CENTRAL ANATOLIAN LANGUAGES AND LANGUAGE COMMUNITIES IN THE COLONY PERIOD : A LUWIAN-HATTIAN SYMBIOSIS AND THE INDEPENDENT HITTITES*

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1. *Introduction and preliminary remarks*

This paper is the result of the seemingly innocent question "Would you like to say something on the languages and peoples of Anatolia during the Old Assyrian Period". Seemingly innocent, because to gain some insight on the early second millennium Central Anatolian population groups and their languages, we ideally would need to discuss the relationship of language with the complex notion of ethnicity.[1] Ethnicity is a subjective construction which can only be detected with certainty if the ethnic group has left information behind on their sense of group identity, or if there is some kind of ascription by others. With only the Assyrian merchant documents at hand with their near complete lack of references to the indigenous peoples or ethnic groups and languages of Anatolia, the question of whom the Assyrians encountered is difficult to answer.

The correlation between language and ethnicity, though important, is not necessarily a strong one: different ethnic groups may share the same language, or a single ethnic group may be multilingual. Even if we have information on the languages spoken in a certain area, we clearly run into serious difficulties if we try to reconstruct ethnicity solely based on language, the more so in proto-historical times such as the early second millennium BCE in Anatolia. To avoid these difficulties I will only refer to population groups as language communities, without any initial claims about the ethnicity of these communities.

Hittite and the other Anatolian Indo-European languages were spoken in an area that also hosted languages from other language families, such as Hattian and Hurrian. Since the populations using those languages did not live in isolation, we may expect that these languages influenced one another to a certain degree, depending on the nature and intensity of contact. Unlike ethnicity, which requires other textual evidence than is currently available to us for the period under discussion, language contact and influence is something that can be studied independent from the content of the available documentation. The type of language contact that can be deduced from these texts, such as vocabulary replacement and grammatical influence, tells us something about the linguistic situation in the pre-literate period. And once we have gained some insight in the linguistic contact situation, we can reconstruct an outline (but no more) of the

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[1] For ethnicity in ancient societies, see especially Emberling 1997 and Van Soldt 2005.

sociopolitical situation that might have caused this linguistic situation. Adding archaeological evidence might then eventually lead to a reconstruction of ethnic groups.

One of the language contact situations that has generated much scholarly discussion, is the interaction between Hattian and Hittite. Around 2000 BCE, the situation encountered by the Assyrians, the Hattians lived in the area that became the core land of the later Hittite kingdom and Empire. So unless we assume that the Hattians were annihilated when the Hittites began conquering this area in the 18th century BCE, the languages of especially these two population groups are expected to have influenced each other, at least from that moment onward.

Until now, all attention has been directed towards the influence of the alleged substrate Hattian on Hittite, but surprisingly no one —as far as I know— has ever considered the reverse: possible influence of Hittite or another Anatolian Indo-European language as a substrate of Hattian. If one can build a case for this reversal, then the map of Anatolia of 2000 BCE drastically changes, with some dramatic consequences for the sociopolitical position of the Anatolian Indo-European language communities.

The whole argument of this paper is based on the assumption that the Hattian texts from Boğazköy were not composed by Hittite scribes with only moderate knowledge of Hattian, influencing its syntax, even though it is very likely that Hittite scribes were the first ones to write these texts down. Their unacquaintedness with the phonemes of Hattian may have caused the fluctuations in orthography so often observed in Hattian documents,[2] but I do not expect them to have altered the word order of the texts that were dictated to or copied by them. I therefore assume that the Hattian texts are reflexes of a once spoken language, instead of being a scholarly concoction.

There are a few arguments to support my assumption. The most important one is provided by the bilinguals. As Table 1 shows, almost without exception the word order in the Hittite clauses of the largest bilinguals follows the word order in the Hattian clauses, even when that violates the word order rules for Hittite.[3] This makes it virtually impossible that the Hittite scribes altered Hattian word order: it is Hittite that underwent immediate interference in these texts, not Hattian. What is especially interesting is that the only Old Hittite bilingual text for which the Hattian column can be reconstructed[4] shows a different pattern. Here the Hittite version shows the word order patterns expected for Hittite, even when that opposes the word order observed in Hattian. This again strongly implies that the word order phenomena observed for Hattian are not to be attributed to the Hittite scribes.

Another issue that is related to the question of whether the scribes themselves influenced Hattian syntax is the extent to which Hattian may be considered a living language, still spoken by part of the population, or whether it had become a sacral language, only to be used in certain ritual contexts. In the latter situation we would be dealing with Hattian as a learned language, studied or spoken by native speakers of Hittite at the court.

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[2] For references see fn. 20.

[3] See Kammenhuber 1969: 430 on the "unhethitischen Syntax".

[4] KBo 17.22 (OS), with NS duplicate KUB 28.8+KBo 37.48.

	Hittite translation has same word order as Hattian		Hittite translation has different word order from Hattian	
	against Hittite word order rules	following Hittite word order rules	against Hittite word order rules	following Hittite word order rules
KUB 2.2+KUB 48.1	11	14	—	1
KUB 24.14	—	1	—	1
KUB 28.6	1	2	—	—
KUB 28.8+KBo 37.48 // KBo 37.49	—	4	—	3
KBo 37.1	15	5	—	—

Table 1: Comparison of Hittite and Hattian word order in bilingual texts

There is however some evidence that Hattian was still alive. Soysal mentions two texts outside a purely cultic context which may point at the use of Hattian by people who probably did not belong to the court (Soysal 2004a: 14-16). I would like to add that the actual number of bilinguals is rather low compared to the numerous New Script mono-lingual Hattian texts and Hittite texts with untranslated Hattian parts (see Figure 1; based on Soysal 2004a: 52-68, with dating of the texts following the Konkordanz). It is of course possible that we are yet unaware of translations of Hattian monolingual texts on separate tablets, but it seems to me that knowledge of Hattian was more widespread over a longer period of time than previously assumed.[5] A final observation is that most Hittite translations should probably be dated to Middle Hittite at the earliest, and not to early Old Hittite as Kammenhuber proposed (1969: 430). Hattian was certainly still alive in the Old Hittite kingdom, but for the later period there is simply no positive evidence that it died out, even though it may have been replaced by Hittite and later Luwian as a vernacular.[6]

In all, the word order phenomena of Hattian, which play such an important role in this article, have to be ascribed to speakers of Hattian and not to the scribes.

Past and current views on the situation in Anatolia and Hattian-Hittite linguistic interactions are discussed in section 2 and 3, respectively. In section 4, I will discuss Hattian and Hittite word order phenomena and other linguistic features, and assess the contact situation from a typological point of view. This section on the syntactic and typological description of Hattian, a language which is wholly unknown to many scholars in ancient near eastern studies, constitutes a large part of this article. If one should wish to skip the linguistics of section 4, and focus on the sociopolitical part of my model, I recommend reading only the introduction, which presents the method used to establish language contact and interference (4.1), the initial paragraphs of 4.3, and the conclusion (4.5). In section 5 I will use certain socio-linguistic methods to explain the contact

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[5] See for example Klinger (1996: 756) who assumes that knowledge of Hattian was almost completely lost in the post-Old Hittite period.

[6] For Luwian as a vernacular see Van den Hout 2006.

phenomena as illustrated in section 4 and propose a hypothetical model that might explain the cultural and linguistic situation in the early second millennium. And finally, in sections 6 and 7, I will provide further evidence that hopefully supports my model for the peoples and languages of Central-Anatolia of 2000 BCE. The paper concludes with a few words on the ethnonym *nuwa'um*.
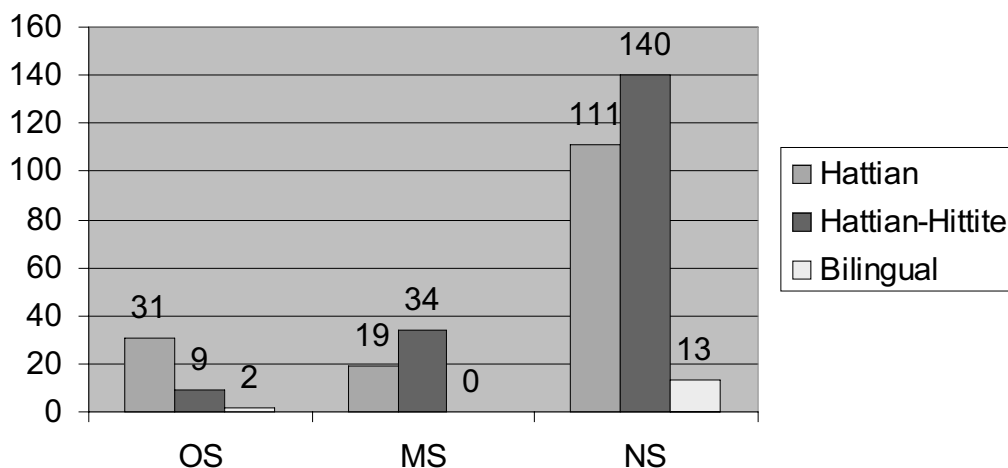
Figure 1: Chronological distribution of Hattian texts, Hittite texts containing untranslated Hattian, and Hattian-Hittite bilingual texts.

2. *Previous scholarship on the ethno-linguistic situation in Anatolia*

From the beginning of Hittitological studies, Hittite has been thought of as a mixed language, as the result of a long symbiotic relationship between an invading Indo-European language and the indigenous substrate language, Hattian. The sociological correlate is, not surprisingly, that of superior aristocratic warriors conquering a peaceful, matriarchal Hattian society. To cite Klinger (1996: 93):

> Vor allem im Bereich der zeitgenössischen Geschichtswissenschaft dominierte das Bild eines aus heiterem Himmel über Kleinasien hereinbrechenden, überlegenen Kriegerstammes.

But even though this social model is generally no longer supported, the linguistic counterpart still exists: the Hittite newcomer becomes the dominant language, or language of prestige, heavily influenced by the conquered Hattian substrate.

Stefanini (2002: 788-789) pictures the following development of the Indo-European languages in Anatolia of the third millennium BCE. The Indo-Europeans that later

became the Anatolians crossed the Caucasus[7] and were therefore first exposed to Hurrian type (i.e., East-Caucasian) languages. At the beginning of the third millennium they entered Eastern Anatolia, spreading out on a substrate of Hattian type (i.e., West-Caucasian) to the North, and again on a Hurrian type substratum to the South. In the course of several centuries the dialect that landed on the Hattian type substrate became proto-Palaic/Hittite, and the dialect that moved more to the South turned into proto-Luwian. To the North and the South-East there remained zones of the unassimilated languages, proto-Hattian and proto-Hurrian respectively.

Then, in the early second millennium when the Assyrians appear on the scene, the proto-Hattian and proto-Hurrian of the unassimilated zones function as adstrata of the Anatolian languages. Besides the language communities that have disappeared without a trace, we find the proto-Hattians in Central Anatolia within the bend of the Kızıl Irmak river.[8] To the South-East of the Kızıl Irmak the proto-Hittites can be located with Kültepe/Kaneš/Neša as one of their main cities,[9] and further to the South and to the West we find the proto-Luwians. The proto-Hittites are therefore wedged between these two neighbours. The South and East further away is the domain of the proto-Hurrians.[10] Whereas most scholars agree that the zone of the Hattians did not extend beyond the Kızıl Irmak bend, Soysal seems to hold a different opinion. He assumes that upon arrival in Anatolia the proto-Hittites integrated in a Hattian society that also included Kültepe. Only around 1800-1750 BCE the Hittites gained control with the conquests of Pitḫana and Anitta, but before that time they were an integral part of Hattian society (Soysal 2004a: 6).

When the literate period starts, views again differ, this time on the position of Hittite. Rosenkranz (1938: 281f.) for example sees Luwian as the vernacular, with Hittite, descendant of the dialect of Kaneš, as the chancellery language.[11] Steiner on the other hand, assumes that Hattian was the vernacular, while Hittite was the chancellery, scholarly and trade language (Steiner 1981: 162ff.). According to Stefanini, Hittite is even a literary language, based on the dialect of Kaneš/Neša and developed on foreign models, such as Hattian, Akkadian and Hurrian (Stefanini 2002: 789).

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[7] Stefanini's description of the interaction between Indo-European and the Caucasian type languages is not invalidated in case the Indo-Europeans entered from the West, across the Bosporus (see for example Watkins 2001: 50, and the assessment of the different views on the point of entry by Melchert (2003b: 23ff., and especially p. 25 n. 29)). These groups still moved to Central Anatolia, where their language(s) came in contact with the precursors of Hattian and Hurrian.

[8] Although the Hattians are often referred to as the indigenous people of Anatolia, all that is meant is that they were already present before the arrival of the Anatolian Indo-Europeans (Kammenhuber 1969: 429; Soysal 2004a: 2 n. 3).

[9] For a historical overview of the often contradicting views on the ethnicity of the population of *kārum* Kaneš see Alp 1997.

[10] Melchert 2003b: 9; Klinger 1996: 182ff.; Singer 1981: 119ff.; Stefanini 2002: 790.

