

## CHAPTER 1

# Language in ancient Asia Minor: an introduction

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In his discussion of the philosopher Cleobulus from the Rhodian city of Lindus – at times identified as one of the Seven Sages of ancient Greece – Diogenes Laertius, chronicler of the philosophers, rehearses for his readers the inscription that was carved upon the tomb of the Phrygian King Midas – reported to have been composed by the wise and riddling Cleobulus (though some say it was Homer’s work, commissioned by Midas’ sons after Homer had lost a poetic contest to Hesiod):

I am a maid of bronze, and upon the tomb of Midas do I lie.  
 As long as water flows and tall trees bloom and leaf,  
 And the sun shall rise and shine, and moon so bright,  
 And rivers run, and the sea shall surge upon the shore,  
 Remaining here upon his tomb, washed with many tears,  
 I shall declare to those who pass that here does Midas buried lie.  
 (*Lives of Eminent Philosophers* 1.89–90)

If Midas’ tomb and its inscription shall stand forever, resisting the onslaught of time and testifying to the Phrygian king’s existence upon this earth, until earth no longer is, the people over whom this monarch reigned and the language that they spoke would seem to occupy a no less transcendent place in the unwinding of time – at least to judge from Herodotus’ report of a discovery that was made in the reign of the Egyptian Pharaoh Psammetichus:

The Egyptians – before Psammetichus ruled over them – considered themselves to be the first of all peoples. But when Psammetichus became king he wanted to find out who was actually the first to exist; and since that time, they have believed the Phrygians to be earlier than themselves, but the Egyptians to be earlier than all others. Since he was not able by inquiry to discover anything at all concerning who among humankind existed first, he designed an experiment. He took two newborn babies from some random people and gave them to a shepherd to rear among his flocks, commanding that no one should speak a sound in their presence, that they were to lie by themselves in an out-of-the-way spot, and that at appropriate times the shepherd should bring goats to them, give them as much milk as they wanted, and do whatever else needed to be done. Psammetichus did this and gave these instructions because he wanted to hear what language the children would first speak, after they had moved beyond the stage of unintelligible babbling. And it happened – when the shepherd had followed the king’s orders for two years, he one day opened the door, and both children came running to him, holding out their hands, saying *bekos*. When he first heard this, the shepherd mentioned nothing about it. But making regular trips, he noticed the repetition of this word; and so reporting it to the Pharaoh, the shepherd was commanded to bring the children into his presence. When Psammetichus heard it for himself, he made inquiries to find who it was among humankind that called something *bekos*; and having inquired, he discovered that it is what the Phrygians call bread. And so, on the weight of this evidence, the Egyptians conceded that the Phrygians are older than themselves. (*Histories* 2.1–2)

The tale that the fifth-century BC Greek historian relates is a remarkable one on several counts, not least of which are Psammetichus' application of something approaching the scientific method (chilling, and not sufficiently unfamiliar, in its disregard for the lives affected), and the Egyptians' willingness to concede existential priority to the Phrygians on the basis of the outcome of Psammetichus' experiment.

Phrygian is but one of the numerous languages known from ancient Anatolia (Asia Minor) – chiefly Indo-European languages – and certainly not the earliest indigenous language to be *attested* in that locale. Pride of place in that regard goes to Hurrian, about which we will have more to say below, and Hittite (see Ch. 2) – the latter being the earliest attested of *all* Indo-European languages (first texts dated to c. seventeenth century BC), not only of those of Anatolia.

Somewhat paradoxically, this most anciently documented Indo-European linguistic form, Hittite, was one of the most recently “discovered”: fragments of Hittite texts were found in the Turkish village of Boğazköy – location of the ancient Hittite capital of Hattusas (or Hattuša; see Güterbock 1997) – in the last decade of the nineteenth century, leading to excavation of the site – beginning in 1906 and continuing to the present day – and the unearthing of many thousand Hittite documents. By 1917 the language of the documents had been deciphered – chiefly the work of a Czech scholar, Friedrich Hrozný – to reveal, to the astonishment of many, a language having an archaic Indo-European grammar and familiar Indo-European vocabulary such as *wa-a-tar* ‘water’ and *gi-e-nu* ‘knee’.

