

Hittite Chronology

Gary Beckman*

The sad truth is that we will never be able to establish a satisfactory absolute chronology for the entire second millennium BC in Anatolia, since the available written records are just not adequate for the task. The relevant sources include: 1) the cuneiform letters and business records of the Old Assyrian merchant colonies (Akkadian *kārū*) located at Kültepe/Kaniš and several other towns for the first half of the second millennium, 2) the cuneiform texts of most varied contents from the Hittite capital of Boğazköy/Ḫattuša and a few additional sites for the sixteenth or fifteenth through the twelfth centuries, and 3) the preponderantly monumental hieroglyphic Luwian inscriptions scattered throughout central and eastern Anatolia, as well as northern Syria, for the thirteenth through the eighth centuries.

Only the first of these groups of epigraphic material, which is in any case the product of aliens resident in Anatolia, employs an internal chronological system of any sort. As at home, the Assyrian traders dated their documents according to the yearly tenure of eponym officials (Akkadian *līmū*). While the scribes did maintain chronologically ordered lists of these office holders in order to facilitate their administrative tasks, up until now only a fragmentary copy of an “eponym chronicle” for the Old Assyrian period from Mari has been published,¹ although an eponym list has recently also been found at Kaneš.²

Thus at present we can do little more than establish the relative placement of the Old Assyrian eponyms, and must often be satisfied simply with assigning the *līmū* to either the Kültepe II or Ib archaeological period. A loose linking of the latter era as a whole to the absolute chronology of Mesopotamia has been made possible by the discovery of seal impressions of Šamši-Adad I at the contemporary merchant settlement of Acemhöyük,³ for it is known that the last years of this king coincided with the early part of the reign of Ḫammurabi of Babylon.⁴ Nonetheless, to judge from the small percentage of the *kārum* documents that have been published, the potential importance of the Old Assyrian texts for Anatolian chronology is not great, since they seldom contain information of direct significance for political history.

* University of Michigan

¹ Birot 1985.

² Veenhof 1985, Whiting 1990. Professor Veenhof has informed me that he will soon publish the Kültepe list. See his contribution to this symposium.

³ Özgüç 1980, 64-65.

⁴ Šamši-Adad died in Ḫammurabi year 12, 13, or 17. See Charpin and Durand 1985, 306-8, and Gasche *et al.* 1998, 64.

In contrast, the cuneiform texts of the later Hittite state constitute an historical source of the utmost value, but they make use of no chronological system.⁵ I have always found this nothing short of astonishing — How did a complex society function without a generally accepted method for reckoning time? I can only assume that such a system was employed in the vanished wooden tablets⁶ that seem to have been the medium for most Hittite economic records. Even in their “Annals,” Hittite kings do not assign events to numbered regnal years; the annual segments of the narrative are simply separated from one another through the use of a phrase such as “in the next year.”⁷ For all of Hittite history it is possible to place particular occurrences in a specific regnal year of a monarch only for the first decade of Muršili II, since we are certain that the preserved text of his “Ten Year Annals” commences with his initial year of rule.⁸

A further difficulty in evaluating the preserved Hittite records arises from the propensity of Hittite monarchs to assume one of a rather limited number of throne names,⁹ and from the failure of the texts to differentiate among rulers with identical names by means of either ordinal numbers or epithets.¹⁰ Thus, only reference to a well-known foreign king or deduction based upon the gradually developed understanding of the course of Hittite history has allowed scholars to distinguish, for example, a text written under Ḫattušili I (seventeenth or sixteenth century) from one composed by the scribes of Ḫattušili III (mid-thirteenth century).

It must be stressed that the so-called “king lists”¹¹ of the Hittites are not particularly helpful in sorting out this confusing situation. These texts were not chronographic tools or historiographic compositions, but rather sacrificial rolls for the royal ancestor cult.¹² Although for the most part they do seem to present names in correct chronological order, the lists omit several known monarchs,¹³ and also include without differentiation members of the royal clan other than kings.¹⁴ And while they tell us how many sheep and oxen a person’s ghost regularly received, they do not indicate when or for how long he might have sat upon the Hittite throne.

A relatively recent advance with implications for the investigation of Hittite chronology has been the identification of paleographic criteria according to which, in principle, a manu-

⁵ Otten 1967, 58, adduces two texts mentioning a “year of Ḫuḫazalma,” which he speculates may be traces of a chronological system based either on eponyms or on year names. Since no further such “dates” have been noted, however, I think it more likely that the “year of Ḫuḫazalma” is a nonce coinage rather than the relic of a system of dating. Cf. also de Martino 1996, 65-66.

⁶ See Marazzi 1994.

⁷ E.g., *ana balāṭi* in the Akkadian-language version of the “Annals” of Ḫattušili I (CTH 4.I): *KBo* 10.1 obv. 6, 10.

⁸ CTH 61.I. For the text see Goetze 1933.

⁹ Three Muršilis, four Tudḫaliyas, etc. See Chart I.

¹⁰ Note only ^mKÛ.GA-TÚ[L]-*ma MAḪ-RU-Ú*, “Šuppiluliuma the Former/Elder/First,” *KUB* 31.106 + *KUB* 23.44 (CTH 124.A) ii 12’.

¹¹ CTH 661. See Otten 1951 and Haas 1994, 247-48.

¹² Similar texts have been recovered at Ebla and Ugarit. See Schmidt 1996, 15ff., 67ff., with references to previous studies.

¹³ The early monarchs Zidanta I, Muwattalli I, and Taḫurwaili all suffered *damnatio memoriae*. The lists do not extend beyond Muwattalli II of the Empire period, so we do not know how Urḫi-Teššub and Kurunta would have been treated.

¹⁴ E.g., Kantuzili (*KUB* 11.7 i 8), PU-Šarrumma (i 10), Pawaḫtelmaḫ (i 11), Pimpira (i 13).

script may be assigned a date of inscription within a period of about fifty years. But even here the situation is complicated by the fact that Hittite archivists on occasion recopied older records, and in the process tended to employ orthographic and grammatical standards current in their own time rather than reproduce the sign shapes, orthography, and textual layout of their source documents. There is therefore ample scope for disagreement among experts as to the dating of a particular tablet. Indeed, a major debate in the last quarter century has turned on the question of whether an important group of closely related historical texts is to be placed in the mid-thirteenth century, as had been traditionally held, or reassigned to the late fifteenth and early fourteenth centuries.¹⁵ At this point, the great majority of Hittitologists have accepted the redating of these so-called “floating texts” of Tudḫaliya and Arnuwanda to the earlier Middle Hittite era.