[11] For some critical remarks see Melchert 2003b: 12-13.

To summarize, Hattian type languages seem to have acted both as substrates and as adstrates for Hittite and proto-Hittite. How much of these claims are substantiated by linguistic evidence will be discussed in the next section.

3. *Previous scholarship on Hattian-Hittite language contacts*

The assumption that Hittite was heavily influenced by the language of a proto-Hittite population was already expressed by Hrozný (1915: 40). Although he did not further explain or exemplify his views, we can safely assume that the non-Indo-European appearance of the lexicon was the trigger. The 'alien' outlook of the Hittite vocabulary led scholars like Puhvel and Kammenhuber to believe that Hittite, but also Luwian, was under heavy substratal influence (Puhvel 1966: 237f.) and "in hohem Maße überfremdet" (Kammenhuber 1969: 266, 429).

On the other hand, there is general agreement on the fact that Hattian influence on syntax, morphology and phonology was less far reaching. In the domain of morphology we find references to the borrowing of the Hattian morpheme *-il* (as in the name Ḫattušil "He of Ḫattuš"), as the nominal suffix *-ili* of appurtenance and the genitive ending *-el* in the pronominal paradigm (Puhvel 1966: 237, Kammenhuber 1969: 270).

Regarding syntax, Kammenhuber (1962: 17) mentions the parallel genitive constructions between Hattian and Hittite (also see Klinger 1996: 632). According to her this confirms her earlier assumption that the Hattian substrate was in part responsible for the proliferation of the Hittite genitive function (Kammenhuber 1960: 23). Puhvel (1966: 238) blames the absence of adjectival comparison on substratal influence.

A different position is taken by Watkins. He does not treat Hattian as a substrate of Hittite, but sees Anatolia as a linguistic area with diffusional convergence and innovations in both the Indo-European and non-Indo-European languages, in the domains of phonology[12] and morphosyntax (Watkins 2001: 52-55).

Watkins explains the three syntactic isoglosses which set the Anatolian languages apart from the other Indo-European languages, —the split ergative system, the use of enclitic pronouns and particle chains after the first accented word of the sentence, and the nearly obligatory use of sentence connectives—, as the result of diffusional convergence in Hittite, Hattian and Hurrian (2001: 54). Given Watkins' dating of these innovations between 2200 and 1900 BCE (or 1700 BCE at the latest) (2001: 55), these innovations are probably not the result of the Hittite conquests of Pitḫana and Anitta. We may infer from this time frame that they are the side-effects of the rather peaceful and unifying contacts in the Assyrian Colony period, with its elaborate trade network, that is, if Watkins' views are correct (but see below).

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[12] Kammenhuber (1969: 267f.) assigns the phonological features shared by these languages, such as the absence of word-initial *r* and the presence of the laryngeal *ḫ* in Hittite, Palaic, Luwian, Hattian and Hurrian, to substrate influence in the whole area towards the Tigris. According to her, the retention of the laryngeal *ḫ* in the Anatolian languages is the likely result of language contacts with Hattian and/or Hurrian.

On the other hand, Melchert has very recently minimized the influence of Hattian on Hittite and has given Luwian influence a more prominent position (Melchert 2003b: 16):

> This supposed impact of Hattian on Hittite language and institutions has been consistently overestimated (…), and the *prehistoric* (author's emphasis) influence of Luwian on Hittite seriously underestimated.

But already Tischler's lexical studies show that the influence of Hattian on the Hittite lexicon is far less than scholars usually assume: there are about 30 assured Hattian loans in Hittite[13] (Tischler 1979: 257; see section 4.2). We can therefore safely conclude that Hattian did *not* heavily influence the Hittite lexicon.

Hattian influence on morphology was already considered minimal, but Melchert provides a further reduction. For example, the pronominal genitive *-el* cannot be derived from *-il*. Oettinger (1999) has shown that *-el* has an Indo-European origin, whereas the Hattian derivational suffix *-il(i-)* occurs only in personal names or in lexical borrowings in Hittite.[14]

But we should also reconsider the similarities in syntax between Hattian and Hittite as observed by Watkins. To begin with syntactic alignment, even though it is true that both languages show morphological ergativity,[15] direct comparison of Hittite with Hattian is not possible. Hittite split ergativity is found in the nominal system, whereas Hattian ergativity is expressed in the prefix chain of the verb.[16]

Watkins also mentions the use of enclitic pronouns and particle chains after the first accented word of the sentence. According to him these pronouns and particles follow the sentence initial verb in Hattian (Watkins 2001: 55). This is evidently not the case, for two reasons: (a) Hattian is mainly a prefixing language, so most affixes *precede* their host as far as the pronominal elements are concerned. There are a few particles, often with

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[13] This low number is probably due to the scarcity of sources and our relative lack of knowledge of Hattian (Melchert 2003b: 17).

[14] Melchert 2003b: 16; see especially Rieken 1999: 429-430, with references to older literature on the subject.

[15] I follow Taracha's analysis of the Hattian personal prefixes and Hattian as an ergative language (see Taracha 1988: 60-63, 1989: 266, 1998: 15-16; also see Schuster 1974: 106 on the ergativity of Hattian, without using this terminology however). For arguments against an ergative-absolutive alignment of Hattian see Klinger 1994: 36ff., with references and Girbal 2000: 369. Also see Girbal 1986: 137-140. I will elsewhere counter their arguments and provide some additional material in favor of Taracha's analysis.

[16] Hittite neuter nouns require ergative case marking when they are the subject of a transitive clause, but absolutive marking for object and intransitive subject function. Common gender nouns on the other hand always receive nominative-accusative marking. Whereas Hittite distinguishes between neuter and common gender, Hattian only distinguishes between masculine and feminine gender (Soysal 2004a: 183-184). Because the Hattian nominal subject is always unmarked, intransitive and transitive nominal subjects cannot be distinguished by case marking alone. An additional complication is the fact that direct objects are only optionally marked on the noun by means of an oblique marker *-šu/-tu*, which also covers other functions (Girbal 1986: 137-138; Soysal 2004a: 184, 186). Instead, syntactic relations are marked on the verb (see fn. 28).

unclear function, that are suffixed to the verb, but they certainly do not appear in a particle chain; (b) Unlike the Hittite pronoun and particle chain, which is restricted to Wackernagel's position and has barely any functional relation with the word in initial position,[17] the Hattian morpheme chain is an integral part of the verb. If the Hattian verb is placed in other than sentence initial position, the pronominal and other prefixes remain attached to the verb instead of being prefixed to the first accented word.

Watkins' last observation on the nearly obligatory use of phrase connectors in Hittite and the semantic and syntactic identity between Hattian *pala* and Hittite *nu* is incorrect as well. Watkins claims that both connectors are restricted to absolute initial position (2001: 55). This is true for Hittite, but not for Hattian. The Hattian connective *pala* is both a sentence and a phrase connector, whereas Hittite *nu* is only a sentence connector. As sentence connector *pala* is often translated by Hittite *nu*, but as phrase connector it is matched by the Hittite conjunction *-i̯a* "and, also". There is therefore neither semantic nor syntactic identity of these connectors. Besides, Hittite phrase connectors only become obligatory in the 15th century BCE, whereas Watkins claims that the convergent innovations were completed by about 1900 BCE (Watkins 2001: 55).

After the dismissal of most of the alleged grammatical similarities between Hattian and Hittite and with the rather few Hattian loan words in Hittite in mind, we may conclude that the influence of Hattian on Hittite was quite limited as far as language is concerned. According to Melchert, this points at adstratum effects, not at substratal influence (Melchert 2003b: 21).

Still, it is beyond doubt that the speakers of these languages were in close contact, as our historical sources amply testify. The regal terminology of the Old Kingdom was mainly Hattian, the Old Hittite pantheon was almost completely Hattian, the mythology is clearly adopted, if not directly translated, from Hattian, and Hattian was the main language of the cult. And, finally, as Oettinger notes,[18] Hittite literary style is highly influenced by Hattian stylistics.

In view of the strong influence of Hattian culture on Hittite culture, it is inevitable that contact-induced language change occurred. The direction and degree of linguistic interference will be addressed in the next section, where I will try to resolve the contradiction between strong Hattian cultural influence and the near lack of Hattian linguistic interference.

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[17] There are indeed a few Hattian particles that are suffixed to the first accented word, which is not always the verb. The most important ones are the quotative particle *-ḫu* (the equivalent of Hittite *-war-*) and the semantically contrastive conjunction *-pi* (a partial equivalent of Hittite *-ma* "and, but, while"). The early position in the clause of exactly these particles can hardly be surprising.

[18] Oettinger 2004: 359 n. 6; 2005: 468-470.

4. *Finding the linguistic facts for Hattian-Hittite language contacts*

4.1. *An algorithm*

In this section I will present the evidence for contact-induced language change in both Hittite and Hattian. I will use the method and model developed by Sarah Thomason and Terrence Kaufman (1988).[19] Thomason has set up an algorithm which can help us determine the extent, the direction and the type of language interference. In the end this will give us a means to reconstruct the socio-linguistic situation responsible for the observed language contact effects.

Thomason (2000: 316) lists four requirements which help one detect language interference. X is the proposed receiving language, and Y the proposed donor language:

(1)   Establish that there was contact intimate enough to permit contact-induced change.
(2)   Find several independent shared features in X and Y – ideally, features in different grammatical sub-systems. That means, look at the whole language, for structural interference will not be isolated.
(3)   Prove that the shared features were not present in pre-X. You thereby prove that X has changed.
(4)   Prove that the shared features were present in pre-Y. You thereby prove that Y hasn't changed.

I will apply this algorithm to lexicon, morphology and syntax. Phonology must be excluded for the following reasons. First of all, it is very well possible that Hittite scribes did not have a scribal tradition for Hattian texts, but had to rely on oral tradition and therefore attempted to write the dictates phonetically instead of phonemically. This could have led to the frequently observed alternations in Hattian orthography. These alternations might also be caused by the mismatch between the cuneiform syllabary and the Hattian phoneme inventory, or just by scribal errors or misunderstandings. The result is that we do not yet have a satisfying description of the Hattian phoneme inventory, thus excluding a reliable comparison of Hittite and Hattian phonology.[20]

4.2. *Shared features*

As noted above, all scholars agree that Hattian lexical elements found their way into Hittite. In sharp contrast, loan words from an Anatolian Indo-European language have not been found in Hattian, with the possible exception of the regal terms *tabarna* and *tawananna*.[21]

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[19] Also see Thomason 2001 for a concise overview of the main results of their work.

[20] See Girbal 1986: 15, Soysal 2004a: 69 (with further references in fn. 1), and especially Klinger 1996: 615ff. and Soysal 2004a: 27ff.

[21] For these terms as Hattian but without etymology, see for example Kammenhuber 1969: 432. Soysal (2005: 196-197) analyses *tabarna* as *ta-par-na* "nominal prefix-1000-noun = the

Not considering the numerous divine and geographical names, there are less than 30 assured loans from Hattian into Hittite (Melchert 2003b: 17). These loans do not belong to the basic vocabulary but can be assigned to restricted cultural domains, as the following overview shows. This overview is based on Soysal (2004a: 142-155) and contains only those words that Soysal listed as ascertained loans from Hattian into Hittite, either because they are attested in Hattian texts or because they have a clear Hattian etymology; a few additional words are taken from the list in Tischler 1998: 679-680.[22] The original Hattian words are added in brackets. Words reconstructed for Hattian are marked as such (*), and followed by an analysis.

Government and kingship

regal onomastics	*tuḫ(u)kanti-/taḫukanti-* "crown prince" (—)
attributes of kingship	*ḫalmaššuit-* "throne" (*ḫanfašuit*)
court officials[23]	LÚ*ḫaggazuwašši-* "Tränker" (LÚ*ḫaggazuel*); LÚ*duddušḫiyalla-* "?" (LÚ*duddušḫiyal*)
architecture	É*ḫalentiu-/*É*ḫalentuwa-* "palace" (*ḫalantiu*); É*kaškaštipa-* "gate building" (? *kaštip*); É*taštuppa-* "boudoir of the king"[24]
administrative units	*telipuri* "district" (**teli-fur-i* "great land")

Religion

cultic officials	LÚ*šaḫtarili-* "singer-priest" (LÚ*šaḫtaril*)
cultic festivals	EZEN$_4$ *purulli-* "spring festival" (**fur-ul(li)* ? "Earth (?)")
cultic tools	GIŠ*ḫalputi* "?" (*ḫalfutte(l)*); *kurkuenn[a-]* "?" (*kurkufenna*); *zinar* "lyre" (*zinar*)
(cultic) food	NINDA*zippulašne* "kind of bread" (*fulašne*); NINDA*taparfašu-* "thick bread of the Stormgod" (**ta-par-fašu* "nominal prefix-1000-abundance = "thousandfold abundance")
Other	*zaḫanittenna-* "holy location" (*fuḫnettinni*)

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thousand *na*", and *tawananna* as "the *wanan na*", with *wanan* and *na* as unknown lexemes; for *tabarna* and *tawananna* as Luwian lexemes see most recently Melchert 2003b: 18-20. Melchert (2003b: 19 with references) analyses *tabar-na* as "(the) powerful (one)" and *tawana-nna* as "(the) righteous (one)", both with the suffix *-nna*, derived from the Proto-Indo-European ruler suffix *-h$_3$no*. See further Soysal 2005: 190 n. 7 for an overview of the literature on the etymology of *tabarna* and *tawananna*.

