

Hittite

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
ABL	ablative
ACC	accusative
C	common gender
CONN	connective
D/L	dative/locative
DAT	dative
DIR	directive
GEN	genitive
IMPER	imperative
INDEF	indefinite
INF	infinitive
INSTR	instrumental
ITER	iterative
LOC	locative
M	mediopassive
N	neuter
N/A	nominative/accusative neuter
NEG	negation
NOM	nominative
OBL	oblique
PART	participle
PL	plural
POSS	possessive
PRES	present
PRET	preterite
PTC	particle
REL	relative
SG	singular
SUP	supine

0. Sociolinguistic and historical data*

0.1. Genealogical and chronological placing

Hittite belongs to the Anatolian branch of the Indo-European languages. It is attested from ca. 1650 B.C. until ca. 1180 B.C. Hittite speakers lived in the inner part of northern Anatolia: the capital of the Hittite kingdom, Hattusa (near Boğazkale), lies about 210 km. south east of Ankara. Beside Hittite, we know a number of other Anatolian languages, some of which are attested in the second Millennium B. C. (Cuneiform Luwian and Palaic), whereas others are attested in the first Millennium B. C. (Hieroglyphic Luwian, Lycian, Miliar, Lidian, and Carian). None of the languages of the first Millennium is a direct descendent of Hittite (see Luraghi, forthcoming).

0.2. Written sources and graphic peculiarities

Hittite is documented through several thousands of clay tablets, mostly found in the royal archives of Hattusa. Knowledge of the Hittite language is a relatively recent achievement, which was made possible by the work of Hrozný at the beginning of the present Century (see Hrozný, 1917). Hittite is written in cuneiform syllabary, a kind of writing which was common in Ancient Near East, and that Western scholars had deciphered in the past century already. Originally, cuneiform had been an ideographic writing system created for Sumerian in the third Millennium B.C. Already in Sumerian, cuneiform signs had developed syllabic values, which occurred in writing together with ideographic ones. The type of cuneiform adopted by the Hittite is most resembling to the Old Babylonian variant, one of several variants used for writing Akkadian, a Semitic language. As I have mentioned, cuneiform signs could have either an ideographic or a phonetic (syllabic) reading in Sumerian. This peculiarity was preserved in Akkadian. Because of current transliteration conventions, signs which must be given an ideographic reading are spelled according to their Sumerian form in transliteration of Akkadian texts. One is made aware of this through the use of capital letters. So for instance, one can find the form DINGIR-*lim*, '(the) gods', where DINGIR is (one of) the ideographic reading(s) of the sign  (to be read phonetically as *an*), while *lim* supplements morphological information (plural number) relevant to the Akkadian form (the Akkadian form for 'gods' is *ilim*).

The Hittite usage of cuneiform is complicated by the fact that, beside Sumerian readings, even the Akkadian reading may be preserved for some signs. For instance, the personal name *Hattusili*, the name of several Hittite kings, can be written either phonetically, as *^mha-at-tu-si-li-is*, or ideographically, as *^mGIŠPA-si-DINGIR^{LM}-is*. The first form is the nominative singular (ending -s) of the name *Hattusili*, preceded by the determinative of masculine personal names, which can be transliterated as ^m, meaning 'masculine', or as ^l, because it has the form of the ideogram for the numeral 'one'. In the second form, beside this same determinative, we find:

* The present book was written during a stay in Vienna in June 1996 and a longer one in Berlin, in the Summer/Fall of the same year. I thank my colleagues and friends in both institutions for making available to me the facilities in their Departments. Besides, I thank the Alexander von Humboldt Foundation for financial support during my stay in Berlin.

- *GIS*, determinative for nouns denoting trees or wooden implements;
- PA, ideogram for stick. *GIS*PA is to be read as *hattu*, that is, it has to be given the Akkadian reading of the Sumerian ideogram;
- *si*, sign to be read according to its phonological value;
- DINGIR^{LM}, ideogram for ‘god’ with supplementary Akkadian ending (italicized capitals), to be read *ili*;
- *is*, Hittite nominative singular ending.

There are several reasons why cuneiformists make use of this (apparently) complicated system of transliteration, among them the fact that some words are known to us only through the ideographic form and we cannot give them any phonetic correspondence: for example, most roots of Hittite numerals are still unknown.

Given the syllabic nature of cuneiform, and given the fact that it was adapted for Hittite from Akkadian, hittitologists sometimes have to reckon with problems in the phonemic interpretation of signs, as I will show below, § 1.1.

0.3 Diffusion and status

The actual range of spoken Hittite is an open question. Apparently, at least in the New Hittite period (cf. § 0.4) the population was mostly constituted by Luwian speakers, and Hittite was the language of the dominating class. Some scholars have gone so far as to say that Hittite was not (or no longer) a spoken language, and that it was used only for the purpose of writing. However, such a hypothesis is contradicted by the diachronic data concerning the evolution of the Hittite language, which mirror ongoing changes in a spoken language.

0.4. Language stages

From the very beginning, hittitologists have been aware of the existence of older texts among the Hittite clay tablets, which contained writing peculiarities and presumably preserved features of an older language stage. However, different morphological variants appeared to be unreliable for dating the texts, so that only when the evolution of writing habits became thoroughly known a chronology of sources could be worked out successfully. The unreliability of morphological forms is mainly due to the scribal habit of partly updating the texts that were being copied. This is very clear in the case of Old Hittite texts, when those written in Old Hittite Script are compared with later copies. In particular we luckily have several copies of the Hittite Laws where the same passages are preserved in different types of script, that clearly show how older morphology (and sometimes syntax) was partly preserved, partly changed by the scribes.

According to the most widely accepted chronology, we have to reckon with at least three different historical stages in Hittite, commonly known as Old, Middle, and New Hittite (*Alt-*, *Mittel-*, and *Jung-*

hethitisch). A fourth stage is sometimes added, known as Late Hittite (*Spätjunghethitisch*), which relates to the language of the last few decades of the Hittite kingdom.

Major historical changes in the Hittite language concern noun inflection and case syncretism, verbal voice, the use of sentence particles and connectives, and several other topics; apparently, the difference between Old and Middle Hittite is much bigger than the difference between the latter and New Hittite, whose most important features were all developing during the Middle Hittite period already.

1. Phoneme inventory and orthography

1.1. Orthography

The use of syllabic writing implies a number of intrinsic limitations, most noteworthy, the impossibility of rendering complex consonant clusters. However, the bigger obstacle to our understanding of Hittite phonology lies in a number of scribal habits, among which the confusion between voiced and voiceless stops, mostly for dental stops. This amounts to saying that *dV* and *tV* signs are often found in different occurrences of the same word. For *VC* signs only signs with final voiceless stops are found; *CV* signs with bilabial or velar stops occur more frequently in the voiceless form than in the voiced one. Observing the distribution of word internal geminated and simple stops, especially in the Old Script, it appears that gemination represents devoicing and lack of gemination represents voicing. (The voiceless/voiced opposition is sometimes interpreted phonetically as an opposition between *fortis* and *lenis*, presumably meaning tense and lax. For the sake of simplicity I will speak of voiceless and voiced stops in the present chapter). The voicing opposition only appears to have phonemic value in word internal position, whereas it is neutralized in word initial and word final position.¹

Orthographic problems also concern vowel length, but to a lesser extent: it is now generally agreed upon that the writings *CV-VVC* and *VVC* represent long (maybe stressed) vowels, and that the writing *CVC* is equivalent to *CVVC*.

1.2. Consonants

1.2.1. Stops

There are four series of stops in Hittite, all of which can be voiceless or voiced word internally: bilabial, dental, velar, and labiovelar. In the following examples, capitalized voiceless stops represent cases where the voicing opposition is neutralized:²

/p/: *appa*, ‘back’; *suppi-*, ‘pure’;

/b/: *apas*, ‘that one’;

¹ Melchert (1994) reconstructs initial stops as *fortis* and final ones as *lenis*. However, since there appears to be no phonemic opposition in such positions, the phonetic nature of stops needs not concern us here.

² If not otherwise specified nouns are given in the form of the nominative singular; if the nominative singular is not attested, they are given in their stem form, in which case the form is followed by -. Adjectives and verbs are in their stem form, unless a particular form is specified.

#/P/: *pir*, 'house'; *para*, 'forwards';
 /P/# *ep*, 'take' (imperative);
 /t/: *katta*, 'downwards'; *atta*, 'father';
 /d/: *edi*, 'on this side'; *watar*, 'water';
 #/T/: *iaru*, 'wood', 'tree'; *tarna-*, 'to leave';
 /T/#: *kessarit*, 'hand' (instrumental);
 /k/: *tuekka*, 'body';
 /g/: *sagahhi*, 'I know';
 #/K/: *katta*, 'downwards'; *kessara*, 'hand';
 /K/#: *lak*, 'turn' (imperative);
 /k^w/: *maninkuwa-*, 'near', *akkusk-*, 'to drink';
 /g^w/: *sakuwa*, 'eyes';
 #/K^w/: *kuis*, 'who'; *kuen-*, 'to kill';
 /K^w/#: *takku*, 'if'.

1.2.2. Affricate

Hittite has one affricate phoneme, /ts/, with no voiced counterpart. It can occur in word initial, internal, and final position. Examples are:

/ts/: *zahhiya-*, 'to fight'; *uizzi*, '(s)he comes' *panzi*, 'they go'; *ammedaz* 'me', 'mine' (abl.).

1.2.3. Spirants

Hittite spirants are /s/, /h/ (tense, spelled word internally with gemination), and /ħ/ (lax, spelled word internally without gemination). Geminated /s/ apparently really represents /s:/, and has phonemic value. Examples:

/s/: *ser*, 'over'; *esanzi*, 'they sit';
 /s:/: *essanzi*, 'they make'; *assu-*, 'good';
 /h/: *pahhur*, 'fire'; *tehhi*, 'I put';
 /ħ/: *mehur*, 'time';
 #/H/: *hastai*, 'bones'; *haranis*, 'eagle';
 /H/#: *suppiyah*, 'purify' (imperative).

1.2.4. Sonorants

Hittite sonorants include two nasals /m/ and /n/; a lateral /l/, a vibrant /r/, and two approximants or semivowels /j/ and /w/. The phoneme /r/ never appears in initial position. Nasal and liquid phonemes also contrast with geminates. Examples:

/m/: *mahhan*, 'when'; *laman*, 'name';

/m:/: *lammar*, 'hour';
 /n/: *anda*, 'into'; *nai-*, 'to turn'; *kunan*, 'killed' (part. neuter);
 /n:/: *kunnan*, 'on the right';
 /l/: *lahha-*, 'war campaign'; *lalan*, 'tongue'; *malai*, '(s)he agrees';
 /l:/: *mallai*, '(s)he grinds';
 /r/: *arnu-*, 'to carry'; *tarmis*, 'nail'; *ara-* 'right';
 /r:/: *arra-*, 'to wash';
 /j/: *iukan*, 'yoke'; *sius*, 'god';
 /w/: *newa-*, 'new'; *watar*, 'water'.

1.3. Vowels

Hittite phonemic vowels are /a/, /e/, /i/, /u/. They can be either short or long, but it is not altogether clear whether there are minimal pairs where vowel length is distinctive, or whether long vowels merely result from accent shift. In minimal pairs such as *uddar*, 'thing' (sg.), *uddār*, (pl.) the distinctive feature might be accent shift rather than vowel lengthening. Another example is the pair *mān*, 'if', 'when', and *man*, modal particle, often enclitic but sometimes sentence initial and hosting other enclitics.³

Since /i/ and /e/ are sometimes confused in writing, it has long been doubtful whether a phoneme /e/ really had to be reconstructed; recently worked out dating criteria however have shown that the distinction was consistently made in the Old Script, so that both phonemes can safely be reconstructed.

Since Akkadian did not have a phonemic /o/, there are no *o* signs in the Hittite writing system. However, two different *u* signs are found, normally transliterated as *u* and *ú* (so-called 'u-two'). Given the fact that a number of words are consistently spelled with one of the two signs, some scholars assume that the *u* sign really represented a phonemic /o/. However, it must be stressed that there are no minimal pairs which can satisfactorily prove the opposition between /u/ and /o/.⁴ Since all Indo-European /o/ have become /a/ in Hittite, comparative reconstruction is of no help in this matter.

Examples for all vowels are to be found above, among the forms listed for consonants.

2. Parts of speech and grammatical categories - Morphosyntax

The Hittite parts of speech system includes the lexical categories noun, adjective, pronoun, numeral, verb, adverb, conjunction, and particle.

2.1. Noun

Inflectional categories of the noun are number and case; gender is a non-inflectional, mostly inherent (sometimes derivational) category. Besides, all nouns are sensitive to the inherent category of animacy.

³ However, the modal particle is occasionally spelled with long *a* when it is not enclitic.

⁴ Lack of minimal pairs and spelling variations might be connected with a possible origin of /o/ from alternating diphthongs /au/ ~ /u/, which would result in a /o/ ~ /u/ alternation in Hittite.

2.1.1. Word formation

Hittite stem formation involves a number of suffixes for different types of nouns, as I will show below. Whereas derivation is a productive process in Hittite, there are virtually no compounds, except for some grammaticalized nominal forms that have become adverbs, such as *menahhanda*, 'in front of', originally *mene-*, 'face' plus *handa*, 'forepart', both inflected in the directive case. Derived nouns formed with the suffix *-sepa-* also go back to older compounds, the suffix most likely deriving from a noun meaning 'spirit' (see below, § 2.1.1.3, for the relevant examples).

2.1.1.1. Several suffixes have the function of deriving abstract nouns mostly from verbal roots or from adjectives, but sometimes from other nouns as well. The following list is based on Friedrich (1960: 38 fl.), Kronasser (1966), and Berman (1972):

- a-*: *harga-*, 'destruction', from *hark-*, 'to perish'. The suffix occasionally also derives concrete nouns, as *hassa-*, 'grandchild', from *has-*, 'to generate'. All nouns with the suffix *-a-* are common gender;
- an-*: *henkan-*, 'destiny', 'death', from *hink-*, 'to share'; derives neuter nouns;
- asti-*: *dalugasti-*, 'length', from *daluki-*, 'long'; mostly for neuter nouns;
- atar-*: *idalawatar-*, 'badness', from *idalu-*, 'bad'; neuter gender;
- att-*: *aniyatt-*, 'performance', from *aniya-*, 'to perform'; common gender;
- essar-*: *hannessar-*, 'a legal problem', from *hanna-*, 'to regulate by law'; neuter gender;
- ima-*: *ekunima-*, 'cold' (noun), from *ekuna-*, 'cold' (adj.); common gender;
- ul-*: *assul-*, 'health', from *assu-*, 'good'; *wastul-*, 'fault', from *wasta-*, 'to commit a fault'; neuter gender;⁵
- ur-*: *aniur-*, 'religious performance', from *aniya-*, 'to perform'; neuter gender;
- uwar-*: *partauwar-*, 'wing'; gender uncertain.

2.1.1.2. Action, agent, and instrument nouns are formed with the following suffixes:

- ai-*: *wastai-*, 'sin', from *wasta-*, 'to commit a sin'; *-ai* derivatives have common gender;
- al(l)a-*: *hattawala-*, 'door keeper', from *hattalu-*, 'locker';⁶ most *-al(l)a-* nouns have common gender, but neuter nouns are attested as well;
- alli-*: *harsanalli-*, 'crown', from *harsan-*, 'head';⁷
- el-*: *hurkel-*, 'horror';
- sha-*: *unuwasha-*, 'ornament', from *unuwai-*, 'to adorn'; common gender;
- talla-*: *uskiskatalla-*, 'observer', from *uskiskat-*, 'to observe'; common gender;

⁵ Friedrich (1960: 39) lists this suffix twice, once under 'abstract nouns' (with *assul* as example) and once under 'action nouns' (where he gives *wastul* as one of the relevant examples), but it is clearly always the same type of semantic shift, the only difference being that in the former case the noun is derived from an adjective rather than from a verb. The suffix *-ul-* can occasionally also give rise to concrete instrument nouns, such as *sesarul*, 'riddle', from the verb *sesariya-*, 'to riddle'.

⁶ The noun *hattawala-* may also be deverbal from *hatalwai-*, 'to bolt'.

⁷ Nouns in *-al(l)a-*, *-alli-*, and *-talla-* share the same derivational meaning; no functional or morphological reason appears to govern the choice of a specific suffix, cf. van Brock (1962).

- tara-*: *westara-*, 'shepherd', from *wesiya-*, 'to herd'; derives common gender nouns;
- uzzi-*: *ishuzzi-*, 'belt', from *ishiya-*, 'to bind'; both common (more frequent), and neuter gender;
- zel-*: *sarnikkel-*, 'fine', from *sarnink-* 'to pay a fine', 'to substitute' (*sarnink-* is an infixed verb, i.e. the second /n/ in the stem is an infix, see § 2.5.6);

(The suffix *-ant-* will be discussed below, § 2.1.2).

2.1.1.3. The suffix *-sepa-* is found with nouns denoting various concrete entities and gives rise to the name of the spirit or divinity the inhabits the relevant entity: *daganzipas*, 'earth' (or 'spirit of the earth'), from *tekan*, 'earth'. Sometimes, nouns with the suffix *-sepa-* are preceded by the determinative of god names: ^D*kamrusepas*, ^D*hantasepas*, etc.

2.1.1.4. Hittite has no feminine gender, but a few derivative nouns denote persons of female sex, such as *ishassas*, 'Lady', from *ishas*, 'Lord'. Elsewhere, the difference between male and female, if relevant, can be expressed through the use of the Sumerogram SAL (now to be read MUNUS), 'woman': DUMU, 'child', 'son'; DUMU.SAL (or DUMU.MUNUS), 'daughter'.

2.1.1.5. Ethnic nouns are formed with the suffix *-umna-*:⁸ ^{URU}*hattusa-*, 'the city of Hattusa', ^{URU}*hattusumna-*, 'somebody from Hattusa'.

2.1.1.6. A few diminutives are formed with the suffix *-anni-*: *armanni-*, 'small crescent', from *arma-*, 'moon'.

2.1.2. Gender

All Hittite nouns inherently belong to one of two genders, common and neuter. Common gender owes its name to the fact that from a comparative point of view it appeared at first to include masculine and feminine gender of the other Indo-European languages; a better name for it would be non-neuter. Although virtually all neuter nouns are inanimate, nouns belonging to the common gender are both animate and inanimate. Neuter nouns, rather than as inanimate, can be better described as inactive, given the constraint that they cannot occur as subject of action verbs. In order to fulfill this function, neuter nouns can be transposed into the common gender through the derivational suffix *-ant-*. So for instance we find the word *tuppi*, 'clay tablet', neuter, inactive, and *tuppiyanza*, same meaning, common gender, active, as in⁹

- (1) *mahhan* = *smas* *kas* *tuppiyanza* *anda wemizzi*
 when you-PL-OBL this-NOM-SG-C tablet-NOM-SG-C into find-3SG-PRES

⁸ The suffix *-umna-* is also attested in the form *-uman-*, perhaps the older one, since it occurs especially in Old and Middle Hittite texts.

⁹ The suffix *-ant-*, which also appears in verbal participles, has been understood by some scholars as an 'animating' suffix. However, there appears to be no real change in animacy involved in this type of suffixation, which is better described as transposition to another grammatical gender. The former interpretation was made possible by occurrences as *utne*, 'country', nt., inactive, vs. *utniyanza*, same meaning, c., active. Since an active version of the word 'country' necessarily refers to its population, and the use of the word 'country' in this metonymical meaning is frequent across languages, there is no reason for speaking of animation.

“when this tablet will reach you”, *Mst.* 75.10, obv. 3-4 (=Alp, 1980).

Nouns with the suffix *-ant-* are mostly found in the nominative, but they can occur in the accusative and occasionally in other cases as well, as in *utniyandan lalus*, ‘the tongues (acc.) of the population (gen.)’ (ex. (80)). This is a very important remark, because it shows that *-anza* forms are nominatives of derived nouns, and do not represent an inflectional ergative case, as it has sometimes been suggested.¹⁰ Note furthermore that no traces of morphological ergativity can be gathered on the evidence of animate and inanimate nouns of common gender.

The suffix *-ant-* is also found with nouns referring to time, as e.g. *hameshant-*, ‘spring’, or with nouns of body parts especially in rituals.

2.1.3. Animacy

All Hittite nouns are inherently animate or inanimate. Animacy, which overlaps with gender to a partial extent only, has a bearing on the use of cases in Old Hittite and on changes in this field in Middle and New Hittite (cf. § 2.1.5.9, 2.1.5.10).

2.1.4. Number

Hittite has two numbers, singular and plural. All nouns can be inflected in either number, with the limitation that not all cases have number distinction: in particular, the instrumental and the ablative only have one form for both numbers. Especially in Old Hittite it appears that nominal modifiers (enclitic possessive adjectives) which accompany an ablative or an instrumental are inflected in the same form for both numbers. This can be taken as a piece of evidence for number opposition being non-pertinent with these cases: the number is apparently to be recovered contextually. Besides, the so-called nominative /accusative neuter plural always agrees with a finite verb in the singular when it occurs as subject, as in

- (2) *mahan= ma ke huitār sarazziyaz Ékasgastipaz KÁ.GAL-az katta ari*
 when PTC this-N/A-PL animal-N/A-PL upper-ABL main-gate-ABL palace-ABL set-out-3SG-PRES¹¹
 “when these animals set out from the upper gate of the palace”, *StBoT* 28.1.b obv. i 11 (= Singer, 1984).¹²

This means that neuter plural rather has collective value and refers to uncountable entities. Note furthermore that even the bare stem can function as a collective for Hittite neuters; nouns of the common gender can take predicates in the bare stem with some particular adjectives, as *mekki* in the following

¹⁰Cf. for instance *CHD s.v. pahhur*. For the existence of an Anatolian ergative, see Garrett (1990b); Carruba (1992) contains convincing arguments against it, mostly drawn from morphology.

