The Anatolian Languages

The Anatolian branch of IE comprises several languages that spread across Anatolia in the course of the second and first millennia BC. On the delimitation of the Anatolian linguistic group, see Carruba (1981a: 47, 1981b). On the geographical spread of the Anatolian languages, see Map 7.1.

There is no continuity in the attestations of any of these languages, so for convenience they may be divided into languages of the second millennium and those of the first:

Second millennium: Hittite, Cuneiform Luwian, Palaic
First millennium: Hieroglyphic Luwian, Lycian, Milyan, Lydian, Carian

The relationships within the Anatolian linguistic group are represented by the ‘family tree’ in Figure 7.1. The ‘family tree’ shown in the figure is based

![Figure 7.1 Anatolian linguistic group](image-url)
The attestations cover approximately one millennium, beginning around 1650 BC (or 1570 BC, according to the short chronology) and ending around 330 BC, with a gap of almost a century and a half at the end of the second millennium. On all the problems regarding the chronology of the Near East in the second millennium BC, see the *Cambridge Ancient History*.

**Problems of the Writing Systems**

The Anatolian sources have come down to us in three types of script: cuneiform, from the second millennium; hieroglyphic, attested in both the second and first millennia; and alphabetic, from the first millennium. The type of script employed has very important consequences for our understanding of Anatolian phonetics (see also *Phonology*, pp. 174f.). For example, the cuneiform syllabary does not lend itself to the transcription of complex consonant groups, which therefore have to be rendered with the addition of a written supporting vowel.

The same is true of hieroglyphic, which presents even greater problems. Hieroglyphic is a script which originated in Anatolia (unlike cuneiform, which, as is well known, was introduced there from Mesopotamia; see Pugliese Carratelli and Meriggi (1978) and Hawkins (1986)). It is a syllabary similar to cuneiform in that the signs have sometimes an ideographic and sometimes a syllabic value. Only in the first millennium is Anatolian hieroglyphic clearly associated with a particular language (Luwian); the highly ideographic attestations from the second millennium make it practically impossible to establish which language (Hittite or Luwian) hieroglyphic was used for. Since Anatolian hieroglyphic was not used for any other independently known language, the assignment of a precise value to each sign has been a particularly complex matter and still leaves room for uncertainty.

The alphabetic scripts obviously present fewer problems; they are all derived in some way from Greek alphabets of the red type (Eastern alphabets; see Rosenkranz (1978: 32)).

**Hittite**

Among the Anatolian languages, by far the best attested is Hittite, which is know to us from a large number of clay tablets written in the cuneiform syllabary, for the most part originating from the archives of the capital of the Hittite kingdom, Hattusas (now Boğazkale) in northern Anatolia, about 100 kilometres east of Ankara. The fundamental works for a knowledge of Hittite are Friedrich (1952) and (1960) and the part so far published of the *Chicago Hittite Dictionary*, the *Materialien zu einem hethitischen Thesaurus* and Puhvel (1984).
Map 7.1 Anatolian
The tablets were deciphered in 1915–17, by the Czech scholar Hrozný (see Friedrich 1966); this is thus a relatively recent area of study. The Hittite texts in our possession cover a span of around 500 years (or less, according to the ‘short chronology’) and are of various types; we have historical texts (mainly treaties and annals produced under various kings), legal texts (of which the best known is the collection of Laws), letters, religious and mythological texts and many rituals, oracles and descriptions of religious festivals. Consequently, Hittite does not present substantial problems of interpretation.

Cuneiform Luwian

Luwian of the second millennium is termed ‘Cuneiform Luwian’, because it is written in the cuneiform syllabary, unlike Luwian of the first millennium, for which hieroglyphic is always used. Cuneiform Luwian is known to us through a certain number of Hittite ritual tablets containing parts which were recited in Luwian, the rituals themselves having originated in Luwian territory. Luwian was spoken in the south of the Anatolian peninsula and the extent of its effective spread throughout the population must have been greater than that of Hittite, as is shown by the fact that languages of the Luwian group survived the population migrations which took place in the Near East at the end of the second millennium. Moreover, Luwian also exercised a certain influence over Hittite during the course of the centuries. Proof of this are the numerous Luwian words found in Hittite texts; these words are often indicated in a conventional way by the scribe. A grammatical sketch of Luwian, based mainly on Cuneiform Luwian, may be found in Laroche (1959); the most up-to-date work on Cuneiform Luwian is Starke (1985).

Palaic

Also attested through Hittite rituals, but to a much lesser extent than Luwian, is Palaic, a language which was spoken in the mountainous region to the north of the Hittite area, towards the Black Sea (see Carruba 1970; Melchert 1984). The Palaic peoples were very quickly overwhelmed by the invasions of the Kaskas, a non-IE people from the East, who swept them away and for centuries kept attacking the Hittite kingdom. Even at the time when the texts containing the Palaic formulae were written, Palaic must already have been a dead language.

Hieroglyphic Luwian

Hieroglyphic Luwian is attested until the middle of the first millennium. It is a very important source not only from the linguistic but also from the cultural point of view, in that it is the only one which gives us any information about the centuries bridging the two millennia, during the break caused by the so-called Peoples of the Sea. The sources consist mainly of long inscriptions, produced at the behest of the lords of small local monarchies, celebrating their
deeds (see Meriggi 1966; Hieroglyphic Luwian has also been studied by Hawkins in many studies published over the last twenty years; see also Marazzi 1990).

**Lycian and Milyan**

Until recently, Lycian and Milyan were considered to be two varieties deriving from a common ‘Proto-Lycian’. In conformity with this theory, the two languages were long designated Lycian A (= Lycian) and Lycian B (= Milyan). In the last ten years, however, the traditional view has been called into question. For example, Carruba (1981a: 47) writes that Milyan is ‘una lingua diversa, ... che non è escluso sia imparentata più strettamente con il luvio’ (‘A different language, ... which is not to say that it is not most closely related to Luwian’). Starke (1982), examining the nominal declension in the languages of the Luwian group, notes that Lycian and Milyan do not share any common innovation with respect to Cuneiform Luwian and Hieroglyphic Luwian and thus should not be considered as more closely related to each other. Consequently, the Luwian branch of the family tree in Figure 7.1 would be redrawn as in Figure 7.2. However, it is very difficult to assess the position of Milyan, because it is basically known from a single source, the so-called ‘bilingual from Xanthos’. Lycian is better attested. Our knowledge is based on epigraphic texts, funerary and religious in nature, and, especially as far as onomastics is concerned, locally minted coins. Melchert (1994: 125) points out that ‘Lycian shares a number of innovative features with Luwian ... However, some of the relevant features are also shared with Lydian, while Luwian agrees with Hittite and Palaic in other respects. It thus seems more prudent at this point to view the Anatolian languages as a continuum of dialects.’ Other objections to the present ‘family tree’, as well as bibliography on the subject, may be found in Gusmani (1990).

**Lydian**

Lydian is known to us through funerary inscriptions and poetic texts. Both the rather small number of texts and their extremely uniform nature make them difficult to understand, so much so that their IE character long remained in doubt. Within the Anatolian languages, Lydian appears rather isolated; it is

---

**Figure 7.2 Luwian branch**
also possible that it should be seen as a separate branch of Anatolian, different from both Hittite and the Luwian/Palaic group. A grammatical outline of Lydian may be found in Gusmani (1964); see also Carruba (1969a) and, for an up-to-date bibliography, Gusmani (1981).

**Carian**

Carian (see Rosenkranz 1978: 8) is in fact a Restsprache. We cannot be completely sure that it belongs to the Anatolian group, or even to the IE linguistic family. Carruba (1981a) places it close to the Luwian subgroup of Anatolian, mainly on the basis of his study of the onomastics; however, this is a hypothesis which cannot easily be proved. Beside Carian, one should still add Pisidian and Sidetic attested through onomastics (see Melchert 1994: 44–5).