[22] Also see Kammenhuber 1959: 41-47; 1969: 432-438.

[23] These words are most likely Luwian adaptations of Hattian words. Derivations with *-alla-* are Luwian (Melchert 2005: 455), and LÚ*ḫaggazuwašši-*, attested as LÚ*ḫaggazuwaššieš* (nom.s.c.) in IBoT 1.36 iv 37 (ed. Güterbock and Van den Hout 1991: 38-39), is a Luwian *-ašši-* genitival adjective formation on the Hattian stem *ḫaggazue-* (*kazue* means "cup"), see Güterbock and Van den Hout 1991: 58. This would mean that the Luwians were aware of the composition of the Hattian word LÚ*ḫaggazuel* "he of the cup" (just as Ḫattušil means "he of Ḫattuš"), parsed it correctly in stem + derivational suffix *-il* and replaced the latter with their own suffix *-ašši-*. The rejection of this Luwian formation in HW[2] Ḫ: 15 is based on the *a priori* assumption that Luwian was never in close contact with Hattian.

[24] Listed in Tischler 1998: 679 ("ein Gebäude bzw. Raum zum Waschen und Umkleiden für den König"). Hattian *štup* means 'root', or possibly 'stem', and is used in connection with the body of the king.

Other

metals	*ḫapalki-* "iron" (*ḫapalki*)
flora	^{GIŠ}*parnulli-* "aromatic wood or plant" ([*parn*]*ulli*); ^{GIŠ}*šaḫi-* "aromatic wood or plant" (*šaḫiš*)
illness	*parninka/i-* "an eye disease[25]" (*parninka/iš*)

There are no similarities in inflectional morphology between Hattian and Hittite, and the only ascertained borrowing of derivational morphology from Hattian to Hittite is the suffix *-il*, thematicized as *-ili.*[26] However, as noted above, this suffix is only productive in names and appears only in Hattian loans.

Syntax however is far more rewarding for our search for similarities between the two languages. I already mentioned the parallel genitive constructions between Hattian and Hittite, noted by Kammenhuber (1962: 17) and Klinger (1994: 34-35; 1996: 632). In both languages the possessor precedes the possessed (i.e., regens precedes rectum). In addition, in Hattian and Old and Middle Hittite the possessed noun can be accompanied by a possessive clitic. In Hattian the possessive is prefixed to the possessed noun, and in Hittite it is suffixed, corresponding with the nature of these languages as prefixing and suffixing respectively. With the 'genitivus possessivus'[27] see for example 1a and b:[28]

1a   Hattian KBo 37.1 i 18 (NS) =   Hittite KBo 37.1 ii 18-19

 fā-šḫap-ū[*n*]   *ifā-fa-škel*   DINGIR.MEŠ-*naš*   ŠÀ=*ŠUNU*

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[25] See Soysal 2002a.

[26] This borrowed suffix is distinct from the Luwian suffix *-ili* in for example *ḫantili-* "first" (KUB 35.123 iv 9), which has a Proto-Indo-European etymology (see Melchert 2001: 266-267).

[27] Hattian possessive prefixes are not always matched by Hittite possessive suffixes (Kammenhuber 1969: 477). It seems to me that the distinction between inalienable and alienable possession in Hittite (see Garrett 1998) lies behind the 'irregular' translation of Hattian possessive clitics. Whereas the genitive of possession in Hattian is always marked by means of a possessive prefix (Soysal 2004a: 186), Hittite possessive suffixes are only attested with kinship terms, bodyparts and a few other concepts, indicating inalienable possession. We therefore only find them when the Hattian possessive noun phrase expressed inalienable possession. If my interpretation of the difference between Hittite and Hattian possessive marking is correct, the possessive prefix *le-* is not to be analyzed as a plural marker in those cases were the Hittite possessive suffix is lacking (see already Kammenhuber 1969: 477, expressing doubts about *le-* as plural marker).

[28] In my analysis of Hattian morphemes I heavily rely on Soysal (2004a). However, my analysis of the 3rd person markers on the verb is different. Instead of segmenting *ān-* and *āš-* in *a-* (a 3rd person subject marker) and *-n-/-š-* (3rd person object markers), I take *ān-* and *āš-* as unitary morphemes for the 3rd person sg. agent and 3rd person pl. patient respectively, with zero-morphemes for both the 3rd person sg. patient and 3rd person pl. agent. In other words, the singular subject of a declarative transitive clause is marked by means of *an-* (or *ān-*), the singular intransitive subject and object are unmarked (i.e., they can be represented by a ø-morpheme). The plural transitive subject is unmarked, but the plural intransitive subject and object are expressed by means of *aš-/eš-* and *-š-*. The fact that the intransitive subject and the object receive the same marking points at morphological ergativity. I will provide the evidence supporting these views elsewhere.

COLL-god-GEN[29]   their-COLL-soul   god.PL:GEN.PL   Soul=their

"The souls of the gods"

1b   KUB 28.104 obv. iii 9' (NS)

fur-un-ši-mu
earth-GEN-her-mother

"Mother of the Earth (epithet of the Sungoddess of Arinna)"

The 'genitivus materiae' occurs without possessive clitics in both languages:

2   Hattian KBo 37.1 i 23 (NS) =   Hittite KBo 37.1 ii 23

ḫapalki(i)-an   *tete-kuzzan*   AN.BAR-*aš*   GUNNI
iron-GEN   great-hearth   iron-GEN.S   Hearth

"The great hearth of iron"   "The hearth of iron"

Hattian and Hittite question words appear in initial and non-initial position (for Hittite interrogatives, see Hoffner 1995, Goedegebuure fc). With the Hittite question word in initial position see 3a, for preverbal position see 3b:

3a   KUB 48.99: 6'-7' (OH/NS)

kui-š=war=an   *ḫara-n*   deity*Pirwa*[-*i*]   city*Ḫaššuw-az*   *uwate-z*[*zi*]
Who=QUOT=him   eagle-ACC.S   deityPirwa[-DAT.S]   cityHassu-ABL   bring-3S.NPST

" 'Who will bring him, the eagle, from the city of Hassu [to] Pirwa?' "

3b   HKM 55 obv. 16-17 (MH/MS)

nu   *ap-ē*   NUMUNHI.A   *kuwapi*   *p*[*ai-*]*š*
CONN   EMPH.PRON-N.ACC.PL   seedPL   whereto   give-2S.PST

"whereto have you g[iven] those seeds instead?"

For the Hattian question word *ūk* "how, what"[30] in initial position, see for example 4a. Compare with 4b, which is similar to 4a but with *ūk* in final position, and 4c:

4a   KUB 28.4 obv. l. col. 14 (NS)

ūk=ḫū=ba   *itā*
Q-word=QUOT=but   this way

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[29] The ending *-n* is actually a marker of the oblique. Although it mostly marks the genitive, it is sometimes also found as a dative marker (Soysal 2004a: 195).

[30] As subordinator *ūk* means "just as (< how)".

"But what is this (lit. but how (is it) this way)?"[31]

4b KUB 28.86 + KUB 48.23 iii/v 5 (NS)

itā=ḫu=pi   *ūk*
this way=QUOT=but   Q-word

"But what is this?"

4c KBo 37.9 obv. 9'-10' (MS), dupl. KUB 28.1 iv 25' (ed. Soysal 2004b: 80, 82, 88-92 (differently))

pala *ān-**k[it]āt**=pa* *ūk* *pala* *ān-ḫa-**u[(i)]t**=pa* *ūk*
and   3S.AG-**fight**=but Q-word and   3S.AG-INCHOATIVE-**sour**=but Q-word

"Why[32] does he pick a fight, and why does he turn sour?"

Both in Hittite and Hattian, subordinate clauses precede their main clause.[33] Compare the clauses of comparison 5a and 6a, and the temporal subordinate clauses in 5b and 6b:

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[31] Soysal (2004a: 203) analyses the sequence *ūk=ḫu=ba* differently ("**spricht** aber wie es ist"). Boldface is used in this paper to indicate the verbal stem.

[32] As Soysal (2004b: 88) notes, the parallel expressions in KUB 28.1 iv 35" do not employ *ūk*. But if we consider the Hittite translation of KBo 37.9 obv. 9'-10'//KUB 28.1 iv 25" and KUB 28.1 iv 35", it becomes clear that these passages are not really parallel. Hittite KUB 28.1 iv 26"-27" (the translation of KBo 37.9 obv. 9'-10'//KUB 28.1 iv 25"), reads [………..-]˹*u̯a*˺-*at* (not *la*, coll.) *ša-am-ma-al-eš-zi-ma-aš* / [……]-*at* (not *la*ꜜ), while the Hittite translation of the Hattian clause *ta-a-ḫa-a-ú-e-et* in KUB 28.1 iv 35" is *na-aš ša-am-ma-al-li-i̯a-zi* (KUB 28.1 iv 37"). Just as *ūk* lacks in the Hattian clause KUB 28.1 iv 35", the word […]*wat* is absent in the Hittite version KUB 28.1 iv 37". Instead of emending the second *at* in KUB 28.1 iv 26" to *la* with Soysal, in order to read twice *apašila* "himself", I prefer restoring the question word *kuwat* "why". The lexeme *ūk* is therefore not part of a verbal expression based on the nominal comparison **wit ūk* "like an apple", as suggested by Soysal (2004b: 88), but is simply a free-standing general question word. The question word *ūk* covers several functions for which Hittite requires separate words. As marker of clausal comparison "just as", which is derived from the manner question word "how", it matches Hittite *maḫḫan* "just as, how", and when *ūk* means "what", Hittite uses an inflected form of *kui-* "who". We now may add "for what reason" to the semantics of *ūk*, for which Hittite has *kuwat* "why" and the more general *kuit*. The larger context, KBo 37.9 obv. 3'-10', now reads: "Lady [Estan?] and [Lord] Taru speak as well: '[…] and we made him [ou]r priest, we treated him well, and we also assigned his land to him. (So) why does he pick a fight, and why does he turn sour?' ".

[33] Kammenhuber (1969: 543) doubted the existence of subordinate clauses ("wohl keine Subordinierung der Sätze").

5a   KBo 15.10+ ii 5-6 (MH/MS), ed. Szábo 1971: 20-21, CHD P: 314a

k[ī]	NA₄*peru*	*māḫḫan*	*uktūri*
this:S.NOM-ACC.N.	rock:S.NOM-ACC.N.	just as	everlasting: S.NOM.-ACC.N

BELU	*Ù*	DAM-*ZU*	DUM[U.MEŠ-Š]*U*	*QATAMMA*	*uktūri-eš*	*aš-andu*
lord	and	wife-his	son.PL-his	likewise	everlasting-PL.NOM.C	be-3PL.IMP

"Just as this rock is everlasting, so may the master and his wife (and) chil[dren] be everlasting."

5b   KBo 14.13 iv 33-34 (NH), ed. Güterbock 1956: 98

[*n*]*u=šmaš=kan*	*maḫḫan*	*tuppi*	*peran*	*ḫalz-er*
CONN=them=PTCL	when	tablet	before	call-3PL.PST

[*n*]*amma=šmaš*	*ABU=YA*	*kiššan*	*IQBI*
then=them	father=my	as follows	he said

"And when they had read the tablet aloud before them, my father then said
 to them as follows:"

6a   KUB 24.14 iv 11a'-17a' (NS)

imā-l-len	*zar-du*	*ūk*	*fa-ø-kā-**pudd**-u*	*kā-naiu*
this-MASC[?]-?	sheep-OBL	just as	1S-3PAT-on-**be**-PRS	on-?

*fa-ø-ta-ḫa-**zi***	*faḫ-tu*
1S-3PAT-into-3DAT-**put**	?-OBL

pāla	*a-šaḫ-du*	*lē-i-zzuwātu*[34]	*lē-i-pinu*
also	DET[?]-evil-OBL	his-PL[?]-wife	his-PL[?]-child

palā	*lē-pa-zizintu*	*intā*	*te-š-**pūt***[35]
and	his-COLL-offspring	thus	MD-3PL.PAT-**be**

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[34] The transcription of this word follows the duplicate KUB 28.78 iv 6'.

[35] The transcription follows the duplicate KUB 28.78 iv 8'.

"Just as I stretch this sheep out on the pedestal/ground??, (and) fasten (lit. put)? it (the sheep) on it with? a rope/spell?? [36], let also the evil one, his wives, his children and his offspring be likewise."