¹¹The verb *katta ar-* is understood as a compound verb (cf. Singer, 1984: 126); consequently, no separate gloss is given for *katta*.

¹²There are few exceptions to this rule; one is found in the same text (*StBoT* 28.1a iii 9) where *huitār* is the subject of *sa-meyanzi*, ‘they parade’. Elsewhere the same word normally occurs with singular verb forms, as in example (2).

example (see further § 3.2):

- (3) *mu= wa kunnanza= a mekki^{LÜ} appanza= a= wa mekki*
 CONN PTC killed-NOM-SG and many taken-NOM-SG and PTC many
 “there were many casualties and many prisoners”, *AM* 122.75 (=Goetze, 1933).¹³

(Both *kunnanza* and *appanza* are participles, see below, § 2.2.5.7).

2.1.5. Case

The case system consists of eight cases in Old Hittite. Since ongoing case syncretism neutralized some distinctions starting from the Middle Hittite period, I will first describe the use of cases in Old Hittite and then the relevant changes that led to Middle and New Hittite.

2.1.5.1. The nominative is the case of the Subject, both of active and of passive verbs, of predicative Complements and Adverbials that refer to the Subject, and of predicate nouns in nominal sentences. It is also used as a vocative in the plural.

2.1.5.2. The vocative is used for appellative function. Besides, the bare stem is normally found in the construction ‘X is his/her/its name’. That the bare stem in this function does not coincide with the vocative, as it had been formerly thought, will be shown in the morphological section below, § 2.1.6.2.

2.1.5.3. The accusative is the case of the D(irect) O(bject) of transitive verbs and of predicative complements which refer to the DO, as in

- (4) *kinun=ma= si LUGAL.GAL^{URU} santimman ZAG-an ianun*
 behold CONN 3SG-DAT great-king city-S.-ACC border-ACC make-1SG-PRET
 “now I, the Great King, have established the city of Santimma as his border”, *KUB* 4.10 + obv. 23.

Other types of double accusative are not frequent in Hittite: only three examples occur in the Old Hittite corpus, one of which with a ditransitive (causative) verb:

- (5) *takku LÚ-as GUD-ŠU ÍD-an zimuskizzi*
 if man-NOM ox his river-ACC let-cross-3SG-ITER-PRES
 “if a man is used to let his ox(en) cross the river”, *HG* § 43 (=Friedrich, 1959).

Note that elsewhere ditransitive verbs never occur with an overtly expressed Causee (or secondary Agent, see below, § 2.5.5.2).¹⁴ The other two examples involve the verbs *tarna-*, ‘to let (go)’ where the

¹³The cuneiform spelling of *kunnanza=a* and *appanza=a* is interesting, because it shows that the final *-a* that we usually find is only a graphic device for spelling the phoneme /ts/: in the text we find the spellings *ku-na-an-za-as-sa* and *ap-pa-an-za-as-sa*, which represent *kunnantss=a* and *appantss=a*, with gemination of the final phoneme before the conjunction *-(y)a-*.

¹⁴In fact, the word GUD is not marked for case in this example; although this usually happens with the accusative, one

two accusatives function respectively as DO and Direction expression, and *pumuss-*, ‘to ask for’, widely attested elsewhere with other types of construction. (Another type of double accusative, attested after the Old Hittite period, will be described below, § 2.1.5.11).

The accusative of motion regularly occurs only with the verb *huwai-*, ‘to run’, mostly in the expression *hassan=kan huwai*, ‘(s)he runs toward the hearth’, found in rituals. Since *huwai-* is often classified as a stative verb in Old Hittite (cf. § 2.5.2.1), the interpretation of the accusative as a Direction expression is doubtful. Besides, there is one occurrence with *tarna-* (mentioned above) in Old Hittite and very few other occurrences in Middle and New Hittite.

2.1.5.4. The genitive is the case of nominal dependency. Rather striking for a Indo-European language is the absence of adverbial genitives, i.e. genitives as verbal complements.

Adnominal use of the genitive ranges from Possessor to a number of other functions, such as Content and Matter, as e.g. *anduhsas* (gen.) *harsar*, ‘human head’, ‘head of a human being’; *lalan* AN.BAR-*as* (gen.), ‘a tongue (made) of iron’; *halinas* (gen.) *tesummius*, ‘clay vessel’ (lit. ‘a vessel of clay’); GEŠTIN-*as* (gen.) *ispantuzziassar*, ‘a libation vessel (full) of wine’.

Possessive expressions in Old Hittite often involve possessive enclitics (see § 2.2.4), to which a noun in the genitive denoting the Possessor can be added as an apposition:

- (6) LUGAL-*was aras= mis*
king-GEN friend-NOM-C 1SG-POSS-NOM-C
“the friend of mine, the king” (lit.: “my, the king’s, friend”), KUB 29.1 i 35.

A peculiar use of the genitive is the so-called ‘free Genitive’ (*freischwebender Genitiv*). It is mostly the case of abstract nouns, that, used in the genitive, become agent or action nouns, as *tayazzilas*, ‘thief’, or ‘punishment for a theft’, from *tayazil*, ‘theft’:

- (7) *tayazilas* 6 GÍN KÙ.BABBAR *pai*
theft-GEN six shekel silver give-3SG-PRES
“as a fine for stealing, (s)he pays back six shekels of silver”, HG § 95 (= Friedrich, 1959).

Such use is normally taken as implying an elliptical head: a thief would then have to be understood as ‘(the one) of theft’, and a consequent fine ‘(the thing) of the theft’. In the above passage I have given an example of the free genitive denoting an inanimate entity and behaving as an abstract noun; most often, however, free genitives are to be taken as agent nouns, as in

- (8) *nu ABU-ŠU kuel wastai katta=ma DUMU-ŠU UL wasdulas= pat*
CONN father his who-GEN-SG sin-3SG-PRES down PTC son his not sin-GEN PTC
“the son whose father has committed a sin is not a sinner”, SV 1, C 15 (=Friedrich, 1926).

Free genitives bear several grammatical relations, including Subject, Object, and Predicative, either of the Subject, as in (8), or of the Object (as in (7)).

2.1.5.5. The dative/locative is used with animate nouns for the I(ndirect) O(bject) of three-place predicates:

- (9) *ta LUGAL-i SAL.LUGAL-ya kissan memahhi*
CONN king-D/L queen and so say-1SG-PRES
“and to the king and the queen I say the following:...”, StBoT 8 i 9 -10 (= Otten & Souček, 1969).

Otherwise, if it occurs with other types of predicate, it can express Beneficiary or Direction:

- (10) *mu= us appa ishi= ssi penmai*
CONN they-ACC back master-D/L 3SG-POS-D/L drive-3SG-PRES
“(s)he takes them (= the oxen) back to their (sg.) owner”, HG § 79 (=Friedrich, 1959).

With inanimate nouns, the d/l expresses Location or Purpose:

- (11) *hurtiyali=ma AN.BAR-as nepis 1-EN kitta*
bowl-D/L CONN iron-GEN sky-NOM one lie-3SG-PRES
“an iron sky lies on the bowl”, StBoT 8 i 7 -8 (=Otten & Souček, 1969);

- (12) *su= wa^{URU} hattusa hengani paun*
CONN PTC H.-DIR death-D/L go-1SG-PRET
“I went to Hattusa to death”, StBoT 17, rev. 5-6 (=Otten, 1973);

or it can express end of motion with the verb *dai-*, ‘to put (down)’, that did not govern the directive case (see § 2.1.5.6) in Old Hittite, as in:

- (13) *halmasuitti hassi=ya=ssan tiyanzi*
throne-D/L hearth and PTC put-3PL-PRES
“and they (sc. the king and the queen) put (them, sc. the bowls) on the throne (and) on the hearth”, StBoT 8 ii 49 (=Otten & Souček, 1969).¹⁵

¹⁵The conjunction *-ya-*, ‘and’, that I have taken as sentence conjunction, could possibly also be interpreted as NP conjunction; however, I think that the former interpretation is more likely to be the correct one, since it is supported by the position of the sentence particle *-san*, that normally takes Wackernagel’s position, as does sentence conjoining *-ya-* (see §

Besides, the d/l is found in Time expressions, as in ex. (18).

2.1.5.6. The directive case has the function of an allative with inanimate nouns and is found in Direction expressions. One example is ^{URU}*hattusa*, ‘to Hattusa’, in (12); as a further example, see:

- (14) [LUGAL-w]ann=a parna 3 GÍN KÙ.BABBAR dasker
king-GEN-PL and house-DIR 3 shekel silver take-3PL-ITER-PRET
“they used to take three shekels of silver to the royal palace”, *HG* § 25 (=Friedrich, 1959).

(For animate nouns the d/l is normally found).

2.1.5.7. Some inanimate nouns also have a bare-stem locative, generally involving root apophony, as in *tekan*, ‘earth’, *tagan*, ‘on the ground’. The bare stem locative does not have the same distribution as the d/l. In the first place, it is built only for (certain) inanimate nouns; as a consequence, it never functions as a dative. Besides, the bare stem locative occurs with motion verbs in Old Hittite already, covering not only the function of the locative case, but that of the directive, too, as in:

- (15) *mu* I ^{DUQ}*huppar* KAŠ *tagan* *dapiin* *lahuwanzi*
CONN one bowl-N/A-N beer earth-LOC whole-N/A-N pour-3PL-PRES
“they pour a whole cup of beer on the ground”, *StBoT* 25.23, iv 56 (= Neu, 1980).

(The verb *lahuwa-*, ‘to pour’, normally takes the directive case in Old Hittite).

2.1.5.8. The ablative is used in Source expressions with inanimate nouns only:

- (16) *takku* İR LÚ ^{URU}*luumnas* İŠTU KUR ^{URU}*luuyaz* *kuiski* *taizzi*
if slave Luvian-GEN from country Luwiya-ABL someone-NOM-SG steal-3SG-PRES
“if somebody steals the slave of a Luvian from the country of Luvia”, *HG* § 21 (=Fiedrich, 1959).¹⁶

Besides, already in Old Hittite there are Location expressions involving the ablative (so-called ‘ablative of position’), such as *kunnaz*, ‘on the right’, *GÜB-laz*, ‘on the left’, in

- (17) *apas*= a *peran*=mit *kunnaz* *esari*
that-one-NOM CONN before 1SG-POSS-SG-N right-ABL sit-3SG-PRES-M
“he shall sit in front of me, on my right”, *StBoT* 18, 78-79 (=Neu, 1974).

2.2.5.9. The Old Hittite instrumental is found in Instrument and in Cause expressions, with inanimate nouns only:

3.3.2.1).
¹⁶ The Akkadian form *İŠTU*, ‘from’, ‘with’, is sometimes used in the place of the ablative or of the instrumental, with nouns in the bare stem, in the same way as *INA* and *ANA* with the d/l (cf. § 2.2.5.10). Here it occurs with the ablative, but it must not be taken as representing an Hittite preposition: it merely strengthens the meaning of the ablative ending.

- (18) *s*= an *ispanti* *nakkit* *dahhun*
CONN 3SG-N/A-N night-D/L violence-INSTR take-1SG-PRET
“I took it in the night by storm”, *StBoT* 18, 47-48 (=Neu, 1974).

- (19) *anda*= kan *halinas* *tessummius* *tarlipit* *suwamus* 2-ki *petumini*
into PTC clay-GEN bowl-ACC-PL t.-INSTR full-ACC-PL twice bring-1PL-PRES
“we bring inside twice the clay vessels full of t.”, *StBoT* 8 i 26’-27’ (=Otten & Souček, 1969).

2.1.5.10. Changes in the case system partly owe to the possibility for animate nouns to be inflected in all cases, including the ablative and the instrumental, and partly owe to case syncretism. The latter results in the loss of the directive case, which started to be confused with the d/l in Middle Hittite: note that this instance of syncretism was ultimately made possible by the fact that animate and inanimate nouns were no longer separated, so that the directive ending could appear in the place of the d/l with animate nouns as well. The d/l ending is found in Direction expressions with all types of nouns starting from the Middle Hittite period. The Akkadian prepositions *INA*, ‘in’, and *ANA*, ‘to’, are often used in the place of the d/l or of the directive, preceding a Hittite noun in the bare stem form. In Old Hittite, *INA* is in the place of the d/l with inanimate referents only, i.e. it expresses Location; *ANA* is found either in the place of the directive case, or in the place of the d/l with animate nouns. After the OH period the two Akkadian prepositions also undergo syncretism, much in the same way as the d/l and the directive, although *INA* remains mostly restricted to inanimate nouns.

Beside the directive, the instrumental case also starts to disappear at the benefit of the ablative. Both cases start to be used in Source and in Instrument expressions indifferently, but the instrumental case appears increasingly seldom, whereas the ablative ending is much more frequent.¹⁷

2.1.5.11. Double case constructions are found with the accusative, the ablative, and occasionally the dative locative in cases where inherent possession is expressed. They involve a possessed noun inflected in the case required by the syntactic context, and a possessor noun, which agrees with the possessed noun as if it were an adjective:

- (20) *takku* LÚ.ULU^{LU}-an *ELLAM* KA_xKAK=*set* *kuiski* *waki*
if man-ACC free nose 3SG-POSS-A someone-N-SG bite-3SG-PRES
“if someone bites a free men on his nose”, *HG* § 13 (B i 33) (=Friedrich, 1959);

- (21) *n*= at=*mu*= kan UKÜ-az KA_xU-az *sara* *uizzi*= *pat*
CONN it me-OBL PTC man-ABL mouth-ABL up come-3SG-PRES PTC
“this (word) comes out of my mouth of man”, *StBoT* 24 i 30-31 (=Otten, 1981);

¹⁷ The progressive functional merging of the ablative and the instrumental is described in Melchert (1977).

- (22) *mu= za ke* KUR.KUR^{LÚ}KÚR INA MU 10.KAM *ammedaz ŠU-az tarahhun*
 CONN PTC this-N/A-N-PL countries enemy in year ten I-ABL hand-ABL conquer-1SG-PRET
 "I conquered these enemy lands in ten years by my hand", *AM* 136.45-46 (=Goetze, 1933);

- (23) *tuedas assiyantas pedas*
 you-D/L-PL love-PART-D/L-PL place-D/L-PL
 "in your favorite places", *KUB* 36.90 16.

By carefully analysing the evidence, it can be shown that double case is a post-Old Hittite innovation. In the first place, it must be remarked that examples as (21) and (22) could not date back to the OH period, since animate nouns cannot be inflected in the ablative in Old Hittite. Pronominal forms such as the one in (23), too, are found after the OH period only. They are quite frequent in double case constructions, and again they are found with the ablative, too (e.g. *ammedaz ŠU-az*, in *AM* 3.4 iv 46, = Goetze, 1933). Pronouns probably fit well into this construction, because they obviously could be treated as adjectives much more easily than nouns.

Double accusatives such as the one in (20) in principle could be possible in Old Hittite and they have been held as older types of possession expressions for a long time, especially on comparative grounds (a similar construction occurs in Ancient Greek). However, the Old Hittite Corpus written in Old Script hardly offers evidence for such a hypothesis. On the contrary, comparing older with more recent versions of the Hittite Laws it become apparent that the double accusative of inherent possession has substituted the older construction with the possessor noun in the genitive. Example (24) is an older version of the same passage given above as example (20):

- (24) *takku LÚ.ULÚ^{LÚ}-as ELLAM-as KAxKAK=set kuiski waki*
 if man-GEN free-GEN nose 3SG-POSS-N/A someone-NOM-SG bite-3SG-PRES
 "if someone bites the nose of a free man", *HG* § 13 (A i 24, =Friedrich, 1959).

Further evidence adduced in the literature for double case in Old Hittite involve double dative/locatives. Note that such occurrences can always be interpreted as involving a Recipient and a Direction or Location expression, since they contain an animate and an inanimate noun (e.g. *LUGAL-i kis-sari dai*, from ex. (68), 'he puts in the king's hand', or 'he gives the king in his hand', Germ. *er legt dem König in die Hand*, cf. Otten & Souček, 1969 21; note that *dai-*, 'to put' is one of the verbs that govern an inanimate d/l for expressing Direction, cf. § 2.1.5.5).

It is interesting to remark that inherent possession in Old Hittite often involves doubling of the possessor, as in (24) and (26) below, where the genitive *LÚ.ULÚ^{LÚ}-as ELLAM-as*, 'of a free man', is coreferent with the NP internal possessive *-set* (see § 2.2.4). Possessor doubling in Hittite did not occur with inherent possession only, since we find numerous examples of the type of (6), where the NP rather ap-

pears to be appositional to the possessive adjective.¹⁸

2.1.6. Inflectional classes and case endings

Old Hittite case endings are given in Table (1):

TABLE 1. Case endings

	SINGULAR	PLURAL
NOM	-s	-es, -as
VOC	-Ø, -i (-e)	-es
ACC	-(a)n	-us
NOM/ACC N	-Ø, -n	-a, -Ø with stem lengthening
GEN	-as, -an	-an, -as
D/L	-i, -ya	-as
LOC	-Ø only sg. and for inanimate NPs	
DIR	-a	-as inanimate NPs only
ABL	-az, -z no number distinction; inanimate NPs only	
INSTR	-it, -t, -ta (?) no number distinction; inanimate NPs only	

Inflectional classes include *-a-*, *-u-*, *-i-*, *-e-*, and consonant stems. Among underived stems, *-a-* and *-i-* stems build the two larger groups. While *-i-* and *-u-* stems are usually recognizable, forms of *-a-* stems are mostly not distinct from forms of consonant stems, so that when full paradigms are not attested, it may be difficult to attribute a noun to the *-a-* class or to the consonant class. Among *-e-* stems Berman (1972: 61) only lists three items: *udne-*, 'country', and *mene-*, 'face', both neuter, and *GIStarse-*, name of an implement (only attested in *KUB* 30.19+). For *udne-* and *mene-* there is variation in the spelling of the stem vowel as *-i-* or *-e-*, due to usual scribal habits (cf. § 1.3). Among consonant stems, velar and labial stems are virtually unattested; we find a fairly big amount of *-t-*, *-s-*, *-l-*, *-r-*, and *-n-* stems. Case endings are rather stable across inflectional classes, as shown in tables 2-5 (only attested forms are

¹⁸See Luraghi (1990c) on the origin and evolution of possessor doubling. It can be remarked from the examples that inherent possession mostly involves body parts (this is the reason why case attraction is traditionally referred to as 'partitive apposition' in reference grammars). However, there appear to be other entities that can be inherently possessed, as one's own place in (22) and (23). Among Old Hittite examples possessor doubling also occurs with the word for 'bread': *labarnas LUGAL-as NINDA=san*, 'the bread (acc.) of the *labarna*, the King', ... The presence of *=set* in example (20) is due to partial modernization of the text by the scribe (the possessive should not occur in a post-Old Hittite text). On pronominal possession after the Old Hittite period, see § 2.2.4 and § 2.3.1.2.

given):

Table 2. Declension of -a- stems: *atta-*, 'father', *anna-*, 'mother'

	SINGULAR	PLURAL
NOM	<i>attas, annas</i>	<i>attes, annis</i>
ACC	<i>attan, annan</i>	<i>attus, annus</i>
GEN	<i>attas, annas</i>	<i>attas</i>
D/L	<i>atti, anni (annai)</i>	<i>attas</i>
ABL	<i>annaz</i> (after OH)	

TABLE 3. Declension of -u- stems: LUGAL-us, 'king' (only sg.)

NOM	LUGAL-us
VOC	LUGAL-ui
ACC	LUGAL-un
GEN	LUGAL-was
D/L	LUGAL-i
ABL	LUGAL-waz (after OH)

TABLE 4. Declension of -n- stems: *memiyan-*, 'word', 'speech', 'act', 'matter'

	SINGULAR	PLURAL
NOM	<i>memias, memiyas</i>	
ACC	<i>memian, memiyan</i>	<i>memiyanus, memiyanes</i>
GEN	<i>memiyanas</i>	<i>memiyanas</i>
D/L	<i>memini, memieni, memiyani</i>	<i>memiyanas</i>
ABL	<i>memiaz, memiyanaz</i>	
INSTR	<i>meminit, memiyanit</i>	

TABLE 5. Declension of *pir*, 'house'

	SINGULAR	PLURAL
NOM/ACC	<i>pir</i>	<i>pir</i>
GEN	<i>parnas</i>	
D/L	<i>parni</i>	<i>parnas</i>
LOC	<i>pir</i>	
DIR	<i>parna</i>	<i>parnas</i>
ABL	<i>parnaza</i>	

The most noteworthy inflectional class is that of so-called heteroclit neuter nouns, that have a *r/n* alternation in the root between direct (nom/acc) and oblique cases. An example is the word *uddar*, 'word', 'thing':

TABLE 6. *r/n* declension: *uttar*, 'thing', 'word'

	SINGULAR	PLURAL
NOM/ACC	<i>uddar</i>	<i>uddār</i>
GEN	<i>uddanas</i>	<i>uddanas</i>
D/L	<i>uddani</i>	<i>uddanas</i>
ABL	<i>uddanaz</i>	
INSTR	<i>uddanit</i>	

As shown by words as *watar*, gen. *wetas* 'water', n/a. pl. *witār*, or *pahhur*, gen. *pahhuenas*, 'fire', etheroclit nouns sometimes have different root apophony accompanying the consonant alternation; the word *watar* also provides the form *wetena* for the directive case.

In the following paragraphs I am going to survey morpheme variants required by specific inflectional classes, and changes in the distribution of case endings after the OH period.