**Phonology**

Since it is the best-attested Anatolian language, Hittite is obviously of central importance for comparison. To some extent, the Hittite writing system limits our understanding of Anatolian phonology, in part because of the very nature of cuneiform as a syllabic script (for example, the inability to transcribe complex consonant clusters); in part because of particular Hittite scribal practices. Amongst these, one peculiarity is the confusion of voiceless and voiced stops, attested particularly in the case of the dentals.1 Basically, the signs -dV- and -rV- are employed interchangeably in different occurrences of the same word. Moreover, in the case of syllables of the type VC, only the sign with a voiceless stop is normally used; finally the frequency of signs with voiced labials or velars is rather low, even for syllables of the type CV. However, from an observation of the distribution of spellings with double and single consonants in the oldest texts, it appears that the voiceless stops were spelled as double consonants and voiced ones as single consonants. This regularity is most consistent in the case of dental stops in older texts; in later texts one sometimes finds irregular variation.

**Vowels**

Anatolian reduces the inventory of vowel phonemes inherited from Indo-European, in that it merges the vowel qualities a and o. Moreover, the status of the opposition between long and short vowels is unclear, but it does not continue the IE contrast.2 The vowels e and i are frequently interchanged in Hittite cuneiform spelling; however, this does not mean that there were not two distinct phonemes /e/ and /i/ in Hittite; this is shown by the pair et ‘eat!’ vs it ‘go!’, a contrast which may also be encountered in later Hittite. As shown by Melchert (1983), in Hittite we find the two vowels as the reflexes of IE */e/ and */i/ in roots, suffixes and inflectional endings. For example, the word eshar ‘blood’ must contain a phoneme /e/ (cf. Gk ἐαρ) continuing IE */el/,
despite the fact that the spelling ishar, too, is sporadically attested. However, the reconstruction of an Anatolian */i/* remains a problem, given that Hittite /i/ generally corresponds to a vowel of different quality in the other languages (see Meriggi 1981). The */e/o* ablaut is preserved as an alternation *ela*, for example, Hittite peda ‘place’ and pata- ‘foot’, which both derive from the IE root *ped-/pod-. The IE diphthongs are not preserved; in Hitt. *ew, ow > u* (luk- ‘to be light’ < *lewk ‘white’), while *ej, aj* gives the varying spelling *e/i* mentioned above.

The development of the semi-vowels, */w/* and */j/* is examined in Melchert (1983). Indo-European */w/* is normally preserved: Hitt. watar, gen. wetenas ‘water’ (Gmc *water, Gk hýdor, gen. hýdatos < *hudント), CLuw. hawi- ‘sheep’ (Lat. ovis); in Hitt. */w/* > */w/* by dissimilation when it follows or precedes the vowel */u/*, cf. Hitt. sumes < IE */suwes* (secondary form of */swes*, see Melchert 1983: 27).

According to some scholars, a vowel */o/* is attested in Hittite, where it is spelled */u/* (*/u/* is consistently spelled */ü/*), but it is not a reflex of IE */o/* (see Eichner 1980).

**Consonants**

The stops (see Shevoroshkin 1988; Melchert 1994) are reduced to two series, voiceless and voiced. The IE voiced aspirates lose their aspiration and their reflexes merge with those of the non-aspirated voiced stops. The labiovelars are on the whole preserved as such; only in Lycian they are de-labialized (the attested forms allow this to be established with certainty only for the voiceless series). The development of the labiovelars should show the Anatolian languages to be of the ‘centum’ type; the development of the palatals, however, is not so clear.

IE */p/* > Anat. */p/*, cf. Hitt. pada- ‘foot’, appa ‘behind’ (Gk apó); Anat. */p/* > Lyd. */f/*
IE */b/* > Anat. */b/*, cf. Hitt. nepis- ‘sky’ (Lat. nebula, Gk nephélē)
(There are no certain examples of IE */b/*)
IE */h/* > Anat. */u/*, cf. Hitt. hastai ‘bone’, katta ‘down’ (Gk katá); Anat. */h/* before */l/* > */l/* in Hittite, cf. exzi ‘he is’
IE */d/* > Anat. */d/*, cf. Hitt. tehži ‘I place’ (Gk tithémi, OInd. dadhámi, Lat. fació)
IE */d/* > Anat. */d/*, cf. Hitt. pada- ‘foot’
IE */k/* does not have a single reflex in Anatolian. In the languages of the Luwian group we have assimilation, while in the other languages the reflexes merge with those of */k/*; cf. Hitt. karawar- ‘horn’, HLuw. zurni ‘id.’ (Gk kéras, Lat. cornu, Goth. haurn, Avest. sruuvā-), Hitt. kas ‘this’,
CLuw. za- ‘id.’ (Arm. sa-); for the Hittite reflex compare also Hitt. gank- ‘to hang, suspend’ (OI hanga). The uniformity of the Luwian group as regards the treatment of voiceless palatals appears to be confirmed by other words, attested only in Lycian, such as Lyc. esbe, HLuw. azu(wa)- ‘horse’ (Skt aśva-), Lyc. sīta ‘100’ (or perhaps ‘10’) (Lat. centum, Skt satam)\(^4\)

IE \(*g\/\), \(*\hat{g}\)/ > Anat. \(*g/\), cf. Hitt. kessera- ‘hand’ (Gk kheír), Hitt. mekki-, HLuw. maia- ‘very’ (Gk mega-) (on the loss of the medial velar in Luwian, see below)

IE \(*g/\), \(*\hat{g}/\) > Anat. \(*g/\), cf. Hitt. genu- ‘knee’; Anat. \(*k/\), \(*\hat{g}/\) - \(i/\) and in medial position > 0 in the languages of the Luwian group, cf. CLuw. issari- ‘hand’ (Hitt. kessera-), CLuw. maia-, cited above, CLuw. tiyammi ‘earth’ (Hitt. tekan, Gk khthón)

IE \(*k^w/>\) Anat. \(*k^w/>\), cf. Hitt. kuis, CLuw. interrogative and relative pronoun kuis (Lat. quis); Anat. \(*k^w/>\) Lyc. \(h/\), cf. the relative pronoun ti-

IE \(*g^w/>\) > Anat. \(*k^w/>\), cf. Hitt. kuen- ‘kill’, Skt han-

IE \(*g^w/>\) > Anat. \(*w/\), cf. Luw. uana- ‘woman’ (Eng. queen).

The velar and palatal voiceless stops have two distinct developments in the languages of the Luwian group, while in the others they share the same development. Consequently, it is difficult to reconstruct a Proto-Anatolian form for the palatals, unless we wish to suppose that IE \(*k/>\) Anat. \(*k/\), which subsequently > /s/ (or /z/) in Luwian and /k/ in Hittite. However, this smacks of an ad hoc solution. The most balanced conclusion is perhaps that offered by Tischler, who writes on this subject:

Daß das Luwische Reflexe aller drei Gutturalreihen zeigt, ist also in keiner Weise einzigartig, überraschend ist lediglich, daß das eng verwandte Hethitische sich diesbezüglich so anders verhält. Das wird erst dann verständlich, wenn man sich von der Vorstellung frei macht, daß die indogermanische Grundsprache bis zur Aufspaltung in die verschiedenen Einzelgruppen einheitlich war.\(^5\)

The liquids and the voiceless fricative \(*s/\) are preserved as such, compare Hitt. melit, Luw. mallit- ‘honey’, Hitt. laman ‘name’ (initial \(l/\) is due to nasal dissimilation), HLuw. atima ‘id.’ (with a prothetic vowel and dissimilation of a different sort from that attested in Hittite), Hitt. kessera-, Luw. issari- ‘hand’. As in Greek and Armenian, \(h/\) is not found in word-initial position. On the voiceless fricative, compare Hitt. hassa- ‘hearth’ (Lat. ara) and also the nominative singular of the common gender, -s, attested in all the Anatolian languages except Lycian and Milyan, where Anatolian final \(*s/\) > \(Ø\).