Yet the Hittites are not the earliest speakers of central Asia Minor of whom we have knowledge. They were preceded in that place by a non-Indo-European people who lent their name to the Hittite state – the “land of *Hatti*” – and provided the nomenclature by which we identify their Indo-European successors, the *Hittites*. These were the Hattians; episodic traces of their language, Hattic, are preserved in Hittite texts, chiefly religious texts, in which the language appears to serve a liturgical function.

The chief graphic medium by which Hittite language is preserved is the clay tablet impregnated with cuneiform script. The writing system, like the materials for writing, was acquired from Akkadian-speaking peoples of Mesopotamia, perhaps by way of Syria (see Ch. 2, §2 and, on Akkadian cuneiform, Ch. 4, §2 in *The Ancient Languages of Mesopotamia, Egypt, and Aksum*). The cuneiform archives from Hattusas preserve not only Hittite but other, related, Indo-European languages – namely Luvian (see Ch. 3) and Palaic (see Ch. 4), the latter perhaps already an extinct liturgical language by the time it first appears in cuneiform documents of the sixteenth century BC – as well as non-Indo-European languages: Sumerian and Akkadian, hailing from Mesopotamia (see Chs. 2 and 4 in *The Ancient Languages of Mesopotamia, Egypt and Aksum*), and Hurrian, indigenous to southeastern Anatolia and contiguous areas (see Ch. 9).

Cuneiform, while far and away the principal script of Hittite documentation, is not the only mode of writing utilized for recording that earliest-evidenced Indo-European language. Use was also made of a syllabo-logographic hieroglyphic script (see Ch. 2, §2 and Fig. 2.1) – labeled “hieroglyphic” because of the pictorial nature of its symbols. Like cuneiform, the hieroglyphic script was acquired for – and not devised for – writing Hittite; it appears to have been designed for spelling Luvian, and it is this language that predominantly evidences the script (see Ch. 3, §2.2). Several of the Anatolian hieroglyphs bear similarity to symbols of the undeciphered pictographic script of Minoan Crete (see the Introduction to the companion volume entitled *The Ancient Languages of Europe*), but the nature of the “relationship” of the two is perhaps more likely of an indirect nature rather than direct, though the presence of Luvian (or “Luvoid”) speakers in pre-Greek Crete has long been speculated.

The above-mentioned Anatolian language of Hurrian (see Ch. 9) – with texts recovered from numerous sites across the Near East – is not only non-Indo-European, but has no known linguistic relative at all, other than the somewhat later attested Urartian – also spoken in eastern Anatolia and certainly sharing a common origin with Hurrian (see Ch. 10, §1.1). The antiquity of Hurrian eclipses even that of the far more copiously attested Hittite, with the earliest known Hurrian text dating to c. 2000 BC. Hurrian, as already noted, and the closely related Urartian are both written with Mesopotamian cuneiform syllabaries (see Ch. 9, §2.1; Ch. 10, §2.1); a few Hurrian texts from Ugarit in Syria utilize the Ugaritic cuneiform consonantal script (see Ch. 9, §2.2; WAL Ch. 9, §2), while a small number of Urartian inscriptions are recorded with pictographic characters (see Ch. 10, §2.2).

With the appearance of Urartian, we have arrived in the Anatolia of the first millennium BC – the language is attested from the ninth to the seventh centuries before the Christian era. The Hurrian civilization had been overwhelmed by Hittites and Assyrians, and the Hittite Empire had subsequently collapsed – part of a general conflagration that seems to have swept across the eastern Mediterranean beginning c. 1200 BC in conjunction with the appearance of so-called “Sea Peoples,” mentioned in Egyptian and Akkadian documents, ushering in a dark age.