2.1.6.1. The nominative singular of common gender nouns is *-s* throughout the history of Hittite. With dental stems the ending gives rise, together with the preceding consonant, to the affricate phoneme /ts/, as in UD-*az*, 'day' nom. Since dentals are often found in *-ant-* stems, the spelling involves the syllabic sign *-za*, as in the nominative of participles: *akkanza*, 'dead', *huiyanza*, 'running': no /a/ sound is actually there after the affricate, but a *-nz* cluster cannot be written in cuneiform without the intervention of a purely graphic vowel. Common gender stems in *-r-* and *-n-* take the *-s* ending directly after the stem, apparently dropping the final consonant, as in *memiyas*, 'word', nom. (cf. Table 4); *-l* stems drop the

nominative ending: *taksul*, 'friend' (i.e. not an enemy), nom. In the plural the most frequent ending is *-es* in Old Hittite, although there are sporadic instances of *-as*. In Middle and New Hittite the ending of the accusative plural, *-us*, is used for the nominative as well; all three endings may be used for the accusative plural (see § 2.1.6.11).

2.1.6.2. The bare stem form mostly occurs for the vocative singular. Nouns in *-u* add an ending *-i* (sometimes also *-e*) to the stem: LUGAL-*ui*, 'oh king!' (nom. LUGAL-*us*). The discovery of forms with a specific ending for the vocative has made it possible to distinguish occurrences of true vocative from occurrences of the bare stem in naming constructions (cf. § 2.1.5.2). In the latter nouns with *-u*-stems occur in the bare stem form, just as other nouns, without taking any ending: ^m*Tuttu ŠUM-ŠU*: 'Tuttu is (was) his name'. Beside *-u*-stems, *-ant*-stems may have had a *-i*-ending for the vocative, too, as in KÜ.BABBAR-*anti*, 'oh Silver!', but the data on this matter are scanty. In the plural there are no specific forms for the vocative, and the nominative is used in its place.

2.1.6.3. The accusative singular is *-n* for all stems, but *-r* and *-n* stems have the ending *-an* or sometimes *-anan*. The accusative plural consistently takes the ending *-us* in Old Hittite, and consequently does not merge with the nominative plural. After the OH period, the endings *-as*, *-es* of the nominative plural can occur for the accusative as well.

2.1.6.4. The nominative/accusative singular neuter coincides with the bare stem in the singular of all inflectional classes, except for *-a*-stems, where the ending *-n* of the common gender accusative is used. In the plural, the nominative/accusative ending is mostly *-a*, with the exception of *r/n* alternating stems (see Table 7 above), which have a \emptyset ending with lengthening of the (second) root vowel.

2.1.6.5. The genitive has the ending *-as* in the singular. Evidence for an ending *-s* is limited and discussed. The genitive plural ending *-as* is attested in Old Hittite already. Only in Old Hittite another genitive ending, *-an*, is attested, apparently used for the plural. Its distribution is not altogether clear. Since the genitive in *-an* is mostly attested for nouns of common gender (with the exception of *tuppi-*, 'clay tablet', neuter gender), some scholars have argued that it could only be used for animate nouns. However, in some Old Hittite texts in the Old Script there is evidence for *-an* occurring with inanimate nouns as well, in forms such as *padan*, from *pada-*, 'foot', or *asusan*, from *asusa-*, 'metall implement'. Other scholars have suggested that *-an* had a plural (or collective) meaning: actually, a connection with number appears to be more likely, especially in the light of the existence of *-an* forms for the genitive plural of Old Hittite possessive adjectives (cf. § 2.2.4). However, genitive singular with *-an* also occur, such as *labarnan*, 'of the king'. In any case, since *-an* was much more frequent for the genitive plural than *-as* in Old Hittite, the most likely difference between the two endings actually lies in their belonging to different historical stages.

2.1.6.6. The dative locative ending is *-i* in the singular of all declensional classes, except for *-i* stems, where the ending is *-ya*. The plural ending is *-as* throughout the history of Hittite.

2.1.6.7. The directive case, as already mentioned above, has an ending *-a* in the singular of *-a*- and of

consonant stems, which is different from the *d/l* ending. After the OH period the ending *-a* becomes less frequent, due to syncretism of the directive with the *d/l* (cf. § 2.1.5.10). In the plural of all stems the directive is not distinct from the *d/l* and has the ending *-as*.

2.1.6.8. The bare stem locative is a productive form (i.e. it is part of a nominal paradigm) for a few words only, such as *tagan*, 'on the ground', from *tekan*, 'earth'; *pir*, 'at home', (same form as the nominative). Some other bare stem locative forms have become adverbs, such as *ser*, 'over', see below, § 2.6.2.

2.1.6.9. The ablative has the ending *-az*, possibly used for both numbers. Only inanimate nouns could occur in the ablative in Old Hittite; starting from Middle Hittite numerous ablative forms of animate nouns are found as well.

2.1.6.10. The instrumental has the ending *-it* or *-t*, the latter written with the sign *ta*. As the ablative ending, the instrumental, too, apparently functions for both numbers. Again as the ablative, the instrumental only occurs with inanimate nouns in Old Hittite texts.

2.1.6.11. As a result of case syncretism and extension of certain case forms at the expenses of others (e.g. *-as* instead of *-an* for the genitive plural, *-es*, *-as* instead of *-us* for the accusative plural), Late Hittite paradigms are greatly reduced with respect to Old Hittite ones. This reduction does not only result in a general reduction in the number of cases (nominative, vocative, accusative, genitive, dative/locative, and ablative in the singular), but it gave rise to a completely different system of case distinction in the plural, where a nominative/accusative in *-us*, *-as*, *-es* can be distinguished from a genitive/dative/locative in *-as*. Leaving out neuters, that preserve the same endings as in Old Hittite, and the \emptyset locative, that does not appear to be productive, the new paradigm results in

TABLE 7. Case endings of Late Hittite

	SINGULAR	PLURAL
NOM	<i>-s</i>	<i>-us, -es, -as</i>
ACC	<i>-(a)n</i>	<i>-us, -es, -as</i>
GEN	<i>-as</i>	<i>-as</i>
D/L	<i>-i, -ya</i>	<i>-as</i>
ABL	<i>-az, -z</i>	

According to Melchert (1995), the ending *-us* is the most frequent one for the nominative/accusative plural of common gender *-a*- and consonant stems. The ending *-es* is limited to *-u*- and *-ant*-stems and to the relative pronoun; some *-u*-stems also have the ending *-as*, which also occurs with several *-i*-stems and a small number of *-a*-stems. Note that the ending *-as* was very productive in the plural in Old

Hittite already, since it occurred for the d/l, the directive, and it had started spreading to the genitive.

Syncretism of nominative and accusative does not affect the singular of nouns and adjectives, but personal pronouns do extend the form of the accusative to the nominative after the OH period, as we will see below, § 2.3.1.1.

2.2. Adjective

Inflectional categories of adjective in Hittite are gender, number, and case.

2.2.1. Word formation

Derived adjectives take the following suffixes:

-*ala-* derives adjectives from nouns or from adverbs: *tuwala-*, 'far', from the adverb *tuwa*, 'far away';

-*ili-* derives adjectives from adverbs, as in *karuili-*, 'old', from *karu* 'formerly', 'once upon a time'; most often, this suffix is used for deriving adverbs from nouns or adjectives, see § 2.6.1;

-*ya-* (not a common suffix) applies mostly to nouns: *istarn-*, 'middle', *istarniya-*, 'medial';

-*u-* derives adjectives from nouns, as in *miliddu-*, 'sweet', from *milit-*, 'honey';

-*want-* forms adjectives that mean 'being in a certain state': *samankuruwant-*, 'bearded', from *zamankur-*, 'beard'; *kistuwant-*, 'hungry', from *kast-*, 'hunger'; *esharwant-*, 'blood red', from *eshar-*, 'blood', *nekumant-*, 'naked', from *neku-*, '(naked) body' (with dissimilatory change /w/ > /m/ / /w/ _);

-*zi-* is found in a few lexicalized comparatives to be discussed below, § 2.2.3.

2.2.2. Inflectional paradigms

Adjectives have the same inflectional paradigms as nouns, the only relevant difference concerning stem formation for *-i-* and *-u-* stems, which add the vowel /a/ before all case endings, with the exception of the nominative, accusative and instrumental singular. I give the complete declension of the adjective *suppi-*, 'pure', as an example:

TABLE 8. Declension of adjectives: *-i-* stems, *suppi-*, 'pure'

	SINGULAR	PLURAL
NOM	<i>suppis</i>	<i>suppaes, suppis</i>
VOC	bare stem; not attested for <i>suppi-</i>	
ACC	<i>suppin</i>	<i>suppaus</i>
NOM/ACC N	<i>suppi</i>	<i>suppa</i>
GEN	<i>suppayas</i>	not attested for <i>suppi-</i> , ending - <i>ayas</i>
D/L, DIR	<i>suppai</i>	<i>suppayas</i>
ABL	<i>suppayaz</i>	
INSTR	<i>suppit</i>	

TABLE 9. Declension of adjectives: *-ant-* stems, *humant-*, 'all'

	SINGULAR	PLURAL
NOM	<i>humanza</i>	<i>humantes, humandus</i>
ACC	<i>humandan</i>	<i>humantes, humandus</i>
NOM/ACC-N	<i>human</i>	<i>humanda</i>
GEN	<i>humandas</i>	<i>humandas</i>
D/L	<i>humandi</i>	<i>humandas</i>
ABL	<i>humandaz</i>	
INSTR	<i>humantit</i>	

The *-a-* added in the stem of adjectives in *-i-* and *-u-* goes back to stem apophony; as the variants of the nominative plural make clear, there are sometimes oscillations in the apophonic grade of the stem. This is also shown by attested variants for the d/l singular: *suppaya*, *suppi*, *suppa*, plural: *suppiyas*, and of the ablative: *suppaz* (the ablative may be spelled with a final *-za* in both variants given above).

2.2.3. Comparison

Only a few lexicalized morphological comparatives occur in Hittite: *hantezzi-*, 'first' (*hant-*, 'forepart'); *apezzi-*, 'last' (*appa*, 'back'); *sarazzi-*, 'upper' (*sara*, 'up', 'above'), *kattera-*, 'lower' (*katta*, 'down').

Otherwise comparison is expressed syntactically, as in the following example:

- (25) *mu= wa=kan ANA ERÍN^{MES} -KA ERÍN^{MES} -YA mekki*
 CONN PTC PTC to army-D/L your army-D/L my big
 “my army is bigger than yours”, *AM* 19.18 (=Goetze, 1933).

2.2.4. Enclitic possessive adjectives

Enclitic possessive adjectives, referred to as ‘pronouns’ in reference grammars although they usually modify nominal heads, are productively used in Old Hittite only. They are inflected for person, number, gender, and case, as shown in Table (9):

Table 10. Enclitic possessive adjectives

	SINGULAR					
	1SG ¹⁹	2SG	3SG	1PL	2PL	3PL
NOM.	- <i>mis</i>	- <i>tis</i>	- <i>sis</i>	- <i>s(um)mis</i>	- <i>smis</i>	- <i>smes</i>
VOC	- <i>mi</i> , - <i>mit</i>					
ACC	- <i>min</i> , - <i>man</i>	- <i>tin</i>	- <i>sin</i>	- <i>s(um)min</i>		- <i>sman</i>
NOM/ACC N	- <i>mit</i>	- <i>tit</i>	- <i>set</i>		- <i>smet</i>	- <i>smet</i> , - <i>samet</i>
GEN	- <i>mas</i> , - <i>man</i>	- <i>las</i>	- <i>sas</i>			
D/L	- <i>mi</i>	- <i>ti</i>	- <i>si</i>		- <i>smi</i>	- <i>smi</i>
DIR	- <i>ma</i>	- <i>ta</i>	- <i>sa</i>			- <i>sma</i>
ABL/INSTR ²⁰	- <i>met</i>	- <i>tet</i>	- <i>set</i>			- <i>smet</i>
	PLURAL					
	1SG	2SG	3SG	1PL	2PL	3PL
NOM	- <i>mes</i>	- <i>tes</i>	- <i>ses</i>		- <i>smes</i>	
ACC	- <i>mus</i>	- <i>tus</i>	- <i>sus</i>	- <i>s(um)mus</i> ,		- <i>smus</i>
				- <i>smius</i>		
NOM/ACC N	- <i>met</i>		- <i>set</i>			
GEN	- <i>man</i>		- <i>san</i>			
D/L, DIR		- <i>tas</i>				- <i>smas</i>

Examples are to be found in (6), (10), and (24) above; a further example is *GİR=si*, ‘at his foot’ in (26):

¹⁹For all spelling variants of first person singular possessive forms, especially for possible *i/e* alternations, cf. *CHD* s.v.

²⁰The forms of possessive adjectives used with ablative and instrumental noun forms are homophones of the *n/a* singular neuter, and they might be in fact stem forms used adverbially.

- (26) ^{ciš}*harpa= ma I-anta LUGAL-as GİR=si kitta*
 heap-N/A-N-SG CONN one-N/A-N-SG king-GEN-SG foot 3SG-POSS-D/L lie-3SG-PRES
 “a heap (of wood) lies near the king’s foot”, *StBoT* 8 iv 28 (=Ottén & Souček, 1969).

Enclitic possessives can modify local adverbs as well. This possibility goes back to the nominal origin of local adverbs (see below, § 2.6.2); synchronically, possessives in such examples really function as pronouns. Examples are (17) above and (27):

- (27) ^{NINDA}*sarrui=ma= ssan ERÍN^{MES}-az eszi ser=samet= a GİR ZABAR kitta*
s.bread-D/L CONN PTC troop-NOM lie-3SG-PRES over 3PL-A-POSS PTC dagger bronze lie-3SG-PRES
 “a (clay figurine of a) troop lies on the *s.bread*; a bronze dagger lies over them”, *StBoT* 8 i 30-31
 (=Ottén & Souček, 1969).²¹

After the Old Hittite period possessive adjectives disappear. However, they are only partially replaced by the accented form of personal pronouns, since possession is increasingly expressed through second position enclitic personal pronouns in the oblique case (dative for third person):

- (28) ^{LÚ}*KÜR^{MES}-mu= kan ^{LÚ}MES arsanatallus ^DIŠTAR GAŠAN-YA ŠU-i dais*
 enemy-PL 1SG-OBL PTC eviuous-ACC-PL *I*. Lady my hand-D/L put-3SG-PRET
 “Istar my Lady put in my hand my enemies and those who were envious of me”, *StBoT* 24
 i 58-59 (=Ottén, 1981).²²

Many of the examples in this book contain similar occurrences. In (21), (57), (76), again, the oblique form *-mu* indicates the possessor; in (4) and (40) there are examples with *-si* (3 pers. sg. dat.); (56) contains a third pers. pl. possessor (*-smas*). Further discussion on this topic can be found below, § 2.3.1.2.

2.3. Pronoun

In Hittite we find personal, demonstrative, relative, interrogative, and indefinite pronouns.

2.3.1. Personal pronouns

Personal pronouns in Hittite are inflected for case and number; they have both accented and unaccented (enclitic) forms.

2.3.1.1. The declension of accented pronouns for first and second person and third person singular is as

²¹Note that the possessive *=samet*, ‘their’, in this example is hosted by the first word in the sentence: but this does obviously not depend on Wackernagel’s Law.

²²Example (28), as many other examples in the following sections, contains an Akkadian possessive suffix (here the first person sg. *-YA*). Such suffixes are attested in Hittite texts from all language stages; they must not be confused with Hittite enclitic possessives, since we do not know what the Hittite reading of Akkadian suffixes was.

follows:

TABLE 11. *Accented personal pronouns of 1st and 2nd person*

	1SG	2SG	3SG	1PL	2PL
NOM	<i>uk</i>	<i>zig</i>		<i>wes</i>	<i>sumes</i>
ACC./DAT	<i>ammuk</i>	<i>tuk</i>	<i>setani</i> (only d/l)	<i>anzas</i>	<i>sumas</i>
GEN	<i>ammel</i>	<i>tuel</i>	<i>sel, siel</i>	<i>anzel</i> (not OH)	<i>sumenzan</i> <i>sumel</i> (LH only)
ABL (not OH)	<i>ammedaz</i>	<i>tuedaz</i>	<i>sez</i>	<i>anzedas</i>	<i>sumedas</i>

After the OH period, the forms of the accusative and those of the nominative start to be found in place of each other, in the same way as we have seen for nominal declension. The forms of the ablative are post-Old Hittite; they are mostly found in double case constructions and virtually function as adjectives (see § 2.1.5.11). For the genitive of plural pronouns, only *sumenzan* is found in Old Hittite; *anzel* and *sumel* are analogical forms based on the singular and occur only later. There were originally no distinct forms for the accusative and the dative, but only one form was used as oblique, as for unaccented personal pronouns, shown in Table (11). After the Old Hittite period, again owing to the spread of double case construction, oblique forms started to be used with locative function as well; besides, plural forms of the d/l developed in the same context, again functioning as adjectives, as shown above, in example (23).

For third person the demonstrative *apa-*, 'that one', is used. Being originally a demonstrative, this pronoun also has neuter forms; they are given below, § 2.3.2. The forms in Table (11) for third person singular are rather infrequent.

2.3.1.2. Enclitic pronouns are widely employed in Hittite. First and second person only have a form for oblique, functioning as accusative and dative; third person pronouns are suppletive: they have a form for the dative from an originally pronominal stem, and forms for the nominative and the accusative, from an original demonstrative.

TABLE 12. *Declension of enclitic personal pronouns*

	1SG	2SG	3SG	1PL	2PL	3PL
NOM			<i>-as</i>			<i>-e, -at</i>
ACC			<i>-an</i>			<i>-us, -as</i>
NOM/ACC N			<i>-at</i>			<i>-e, -at</i>
DAT (OBL) ²³	<i>-mu</i>	<i>-ta, -du</i>	<i>-si</i>	<i>-nas</i>	<i>-smas</i>	<i>-smas</i>

The two forms of second person sg. oblique are phonologically determined allophones: *-du* is found where it occurs before the enclitic particles *-za* and *-san*, *-ta* is found elsewhere. The forms of third person plural *-e* (both for common and neuter gender) and *-us* are Old Hittite; *-at* and *-as* are later.

An occurrence of second person oblique enclitic functioning as an accusative is found in (37), where *-ta* is a DO; cases where first and second person enclitics function as dative are (35), (47), (67b) where *-ta* and *-mu* are IO's (Addressee with verbs of saying or Recipient), (92), where *-mu* is the Complement of the verb *kururiahh-*, 'to become hostile', which governs the dative, (67f), where *-mu* is the Complement of the adposition *piran*, 'before', and several Beneficiary expressions, as *-nas* in (102) (a 'free dative'), or *-mu* in (90). In some other cases, first and second person obliques, as well as third person datives, must be understood as Possessor expressions (see above § 2.2.4). The relevant examples make clear that Beneficiary and Possessor cannot be viewed as discrete categories, since a Beneficiary interpretation is often possible for Possessor expressions with enclitic pronouns. However, it must be remarked that Possessor, marked through possessive enclitics (§ 2.2.4), and Beneficiary, marked through enclitic personal pronouns, were kept distinct in Old Hittite, as is most clearly shown in example (80).

2.3.2. Demonstrative pronouns

Demonstrative pronouns are *ka-*, 'this', and *apa-*, 'that', the latter used as third person pronoun as well. Demonstrative pronouns can accompany a head noun, in which case they function as adjectives. The forms of *apa-* are given in Table (13):

²³Forms in this row are to be understood as dative for 3rd person sg. and pl., and as oblique (i.e. non-nominative) for all other pronouns.

TABLE 13. Declension of *apa-*

	SINGULAR	PLURAL
NOM	<i>apas</i>	<i>ape</i>
ACC	<i>apun</i>	<i>apus</i>
NOM/ACC N	<i>apat</i>	<i>ape</i>
GEN	<i>apel</i>	<i>apenzan</i>
D/L	<i>apedani</i>	<i>apedas</i>
ABL	<i>apedaz</i>	
INSTR	<i>apit, apedanda</i>	

The pronoun *kas-* is inflected as *apa-*, with the difference of the n/a sg. neuter, which has the form *ki*. Again, the nominative and the accusative plural forms are confused after Old Hittite; the form of the dative plural can sometimes occur in the place of the genitive plural, and the accusative singular has thematic forms, *apan* and *kan*.

Other pronominal stems, attested only in some forms, are *a-* (or *e-*), *eni-*, *uni-*, and *ani-* (all meaning 'that').

2.3.3. Relative, indefinite, and interrogative pronouns

The stem of the interrogative and relative pronoun is *ku-*, which is used as an adjective as well:

TABLE 14. Declension of the relative and interrogative pronoun

	SINGULAR	PLURAL
NOM	<i>kuis</i>	<i>kues</i>
ACC	<i>kuin</i>	<i>kueus, kuius</i>
NOM/ACC N	<i>kuit</i>	<i>kue</i>
GEN	<i>kuel</i>	<i>kuenzan</i>
D/L	<i>kuedani</i>	<i>kuedas</i>
ABL	<i>kuedaz</i>	

If doubled (*kuis kuis*) the pronoun has the meaning of an indefinite relative ('someone', 'anyone'); the same holds for the form *kuiissa*, which also means 'each one'. A couple of forms are attested for an interrogative stem *mas-*: nom. pl. c. *mases*; acc. sg. c. *masin*; n/a pl. n. *mase*.

Indefinite pronouns are *kuiski* and *kuiissa*, which both mean 'whoever', and *damai-*, 'another'; some pronominal forms are found for *dapiya-*, 'all', as well. The pronoun *kuiski* is inflected as *kuis* with the addition of enclitic *-ki* (or sometimes *-ka*, *-ga*); *kuiissa*, too, is inflected as *kuis*, with the enclitic conjunction *-ya-*, that causes gemination of final consonants. The negative indefinite is *UL kuiski* or *natta kuiski*, 'nobody'. In Table (15) the forms of *kuiissa* and *damai-* are given. Again, missing forms are unattested.