The sad failure of the Hittite cuneiform tablets to present a rigorous chronological framework is all the more unfortunate, since the archives of Boğazköy/Ḫattuša contain material spanning the “Dark Age”¹⁶ of the mid-second millennium, which is poorly documented in other areas of the ancient Near East. Despite its inherent limitations for the task, the temporal skeleton of Hittite history has nonetheless frequently been adduced in attempts to clear up difficulties in the chronologies of Syria and Mesopotamia. I refer, of course, to the influential studies of Albrecht Goetze and of Heinrich Otten. O. R. Gurney, Gernot Wilhelm, and the late H. G. Güterbock have also made significant contributions to this discussion. See the sources cited in the Bibliography.

As for the hieroglyphic Luwian inscriptions produced by the “Neo-Hittite” states of Anatolia and Syria of the close of the second millennium and the early centuries of the first millennium, these also lack an internal chronological system. The absolute chronology of these successor states to Ḫatti is dependent upon synchronisms with the chronology of Assyria, which is well established for this period. Unfortunately, in times of their prosperity, the “Neo-Hittite” polities seldom find mention in Assyrian records, which discuss primarily their absorption into the Assyrian empire over the course of the ninth and eighth centuries. Hence we can only hope to establish a relatively loose chronology for this region in the early Iron Age, reconstructed by means of the historical evaluation of the hieroglyphic Luwian sources. In the past, chronological ordering of the “Neo-Hittite” monuments has been based chiefly upon necessarily impressionistic and inexact stylistic analysis of their sculptural elements.¹⁷ But substantial advances in the study of “Neo-Hittite” history are now to be expected, thanks to significant progress in the philological study of the hieroglyphic Luwian texts and the expected publication of a complete corpus of the Iron Age material.¹⁸ But the yield of chronological information from this corpus is unlikely to be great.

Having painted a rather pessimistic picture of the possibilities for establishing an absolute chronology for ancient Anatolia, it is time now for me to take up the challenge and examine the limited relevant information provided by the cuneiform Hittite sources. In particular

¹⁵ See Houwink ten Cate 1970 and Heinhold-Krahmer, Hoffmann, *et al.* 1979.

¹⁶ Landsberger 1954.

¹⁷ See Orthmann 1971.

¹⁸ Hawkins forthcoming.

I will investigate whether the Anatolian data can be brought into harmony with the new chronological scheme proposed by Professor Gasche and his co-authors.¹⁹ The evidence may be grouped into four categories: 1) *Distanzangaben*, or statements in ancient texts that so many years had passed between two narrated events, or between a single event and the narrative present, 2) astronomical data, 3) synchronisms of Hittite monarchs with rulers in other cultures of the ancient Near East for which more satisfactory chronological skeletons have been established — that is, with those of Egypt or of Mesopotamia (Babylonia, and more importantly, Assyria), and 4) generational reckoning.

I am aware of only a single *Distanzangabe*: In a cultic text of Tudḫaliya IV, the religious center of Nerik is said to have lain in ruins for 400 or 500 years — the figure is in an unclear erasure²⁰ — since the reign of a king Ḫantili.²¹ Whether the figure is 400 or 500, whether the abandonment of the site is meant to have lasted until the time of Tudḫaliya himself, or only up until that of his father Ḫattušili, and whether Ḫantili I or Ḫantili II was Great King when the town was lost to Ḫatti, this time span is far too great to be accurate and must be discounted.

Astronomy comes to our assistance in one significant instance: In a prayer of Muršili II it is reported that while that king was on campaign against the land of Azzi, the sun “gave an omen.”²² If, as seems probable, this refers to an eclipse visible in the northern portion of Anatolia, then the celestial occurrence most likely to be identified with this omen took place in 1312.²³ Muršili’s “Annals” inform us that he conducted military operations against Azzi in both his ninth and tenth years. Therefore we may assign absolute dates to the events narrated in the “Ten Year Annals”²⁴ with a margin of error of only one year, the source of uncertainty being whether the eclipse occurred during the first or second campaign against Azzi. In particular, Muršili’s accession to the throne should be dated to 1322 or 1321.²⁵

The least problematic approach to providing absolute dates to Hittite kings is through the recognition of synchronisms. It must frankly be admitted, however, that for practically none of these synchronisms can we state in just which regnal year of the Hittite ruler contact was made. In many instances we are also unable to identify the year of reign of the foreign partner.

The more important synchronisms with Egypt (see Chart 2) are: the dispatch by Šuppiluliuma I of a letter to the pharaoh Ḫuriya (probably Smenkhkare²⁶) congratulating him on his accession²⁷ (1338, according to von Beckerath’s most recent systematic presentation of Egyp-

¹⁹ 1998.

²⁰ Goetze 1951, 24-25, with n. 26; Carruba 1988, 200.

²¹ *KUB* 25.21 (*CTH* 524) iii 1-4. See von Schuler 1965, 186-87.

²² *šakiyahh-*, *KUB* 14.4 (*CTH* 70) iv 24. See Huber n. d.

²³ But it must be pointed out that solar eclipses are of not infrequent occurrence, and that there are a number of others that would fit equally well the rather vague description given in the “Annals.”

²⁴ Since many portions of the “Extensive Annals” (*CTH* 61.II) have either not yet been recovered or placed in their proper sequence within the composition, we may not similarly date occurrences from later in the rule of Muršili.

²⁵ I prefer the latter alternative because this gives us more time between the date established below for the diplomatic contact of Šuppiluliuma I with the widow of Tutankhamon and the succession of Muršili.

²⁶ Bryce 1990, 103.