As is known, the decipherment of Hittite has provided concrete evidence for the Laryngeal Theory outlined by Saussure in his Mémoire of 1878. Besides,
the Anatolian data have demonstrated the essentially consonantal character of the laryngeals (see Chapter 2, p. 40).

Indo-European */h₁/ > Anat. 0, cf. Hitt. eszi 'he is' < IE *h₁esti: this development is found in pre- and post-vocalic initial and medial positions. IE */h₂/, */h₃/ are continued in a sound which is probably a fricative before vowels and sonants, cf. Hitt. harki 'white' (Lat. argentum); Hitt. ħastai, Luw. ħassa 'bone' (Gk ostēon); CLuw. hwī, HLuw. hwā, Lyc. ħawa- 'sheep'; Hitt. hulana 'wool' (Skt urya). IE */h₂/ is also preserved in post-vocalic position, while IE */h₃/ > 0; cf. Hitt. newahh- 'to renew' < *neweh₂- (Lat. novāre).

In addition, IE */h/ is vocalized, becoming /a/ in consonantal environments (this is the */a/ of traditional reconstruction); this happens both medially, as in the other IE languages, and initially, where in the other languages */h/ normally > 0, cf. Hitt. asanzi 'they are' < IE *h₁senti (Skt santi, Lat. sunt).

Morphosyntax of the Main Word Classes

Nouns and Adjectives

Anatolian had eight cases (nominative, accusative, genitive, dative-locative, directive, instrumental, ablative and vocative), two numbers (singular and plural) and two genders (common and neuter). There is disagreement over what the common gender represented (possibly an IE common gender where masculine and feminine were not yet distinguished; or syncretism of the IE masculine and feminine); answers to this question are often based not only on the interpretation of data but also on the position assigned to Anatolian within the IE languages. This is discussed further in The Position of Anatolian (pp. 190f.).

The nominal endings of the Anatolian languages and those of Common Anatolian may be seen in the overview in Table 7.1.

Nominative and Accusative

The common nominative and accusative do not present problems; the presence of 0 in Lycian and Milyan is due to the regular loss of final -s; see Consonants, pp. 175f.. The nominatives in -s and -z in these two languages are those of the stems in -ant-. As regards the nominative-accusative neuter singular, the only noteworthy point is the extension of the pronominal ending -d to the nouns in Lydian and, partially, in Palaic. In the plural, the Luwian endings in -nz- carry on the Anatolian accusative ending *-ns. The value of the Luwian plural in -sa is doubtful (perhaps collective).

Dative-locative and Directive

The directive is preserved as a case distinct from dative-locative only in Old
### Table 7.1 Nominal endings of the Anatolian languages

<table>
<thead>
<tr>
<th></th>
<th>Anatolian</th>
<th>Hittite</th>
<th>Palaic</th>
<th>Cuneiform Luwian</th>
<th>Hieroglyphic Luwian</th>
<th>Lycian</th>
<th>Milyan</th>
<th>Lydian</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom.</td>
<td>-<em>s</em></td>
<td>-<em>s</em></td>
<td>-<em>s</em></td>
<td>-<em>s</em></td>
<td>-<em>s</em></td>
<td>Ø, -s</td>
<td>Ø, -z</td>
<td>-<em>s</em></td>
</tr>
<tr>
<td>Acc.</td>
<td>-<em>n</em></td>
<td>-<em>n</em></td>
<td>-<em>n</em></td>
<td>-<em>n</em>, -an</td>
<td>-<em>n</em>, -an</td>
<td>~, -n</td>
<td>~, -n</td>
<td>-(v)^{(a)}</td>
</tr>
<tr>
<td>Neuter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom.-Acc.</td>
<td>-<em>n</em>, Ø</td>
<td>-<em>n</em>, Ø</td>
<td>-<em>n</em>, Ø</td>
<td>-<em>n</em>, Ø, -t</td>
<td>-<em>n</em>, Ø</td>
<td>~, Ø</td>
<td>~, Ø</td>
<td>-d</td>
</tr>
<tr>
<td>Gen.</td>
<td>-<em>as</em></td>
<td>-<em>as</em></td>
<td>-<em>as</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dat.-Loc.</td>
<td>-<em>i</em></td>
<td>-((a)i)</td>
<td>-(a)i)</td>
<td>-<em>i</em>, -ya, -a</td>
<td>-(i*, iya, -a)</td>
<td>-(i*, iye, -a)</td>
<td>-i</td>
<td></td>
</tr>
<tr>
<td>Dir.</td>
<td>-<em>a</em></td>
<td>-<em>a</em></td>
<td>-<em>a</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inst.</td>
<td>-<em>t</em></td>
<td>-<em>it</em></td>
<td>-<em>at</em></td>
<td>-(ati)</td>
<td>-(ati, -ari)</td>
<td>-(edi, -adi)</td>
<td>-ad</td>
<td></td>
</tr>
<tr>
<td>Voc. Plural</td>
<td>-<em>az</em></td>
<td>-<em>az</em></td>
<td>-<em>at</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom.-Voc.</td>
<td>-<em>es</em></td>
<td>-<em>es</em>, -us, -as</td>
<td>-<em>es</em></td>
<td>-<em>nzi</em></td>
<td>-<em>nzi</em></td>
<td>-i</td>
<td>-iz</td>
<td>-is?</td>
</tr>
<tr>
<td>Acc.</td>
<td>-<em>ns</em></td>
<td>-<em>us</em></td>
<td>-anza?</td>
<td>-<em>nzi</em></td>
<td>-<em>nzi</em></td>
<td>-s</td>
<td>-z</td>
<td>-as</td>
</tr>
<tr>
<td>Neuter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gen.</td>
<td><em>-an</em>, -as</td>
<td>-<em>an</em>, -as</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dat.-Loc.</td>
<td>}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dir.</td>
<td><em>-as</em></td>
<td>-<em>as</em></td>
<td>-<em>nz</em></td>
<td>-<em>nz</em></td>
<td>-<em>e</em></td>
<td>-z</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abl.</td>
<td>}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inst.</td>
<td>}</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** (a) IPA [\(n\)] (b) IPA [\(\ddot{a}\)]

**Source:** Based mainly on Meriggi (1981) and, for the languages of the Luwian group, on Starke (1982).
'motion towards', in sentences containing verbs of motion (e.g. \textit{Harrahuwa}= as aras 'he (-as) arrived at the city of Harahsu (dir.)', Keilinschriften aus Bogazköy XXII 2 ii 7). Both in later Hittite and in the other Anatolian languages, the directive merges with the dative-locative; this is also the case in Old Hittite with the stems in -i-. The IE origin of the -a ending of the directive is controversial. In addition, there is also a locative with ending 0 attested in Hittite. This form is subject to lexical restrictions, in that it is mainly used with nouns referring to natural locatives, such as the Hittite form \textit{dagan} 'on the ground', locative of \textit{tekan} 'ground'. In some cases, as in this example, the formation of the 0 locative involves a vowel gradation different from that of the nominative; in other cases, however, the vowel does not undergo any change (see Neu 1980).

\textbf{Genitive}

A characteristic of the Luwian group is that it has lost the genitive, which is replaced by adjectival formations (see Chapter 9, p. 258), with a suffix -assi- (CLuw.). This suffix derives adjectives from nominal stems which are then declined.\textsuperscript{7} The replacement of the genitive with a denominal adjective also happened in Lydian, where the suffix -ali- is used. This suffix has given rise to an ending which has also been extended to the dative.

The genitive in -an is attested in Old Hittite: it is possible that it had a collective rather than a plural value. Probably Lycian, too, preserves a genitive plural ending -\textit{a}, -\textit{e}, related to the Hittite genitive in -an.

\textbf{Ablative and Instrumental}

Only Hittite has two different inflectional endings for the ablative and instrumental. These two cases are functionally distinct only in Old Hittite; in the texts of the later period there appears first a functional syncretism, then a tendency for the instrumental ending to disappear.