TABLE 15. Declension of indefinite pronouns

	SINGULAR		PLURAL	
NOM	<i>kuiissa</i>	<i>damais</i>	<i>kuesa</i>	<i>damaus</i>
ACC	<i>kuinna</i>	<i>damain</i>	<i>kuiussa</i>	<i>damaus</i>
NOM/ACC N	<i>kuitta</i>	<i>damai</i>		<i>damai</i>
GEN	<i>kuella</i>	<i>dammel</i>		
D/L	<i>kuedaniya</i>	<i>damedani</i>		<i>damedas</i>
DIR		<i>dameda, damatta</i>		
ABL	<i>kuezziya</i>	<i>damedaz</i>		

2.4. Numerals

Cardinal numbers in Hittite are written ideographically. Sometimes, Hittite phonetic complementation is added, which supplies morphological information; nevertheless, stem forms and inflection are not altogether clear. Apparently, some numerals, notably 'one' and 'two', have a mixed declension similar to that of demonstratives; besides, they also have forms from an *-ant-* stem; the numeral 'one' has some forms from an *-i-* stem as well. The following table contains the forms attested for the numeral 'one' according to Eichner (1992):

- *-as* stem: nom. sg. c. 1-*as*; acc. sg. c. 1-*an* pl. perhaps 1-*en-as*; n/a sg. n. 1-*e*, 1-*an* (both uncertain); gen. sg. 1-*el*; d/l sg. 1-*edani*, pl. 1-*edas*; abl. 1-*eaz* (or 1-*edaz*), 1-*ez*; instr. 1-*edanta*; the form 1-*eda* was perhaps an ancient locative (?) singular;
- *-i* stem: nom. sg. c. 1-*is*; acc. sg. c. 1-*ir*;
- *-nt-* stem: n/a sg. n. 1-*an*, pl. 1-*anta*; this latter stem should represent a form derived possibly from the *-a-* stem.²⁴

Besides, the adverb *anki* means 'once'.

2.5. Verb

Inflectional categories of the Hittite verb are person (first, second, and third), number (singular and plu-

²⁴According to Eichner the word for 'one' in Hittite should be **anza*, see also Puhvel (1991) sv.

ral), tense, and diathesis. Modality is a partially inflectional category, which involves two verbal moods, the indicative and the imperative; potential and contrary-to-fact modality are expressed by means of the indicative and a modal sentence particle. Aspect (here mostly to be intended as 'lexical aspect' or *Aktionsart*) is partly expressed derivationally (iterative and durative aspect), partly syntactically (inchoative aspect); inherently, all Hittite verbs are divided into stative and non-stative. Among transitivity affecting operations, besides diathesis, one also finds causativity, which is expressed derivationally. Again, there are differences between Old Hittite and later usage and morphology, especially in the field of diathesis.

2.5.1. Word formation

2.5.1.1. A number of suffixes are used to form derived verbs:

-*es-* derives verbs from adjectives, and means 'to become X': *idalawes*, 'to become bad', from *idalu-*, 'bad';

-*amai-* derives intensive forms from basic verb forms, as in *iannai-*, 'to march', from *iya-*, 'to walk';

-*sk-* is used for iteratives and applies to verbal stems: *dai-*, 'to put', *zik-*, 'to put continuously', 'to put or lay down several objects'. The suffix *-sk-* is frequently found with intensive verbs formed with *-amai-*: *iannai-*, 'to march', *iannisk-*, 'to march constantly';

-*ahh-* is used for denominal verbs; it means 'to behave like a X, in a X manner': *kurur-*, 'enemy', *kururiahh-*, 'to behave like an enemy', 'to make war against sbd.'; *nakki-*, 'heavy', *nahhiahh-*, 'to behave in a heavy, oppressive manner', thus 'to oppress', 'to be(come) a concern, to be difficult for sbd', 'to trouble sbd.'. Verbs in *-ahh-* sometimes can have a causative meaning, similar to the meaning of de-adjectival verbs in *-nu-*, as in *suppi-*, 'pure', *suppiahh-*, 'to purify';

-*nu-* is used for causatives; it can derive transitive verbs from adjectives, as in *parkunu-* 'purify' from *parkui-*, 'pure', or from intransitive verbs, or it can derive ditransitive verbs from transitive verbs;²⁵

-*nin-* is used for causatives, too, and functions in the same way as *-nu-*, but it is much less frequent.

2.5.1.2. Reduplication is a non-productive process, attested only for a restricted number of verbs, such as *kikkis-*, 'to become', from *kis-*, same meaning. Morphologically, redoubled stems fall into six groups according to van Brock (1964):

- reduplication with the vowel /e/: *wak-*, 'to ask for', *wewakk-*, s.m.;
- reduplication with the vowel /a/: *lalukka-*
- reduplication with the vowel /i/: *lilak-*
- reduplication with the root vowel, as in *kikkis-*
- reduplication of the whole root: *kurkuriya-*, 'to cut up', from *kuer-*, 'to cut';

²⁵For a few verbs in *-nu-* we have no adjective or verb that could represent the derivational base, but nouns with the same root occur, so that scholars have formerly thought that the suffix *-nu-* could also be used for denominals. However, considering that there are no cases of denominal *-nu-* forms that can be considered certain, it seems better to assume that the verb that served as the base for derivation is simply unattested in the extant Hittite corpus, cf. Oettinger (1979: 167).

- reduplication with initial vowel: *ases-*, 'to settle (people)', from *as-* 'to settle' (intr.).

From a semantic point of view, often there appears to be no relevant difference between simple and reduplicated forms. Note furthermore that quite a few reduplicated stems are not attested in the basic form. Closer analysis of the relevant passages shows that reduplicated forms still partly preserve what must have been their original meaning, i.e. intensive or iterative (see below, § 2.5.2.2.2, for more details).

2.5.1.3. Verbal prefixes are not frequent in Hittite. The only two prefixes are the deictic forms *pe-* and *u-*, which mostly occur with motion verbs: *pāi-*, 'to go', *uwa-*, 'to come' (cf. *iya-*, 'to walk'); *penna-*, 'to drive (forwards)', *unna-*, 'to drive (back)', from *nāi-*, 'to drive', etc.²⁶

2.5.2. Aspect

Before discussing aspect in Hittite, some general remarks on types of state of affairs (events) may be useful. Events can be classified according to the parameters of control and of dynamism. Cross-combining these parameters, we get the following typology of events:

TABLE 16. *Types of events*

	-DYNAMIC	+DYNAMIC
-CONTROLLED	states ²⁷	processes
+CONTROLLED		actions

2.5.2.1. States are typically denoted by adjectives; otherwise, they can be denoted by verbs that have inherently stative meaning. In Hittite such verbs constitute a particular class of predicates, most of them, but not all, characterized by middle-voice morphology. Stative verbs are made recognizable by the peculiar meaning of their participle. Hittite only has one participle, formed from the verbal root with the suffix *-ant-*. The participle of non-stative verbs has passive meaning: for example, we have *appanza*, 'prisoner', from *ep-*, 'to take', or *kummanza*, 'killed', from *kuen-*, 'to kill'. Participles of stative verbs cannot have passive meaning, because this would imply the accomplishment of some dynamic event. They simply denote that a certain referent is in the state described by the verb, so they have what we translate as active meaning: *huanza*, 'to be running', from *huwai-*, 'to (be) run(ning)', atelic with active

²⁶Local adverbs (§ 2.6.2) sometimes behave semantically as preverbs, but they are always separated from the verb graphically. See Kammenhuber (1974).

²⁷Controlled states are sometimes referred to as positions. They are denoted by verbs such as 'have', 'hold', that clearly do not involve dynamism, yet may imply control from the side of a volitional being. Note however that this distinction is not as clear as it may look at first sight, since the verb 'to have' is typically used for describing states of inanimate, non-volitional entities, too.

morphology;²⁸ *zae-* ‘to be in the state of being cooked’, *zaiyanza*, ‘being cooked’, with middle morphology; *iyanza*, ‘sheep’, from *iya-*, ‘to walk’ (originally meaning ‘the walking one’):

- (29) *mān*^{MUSĒN} *haranan* *husuwandan* *appanzi* *n= an* *udanzi*
 when eagle-ACC-SG-C live-PART-ACC-SG-C take-3PL-PRES CONN 3SG-ACC carry-3PL-PRES
 “when a living eagle is captured, it is carried (inside)”, *StBoT* 8 ii 19 (=Otten & Soucek, 1969).

2.5.2.2. Given their dynamic nature, actions and processes can be viewed at different stages in their development.

2.5.2.2.1. Inchoative aspect is expressed through a periphrasis involving the auxiliary *dai-* with a special form (*-uwan-* supine) from the iterative stem of the main verb. The *dai-* construction denotes that the subject is starting a durative action: *memiskiwān dais*, ‘(s)he started speaking, telling (a story)’. Sometimes it can simply denote imperfective aspect; in such cases, it is found in sentences that denote backgrounded information, such as

- (30) *m*hantiliss=*a*^{LÜŠU}.GI *kisat* *n= as* DINGIR^{LIM}-*is* *kikkisuwān dais*
H.-NOM and old become-3SG-PRET CONN 3SG-NOM god-NOM become-ITER-SUP put-3SG-
nu= kan^m *zidantas*^m *pisenin* DUMU^m *hantili QA-DU* DUMU^{MES}-*ŠU* *kuenta*
 PRET CONN PTC Z-NOM P.-ACC son H. together child-PL- his kill-3SG-PRET
 “Hantili became old, too, and he was becoming a god (i.e. ‘dying’; or: ‘he was about to become a god’): then Zidanta killed
 Hantili’s son Piseni together with his children”, *TE* 1, 63-64 (=Hoffmann, 1984).

More details on this construction are to be found in § 2.5.8.3.

2.5.2.2.2. Intensive and iterative aspect are built with the suffix *-sk-*. Other possible ways of expressing the same aspect are reduplication and derivation with the suffix *-annai-*, both of which had become non-productive by the time of written attestations. Some reduplicated stems and most stems in *-annai-* still have durative meaning, but they are all more or less lexicalized forms, as shown, among other things, by the fact that such verbs can still often take the suffix *-sk-*. As an example of a reduplicated form with iterative meaning, see (31), where reduplicated *kikkistari* is coordinated with the *-sk-* form *wasteskanzi*:

- (31) ^{DIM} ^{URU} *hatti* EN- *YA* DINGIR^{MES} *BELU*^{MES}-*YA* *kikkistari* *QATAMMA* *wasteskanzi*
 weather-god H. Lord my god-PL lord-PL my happen-3SG-PRES thus sin-3PL-ITER-PRES
 “Storm God of Hatti, my Lord, Gods, my Lords, so it happens all the time: people are committing sins all the time”, KUB 14.8 10.

²⁸ The verb *huwai-* originally did not denote an action, and consequently no change of place. This is easily seen from the fact that, in Old Hittite at least, it cannot govern a complement in the directive case (for the accusative with *huwai-*, see § 2.1.5.3). After the OH period direction complements in the d/l (occasionally in the directive) occur, as *huwai-* underwent a semantic change and developed a non-stative meaning.

Verbs in *-sk-* denote various nuances in meaning, such as distributive, as in

- (32) *nu= kan* INA ŠÀ KUR^{URU} *hatti apezza* UD.KAM-*az* *akkiskittari*
 CONN PTC in heart land H. that-ABL day-ABL die-3SG-ITER-PRES
 “in the inner country many people die from that day”, KUB 14.14+ obv. 30;

iterative, as in

- (33) *nu= mu* DINGIR^{MES} *istamassandu* *mu apiyaya* ^DŠKUR *pihassassin sarliskimi*
 CONN 1SG-OBL gods listen-3PL-IMPER CONN then Storm-god P.-ACC prise-1SG-ITER-PRES
 “may the Gods listen to me, then I shall always prise the Storm God Pihassassi”, KUB 6.45 iii 43-44

reciprocal, as in

- (34) *1-as* *1-an* *appeskit* *nu hulluskir*
 one-NOM one-ACC seize-3SG-ITER-PRET CONN fight-3PL-ITER-PRET
 “one seized the other and they fought with each other”, KUB 5.22 23.²⁹

Since only actions or processes (i.e. dynamic events) can be repeated or intensively performed, *-sk-* stems are not formed of stative verbs.

2.5.3. Tense

Hittite has two finite tenses, a past and a non-past, commonly referred to as present/(future) (=non-past) and as preterite (=past).

The present can express both habitual and progressive present; its possible future meaning is to be understood from the context. In narrative texts the historical present is sometimes used. The aspectual value of the preterite (imperfective or durative vs. perfective or punctual) must be understood from the context as well. Sometimes the preterite has the value of a pluperfect, as *para nehhun* in

- (35) *mahhan=ma=kan*^{URU} *astataz arha* INA^{URU} *kargamis anda iyahhat* *nu= kan*
 when CONN PTC A.-ABL out in K. into march-1SG-PRET-M CONN PTC
^m*nana-LÜ-in* *kuin* DUMU.LUGAL ANA^m *muwanza* GAL.GEŠTIN *haluki* *para*
 N.-ACC REL-ACC prince to N. cup-bearer news-D/L toward
^m*nehhun* *nu= mu* KASKAL-*si menahhanda unnesta* *nu= mu* *kissan*
 send-1SG-PRET CONN 1SG-OBL road-D/L ‘in front drive-3SG-PRET CONN 1SG-OBL thus
 IQBI
 he-spoke

²⁹ The second sentence in this example is noteworthy, because it does not contain an overtly expressed subject; see below, § 3.1.

“as I was marching from Astata to Karkemis, prince Nanaziti, that I had sent to Nuwanza, the Cup-bearer, with an embassy, met me on the road and spoke to me as follows”, *AM* 120.67-70 (=Goetze, 1933).

(The periphrastic form sometimes called ‘perfect’ in Hittite has neither perfective, nor pluperfect meaning, see below, § 2.5.8.1).

2.5.4. Mood and modality

Hittite has two finite moods, the indicative and the imperative. The imperative is inflected in the present only for all persons. Second and third person imperatives mostly occur in orders or commands; occasionally, they can have desiderative or optative meaning, as in

- (36) *utne mau*
land-N/A flourish-3SG-IMPER
“may the country flourish”; KBo 3.7 i 5.

First person imperatives have voluntative or optative meaning: *piskellu*, ‘I shall repeatedly send’, *uwallu*, ‘may I see’. Negative orders are expressed by means of the negation *le* (§ 2.9) with the present indicative.

The indicative can occur in sentences introduced by the modal particle *man* (see § 2.8.1 for the examples), in which case both present and preterite can express potentiality; the preterite can express contrary-to-fact modality; sometimes the present-future can be understood as an optative.

2.5.5. Transitivity affecting categories

2.5.5.1. The Hittite verb has two diatheses, known as active and medio-passive. Voice oppositions have undergone deep semantic change after the Old Hittite period, especially regarding the possible use of the middle voice as a true passive. In the first place, it must be remarked that texts written in OH script only preserve examples of three verbs inflected in both diatheses: *halzai-*, ‘to shout’, which has an impersonal middle, and *suppiahh-*, ‘to purify’, and *nai-*, ‘to turn’, both with reflexive middles. Other verbs have either active or middle forms only. Middle verb forms can have impersonal or reciprocal meaning, as those mentioned above, or they can have other detransitivizing meanings. Most stative verbs are *media tantum*. Among underived, original *media tantum*, Neu (1968: 52) lists the following:

- a-*, ‘to be warm’;
ar-, ‘to stand’;
es-, ‘to sit down’, ‘to be sitting’;
iya-, ‘to walk’;
isduwa-, ‘to be(come) aparent’;
ki-, ‘to lie’;

- kis-*, ‘to happen’, ‘to become’;
kist-, ‘to be burning’;
pugga-, ‘to be hated’;
tarra-, ‘to be capable of’;
tugga-, ‘to be visible’;
war-, ‘to burn’;
zeyya-, ‘to be cooking’.

(Most of the above verbs have stative meaning, although a few are dynamic, as *kis-*, ‘to happen’, ‘to become’.)

Some intransitive verbs, both stative or dynamic, can serve as lexical passives of transitive verbs, as *ki-*, ‘to lie’, used as the passive of *dai-*, ‘to put’, or *kis-*, ‘to become’, used as the passive of *iya-*, ‘to make’.

2.5.5.2. Causativity affects transitivity in that it is usually said to increase by one the verbal valency: so causative forms of intransitive verbs are usually transitive, as *emu-*, *imu-*, ‘to warm up’, from *a-*, ‘to be warm’, *huinu-*, ‘to let escape’, from *hawai-*, ‘to run’, *huismu-*, ‘to rescue’, ‘to give life’, from *huis-*, ‘to live’, ‘to be alive’. The same happens to de-adjectival causatives: since adjectives denote a state, a causative derived from an adjective adds to its meaning both a change-of-state (dynamic) and a transitive value, as in *daluganu-*, ‘to lengthen’, from *daluki-*, ‘long’; *sallamu-*, ‘to strengthen’, from *salli-*, ‘powerful’. A number of adjectives can take either the suffix *-es-* and denote dynamic uncontrolled events, or the suffix *-mu-*, and consequently denote dynamic controlled events: *parkui-*, ‘pure’, *parkues-*, ‘to become pure’, *parkumu-*, ‘to purify’; *dassu-*, ‘strong’, *dasses-*, ‘to become strong’, *dassamu-*, ‘to strengthen’.

Across languages, causative forms of transitive verbs are often ditransitive. Ditransitive verbs of this type denote an event where a primary Agent, denoted by the subject, causes a secondary Agent, or Causee, to perform an action that affects a Patient. Since both the Causee and the Patient proper have Patient properties, but on the other hand the Causee also shares some Agent properties with the primary Agent, the grammatical expression of the Causee shows a fair degree of variation across languages. Some languages, as English and German, have double object constructions, while others, as Italian and French, rather tend to encode the Causee as an Indirect Object. Another solution found in several languages consists in having the Patient expressed as a Direct Object and avoiding the expression of the Causee altogether. This is what we normally find in Hittite, where only once, as I have mentioned in § 2.1.5.3, example (5), both the Causee and the Patient occur in the same sentence. Elsewhere, one normally finds the Patient only, while the Causee remains unexpressed:

- (37) *nu = tta = kkan*^{URU}*hattusi ANA LU*^{JMES}*URU**hayasa = ya assuli istarna tekussanun*
CONN 2SG-OBL PTC H.-D/L to people H. and good among show-1SG-PRET-CAUS
“in Hattusa I had you be favorably introduced to the people of Hayasa, too”, KBo 5.3. i 4-5.

2.5.6. Inflectional classes and paradigms

Hittite verbs are divided into two inflectional classes, commonly known as verbs in *-mi* and verbs in *-hi*. The following types of stems can occur in the *-mi* class, according to Oettinger (1979) and (1992):

- consonant stems with root apophony: *kuen-*, 'to kill', 3 sg. *kuenzi*, 3pl. *kunanzi*;
- consonant stems with no root apophony: *pessiya-*, 'to throw',
- consonant stems with *-n-* infix: *link-*, 'to swear', 3sg. *likzi*, 3pl. *linkanzi*;
- vowel stems in *-e-*, *-ae-*, and the irregular verbs *pai-*, 'to go', and *uwa-*, 'to come' (see below for inflectional paradigms).

Verbs in *-hi-* may have consonant stems, as *ispantahh-*, 'to libate'; most frequently, they have vowel stems, in which case they may have root apophony, as in *dai-*, 'to put', *tehhi*, 'I put'.

In Table (17) I give the endings of the present and the preterite active; mediopassive endings are shown in Table (18), and imperative endings in Table (19). As it becomes apparent from the data in the tables, differences between *-mi* and *-hi* verbs only involve forms of the present and preterite singular active, and of third person singular active imperative:

TABLE 17. *Verbal endings for the active*

	PRESENT		PRETERITE	
	<i>-mi</i> CONJUGATION	<i>-hi</i> CONJ	<i>-mi</i> CONJ	<i>-hi</i> CONJ
1SG	<i>-mi</i>	<i>-hi</i>	<i>-un</i>	<i>-hun</i>
2SG	<i>-si</i>	<i>-ti</i>	<i>-t(a)</i>	<i>-s, -sta, -(t)ta</i>
3SG	<i>-zi</i>	<i>-i</i>	<i>-t(a)</i>	<i>-s, -sta, -(t)ta</i>
1PL	<i>-weni</i>		<i>-wen</i>	
2PL	<i>-teni</i>		<i>-ten</i>	
3PL	<i>-anzi</i>		<i>-ir</i>	

TABLE 18. *Verbal endings for the medio-passive*

	PRESENT	PRETERITE
1SG	<i>-ha(ha), -ha(ha)ri</i>	<i>-ha(ha)t, -ha(ha)ti</i>
2SG	<i>-(t)ta, -(t)tari</i>	<i>-at, -(t)tat, -(t)tati</i>
3SG	<i>-a, -ari, -(t)tari</i>	<i>-at, -(t)tat, (t)tati</i>
1PL	<i>-wasta, -wastari</i>	<i>-wastat, -wastati</i>
2PL	<i>-(t)tuma, -(t)tumat</i>	<i>-(t)tumat, -(t)tumati</i>
3PL	<i>-anda, -andari</i>	<i>-antat, -antati</i>

TABLE 19. *Verbal endings for the imperative*

	ACTIVE	MEDIO-PASSIVE
1SG	<i>-allu</i>	<i>-ha(ha)ru</i>
2SG	<i>-Ø</i>	<i>-hut, -huti</i>
3SG	<i>-du, -u</i>	<i>-aru, -(t)taru</i>
2PL	<i>-(t)ten</i>	<i>-(t)tumat, (t)tumati</i>
3PL	<i>-andu</i>	<i>-antaru</i>

First and second person plural also have the forms *-wani*, *-tani* for the present. Of the two possible forms of the third person singular active imperative, *-du* belongs to the *-mi* conjugation, *-u* to the *-hi* conjugation. The *-hi* conjugation also occasionally has an ending *-allu* for the first person singular active imperative.