6b   KBo 19.162 obv. 8-10 (MS), dupl. KUB 2.2+KUB 48.1 ii 45-47; also see Schuster 1974: 66-67.

anna	*e-š-kā-**her**=pi*	*tabarna*[-?]	*kattē*	*lē-ḟēl*
When	1PL-3PL.PAT-on-**appoint**=but	Tabarna[-?]	king:DAT	his-house

*n-ī-ø-**pu**=pē*	*zīš*
?-1PL-3PAT-**make**=but	mountain

pala[37]	*(i-)yāy-a*	*i-malḫip*	[*pīp*]
and	(1PL?-)give-MD	PL?-good	[stone]

"Once we both (=*pi*) have appointed his estate to Labarna, the king, and (=*pē*) have created the mountain(s), then let us give good stones (to the king, to build his house)."

As far as can be concluded from the limited number of ascertained attestations, Hattian text-initial clauses with lexically expressed subject and object show SOV order (Berman 1977: 459, Girbal 1986: 39, Klinger 1996: 651, Schuster 2002: 412), see for example:

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[36] The analysis and translation from *kānaiu* to *faḫtu* is conjectural, but, in my view, finds some support in the preceding Hittite description of a ritual act, KUB 24.14 iv 9'-10' *ta*[!] *namma* UDU-*un palzaḫaizzi* [......] / *tarmaizzi* "And then he stretches the sheep out (on the pedestal/ ground?) [and] fastens [...] (and speaks as follows in Hattian)". It is reasonably certain that *fakāpuddu* is translated as *palzaḫ*[*aimi*] in KUB 24.14 iv 12b', which could give the equation *puddu* = *palzaḫai-* "stretch". However, the element *puddu* is perhaps better analyzed as a stem *put* with the present tense (?) marker *u* (Soysal 2004a: 304). In that case nothing prevents taking *put* as the verb "be". In order to retain the meaning of *palzaḫai-* "stretch out on a flat surface", we need a locative expression to further specify the general phrase -*ka-put* "be on". I believe this could be *ka-nai(-)u* "on-the pedestal/ground??". There seems to be room for more signs after *palzaḫ*[*aimi*] in KUB 24.14 iv 12b', perhaps a short clause with *tarmaemi* "I fasten/nail down", parallel to *tarmaizzi* "he fastens/nails down" in KUB 24.14 iv 10', to match my analysis of *fataḫazi*. While the Hittite translation KUB 24.14 iv 13b'-14b' continues with *n=aš=kan p*[*edi duwān*?] / *duwann=a U*[*L niniktari*?] "and it does n[ot] move [hither] and thither [on the spo]t", the Hattian part would leave no room for an equivalent clause. This is not problematic because KUB 24.14 iv 16b'-17b' *n=at=k*[*an*] / *pedi duwān duwann=a lē ninitari* is lacking in Hattian as well. Schuster's (1974: 93) analysis of *faḫtū* = *adanzi* "they eat", with *tu* "eat", requires that we accept the misplacement of the Hittite translation (suggested by Laroche 1950: 177), which I do not think is necessary. For a completely different analysis, see Girbal 1986: 112-114.

[37] Absent in KUB 2.2+KUB 48.1 ii 46.

7a   KBo 19.162 obv. 4 (MS), dupl. KUB 2.2 ii 40, somewhat differently Schuster 1974: 66

fa-šḫap=ma   *eš-fūr*   *ø-āš-k*[(*a-ḫḫir-ø*)]
COLL-god=?   PL-land   3PL.AG-3PL.PAT-on-**distribute**-PST

"The gods distributed the lands."

7b   KBo 37.1 i 3-4 (NS), ed. Klinger 1996: 638, 650-651; Schuster 2002: 156

Eštān   URU*Laḫzan*   *lē-fēl*   *ān-ø-teḫ-ø*
Estan   city Lahzan   his-house   3S.AG-3S.PAT-**build**-PST

"Estan built her[!] house in Lahzan."

Because most Hittite clauses show SOV order, as all preceding Hittite examples can confirm, Hittite text-initial clauses have this order as well.

We can now isolate a few shared features from different grammatical sub-systems (step two in the methodology of Thomason):

	HATTIAN	**DIRECTION OF INFLUENCE**	**HITTITE**
Content words	30	$\rightarrow$	30
Syntax of noun phrase			
possessor - possessed	N_{Gen} (poss.+)N	?	N_{Gen} N(+poss.)
Clause syntax			
position of question word	initial and non-initial	?	initial and non-initial
text initial clauses	SOV	?	SOV
Sentence syntax			
clauses of comparison	subordinate - main	?	subordinate – main
temporal clauses	subordinate - main	?	subordinate – main

4.3. *Typologies of Hattian and Hittite*

Having established several shared features in different sub-systems of Hittite and Hattian, it is now time to turn to steps 3 and 4 of Thomason's algorithm:

(3)   Prove that the shared features were not present in pre-X. You thereby prove that X has changed.

(4)   Prove that the shared features were present in pre-Y. You thereby prove that Y hasn't changed.

The catch is of course that we do not have any evidence of the precursors of attested Hittite and Hattian. But despite this lack of evidence for proto-Hittite and proto-Hattian, with respect to clausal and noun phrase syntax we can still predict to a reasonable extent what these languages would have looked like in their prehistory. In order to do this, we need to turn to language typology. I will focus on two strands of typological research, one that is concerned with preferences for word order patterns and another one that deals with preferences for marking.

     After that, I will investigate whether the shared features noted above are consistent or not with respect to the language types of Hittite and Hattian. If it turns out that one of these languages shows inconsistencies, it *may* be the case that that language is typologically disrupted. That is, it may be moving from a more consistent, prehistorical, language type to a garbled one, and one reason for such a change could be heavy structural influence from the other language.

4.3.1. *Word order typology of Hattian and Hittite*

If we can establish the dominant word order of the main clausal elements in Hattian and Hittite, we may then use the linguistic universals correlated with these word orders to predict other word orders, such as ordering within the noun phrase.

     The dominant word order in a given language is often equated with the surface position of the agent-like element (henceforth subject), patient-like element (henceforth object) and verb in transitive declarative clauses. This might lead to the assumption that the subject of an intransitive clause shows the same position with respect to the verb as the subject in a transitive clause. That this is not always the case is shown in Dryer 2005: 334-335. Another objection to only considering clauses with lexically expressed subjects and objects is that these clauses are actually not very common: most clauses in natural discourse contain at least one pronominal element.

     I will therefore discuss all types of intransitive and transitive clauses, with lexically and pronominally or clitically expressed elements. Because word order in Hittite is well investigated[38] it is not necessary to provide further support for the basic word order SOV. Hattian however has not been studied from a more fine-grained perspective.[39] There is reasonable agreement on the basic VSO word order of Hattian when both subject and object are expressed (Berman 1977: 458-459; Klinger 1994: 34), but other clause types, such as intransitives and clauses with pronominal elements have not yet received much attention.[40]

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[38] Luraghi 1990: 73ff.

[39] Berman (1977) studied clauses with expressed subject and object, with only a subject, and with only an object, but his corpus was restricted to the clauses of KUB 2.2 + KUB 48.1. Although his observations are correct, his conclusions will require some modification once the other bilingual texts are taken into account.

[40] Kammenhuber (1962: 18; 1969: 543) claimed that word order in Hattian varies freely, and that the verb can take any position in the clause (1969: 503, 543). This is only true if one does not distinguish between transitive and intransitive clauses.

In most Hattian transitive declarative clauses with lexically expressed subject and object the verb occupies initial position (see the Appendix for the counts). With the order VSO:[41]

8a   KUB 2.2 iii 45 (NS), ed. Schuster 1974: 74

*ān-ø-**tuḫ**-ø*	[d]*Šulinkatti*	*kattē*	*lē-fa-eli*[?]*a*[?]*nu*
3S.AG-3S.PAT-**take**-PST	Sulinkatte	king	his-COLL-utensil

"Lord Sulinkatte took his tools."

8b   KBo 37.49 rev. 14'-15' (NS), ed. Girbal 2000: 367-369, Klinger 2000: 159-161

*[ø-t]ū-ø-**miš**-ø*	*tabarna*	*li-fūr*	*ø-tū-ø-[**miš**-ø]*	*[ta]barna*	*lē-līš*
3-?-3S.PAT-**take**-PST	Tabarna	his-land	3-?-3S.PAT-**take**-PST	Tabarna	his-year

"Tabarna took his land, Tabarna took his year(s)"

The order VOS is also attested, see for example:

9a   KUB 2.2 + KUB 48.1 iii 14-15 (NS), differently Schuster 1974: 70

*ān-ø-ta-**ḫan**-ø*	*kaštip*	[d]*[Zilipurē]u*	*katti*
3S.AG-3S.PAT-into-**open**-PST	gate	Zilipuri	king

"Lord [Zilipur]i opened the gate"

9b   KBo 37.1 i 26-27 (NS), differently Schuster 2002: 158

*ām-ø-**miš**-ø*	*zīlāt*	[d]*Kataḫzīfuri*
3S.AG-3S.PAT-**take**-PST	throne	Katahzifuri

"Katahzifuri took the throne"

However, as expected in narrative discourse, most subjects in mid-text transitive clauses simply continue the subject from the preceding clause. We therefore usually find clauses without lexically expressed subject. The word order in these clauses is over-whelmingly VO. A few examples:

10a   KBo 37.1 i 7-8 (NS), ed. Klinger 1996: 638, 656-657

pala	*ān-ø-**zaraš**-ø=ma*	[d]*Kataḫzifurē-šu*
and	3S.AG-3S.PAT-**call**-PST=?	Katahzifuri-OBL

"Then she called Katahzifuri"

---

[41] Without taking the relative position of subject and object into account, verb initial word order preference for declaratives has been observed by Girbal (1986: 23).

10b KUB 2.2 + KUB 48.1 iii 19 (NS), dupl. KBo 21.110 obv. 4', ed. Schuster 1974: 70

*ān-ø-**tuḫ**-ø*	*lē-zūḫ*	*lē-šteraḫ*	*bala*	*l[(ē-šepš)]ep*
3S.AG-3S.PAT-take-PST	his-clothes	his-fell cover	and	his-shoe:shoe

"He took his clothes, his fell-cover and his shoes"

10c KUB 28.4 i 10a (NS), ed. Schuster 2002: 384

*[(ø-t)]u-ø-ḫ-ta-**šul**-ø*	*tūmin*	*ø-tu-ø-ḫ-ta-**šul**-ø*	*fi-pizil*
3-?-3S.PAT-3DAT[42]-into-let go-PST	rain	3-?-3S.PAT-3DAT-into-let go-PST	COLL-wind

"He (Taru) released Rain after him, he released the Winds after him."

10d KBo 37.49 rev. 12'-13' (NS), ed. Klinger 2000: 159-160

*ø-tū-fa-**p[pu**?-ø]*	*[fu]r-un*	*te-fa-katti*
3-?-3COLL.PAT-**make**-PST	land-GEN	her-COLL-king

"She m[ade] them kings of the land (lit. of the land her kings)"

10e KBo 37.9 obv. 7'-8' (MS), ed. Soysal 2004b: 82, 84[43]

pa!la(=)	*ai-ø-ta-ḫa-ka-**aḫ**-ø=fa*	*pala*	*lē-fur*
and	1PL-3S.PAT-into?-3DAT-on-**place**-PST=?	also	his-land

"And we also assigned his land to him."

Surprisingly, the few preserved text-initial and speech-initial transitive clauses with lexically expressed subject and object consistently show an SOV pattern (see exx. 7a, b). There are also a few mid-text transitive clauses with the verb in final position, see for example:

11a KUB 2.2+ KUB 48.1 iii 10 (NS), ed. Schuster 1974: 68

[i]štarrazil=pi	*fā-ša[ḫ]*	*[ø-f]a-ḫ-zī-**ḫert**-a*
dark earth=but	COLL-evil	3PL.AG-3COLL.PAT-3DAT-down-**hide**-OPT

"But let them hide the evil things in the dark earth."

11b KBo 37.23 i 13'-14' (MS), also see 14'-16'

zāriu-n=aḫ	*te-pīnu*	*ḫa-tē-kkaš*	*e-ḫa-š-**dur**-ø*
man-GEN=QUOT	her-child	at-her-head	1PL-3DAT-?-**hit**-PST

---

[42] I agree with Schuster's analysis of *-ḫ-* as the marker of the 'Zielpunkt der Handlung' (2002: 447). This is also suggested by Soysal (2004a: 216) sub (-ḫ³). In the remainder of this paper I will provisionally gloss *-ḫ(a)-* as 3DAT.

[43] Soysal analyzes and translates somewhat differently: "We arranged his land as well".

" 'We have hit the human child on its head'."

On the other hand, the word order preferences for intransitive clauses are the reverse of those for transitive clauses. Although a few intransitive clauses have VS order, most intransitive clauses show SV order:[44]

12a   KUB 28.75 obv. ii 14 (OS), translit. Neu 1980: 193

tabarna   *te-ø-**kunkuḫḫū**-a*
Tabarna   OPT-3S.PAT-**live**-OPT

"May Tabarna live!"