\textbf{Vocative}

The origin of the Hittite vocative in -i (-u-stems) is unknown. The -nt- stems preserve final -\textit{t} in the vocative, unlike what happens in the other IE languages.

\textbf{Absence of the Concrete Cases in the Plural}

In Table 7.1 there are no ablative or instrumental plural forms (except for Hittite, where these are given in parentheses, in that they are in fact singular endings, see below); the directive appears to have undergone syncretism with the dative-locative. Basically, the plural has only the grammatical cases and not the concrete cases. In addition, the neuter seems not to have a true plural. This fact has to be seen in the light of another phenomenon which may be clearly observed in Old Hittite: the concrete cases are used only for the neuter. It will be remembered, then, that the ending of the nominative-accusative neuter plural in Indo-European was in fact a collective ending (cf. Chapter 2,
p. 63). This was surely still true in the Anatolian languages, where the nominative neuter regularly agrees with the predicate in the singular (also well attested in Greek, the so-called skhēma Attikón). In Hittite, from the oldest texts onwards, the neuter ablative and instrumental are used both in contexts where the singular would be required and where the plural would be required (cf. expressions such as isaz = smit ‘from their mouths’, where isaz may be analysed as ablative singular).⁸

**Pronouns**

The first- and second-person pronouns are well attested in Hittite; in the other Anatolian languages the paradigms are not preserved fully. The IE character of the Hittite personal pronoun inflection is shown above all by the suppletion which contrasts the nominative stem with that of the other cases. The paradigms are as in Table 7.2.

The nominative of the personal pronouns is also attested in the so-called emphatic form, with the addition of an enclitic particle -a; consequently, we have forms such as Hittite uga, analogous to Latin ego and Greek ego. The Hittite vocalic alternation between the nominative and the oblique cases in the second singular pronoun is matched by the Palaic forms ti, tu. The genitive in -el is found only in Hittite, where it has been generalized in the pronominal flection. The ablative forms are more stable; they are formed with a suffix -ed- deriving from the demonstrative pronoun flection, and they originated within the case-attraction construction. This construction is used to express inalienable possession. The noun referring to the possessor is ‘attracted’ into the same case as the noun denoting the object possessed, as in the expression ammedaz ŠU-az ‘with my hand’ literally ‘with me with the hand’ (see Luraghi 1990b).⁹

In all persons, the Anatolian languages have weak pronominal forms in the oblique cases; alongside the accusative/dative forms of the unaccented first- and second-person pronouns, we also find a third-person singular and plural dative pronoun, which in Hittite derives from the IE reflective pronoun. The third-person nominative and accusative are rendered with the forms of the enclitic demonstrative -a-, attested throughout Anatolian. Only in Hittite do

<table>
<thead>
<tr>
<th>Table 7.2 Luwian branch</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-person singular</strong></td>
</tr>
<tr>
<td>Nom.</td>
</tr>
<tr>
<td>Acc./Dat.</td>
</tr>
<tr>
<td>Gen.</td>
</tr>
<tr>
<td>Abl.</td>
</tr>
</tbody>
</table>
we have the third-person strong forms *sel (gen.) and *sez (abl.) from the stem *se-.

The paradigms of the enclitic third-person pronoun may be reconstructed as in Table 7.3.

The reflexive is expressed not only by means of the middle voice of the verb (see Verbs, pp. 182f.) but also by an enclitic particle, attested in Hittite as -z(a), in Luwian, Palaic, Lycian and Milyan as -ti and in Lydian as -(i)t, whose origin is obscure.

Table 7.4 shows the inflection in Hittite of the demonstrative pronoun *apas 'that', also used as an anaphoric pronoun. The Common Anatolian form of this pronoun may be reconstructed as *aba-; this root is also attested in the other Anatolian languages and functions as an anaphoric pronoun in Luwian (CLuw. apa, HLuw. (a)pa- or (a)pi-) and in Lydian (bi-); Lycian ebi-, on the other hand, appears to function only as a demonstrative (see Meriggi 1981: 324).

Table 7.3 Enclitic third-person pronoun

<table>
<thead>
<tr>
<th></th>
<th>Hittite</th>
<th>Palaic</th>
<th>Cuneiform</th>
<th>Hieroglyphic</th>
<th>Lycian</th>
<th>Lydian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom.</td>
<td>-as</td>
<td>-as</td>
<td>-as</td>
<td>-as</td>
<td>-ne?</td>
<td>-is</td>
</tr>
<tr>
<td>Acc.</td>
<td>-an</td>
<td>-an</td>
<td>-an</td>
<td>-an</td>
<td>-ene, -e?</td>
<td>-av</td>
</tr>
<tr>
<td>Neut.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom.-Acc.</td>
<td>-at</td>
<td>-at</td>
<td>-ata</td>
<td>-ata</td>
<td>-ede</td>
<td>-ad</td>
</tr>
<tr>
<td>Dat.</td>
<td>-si</td>
<td>-du, -si</td>
<td>-du</td>
<td>-tu</td>
<td>-ije, -i?</td>
<td>-mλ</td>
</tr>
<tr>
<td>Plural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom.</td>
<td>-e, -at</td>
<td>-e, -as</td>
<td>-ata</td>
<td>-ata</td>
<td>-ne?</td>
<td></td>
</tr>
<tr>
<td>Acc.</td>
<td>-as, -us</td>
<td>-e, -as</td>
<td>-ata</td>
<td>-ata</td>
<td>-ne</td>
<td>-as</td>
</tr>
<tr>
<td>Neuter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nom.-Acc.</td>
<td>-at, -e</td>
<td>-e</td>
<td>-ata</td>
<td>-ata</td>
<td>-ija</td>
<td>-ad</td>
</tr>
<tr>
<td>Dat.</td>
<td>-smas</td>
<td>-si?</td>
<td>-mmas</td>
<td>-ma&quot;za</td>
<td>-ije?</td>
<td>-ms</td>
</tr>
</tbody>
</table>

Source: Carruba 1985: 97.

Table 7.4 The demonstrative pronoun *apas

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>apăs/abăs</td>
<td>apē</td>
</tr>
<tr>
<td>Acc.</td>
<td>apūn</td>
<td>apăs</td>
</tr>
<tr>
<td>Neuter Nom.-Acc.</td>
<td>apāt</td>
<td>apē</td>
</tr>
<tr>
<td>Gen.</td>
<td>apēl</td>
<td>apēnzan</td>
</tr>
<tr>
<td>Dat.-Loc.-Dir.</td>
<td>apēdani</td>
<td>apēdas</td>
</tr>
<tr>
<td>Inst.</td>
<td>apēz</td>
<td></td>
</tr>
<tr>
<td>Abl.</td>
<td>apit/apēdanda</td>
<td></td>
</tr>
</tbody>
</table>
After Old Hittite, all the demonstrative pronouns show a tendency towards syncretism affecting the accusative and the nominative plural of the common gender (the ending -us is used for both cases; to a more limited extent, the ending -e is extended to the accusative). In addition, the oblique cases, too, tend to merge in the plural (the dative ending is extended to the genitive, the original genitive ending becomes less frequent), where the plural form of the pronouns tends to be structured according to a paradigm which contrasts a form, or rather, two allomorphs, for the direct cases (nominative and accusative) with a form for the oblique cases.

A peculiarity of Hittite is the presence of enclitic possessives in all persons. Although generally called 'possessive pronouns', these are really adjective forms; they exhibit a regular declension and agree in gender, number and case with their nominal head, which hosts them. Consider the following examples: attas = mas 'of my father (gen.)'; ishi = ssi 'to his master (dat.)'; parna = ssa 'to his house (dir.)'; issaz = smit 'from their mouths (abl.)'.

Possessives take on the value of pronouns when they are used with local adverbs (see Adverbs, p. 186) as in the expressions ser = samet 'above them', katti = ssi 'with him'.