The following tables contain examples of full paradigms for verbs of both conjugations. Missing forms are unattested.

TABLE 20. *The verb es-, 'to be'*

	PRESENT	PRETERITE	IMPERATIVE
1SG	<i>esmi</i>	<i>esun</i>	<i>eslut, eslit, asallu</i>
2SG	<i>essi</i>	<i>esta</i>	<i>es</i>
3SG	<i>eszi</i>	<i>esta</i>	<i>esdu</i>
1PL		<i>esuen</i>	
2PL		<i>esten</i>	<i>esten</i>
3PL	<i>asanzi</i>	<i>esir</i>	<i>asandu</i>

TABLE 21. The verb *iya-*, 'to make'

	PRESENT	PRETERITE	IMPERATIVE
1SG	<i>iyami</i>	<i>iyamun</i>	<i>iyallu</i>
2SG	<i>iyasi</i>	<i>iyas</i>	<i>iya</i>
3SG	<i>iezzi</i>	<i>iyat</i>	<i>iyaddu</i>
1PL	<i>iyaueni</i>	<i>iyauen</i>	
2PL	<i>iyatteni</i>	<i>iyatten</i>	<i>iyatten</i>
3PL	<i>yanzi</i>	<i>ier</i>	<i>iyandu</i>

TABLE 22. The verb *dai-*, 'to put'

	PRESENT	PRETERITE	IMPERATIVE
1SG	<i>tehhi</i>	<i>tehhun</i>	
2SG	<i>daitti</i>	<i>dāista</i>	<i>dāi</i>
3SG	<i>dāi</i>	<i>dāis</i>	<i>dāu</i>
1PL	<i>tiyaueni</i>	<i>dāiuen</i>	
2PL	<i>dāitteni</i>	<i>daisten</i>	<i>dāisten</i>
3PL	<i>tiyanzi</i>	<i>tier</i>	<i>tiandu</i>

TABLE 23. The verb *aus-*, 'to see'

	PRESENT	PRETERITE	IMPERATIVE
1SG	<i>uhhi</i>	<i>uhhun</i>	<i>uwallu</i>
2SG	<i>autti</i>	<i>austa</i>	<i>au</i>
3SG	<i>auszi</i>	<i>austa</i>	<i>ausdu</i>
1PL	<i>(a)umeni</i>	<i>aumen</i>	
2PL	<i>(a)usteni</i>	<i>austen</i>	<i>austen</i>
3PL	<i>uwanzi</i>	<i>auer</i>	<i>uwandu</i>

TABLE 24. The verb *es-*, 'to sit'

	PRESENT	PRETERITE	IMPERATIVE
1SG	<i>eshahari</i>	<i>esha(ha)ti, esha(ha)t</i>	
2SG	<i>estari, estati</i>	<i>estat, esat</i>	<i>eshut</i>
3SG	<i>esa(ri)</i>	<i>esat(i), estat</i>	<i>esaru</i>
1PL	<i>esuwastari</i>	<i>esuwastati</i>	
2PL	<i>estummat</i>	<i>estumat</i>	<i>estumat</i>
3PL	<i>asanda, esanda(ri)</i>	<i>esandat</i>	<i>estumat</i>

TABLE 25. The verb *ar-*, 'to stand'

	PRESENT	PRETERITE	IMPERATIVE
1SG	<i>arha(ha)ri</i>	<i>arha(ha)t, arhati</i>	<i>arha(ha)ru</i>
2SG	<i>artari, artati</i>	<i>artat(i)</i>	<i>arhut</i>
3SG	<i>arta(ri)</i>	<i>artat</i>	<i>artaru</i>
1PL	<i>arwasta</i>	<i>arwastat</i>	
2PL			<i>ardumat</i>
3PL	<i>aranda(ri)</i>	<i>arandat(i)</i>	<i>arandaru</i>

2.5.7. Verbal nouns

Verbal nouns can be made of any verbs³⁰ with the suffixes *-atar*, mostly restricted to *-mi* and to some *-hi* verbs with root apophony, and *-uwar/-mar*, for the other verbs. They are fully inflected forms; the genitive of the *-uwar/-mar* verbal noun is built on a *-u-* stem: *iya-*, 'to make', *iyawar*, 'the making', 'the act of making', gen. *iyawas*. The other case forms are less frequent; they are built partly on the *-u-* stem, partly on the *-r/n-* alternating stem. Verbal nouns in *-atar* are inflected as *-r/n-* stems:

- (38) *nu= kan mahhan ABU-YA ANA* ^{mD}LAMMA *ammuqq=a nakkiyatar assiyatarr=*
 CONN PTC when father my to K. 1SG-OBL and consideration-NOM love-NOM
a austa nu= nnas ABU-YA anda arnut
 and see-3SG- PRET CONN 1PL-OBL father my into bring-3SG-PRET
 "when my father saw esteem and affection between Kurunta and me, he brought us together",
Bronzetafel ii 45-46 (=Otten, 1988).

³⁰ However, as far as I know, they are mostly made from non-stative verbs.

From the two forms of verbal nouns two infinitive forms are derived, in *-anna*, from *-atar*, and in *-uwanzi*, from *-uwar*. Normally, each verb has either the *-anna*, or the *-uwanzi* form; the verb *piya-*, 'to give', has both: *piyawanzi* and *piyanna*.

Verbal infinitives depending on a finite verb form express Purpose:

- (39) LUGAL-*us*^{URU}hattusa DINGIR^{DIDL}-*as* aruwanzi uet
king-NOM H.-DIR god-PL-DAT venerate-INF come-3SG-PRET
'the king came to hattusa, in order to venerate the gods', *StBoT* 17, obv. 13 (=Ottén 1973).

(see (52) (*danna*, 'to take away') for a further example).

The so-called supine in *-uwan* is an uninflected form, which only occurs in inchoative periphrases with the auxiliary *dai-*, see § 2.5.8.3.

Hittite only has one participle, formed from the verb stem with the suffix *-ant-* and inflected as an *-nt-* stem. As mentioned above, § 2.5.2.1, the meaning of the participle depends on the stative or non-stative nature of the verb: the participle of stative verbs has present value, as *huyanza*, 'running', from *huwai-*, 'to run', while the participle of non-stative verbs has past value, as shown by forms such as *appanza*, '(he) who has been taken' (i.e. 'prisoner'), and *kummanza*, '(he) who has been killed', ex. (3), and *pan*, 'gone', ex. (48). Note that from the point of view of diathesis, the participle of active verbs has past passive meaning, whereas the participle of intransitive verbs remains active. The participle of the verb *ed-*, 'to eat', can have either past passive value ('having been eaten'), or past active value ('having eaten'); note however that the participle can never be taken as really transitive, since it is never found with an accusative object:

- (40) *nasma=ssi= kan garates adantes*
or 3SG-DAT PTC bowels-NOM-PL eat-PART-NOM-PL
'or (when) its bowels have been eaten', KUB 7.1+ i 2;

- (41) *n= at adanza ekuzi*
CONN 3SG-N/A eat-PART-NOM-SG-C drink-3SG-PRES
'having eaten, (s)he drinks it', KBo 5.2 iv 42.³¹

The participle of *eku-*, 'to drink', can likewise have past active meaning, 'having drunk'.

2.5.8. Auxiliaries³²

2.5.8.1. The verb *har(k)-* as a main verb means 'to have', 'to hold', as in

³¹The meaning of *adanza* in this passage is made clear by the expression *tangananza ekuzi*, '(s)he drinks on an empty stomach', found above in the same text (Il. 25-26); see Neu (1984) on this matter.

³²See Luraghi (1997).

- (42) ^{GIŠ}TUKUL=*ma kuin apiya harkun n= an halissiyamun*
weapon PTC REL-ACC there have-1SG-PRET CONN 3SG-ACC inlay-1SG-PRET
'the weapon that I had there I had inlaid', *StBoT* 17, obv. 46 (=Ottén, 1981).

As an auxiliary, *har(k)-* is found with the participle of another verb in the form of the n/a singular neuter:³³

- (43) UGULA ^{LÚ.MEŠ}MU *hassas katta ket arta 6 HAR-nai^{SAR} harzi*
chief cook-PL hearth-GEN near this-side stand-3SG-PRES six h. have-3SG-PRES
^{LÚ}hesta *hassas katta edi parsanan harzi 6 HAR-nai^{SAR} harzi*
h.-NOM hearth-GEN near that-side kneeling-PART have-3SG six h. has-3SG-PRES
'the chief of the cooks stands near the hearth on this side and holds six h.; the *hesta* is kneeling near the hearth on that side and holds six h.', KBo 17.15 rev. 14-16;

- (44) ANA ^mIŠTAR.LÍ *walliwalli=ma ŠA^m mursili annallan SISKUR UL hapusanzi*
to I. w. CONN of M. ancient-ACC ritual not modify-3PL-PRES
ANA ^DIŠTAR ^{URU}samuha=*as= kan EZEN-ni anda assuli halziyanza*
to I. S. 3SG-NOM-C PTC festival-D/L in good invoke-3PL-PRES
^mmursilis=*at ABI^DUTU^S kissan iyan harta*
M.-NOM 3SG-N/A-N father His Majesty so make-PART have-3SG-PRET
'for the goddess Istar of the fields *walliwalli* the ancient ritual of Mursili is not modified: the goddess is honored in the festival of Istar of Samuha: Mursili, the king's father, had established it this way', KUB 27.1 i 2-6;

- (45) ABU-YA *kuwapi^mhattusili ANA^m urhitesupas DUMU^m muwatalli menahhanda kururiahta*
father my when H. to U. son M. towards make-war-3SG-PRET
n= an LUGAL-izannni arha tittamut ANA^m LAMA=ma= kan UL kuitki
CONN 3SG-ACC kingdom out put-3SG-PRET to K. CONN PTC not any
asta ... annissan=pat=an^m NIR.GÁL-is LUGAL-us ANA ABU-YA^mhattusili
remain-3SG-PRET formerly PTC 3SG-ACC M.-NOM king-NOM to father my H.
sallanummanzi piyan harta n= an annissan=pat ABU-YA sallamuskit
honor-INF give-PART have-3G-PRET CONN 3SG-ACC formerly PTC father my honor-3SG-
PRET-ITER
'when my father Hattusili made war to Urhitesup, the son of Muwatalli, and deposed him, no fault remained on the side of Kurunta. ... Formerly king Muwatalli had given him to my father, so that he honored him, and he formerly had been honoring him', *Bronzetafel* i 6-12 (=Ottén, 1988)

Example (43) shows that participles of intransitive verbs are occasionally found with *har(k)-* in Old Hittite. The subject in this example is nominative singular common gender; the participle is inflected in the n/a neuter, so that it cannot be taken as a predicative adverbial, because in such case it should agree with the subject in gender. Intransitive verbs in this construction are not found after the OH period.

³³A couple of passages are attested, where the participle in the *har(k)-* construction agrees with the direct object: Puhvel (1991: 153, 155) mentions the form *munnanda harta*, 'he had/kept hidden', that he considers a scribal error.

Examples (44) and (45) show that the *har(k)*- construction does not have the value of a pluperfect. As a matter of fact, in all examples where a pluperfect is given in the translation, anteriority is implicit in the context; the real difference between the preterite and the *har(k)*- perfect lies in the durative character of the latter, both with the present, and with the past of the auxiliary. The contrast between durative and punctual aspect is neatly shown in example (46) below, where the form *esat* ‘he took/had taken hold of’ is opposed to *esan harta*, ‘he had taken (and consequently kept occupied)’; cf also example (35):

- (46) MU-*ammi*=*ma* INA KUR^{URU} *zihariya paun* nu= za ANA PANI ABI ABI- YA
 year-D/L CONN in country Z go-1SG-PRET CONN PTC to face father father my
kuis URU *gasgas*^{HUR.SAG} *tarikarimun* GEŠPUN-*az esat* *namma*=
 REL-NOM-C city g.-NOM T.-mountain fist-ABL occupy-3SG-PRET furthermore
as= za^{URU} KÜ.BABBAR-*si* *hargas* *kisat* nu *uer*
 3SG-NOM-C PTC H.-D/L danger-NOM-C become-3SG-PRET CONN come-3SG-PRET
 URU KÜ.BABBAR-*san* GUL-*hir* n= an *mekki dammeshair* nu^{DUTU}^{Šr}
 H.-ACC make-war-3SG-PRET CONN 3SG-ACC-C much damage-3SG-PRET CONN His
paun nu= za^{HUR.SAG} *tarikarimun* *kuis* URU *gasgan esan*
 Majesty go-3SG-PRET CONN PTC T.-mountain which-NOM-SG-C city g.-ACC occupy-PART
harta n= an GUL-*un*
 have-3SG-PRET CONN 3SG- ACC-C conquer-3SG-PRET
 “in the following year I went to the country of Zihariya. The Caska city that had taken mount
 Tarikarimu from the hand of my grandfather and had become a danger for Hattusa, and had striken
 Hattusa and had greatly oppressed it - I, His majesty, went and conquered the Caska city that had
 been keeping mount Tarikumu”, AM 80.57-61 (=Goetze, 1933).

As shown by the examples, the so-called *har(k)*- ‘perfect’ rather has an aspectual value that denotes durativity. After the OH period the *har(k)*- construction partly preserves this meaning; partly, it acquires a resultative value, similar to the value of the English present perfect. Passages where the *har(k)*- construction occurs in the imperative have to be taken as denoting duration, too, as shown in example (47), where the *har(k)*- construction is coordinated to two verb forms in the iterative:

- (47) nu GEŠTU-*an lagan* *hark* nu= *tta* *kuit* LUGAL SAL.LUGAL
 CONN ear-ACC turn-PART have-2SG-IMPER CONN 2SG-OBL REL-N/A-N king queen
memiskanzi nu= *us* *istamaski*
 say-3PL-PRES-ITER CONN 3PL-ACC-C listen-2SG-IMPER-ITER
 “keep your ear turned and whatever the king and the queen may be telling you, keep on listening
 to them!”, KUB 33.68 ii 4-5.

2.5.8.2 The auxiliary *es-*, ‘to be’, with the participle of a transitive or an intransitive verb that agrees in number and gender with the subject, is virtually only found in the past; it is often translated as a pluperfect:³⁴

- (48) [] INA^{URU} *puranda sara* *pān* *esta*
 in P. upwards go-PART be-3SG-PRET
 “[the population] had gone to Puranda”, AM 60.55 (=Goetze, 1933);
- (49) ... *uedanza* *esta*
 build-PART-NOM-SG-C be-3SG-PRET
 “it (sc. ^{URU}*Uras*, ‘the city of Ura’) had been built”, AM 98.24 (=Goetze, 1933);
- (50) *kedas*= *ma* ANA KUR.KUR^{HIA} LUGAL^{URU} *hatti kuit* UL *kuiski*
 this-D/L-PL CONN to country-PL king H. because not anyone-NOM-SG-C
pānza *esta* nu= *ssan ser sakuwantariyamun*
 go-PART-NOM-C be-3SG-PRET CONN PTC over remain-ITER-1SG-PRET
 “since no Hittite king had been in those countries (before), I remained up there for some time”,
 AM 150.37-38 (=Goetze, 1933).

The same construction can be found in the imperative:

- (51) n= *as*= *kan ŠÀ* DINGIR^{MEŠ} ANA^D IŠTAR^{URU} *samuha nahhanza*
 CONN 3SG-NOM-C PTC among god-PL to I. Š. fear-PART-NOM-SG-C
esdu
 be-1SG-IMPER
 “may he only fear the goddess Istar of Samuha”, *StBoT* 24 iv 88-89 (=Otten, 1981).

The relation between the *har(k)*- and the *es-* construction is not so easy to evaluate, since the distribution of the two auxiliaries is asymmetrical with regard to verbal tenses. Whereas the present is mostly found with *har(k)*-, *es-* virtually occurs with the preterite only. This difference depends on the fact the the verb *es-* is normally omitted in the present, both when it should occur with adjectival predicates, when it means ‘there is/are’, and with participles. Omission of the verb ‘to be’ will be discussed below, § 3.2.

2.5.8.3. The verb *dāi-*, ‘to put’, occurs in its auxiliary use with the *-uwan-* supine of a verb in the iterative form. This periphrasis has inchoative meaning, and it denotes the beginning of an action or process that has some duration or that is repeated in time:

- (52) nu= *wa tuel* ŠA^D UTU^{URU} *arinna* GAŠAN-YA ZAG^{HIA} *danna sanhiskiuun*
 CONN PTC you-GEN of Sun-goddess A. Lady my land-PL take-INF look-for-ITER-SUP
dair
 put-3PL-PRET
 “they started to continuously try to take your territories, Sun Goddess of Arinna, my Lady”, AM
 22.24-25 (=Goetze, 1933);

³⁴Cotticelli (1991: 131-155) contains a list of all participles occurring with the verb ‘to be’ in Hittite.

(53) *nu= wa ANA BELI-NI ERÍN^{MES} ANŠU.KUR.RA^{HIA} peskiwan tiyaweni*
 CONN PTC to Lord our troop-PL horse-PL send-SUP put-1PL-PRES
 “we shall start to send out troops regularly”, *AM* 138.34-35 (=Goetze, 1933);

(54) *nu KUR^{URU} kanis walahhiskiuwan dāis*
 CONN country K. strike-SUP put-3SG-PRET
 “he started striking continuously the city of Kanes”, *StBoT* 24 ii 6 (=Ottén, 1981).

Durative aspect is expressed by the suffix *-sk-* of the iterative form. As for the *-uwan-* supine, it only occurs in the *dāi-* construction and it is never inflected. Occasionally, the auxiliary in this construction can be the verb *tiya-*, ‘to proceed’, a verb derived from *dāi-*:

(55) *EZEN^{HIA} essuwan tiyanzi*
 festival-PL make-ITER proceed-3PL-PRES
 “they will start to celebrate regularly the (religious) festival”, *KUB* 5.6 i 23.³⁵

2.5.8.4. The two motion verbs *pai-*, ‘to go’ and *uwa-*, ‘to come’ occur in a serial construction, where they do not express their concrete meaning, but rather some type of verbal aspect. The following examples, that will be discussed below, show the syntactic peculiarities of the serial use of motion verbs:

(56) *LÚ.MEŠ^{URU} muhassi=wa kuit kurur nu= wa= smas it*
 man-PL N. PTC because enemy CONN PTC 3PL-DAT go-2SG-IMPER
halki^{HIA}-us arha harmik
 granary-PL-ACC out destroy-2SG-IMPER
 “since the population of Nuhasi is hostile, (go [it]) destroy their (=smas) granaries”, *AM* 110.41-42 (=Goetze, 1933);

(57) *nu= mu= kan AMA- ŠU menahhanda para naista n= as= mu*
 CONN 1SG-OBL PTC mother-his against towards send-3SG-PRET CONN 3SG-NOM 1SG-OBL
uit GİR.MEŠ-as katta haliyattat
 come-3SG-PRET foot-PL-D/L-PL down fall-3SG-PRET
 “he sent his mother to me: she (came) fell to my feet”, *AM* 70.28-29 (Goetze: 1933);

(58) *n= an= kan uwami LÚ.KÜR-as iwar GUL-ahmi*
 CONN 3SG-ACC PTC come-1SG-PRES enemy-D/L as fight-1SG-PRES
 “I will (come) fight against him as an enemy”, *SV* 1, 116 (=Friedrich, 1926);

(59) *nu uer KÚ.BABBAR-san GUL-hir*
 CONN come-3PL-PRET H.-ACC strike-3PL-PRET

³⁵Occurrence of this verb is more limited and it makes no semantic difference with respect to *dai-*; cf. Rosenkranz (1959)

“they (came) attack Hattusa”, see ex. (46);

(60) *GI[M]-an= ma= za uit ŠEŠ- YA [(^mArnuwandas DINGIR^{LIM} kīsat)*
 when CONN PTC come-3SG-PRET brother my A.-NOM god become-3SG-PRET
DUJTU^{ŠU}= ma= za= kan ANA GİŠŠÚ.A ABI- YA eshahat
 his Majesty CONN PTC PTC to throne father my sit-1SG-PRET
 “when my brother Arnuwanda (came) became god (=died), I, His Majesty, sat on my father’s throne”, *SV* 2, 6 (=Friedrich, 1930);

(61) *nu= mu memir paiueni= war=an= kan kuenmumeni nu= wa=*
 CONN 1SG-OBL speak-3PL-PRET go-1PL-PRES PTC 3SG-ACC PTC kill-1PL-PRES CONN PTC
tta SAG.DU-an utumeni
 2SG-OBL head-ACC bring-1PL-PRES
 “they told me: ‘we shall (go) kill him and shall bring his head to you’”, *Kbo* 6.29 ii 24-26 (=Goetze, 1925).