12b   KBo 37.49 rev. 15'-16' (NS), with dupl. KUB 28.8 rev. l. col. 4a, ed. Girbal 2000: 369

tabarn[a-n]	*[le]-liš*	*te-ø-**fūti(i̯)**-a*	*tē-ø-**ḫārkim**[(āḫḫ-a)]*[45]
Tabarna[-GEN]	[his]-year	OPT-3S.PAT-**long**-OPT	OPT-3S.PAT-**wide**-OPT

"Let the year(s) of Tabarna be long and wide."

12c   KBo 37.28 iv 13'-14' (NS), ed. Soysal 2002b: 8-9

zār   *šeš-ø-ta-**ḫḫu**-meme*
sheep   NEG-3S.PAT-INTR/PASSIVE-**say**-'meme'

"The sheep does not say 'beeeeh'. "

12d   KBo 19.162 obv. 11 (MS), dupl. KUB 2.2 + KUB 48.1 ii 51, also see obv. 12-13, differently Schuster 1974: 66

pīp	*a-šaḫ*	*taš-te-ø-ḫ-ka-**zii̯**[(-a)]*
stone	DET-evil	NEG-OPT-3S.PAT-3S.DAT-down-**put**-OPT

"May not the evil stone be put down on it (i.e., on the house of the king)."

12e   KBo 19.162 obv. 6-7 (MS), with dupl. KUB 2.2 ii 42, also see KUB 2.2 iii 52-53, ed. Schuster 1974: 66

tabar[(na)]	*Kātte*	*ān-**nifa**-š*[46]
Tabarna	King	3S.AG-**sit**-?

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[44] It is unclear to me on what grounds Schuster (2002: 622) claims that only in text-initial clauses (his *Eingangs-Aussagesatz*) the verb takes final position.

[45] I follow Girbal's analysis of these two forms as verbal complexes. Compare the different clause parsing and analysis of Klinger (2000: 160-162).

[46] KUB 2.2 ii 42 has the patientive intransitive form *ta-ni-u̯aₐ-aš* (*ø-ta-nif-aš*) instead of the agentive intransitive.

"Lord Tabarna sat down."

For some intransitive clauses with VS order, see:

13a KBo 37.1 i 16-17 (NS), ed. Klinger 1996: 640, 662; Schuster 2002: 158

ø-ḫa-**nū(-)u̯a**=pa   ᵈ*Ḫašammī*[*l*]
3S.PAT-to-**go**=but   Ḫašammil

"Hasammil entered."

13b KBo 37.1 i 54-55 (NS), Soysal 2004c: 367-368

ø-tu-**ndi**ⁱ   *Eštan-ūn*   [*lē-f*]*ēl*
3-?-**stand**   Estan-GEN   [his-h]ouse

"They (the bulls of the Stormgod Taru) are standing in Estan's temple."

To summarize, Hattian is basically V(S)O in mid-text transitive clauses, it has always SOV order in text-initial clauses and shows a strong tendency for SV in intransitive clauses.[47] Theoretically, the last two observations could mean that Hattian might originally have been an SOV language even though the majority of transitive clauses points at VSO order. However, further support for a basic VSO order in Hattian will be presented in the next section.

4.3.2. *Marking preferences in Hattian and Hittite*

Another way of classifying languages is to describe how they mark grammatical relations within clauses and noun phrases. Cross-linguistically, there are four strategies for marking relations: word order, dependent marking, head marking and double marking, which is a combination of head- and dependent marking. The following overview shows which parts of speech count as head or dependent at different levels of a clause:

LEVEL	CONSTRUCTION	HEAD	DEPENDENT
Phrase	Possessive	possessed noun	possessor
	Attributive	noun	adjective
	Adpositional	adposition	complement
Clause	Clausal	verb	arguments and adjuncts

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[47] Similar observations were made by Berman (1977: 458-460). Based on the bilingual text KUB 2.2 he observed that clauses with V and O show VO order, but that clauses with V and S both show SV and VS order. The fact however that this text contains only one V & S & O clause, the text-initial SOV clause, forced him to combine the VO and SV/VS facts from the other clauses. He concluded that "[s]ince Hattic is a VO language and shows both VS and SV word order, we may describe it as having two main word orders, VSO and SVO." Referring to Greenberg's language universal 6 which states that SVO is a variant word order in VSO languages, he then concluded that Hattian is a VSO language.

Heads or dependents may carry an affix which registers the presence of a syntactic relation between head and dependent, and which also very often contains information on the nature of the relationship. When a language marks a certain grammatical relation on the head, it is head-marking for that construction, and similarly for dependent-marking. But it is also possible to mark both the head and the dependent of a construction, in which case the language is double-marking for that construction. For example, the Akkadian nominative, accusative and genitive case endings on the noun respectively signify the syntactic relations subject, object and possession (among others). But the Akkadian verb also agrees with the subject, and furthermore, indexes properties of the subject, such as person, number and, in part, gender. The subject relation is therefore double-marked: it receives marking on the verb by means of the personal prefixes and suffixes, and on the noun by means of case endings.

The marking preference is of great interest for the classification of Hattian as a VSO language, and Hittite as an SOV language. Nichols, in several highly influential studies (1986, 1992), found a correlation between word order and marking preference:

> Verb-initial order and lack of any determinate or stated order favor head marking, verb medial and verb final order favor dependent marking (Nichols 1992: 113).

Grammatical relations in Hattian are not marked by word order. The subject can appear on either side of the verb, and so can the object, although this is rather rare. This lack of fixed relative positions for the core arguments shows that word order is not used to mark syntactic relations. Instead, Hattian uses affixes on the noun to mark dimensional relations, and person affixes on the verb to mark syntactic relations, besides tense (and/or aspect?) and mood markers. Hittite uses affixes as well, but the locus of the affixes and the extent to which they are used are different from those in Hattian.

The fact that Hattian and Hittite use both heads and dependents as the locus for dependency markers is not surprising. The analysis of the 60-language sample in Nichols 1986 shows that most languages have both head- and dependent marking constructions. However, the distribution of head- versus dependent marking constructions is not random. Head marking is favored at clause level, whereas dependent marking occurs more regularly on phrase level. The following concise overview of the construction types in Hattian and Hittite will show that these languages neatly follow the patterns observed by Nichols.

To start with phrase level, Hattian and Hittite are both double-marking and dependent marking with respect to the possessive construction. When the dependent is expressed as an independent phrase, such as a noun or emphatic pronoun, it is always marked. The Hattian genitive is marked by the suffix -*n*, the Hittite nominal gen. sg.-pl. suffix is -*aš* (the gen.pl. is -*an* in Old Hittite), and the pronominal gen. sg.-pl. suffix is -*el* (the gen.pl. is -*enzan* in Old Hittite). Sometimes a possessive clitic is added to the head noun (the possessed): it is prefixed in Hattian and suffixed in Hittite. The construction is double-marking when the possessive clitic is present (exx. 1a, b), otherwise it is dependent marking in both languages (ex. 2).

The Hittite attributive construction is dependent marking: the adjective receives its gender, number and case marking from the noun (ex. 5a) (and there is no special marker

on the noun that indicates a relation with an adjective, which would make it double-marking). We do not have enough attributive constructions in Hattian to establish its marking type, but it seems that it is dependent marking as well. For example, only the adjective seems to carry the plural marker in a plural noun phrase.[48]

The adpositional construction in Hittite is dependent marking. The noun that depends on and precedes the stative place word is marked as a genitive in Old Hittite, and as a dative-locative in post-Old Hittite (ex. 5b). Hattian does not have independent adpositions, but it is likely that the noun prefixes denoting spatial position and direction are derived from prepositions. Some of the noun prefixes for direction are accompanied by the oblique marker -*n*, suffixed to the noun.[49] It is therefore possible that the noun, the dependent in this construction, was marked, and that Hattian was at least dependent marking in the adpositional construction as well.

At the clausal level however, Hattian and Hittite behave differently. The most common grammatical relations are subject and object. These relations are marked on the arguments in Hittite (and there is agreement between the subject and the verb-ending), which makes Hittite dependent-marking for the object and double-marking for the subject with respect to person and number (see for example ex. 3a). The other grammatical and semantic relations, such as indirect object, locative, ablative etc. are always marked on the nouns or pronouns. Hittite is therefore dependent-marking on clause level.

Hattian on the other hand does not mark the subject on the arguments, and only occasionally the object. Instead, we find marking on the verb (see for example ex. 8a). And although the dimensional relations may be marked on the nouns as prefixes, the verb is also marked for dimensional relations (ex. 11b). Hattian is therefore basically head-marking at clausal level.

Nichols (1992) has developed a method to weigh the different marking constructions mentioned in the preceding paragraphs. In her analysis, most weight is placed on marking at clause level. Taking this into account, the fact that Hattian is dependent-marking in the possessive and attributive constructions, and probably in the adpositional construction in prehistoric times, is overruled by the head-marking of syntactic relations at clause level. Hattian can thus be classified as a head-marking language.

As noted above, Nichols also showed that verb-initial languages are often head-marking, while verb-final languages are often dependent-marking. The head-marking of Hattian and the dependent-marking of Hittite therefore match their respective basic VSO and SOV word orders.

But there is yet another phenomenon that correlates with VSO order, noted by Klinger (1994: 35 n. 56). Hattian is a prefixing language, and prefixing is known to correlate with head-initiality, in other words, with verbs in clause initial position (Hawkins and Gilligan 1988: 219-259). We can therefore conclude that Hattian is indeed a VSO language with SOV, OV and SV as variant orders, and not an original SOV language turning VSO.

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[48] See for example KUB 28.82 ii 15' *fa-šāḫ alēp* "COLL-evil tongue/word = the evil tongues/words", with marking on the adjective *šaḫ* only.

[49] See for example KUB 2.2 + KUB 48.1 iii 16 *kā-[ḫ]ānfašuitt-un* "on-throne dais-GEN = on the throne dais".

4.4. *Language universals, Hattian, and Hittite*

Having established that the VSO word order of Hattian is supported by its head-marking of syntactic relations and its prefixing nature, we now can finally focus on whether the shared features of Hattian and Hittite were present or not in their precursors.

The language universals set up by Greenberg (1966) provide a means to establish additional word orders given the basic word orders of both languages. These expected word orders can then be compared with what is actually attested. If the shared features mentioned in section 4.2. are not expected to occur in one (or both) of our languages, then this language, showing a mismatch between shared feature and basic word order, is the one that most likely has changed.

I will compare all Greenbergian language universals that are relevant for word order, together with the additional word order correlations listed by Dryer (1992),[50] with the Hattian and Hittite phenomena and discuss whether these languages obey the word order universals or not.

> **Universal 3.** Languages with dominant VSO order are always prepositional.
> **Universal 4.** With overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional.

Most Hittite adpositions are postpositional, matching its SOV order (Friedrich [3]1974: 129). Although Hattian does not have prepositions, the prefixes on the noun other than the plural and possessive markers are always locational, whether stative or directive (ex. 11b). As noted above, they could very well have developed from prepositions. The next universal may therefore be used to predict the Hattian order of genitive and noun:

> **Universal 2.** In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes.

While the Hittite preposed placement of the genitive (see exx. 1a, 2) is in agreement with this universal (SOV and preceding genitive), Hattian is not. As in Hittite, its genitive is preposed, without exceptions[51] (see ex. 1a, b, 2).

> **Universal 6**. All languages with dominant VSO order have SVO as an alternative or as the only alternative basic order.

As noted above, I have not yet found examples of SVO order in Hattian. The only alternative order seems to be (S)OV in text-initial or speech-initial clauses, which is also the basic order in Hittite.

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[50] The Greenbergian universals dealing with the ordering of adjectives and nouns need to be left out, because Dryer (1988, 1992: 95-96) has shown them to be invalid.

[51] See Klinger (1994: 34 n. 53) for a rejection of the alleged exceptions mentioned by Girbal (1986: 18f.).

Universal 12. If a language has dominant order VSO in declarative sentences, it always puts interrogative words or phrases first in interrogative word questions; if it has dominant order SOV in declarative sentences, there is never such an invariant rule.

This universal states that the position of question words cannot be predicted for SOV languages. The initial and non-initial placement of Hittite question words is therefore not surprising (exx. 3a, b). However, the fact that question words in the VSO language Hattian also occur in initial and non-initial position (exx. 4a, b, c), is yet another violation of a language universal.

Universal 23. If in apposition the proper noun usually precedes the common noun, then the language is one in which the governing noun [follows, PMG]⁵² its dependent genitive. With much better than chance frequency, if the common noun usually precedes the proper noun, the dependent genitive [follows, PMG] its governing noun.

In Hattian the proper noun always precedes the common noun, as in ᵈ*Šāru   kātte* ᵈ*Lēluwani kātte* "Šaru king Leluwani king = King Šaru (and) King Leluwani" (KBo 37.1 i 5-6). This order matches the order observed for genitive and head noun. This is also true for Hittite, see for example the gen.s. proper noun and common noun [ᵐ*Pi*]*tḫānaš attaš=maš* "Pitḫana, my father" (OH/OS, KBo 3.22 obv. 10).