In the wake of the disappearance of Hittite and Hurrian language, there surface in the historical record not only Urartian, but several Indo-European Anatolian languages. Luvian reappears in southern Anatolia and northern Syria early in the first millennium, written with the hieroglyphic script (see Ch. 3, §§1–2), and the closely related language of Lycian (see Ch. 5) emerges in the middle of the millennium in southwestern Anatolia. Inscriptions in Lydian (see Ch. 6), a language spoken in western coastal Anatolia, appear c. 700 BC. The less-well attested Carian (see Ch. 7), whose speakers were sandwiched between Lycian and Lydian areas along the western coast of Anatolia, is evidenced as early as about the seventh century BC; according to Diogenes Laertius, Cleobulus, the philosopher and reported composer of the Midas tomb inscription, was claimed by some to be from Caria (rather than Rhodes, the Greek island lying off the southwest coast of Lycia). Each of these three western Anatolian languages – Lycian, Lydian, Carian – was written with its own alphabetic script – all adapted from the Greek alphabet. To this list of first-millennium BC Anatolian languages can be appended Pisidian and Sidetic, even more meagerly attested than Carian (see Ch. 2, §1; Ch. 6, §4.1).

And so we come again to Phrygian. While, like Hieroglyphic Luvian, Lycian, Lydian, and Carian, Phrygian (see Ch. 8) is an Indo-European language of Anatolia of the first millennium BC, it is not a member of that Indo-European subfamily dubbed “Anatolian” – i.e. that group to which Hittite, Luvian, Lycian, and so forth belong. Psammetichus’ experiment may have demonstrated to the Egyptians’ satisfaction that the Phrygians, and their language, enjoy existential primacy, but exactly where the speakers of that language were prior to their appearance in the historical record in central Anatolia in the eighth century BC (often in former Hittite areas) is a matter of uncertainty. The ancestors of the documented Phrygians are perhaps to be identified with the people called the Mushki, mentioned in Assyrian documents from the end of the second millennium BC.

Among Indo-European languages, Phrygian is most closely related to Greek (see Ch. 8, §1.5), and, in concord with this linguistic similarity, the Phrygians appear to have entered Anatolia from the Balkans (see Ch. 8, §1). An early Phrygian (that is, Paleo-Phrygian) inscription from a “Tomb of Midas” reads “Ates . . . has dedicated [me] to Midas, *lavagatas* and *vanax*” (see Ch. 8, §6). The Phrygian terms *lavagates* and *vanax* are matched by the Mycenaean Greek (on which, see WAL Ch. 25, §§1.2 and 2.1) forms *lāwāgetās* and *wanax* – titles

denoting respectively the “leader of the people” (apparently the commander of military forces) and the king, who alone seems to outrank the *lāwāgetās*, to judge by Mycenaean inscriptions in which the two terms co-occur. The older Phrygian documents, those preserving Paleo-Phrygian, are written with the Phrygian alphabet, an adaptation of the Greek alphabet; Neo-Phrygian, attested in the first centuries AD, is written with the Greek alphabet.

The Indo-European language of Armenian (see Ch. 11) first makes its appearance in eastern Anatolian regions formerly inhabited by the non-Indo-European Urartians. A group of the aforementioned Mushki has likewise been injected into discussions of Armenian origins. While the term *Armenia* (which is not the Armenian idiom of self-designation) is first attested in a Persian inscription of the late sixth century BC, documentation of the Armenian language is virtually non-existent for almost another thousand years (see Ch. 11, §1). In the early fifth century AD, an Armenian cleric named Mesrop is said to have devised an alphabet for spelling Armenian, with which an Armenian – Classical Armenian – translation of the Bible was produced (see Ch. 11, §§1–2). Armenian forms its own subgroup within the Indo-European family; its closest linguistic relatives are Greek (see WAL Chs. 24–25; on this relationship, see especially Clackson 1994) and Indo-Iranian (see WAL Chs. 26–30).