²⁷ *EA* 41 (*CTH* 153), translated in Moran 1992, 114-15.

tian chronology²⁸), the receipt by the same Hittite king of an embassy from the widow of the recently deceased Niphururiya (probably Tutankhamon) requesting a son in marriage (1323),²⁹ the Battle of Qadesh fought between the forces of Ramses II of Egypt and those of Muwattalli II of Hatti in the fifth year of the former ruler (1275),³⁰ and the conclusion by the same pharaoh in his twenty-first year (1258) of a treaty of peace and alliance with Hattušili III.³¹ Furthermore, Ramses received a daughter of Hattušili in marriage during his thirty-fourth year (1245),³² in connection with which the two courts had previously exchanged an extensive correspondence.³³ This pharaoh had earlier given refuge to the exiled Hittite king Urḫi-Teššub (Muršili III), but no specific regnal years can be associated with this hospitality.

Egyptian sources also reveal that Ramses' thirteenth son and successor Merneptah sent grain to Hatti to relieve a famine.³⁴ Tudḫaliya IV was almost certainly Hittite Great King by this time, but we cannot place this act of generosity on the part of the Egyptians in a definite year or even a period within his reign.

Finally, a *terminus ante quem* for the destruction of the Hittite empire has been recognized in an inscription carved at Medinet Habu in Egypt in the eighth year of Ramses III (1175).³⁵ This text narrates a contemporary great movement of peoples in the eastern Mediterranean,³⁶ as the result of which "the lands were removed and scattered in the fray. No land could stand before their arms, from Hatti, Kode, Carchemish, Arzawa, Alashiya on, being cut off."³⁷

I know of only two close synchronisms between Hatti and Mesopotamia: Muršili I captured Babylon and brought an end to the reign of Samsuditana and the First Dynasty of that city in the thirty-first year of the Babylonian ruler (1499 by the new interpretation of Gasche *et al.*, 1595 by the Middle Chronology), and Tudḫaliya IV of Hatti fought the Battle of Niḫriya with Tukulti-Ninurta I of Assyria in the first or second year of the latter (c. 1239).³⁸ In addition, we know that Hattušili III corresponded with the Kassite kings Kadašman-Turgu (reigned 1276-1259, according to Gasche *et al.*) and Kadašman-Enlil II (1258-1250) of Babylon,³⁹ Urḫi-Teššub with Shalmaneser I of Assyria (1269-1241),⁴⁰ Tudḫaliya IV apparently

²⁸ 1997, 190.

²⁹ "Deeds of Šuppiluliuma," Fragment 28 (Güterbock 1956, 94-98). For the identity of Niphururiya see Bryce 1990. Note that Bryce 1989 had placed at the end of Šuppiluliuma's reign the "Second Syrian War" resulting from the death of the son whom the Great King ultimately dispatched to Egypt. If we follow von Beckerath in dating the death of Tutankhamon to 1323, this still leaves sufficient time before Muršili's accession in 1321 to accommodate the turn-around of the Hittite diplomats in Egypt, the ill-fated journey of Zannanza, the Hittite invasion of Egyptian territory in the Levant, and the resultant plague that claimed the lives of Šuppiluliuma and his first successor Arnuwanda I.

³⁰ Murnane 1985.

³¹ Beckman 1999, 96-100, No. 15.

³² Pintore 1978, 33-46.

³³ Edited in Edel 1994.

³⁴ Wainwright 1960.

³⁵ Another fixed point for dating the destruction of the Hittite empire is provided by the tablet *Emar* 6, 26, dated to the second year of the Kassite king Melišipak, 1180/1187 BC — see Arnaud 1975, 88-89.

³⁶ See Noort 1993.

³⁷ Quoted in Dothan and Dothan 1992, 23.

³⁸ Grayson 1987, 272, Text 23, ll. 27-30. See also Singer 1985.

³⁹ Beckman 1999, 138-43, No. 23, especially §4.

⁴⁰ *CTH* 171, edited and discussed by Hagenbuchner 1989, 260-64.

also with the same king⁴¹ and certainly with Tukulti-Ninurta I (1240-1205).⁴² These synchronisms with Shalmaneser would seem to indicate that the reign of Ḫattušili fell entirely within that of the Assyrian monarch.

As should be obvious by now, the information provided by Hittite sources for the question of absolute chronology is rather scanty. To summarize: For the late fourteenth and the entirety of the thirteenth centuries we have five rather securely dated events that can be placed somewhere within the reign of a particular monarch, and two whose dates can be established within a year or two. The only earlier occurrence in Hittite history to which a date might currently be assigned through synchronism is the raid of Muršili I on Babylon, but that date is precisely what is at issue in this conference.

The sole possibility of utilizing Hittite historical data to test the re-dating proposed by Gasche *et al.* is therefore through the consideration of the generations of the royal family.⁴³ See Chart 1 for a list of all attested Hittite monarchs. Arabic numerals here indicate the order in which the individuals occupied the throne, which in the cases of Nos. 10 and 25 is still somewhat uncertain. In the majority of cases succession was from father to son, sometimes adopted.⁴⁴ But this was by no means a hard and fast rule, and on a number of occasions brother followed brother. Usurpations and civil war further complicated the situation. In several instances we are ignorant of the precise relationship of a king to his predecessor — see Nos. 10, 12, 14. I have simply grouped the kings according to the generation to which they belonged, indicated by Roman numerals. Since No. 3 was the grandson of No. 2, no member of generation III became king.

The line of succession indicated here is now fairly certain. It is extremely unlikely that any king who reigned more than a year or two is absent. On the other hand, it is doubtful that one or more of these nineteen or twenty generations could be eliminated with any confidence. Ḫuzziya of generation 0 may have been king only of Kuššar, ancestral home of the dynasty, and the murder of Tudḫaliya III, “the younger” (No. 17a*), probably took place before he actually assumed rule, but resolution of their questionable status as kings of Ḫatti cannot affect the generation count. Although the existence of rulers Nos. 11-13 of the Middle Hittite period had once been questioned,⁴⁵ recent epigraphic discoveries have demonstrated beyond doubt that they indeed lived and ruled.⁴⁶ The filiation of Nos. 12 and 14 is unknown, and that of No. 13 uncertain, but it is unlikely that Ḫantili II through Muwattalli I should be collapsed into one or even two generations,⁴⁷ because Tudḫaliya I relates in his treaty with Sunaššura that both his father and grandfather — the latter in all probability Zidanta II — had earlier

⁴¹ CTH 175. For an edition, see Otten 1959, 66-67, but cf. Hagenbuchner 1989, 441-42.