Having exhausted Greenberg's universals, I will now turn to other word order correlations that have received less attention, discussed in Dryer 1992.

Correlation of verb and manner adverb. Manner adverbs overwhelmingly precede the verb in OV languages and generally follow the verb in VO languages (Dryer 1992: 93).

Hittite manner adverbs precede the verb, as illustrated by the demonstrative manner adverb *kiššan* in ex. 5b. Manner adverbs in Hattian are extremely rare (or still not recognized). The only manner adverb known to me occurs in postverbal position in an intransitive SV clause:⁵³

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⁵² The original text states twice 'precedes'. Greenberg's universal 23 is based on a hapless reversal of the figures in the table on which the universal is based. This can be shown by a recount based on the material in the appendices of Greenberg 1966. The corrected table is (G = genitive noun, N = governing noun):

	G	N
Common Noun - Proper Noun	1	8
Proper Noun - Common Noun	8	0

I have not checked the secondary literature for references to the corrected universal.

⁵³ The demonstrative manner adverb *intā* "in this way, thus" in ex. 6a does not modify a verb but is itself the predicate, followed by the copula *tešpūt*.

14   KUB 2.2 iv 53, 57 (NS), differently Schuster 1974: 74

ūn=ḫu=pi	*weuttā*	*u-da-**nu***	*pi-izz*[*i*]
you=QUOT=but	further[?]	2SG-into-**go**	to[?]-good

"And *you* go further (?) into it (the palace) in a good way!"

Correlation of adverbial subordinators. Adverbial subordinators are somewhat more commonly clause-final in OV languages but overwhelmingly clause-initial in VO languages (Dryer 1992: 103).

The one recognized Hattian adverbial subordinator is clause-initial (ex. 6b). Hittite adverbial subordinators may be placed in clause-initial position, but also occur mid-clause (ex. 5b).

Correlation of verb and adpositional phrase. Adpositional phrases more often precede the verb in OV languages, and they more often follow the verb in VO languages. This is almost exceptionless for VO languages (Dryer 1992: 92).

In my sample I counted 15 cases of adpositional phrases preceding the verb in the verb-final clauses (see the Appendix), and 9 cases of adpositional phrases following the verb in the verb-initial clauses. In one case there might be O-V-Adp order, but my analysis of this example (ex. 6a) is too uncertain to count. This distribution is another strong indication that Hattian also has SOV characteristics, but no characteristics of the expected alternative SVO pattern. This is also shown by the following correlation pair.

Correlation of copula and predicate. The preferred order of copula and predicate is Predicate-Copula in OV languages and Copula-Predicate in VO languages (Dryer 1992: 93-94).

I counted two instances of the order Predicate-Copula. The clearest example is *intā tešpūt* "Let them be this way" in ex. 6a. Hittite always shows the order Predicate-Copula.

The following table gathers the information just presented on universals and correlates. I have also added a row on text initial clauses and the order of subordinate and main clauses. The diagram clearly shows that Hattian violates the majority of universals and correlations dealing with word order phenomena in VO languages (white). Instead, Hattian mostly patterns with an OV basic order (grey shade). Hittite on the other hand does not violate any universal or correlation dealing with its basic OV order.

OV correlate	Hittite	Hattian	VO correlate
postpositions	postpositions	prefixes (< prepositions)	Prepositions
genitive – noun	genitive - noun	genitive - noun	noun – genitive
SOV text initial clauses	SOV text initial clauses	SOV text initial clauses	VSO text initial Clauses
free placement of question – word	free placement of question - word	free placement of question - word	initial question word
proper noun - common noun	proper noun - common noun	proper noun - common noun	common noun – proper noun
manner adverb - verb	manner adverb - verb	verb - manner adverb	verb - manner adverb
initial / final adverbial subordinator	initial adverbial subordinator	initial adverbial subordinator	initial adverbial subordinator
adpositional phrase – verb	adpositional phrase – verb	adpositional phrase - verb / verb - adpositional phrase	verb-adpositional phrase
predicate – copula	predicate - copula	predicate - copula	copula – predicate
subordinate clause - main clause	subordinate clause - main clause	subordinate clause - main clause	main clause - subordinate clause

Table 2: Consistency of Hittite and Hattian as OV and VO languages.

4.5. *Conclusion*

In many aspects Hattian does not behave like a VO language, whereas Hittite generally shows the word order correlates of OV languages. The non-typical placement of the genitive was already noted by Klinger (1994, 1996), who therefore concluded that typology was probably not very helpful in understanding Hattian. Klinger is indeed correct in that the fluctuation between VO and OV characteristics prevents the use of typology for the further analysis of Hattian. Still, this fluctuation allows the following suggestion: the structure of Hattian is distorted in such a way that I hypothesize that Hattian is heavily influenced by an (S)OV language. This type of distortion is also known as typological disruption. Hittite on the other hand is a perfectly harmonious (S)OV language.

One could object that Hattian is simply shifting from VSO to SVO in view of the dominant SV order in intransitive clauses, since SVO is often an alternative basic order for VSO languages (Greenberg universal 6). The fact however that I have not yet found any SVO clauses, while there is ample evidence for SOV clauses in Hattian, points at a

shift to OV structure. Another argument against an alternative SVO order is the fact that SVO languages often behave like VSO languages, because both have VO order. As we have seen, Hattian has many non-VO features.

The shift proposed for Hattian is well attested. Amharic, an Ethiopic Semitic language with originally a basic order VSO, changed to SOV under the influence of Cushitic (Thomason and Kaufman 1988: 131), and of course the VSO language Akkadian became SOV under the influence of Sumerian.[54] In modern times a similar change has been noted for modern Asia Minor Greek, which borrowed SOV word order and its correlative structures from Turkish (Thomason and Kaufman 1988: 220ff.).

To return to the criteria listed by Thomason: the features shared by typologically disrupted Hattian and typologically harmonious Hittite probably did not exist in pre-Hattian, and are almost certain to have existed in proto-Hittite. Thus, it is Hattian that underwent contact-induced change, and not Hittite, as has been claimed so often (see section 3). Hattian is on the verge of changing from VSO to SOV, even though a change from VSO to SVO would be the more regular development. Theoretically, Hattian might be under heavy influence from an unknown SOV language in Anatolia, but I suggest that we do not look any further than (one of) the Anatolian Indo-European SOV languages as the source language(s).

But how can we account for this situation from a sociological point of view? In the next section I will discuss several socio-linguistic models that might explain the linguistic picture, and select the most likely candidate.

5. *Socio-linguistic factors compatible with the situation as described*

Sarah Thomason and Terrence Kaufman (1988) distinguish two types of natural change in languages, *borrowing* and *shifting*. In the borrowing situation speakers maintain their language but borrow elements from a second language, the source language. In the shifting situation speakers often abandon their native language and shift to another language, the target language.

Based on research in many contact situations, Thomason and Kaufman have isolated the following rule of thumb: in the borrowing situation one will find lexical borrowing, or loan words. Only if there is strong long-term cultural pressure from the source language group on the borrowing language group, substantial borrowing of structural features may occur. This requires extensive bilingualism in the borrowing language over a period of several centuries of intimate contact (1988: 37-39). In the shift situation on the other hand, there will be influence on syntax and phonology but no or few loan words. The interference in the shift situation is the result of imperfect language learning. Learner errors of the speakers of the source language spread to the whole target language when imitated by the native speakers of the target language. But this only happens when the

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[54] Even though a few scholars claim that Akkadian retained an original proto-Semitic basic SOV order (Haayer 1986; Michalowski 2005), it is quite safe to accept that Akkadian changed from VSO to SOV under the influence of Sumerian (Von Soden 1995: 227).

shift occurs rapidly, for example within one generation, and the source language group is numerically large enough to allow imperfect language learning (1988: 39-41).

If we apply these rules to two situations, bilinguals with either Hattian as native language or an SOV Anatolian Indo-European as native language, we can reconstruct the following sociopolitical constellations that explain both the lack of lexical borrowing in Hattian and the structural influence from the SOV language:

1. Substrate Hattian structural borrowing, with a taboo on lexical borrowing
We have a truly borrowing situation, in which Hattian speakers maintain their language but are under strong influence from an SOV language. This situation requires a great amount of lexical borrowing before grammatical structure starts to be affected by the SOV language. But since there are hardly any (or no) recognized borrowings from other languages besides Akkadian in Hattian, we must assume a taboo on lexical borrowing at least in the religious sphere (i.e., in Hattian myths and the other cultic texts). Such a taboo would seem rather odd in view of the fact that Hattian *did* borrow from Akkadian. But let us assume that such a taboo existed, then there would only be structural borrowing. The time frame for this kind of borrowing is several centuries at the least.

If the giving SOV language is proto-Hittite/Luwian, the borrowing situation would also explain the slight borrowing of cultural loanwords in Hittite/Luwian and the lack of structural influence from Hattian in these languages. The long period of coexistence of a large group of monolingual Hittite/Luwian speakers and fully bilingual Hattian-Hittite/Luwian speakers, which would have allowed perfect language learning of Hittite/Luwian, would leave no trace of Hattian interference in Hittite/Luwian, besides some lexical borrowings.

Even though this scenario would explain the typological disruption of Hattian without lexical borrowing, and the lack of structural interference in Hittite combined with slight lexical borrowing, it does not match well with our current knowledge of Anatolian political and cultural history. The linguistic situation as described here requires that for many centuries before 1650 BCE the proto-Hittite/Luwian speakers were the dominant power, with very strong cultural and linguistic pressure on the Hattian speakers.

But why did this –necessarily large– group of proto-Hittite/Luwian speakers abandon their religion in favor of Hattian cult, mythology and pantheon? And most importantly, why did they use mainly Hattian as the language of religion? It is of course possible that the proto-Hittites/Luwians already held a territorial view of deities and that they therefore adopted worshipping of Hattian deities and continued the cult in Hattian. But one would also expect that their own Indo-European deities would have been added to the local pantheons, either by means of syncretism or by means of true addition. And presumably we should find many more cultic recitations in Hittite/Luwian than is currently the case. Besides, we would also need to explain why the royal names of the Old Hittite kingdom are mainly Hattian.[55]

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[55] See for example Tudḫaliya, Pafaḫtelmaḫ, Ḫattušili and Kadduši, Muršili, Ḫarapšili, Ḫuzziya, Telipinu and Ištapariya. Ḫantili is either Hattian or Luwian, but Zidanta and Muwatalli are Luwian.

Finally, a subordinate position of Hattian with many centuries of Hittite/Luwian political dominance does not explain the influence of Hattian on Palaic (see section 7.2 for further discussion).

In short, the dominance of Hattian culture is difficult to reconcile with the subordinate sociopolitical position of the Hattian speakers that should accompany the borrowing phenomena. So maybe we have:

2. Superstrate Hattian structural borrowing, with a taboo on lexical borrowing
A relatively small group[56] of Hattian speakers, the superstratum, provides the dominant culture within a large population of speakers of an SOV language. The Hattian elite is fully bilingual in the SOV language, but will have given in to the numerical pressure of the SOV speakers, with structural borrowing and lexical taboos in their native Hattian.

This model fits the 'victorious invaders' hypothesis, but this time the Hattian speakers are the invaders and, since there are no other language communities that fit the profile, the Anatolian Indo-European speakers form the substratum.[57] This would not only explain the Hattian cultural dominance in Hittite society without linguistic structural interference in Hittite, but also the death of the Hattian language within two to three centuries once the Hittites regained supremacy under Pitḫana and Anitta.

This scenario, however, is also problematic: could the Hattian speakers superimpose their religion on the numerically large Anatolian Indo-European language community and completely wipe out the latter's 'original' religion? Could they, as a small group, replace the deities of the local cults with their own gods? The same issues that made option 1. less likely also diminish the chances for option 2.

3. Superstrate Hattian structural interference through shift
Finally, the Hattian language facts may be explained by a language shift from a numerically large and originally subordinate group of speakers of an SOV language to Hattian. This group is in close contact with Hattian speakers, but, because of the group size, not exposed enough to learn the language perfectly on an individual level. This imperfect group learning leads first to grammatical mistakes in the Hattian of the SOV speakers and then in the speech of the Hattian speaking natives. Without lexical borrowings in Hattian this indicates a language shift from the SOV speakers to Hattian in a rather short period of time, maybe even in one generation. The lack of lexical borrowing in Hattian also points at a subordinate sociopolitical position of the shifting SOV speakers (Thomason and Kaufman 1988: 117).

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[56] A large dominant group would most probably not feel the need to become bilingual in the subordinate language.

[57] This is what Melikishvili claimed: "There are no foundations for us to agree with the widespread opinion, that the Proto-Hittites [i.e., Hattians, PMG] are presumably the most ancient population of Central Anatolia, the predecessors of the Hittites-Nessites. It was only toward the end of the IIIrd millennium, that they penetrated into the central Anatolian regions, which were already occupied by the Nessites, and began to play an active role in the political life of the country. It is particularly under their hegemony and not under the hegemony of the Nessites, that the Hittite state was formed" (1968: 5-6).