Interrogative, relative and indefinite pronouns, and adjectives all derive from the IE type with initial labiovelar, cf. Hitt. kuis, kuit, CLuw. kuis, kui, Pal. kuis, kuid, Lyc. ti- (see Carruba 1983), Lyd. interrogative and relative pronoun qi-; Hitt. indefinite pronoun kuiski, kuitki. The pronoun kuis, kuit in Hittite has the forms given in Table 7.5.

On the formation of relative clauses, see Subordinate Clauses, p. 189.

Verbs
The Anatolian verbal system differs greatly from the system traditionally reconstructed for Indo-European, which is based mainly on Greek and Old Indic. The Anatolian verb only has two finite moods, indicative and imperative, two tenses, present- future and preterite, and two voices, active and mediopassive (we shall see below that the term mediopassive is perhaps not ideal to describe the function of that voice). In the present, in the singular only, and in the first person singular of the preterite the verbs are divided into two conjugations, one in -mi and one in -hi. While the IE origin of the -mi

Table 7.5  The pronoun kuis/kuit

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nom.</td>
<td>kuis</td>
<td>kues</td>
</tr>
<tr>
<td>Acc.</td>
<td>kuin</td>
<td>kueus</td>
</tr>
<tr>
<td>Neuter Nom.-Acc.</td>
<td>kuit</td>
<td>kue</td>
</tr>
<tr>
<td>Gen.</td>
<td>kuel</td>
<td></td>
</tr>
<tr>
<td>Dat.-Loc.</td>
<td>kuedani</td>
<td>kuedas</td>
</tr>
<tr>
<td>Abl.</td>
<td>kuez</td>
<td></td>
</tr>
</tbody>
</table>
conjugation is unequivocal, the origin of the -hi conjugation has given rise to greater controversy. On the one hand, there are similarities between the -hi conjugation and the IE perfect; on the other hand, the -hi conjugation can also be compared with the IE middle. Note also that this conjugation is attested with certainty only in Hittite; among the other languages, Luwian and Palaic probably have the third-person singular form. The reconstruction of the verb endings for Proto-Anatolian is extremely doubtful; the synopsis in Table 7.6 shows, as far as is possible, the paradigms of the historical languages.

The conjugation of the mediopassive is fully attested only in Hittite; its paradigms are listed in Table 7.7.

Only in the third-person singular present is there a difference between the conjugation in -mi (ending -ta(ri)) and that in -hi (ending -a(ri)). The forms with the suffix -ri, which at first had suggested an exact correspondence

### Table 7.6 Verb endings for Anatolian languages: active

<table>
<thead>
<tr>
<th></th>
<th>Hittite</th>
<th>Palaic</th>
<th>Cuneiform</th>
<th>Hieroglyphic</th>
<th>Luwian</th>
<th>Lycian</th>
<th>Lydian</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present indicative active</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 sg.</td>
<td>-mi -ți</td>
<td>-ți</td>
<td>-și</td>
<td>-și</td>
<td>-și</td>
<td>-și</td>
<td>-și</td>
</tr>
<tr>
<td>2 sg.</td>
<td>-si -ți</td>
<td>-si</td>
<td>-si</td>
<td>-s(a)</td>
<td>-s(a)</td>
<td>-s(a)</td>
<td>-s(a)</td>
</tr>
<tr>
<td>3 sg.</td>
<td>-zi -i</td>
<td>-ți</td>
<td>-ți</td>
<td>-t(a)</td>
<td>-t(a)</td>
<td>-t(a)</td>
<td>-t(a)</td>
</tr>
<tr>
<td>1 pl.</td>
<td>-wəni</td>
<td>-wani</td>
<td>-wani</td>
<td>-wani</td>
<td>-wani</td>
<td>-wani</td>
<td>-wani</td>
</tr>
<tr>
<td>2 pl.</td>
<td>-təni</td>
<td>-təni</td>
<td>-təni</td>
<td>-təni</td>
<td>-təni</td>
<td>-təni</td>
<td>-təni</td>
</tr>
<tr>
<td>3 pl.</td>
<td>-ənzi</td>
<td>-antı</td>
<td>-nti</td>
<td>-nti</td>
<td>-nti</td>
<td>-nti</td>
<td>-nti</td>
</tr>
<tr>
<td><strong>Preterite active indicative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 sg.</td>
<td>-un -hun</td>
<td>-ha</td>
<td>-ha</td>
<td>-hə</td>
<td>-hə</td>
<td>-hə</td>
<td>-hə</td>
</tr>
<tr>
<td>2 sg.</td>
<td>-s -(s)ta</td>
<td>-s</td>
<td>-s</td>
<td>-s</td>
<td>-s</td>
<td>-s</td>
<td>-s</td>
</tr>
<tr>
<td>3 sg.</td>
<td>-(t(a)) -s(t)ta</td>
<td>-t</td>
<td>-ta</td>
<td>-t</td>
<td>-t</td>
<td>-t</td>
<td>-t</td>
</tr>
<tr>
<td>1 pl.</td>
<td>-wen</td>
<td>-man</td>
<td>-man</td>
<td>-man</td>
<td>-man</td>
<td>-man</td>
<td>-man</td>
</tr>
<tr>
<td>2 pl.</td>
<td>-ten</td>
<td>-ten</td>
<td>-ten</td>
<td>-ten</td>
<td>-ten</td>
<td>-ten</td>
<td>-ten</td>
</tr>
<tr>
<td>3 pl.</td>
<td>-er</td>
<td>-nta</td>
<td>-nta</td>
<td>-nta</td>
<td>-nta</td>
<td>-nta</td>
<td>-nta</td>
</tr>
</tbody>
</table>

### Table 7.7 Verb endings for Anatolian languages: mediopassive

<table>
<thead>
<tr>
<th></th>
<th>Mediopassive</th>
<th>Preterite</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present</strong></td>
<td>-hə, -həri, ʰhəhəri</td>
<td>-hət(i), -ʰhəhət(i)</td>
</tr>
<tr>
<td>2 sg.</td>
<td>-ta</td>
<td>-ta, -(t)at(i)</td>
</tr>
<tr>
<td>3 sg.</td>
<td>-ta, -(tə)-a, -ari</td>
<td>-(t)at(i)</td>
</tr>
<tr>
<td>1 pl.</td>
<td>-(wa)-sta, -(wa)stari, -(wa)stati</td>
<td>-(wa)stati</td>
</tr>
<tr>
<td>2 pl.</td>
<td>-(du)-mari, -(du)mati</td>
<td>-(du)mati</td>
</tr>
<tr>
<td>3 pl.</td>
<td>-(an)-tari, -(an)tarı</td>
<td>-(an)tarı</td>
</tr>
</tbody>
</table>
between the Hittite and the Latin middle, are in fact the most recent (cf. Neu 1968). Forms with this suffix are attested also in the present middle of Luwian and Palaic (see Meriggi 1981).

The link between the -hi conjugation and the IE perfect is unclear, so much so that some scholars believe that the -hi conjugation may have had a number of different origins. Eichner (1975) elucidated the correspondence between a group of verbs in -hi and the Germanic preterite-presents (see Chapter 13, pp. 404–5). One example is the root sag- ‘to know’ (cf. Lat. sagire, Goth. sokjan), which forms a present saggahhi, formed with the same ending *-h₂a that we find in the perfect of the other IE languages and the addition of a suffix -i, by analogy with the verbs in -mi; the forms without addition of -i have given rise to a preterite. The -hi conjugation then came to have a present, continuing the original stative value of the IE perfect, and a preterite, continuing its form. From a formal point of view, this process must have been the origin of all the verbs in -hi; but from a semantic point of view, the verbs in -hi which can be derived through the value of preterite-presents are limited in number. Neu (1985), partly based on the conclusions of Eichner, provides an analysis of the origins of voice in Indo-European, which is conditioned by the necessity to explain the facts of Anatolian. In addition, Neu elucidates the links between perfect and middle in Indo-European, which were probably still reflected in the stative value of some old Hittite ‘media tantum’ (see Neu 1968). The derivation of the -hi conjugation from the IE perfect is, however, still controversial; for example, Jasanoff (1979) prefers to link the -hi conjugation to the thematic inflection of the other IE languages.