North of Armenia, on the northeastern lip of Anatolia, extending up into the highlands of Transcaucasia, Georgian, a Kartvelian language, is spoken. Early Georgian is attested in late antiquity, first documented at about the same time that Classical Armenian appears. The non-Indo-European Georgian shares distinct phonological features with the Indo-European Armenian (see Ch. 11, §1), revealing a prolonged period of Georgian–Armenian interaction; and Armenian speakers may well have provided the conduit by which Persian and Syriac vocabulary entered Georgian (see Ch. 12, §6). According to tradition, St. Mesrop, the cleric credited with creating the Armenian script, also devised the Georgian alphabet in the fifth century AD. “Nevertheless,” writes David Braund in his *Georgia in Antiquity* (p. 216):

... the Georgian language must have been current in Georgia centuries before it was written down in the fifth century, since it is not Indo-European and is undoubtedly indigenous ... A neglected passage of Fronto [Marcus Cornelius Fronto, tutor to the Roman emperor Marcus Aurelius, in the second century AD] may be the earliest allusion to spoken Georgian: Fronto imagines the Iberians [of eastern Transcaucasia] addressing the emperor Marcus in their own incomprehensible tongue. In Iberia, several languages might be used: there may be some substance to the medieval Georgian tradition that the kings of Iberia were fluent in six languages. In antiquity, as today, Transcaucasia was very much a multilingual region, as our sources regularly observe.

Colchis, in western Georgia, was colonized by the Greeks beginning in at least the sixth century BC, and possibly earlier (on the difficulty of identifying when “colonization” *per se* begins, see Braund 1994:87–118). The region is well known in Greek myth as the legendary locale to which the hero Jason and his Argonaut companions sailed in search of the Golden Fleece. Among the Greeks, Colchis enjoyed the reputation of being a place of great natural wealth; Strabo, the Greek geographer of the first centuries BC and AD, knows Colchis as a region rich in quality produce – “except for its honey, which tends to be bitter” – and famed for its manufacture of linen (*Geography* 11.2.17). It is Colchian linen, in fact, that Herodotus adduces as one piece of evidence – along with physical and cultural similarities – to support his claim that in origin “the Colchians are Egyptians” – a view that he reports to be held by both Colchians and Egyptians themselves (“when I began to reflect on this, I questioned both groups”; *Histories* 2.104). And concerning linen, the historian reports: “They [the Colchians] and the Egyptians alone work linen in their own particular way; and

they resemble each other in both overall lifestyle and in language. Colchian linen has been called ‘Sardonian’ by the Greeks, and, naturally, the linen that comes from Egypt is called ‘Egyptian’” (*Histories* 2.105). And so it seems that, again courtesy of Herodotus, we have come to the Egyptians, passing from Phrygians to Georgians, ending as we began.

But what of the tomb of the Phrygian king Midas – that one bearing the inscription by the Greek sage Cleobulus of Lindus – with its claims of a permanence coequal with that of the earth as humankind has known it from earliest ages? Where are that tomb, its inscription, and the bronze maid proclaiming her message to all who pass by? Where is the *language* of the king who lay buried in that tear-washed tomb – the first of all languages for Psamettichus? One is reminded of lines from Auden that seem to frame a response to such ponderings:

Time will say nothing but I told you so,  
 Time only knows the price we have to pay;  
 If I could tell you I would let you know.  
 ...  
 The winds must come from somewhere when they blow,  
 There must be reasons why the leaves decay;  
 Time will say nothing but I told you so.  
 from W. H Auden, “If I Could Tell You”

Simonides of Ceos, the Greek lyric poet of the sixth and fifth centuries BC, is more direct about the rash romanticism of the Rhodian sage (fragment 581):

What one, trusting in his wits, would commend Lindus-dwelling Cleobulus,  
 Who against ever-flowing streams and flowers of spring  
 And fiery sun and golden moon  
 And swirling seas would set a gravestone’s might?  
 All things pale before the gods. And stone  
 Even mortals’ hands do break and split.  
 That judgment was a fool’s.