This situation may result from the rather sudden intrusion of a large group of immigrants, which may have taken place at any point in the history of the Hattians. The *terminus ante quem* however, would be a generation before the Hittites start taking over because this is the minimum time required for the emergence of interference in Hattian. After the conquests of the Hittites, Hattian political dominance is *de facto* over, and the population would rather turn to Hittite as the language of prestige.

To return to the period before the Hittite conquests, since the dominant culture is Hattian, exerting strong cultural and political pressure, many cultural concepts are taken over by the SOV speaking population. If they remained bilingual for a while, we expect strong lexical borrowing by the subordinate group of SOV speakers, but only structural borrowing if the period of bilingualism lasted for a larger period of time.

The third option seems to explain the sociopolitical situation better than the other two. We have a large, originally subordinate immigrant group which has completely merged with Hattian society, and is fully, but not perfectly bilingual in both Hattian and an Indo-European language, either proto-Hittite, proto-Luwian, proto-Palaic, or another Anatolian Indo-European language.[58]

As a result, the native language of this group must have borrowed many Hattian words, and, depending on the length of contact, might also show structural borrowing. But this does not show in the Hittite documents, or Luwian for that matter. I believe that this is caused by the fact that the Hittite language as attested is not the language of the subordinate group, but is the successor of the dialect of Kaneš/Neša, an area in which the Hittites were *not* subordinate. Unlike their related neighbours, the language of the proto-Hittites of Kaneš would at the most show some adstratum effects due to casual contact, as is of course already mentioned by Melchert (2003b: 21).

When Anitta sweeps over Hattian ruled land and certainly after Labarna, Ḫattušili I of Kuššar and Muršili I definitively conquer the former Hattian core land, the Hittites find a language community of mixed descent, in which a large part of the population might still speak a form of Indo-European, but worships Hattian deities in Hattian, performs Hattian rituals, and listens to Hattian mythology. Although Hattian as a court language will have been replaced by Hittite, part of the population will still speak Hattian for some time after the conquests. One can imagine however, that possibly bilingual descendants of the speakers of Indo-European might easily switch to that other Indo-European language or dialect, Nešite Hittite.

It is also noteworthy that the Anatolian Indo-European system of name-giving in the Colony period is both different from the Proto-Indo-European system *and* from that of the later Hittite kingdom, which is basically adopted from the Hattian speaking population, although there are some scanty remains from the Colony period (Oettinger 2004: 359-361). What we find in the Hittite kingdom is not so much a replacement as a

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[58] This corresponds with Soysal's phase 1 of Hattian-Hittite contacts: "The earliest Hittites who peacefully lived in Hattian cities under Hattian sovereignty without having any military-political claim" (2005: 204). There is however no positive evidence that identifies Hittite speakers as the ones in contact with the Hattians.

merger of a majority (Hattian) and a minority (Kanešite) system of name-giving, mirrorring the distribution of Hattian and Kanešite religious elements.

In this scenario of élite dominance, the Nešite Hittites form only a small part of the population. Numerically they would not have been able to impose their religion and cult on the religious practices of the conquered area, which could explain the adoption of Hattian religion and cult and the very few references to the pantheon of Kaneš and Kanešite cultic practices.[59] And although it remains conjectural, the mainly Hattian onomasticon of the royal dynasty, with a few Luwian names (see fn. 55), might be another, perhaps deliberate instance of acculturalization to the Hattian speaking majority.

All three models presented above require the presence of an Indo-European speaking language community in Hattian lands before the Hittite conquests. This is the subject of the next section.

6. *'Indo-Europeans' in Hattian lands before the Hittite conquests*

The documents from the Colony period seem to provide some evidence for the structural presence of 'the others' in the Hattian linguistic area.[60] Indo-European names are not only attested in the Kültepe archives but also in the archives of Boğazköy (Ḫattuš) and Ališar (Capp. A(m)kuwa, Hitt. Ankuwa). Singer (1981: 126) suggests that the Boğazköy and Ališar archives date after Anitta's conquests,[61] which would explain the presence of these names. Irrespective of the exact dating of these two archives however, the few Anatolian names do not prove the presence of a large Indo-European speaking population in these cities.

Klinger (1996: 88 w. fn. 30) adduces two letters, one from Mari[62] and one from Kültepe[63] in which the name Ḫattuš is already thematicized as Ḫattuša. The form Ḫattuša instead of genuine Hattian Ḫattuš might indeed show the early presence of Indo-

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[59] For a recent overview of the religion and cult of Kaneš, see Archi 2004.

[60] I concur with the majority view that Kültepe/Kaneš was not part of the Hattian linguistic and cultural area (see for example Singer 1981: 123; Klinger 1996: 197; Melchert 2003b: 9). For the opposite view see Soysal 2004a: 3.

[61] This may not be the case for the Boğazköy tablets. Even though the tablets are contemporaneous with Kültepe Ib and Anitta, the destruction layer separating the Old Assyrian period from the Old Hittite period may be the result of Anitta's conquest. Since Anitta claims that he depopulated Ḫattuša (see fn. 70), it seems reasonable to assume that the Boğazköy tablets predate the conquests.

[62] M.8426+9046, edited by Ziegler (1996: 480): "[Jegliche Wertgeschenke, [die au]s Kaniš, Ḫarsamnā [oder Ḫa]ttuša sind (¹⁵' [ša iš]-t[u] Ka-ni-iš^KI Ḫa[r]-sa-am-na-a^KI ¹⁶' [ù Ḫ]a-[a]t-tu-ša^KI), Kunstwerk, Künstlerarbeit oder Seltenes".

[63] KTK 10, edited by Larsen (1972: 100-101): "The prince of Šinaḫuttum, the man of Amkuwa, and the man of Kapitra have made common cause, and they have rebelled against the man of Ḫattuša (Ḫa-tù-š[a]-i-a[m] "he of Ḫattuša"). To⁷ the men of Kaneš …". For the special Old Assyrian nisbe-formation -āj following the Anatolian place names on -a, see Hecker 1968: 89.

Europeans in the northern part of Central Anatolia, but it does not prove it. Most Old Assyrian references to Ḫattuš are still without the theme-vowel.

Far more telling than the isolated mentions of Ḫattuša, is the name Amkuwa and its variant Akuwa, already attested in Kültepe level II,[64] whereas the Hattian name of this city is Ḫanikku.[65] The mere fact that we do not find the Hattian name in the Colony period points to the early Indo-Europeanisation of this city in the core land of the Hattians.

The other piece of evidence for the presence of (a type of) Hittite speaking population within the bend of the Kızıl Irmak in the Colony period may be the Hittite place name Šuppiluliya "sacred pool".[66] In view of the fact that Hittite speakers were able to found a village in an originally Hattian area, Alp (1997: 40) concluded that the Hittites must have formed a majority already in the Colony period.

A connected issue is the use of the ethnonym *nuwa'um* (further see section 8.). As it is the only term used by the Assyrians to refer to non-Assyrians, it seems reasonable to take this word as referring to *all* the natives of Central Anatolia, irrespective of their linguistic and cultural background. Not only are the *nuwa'um* the only trade associates of the Assyrian merchants,[67] they are also attested in Ḫattuš/Boğazköy[68] and Alişar.[69] The Boğazköy texts predate a destruction layer which is most likely (but not certainly) caused by the devastating attack of Anitta on Ḫattuš(a), as recounted in KBo 3.22 rev. 45-51.[70] Since this could mean that Ḫattuš was not yet 'Hittitized' by the time the archives came into being (as the name Ḫattuš itself probably testifies, see above), we have again more support for the view that the *nuwa'um* are just the natives of Central Anatolia.

In all, there is no positive evidence to restrict *nuwa'um* to either Luwians, Hittites, or both. This term therefore does not prove the presence of an Indo-European language community in Hattian lands. Nevertheless, the other facts mentioned above support the view that these language communities were already present in Hattian lands before the Hittite conquests.

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[64] Spelled *A-am-ku-wa* in TMH 1, 2b: 27.

[65] See Klinger 1996: 190-191 with references to older literature in fn. 266.

[66] The Cuneiform Luwian words for "pure, sacred" are *ḫalāl(i)-* (Melchert 1993: 46) and *kumma-* (Melchert 1993: 108).

[67] See for example BIN 6, 59: 23 ("turn them into money") *lu ṭup-pu ḫa-ru-mu-tum ša* DAM.QAR-*ru-tim / lu ša nu-a-e* "whether they are case-enclosed tablets drawn either on merchants or on *nuwa'um* (…)" (see CAD A 306, **arrumu* b).

[68] KBo 9.5: 6, 17, 18 (Dercksen 2001: 54 n. 81), found in level IV (corresponding to Kültepe level Ib). The *nuwa'um* mentioned in lines 12 and 13 lived in Kaneš.

[69] OIP 27, 12: 5, 12 (Dercksen 2001: 48 n. 48) and OIP 27, 37 rev. 2', both level 10 T (corresponding to Kültepe level Ib).

[70] "But when later it (the city Ḫattuša) suffered from famine, Ḫalmašu[it], their deity, relinquished it, and I took it by force at night. [I] sow[ed] cress on its grounds. § Whoever should become king after me and should resettle Ḫattuša, may the Stormgod of Heaven smite him!" (see Beckman 2006: 218 for the most recent translation).

7. *Who were these 'Indo-Europeans' ?*

7.1. *Hittite speakers ?*

As noted above, during the shift to Hattian there must have been a period of bilingualism, with borrowing of Hattian features in the language of the subordinate group. Lack of Hattian interference in Nešite Hittite shows that this type of Hittite could not have been the native language of the subordinate Anatolian Indo-European language community. It is still possible though that speakers of a form of proto-Hittite moved into the Hattian domain, whereas others resided in the area to the South and East of the Kızıl Irmak river. Borrowings from Hattian would have led to a form of Hittite which must have been different from attested Nešite Hittite in lexicon, phonology and possibly syntax, but I suppose it would still be recognizable as a kind of Hittite.

Although there is no direct evidence for 'Hattian' Hittite spoken by descendants of proto-Hittite speakers, we actually have an example of a 'Hattian' Hittite text produced by a bilingual individual of Hattian background. Soysal (2000: 113-114) has argued that the Old Hittite oracle text KBo 18.151 shows strong interference from Hattian phonology and morphosyntax. I do not claim that the Hittite language of the subordinate language group would exhibit the same features to the same degree, but it shows what type of interference to expect. In addition, we would probably find strong lexical borrowing from Hattian in non-Nešite proto-Hittite.[71]

That we do not find texts of this kind more often in Old Hittite has probably to do with the Nešite Hittite background of the court. Thus, the proto-Hittite speakers might be the language community we are looking for, but the linguistic evidence to support this is simply not expected to occur.

7.2. *Palaic speakers ?*

The only language that not only shows direct evidence of Hattian interference[72] but was also spoken in an area that was culturally, if not politically, dominated by Hattian society, is Palaic, preserved in a very small corpus of religious texts from the Old Hittite period. Hattian mythology, deities and themes in Palaic texts all point at dominance of Hattian culture. Besides borrowed lexemes, these texts also show signs of phonological interference. Unlike Hittite and Luwian, Palaic usually preserves /f/ in Hattian loans and divine names.[73] The nasal /n/ assimilates to /m/ before /p/,[74] a process which is very well

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[71] Compare for example the Yiddish and English spoken by a group of bilinguals in the US. The native Yiddish of these bilinguals shows strong borrowing of English lexicon, weak borrowing of phonology, and moderate borrowing from morphosyntax. In their second language English, on the other hand, there is moderate influence in lexicon, and strong interference in both phonology and morphosyntax (Thomason and Kaufman 1988: 40).

[72] See Carruba 1970: 38, 40 and Kammenhuber 1969: 142, 254, 269.

[73] Carruba 1970: 38, 40.

known in Hattian, but again absent in Hittite, and rarely attested in Cuneiform Luwian.[75] I would furthermore like to suggest an interesting case of direct borrowing from Hattian on discourse level: the contrastive coordinator -pi, partial equivalent of Hittite -a/-ma.[76]

The borrowing of content words and function words, such as -pi, and the appearance of new phonemes in loanwords belong to 'slight structural borrowing', category (2) of Thomason and Kaufman's borrowing scale (1988: 74). A completely analogous situation is found for example in Huastec, a Mayan dialect in Mexico. Huastec has borrowed Spanish conjunctions such as *por* "but", derived from Spanish *pero* and the Spanish morphemes /d g/, in loanwords only (Thomason and Kaufman 1988: 80). This type of borrowing occurs when the contact is slightly more intense than category (1), casual contact.

All this information derives from the earliest Hittite texts. Even though it is likely that Palaic was already a distinct language in the Colony period, we have no means to distinguish between Palaic and the other Anatolian languages in the Cappadocian tablets, mostly due to our lack of knowledge of Palaic lexemes. However, in Hittite times Pala is located to the north-west of the Kızıl Irmak river, and therefore rather out of reach of the Assyrian trade network. This might mean that Palaic is simply not or only rarely expected to appear in the Cappadocian documents.

