakers was accompanied by the symmetrical acquisition of Luvian on the part of the Hittite-speaking elites.

The reasons for these two symmetrical processes must have been very different. The Luvian adults strove to learn Hittite in order to improve their social status. The Hittite native speakers could not help learning Luvian in their childhood because it dominated on the streets of Hattusa. Only the first process, but not the second one, was bound to result in the continuum of imperfect language learning. In addition, the periphery of Luvian monolingual speakers was able to resist whatever interference features the contact with Hittite may have imposed. This is why the Luvian influence on Late Hittite is far more significant than the Hittite influence on the Iron Age Luvian.

If one assumes that the elites of Hatti were fully bilingual, then the reason for maintaining the Hittite language in the capital was not communicative necessity, but

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[115] For the recent detailed treatment of partially restructured vernaculars see Holm 2004. The concise discussion of the sociolinguistic situation that led to the creation of Afrikaans can be found already in Thomason and Kaufman 1988: 251-56.

rather emblematicity (group solidarity). The same must have been the motivation for maintaining the "proper" Hittite accent, while the morphosyntactic structure of the language was predictably more receptive to the effects of Imposition II. One may hypothesize that, after the Hittite kings had to abandon the capital in the early twelfth century BC and move to an area that was historically Luvian-speaking, the critical mass of Hittite native speakers necessary for the group self-identification ceased to exist, and the royal family shifted to Luvian within two or three generations. This does not, of course, exclude the theoretical possibility that Hittite continued to be natively transmitted for many more centuries in certain other areas that had not experienced the impact of massive Luvian migrations.

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