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## CHAPTER 2

# Hittite

CALVERT WATKINS

## 1. HISTORICAL AND CULTURAL CONTEXTS

Hittite is a member of the Anatolian branch of the Indo-European family, and the earliest attested Indo-European language. Anatolian is generally regarded as the first branch to have separated from the other Indo-European languages. Aside from Hittite it includes Luvian (Cuneiform and Hieroglyphic) and Palaic, all from the second millennium BC, and Hieroglyphic Luvian, Lycian, Lydian, and the scantily attested Carian, Pisidian, and Sidetic in the first millennium BC.

The speakers of Hittite were in place in Central Anatolia by the nineteenth–eighteenth century BC, since a few words of the language (notably *išḫiul-* “contract”) appear in Old Assyrian documents from the merchant colonies like *Kārum Kaneš*, Hittite *Nešaš*, modern Kültepe. As an Old Hittite origin legend shows (Otten 1973), the Hittites regarded this city as their original home; it is the base of their designation of their own language, <sup>URU</sup>*nišili*, *nešumnili* “in Hittite,” literally “in the language of (the inhabitants of) Nešaš.” With the beginning of our documentation of the language proper we distinguish Old Hittite (seventeenth or early sixteenth century–c. 1500), Middle Hittite (c. 1500–c. 1375), and Neo-Hittite (c. 1375–c. 1200). Adherents of the “short chronology” would lower these dates somewhat, particularly at the upper end.

Speakers of what was to be the Anatolian branch of the Indo-European family apparently migrated into Asia Minor, probably from the Balkans across the Bosphorus, in the course of the third millennium BC. It is not unlikely, though not susceptible of proof, that these immigrating future Anatolians were already dialectally differentiated into (at least) Pre-Hittites, Pre-Palaites, and Pre-Luvians. On the Central Anatolian plateau Pre-Hittites came in contact with the autochthonous Anatolian Hattic speakers, from whose self-designation (KUR <sup>URU</sup>*Hatti* “land of Hatti,” cf. *ḫattili* “in Hattic”) the Hittites took their name, as well as many aspects of their culture and religion.

The earliest Hittite history is one of warring petty kingdoms, described in our earliest Hittite text, that of Anittas (Neu 1974), eighteenth/seventeenth century BC. These city-states were subsequently united to form the Old Kingdom under Hattusilis I and his adopted son Mursilis I (seventeenth/sixteenth century), a period of rapid Hittite expansion into Syria, Hurrian Mittani, and Western Anatolia, “making the sea the boundaries.” Internal dissension and pressure from the hostile nomadic Kaska people to the north brought about retraction of Hittite hegemony during the succeeding Middle Kingdom, c. 1500–1375. The New Kingdom or Empire was founded by Suppiluliumas I, c. 1375 (he spoke late Middle Hittite; his son Mursilis III spoke classical Neo-Hittite). This was the period of greatest expansion of the Hittites and their role on the international scene. The Hittite Empire



came to an abrupt end shortly after 1200, during the reign of Suppiluliumas II, with the destruction of Hattusas by an unknown people, in all likelihood part of the general upheaval in the Eastern Mediterranean area caused by the “Peoples of the Sea,” the “*Šikalayū* who live in ships,” the people from the land of *Šikila*, as Suppiluliumas II referred to them in a letter to a prefect of Ugarit (Dietrich and Loretz 1978).