Semantic and syntectic properties of the Anatolian verb are mostly known from Hittite, to which I shall refer in the remaining part of this section.

Modality
Apart from assertive and imperative modality, expressed by means of the indicative and imperative moods, the Hittite verb can also denote potential and contrary-to-fact modality, by means of the particle man and the present indicative (potential) or preterite indicative (contrary-to-fact).

Voice
The original value of the Hittite middle is disputed; however, most likely the opposition active/middle continued an original opposition between active and stative, as is evident above all in Old Hittite (see Neu 1968). Among other things it is to be noted that in the oldest texts each verb exhibits, with few exceptions, only forms belonging to one of the two voices. The processual middle must also have been ancient; in addition, the forms of the middle often have reflexive or (in the case of the third-person singular) impersonal value. Relatively rare, and attested only in documents later than the oldest phase, is the use of the middle as a true personal passive. The function of the passive is otherwise conveyed by lexical passives (e.g. ak- ‘die’ as the passive of
kuen- ‘kill’) or by the third-person active plural, which is widely employed as an impersonal form (cf. Luraghi 1990a: 39 and n.75).

Periphrastic Forms
A peculiarity of Hittite with respect to the other IE languages is the existence of a large number of periphrastic verb forms, for the most part already attested in the older period, whose use becomes more frequent in the course of time. Periphrastic constructions are the following:

1. har(k)- ‘hold’, ‘have’, + n. nom.-acc. of the participle, with the value of a durative perfect (see Boley 1984)
2. es- ‘be’, + participle, initially agreeing with the subject (predicative participle), later in the form of a nom.-acc. n., indicating an advanced degree of grammaticalization of the construction. The sense is that of a pluperfect (see Houwink Ten Cate 1973)
3. dai-, tiya- ‘take’ + (invariable) supine, with inchoative value (see Kammenhuber 1955)
4. pai- ‘go’, or uwa- ‘come’, with the indicative, which give rise to a serial construction: they emphasize the temporal sequence of a certain action with respect to a preceding action (usually translated as ‘it happened that’, ‘and then’, see Luraghi (1993)).

Derivative Verbs
Hittite makes extensive use of derivative verbs, both deverbatives and denominatives. Among the most commonly used suffixes also attested in other IE languages we have -sk-, for deverbatives with indicative value, and -nu-, which forms causatives, mainly deverbative (the denominative causatives, also called ‘factitives’, are generally formed with the suffix -ahh-) (see Friedrich 1960: 73–6 and Luraghi 1992).

Non-finite Forms of the Verb
(see Kammenhuber 1954, 1955) Hittite has only one participle, formed with the suffix -nt-, also attested in other IE languages. Unlike elsewhere, however, the Hittite participle in -nt- does not have a present, but rather a perfect, value: akkanza ‘died’, participle of ak- ‘die’; appanza ‘the prisoner’ (i.e. he who has been captured), from ep- ‘take’, panza ‘gone’, from pai- ‘go’. Unlike Hittite, all the other Anatolian languages instead have a participle in -mi-, which also has the value of a past participle. Both of the participles are attested in Luwian and Palaic, but it is difficult to establish whether there is any semantic difference between them.11

The infinitive in Hittite is formed with the suffixes -uwanzi, as in uwauwanzi ‘to come’ (root uwa-) and -anna, as in adanna ‘to eat’ (root ed-). This second type of infinitive is also attested in the other Anatolian languages, for example, CLuw. aduna ‘to eat’ and Pal. ahuna ‘to drink’. Finally Hittite has a verbal noun, formed with the suffixes -war (gen. -was), for verbs with
an infinitive in -\textit{wanzi}, and -\textit{atar} (gen. -\textit{annas}) for verbs with an infinitive in -\textit{anna}.

\textbf{Adverbs}

This section will be limited to providing a simplified treatment of the so-called ‘local adverbs’ or ‘dimensional adverbs’ of Hittite, in so far as these are of particular interest for comparison with the other IE languages (see Starke 1977 and Boley 1985). Local adverbs make up a coherent system in old Hittite, where they are divided into two corresponding series of static and dynamic adverbs:

\begin{tabular}{ll}
\textit{Static adverbs} & \textit{Dynamic adverbs} \\
\textit{andan} ‘within’ & \textit{anda} ‘into’ \\
\textit{appan} ‘behind’ & \textit{appa} ‘backwards’, ‘again’ \\
\textit{kattan} ‘under’ & \textit{katta} ‘downwards’ \\
\textit{piran} ‘in front of’ & \textit{para} ‘forwards’ \\
\textit{ser} ‘on’ & \textit{sara} ‘upwards’
\end{tabular}

The static adverbs are forms whose nominal origin is still clear; in fact, they can be used with the genitive of a noun, in constructions similar to those attested in other IE languages (cf. Lat. \textit{causā gratiā}), and they can take enclitic possessive pronouns (see \textbf{Pronouns}, pp. 180–2). The dynamic adverbs are of more recent origin than the static adverbs, as is clear, among other things, from the greater regularity of their formation (the root has the same vowel in all the dynamic adverbs). They are derived from the corresponding static forms with the addition of the directive ending -\textit{a}.\textsuperscript{12} They are used exclusively with verbs of motion, in sentences which can also contain a complement of motion in the directive.

Etymologically, the Hittite spatial adverbs are related to the adverb-preverb-prepositions of the other IE languages (see Chapter 8, \textbf{Prepositions}, p. 222 and Chapter 9, pp. 257–8). Their use as postpositions or preverbs, however, is extremely limited in Old Hittite, where this happens only in the case of \textit{piran} + dative-locative and \textit{para} + ablative (postpositions) and for a few verbs, which, with the addition of the adverb-preverb, exhibit a meaning and valency different from the simple verb (see Luraghi 1990a: 33–5).

The contrast of static and dynamic adverbs disappears after Old Hittite, parallel to the disappearance of the opposition between directive and dative-locative. At the same time, the use of the adverbs as postpositions or preverbs undergoes considerable development. (However, in writing the preverbs are usually still separate from the verb.)
Sentence and Phrase Structure

Constituent Order in the Simple Sentence

The order of constituents in the Anatolian languages is free as regards the nominal constituents, as is generally the case in inflected languages, but fixed as regards the position of the verbs and enclitics. The simple sentence is characterized by two pivotal points, the verb, which delimits its rightmost boundary, and the enclitics, often supported by a connective, which delimit its leftmost boundary.

Let us analyse the following example:

(a) nu= za \( \text{ŠA } \text{HUR.SAG } \text{Tarikarimu } \text{URU } \text{Kaskan } \text{tarahhun} \)

\( \text{conn. refl. of } \text{T. } \text{K. : acc. I-defeated} \)

(b) n= an= kan kuenun

\( \text{conn. pron.3sg.acc.=part. killed} \)

(c) \( \text{HUR.SAG } \text{Tarikarimun= ma dannattahhun} \)

\( \text{T. : acc. -conn. emptied} \)

(d) KUR \( \text{URU } \text{Zihariya ya human arha warnun} \)

\( \text{land Z. and all: acc. prev. burnt} \)

‘(a) The Kaskas of the Tarikarimu mountains I defeated, (b) I massacred them, (c) I cleared the mountains of Tarikarimu of people (d) and set alight the whole land of Zihariya.’

\( \text{(Annals of Muršiliš 80)} \)

All the sentences contain one or more enclitics (i.e. -za, -an, -kan, -ma and -ya), phonologically hosted by the first word of the sentence. In sentences (a) and (b), the first word, which serves as a support for the enclitics, is the connective nu.