In all, Palaic seems to be too peripheral to have formed the substrate of Hattian we are looking for.

7.3. *Luwian speakers ?*

If a proto-Luwian language community lies behind the SOV language[77] that influenced Hattian before the Hittite conquests, we at least need to show that Luwian was already a distinct language in the Colony period, and we would also like to find some evidence of a Hattian-Luwian cultural symbiosis. The Old Assyrian tablets do not provide evidence for the latter, so for a Hattian-Luwian cultural admixture we need to turn to the Old Hittite texts.

The presence of proto-Luwian and proto-Hittite in the early second millennium can be gleaned from the Old-Assyrian documents. The following short overview is merely intended to illustrate that proto-Luwian and proto-Hittite are already attested as distinct languages in Anatolia during the Old Assyrian period. For a more elaborate discussion of the Anatolian Indo-European and other languages in the Cappadocian texts one should consult the recent studies of Tischler (1995), Alp (1997), and especially Dercksen (2007).

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[74] Carruba 1970: 41.

[75] Melchert 2003c: 183.

[76] For Palaic -pi as a coordinator, see Yakubovich 2005: 119. Whatever Cuneiform Luwian -pi might mean (Melchert 1993: 175), it seems difficult to compare it with the Palaic coordinator.

[77] Preliminary research shows that Luwian word order phenomena are similar to those established for Hittite. Its basic, or unmarked order is SOV (Melchert 2003c: 200ff.).

Although grammatical information is almost completely absent, the Anatolian onomasticon and a growing collection of loanwords provide evidence for the lexical distinction between proto-Hittite and proto-Luwian. Proto-Hittite loans are the often adduced lexemes *isḫiuli/isḫiul(l)um*, *ispadallum* and *tuzinnum* "(military) land tenure".[78] Proto-Luwian on the other hand are *ubadinnum* "royal land-grant"[79] and *targummannum* "interpreter".[80]

Palaic and Palaic culture play hardly any role in the Old Hittite kingdom and all traces of the language disappear after that. This is different however for Luwian and Luwian culture, as most clearly illustrated in Melchert 2003a. Hattian and Luwian seem to be on a par when it comes to lexical and cultural borrowing. The limited number of Hattian lexical borrowings in Hittite, not more than 30 assured loans, equals the number of Luwian lexical borrowings in Old Hittite. But Luwian itself also borrowed from Hattian: Melchert reckons with parallel loans from Hattian into Hittite and Luwian or from Hattian into Luwian and then into Hittite (Melchert 2003b: 18).

With respect to the religion of the Old Hittite Kingdom, we must recognize a Hittite-Luwian stratum which is closely related to the Hattian stratum (Miller 2004: 442). However, we might even have to assume a Hattian-Luwian stratum if the use of Luwian besides Hattian in the cult recitations may be taken as positive evidence. As Klinger (1996: 91) observes, the language of the cult in the Old Hittite period is Hattian while Hittite is only used in the cult for the pantheon of Kaneš/Neša. But this is different for Luwian: we find Luwian cult recitations for *Hattian* deities. In a festival for the Stormgod and the Sungoddess of Arinna,[81] in other words, in the official state cult for the two supreme deities, these deities are evoked in Luwian with a plea for the well-being of Hattuša and the king. It is also interesting to find a Hittite magical ritual,[82] probably addressed to Ziparwa, the supreme deity of the Palaic pantheon, with both Luwian and Palaic incantations (Yakubovich fc.). Luwian religious texts furthermore contain Hattian mythological motifs, again pointing at close contact with Hattian culture (Soysal 2002a: 331 n. 44). In addition, the indigenous Anatolian Telipinu myth and other related Old Hittite compositions show a mixture of Hattian and Luwian motifs (see for example Haas 2002: 143ff.; Miller 2004: 441, with literature).

The favorable position of Luwian cultural aspects in the Old Kingdom, together with Hattian culture, is also apparent in the ideological and administrative sphere (Melchert 1993: 20; Yakubovich fc.). In the ideological sphere of organized society we find Luwian borrowings in Hittite, such as *nū-* "contentment, satisfaction (?)" and *tumantiya-*

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[78] See Dercksen 2004: 147-150. Cappadocian *tuzinnum* refers to land belonging to a house that is tied with a service obligation. The possibly military character of this service obligation may provide the semantic link with Hittite *tuzzi-* "army, army-camp" (2004: 148, 155).

[79] See Dercksen 2004: 150-154 for a discussion of *ubadinnum* in context.

[80] See Starke 1993.

[81] KUB 35.133 (CTH 772, OH/13th c. copy), ed. Starke 1985: 278ff.

[82] KBo 8.74 + KBo 19.156 + KBo 39.174 + KUB 32.16 + KUB 32.117 + KUB 35.93 (CTH 752A, OH/OS), translit. Neu 1980: 220ff., without the joins KBo 39.174 and KUB 32.16.

"obedience", in administration and government *ubati-* "demesne, landgrant",[83] *tapariya-* "to rule", and most likely *tabarna/labarna* "the powerful one" and *tawannanna* "the righteous one"[84] (Melchert 2005: 453).

It should therefore not come as a surprise that several scholars have pointed out that Luwian speakers must have been present in or near Central Anatolia or even North Anatolia at least at the beginning of Hittite history (see for example Soysal 2002a: 331-332, n. 44; Haas 2002: 146; Hutter 2003: 214-215). Carruba (1992) uses onomastic evidence and the ethnonym *nuwa'um* "Luwians" to support the presence of Luwians in Central Anatolia in the Colony period. Finally, a local Luwian homeland in Central Anatolia before their migration to Western Anatolia is cogently argued for by Yakubovich fc.

But does this all mean that a form of proto-Luwian is the language that has influenced Hattian? The early presence of Luwian language and culture in Central Anatolia may also be the result of a joint migration in the wake of either the Anitta or, more likely, the early Old Kingdom conquests. What we really need is a form of Luwian that shows lexical and possibly structural borrowing from Hattian as an accompanying phenomenon. But even though we have some Luwian texts, the Istanuwian festival songs[85] composed in the 16th-early 15th centuries BCE, that represent the language of a local language community instead of the court vernacular, the situation is hardly better than for non-Nešite Hittite. We do not understand enough of these texts to even begin thinking of Hattian interference.

There is however other, unexpected supportive linguistic evidence. As noted above in section 5, possibly bilingual descendants of the speakers of the Indo-European SOV language we are looking for might switch to Nešite Hittite after the conquests. In case of imperfect learning, this shift should result in influence on spoken Hittite in the post-Ḫattušili I / Muršili I period and at some point after that it would have influenced the written language as well. Rieken (2006) recently investigated the nature of Hittite-Luwian language contacts and showed how structural influence from Luwian starts in Old Hittite, but gains real momentum in Middle Hittite.[86] If Hittite starts to be structurally influenced by Luwian in Old Hittite, then there must have been a large contingent of speakers of Luwian in the area of Ḫattuša.

These language facts might also be compatible with another socio-linguistic model: that of Luwian speakers arriving with the Hittite conquerors. But then we must accept several additional assumptions: 1. Before the conquests proto-Luwian speakers did not have much contact with proto-Hittite speakers, certainly not in a subordinate position (a

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[83] For a discussion of *ubati* see Melchert 2004: 373.

[84] See fn. 21.

[85] Edited by Starke 1985: 294-304. On 'Istanuwian' as a dialect of Luwian, see Melchert 2003c: 174-175. For a discussion of the Istanuwian cult, see Hutter 2003: 239-243. These cultic texts are associated with the city Ištanuwa, location still unknown. I find it tempting to analyze this name as a thematized form of Ištanu, an already Hittitized/Luwianized form of the Hattian Sungoddess Eštan. On Ištanu and other spellings see Van Gessel 1998: 205-206 (with references).

[86] See especially Rieken 2006: 281.

long period of contact would allow perfect language learning); 2. After the conquests the large Luwian language community would be subordinate to a smaller Hittite language community, allowing imperfect learning of Hittite; 3. This large population group must have *replaced* the existing Hattian-SOV language community to a large extent, otherwise we would have found linguistic interference from the Hattian-SOV language community; 4. Yet, it is Hattian high culture which is adopted by the Hittites.

To conclude, the linguistic, cultural and political facts seem more easily explained by a pre-conquest merger of proto-Hattian and proto-Luwian language communities than by an invading Luwian-Hittite language community replacing a Hattian and, for example, Palaic language community.

8. *Concluding remarks and a final word on the* nuwa'um

While I am quite certain about the lack of influence of Hattian on Hittite and the typological disruption of Hattian, there is no direct evidence that the latter was caused by one of the Anatolian Indo-European languages. Still, what other options do we have? And even though Thomason and Kaufman's framework of contact-induced language change is well-supported, applying it to an already hypothetical contact situation does not make the hypothesis less hypothetical.

However, I believe that we have enough evidence for a cultural merger of Hattian and Luwian elements already in the Old Hittite kingdom. Even though it is possible that the Hittites were the mediators for this merger, it is not unlikely that a Hattian-Luwian symbiosis was the result of direct contact before the conquests of Labarna and Ḫattušili I. Combining this with the typological disruption of Hattian by an SOV language and the influence that Luwian exerted on Old and especially Middle Hittite, I conclude that a form of Luwian is the most likely source for the change of Hattian as well.

To return to an old but related issue: does the ethnonym *nuwa'um* refer originally to the proto-Luwians?[87] I believe with Carruba (1992) that it does. The *nisbe*-formation is necessarily based on a geographical noun base **Nuwa-* < **Luwa-*[88] instead of Luwiya, but, as Carruba shows, this is not an important obstacle. Alp (1997: 47) argued against Carruba's thesis, because according to him the Hittites formed the majority of the population. It would therefore be unlikely that the Assyrians would refer to the Hittites as Luwians, while they themselves used *nešili* for their language. However, Alp did not distinguish between self-designation (speakers of *nešili*) and other-designation (*nuwa'um*).[89] Furthermore, as Carruba already argued, if the designation *nuwa'um* is the external reference to the inhabitants of Central Anatolia, at least in Assyrian sources, this could very well be because the Assyrians first met the Luwians in the third millennium,

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[87] We should discard Edzard's analysis of *nuwa'um* as 'those who say *nu*' (1989). As noted in section 3, the sentence connective *nu* became near obligatory only in Middle Hittite. In Old Hittite the Hittites also started their sentences with *ta* and *šu* (+ enclitics).

[88] For the alternation *n/l* see Carruba 1992: 255-256.

[89] One only need to refer to the self-designation 'Nederlanders' versus the other-designation 'Dutch'.

possibly through the mediation of the Hurrians (who turn initial *l-* into *n-*), before extending the term to the autochtonous population of Central Anatolia. We might now add that the use of the term *nuwa'um* could easily be extended to all the natives of Anatolia because the proto-Luwians were probably everywhere where the Assyrians went.

So, in my view, who did the Assyrians meet, and what language did those people speak? Within the bend of the Kızıl Irmak river we find the proto-Hattians, merged with immigrant proto-Luwians. Proto-Hattian is heavily influenced by a Luwian dialect, and this Luwian dialect might still have been spoken in historical times. To the North-West of the Hattian-Luwian zone we probably find the Palaeans, in the periphery of the trade network. Their language is clearly influenced by Hattian. Surrounded by Hattians and 'Hattian' Luwians to the North, by the independent, unassimilated proto-Luwians with their own dialects further to the South and to the West, and by the proto-Hurrians to the East, the proto-Hittites focus their attention on Kültepe, on the brink of expansion.

But to the Assyrians it was all the same: the population groups that participated in their trade network in Central Anatolia were simply the *nuwa'um*.

APPENDIX: WORD ORDER COUNTS FOR HATTIAN

The following table presents the counts on the word order sequences in transitive and intransitive clauses in Hattian. The counts are based on the following texts: KBo 37.1, KBo 37.9 + KBo 37.74, KBo 37.49 (only rev. 13'-19'), KUB 2.2 + KUB 48.1, KUB 24.14, KUB 28.4, KUB 28.6, VBoT 126. Not all clauses were counted, mostly because of interpretational difficulties. Capitals indicate lexically expressed words, roman type marks verbal prefixes.

TRANSITIVE CLAUSES

V-final		(sub)totals
with expressed subject		4
SOV	3	
SXOV	1	
without expressed subject		4
XOV	2	
OXV	2	
V-initial		
with expressed subject		7
VOS	2	
VSO	3	
Vo S	1	

Vox S   1

without   expressed
subject
VXO   1   50
VOX   3
VO   38
Vo   5
VoX   3

V-medial
OVX   1   1
                                                                      66

INTRANSITIVE CLAUSES

V-final
with expressed subject   20
SV   12
XSV   3
SXV   4
S Adv V Adv   1

without   expressed   3
subject
XVs   3

V-initial
with expressed subject   7
VS   6
VSX   1

without   expressed   1
subject
VX   1

                                                                      31

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