The Hittite language is preserved for us on clay tablets written in a cuneiform syllabary, the archives of the palace or central authority in the capital city of Hattusas (Boğazköy, now Boğazkale), and a few other urban centers like Maşat, Ortaköy, and Kuşaklı, the tablets themselves written over the period from the seventeenth/sixteenth to the end of the thirteenth century. One of the important functions of the Hittite “state” was to assure the regular performance of ritual, and the correct preservation of the appropriate words and actions of ritual procedure. The great majority of our texts deal with religion and the administration of cult, festivals, and both public and private rituals, as well as magic, oracles, and divination. Our texts also include the Hittite political archives, treaties, political and some personal correspondence, land grants, as well as historical texts and annals (by regnal year) of individual rulers (see Beckman 1996). We find also “instructions” for religious and secular administrations and military personnel, all – like the treaties with foreign powers – regarded as engagements of personal fealty and labeled simply *išhiul-* “contract.” We have a highly original law “code” composed and written down originally in the Old Kingdom, together with later copies (Hoffner 1997), but only a few documents dealing with the administration of public or private justice. Literary texts are primarily mythological (Hoffner 1990) in character, and both native compositions and translations from Hittic, Hurrian, and Sumero-Akkadian sources. The archives also include foreign-language cultic material, sometimes with Hittite translation, in Hittic, Hurrian, Sumerian and Akkadian, Cuneiform Luvian, and Palaic, attesting the significant cultural influence of all of these. For a catalogue of the Hittite texts then known see Laroche 1971 and supplement.

Hittite was clearly the language of the ruling classes, of public and private administration, and of the army, as our texts show. The changes over the four or five hundred years of our documentation of Hittite are entirely consistent with the development of a spoken language. At the same time, the extensive Luvian elements in Hittite personal names, the practice in the later empire of setting up large public inscriptions in Hieroglyphic script and in the Luvian language, and the frequency of Luvian loanwords in Hittite texts, often marked as foreign by the prefixation of the *Glossenkeil* (ε), would point to widespread use of Luvian and bilingualism.

Dialectal variation is virtually nonexistent in Hittite, not surprisingly since our texts are probably all produced in the same tradition of professional scribes. One or two texts like KUB 48.69 point to genuine dialect variation, but by and large they are remarkably homogeneous, as is to be expected in a literary language.

## 2. WRITING SYSTEMS

Our preserved Hittite texts were written by professional scribes on clay tablets, impressed with a stylus and then baked (plus one bronze tablet with signs hammered in). The writing system is the Mesopotamian cuneiform syllabary of the second millennium, borrowed probably in Northern Syria from a Peripheral Akkadian (see WAL Ch. 8 §1.1) scribal school source, in the seventeenth century at the beginning of the Old Kingdom period. The signs in use in Boğazköy most closely resemble the Old Babylonian variants (Labat 1976).

The Old Assyrian variety of the merchant colonies in central Anatolia at an earlier period left no trace on Hittite literacy.

In addition to the cuneiform written by professional scribes on clay tablets, the Hittites also made use of another syllabary, the hieroglyphic. This syllabary, which made extensive use of logograms as well, was used for monumental carved rock inscriptions in the Luvian language in the empire (and continued in Southeastern Anatolia and Syria to c. 750 BC), and from the time of the Old Kingdom on, for names and titles on seals. The latter were doubtless logographic and not “in” any language, but read in Hittite context as Hittite, like numerals in modern scripts. The same may have been true for the monumental public inscriptions in the Empire, and for the wooden tablets inscribed with hieroglyphs the existence of which is evidenced in text references. For discussion of the hieroglyphic script see Chapter 3.

The cuneiform syllabary notes syllables of the structure V (the vowels *a, e, i, u*), CV (i.e., consonant + vowel), VC, and some CVC. The sets of CV and VC signs are incomplete for inherent *e*, and CVC signs distinguish only the vowels *a, i, u*, and these not always. For the cuneiform script, see Appendix 1.

The writing system also makes use of a number of logograms from Sumerian (*Sumerograms*) and Akkadian (*Akkadograms*, written syllabically). The Hittitological convention is to transliterate syllables, writing Hittite in lower case, Sumerograms in roman capitals, and Akkadograms in italic capitals: *at-ta-aš* “father,” *e-eš-zi* “is,” LÚ “man,” LUGAL “king,” BI-IB-RU “rhyton,” QA-TAM-MA “as follows.” *Narrow transcription* separates each sign of a word by a hyphen, as in *at-ta-aš, e-eš-zi*; *broad transcription* (with greater phonetic accuracy) erases the hyphens and deletes one of the identical vowels of CV–VC sign sequence, as in *attaš*, and if two vowels remain, marks a macron, as in *ēšzi*.