⁴² CTH 177.1. See Otten 1959, 65.

⁴³ It no longer seems that there was a change of dynasty in the Middle Hittite period. Tudḫaliya I was probably the son of Ḫuzziya II. Note that cruciform seal (Dinçol *et al.* 1994) seems to stress continuity in the ruling family. This is not to say that the claims of filiation made here and elsewhere in the Hittite sources are always truthful.

⁴⁴ See Beckman 1986.

⁴⁵ Cf. Otten 1968, 8-9.

⁴⁶ Otten 1991.

⁴⁷ Cf. Klingner 1995, 242-43.

had dealings with the southern Anatolian land of Kizzuwatna.⁴⁸ Note especially that the three generations of Hittite kings that I have reconstructed for this portion of the succession would correspond to four known kings of Kizzuwatna: Pilliya,⁴⁹ Paddatiššu,⁵⁰ Talzu,⁵¹ and Sunaššura.

For chronological reckoning, a generation should be counted as between twenty and thirty years. As O. R. Gurney has explained,⁵² the eldest child of no man, including a king, is likely to be born before the father has attained at least the age of eighteen years.⁵³ Nor would a ruler pass on his position to his offspring immediately upon the latter's birth. It is of no importance for our purposes whether a single monarch held his office for a long or short period, or whether he was succeeded by a son or by a brother, or even by an uncle. Over a number of reigns, generational tenure will average out to reflect the underlying biological realities. M. B. Rowton has determined empirically that the average length of generation for rulers in the ancient Near East and Egypt was about twenty-five years.⁵⁴

Let us then see how the newly calculated date of 1499 for Muršili's razzia to Babylon matches up with the evidence of the Hittite royal succession. If we make the most favorable assumptions, namely 1) that the king was cut down soon after his triumphal return to Ḫatti — for which, by the way, there is no evidence⁵⁵ — and 2) that the reign of his murderer was a short one, we may posit that the representative of Generation V, Zidanta I, ascended the throne in c. 1490 B.C.E. 169 years separate this event from the assumption of power by Muršili II in 1321 B.C.E. Divided among eleven generations, this yields an average tenure of 15.36 years per generation, which is hardly credible in light of the considerations above. Turning the calculation around, this time period could accommodate six generations of 31.5 years, seven of 24.14 years, or eight of 21.12 years. But there is absolutely no question of eliminating three generations from the list of Hittite monarchs, let alone four or five.

Applying this same test to the traditional chronologies,⁵⁶ we arrive at the following figures (see Chart 3): High Chronology, 29.18 years per generation; Middle Chronology, 24.01 years per generation; Low Chronology, 18.27 years per generation. I must conclude that the Anatolian evidence does not favor the suggested downward revision of the date of the fall of Babylon. From my viewpoint, the Middle Chronology best fits the evidence, although the High Chronology would also be possible.

⁴⁸ Beckman 1999, 17-26, No. 2.

⁴⁹ *CTH* 25, edited in Otten 1952.

⁵⁰ *CTH* 26, edited in Meyer 1953.

⁵¹ *KUB* 40.2 (*CTH* 641), edited in Goetze 1941, 61-71.

⁵² 1974, 108-09.

⁵³ At the other end of the spectrum, an elderly ruler can— and often does— sire a child with a much younger wife or concubine. This has no effect on the case presented here, however, because my argumentation concerns the *minimum* number of years to be allotted to a particular generation.

⁵⁴ Rowton 1952, 21.

⁵⁵ Cornelius 1973, 113 sees such an end for the conqueror, but cf. Otten 1968, 22, n. 2, and Wilhelm 1991, 471, n. 4.

⁵⁶ Rowton 1973, 231-33.

CHART 1—KINGS OF ḪATTI

<u>Generation</u>		<u>Date</u>
0		
I	(0) Ḫuzziya	
II	(1) Labarna I <i>son of 0</i>	
IV	(2) Labarna II = Ḫattušili I <i>nephew of 1</i>	1499/1595 ^a
V	(3) Muršili I [†] <i>grandson of 2</i>	(4) Ḫantili I <i>brother-in-law of 3</i>
VI	(5) Zidanta I [†] <i>son-in-law of 4?</i>	
VII	(6) Ammuna <i>son of 5</i>	
VIII	(7) Ḫuzziya I [◆] <i>son of 6?</i>	(8) Telipinu <i>brother-in-law of 7</i>
IX		(9) Alluwamna <i>son-in-law of 8?</i>
X		(10) Taḫurwaili [◆] <i>unknown</i>
XI		(11) Ḫantili II <i>son of 9</i>
XII		(12) Zidanta II <i>unknown</i>
XIII	(13) Ḫuzziya II [†] <i>son of 12?</i>	(14) Muwattalli I [†] <i>unknown</i>
XIV		(15) Tudḫaliya I <i>son of 13</i>
XV		(16) Arnuwanda I <i>son-in-law of 15</i>
XVI	(17) Tudḫaliya II <i>tuhukanti</i> = Tašmi-šarri <i>son of 16</i>	
XVII	(17a*) Tudḫaliya III, "the younger" [†] <i>son of 17</i>	(18) Šuppiluliuma I <i>son of 17</i>
XVIII		
XIX	(19) Arnuwanda II [✖] <i>son of 18</i>	(20) Muršili II <i>son of 18</i>
	(21) Muwattalli II <i>son of 20</i>	(23) Ḫattušili III <i>son of 20</i>
	(22) Muršili III = Urḫi-Teššub [◆] <i>son of 21</i>	(24) Tudḫaliya IV <i>son of 23</i>
		(25) Kurunta [◆] = Ulmi-Teššub <i>son of 21?</i>
	(26) Arnuwanda III [✖] <i>son of 24</i>	(27) Šuppiluliuma II <i>son of 24</i>

key

† = assassinated

✖ = died young

◆ = driven from throne

datable events

a. Fall of Babylon (Muršili I)

b. Letter to Smenkhkare (Šuppiluliuma I)

c. Request from widow of Tutankhamon (Šuppiluliuma I)

d. Accession of Muršili II

e. Solar eclipse (Muršili II)

f. Battle of Qadesh (Muwattalli II)

g. Egyptian-Hittite peace treaty (Ḫattušili III)

h. Egyptian-Hittite dynastic marriage (Ḫattušili III)

i. Battle of Niḫriya (Tudḫaliya IV)