Serialized motion verbs occur together with another inflected verb form, and agree with it in tense and number. Their position is either initial, or ‘post-Wackernagel’, i.e. the first available position after sentence clitics, only in the case that the latter are hosted by a sentence connective. Besides, serialized motion verbs cannot take a Direction or a Source expression, as motion verbs normally do in their full lexical use. As a matter of fact, the behavior of sentence connectives and sentence enclitics shows that there is no sentence boundary between serialized motion verbs and the second finite verb in the above sentences:

- i) the connective *nu*, which marks sentence boundaries and becomes virtually obligatory after the OH period, never occurs after serialized motion verbs;
- ii) as a consequence, Wackernagel’s enclitics are placed before the motion verb, but they refer to the second verb in the sentence. In example (58) the accusative *-an* precedes the verb *uwami*, ‘I shall come’, but it is the direct object of *GUL-ahmi*, ‘I shall fight’, which is transitive: enclitics never behave in this way in coordinated sentences; a similar occurrence is *-at* in (115b). In the same way, the datives *-mu* and *-smas* in examples (59) and (56) are possession expressions that refer to NP’s that follow the motion verbs, and they could not be understood as complements of the latter. Example (61) shows the other possible collocation of sentence enclitics, i.e. hosted by the motion verb itself when it takes sentence initial position. Under normal conditions, such placing should still imply that the enclitics refer to the verb that hosts them, whereas here they refer to the verb *kuen-*, ‘to kill’: *-an* is its direct object, and *-kan* is an aspect particle that always occurs with this verb after the OH period;
- iii) the subject can possibly be omitted for third person, when the second verb is one of those that admit omission. Motion verbs belong to the group of verbs that do not admit omission of third

person subjects, as shown in:³⁶

- (62) *n= as namma UL uit*
 CONN 3SG-NOM-C besides not come-3SG-PRET
 “he did not go any more”, *AM* 28.19 (=Goetze, 1933).

As for the meaning of serialized motion verbs, it can be remarked that they apparently preserve their concrete meaning. This is only partially true, as shown most clearly in example (60), where no motion is implied. It can further be observed that there is a difference between the occurrences of motion verbs in the present-future and in the preterite. In the former case, the verbal tense is always to be understood as future and motion verbs have an exhortative meaning, as shown in examples (58). The same can be said of examples (56) and (61), with the imperative. In passages that contain the preterite tense, motion verbs underline a certain event as a point in time from where other events develop: see examples (56), (58), and (59). Usually such passages are translated as ‘it happen then’ (German *es kam darauf*).

2.6. Adverb

Hittite adverbs can be divided into two groups according to their syntactic behavior: the first group has no particular characterization and it constitutes an open class, similar to English adverbs; the second group is constituted by so-called local adverbs, that underwent a semantic and syntactic change during the history of Hittite. Adverbs in this second group build a close class and correspond to the preverbs/adpositions of the other Indo-European languages.

2.6.1. Word formation

Adverbs mostly derive from inflected nouns or pronouns that have lost the function corresponding to their original case form. Often the form corresponds to the accusative singular, or to a ‘concrete’ case, such as ablative, as in *kez*, ‘on this side’; UD.KAM-*az*, ‘during the day; MI.KAM-*az*, ‘during the night’; etc. The *n/a* singular neuter can be used adverbially, as in *mekki*, ‘much’. Adverbs can be formed on nominal stems with the suffix *-ili-*: MUNUS-*ili-*, ‘as a woman’; when applied to toponyms *-ili-* gives rise to adverbs that mean ‘in the language of ...’, as in *hattili*, ‘in Hattic’, *nesili*, ‘in Hittite’, from the name *Nesa*, that the Hittites gave to their country.

³⁶Repetition of the subject with a motion verb and in the subsequent sentence should be taken as implying two different subjects and no serialization of the motion verb, as in the following example:

DUMU.É.GAL LUGAL-*i* *peran huwai n= as uizzi DAM LÚ GUDÚ-as katta tiezzi*
 servant king-D/L before run-3SG-PRES CONN 3SG-C come-3SG-PRES woman priest-GEN down walk-3SG-PRES
 “the servant is running before the king, then he (sc. the servant) comes; the wife of the priest walks down”, *StBoT* 25.27
 rev.18 (=Neu, 1980). (rather than: “then she (comes) the wife of the priest [coreferent with she] walks down”).

2.6.2. Local adverbs

The distribution and syntactic behavior of so-called local adverbs underwent major changes after the OH period. In the present section, I will first describe the Old Hittite usage, and then discuss innovations found in later texts.

In Old Hittite there are two series of local adverbs, one of which is referred to as ‘static’, and the other as ‘dynamic’ on account of their occurrence in Location or Direction expressions. Most local adverbs have corresponding forms for the two series, as shown in Table (26):

Table 26. Local adverbs

STATIC	DYNAMIC
<i>andan</i> , ‘inside’	<i>anda</i> , ‘into’
<i>appan</i> , ‘after’	<i>appa</i> , ‘afterwards’
<i>istarna</i> , <i>istarni=</i> , ‘among’	-
<i>kattan</i> , <i>katti=</i> , ‘below’, ‘with’	<i>katta</i> , ‘downwards’
<i>menahhanda</i> , ‘in front of’	-
<i>piran</i> , ‘before’, in front of	<i>para</i> , ‘forewards’
<i>ser</i> , ‘above’, ‘over’	<i>sara</i> , ‘upwards’

The forms *istarni=* and *katti=* only occur with enclitic possessives; the form *katti=* also has a special meaning, ‘with’, whereas *kattan* means ‘below’.

In Old Hittite, local adverbs mostly behave syntactically as independent adverbs; only the adverb *katta* was already developing a postpositional use with the ablative. In the following examples, *anda* is an independent adverb in (61), and *katta* a postposition in (62):

- (63) *ta= an anda 3-is LUGAL-us SAL.LUGAL-ass=a zeriya allapahhanzi*
 CONN 3SG-ACC into three-times king-NOM queen-NOM and bowl-DIR spit-3PL-PRES
 “the king and the queen spit three times inside, into the bowl”, *StBoT* 8 iv 34-35 (= Otten & Souček, 1968);

- (64) [(LU)]GAL-us ^{GIS}*huluga[nmia(z)] katta u[(izzi)]*
 king-NOM litter-ABL downwards come-3SG-PRES
 “the king gets down from the litter”, *StBoT* 25.25 i 28’ (=Neu, 1980).

As already shown above, examples (17) and (30), stative adverbs can take enclitic possessives; besides, they can take genitive modifiers as well, as in the expression *attas=mas appan*, ‘after my father’.

From a formal point of view, dynamic adverbs are much more regular than the corresponding static forms. They all have the same root vocalism and the same ending, corresponding to the directive case of

-a- stems. Stative adverbs in their turn have different root vocalism; as for their case form, some of them are similar to n/a neuter, *istarni*= and *katti*= are d/l, *ser* could be an endless locative or a n/a neuter, or a bare stem, *menahhanda* and *istarna* are directives. As shown above, static adverbs have a nominal behavior, in that they can take genitive NP's or possessives as modifiers.³⁷ This points to a nominal origin. Dynamic adverbs are most likely back formations created on the model of static adverbs.

After the Old Hittite period, the process of syncretism undergone by the d/l and the directive case also affected the two series of local adverbs, so that they became functionally non-distinguished. Furthermore, static adverbs lost the possibility of taking nominal modifiers in the genitive and possessives (obviously this latter development also owes to the disappearance of possessives). Both static and dynamic adverbs developed a postpositional usage with the d/l, as in example (65), and with the ablative, as already in Old Hittite (ex. (64)), and a preverbal function, as *anda wemiya*-, 'to reach' in example (1), or *anda hink*-, 'to be bound to', in (66):

- (65) *ÍD-i anda lahuwai*
river-D/L into pour-3SG-PRES
“(s)he pours into the river”, TdH 2 iv 3 (=Jakob-Rost 1972);

- (66) *huiswatar=ma= pa anda hingani haminkan*
life-N/A CONN PTC into death-D/L tie-PART-N/A
“life is tied to death”, KUB 30.10 obv. 20.

Preverbs are always separated from the verb in writing, but they normally occur in last position, immediately preceding the verb form.

2.7. Conjunctions

Hittite has a variety of conjunctions and connectives, that usually, but not always, stand in sentence initial position. Among non-subordinating conjunctions, some are enclitic, and are placed after the first accented word in the sentence (see § 3.3.2.1); non-enclitic ones are prepositive, i.e. they always occur in sentence initial position. Subordinating conjunctions are often sentence initial, but they are by no means prepositive, and can be found in sentence internal position as well, especially those derived from the indefinite-relative stem *ku*-.

2.7.1. Non-subordinating conjunctions

Non-subordinating conjunctions may be further subdivided, in the first place, according to their syntactic function, between sentence connectives on the one hand, and the coordinating conjunction on the other.

³⁷Possessives are inflected in the d/l with the d/l forms *istarni*= and *katti*=, whereas they are in n/a neuter form (or maybe bare-stem) with the other static adverbs.

The coordinating conjunction is the only one that functions both on the phrase and on the sentence level. Besides, sentence connectives can be divided into two sub-groups, depending on their semantic and pragmatic value, i.e. additive connectives and adversative ones.

2.7.1.1. The coordinating conjunction is the enclitic form *-ya-*, which is spelled as such after vowels and ideograms (cf. the form *hassi=ya*, 'and the hearth', in example (13)); after consonants, it is spelled *-a-* and it causes gemination of the final consonant (cf. the forms *ammuqq=a*, 'and me', and *assiyatarr=a*, 'and affection', in example (38)). It can connect both sentences and other types of constituent; when it is used in two subsequent sentences or phrases it means 'both ... and', cf. the text in § 4. In Hittite the coordinating conjunction is mostly used as the syntactic marker of coordination, that is, it implies that two constituents or two sentences are on the same syntactic level (for this reason it never occurs between a subordinate and a main clause, see below, § 2.7.1.2). The order of coordinated constituents can in principle always be reversed; this holds for coordinated clauses as well, with respect to their reference to the course of the events. Very seldom the coordinating conjunction is used in an additive manner between clauses, since Hittite has specific additive connectives. Examples of the difference between coordination and addition will be discussed in the following section.

2.7.1.2. Additive connectives in Old Hittite are *mu*, *ta*, and *su*. Contrary to the coordinating conjunction, additive connectives have a discourse, rather than syntactic, function; they are used in order to 'push forward' a narration, and express progression in the course of the events. As a consequence, the order of clauses that are conjoined through one of such connectives cannot be reversed, since inversion would violate the real time reference. Additive connectives are sensitive to modality: they can appear in assertions or in orders only, whereas they are incompatible with potential and contrary-to-fact modality (particle *-man-*), and with prohibitive (negation *le*).

In the following passage, the difference between coordination, marked by *-(y)a-*, and addition, with *mu* is neatly borne out in sentences (67d-f):

- (67 a) *mahhan=ma= za ABU-YA m̄mursilis DINGIR^{LIM} kisat*
when CONN PTC father my M.-NOM god become-3SG-PRET
b) *ŠEŠ- YA=ma= za= kan m̄NIR.GÁL ANA GISGU.ZA ABI- ŠU esat*
brother my CONN PTC PTC M. on throne father his sit-3SG-PRET
c) *ammuk=ma= za ANA PANI ŠEŠ- YA EN.KARAŠ kishahat*
1SG-NOM CONN PTC in-front-of brother my army-commander become-3SG-PRET
d) *nu= mu ŠEŠ- YA GAL MEŠEDIUTTIM tittamut*
CONN 1SG-OBL brother my great guard put-3SG-PRET
e) *KUR UGU=ya=mu maniyahhanni pesta*
country upper and 1SG-OBL administration-D/L give-3SG-PRET
f) *nu KUR UGU^{TI} taparha*
CONN country upper rule-1SG-PRET
g) *piran=ma= at= mu m̄D XXX.PU-as DUMU m̄zida maniyahhiskit*
before CONN 3SG-N/A 1SG-OBL A.-NOM child Z. administrate-3SG-ITER-PRET
“when my father Mursili became a god (i.e. died), my brother Muwatalli sat on his father's throne

while I became army commander in front of my brother; he made me chief of the guard and gave me the Upper Country to administrate. So I ruled the country. (Before me Zida's son, Armadatta, had administrated it for a long time)", *StBoT* 24 i 22-28 (= Otten, 1981).

The examples shows the difference between two coordinated sentences, (67d) and (e), which denote events that had taken place at the same time, and addition, in (f), where the event follows as a consequence from the event described in the preceding sentence. (The other sentences in this passage exemplify special uses of *-ma-* and will be discussed below, § 2.7.1.3).

The distribution of *mu* and *ta* is very similar in Old Hittite, except for a higher overall frequency of *ta*, and a higher frequency of *mu* between preposed subordinate and main clauses. The occurrence of *mu* in such environment appears to be an innovation; it ultimately led to the grammaticalization of *mu* as sentence introducer and the consequent disappearance of *ta*, which is preserved in late archaizing texts. The connective *su*, which disappeared immediately after the OH period, is much less frequent than *mu* and *ta* in Old Hittite already, and its function appears to be restricted. In the first place, *su* never occurs between a preposed subordinate clause and the main clause; furthermore, it virtually occurs only when it hosts pronominal enclitics, with very few exceptions.³⁸ Asyndeton, which is quite frequent in narrative texts in Old Hittite (cf. § 5) also virtually disappeared later on.

2.7.1.3. Adversative connectives in Old Hittite are enclitic *-ma-* and *-a-*. The connective *-ma-* denotes that something referred to in a certain clause is contrary to expectations.³⁹ Thus, it indicates discontinuity, either on the text level or in the course of the events. Initial verbs, which also may be used in order to denote that something is contrary to expectations, are frequently found with *-ma-*:

- (68) *anda=kan halinas tesummius tarlipit suwamus 2-ki petumini tarueni= ma=*
 inside PTC clay-GEN vessel-ACC-PL *t.*-INSTR full-ACC-PL twice bring-1PL-PRES say-1PL-PRES CONN
at eshar DUMU.É.GAL-is^d hantasepan LUGAL -i kissari dai tesumminn=
 it blood-N/A-N servant-NOM *H.*-ACC king-D/L hand-D/L put-3SG-PRES vessel-ACC-SG
a pai
 and give-3SG-PRES
 "Twice we bring inside the clay vessels full of blood (we call it *t.*); the Palace servant puts a *H.*
 divinity in the hand of the king and gives (him) a vessel", *StBoT* 8 i 26-29 (=Otten & Souček,
 1969).

The connective *-a-* has the function of indicating topic change; although it only occurs between clauses, and not between phrasal constituents, its scope is usually limited to the word that hosts it. As an example of the difference between *-a-* and additive connectives, see the passage in the following example:

- (69) a) SAL.LUGAL^{URU} *kanis* XXX DUMU^{MEŠ} I^{EN} MU-*anti hasta* ...
 queen K. 30 boy-PL one year-D/L generate-3SG-PRET
 b) *tuppus sakanda sunnas*
 basket-ACC-PL oil-INSTR fill-3SG-PRET
 c) *mu DUMU^{MEŠ} -ŠU anda ziket*
 CONN boys her inside put-3SG-PRET
 d) *s= us ID-a tarnas*
 CONN 3PL-ACC river-DIR leave-3SG-PRET
 e) *ID-s= a ANA A.AB.BA KUR^{URU} zalpuwa pedas*
 river-NOM CONN to sea country Z. carry-3SG-PRET god-NOM-PL
 f) DINGIR^{DIDL} -s= a DUMU^{MEŠ} -us A.AB.BA= *az sara dair*
 god-N-PL CONN boy-ACC-PL sea-ABL outside take-3PL-PRET
 g) *s= us sallanuskir*
 CONN 3PL-ACC bring-up-3PL-PRET
 "The queen of Kanis generated thirty boy during the same year. ... She filled some baskets with oil, laid her children inside and abandoned them to the river. The river took the children to the sea, in the country of Zalpuwa. The gods took the children out of the sea and bought them up", *StBoT* 17, obv. 1-5 (=Otten, 1981).

All *-a-* particles in (69) mark Subject switch, because the subject happens to be the topic of each sentence in this passage; switch between two non-subject constituents is shown in example (27), where two local expressions are contrasted.⁴⁰

In later texts the particle *-a-* disappeared. This is shown in Middle Hittite texts by increasing confusion in the spelling of final consonants before *-a-*, which was by then being interpreted as *-(y)a-* by scribes copying Old Hittite texts. The function of *-a-* is consistently taken over by *-ma-* in Late Hittite. Therefore, the function of *-ma-* in Late Hittite is twofold, as shown in example (67) above:

- a) introducing backgrounded information, typically in temporal clauses, as in (67a), but possibly also elsewhere, as in (67g), where some background information is provided for events that will be narrated further on in the text in which the man called Armadatta will play a major role;
 b) indicating topic switch, as in (67b) and (c).

2.7.2. Subordinating conjunctions

Subordinating conjunctions in Hittite are *kuit*, derived from the stem of the relative pronoun, and mostly used for causal clauses; sporadically, it occurs in complement clauses as well; *takku*, 'if', only Old Hittite, later substituted by *man*, which only occurred in temporal clauses in Old Hittite, and later took the same meaning as German *wenn*; other temporal conjunctions are *kuitman*, 'until', and *mahhan*, 'when', 'as'. The use of subordinating conjunctions will be discussed below, § 3.4.

³⁸For the exceptions, see Luraghi (1990a: 49 fn.7).

³⁹The function and distribution of *-ma-* are extensively described in *CHD* s.v.

⁴⁰The first clause of example (27) contains the connective *-ma-* because the whole passage conveys backgrounded information (the passage in (27) is a side description inserted in a procedural text, cf. Luraghi, 1990a: 50-52).

2.8. Particles

Hittite, and Anatolian in general, has a number of different enclitic particles, most of which are second position clitics (see below, § 3.2). Sentence particles include: the modal particle, *man*, which is the only one that also has an accented variant; the particle of direct speech, *-wa(r)*; the 'reflexive' particle *-z(a)*, and the local particles *-kan*, *-san*, *-(a)pa*, *-(a)sta*, and *-an*. The particle *-pat*, a focalizer, is a word particle, and its placement is not restricted to second position.

2.8.1. The particle *man*

As I have mentioned above, potentiality and irrealty are expressed with the indicative and the particle *man*. This particle can be accented, in which case it takes the first place in the sentence and hosts the chain of enclitics, or it can be unaccented, and appear as the first enclitic in the chain (see § 3.2). Given its modal value, it cannot cooccur with the connectives *mu* and *ta*, which have an actualizing meaning; however, it can appear, and it often does, with the adversative connective *-ma-*. Examples of *man* with different modal meanings are given below (all from the *CHD*):

(70) *iyami= man=pat=wa kuitki*
do-1SG-PRES PTC PTC PTC something-N/A-N
"if I only could do something!", KUB 23.103 rev. 13;

(71) *man=us= kan mhuuziyas kuenta nu uttar isduwati*
PTC 3PL-ACC PTC H.-NOM kill-3SG-PRET CONN thing-N/A-N become-known-3SG-PRET-M
"Huzziya would have killed them, but the matter became known", *TE* iii 11 (=Hoffmann, 1984);

(72) *man=an= kan maskaliyas kuienzi s= an ANA É EN.NU.UN dais*
PTC 3SG-ACC PTC A.-NOM kill-3SG-PRES CONN 3SG-ACC to prison put-3SG-PRET
"Askaliya wanted to kill him, so he put him in prison", KBo 3.34 ii 17.

Example (88) in § 2.9 shows that *man* is compatible with the prohibitive negation *le* and that its scope can be carried over in coordinated sentences.

2.8.2. The particle *-wa(r)*-

Hittite has very few occurrences of complement clauses of *verba dicendi* or *sentiendi* (see § 3.4.1). Most often paratactic clauses are found in their place, either without any particles, or with the clitic *-wa(r)*-, that introduces reported speech, as in

(73) *s= as sara URU-ya pait uk= wa LUGAL-us=smis kisha*
CONN 3SG-NOM up city-DIR go-3SG-PRET 1SG-NOM PTC king-NOM your-NOM become-1SG-PRES
"he went up against the city, saying: "I shall become your king!"", *StBoT* 17, rev. 14-15 (=Ottén,

1973).

In Old Hittite, the particle is mostly found where no verbs of saying occur, as in (73); with verbs of saying, direct speech is often introduced in the text without any further markers, as in example (80) and in § 4 (g). In example (95) the particle occurs with the verb *te-/tar-* in a Old Hittite original. Example (80), much in the same way as example (73), contains a quotation, and the direct speech construction could not be turned into a Complement clause in the English translation. Later in the history of the Hittite language, *-wa(r)*- became virtually obligatory with verbs of saying, too, and it spread to other types of verbs that normally require Complement clauses, such as verbs of sensation and the verb 'to know'. An example of *-wa(r)*- with the verb *memai-*, 'to say', in a Middle Hittite text is given in (61); an example where the particle occurs with the verb *sak-*, 'to know' is the following:⁴¹

(74) KUR URU^ualasya ammel nu= war=at QATAMMA sak
country A. 1SG-GEN CONN PTC 3SG-N/A so know-2SG-IMPER
"the country of Alasya belongs to me, you also must know this", KUB 14.1 rev. 88

Example (74) also shows that *-wa(r)*- clauses can precede the sentence which contains the verb that they logically depend on (this is possible with verbs of 'saying' as well). Note that the *-wa(r)*- clause in (74) can actually be translated as a Complement clause: "you also must know this, that ...". Preposed *-wa(r)*- clauses often are referred to by some resumptive pronoun (as *-at* in (74)) in the following clause.

2.8.3. The particle *-z(a)*

The particle *-z(a)* originally simply expressed a major involvement of the subject in a certain event. Apparently, in Old Hittite the particle was in complementary distribution with the middle in order to express the subject's involvement, since it never occurs in sentences with middle verbs, apart from one passage, whose reading is uncertain. An example of *-z(a)* in Old Hittite is

(75) *mu= zza DUMU.NITAMEŠ karti= smi piran memir*
CONN PTC boy-PL heart-D/L 3PL-POSS-D/L before speak-3PL-PRET
"the boys said to themselves", *StBoT* 17, obv. 14 (=Ottén, 1973).