Akkadograms and Sumerograms sometimes alternate with syllabic Hittite spellings in duplicate texts, which shows that they functioned as rebus writing, purely graphic variants of the Hittite words actually pronounced, just as the Sumerograms were read and pronounced as Akkadian in the source script of the Hittite writing system. The same conclusion is indicated by the common practice of following a Sumerogram with a phonetic complement which may serve to indicate grammatical endings. Thus, for example, the Sumerogram DINGIR “god” may be followed by the Akkadian phonetic complement LIM, conventionally transliterated superscript DINGIR<sup>LIM</sup>, to write the (Old) Akkadian genitive singular ILIM. So read in Akkadian, the whole in Hittite may receive a further phonetic complement written syllabically, DINGIR<sup>LIM</sup>-*na-aš*, to write the genitive singular of the word for “god” in Hittite, *šīunaš*.

A Sumerian scribal practice, continued as graphic convention in Akkadian and then in Hittite, is the use of *determiners* prefixed to words and names to classify them by semantic category. These are conventionally transliterated superscript, and were doubtless not pronounced in Hittite (or Akkadian). They indicate categories like male person (<sup>m</sup> or <sup>l</sup>), female person (<sup>f</sup>), god/goddess (<sup>D</sup> abbreviated for <sup>DINGIR</sup>), city (<sup>URU</sup>), stone (<sup>NA<sub>4</sub></sup>), wooden object (<sup>GIŠ</sup>), and the like.

A further, specifically Hittite graphic convention is to mark grammatical cases of nouns or names written as logograms by preceding them with an Akkadogram. Thus, ŠA (Akk. “the one of”) marks genitive; I-NA (Akk. “in”) indicates dative-locative, and “allative” with inanimates; A-NA (Akk. “to”) indicates dative with animates; IŠ-TU (Akk. “from, by”) marks both ablative and instrumental. Proper names preceded by determiner or Akkadographic case-marker are frequently, though not always, unmarked for case and thus function by graphic convention as quasi-logograms.

We may illustrate these spelling conventions with Figure 2.1 (Bo 91/1314), a seal of the founder of the empire (from Otten 1995). The outer and inner ring legends are cuneiform:





**Figure 2.1** The seal of Suppiluliumas I  
 NA<sub>4</sub> KIŠIB mŠu-up-pi-lu-li-u-ma LUGAL GAL UR.SAG  
 DUMU mDu-ut-ḫa-li-ya LUGAL GAL UR.SAG  
 Seal (of) Suppiluliumas, great king, hero,  
 Son (of) Duthaliyas, great king, hero.

The inner field in hieroglyphs shows the royal emblem of the winged sun, corresponding to the title <sup>D</sup>UTU<sup>ŠI</sup> for <sup>D</sup>ŠAMŠI “my sun,” over the signs right and left MAGNUS REX “great king” (hieroglyphs are conventionally transcribed in Latin) flanking the three signs of the name: PURUS.FONS-*ma/i* for Suppi-luli-(u)ma (PURUS = Hittite *šuppi-* “pure, sacred,” FONS = Hittite *luli-* “pond, spring,” with phonetic complement). Under the name as space-filler is the (cuneiform) Sumerogram TI “life,” upside down.

In the four to five hundred years of its documented history the Hittite cuneiform writing system and scribal practices did not undergo any massive or dramatic changes. But small changes in the shapes of certain signs and the general appearance of the tablets and their *ductus* over this period have enabled scholars to date the tablets fairly precisely to the early or late Old, Middle, and Neo-Hittite periods respectively. The original impetus was given by the discovery in the early 1950s of a tablet fragment (the Zuckraši-text, Laroche CTH 15) in a stratigraphically certain Old Kingdom archaeological context; its characteristic *ductus* was found to recur on many of the tablets already unearthed from the palace archives. Those tablets exhibiting the old *ductus* were then seen to preserve certain characteristic features of language and orthography which could be identified as archaic. The periodization of our corpus of texts and the attendant conclusions about the history of the Hittite language have been the subject of intense investigation by philologists and linguists in the latter part of the twentieth century, and the results are by now generally accepted. We can distinguish paleographically Old, Middle, and New Script (OS, MS, NS); original compositions from these periods are in Old, Middle, and Neo-Hittite (OH, MH, NH). Documents were often recopied later than their composition, such that we can classify the tablets, following the

convention of *The Chicago Hittite Dictionary*, as early or late OH/OS, OH/MS, OH/NS, MH/MS, MH/NS, NH/NS.