Comments of Chart 1

Generation 0: The Ḫuzziya on the cruciform seal studied by Dinçol *et al.* 1993, 105-6, was probably the “grandfather” mentioned by Ḫattušili I in *CTH* 6, §20 (translated by me in Hallo and Younger 2000, 81). If this was the case, then Ḫuzziya son of Ḫattušili I (*CTH* 6, §12) would have received his name through papponymy. Cf. also *KBo* 28.137: [... ^m Pa-wa-] aḫ-di¹(KI)-il-ma-aḫ ^mḪu-uz-z[i-ya ...] (cited by Otten 1951, 52, n. 2).

Generation I: After Labarna had been set on the throne in the town of Šanaḫuitta by the grandfather of Ḫattušili I, he was (temporarily?) removed by Papaḫdilhaḫ (so *CTH* 6, §20).

Generation II: Ḫattušili I is called the “brother’s son of Tawananna” (*ŠA* ¹Ta-wa-an-na-an-na DUMU ŠEŠ-ŠU, *KBo* 10.2 i 3 [*CTH* 4]; see Melchert 1978, 7). In my reconstruction of the early Hittite royal family, Tawananna, Labarna, and the unnamed father of Ḫattušili would all have been children of Ḫuzziya — see Beckman 1986, 21, with notes 40-42.

Generation IV: Muršili I was the grandson of Ḫattušili I (Beal 1983, 122-24); Ḫantili I the brother-in-law of Muršili (*CTH* 19, §9, translated by van den Hout in Hallo and Younger 1997, 195).

Generation V: Zidanta I was probably the son-in-law of Ḫantili I (*CTH* 19, §13 — see the restoration to i 40 in Hoffmann 1984b, 21).

Generation VI: Ammuna was the son of Zidanta I (*CTH* 19, §19).

Generation VII: Ḫuzziya I was seemingly a younger son of Ammuna (Klengel 1999, 76, with notes 205-6), Telipinu definitely the brother-in-law of Ḫuzziya I (*CTH* 19, §22). The relationship of Taḫurwaili to the royal family and his place within the dynasty before or after Alluwamna remain uncertain — see Klengel 1999, 87-88 and Otten 1971a.

Generation VIII: Alluwamna was the son-in-law of Telipinu: [^mA]l-lu-wa-am-na-aš-ša DUMU.LUGAL (*KUB* 11.3 [*CTH* 23]:6’); Ḫarapšeki is called DUMU.MUNUS.LUGAL in *KUB* 26.77 (*CTH* 23) i 2.

Generation IX: Ḫantili II was the son of Alluwamna (*KBo* 32.136 obv. 14-15; cf. Otten 1987, 25, with note 17).

Generation X: The filiation of Zidanta II is unknown.

Generation XI: Ḫuzziya II was probably the son of Zidanta II (Klengel 1999, 99) and was murdered by Muwattalli I (*KBo* 16.25 + [*CTH* 251] iv 15 — see Mellini 1979, 534-35). Muwattalli I had served as Chief of the Royal Bodyguard (GAL MEŠEDI — *KBo* 14.18 [*CTH* 40]:20 — Güterbock 1956, 119) and was himself later murdered (*KUB* 34.40 [*CTH* 271] ii 9’-10’ — Otten 1987, 29-30).

Generation XII: Judging from the Sunaššura treaty (*CTH* 41 and 131 — Beckman 1999, No. 2) Tudḫaliya I was the son of Ḫuzziya II and already advanced in age at the time of his accession to the throne (de Martino 1991, 20).

Generation XIII: Arnuwanda I was the adopted son of Tudḫaliya I (Beal 1983, 115-19 and Beckman 1986, 23).

Generation XIV: Tudḫaliya II *tuḫukanti* is to be identified with the father of Šuppiluliuma I (Gurney 1979, 1983) and further with Tašmi-šarri (Dinçol *et al.* 1993, 100-101).

Generation XV: Tudḫaliya the Younger (TUR) was murdered by supporters of Šuppiluliuma I (*CTH* 378, A obv. 16-22, translated by me in Hallo and Younger 1997, 156).

Generation XVI: Arnuwanda II and Muršili II were both sons of Šuppiluliuma I (*CTH* 61.I, translated by Beal in Hallo and Younger 2000, 83-84).

Generation XVII: Muwattalli II and Ḫattušili III were among the four first-rank offspring of Muršili II (*CTH* 81, §3, translated by van den Hout in Hallo and Younger 1997, 199).

Generation XVIII: According to Ḫattušili III, Urḫi-Teššub, who is to be identified with Muršili III (Houwink ten Cate 1974), was a child of Muwattalli II by a subordinate wife (*CTH* 81, §10a, translated in Hallo and Younger 1997, 202). Tudḫaliya IV was the son of Ḫattušili III (Klengel 1991, 224-25). Kurunta, a descendant of Urḫi-Teššub also known by the name of Ulmi-Teššub (Sürenhagen 1992, 350-58), belonged to the same generation as his cousin Tudḫaliya IV (Otten 1988 = Beckman 1999, No. 18C, §§2, 13).

Generation XIX: Arnuwanda III and Šuppiluliuma II were sons of Tudḫaliya IV (Laroche 1953).