The regular presence of chains of enclitics is a characteristic of the Anatolian languages. The enclitics are placed in fixed positions; each sentence may contain a maximum of six (see Carruba 1985 and, on Hittite, Luraghi 1990a: 13–15):

1. Connectives or coordinating conjunctions: Hitt. -ma, -a, -(y)a; Pal. - (y)a, -pa; CLuw. -ha, -kuwa; HLuw. -ha; Lyc. -me, -be; Mil. -me, -be, -ce; Lyd. -k, -(u)m\(^{13}\)
2. A particle of reported speech, Hitt. and Pal. -wa(r)-; Luw. -wa-; Lyc. and Mil. -(u)we- < IE *wer-; cf. Lat. verbum, Hitt. wериya- ‘call’\(^{14}\)
3. (In Hittite), nominative or accusative forms of the enclitic third-person pronoun
4. (In Hittite), oblique forms of the first- or second-person pronouns, or dative forms of the third-person pronoun
5. (In Hittite), reflexive particle
6 Particles of spatial reference: Hitt. -(a)n, -(a)pa, -(a)sta, -kan, -san; Pal. -(n)ta, -pi; CLuw. -tta, -tar; HLuw. -ta, -pa; Lyc. -te, -pi, -de; Mil. -te, Lyd. -(i)t (Carruba 1985: 95).

The order of the enclitics attested in Hittite for the positions (3)—(5) is different from the order attested in all the other languages, in which we find:

3 reflexive particle
4 oblique forms of the pronouns
5 nominative or accusative of the third-person pronoun.

In Hittite, too, the dative plural forms of the third-person pronoun precede the possible nominative or accusative forms.

The position of the enclitics near the leftmost margin of the sentence in Anatolian has correspondences in the other IE languages, in which, as observed by Wackernagel several decades before the decipherment of Hittite, unaccented particles and pronouns tend to be situated in this position, after the first accented word (see Luraghi 1990c). ‘Wackernagel’s Law’ is attested in Anatolian with much greater regularity than is encountered in the other IE languages (cf. Chapter 2, p. 70).

Using the terminology employed by Rosenkranz (1979: 223), we may call the enclitic chain an Informationskette or ‘chain of information’, in that it contains forms which specify the relationship of the sentence to the preceding context, or relationships within the sentence itself. Connectives, which link the sentence to its context, precede pronouns and particles, whose function is specified within the sentence (i.e. a division into textrelevante (text-relevant) and kernrelevante (core-relevant) enclitics is made, again using Rosenkranz’s terminology).

Connectives and Particles
Among the enclitics listed above, the spatial particles are of particular interest, since they do not correspond to anything in the other IE languages. These particles, whose etymology is difficult, occur on the whole in sentences which also contain complements of place or adverbs and have the function of specifying a particular spatial relationship within the sentence. In later Hittite, the number of particles used is greatly reduced; in practice, the use of the particle -kan becomes generalized with some verbs, even without spatial reference. The function of -kan in this case has not been clarified at all; it appears likely that the particle has something to do with the perfective aspect. In addition, the use of -kan is obligatory with some verbs, for example kuen- ‘kill’ (cf. sentence (b) in the example in the previous section). The most important work of reference on the spatial particles in Anatolian is Carruba (1969b); see also Carruba (1985). On Hittite in particular there are many other studies, among which attention should be drawn to Boley (1989).
The Anatolian languages make great use of connectives, both prepositive and enclitic. The latter go in the initial chain, where they precede all the other enclitics. Very frequently, especially in Hittite and after the oldest period, we find a connective introducing a sentence; this seems to have no function other than to host the enclitics. From the Hittite texts there emerges an opposition between sentences introduced by the prepositive connective (normally nu), which has additive value, and sentences introduced by the enclitic connective -ma-, which has adversative value.

**Subordinate Clauses**

Anatolian makes extensive use of paratactic structures; the widespread employment of different connectives also makes up in part for the scarcity of subordination. Certain types of construction systematically recur with verbs which in other languages govern complement clauses. For example, the verbs of ‘saying’ normally use the so-called ‘reported speech’ construction.

Among adverbial clauses, we do not find purpose or consecutive clauses; however, the use of the infinitive of purpose is attested.

The main subordinating conjunctions in Hittite are takku (Old Hittite only) in conditional clauses, man in temporal or conditional clauses, mahhan in temporal clauses, kuitman in temporal clauses, and kuit in causal clauses.

The formation of relative clauses is of particular interest from a comparative point of view (see Raman 1973; Lehmann 1984). Generally, the head of the relative clause does not appear within the main clause (as happens, for example, in English), but within the relative clause itself. Consider the following example:

(a) nu= za DUPUT 5<sup>st</sup> kuin NAM.RA INA ELUGAL uwatenu conn.refl. His Majesty rel.pron.:acc.sg. prisoner in palace I-took

(b) n= as 15,500 NAM.RA esta conn. dem.pron.:nom.sg. 15,500 prisoner was

‘The prisoners whom I, the king, took into the palace numbered 15,500.’ (lit. ‘(a) what (number of) prisoners I took into the palace, (b) that (number) was of 15,500 prisoners.’

(Ḫattušiliš 86)

This type of relative clause is also attested in Latin, especially in the older texts, and in Greek, where it is referred to as a proleptic relative:

(a) quos ferro trucidari opportebat, (b) eos nondum voce vulnero
‘I cannot even strike with words those who ought to have been killed with arms’, lit. ‘(a) who ought to have been killed with arms, (b) those I cannot even strike with words’

(c) eis hèn aphikonto hoi stratiōtai kómēn. (d) ou megále ēn
‘the village which the soldiers were approaching was not large’, lit. ‘(c) to which village the soldiers were approaching, (d) was not large.’
The origin of this construction is probably paratactic. The form *kuis* was originally an adjective which did not have the function of subordinating one clause to another but rather of establishing, in the first clause of a pair, a constituent about which something would be said in the second clause. The two clauses were originally independent, linked only by the informative dynamic of the text, the first clause constituting in a sense the ‘topic’ of the second (Raman 1973).

The Position of Anatolian within the Indo-European Languages

Immediately after Hittite had been deciphered, the obvious differences distinguishing Anatolian from the other IE languages led scholars to wonder exactly what sort of relationship there was between them.

As long ago as 1921, Forrer suggested that Anatolian should be viewed not as a branch of Indo-European, but rather as a linguistic group in its own right, related only marginally to Indo-European. A similar position was supported by Sturtevant (1933), and is known as the ‘Indo-Hittite theory’. According to Sturtevant, Anatolian and Indo-European were two branches of one linguistic family, hence his term ‘Indo-Hittite’; from this it follows that the relationships within the IE family would not be modified in the slightest by the discovery of the Anatolian languages.

Sturtevant’s position has now been abandoned and the term ‘Indo-Hittite’ is used only sporadically; nevertheless, although returning to a more flexible model of linguistic relationship, most scholars continue to maintain that Anatolian has special status among the IE languages, in that it was the earliest branch to split off from the rest of the family.

However, the notable differences between Anatolian and the other IE languages are explained in different ways. In broad outline there are two contrasting theories: (a) the ‘Schwundhypothese’, according to which all categories which may be reconstructed using information from the other languages, but which are lacking in Anatolian (feminine gender, aorist, dual, etc.) have been lost; Anatolian would thus be a particularly innovative branch of Indo-European; (b) the ‘Herkunfthypothese’, according to which those categories absent from the Anatolian languages were formed only after the Anatolian branch split off from the rest of the IE family; Anatolian would thus be particularly archaic.

The issue about which there is no agreement is not so much the chronology as the degree of archaism of Anatolian. According to the second theory, what Anatolian represents is practically tantamount to a sort of pre-Indo-European, while according to the first, its IE nature has been greatly eroded during the centuries of separation from the other languages.