At the time of the German archeological excavations at Boğazköy under Hugo Winckler beginning in 1906, which unearthed the initial collection of tablets, the Akkadian cuneiform writing system had already been deciphered. The Hittite tablets could therefore be “read,” i.e., transliterated, but not understood. The actual decipherment of the language and its identification as Indo-European was the work of a young Czech Assyriologist, Bedřich (Frédéric) Hrozný, during World War I. His first-hand account of his decipherment can be found in the article “Hittite language” of *The Encyclopaedia Britannica* (14th edition).

### 3. PHONOLOGY

#### 3.1 Graphic considerations

Any discussion of the phonological system of Hittite must begin with consideration of the distinctions made by the cuneiform writing system. The phonological structure of Hittite was clearly different from that of the Semitic language from which the cuneiform was first borrowed. For the details of what follows see Melchert 1994.

Using the symbols V = vowel, C = consonant, we may state that the cuneiform syllabary had signs of the structure V, CV, VC, and CVC (see the above discussion of the Hittite writing systems). The vowels were *a, e, i, u*, and the consonants of the CV series *p, t, k, q, b, d, g, ħ, š, s, z* (an affricate *tš*, Semitic *š* and *z*), *m, n, r, l, w, y*. CV signs with inherent vowel distinguish *a, i, u*, but not all possibilities with inherent *e* are present: thus *ta, da, ti, di, tu, du*, and *te* but not *\*de*, and only *ya, wa* (and secondarily acrophonic *wi*<sub>5</sub> after GĒŠTIN “wine,” Hitt. *wiyana-*). The VC series made fewer distinctions, merging voice (*at* = *ad*) and often ignoring inherent *e* (*iš* vs. *eš*, but only *im*, for example), and the CVC series was less systematic (e.g., *šap* but no *\*šak*). For writing, Hittite *ka* and the rarer *qa* (*ka*<sub>4</sub>) are treated as equivalent, and with few exceptions *š* (*a*, etc.) is used exclusively for writing the single Hittite sibilant, to the exclusion of *s* (*a*, etc.).

The Hittites did not utilize the Semitic orthographic opposition of voiced : voiceless (*da* : *ta*, *ga* : *ka*, etc.), but rather, most clearly in intervocalic position, opposed simple versus geminate (double) consonants, thus *a-ta* (or *a-da*) versus *at-ta* (or *ad-da*), *a-ħa* versus *aħ-ħa*, etc., probably pointing to a phonological contrast of lax : tense (lenis : fortis) respectively. In the case of *š* and the liquids and nasals simple versus double consonants likewise contrasted: *a-na* versus *an-na*, *a-ša* versus *aš-ša*. In initial position the same word could in principle be written with either the voiced or the voiceless sign, the choice governed by scribal convention, for example, third singular *da-a-i* “puts” but third plural *ti-ya-an-zi* “they put.” Previously regarded as arbitrary, this fact has now been explained as indicating a merger of inherited voiced : voiceless (lax : tense) stops in initial position, with generalization of the voiceless or tense stop. Word-finally, the voiced or lax stops were generalized, as is clear from spellings with simple stop before enclitic: *pait* = *as* [paydas] “went he,” *natid* = *a* [nadīda] “but with an arrow.”

#### 3.2 Consonants

The Hittite inventory of phonemic consonantal segments distinguishes four places of articulation (labial, apico-dental, velar, and labiovelar, the last-named usually written with the *ku* sign before a vowel or consonant, but occasionally *uk* before a consonant), five