CHART 2
SYNCHRONISMS OF HITTITE KINGS

<u>HATTI</u>	<u>BABYLON</u>	<u>ASSYRIA</u>	<u>EGYPT</u>	<u>KIZZUWATNA</u>
(3) Muršili I	Samsuditana (1529-1499/ 1625-1595)			
(8) Telipinu				Išputaḫšu
(12) Zidanta II				Pilliya
(15) Tudḫaliya I				Sunaššura
(18) Šuppiluliuma I			Smenkhkare (1337-1333) Tutankhamon (1333-1323)	
(20) Muwattalli II			Ramses II (1279-1213)	
(22) Muršili III = Urḫi-Teššub		Shalmaneser I (1269-1241/ 1273-1244)		
(23) Ḫattušili III	Kadašman-Turgu (1276-1259 / 1281-1264) Kadašman-Enlil II (1258-1250 / 1263-1255)	Shalmaneser I	Ramses II	
(24) Tudḫaliya IV		Tukulti-Ninurta I (1240-1205 / 1243-1207)	Merneptah (1213-1203)	

Italicized Mesopotamian dates from H. Gasche *et al.* 1998, folding table; Roman dates from J. A. Brinkman *apud* A. L. Oppenheim 1977, 335-46; Egyptian dates from J. von Beckerath 1997, 190.

CHART 3
AVERAGE GENERATIONAL TENURE OF HITTITE MONARCHS

<u>Chronology</u>	<u>Fall of Babylon +9*</u>	<u>Time Span</u>	<u>Years per Generation</u>
Gasche <i>et al.</i>	1490	169 years	15.36
Low	1522	201 years	18.27
Middle	1586	265 years	24.01
High	1642	321 years	29.18

*See p. 25.

BIBLIOGRAPHY

- ARNAUD, D., 1975: « Les textes d'Emar et la chronologie de la fin du Bronze Récent », *Syria* 52, 87-92.
- ASTOUR, M. C., 1989: *Hittite History and Absolute Chronology of the Bronze Age*, Partille.
- BEAL, R., 1983: « Studies in Hittite History », *JCS* 35, 115-26.
- BEAL, R., 1986: « The History of Kizzuwatna and the Date of the Šunaššura Treaty », *Or* 55, 424- 45.
- BECKERATH, J. von, 1997: *Chronologie des pharaonischen Ägypten*, Mainz.
- BECKMAN, G., 1986: « Inheritance and Royal Succession among the Hittites », *Kaniššuar. A Tribute to Hans G. Güterbock on His Seventy-Fifth Birthday, May 27, 1983*, Ed. H. A. Hoffner, Jr. and G. Beckman, Chicago, 13-31.
- BECKMAN, G., 1999: *Hittite Diplomatic Texts*. Second edition, Atlanta.
- BIROT, M., 1985: « Les chroniques 'Assyriennes' de Mari », *MARI* 4, 219-42.
- BÖRKER-KLÄHN, J., 1996: « Grenzfälle: Šunaššura und Sirkeli oder die Geschichte Kizzuwatnas », *UF* 28, 37-104.
- BRYCE, T. R., 1989: « Some Observations on the Chronology of Šuppiluliuma's Reign », *AnSt* 39, 19-30.
- BRYCE, T. R., 1990: « The Death of Nipururiya and its Aftermath », *JEA* 76, 97-105.
- CARRUBA, O., 1971: « Ḫattušili II », *SMEA* 14, 75-94.
- CARRUBA, O., 1973: « Die Annalen Tuthaliyas und Arnuwandas », *Festschrift Heinrich Otten*, Ed. E. Neu and C. Rüster, Wiesbaden, 37-46.
- CARRUBA, O., 1974: « Taḫurwaili von Hatti und die hethitische Geschichte von 1500 v. Chr. G. », *Anatolian Studies presented to Hans Gustav Güterbock on the Occasion of his 65th Birthday*, Ed. K. Bittel et al. Istanbul, 73-93.
- CARRUBA, O., 1977: « Beiträge zur mittelhethitischen Geschichte I. — Die Tuthaliyas und die Arnuwandas », *SMEA* 18, 137-74.
- CARRUBA, O., 1977: « Beiträge zur mittelhethitischen Geschichte II. — Die sogenannten 'Protocoles de succession dynastique' », *SMEA* 18, 175-95.
- CARRUBA, O., 1988: « Stato e società nel Medio Regno eteo », *Stato Economia Lavoro nel Vicino Oriente antico*, Milan, 195-224.
- CHARPIN, D., J.-M., DURAND 1985: « La prise de pouvoir par Zimri-Lim », *MARI* 4, 293-342.
- CORNELIUS, F., 1973: *Geschichte der Hethiter*, Darmstadt.
- DE MARTINO, S., 1991: « Himuili, Kantuzili e la presa del potere da parte di Tuthaliya », *Quattro studi ittiti*, Ed. F. Imparati, Florence, 5-21.
- DE MARTINO, S., 1993: « Problemi di cronologia ittita », *PdP* 270, 218-40.
- DE MARTINO, S., 1996: *L'Anatolia occidentale nel medio regno ittita*, Firenze.
- DEL MONTE, G., 1981: « Note sui trattati fra Ḫattuša e Kizzuwatna », *OA* 20, 203-21.
- DINÇOL, A., B. DINÇOL, et al. 1994: « The 'Cruciform Seal' from Boğazköy-Ḫattuša », *IM* 43, 87-106.
- DOTHAN, T., M. DOTHAN 1992: *People of the Sea. The Search for the Philistines*, New York.
- EASTON, D., 1981: « Hittite Land Donations and Tabarna Seals », *JCS* 33, 3-43.
- EDEL, E., 1994: *Die ägyptisch-hethitische Korrespondenz aus Boghazköi in babylonischer und hethitischer Sprache*, Opladen.
- FREU, J., 1987: « Problèmes de chronologie et de géographie hittites. Madduwatta et les débuts de l'empire », *Hethitica* 8, 123-75.
- FREU, J., 1995: « De l'ancien royaume au nouvel empire: les temps obscurs de la monarchie hittite », *II Congresso Internazionale di Hittitologia*, Ed. O. Carruba, M. Giorgieri and C. Mora, Pavia, 133-48.
- FREU, J., 1996: « La 'révolution dynastique' du grand roi de Hatti Tuthaliya I », *Hethitica* 13, 17-38.
- GASCHE, H., J. A. ARMSTRONG, S. W. COLE, and V. G. GURZADYAN 1998: *Dating the Fall of Babylon. A Reappraisal of Second-Millennium Chronology*, Ghent, Chicago.
- GOETZE, A., 1933: *Kizzuwatna and the Problem of Hittite Geography*, New Haven.