The Anatolian data in this respect offer themselves freely to a dual interpretation. There has been great debate on the verbal system, which lacks,
among other things, categories which have always been reconstructed for Indo-European, such as the optative and the aorist. Recently the gender problem has become the subject of frequent discussion (see Chapter 2, p. 63). We saw in *Nouns and Adjectives*, pp. 177–80 that nouns, adjectives and pronouns in Anatolian have only two genders, common and neuter. The common gender has been so termed because it was initially seen as a fusion of the original IE masculine and feminine. In conformity with this theory, Kammenhuber (1963: 253–5) holds that the feminine gender has fused with the masculine in Anatolian through a developing tendency to make grammatical gender coincide with the semantic categories animate and inanimate.

However, it was very quickly pointed out that another, radically different, interpretation was possible. The common gender might well reflect an IE animate gender. It would be possible to reconstruct for Indo-European an opposition animate–inanimate, directly reflected in Hittite; only subsequently would feminine and masculine have become distinguished within the animate gender. Until a few years ago this second theory was greatly favoured. Typological evidence was also adduced in favour of it; for example, it was claimed that, while it is possible for an animate to split up into masculine and feminine, there exist no parallels for a phenomenon whereby a masculine–feminine contrast disappears, leaving no trace even in the pronoun system.

In the past few years, the question of gender in Anatolian has been addressed with renewed interest; attempts have been made above all to adduce data not only from Hittite but also from the other languages. Starke (1982) draws the attention of scholars to the presence of a suffix -i- in the Luwian nominal inflection. Oettinger (1987) identifies this suffix with the IE feminine suffix -ih₂- (as in Skt vrkti ‘she-wolf’) and claims, consequently, that Common Anatolian had had a tripartite gender distinction which was subsequently lost in the attested languages. Weitenberg (1987), too, believes that it is possible to distinguish traces of the feminine in the neuter gender in Hittite. According to the data presented in his article, Hittite animate neuters correspond on the whole to IE feminines, while animate nouns of common gender correspond to the masculines. More recently, Melchert (1992a) has claimed that Lycian preserves traces of the distinction between the IE -o- and -ä- stems. It is extremely difficult to assess these theories. For example, the suffix -ih₂- could have existed in Anatolian without having yet developed the function of marking feminine derivatives. According to several Littitologists, including Carruba and Neu, this is the only acceptable theory, because it also has the advantage of being simpler and more economical than the theory according to which Anatolian has lost the feminine. As regards Melchert’s position, it involves a revision of the Anatolian ‘family tree’ according to which Lycian can no longer belong to the Luwian group; further arguments for such revision need to be adduced.

The problem of gender is only one of the many unsolved problems which Anatolian linguistics has to confront today.¹⁵
Notes
1 In the case of the labials and velars, there is less confusion of spelling simply because the voiceless form is usually written, especially in the case of signs of the type CV.
2 The spelling of the vowels in Hittite varies in such a way that it is difficult to establish which vowels were long and which short. Although we note greater consistency in the oldest texts, there are nevertheless still variations in vowel length in different forms of the same word. On exactly this basis, Carruba (1981c) maintains that the so-called scriptio plena represents not long vowels but rather stressed vowels. However, his theory is not universally accepted: see recently Melchert (1992b, 1994). According to Melchert, the only function of the scriptio plena in Hittite is to indicate vowel quantity. In the case of alâa, Melchert does not restrict himself to Hittite, but reconstructs the two vowels with different quantities for Proto-Anatolian, where */a:/ would be the reflex of IE */o/, */o:/ and */a/; while */a/ would be the reflex of IE */a/; see also Melchert (1992a) and Chapter 2, p. 49.
4 To assess the exact position of Lycian it would also be necessary to consider the presence of words such as keruti ‘deer’ (or other animal with horns), (see Carruba 1978: 171).
5 ‘Luwian is by no means unique in exhibiting reflexes of all three guttural series; the surprising thing is that the closely-related Hittite behaves so differently in this respect. This can only be understood if we free ourselves from the idea that Indo-European was uniform until it split up into various groups’ (Tischler 1992).
6 A possible trace of h₃ in medial position is examined in Eichner (1973).
7 In Cuneiform Luwian no genitive form is attested, while in Hieroglyphic Luwian, beside the adjectival formations, we also find true genitives. The same is true of Lycian, but there the genitive forms are restricted to proper nouns.
8 In the late Hittite texts, nouns of common gender with animate referents also take the ablative and, occasionally, instrumental, endings, for example, in expressions indicating ‘motion away from’ or agents with passive verbs. The use of the concrete cases with nouns denoting animate entities seems to have originated within the ‘case-attraction’ construction in the same way as the ablative forms of the pronouns, see Pronouns.
9 In this example both the first-person pronoun and the noun ŞU ‘hand’ are in the ablative, which since Old Hittite had additionally taken on the functions of the instrumental.
10 The enclitic possessives are attested with certainty only in Hittite; on their possible presence in Luwian, see Carruba (1983). On the reasons for their loss after Old Hittite, see Luraghi (1990b).
11 According to Laroche (1959), in Luwian the participle in -mi- has past value and that in -ni- has present value; however, some forms in -nt- express the past, such as ulant- ‘dead’ (not ‘dying’), cf. Meriggi (1981).
12 It is not clear which form is used for the static adverbs. Conceivably, it could be a nominative-accusative neuter singular but this would have no connection with their function (as locatives). It should also be noted that the adverb andan seems to go back to an adverbial formation already extant in IE (Gk èndon). The static adverbs can be linked to the possessive suffixes (cf. Pronouns, p. 180), which in this case exhibit the form of the nominative-accusative neuter singular. It should be noted, however, that the adverb kattan, if linked to possessives, has a dative-locative form katti= and consistently appears with the dative-locative of the possessive. Moreover, there are some other static adverbs which do not have
corresponding dynamic adverbs, which exhibit a form which seems to be that of a directive (and thus the same as that of the dynamic adverbs!), as for example istarna ‘between, among’ and menahhanda ‘before’. Of these, istarna may be linked to possessives, in which case it appears in the form istarni= (dat.-loc.). On this problem see Starke (1977) and especially Boley (1985).

13 Connectives and enclitic conjunctions are not only mutually exclusive, but are also incompatible with the prepositive connectives, on which see Connectives and Particles, pp. 188–9.

14 On this etymology, see Pecora (1984); on the development from verbal root to particle, see Luraghi (1983).

15 I should like to thank Professor O. Carruba, who kindly read and commented on an earlier draft of this chapter.

References
This chapter does not aim to provide an exhaustive bibliography of the Anatolian languages, which would require much more space than is available. The works cited are those directly referred to in the discussion; where it has been necessary to cite general reference works, I have favoured more up-to-date ones, which in turn offer a much more complete bibliography on the individual problems than I have been able to provide here.


-------- (1989) The Sentence Particles and the Place Words in Old and Middle Hittite (Innsbrucker Beiträge zur Sprachwissenschaft, 60), Innsbruck: Institut für Sprachwissenschaft der Universität.


-------- (1992) Per una grammatica ittita, a c. di O.C., Pavia: Iuculano.

Gusmani, Roberto (1964) Lydisches Wörterbuch; mit grammatischer Skizze und Inschriftensammlung, Heidelberg: Winter.
THE ANATOLIAN LANGUAGES 195

Neu, Erich (1968) Das hethitische Mediapassiv und seine indogermanischen Grundlagen (Studien zu den Boğazköy-Texten, 6), Wiesbaden: Harrassowitz.
Starke, Frank (1977) *Die Funktion der dimensionalen Kasus und Ortsadverbien im Hethitischen* (Studien zu den Bogazköy Texten, 23), Wiesbaden: Harrassowitz.


Tischler, Johann (1983–) *Hethitisches etymologisches Glossar* (Innsbrucker Beiträge zur Sprachwissenschaft, 20), Innsbruck: Institut für Sprachwissenschaft der Universität.