Later on the use of the particle is extended to middle verbs as well; in the meantime its meaning also undergoes a change parallel to the one underwent by middle voice. Starting from the Middle Hittite period, *-z(a)* takes over the functions of reflexive and of reciprocal. As an example, one can quote the verb *es-*, 'to sit down', which never occurs with the particle in Old Hittite, but it regularly does in later

⁴¹ See Justus (1981).

texts.⁴² Besides, the particle *-z(a)* it is consistently found with certain verbs, especially when they can convey different meanings with or without the particle. An example of this tendency is the verb *kis-*, which can mean either ‘to become’, or ‘to happen’. Both meanings are conveyed without the aid of the particle in Old Hittite, whereas in the post OH period the particle regularly occurs when the meaning is ‘to become’. Compare example (73), from an Old Hittite text, with Late Hittite (67a, c); in some Middle Hittite texts the rule does not seem to apply strictly yet:

- (76) *nu= mu É- YA inani piran pittuliyas É-ir kisat ... nu*
 CONN 1SG-OBL house my sickness-D/L before misery-GEN house-N/A become-3SG-PRET CONN
MU-ti meniyas armalas mahhan nu= za ukk= a QATAMMA kishat
 year-D/L course-GEN sick-NOM as CONN PTC 1SG-NOM and the same become-1SG-PRET
 “because of the illness my house has become a house of misery ... as one who is ill the whole year (or: annually), I, too, have become the same”, KUB 30.10 rev. 14-16.

The variation in example (76) might have to do with the fact that the sentence that contains the subject is first person, while the subject of the preceding clause is third person. The same clause also contains the oblique first person form *-mu*, here rendered with the possessive form ‘my’, which shows the particular relevance of the events described rather than for the grammatical subject (‘house’), for the first person possessor. A further example where the particle is missing in a Middle Hittite text with third person subject is to be found in (30); an example of the normal use of *kis-* with *-z(a)* in Late Hittite is (60), which also contains a middle form of the verb *es-*, ‘to sit down’, with *-z(a)* (the latter found in (67b), too). A closer connection of *-z(a)* with non-third person subjects is also shown by its occurrence in nominal sentences (where the copula does not occur), limited to first and second person subjects after the OH period.

Often, when its occurrence is not required by the verb, and it is not connected with first or second person subjects, *-z(a)* appears to have a meaning similar to Beneficiary expressions, for which sometimes enclitic pronouns are used. Overlap of *-z(a)* with enclitic pronouns is best exemplified by the verb *da-*, ‘to take’, often found as *-z(a) da-*, ‘to take for oneself’, as in (100b), and occasionally also occurring with an enclitic pronoun, as in (102) (=nas *dawen*, ‘we took for ourselves’).

2.8.4. Local particles

So-called ‘local particles’ constitute one of the major puzzles of Hittite (and Anatolian) grammar. In Old Hittite, one finds a group of five particles, *-kan*, *-asta*, *-san*, *-(a)pa*, *-an*, which occur in sentences that contain some kind of space expressions, such as a NP in the d/l, or in the directive, or a local adverb, as in the following examples:

⁴²On the evolution of *-z(a)* in Middle Hittite, see Boley (1993).

- (27) ^{NENDA} *sarrui=ma= ssan ERÍN^{MEŠ}-az eszi*
s.bread-D/L CONN PTC troop-NOM lie-3SG-PRES
 “a (clay figurine of a) troop lies on the s.bread”, *StBoT* 8, i 30 (= Otten & Souček, 1969; this example was quoted above in a wider context);
- (77) *LUGAL-i para I-ŠU paizzi appa= ma= sta nea LÚmenean KUSsarazzit*
 king-D/L towards once go-3SG-PRES back CONN PTC turn-3SG-PRES m-ACC s.:STRUM
walhazi para= m= as paizzi LÚ.MEŠ ALAM.KAXUS-us walhazi
 hit-3SG-PRES forwards CONN 3SG-NOM go-3SG-PRES clown-ACC-PL hit-3SG-PRES
 “he goes once towards the king, then he turns back, he hits the m. with a s, he goes forwards and hits the clowns”, *StBoT* 25, 43 i 11-13 (= Neu, 1980);
- (78) *labarnas LUGAL-us inarawanza nu= sse= pa utniyanza humanza*
 l-NOM king-NOM be-strong-PART-NOM CONN 3SG-DAT PTC population-NOM all-NOM
anda inarahhi
 into become-strong-3SG-PRES
 “the king *labarna* is strong and the whole country is strengthened by him” (or strengthens him?), *StBoT* 25.140 rev. 11-12 (= Neu, 1980);
- (79) *ug= an namma anda [p]aimi*
 1SG-NOM PTC besides into go-1SG-PRES
 “I go inside again”, *StBoT* 8, ii 45 (= Otten & Souček, 1969);
- (80) *ta LUGAL-i SAL.LUGAL-ya kissan memahhi kasata=smas= kan utniyandan*
 CONN king-D/L queen-D/L so speak-1SG-PRES behold 2PL-DAT PTC population-GEN
lalus dahhun irma<n>= smas= kan dahhun kardi= smi=
 tongue-ACC-PL take-1SG-PRET illness-ACC 2PL-DAT PTC take-1SG-PRET heart-D/L POSS-2PL-D/L
ya=at= kan dahhun
 and 3SG-N/A PTC take-1SG-PRET
 “to the king and the queen I speak as follows: ‘behold! I took away from you the bad words of the population, I took away illness, I took it away from your heart’”, *StBoT* 8 i 9-12 (=Otten & Souček, 1969);⁴³
- (81) *n= asta GISMÁ istappesnas PA₅-as istappesnaz para ÍD= kan anda pedai*
 CONN PTC ship basin-GEN channel-NOM basin-ABL towards river PTC into lead-3SG-PRES
 “the channel of the basin leads the ship outside toward the river from the basin”, KUB 29.7+ rev. 51-52.

Example (81), from a Middle Hittite text, is of particular interest, because it contains two particles (*-asta* and *-kan*) co-occurring in the same sentence. According to Neu (1993: 139) the two particles refer to the two spatial expressions, *istappesnaz para*, ‘from the basin’, and *ÍD=kan anda*, ‘into the river’,

⁴³The verb *dā-*, ‘to take’, occurs more frequently with the particle *-asta*.

respectively, *-asta* with ablative, and *-kan* with allative meaning. Co-occurrence of two local particles in the same sentence is quite exceptional; even more infrequently, the same particle can be repeated twice in different positions in one sentence:⁴⁴

- (82) *nu= ssan PANI DINGIR^{LM} ANA GIŠBANŠUR.GIŠ=san ANA PANI NINDAZippinni*
 CONN PTC in-fron-of god on wooden-table PTC in-front-of z.-bread
zikkizzi
 put-3SG-ITER-PRES
 “he puts (everything) in front of the god on a wooden table in front of the z.-bread”, KBo 21.33+iv 10-11.

The usage of sentence particles in Old Hittite is not widespread, and it is always connected with space expressions. Hittitologists have repeatedly tried to connect specific particles with specific adverbs or cases, but no rule has been worked out that has more than a broad statistic value. For instance, an adessive value has been repeatedly attributed to the particle *-san* (see lately Boley, 1989); Josephson (1995), on the other hand, has shown that the particle occurs with motion verbs more frequently than with verbs of rest.

After the OH period, the use of sentence particles increases, although *-(a)pa* and *-an* disappear immediately after the OH period and *-san* disappears after the MH period. In Middle Hittite, the particles appear to be related with space expressions only occasionally, whereas their occurrence is often connected to the meaning of the verb. Very often, telic verbs take the particle *-kan* (less frequently *-asta*). This development can be connected with the original local value of the particles: *-kan*, inessive/illative appears to express punctuality (cf. Josephson, 1995: 170).⁴⁵ An example of this tendency is given by the verb *kuen-*, ‘to kill’, that never occurs without particle after the OH period; see exx. (30), (71), and (72). With motion verbs, *-kan* apparently expresses perfectivity, as shown in example (93d-f), where the events referred to are described as fully accomplished achievements. More examples of the particles can be found above, exx. (19), (21), (28), (40), (44), (45), (51), (67b), (68) (*-kan*), (66) (*-pa*), (63) (*-an*), (13) (*-san*).

2.8.5. The particle *-pat*

The particle *-pat* is an enclitic restrictive marker. It can be hosted by nouns, pronouns, verbs or adverbs, and it frequently occurs with negations. Depending on the lexical category to which it refers, *-pat* has a variety of functions, that ultimately go back to its restrictive value.⁴⁶ In complex nominal constituents the particle *-pat* is usually hosted by restrictive modifiers: examples can be found above, in (8), (21), and

⁴⁴Examples (81) and (82) are from Neu (1993), which contains a thorough discussion of these and other similar passages. Local particles can occasionally occur in sentence internal position even if they are doubled, as in example (106) below.

⁴⁵On the development from local meaning to (lexical) aspect, see Boley (1989) and especially (1994).

⁴⁶The use of the particle *-pat* is thoroughly discussed in the *CHD s.v.*

(45). Since *-pat* is not a Wackernagel enclitic, its host does not need to be placed in any particular position in the sentence; when occurring with a word in initial position, *-pat* precedes all second position enclitics, as in (85). When *-pat* is added to a noun which is modified by an enclitic possessive adjective, it comes after the possessive adjective, as in

- (83) *pedi= smi= pat ZAG-ni 1-ŠU wahanzi*
 place-D/L-SG 3PL-POSS-D/L-SG PTC right-D/L once turn-3PL-PRES
 “in their (own) place, they turn once to the right”, *StBoT* 25.31 iii 4 (=Neu, 1980).

This may depend on the closest relevance of the possessive adjective for the NP, or it can mean that *-pat* refers to the possessive, rather than to the noun. This second explanation has the advantage of relating the position of *-pat* in such cases to the position that it takes in NP’s with accented modifiers (attached to the modifier). Furthermore, in sentences with third person singular subject, the particle *-pat* occurs after enclitic possessives when the possessive refers to the subject; if either no particle occurs, or the noun with the possessive is in initial position with the connective *-ma-*, as in (91) (§ 2.9), the possessive adjective refers to a non-subject third person. This difference is shown by comparison of example (83) with example (91) (cf. Luraghi, 1990a: 136 fn.3). Further examples of *-pat* are given below:

- (84) *EGIR-an=ma= as irmaliyattat= pat*
 after CONN 3SG-NOM become-ill-3SG-PRET-M/P PTC
 “later on he also became ill”, *AM* 14.5-6 (=Goetze, 1933);
- (85) *nu= ssan ^mkessis para ANA DAM-ŠU=pat IŠME*
 CONN PTC K.-NOM toward to wife his PTC he-listened
 “Kessi listened only to his wife”, *Kessi* ii 16 (=Friedrich, 1950).
- (86) *ammel= pat=wa=za GUD-un dahhi*
 1SG-GEN PTC PTC PTC OX-ACC take-1SG-PRES
 “I will take my own ox”, *HG* § 74 (=Friedrich, 1959).

2.9. Negation

The most frequent negation in Hittite is *natta*, often written according to the Akkadian form, *UL*, which functions both as word negation, in which case it stands before the negated element (ex. (105)), or as sentence negation, mostly placed in preverbal position;⁴⁷ in nominal sentences it can stand alone and function as predicate:⁴⁸

⁴⁷Sentence negation can also be initial or post-verbal for pragmatic purposes; see below, § 3.3.1.

⁴⁸For a thorough survey of the use of *natta*, see *CHD s.v.*

- (86) KÙ.BABBAR=*ya* GUŠKIN *natta udai* *kuit uemizzi*
 silver and gold not turn-in-3SG-PRES REL-N/A-SG find-3SG-PRES
 "he does not turn in the silver and gold that he finds", KUB 36.104 obv. 10;

- (87) *natta* GUD.MAH-*as*
 not bull-NOM
 "(this one) is not a bull", HG § 57 (=Friedrich, 1959).

Prohibitive sentences take the negation *le* and the indicative mood, as in example (87) above; example (88) shows that the negation *le* is compatible with the modal particle *man* and also that the scope of *le* can be carried on in coordinated clauses::

- (88) *le=man=se* LUGAL-*us kissan tezzi* DUMUMEŠ É.GAL-*s=a daranzi*
 not PTC 3SG-DAT king-NOM so speak-3SG-PRES servant-NOM-PL PTC speak-3PL-PRES
 "let not the king speak to him as follows, (let not) the palace servants speak as follows", HAB iii 65-66 (=Sommer & Falkenstein, 1938).

Existential negation is expressed with the Sumerian form NU.GÁL, '(it) does not exist'. NU.GÁL usually stands alone both when the temporal reference is to the present and when it is to the past. In the latter case, however, there may be the verb *es-*, 'to be'. Since occasionally in the past *UL* is found together with preterite forms of 'to be', and since *UL* always corresponds to Hittite *natta*, the Hittite reading of NU.GÁL should be *natta*. The fact that there is no verb 'to be' with NU.GÁL in the present, while it occurs in the past, implies that the verb 'to be' should not be supplied for the Hittite reading either. Examples of existential negation are the following:

- (89) *takku* DUMU.LUGAL *hantezzis* NU.GÁL
 if prince first-NOM NEG
 "if the king has no son of the first rank", TE 36-37 (=Hoffmann, 1984);

- (90) *mu= mu= kan ŠÀ* KUR URU*hatti* SAL^{TUM} NU.GÁL *esta*
 CONN 1SG-OBL PTC inside country H. bride NEG be-3SG-PRET
 "there was no bride for me in the country of Hatti", KUB 21.38 i 52.

Negation can also be expressed through negative adverbs, notably *nawi*, 'not yet', and *muwan* or *mu-man*, 'no longer', 'by no means':

- (91) *pidi= ssi= ma* ^m*sarmassun hatrait* *paizzi= ma= as nawi*
 place-D/L 3SG-POSS-D/L CONN S.-ACC order-3SG-PRET go-3SG-PRES CONN 3SG-NOM not-yet
 "he ordered Sarmassun to go take his place, but he has not gone yet", KUB 36.104, obv. 12-13.

- (92) *kuitman=za=kan ANA* GIŠGU.ZA *ABI- YA nawi eshat*
 when PTC PTC on throne father my not-yet sit-1SG-PRET-M/P
mu= mu arahzenas KUR.KUR^{MES} LÚKUR *humantes kururiahhir*
 CONN 1SG-OBL surrounding-NOM-PL countries-PL enemy all-NOM-PL make-war-3PL-PRET
 "as I had not yet sat on my father's throne, all the surrounding hostile countries started making war to me", AM 14.3 (=Goetze, 1933)

3. Syntax

3.1. The subject

Hittite is a peculiar type of null subject (NS) language. In the case that the subject is not a NP or an accented pronoun, NS's are regularly found for first and second person singular and plural with all kinds of verb. Third person sg. and pl. on the contrary follow two different patterns, according to the class of verbs that they co-occur with:

Class A includes all transitive verbs that can be found with a direct object, and a few other verbs that never occur with a direct object in our sources, but denote states of affairs that are usually referred to by transitive verbs.⁴⁹ Verbs in this class can have a NP or an accented pronoun as third person subject; otherwise they must have a NS (i.e. they cannot have third person enclitic subjects, cf. Table 12);

Class B includes all other verbs; they cannot take a third person NS, and consequently their subject must be either a NP or accented pronoun, or it has to be the nominative form of enclitic personal pronouns.

In other words, NS and nominative forms of the third person enclitic pronoun are in complementary distribution, depending on verbal transitivity. This means, among other things, that enclitic third person nominative and enclitic third person accusative, which are built from the same root (-*a-*, cf. Tab. 12), also occur in complementary distribution: class A verbs can take a clitic third person object, but not a subject, whereas class B verbs can take a clitic third person subject, but not an object. This restriction holds both for animate and for inanimate entities. In the example (93), the verb *pai-*, 'to go', occurs with first person NS and with third person clitics:

- (93) a) *mu= kan INA* KUR URU*arzuwa paranda paun*
 CONN PTC in country A. upwards go-1SG-PRET
 b) *mu INA* URU*apasa ANA URU^{LIM} ŠA* ^m*uhha-LÚ andan paun*
 CONN in A. to city of U. into go-1SG-PRET
 c) *mu= mu* ^m*uhha-LÚ-is UL mazzasta*
 CONN 1SG-OBL U.-NOM not resist-3SG-PRET-M/P
 d) *n= as= mu= kan huwais*
 CONN 3SG-NOM 1SG-OBL PTC escape-3SG-PRET

⁴⁹See Garrett (1990a) for an exhaustive list.

- e) *n= as= kan aruni paranda gursawanza pait*
 CONN 3SG-NOM PTC sea-D/L toward sail-PART go-3SG-PRET
- f) *n= as= kan apiya anda esta*
 CONN 3SG-NOM PTC there in be-3SG-PRET

"I when up to the country of Arzawa. In the city of Apasa I went into Uhhaziti's quarters and Uhhaziti did not make any resistance. He escaped me and went sailing on the sea and stayed there", *AM* 50.28-32 (Goetze 1933).

Note further that in the second part of the above passage the subject remains the same over several connected sentences. From a discourse point of view, the degree of continuity should be high enough to allow omission of the subject; however, the clitic *-as* (third person singular nominative) is repeated in each sentence, since all verbs belong to class B (intransitive verbs).

The reason why no third person clitic subjects occur with transitive verbs can be connected with restrictions on co-occurrence of accusative and nominative forms of the same clitic stem. The real problem raised by the use of third person clitics is why nominative forms were created in the first place, since third person forms of the verb are just as distinctive as first and second person forms. In this connection, it is interesting to remark that some passages are found in Old Hittite texts,⁵⁰ where the occurrence of third person subjects appears to be pragmatically determined, and NS are allowed with intransitive verbs as well, as with the verb *ar-*, 'to arrive', in:

- (94) *DUMU.NITAMEŠ appa URU nesa ianzi nu ANŠE-in nannianzi man URU tamarra*
 son-PL back N.-DIR go-3PL-PRES CONN donkey-ACC drive-3PL-PRES when T.-DIR
arir nu tarsikanzi
 reach-3PL-PRET CONN say-3PL-PRES-ITER
 "the sons go back to Nesa, and drive a/the donkey. On arrival in Tamarra, they say:...", *StBoT* 17, obv. 7-8 (=Otten, 1973).

However, it must be stressed that example (94) is rather exceptional even for Old Hittite, where the use of third person clitic subjects was already well established with intransitive verbs.⁵¹

3.2. The predicate

The Hittite predicate usually with the subject in number, except in the case of neuter plural subjects, that take singular forms of the verb (see above, § 2.1.4). Nominal predicates mostly agree with the subject in number and gender, as *assus* in (95), and *ishashanta* in (97), but exceptions are sometimes found, as in (97b) below, where the subject is common gender and the predicate is neuter. Some adjectives, as

⁵⁰Garrett (1990a: 130-133) gives a full list of passages where intransitive verbs occur with NS. Beside the Old Hittite examples, that come from all text types, he also gives some Middle Hittite examples, all coming from the same text (a protocol for the royal guard), and some Late Hittite examples from copies of Old Hittite ritual texts.

⁵¹Occasionally, exceptions are found after the Old Hittite period, too, as in ex. (34), where the verb *hulluskir*, 'they fought', should normally occur with an enclitic subject.

mekki-, 'big', 'great', 'many', generally occur as predicate in their bare stem form, cf. example (25).

The predicate of a Hittite sentence can be a verbal form, or any kind of nominal form, an adverb, or a negation (cf. example (87)). Since the copula never occurs in the present, and sometimes it does not occur in the past either, virtually all lexical categories can stand alone as predicate. The following examples contain various types of non-verbal predicate:

- (95) [^mhappi]s ANA LÚMEŠ URU zalpa tarsikizzi uk= wa atti= mi natta
 H.NOM to man-PL Z. say-3SG-PRES 1SG-NOM PTC father-D/L 1SG-POSS-D/L NEG
assus
 good-NOM-SG
 "my father does not like me", *StBoT* 17, rev. 4-5 (=Otten, 1973);
- (96) LÚMEŠ A.ZU-s=a katti=mi
 physician-PL CONN with 1SG-POSS-D/L
 "the physicians are with me", *StBoT* 8 iv 6 (=Otten & Souček, 1969).

When the predicate is a compound form of the verb involving a participle and the verb 'to be', the latter is always omitted in the present, as in (97), and most often overtly expressed in the preterite. In cases where time reference is easily recoverable from the context, the copula can occasionally be omitted even in the preterite, as in (98). Omission of the copula in the preterite is not limited to compound verb forms but it can occur with other types of nominal predicates as well, as in (99):

- (97) *sakuwa= smet ishashanta*
 eye-N/A-PL 3PL-POSS-N/A-N bloodstained-PART-N/A-PL-N
 "their eyes are bloodstained", *StBoT* 8 24 (=Otten & Souček, 1969);
- (98) *nu mahhan austa anda=kan kuit hatkesmuwantes nu= smas halki^{HILA}-us*
 CONN when see-1SG-PRET into PTC COMPL oppres-PART-NOM-PL CONN 3PL-DAT food-ACC-PL
tepaueszi
 become-small-3SG-PRES
 "when I saw that they were being oppressed and that their food was (hist. pres.) diminishing", *AM* 112.5 (=Goetze, 1933);
- (99) [] KUR.KUR^{HILA} URU Amurra nuwa kurur esta İRMES ŠA LUGAL huriat
 land-PL A. still hostile be-3SG-PRET slave-PL of king Hurrian
 "The Amurru lands were still hostile: they were slaves of the Hurrian king", *StBoT* 16.6 (=Kühne & Otten, 19).⁵²

⁵²On the omission of the copula with participles, see Coticelli (1991: 78-82 and 122-139).

3.3. Word order

Hittite is a OV language, with fairly free word order for nominal constituents and a number of restrictions, mostly concerning the structure of sentence boundaries.