- GOETZE, A., 1940: *Die Annalen des Muršiliš*, Leipzig.
- GOETZE, A., 1951: « The Problem of Chronology and Early Hittite History », *BASOR* 122, 18-25.
- GOETZE, A., 1957: « Alalakh and Hittite Chronology », *BASOR* 146, 20-26.
- GOETZE, A., 1957: « On the Chronology of the Second Millennium B.C. », *JCS* 11, 53-73.
- GOETZE, A., 1964: « The Kassites and Near Eastern Chronology », *JCS* 18, 97-101.
- GOETZE, A., 1968: « The Predecessors of Šuppiluliumaš of Ḫatti and the Chronology of the Ancient Near East », *JCS* 22, 46-50.
- GRAYSON, A. K., 1987: *Assyrian Rulers of the Third and Second Millennia BC (to 1115 BC)*, Toronto.
- GURNEY, O. R., 1973: « Anatolia c. 1600-1380 B.C. », *CAH* II/1, 659-85.
- GURNEY, O. R., 1974: « The Hittite Line of Kings and Chronology », *Anatolian Studies presented to Hans Gustav Güterbock on the Occasion of his 65th Birthday*, Ed. K. Bittel et al., Istanbul, 105-11.
- GURNEY, O. R., 1979: « The Anointing of Tuthaliya », *Studia mediterranea Piero Meriggi dicata*, Ed. O. Carruba, Pavia, 213-23.
- GURNEY, O. R., 1983: « The Hittite Title TUHKANTI- », *AnSt* 33, 97-101.
- GÜTERBOCK, H. G., 1956: « The Deeds of Suppiluliuma as Told by His Son, Mursili II », *JCS* 10, 41-68, 75-98, 107-30.
- GÜTERBOCK, H. G., 1970: « The Predecessors of Suppiluliuma Again », *JNES* 29, 73-77.
- GÜTERBOCK, H. G., 1973: « Ḫattušili II Once More », *JCS* 25, 100-04.
- HAAS, V. (1985). « Betrachtungen zur Dynastie von Ḫattuša im Mittleren Reich », *AoF* 12, 269-77.
- HAAS, V. 1994: *Geschichte der hethitischen Religion*, Leiden.
- HAGENBUCHNER, A., 1989: *Die Korrespondenz der Hethiter*. 2. Teil, Heidelberg.
- HALLO, W. W., and K. L., YOUNGER, eds. 1997: *The Context of Scripture. Vol. I. Canonical Compositions from the Biblical World*, Leiden.
- HALLO, W. W., and K. L., YOUNGER, eds. 2000: *The Context of Scripture. Vol. II. Monumental Inscriptions from the Biblical World*, Leiden.
- HAWKINS, J. D., forthcoming. *Corpus of Hieroglyphic Luwian Inscriptions*, Berlin.
- HEINHOLD-KRAHMER, S., HOFFMANN, I., et al. 1979: *Probleme der Textdatierung in der Hethitologie*, Heidelberg.
- HOFFMANN, I., 1984a: « Einige Überlegungen zum Verfasser des Madduwatta-Textes », *Or* 53, 34-51.
- HOFFMANN, I., 1984b: *Der Erlaß Telipinus*, Heidelberg.
- HOUWINK TEN CATE, P. H. J., 1970: *The Records of the Early Hittite Empire*, Istanbul.
- HOUWINK TEN CATE, P. H. J., 1974: « The Early and Late Phases of Urhi-Tesub's Career », *Anatolian Studies presented to Hans Gustav Güterbock on the Occasion of his 65th Birthday*, Ed. K. Bittel et al., Istanbul, 123-50.
- HOUWINK TEN CATE, P. H. J., 1995-96: « The Genealogy of Mursilis II. The Difference between a Legalistic and a Genealogical Approach to the Descent of Suppiluliumas I », *JEOL* 34, 51-72.
- HUBER, Peter J., (n.d.): « The Solar Omen of Muršili II »,
- KLENGEL, H., 1991: « Tuthaliya IV. von Ḫatti: Prolegomena zu einer Biographie », *AoF* 18, 224-38.
- KLENGEL, H., 1999: *Geschichte des hethitischen Reiches*, Leiden.
- KLINGER, J., 1995a: « Synchronismen in der Epoche vor Šuppiluliuma I. — einige Anmerkungen zur Chronologie der mittelhethitischen Geschichte », *II Congresso Internazionale di Hittitologia*, Ed. O. Carruba, M. Giorgieri and C. Mora, Pavia, 235-48.
- KLINGER, J., 1995b: « Das Corpus der Mašat-Briefe und seine Beziehungen zu den Texten aus Ḫattuša », *ZA* 85, 74-108.
- KOŠAK, S., 1980: « The Rulers of the Early Hittite Empire », *Tel Aviv* 7, 163-68.
- KUNIHOLM, P. I., 1992: « Dendrochronological Wood from Anatolia and Environs », *BSA* 6, 97-98.
- KUNIHOLM, P., B., KROMER, et al. 1996: « Anatolian Tree Rings and the Absolute Chronology of the Eastern Mediterranean, 2220-718 BC. », *Nature* 381, 780-83.