3.3.1. The right sentence boundary

The right sentence boundary is mostly marked by the occurrence of a finite verb form, which occurs in final position in by far the vast majority of Hittite sentences. Since pre-verbal and post-verbal position are available for specific types of constituents, I will distinguish here among final, last (= pre-verbal) and post-final (= post-verbal) position. Final verbs are the vast majority in all stages of the Hittite language, numerous examples can be found in the passages already quoted. Sentence negation normally stands in last position (cf. example (86)); the same holds for indefinite pronouns, as shown in example (100):

- (100) a) *nassu dammishan kuiski kuitki harzi*
 whether damage-PART-N/A somebody-NOM-SG something-N/A have-3SG-PRES
- b) *nama=za dan kuiski kuitki harzi*
 or PTC take-PART-N/A somebody-NOM-SG something-N/A have-3SG-PRES
- c) *nama=za happiran kuiski kuitki harzi*
 or PTC sell-PART-N/A somebody-NOM-SG something-N/A have-3SG-PRES
- d) *nama ARÄH kuiski kimowan harzi*
 or granary somebody-NOM-SG break-into-PART-N/A have-3SG-PRES or PTC PTC
- e) *nama=za=kan GUD LUGAL kuiski kunan harzi*
 ox PTC PTC ox king somebody-NOM-SG kill-PART-N/A have-3SG-PRES
- f) *nama=kan ARÄH.^{HLA} kuiski sara adan harzi*
 or PTC granary somebody-NOM-SG up eat-PART-N/A have-3SG-PRES
- g) *mu=za GIŠ.HUR.^{HLA} GÜB-las=ma harminkan harzi*
 CONN PTC document-PL badly CONN destroy-PART-N/A have-3SG-PRES
- h) *n=at=za EGIR-an kappui*
 CONN 3SG-N/A PTC back count-2SG-IMPER
- j) *nama=kan ANA SAG.GEMÉ.İR.^{MES} kuiski kuitki*
 or PTC to male female slave-PL somebody-NOM-SG something-N/A
arha dan harzi
 out take-PART-N/A have-3SG-PRES
- k) *n=an auwariyas EN-as epdu*
 CONN 3SG-ACC watch-GEN lord-NOM take-3SG-IMPER
- “if anyone has either damaged anything, or stolen anything, or sold anything, broken into a granary, killed an ox of the king, eaten the granaries or badly damaged any documents, take note of him. If anyone has stolen the belongings of the slaves, he shall be taken by the Lord of the Watch”, *BM* iv A 14-22 (=von Schuler 1957).

Example (100) is interesting both for the position of indefinite pronouns, and for the position of participles in compound verb forms. Normally, compound verb forms function as lexical units, so that they are not interrupted and indefinite pronouns occur before the participle, as show by *kimowan harzi*, *kunan harzi*, *sara adan harzi*, *harminkan harzi*, and *arha dan harzi* in (100d, e, f, j). The compound forms

dammishan harzi, *dän harzi*, and *happiran harzi* in (100a, b, c), on the other hand, are interrupted by the two indefinite forms, *kuiski* and *kuitki*, that function respectively as subject and direct object in each sentence. Since there are no other accented constituents in the sentence, beside the verb phrase and the indefinite pronouns,⁵³ and the prepositive coordinator does not count for the purpose of defining last position, the indefinite pronouns would be in first position (i.e. the position immediately following a prepositive conjunction/connective and possible clitics, see below, § 3.3.2), if they did not interrupt the compound verb form.

Especially negations, but sometimes also relative⁵⁴ or indefinite pronouns or adverbs, can be placed in post-final position, as in

- (101) *uttar ANA^DUTUŠI^I tawana hatranzi wahnumanzi=ma=at=kan UL*
 thing-N/A to king faithfully write-3PL-PRES turn-3PL-PRES CONN 3SG-N/A PTC not
 “they will report the thing faithfully to the king; they will not lie about it”, *KUB* 23.72+ rev. 24-25 ;
- (102) *mu=mas dawen UL kuitki wahnummeni=wa=kan UL kuitki*
 CONN 1PL-OBL take-1PL-PRET not INDEF-N/A-SG turn-1PL-PRES PTC PTC not INDEF-N/A-SG
 “we did not take anything for ourselves; we do not trade anything (illegally)”,
StBoT 4.12 iv 1-2 (=Werner, 1967).

Such order is mostly found in sentences that only contain the verb and the negation or indefinite form, so that they can be viewed as cases of verb fronting as well (§ 3.3.2.2). Often, as in example (102), negation and/or indefinite form occur after the verb for emphasis when two negated sentences follow each other. Note that the negation can also be placed in initial position for pragmatic purposes, while indefinite pronouns and indefinite adverbs do not occur in initial or even first position.

Other possible types of post-final constituents are all types of lexical categories added as afterthought to an otherwise complete sentence (so-called ‘amplificatory’ constituents), as in

- (103) *DUMU.É.GAL suppi watar para epzi LUGAL-i SAL.LUGAL=ya*
 servant pure-N/A water-N/A toward hold-3SG-PRES king-DAT queen and
 “the palace servant holds out pure water, to the king and the queen”, *StBoT* 8 i 13-15 (=Otten & Soucek, 1969).

Often, amplificatory constituents can be modifiers of nominal heads. In such cases, one can find post-verbal adjectives, adnominal genitives, as in (104), or relative clauses, as in (86) and (105):

⁵³Cf. Luraghi (1990a: 80).

⁵⁴For WO rules involving relative pronouns, see below, § 3.4.2.

- (104) 2 ^Dhantasepus harwani GIŠ-as
 2 *H.*-divinities-ACC-PL hold-1PL-PRES wood-GEN
 “we hold two wooden *H.* divinities”, *StBoT* 8 i 22 (=Otten & Souček, 1969);

- (105) *natta apun* GEŠTIN-an pier LUGAL-us kuin *austa*
 not that-ACC-SG wine-ACC-SG give-3PL-PRET king-NOM REL-ACC-SG see-3SG-PRET
 “they did not give that wine that the king had seen”, (cf. text in § 4).

3.3.2. The left sentence boundary

3.3.2.1. The most important phenomenon that concerns the left sentence boundary in Hittite is Wackernagel's Law, i.e. the placements of all sentential clitics, including unaccented forms of personal pronouns, in second position. Wackernagel's position in Hittite, as well as in the other Anatolian languages, must be understood as the position immediately following the first word in a sentence. Very infrequently, Wackernagel's position is defined by the first constituent, rather than by the first word, as in example (13), discussed above, fn. 15.

Wackernagel's enclitics are of different types; as it may be expected, their occurrence in second position can be traced back to different factors.⁵⁵ Enclitics occur in fixed slots; enclitics belonging in the same slot cannot co-occur, except for the modal particle and the adversative connective *-ma-*:

- i) sentence connectives, *-ma-*, *-(y)a-*, *-a-*; modal particle *man*. The enclitics in this slot cannot co-occur with prepositive connectives *mu*, *ta*, and *su*;
- ii) particle of direct or reported speech *-wa(r)-*;
- iii) nominative or accusative of the third person pronoun;
- iv) oblique of first and second person pronouns; dative of third person pronoun;
- v) reflexive particle *-z(a)*;
- iv) local particles *-kan-*, *-san-*, *-(a)pa-*, *-(a)sta-*, *-an*.

Dative plural forms of enclitic pronouns usually occur before possible third person nominative or accusative forms. The conjunction *-(y)a-* is to be considered a sentence connective when it functions on the sentence level, but it can also have the function of connecting NP's. When clitics on the NP level are attached to the word in initial position, they precede all second position clitics: this holds especially for enclitic possessive adjectives (§ 2.2.4) and for the particle *-pat* (§ 2.8.5). Some irregularities (limited to few occurrences) in clitic placement concern the local particles, which occasionally occur on a locative constituent, as in

- (106) *PANI* GIŠZA.LAM.GAR-at INA ÉTM = *kan anda asanzi*
 in-front-of tent in house- PTC into be-3PL-PRES
 “they are sitting in the house in front of the tent”, *KUB* 12.2 iv 14-15.⁵⁶

The adversative conjunctions *-ma-* and *-a-* in conditional and temporal clauses with the subordinating conjunctions *takku* and *man* and in relative clauses with the relative pronoun in initial position often are placed on the word which follows the subordinator, as in
 Exceptionally *-ma-* can co-occur with *mu*:

- (107) *n= asta* ^DIM-*ummi= ma m̄an assus esta*
 CONN PTC Weather-god-D/L PTC when good be-3SG-PRET
 “but then when he was dear to the Weather god”, *StBoT* 18, obv. 3 (=Neu, 1974).

3.3.2.2. Virtually all lexical categories can be placed in initial position and host the chain of possible enclitics. Numerous examples can be found in the passages quoted earlier in the text. Most often, when initial position is not taken by a prepositive connective, or by a subordinator, we find initial NP's that function as the topic of their sentence. Other constituents can be topicalized or given emphasis, such as local adverbs (ex. (4)), or negations, as prohibitive *le* in (88).⁵⁷

Initial verbs are rather infrequent; they occur in two types of sentences:

- a) sentences that only contain the verb and the clitics, as the second sentence in (61), or the verb and a negation or a *ku-* pronoun or conjunction, sometimes with a prepositive connective, but mostly without, as (70), the second sentences in (91), (101), and (102);
- b) sentences where the initial verb has a particular discourse function.

In the latter case initial verbs are mostly connected with discontinuity in the text or in the course of the events; most often they co-occur with the adversative connective *-ma-*, as in the second sentence in example (68); however, it must be remarked that examples of this type are quite exceptional, and that the conjunction *-ma-* alone is enough to indicate discontinuity. Some initial verbs are connected with emphasis: this is most clearly seen in orders or invocations, as in

- (108) *p̄ai= mu DUMU.É.GAL-in*
 give-2SG-IMPER 1SG-OBL palace-servant-ACC-SG
 “give ma a palace servant”, *StBoT* 8 ii 16 (=Otten & Souček, 1969).

In such cases as well, however, final verbs are by far the vast majority.

⁵⁶Other cases of exceptional placement of local particles have been discussed above, § 2.8.4.

⁵⁷The negation *natta* can be fronted for emphasis, too; this happens often, but not always, in rhetorical questions, cf. *CHD* s.v. Initial *natta* in example (87) functions as the predicate of the whole sentence, so it is better regarded as an example of an initial predicate in a nominal sentence; in example (105), *natta* again occurs in initial position, but it functions as NP negation, so its position is due to the position of the NP it negates.

⁵⁵See Luraghi (1990a, b, and forthcoming).

The predicate of nominal sentences is usually final; examples of non-verbal initial predicates are also available, see e.g.

- (109 a) *dandukisni* DIM-nas L^USUKKAL-ŠU *zik*
 mankind-D/L weather-god vizier his 2SG-NOM
 b) DINGIR^{MES}-nas = a *istana gimras* DIM-as *zik*
 god-D/L-PL CONN PTC among wilderness-GEN weather-god 2SG-NOM
 “for humans you are the vizier of the Weather God; among the gods, you are the Weather God of the wilderness”, *StBoT* 25.109 ii 11-12 (=Neu, 1980).

Note that in the first sentence in (109) the Beneficiary expression *dandukisni* is fronted for contrast with the second sentence, so that the predicate is in sentence internal position, a quite exceptional occurrence.

3.4. Subordination

Hittite is not particularly rich in subordination. As mentioned in § 2.8.2, complement clauses are infrequent; when they occur, they are introduced by the conjunction *kuit*, from the stem of the relative pronoun. Relative clauses are mostly correlative, and they can be shown to have arisen from paratactic structures. Among circumstantial clauses, we find temporal clauses, with *mān*, *kuitman*, *kuwapi*, and *mahhan*; conditional clauses, with either *takku* (older) or *mān* (sometimes *nassu*); causal clauses, with *kuit*.

Subordinate clauses are most often preposed to the main clause; after the OH period, they are linked to the main clause by the connective *mu* (connectives did occur in this position in Old Hittite already, although not always; cf. § 2.7.1.2). Temporal clauses with *kuitman* are often postposed; most clauses with a *ku*-subordinator (relative pronoun, temporal conjunction or complementizer *kuit*) can occur after the main clauses, although preposing is much more frequent. Postposed subordinate clauses are never linked to the main clause by means of *mu*.

3.4.1. Complement clauses

Complement clauses with verbs of saying, knowing, feeling, and the like occur late in Hittite and they are on the whole rather infrequent, since usually paratactic constructions are preferred (see § 2.8.2).⁵⁸ The complementizer *kuit*, ‘that’, is derived from the stem of the relative pronoun.⁵⁹ An example of a *kuit* clause is (98), where the clause is the complement of the verb *aus-*, ‘to see’; for a further example where the *kuit* clause is the subject of the main clause, see

⁵⁸Note that the complementizer *kuit* never occurs with the verbs *memai-*, ‘to tell’, and the verb *te-/tar-*, ‘to say’, which usually have paratactic *-wa(r)-* clauses or, less frequently, predicative or infinitival complements. See Cotticelli (1995).

⁵⁹The change of *kuit* from n/a neuter of the relative pronoun into a complementizer is analysed in Justus (1980) and (1981).

- (110) *IŠTU É.GAL*^{LM}=*ya=war=at=* *kan kuit para udas*
 from palace and PTC 3SG-N/A PTC COMPL towards carry-3SG-PRET
mu= war=as= mu= kan UL ŠA-ta
 CONN PTC 3SG-NOM 1SG-OBL PTC not heart-DIR
 “that (anyone) took it out of the palace, that one is not in my heart” (i.e. “I don’t know of any one who took it out of the palace”), *StBoT* 4.34 11-12 (=Werner, 1967).

This example shows that:

- when a *kuit* clause precedes the main clause, the latter usually contains a resumptive pronoun (here *-as*, coreferent with the unexpressed subject of the Complement clause), much in the same way as preposed *-wa(r)-* clauses (see ex. (74));
- preposed *kuit* clauses are linked to the main clause by the connective *mu*, which does not occur when the *kuit* clause is postposed, as in ex. (98);
- the complementizer is in sentence internal position in preposed *kuit* clauses, while it is often sentence initial in postposed *kuit* clauses.⁶⁰

3.4.2. Relative clauses

Relative pronouns and adjectives can have either determinate or indeterminate (‘whoever’, ‘whatever’) meaning. Examples of determinate relative clauses are (35), (42), (46), (105) and (115a); an example of an indeterminate relative clause is (47). As shown in examples (42) and (46), in preposed relative clauses the relative pronoun is most often used as an adjective, i.e. the head noun of the relative pronoun is inside the relative clause itself. A ‘resumptive’ pronoun, which is coreferent with the head of the relative construction occurs in the main clause. The position of the relative pronoun/adjective varies depending on its definite or indefinite character: indefinite relatives are in first position (they may be preceded only by a connective and possible clitics), definite relatives are in internal position. Relative adjectives mostly precede their heads, but in definite relative clauses they may follow (as in ex. (42)), in order to avoid being placed in first position. Beside being an enclitic pronoun, the resumption in the main clause can be an accented pronoun, or it can be the head noun itself, repeated, as in

- (111) *mu= mu É-ir kuit esta mu= kan IŠTU É- YA* ^D*istar*
 CONN 1SG-DAT house-N/A-SG-N REL-N/A-SG-N be-3SG-PRET CONN PTC with house my I.
 URU^U*samuha hantiyarun*
 S be-true-1SG-PRET
 “with the house I had I was true to Istar of Samuha”, *Kbo* 6.29 i 15-16 (=Goetze, 1925).

⁶⁰According to Cotticelli (1995: 96), *kuit* occurs in second position or in last (preverbal) position in preposed *kuit* clauses, while in postposed *kuit* clauses it is often placed in initial position.

An example of an indeterminate relative clause with a relative adjective is

- (112) *kuedani=ma=ssan URU-ri EGIR-pa arti nu LU^{MES} URU^{LIM} humandus*
 REL-D/A CONN PTC city-D/L back arrive-2SG-PRES CONN men-PL city all-ACC-PL
para halzai
 toward call-2SG-IMPER
 “in whatever city you arrive, call all the inhabitants of the city”, KUB 13.2 iii 29.

Examples (86) and (105) contain two postposed relative clauses. As shown in the examples, postposed relative clauses mostly do not contain their head noun and are definite. Held (1957) mentions a small number of exceptions, among which

- (113) *n= as= kan panzi ANA ZAG LU^{KUR} anda arha pittalanzi kuedani*
 CONN 3PL-NOM PTC go-3PL-PRES to border enemy into out run-3PL-PRES REL-D/L
pedi anzel UL aranzi
 place-D/L 1PL-GEN not arrive-3SG-PRES
 “they run across the borders of the enemy to whatever place where those of us do not come”,
 KUB 9.31 iii 46-47.

Note that in (113) the head of the relative construction is inside the postposed relative clause and it is not coreferred by any forms in the main clause.

3.4.3. Circumstantial clauses

Since many examples of circumstantial clauses can be found earlier in the book, I will just refer to the relevant examples, limiting the discussion to a small number of issues where some diachronic changes have taken place in the history of Hittite.

3.4.3.1. Temporal clauses

Examples of temporal clauses with *mahhan*, ‘when’, ‘as’, are (1), (2), (35), (60), (67a). They are attested in the whole history of the Hittite language. Temporal clauses with *mān*, ‘when’, are mostly from Old Hittite, since the conjunction *mān* later acquired a conditional meaning. An example of temporal use of *mān* is given in (29); for a further example, see the passage in (114). The conjunction *kuwapi*, from the stem of the indefinite pronoun, means ‘whenever’, or simply ‘when’, as in (45) (cf. ex. (60) with GIM-*an*, ideographic writing for *mahhan*). Sentences with *kuitman* can denote limitation in time, either before the event referred to in the main clause (ex. (92)), or after (‘until’), as in

- (114) *mu É-ri= ssi anniskizzi kuitman=as lazziyattat*
 CONN house-D/L POSS3SG-D/L work-3SG-ITER-PRES until 3SG-NOM recover-3SG-PRES
mān= as lazziyatta= ma nu= sse 6 GIN KÜ.BABBAR pai
 when 3SG-NOM recover-3SG-PRES CONN CONN 3SG-DAT 6 shekel silver give-3SG-PRES

“and (he) works in his house, until he (sc. the injured) recovers. When he recovers, the injurer gives him six shekels of silver”, *HG* § 10 (=Friedrich, 1959).

3.4.3.2. Conditional clauses

In Old Hittite *takku*, ‘if’, is by large the most frequent conjunction in conditional clauses. Examples are found in (5), (16), (20), (24), and (89). After the OH period, *takku* is replaced by *man*, which loses its temporal meaning. Already in a few passages from Old Hittite originals *man* must be taken as meaning ‘if’, rather than ‘when’. In the long ritual published in Otten & Soucek (1969), *man* is used both in temporal and in conditional clauses in connection with a peculiar distribution of sentence connectives: temporal *man* clauses are linked to the main clause by the connective *mu*, while conditional *man* clauses are linked to the main clause by the connective *ta*. Even in this text, however, as elsewhere in Old Hittite, conditional clauses can, but need not, be linked to the main clause by one of the non-subordinating connectives. Later on, linkage with *mu* becomes the rule. An example of a conditional clause with *man* from a New Hittite text is

- (115 a) *m^mmarassantas=ma kuit TUPU harzi*
 M.-NOM CONN REL-N/A-SG tablet have-3-SG-PRES
 b) *n= at uizzi man udai*
 CONN 3SG-N/A go-3SG-PRES if bring-3SG-PRES
 c) *n= at le dattari*
 CONN 3SG-N/A NEG take-3SG-PRES-M
 “if Marantassas brings here the tablet he has, do not take it away (from him)”, *Bronzetafel* ii 2-3 (=Otten, 1988).

Finally, the first conditional clause in a series of the ‘whether...or’ type can either take *man* (or *takku* in Old Hittite), or it can be introduced by *nassu*, ‘whether’, as in example (100a). Conditional clauses are always preposed.

3.4.3.3. Causal clauses

Causal clauses have the conjunction *kuit*, again from the stem of the relative pronoun. Examples are found in (50) and (56), where the *kuit* clause is preposed, and *kuit* is in sentence internal position. Both features appear to be peculiar of this type of subordinate clauses.

4. Text

- a) ^mzidis ^{LÚ}ZABAR.DIB esta
Z. cup-bearer be-3SG-PRET.
- b) ABI LUGAL ^{DUG}harharan GEŠTIN-it ANA ^fhistaiyara ^mmaratti=ya maniyahhis
father king measure-N/A-N wine-INSTR to H M. and assign-3SG-PRET
- c) LUGAL-i SIG₅-antan GEŠTIN-an hinkatta
king-D/L good-ACC wine-ACC pour-3SG-PRET
- d) apedass= a tamain GEŠTIN-an pier
that-D/L-PL and other-ACC wine-ACC give-3PL-PRET
- e) apass= a uit LUGAL-i tet
that-NOM and come-3SG-PRET king-D/L tell-3SG-PRET
- f) natta apun GEŠTIN-an pier LUGAL-us kuin austa
not that-ACC-C wine-ACC-C give-3PL-PRET king-NOM REL-ACC-C see-3SG-PRET
- g) apass= a uit QATAMMA IQBI
that-NOM and come-3SG-PRET the-same (s)he-said
- h) s= an= asta arha pehuter
CONN 3SG-ACC PTC out bring-3PL-PRET
- i) s= an essikir
CONN 3SG-ACC beat-3PL-PRET
- l) s= as BA.UG₆
CONN 3SG-NOM die
- “Zidi was cup-bearer. The king’s father had assigned a measure of wine to Hitaraya and Maratti. He (sc. Zidi) gave the king good wine and to them he gave another wine. One of them came and told the king: ‘I was not given the wine that the king has seen!’ The other one came and said the same. Zidi was taken away, beaten up and killed” (from Luraghi, 1990a, 170 = Kbo 4 iii 36, 11’-17”).

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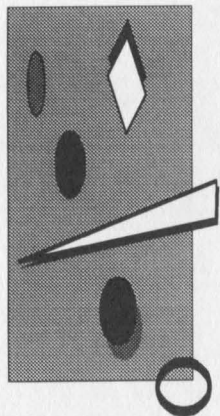
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