- KÜHNE, C., 1982: « Politische Szenerie und internationale Beziehungen Vorderasiens um die Mitte des 2. Jahrtausends vor Chr. », *Mesopotamien und seine Nachbarn*, Ed. H.-J. Nissen and J. Renger, Berlin, 203-64.
- LAROCHE, E., 1953: « Šuppiluliuma II », *RA* 47, 70-78.
- LAROCHE, E., 1955: « Chronologie hittite: état des questions », *Anadolu* 2, 1ff.
- LANDSBERGER, B., 1954: « Assyrische Königsliste und 'Dunkles Zeitalter' », *JCS* 8, 31-73, 106-33.
- MARAZZI, M., 1994: « Ma gli Hittiti scrivevano veramente su 'legno.' », *Miscellanea di studi linguistici in onore di Walter Belardi*, Ed. P. Cipriano, P. Di Giovine and M. Mancini, Rome, vol. I, 131-60.
- MELCHERT, H. C., 1978: « The Acts of Hattušili I », *JNES* 37, 1-22.
- MELLINI, A. M., 1979: « Un 'istruzione' etea di interesse storico: KBo XVI 24 + 25 », *Studia mediterranea Piero Meriggi dicata*, Ed. O. Carruba, Pavia, 509-33.
- MEYER, G. R., 1953: « Zwei neue Kizzuwatna-Verträge », *MIO* 1, 108-24.
- MORAN, W., 1992: *The Amarna Letters*, Baltimore.
- MURNANE, W., 1985: *The Road to Kadesh*, Chicago.
- NEU, E., 1986: « Zum mittelhethitischen Alter der Tuthaliya-Annalen (CTH 142). », *Im Bannkreis des Alten Orients: Studien zur Sprach- und Kulturgeschichte des Alten Orients und seines Ausstrahlungsraumes Karl Oberhuber zum 70. Geburtstag gewidmet*, Innsbruck, 181-92.
- NOORT, E., 1993: « Seevölker, materielle Kultur und Pantheon. Bemerkungen zur Benutzung archäologischer Daten — ein kritischer Bericht », *Religionsgeschichtliche Beziehungen zwischen Kleinasien, Nordsyrien und dem Alten Testament*, Ed. B. Janowski, K. Koch and G. Wilhelm, Freiburg, 363-89.
- OPPENHEIM, A. L., 1977: *Ancient Mesopotamia*. Revised edition, Chicago.
- ORTHMANN, W., 1971: *Untersuchungen zur spätethitischen Kunst*, Bonn.
- OTTEN, H., 1951: « Die hethitischen 'Königslisten' und die altorientalische Chronologie », *MDOG* 83, 47-71.
- OTTEN, H., 1952: « Ein althethitischer Vertrag mit Kizzuwatna », *JCS* 5, 129-32.
- OTTEN, H., 1959: « Korrespondenz mit Tukulti-Ninurta I. aus Boğazköy », E. Weidner, *Die Inschriften Tukulti-Ninurtas I. und seiner Nachfolger*, Graz, 64-68.
- OTTEN, H., 1967: « Ein hethitischer Vertrag aus dem 15./14. Jahrhundert v. Chr. (KBo XVI 47) », *IM* 17, 55-62.
- OTTEN, H., 1968: *Die hethitischen historischen Quellen und die altorientalischen Chronologie*, Wiesbaden.
- OTTEN, H., 1971a: « Das Siegel des hethitischen Grosskönigs Tahurwaili », *MDOG* 103, 59-68.
- OTTEN, H., 1971b: « Die Genealogie Hattusilis III. nach KBo VI 28 », *ZA* 61, 233-38.
- OTTEN, H., 1979: « Original oder Abschrift. Zur Datierung von CTH 258 », *Florilegium Anatolicum. Mélanges offerts à Emmanuel Laroche*, Paris, 273-76.
- OTTEN, H., 1987: « Das hethitische Königshaus im 15. Jahrhundert v. Chr. Zum Neufund einiger Landschenkungsurkunden in Boğazköy », *Anzeiger der phil.-hist. Klasse der Österreichischen Akademie der Wissenschaften*, 123/2.
- OTTEN, H., 1988: *Die Bronzetafel aus Boğazköy. Ein Staatsvertrag Tuthalijas IV*, Wiesbaden.
- OTTEN, H., 1991: « Exkurs zu den Landschenkungsurkunden », *AA*, 345-48.
- ÖZGÜÇ, N., 1980: « Seal Impressions from the Palaces at Acemhöyük », *Ancient Art in Seals*, Ed. E. Porada, Princeton, 61-99.
- PARKER, V., 1996: « Bemerkungen zur mittelhethitischen Geschichte: Madduwattaš und seine Zeit », *Klio* 78, 7-27.
- PINTORE, F., 1978: *Il matrimonio interdinastico nel vicino oriente durante i secoli XV-XIII*, Rome.
- ROWTON, M. B., 1952: « The Date of the Hittite Capture of Babylon », *BASOR* 126 20-24.
- ROWTON, M. B., 1973: « Chronology. Ancient Western Asia », *CAH* I 193-237.
- RÜSTER, C., 1994: « Eine Urkunde Ḫantilis II », *IM* 43, 63-70.

- SCHULER, E. von 1965: *Die Kaškäer*, Berlin.
- SCHMIDT, B. B., *Israel's Beneficent Dead*, Winona Lake.
- SINGER, I., 1985: « The Battle of Niḫriya and the End of the Hittite Empire », *ZA* 75, 100-23.
- SMITH, S., 1940: *Alalakh and Chronology*, London.
- SÜRENHAGEN, D., 1992: « Untersuchungen zur Bronzetafel und weiteren Verträgen mit Sekundogenitur in Tarḫuntašša », *OLZ* 87, 341-71.
- TARACHA, P., 1997: « Zu den Tutḫalija-Annalen (CTH 142) », *WO* 28, 74-84.
- ÜNAL, A., 1984: « Nochmals zur Geschichte und Lage der hethitischen Stadt Ankuwa », *SMEA* 24, 87-107.
- VEENHOF, K. R., 1985: « Eponyms of the 'Later Old Assyrian Period' and Mari Chronology », *MARI* 4, 191-218.
- WAINWRIGHT, N., 1960: « Merneptah's Aid to the Hittites », *JEA* 46, 24-28.
- WHITING, R. M., 1990: « Tell Leilan / Šubat-Enlil. Chronological Problems and Perspectives », *Tall al-Hamīdīya* 2, Ed. S. Eichler, M. Wäfler and D. Warburton, Freiburg, 167-218.
- WILHELM, G., 1991: « Probleme der hethitischen Chronologie », *OLZ* 86, 469-76.
- WILHELM, G., and J., BOESE 1987: « Absolute Chronologie und die hethitische Geschichte des 15. und 14. Jahrhunderts v. Chr. », *High, Middle or Low*, Ed. P. Astrom, Gothenberg, 74-117.