

## GENERATION COUNT IN HITTITE CHRONOLOGY

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In studies on Ancient Near Eastern chronology Hittite history has often been considered a cornerstone of a long chronology. In his grandiose but – as we now see – futile attempt to denounce the Assyrian Kinglist as a historically unreliable source for the Assyrian history of the first half of the 2<sup>nd</sup> millennium B.C., LANDSBERGER 1954: 50 only briefly commented on Hittite history.<sup>1</sup> A. Goetze, however, who at that time had already repeatedly defended a long chronology against the claims of the followers of the short chronology (GOETZE 1951, 1952), filled the gap and supported Landsberger's plea for a long chronology, though not as excessively long as Landsberger considered to be likely.<sup>2</sup> Thirty years later, when in a strongly low-chronology-minded atmosphere at the “High, Middle or Low?” meeting at Gothenburg the audience was invited to take a vote, Oliver Gurney was one

of three participants who voted for the high chronology without hesitation (ÅSTRÖM 1989: 76). At a colloquium organized by advocates of an ultra-low chronology at Ghent, another hittitologist, BECKMAN 2000: 25, deviated from the mainstream by declaring that from his viewpoint, “the Middle Chronology best fits the evidence, although the High Chronology would also be possible”.

Those hittitologists who adhered to the low chronology (which means, sack of Babylon by Mursili I: 1531) had to solve the problem of squeezing all the kings attested between Mursili I and Suppiluliuma I into appr. 150 years, provided that there was agreement on Suppiluliuma's accession to the throne around 1380 B.C. None of the solutions proposed have stood the test of time.<sup>3</sup> The scholars who suggested the (moderate) ultra-short chronology (which means, sack of

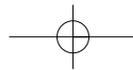
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<sup>1</sup> No longer valid is Landsberger's argument that the “author” of the Puzur-Sîn inscription is omitted by the king-list (see READE 2001). The correctness of the tradition on the Old Assyrian dynasty is proven by the Kültepe eponym list published by VEENHOF 2003 (for a preliminary overview cf. already VEENHOF 2000). The figures given there for the reigns from Irīšum I to Šamši-Adad I match well the *Distanzangaben* of Shalmaneser I's and Esarhaddon's inscriptions. The *Distanzangabe* was certainly computed by using the king-list or an eponym list of the Kültepe type with summary figures of reigns. Down to the Middle and Neo-Assyrian period the Assyrian archival data were evidently not altered because of ideological purposes. In their tradition they were, however, at times subject to mistakes. The early portion of the list had been compiled by using Assyrian archival data supplemented by Amorite tribal traditions (ancestors list) and *Urzeit* constructions (kings in tents), as has been shown convincingly by LANDSBERGER 1954, KRAUS 1965 and YAMADA 1994, but, as is clear now, even for the old Assyrian history prior to Šamši-Adad, the available sources were carefully reproduced: The division line between Ilu-šūma and his son and successor Irīšum can be explained by the fact that only from Irīšum onwards was information on the length of reigns available, as is now shown by the Kültepe eponym list and the Mari eponym canon.

<sup>2</sup> For a detailed summary and bibliography of the discussion on the Ancient Near Eastern chronology especially

during the 40ies and 50ies cf. KAMMENHUBER 1968: 34–40, ZEEB 2001: 75–87. Zeeb pronounces himself in favor of the ultra-short chronology (p. 123), but since he – unfortunately – follows MAYER 1995, 2001:15f., in linking Tudḫaliya I to the “evil” (*mašiktu*) which led to Idrimis flight from Ḫalab (ZEEB 2001: 106f., 112, 122; see, however, WILCKE 1992: 124f.), he is forced to concede only  $24 \pm 5$  years for the span of time between Mursili I's sack of Babylon and Tudḫaliya I's conquest of Aleppo, which is impossible. For an excellent résumé of the data and problems with rich literature cf. DE MARTINO 1993.

<sup>3</sup> Before the discovery of middle-Hittite *Landschenkungs-urkunden* in the late 80ies and early 90ies which proved beyond doubt that there was a double sequence of Hittite kings with identical names (old Kingdom: Ḫantili I, Zidanta I, Ḫuzziya I; middle Kingdom: Ḫantili II, Zidanta II, Ḫuzziya II), some scholars had suggested that the duplication had to be omitted (LAROUCHE 1955: 5, CORNELIUS 1958: 103, VON SCHULER 1965: 16f. with n. 168; for older literature cf. GOETZE 1957b: 54 n. 13). OTTEN 1951: 60, while accepting the middle-Hittite kings, nevertheless remained a supporter of the low chronology by hypothesizing two parallel lines of kings. HELCK 1979: 244, another advocate of the low chronology, suggested a family tree in which Suppiluliuma I was a grandson of Tudḫaliya I, the conqueror of Aleppo and husband of Nikkalmati, and a cousin of Tudḫaliya “III” (who was Suppiluliuma's father as we know today). ASTOUR 1989 was the last author who tried to reconcile an early date



Babylon by Mursili I: 1499) more or less dismissed Hittite data.<sup>4</sup>

The exact figures for the different Ancient Mesopotamian chronologies from the sack of Babylon onwards still rest on the venus data of *Enuma Anu Enlil* tablet 63, though astronomical criticism has led to questioning its usefulness. Do the astronomical data belong to a continuous series of observations or is the tablet the result of compilation?<sup>5</sup> It has been argued that only the first 10 omens (recording 5 synodic periods, i.e. one 8-years-cycle) belong to the reign of king Ammišaduqa whose 8<sup>th</sup> year is mentioned in the 10<sup>th</sup> omen instead of the apodosis.<sup>6</sup> If this is correct, EAE 63 does not provide enough data for identifying a venus period of 64 or 56 years. Some scholars dismiss any chronological value of the venus dates.<sup>7</sup> Two Ur III lunar eclipses mentioned in EAE 20 and 21 have been used in support of the long as well as of the (moderate) ultra-short chronology (GASCHE *et al.* 1998: 74ff.), but they have also been dismissed for chronological purposes by HUNGER 2000. For our discussion of the Hittite chronology of the pre-Amarna period, the exact figures provided by astronomical-

ly based chronological systems cannot be proven or challenged in detail. What can be expected is that the Hittite data might exclude one of the extreme positions (high, ultra-low). This is to be examined on the following pages.

In 1987, the present writer in cooperation with J. Boese submitted a reassessment of the chronology of Suppiluliuma's reign (WILHELM and BOESE 1987). They questioned the traditional view<sup>8</sup> – best expressed and reasoned by KITCHEN 1962 – that Suppiluliuma I ruled for approximately 40 years after ascending the throne between 1386 and 1372 (KITCHEN 1962: 39).

Lowering the chronology of the Hittite Empire period had become urgent after most Egyptologists agreed upon a low chronology for the Egyptian New Kingdom with the key-date 1279 for Ramses II's accession to the throne,<sup>9</sup> while older calculations depended on higher accession dates (1304, 1290, with wide-spread preference for the last date). Lowering Ramses II's accession date from 1290 to 1279 would have “automatically” lowered Suppiluliuma's accession from 1372 to 1361, still maintaining a 40 years reign.<sup>10</sup>

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for Suppiluliuma's accession (1386) with the low chronology, by eliminating Ḫantili II, Zidanta II and Ḫuzziya II as kings of Ḫatti and making them local kings or princes (p. 34–37; for a critique cf. WILHELM 1991: 471).

<sup>4</sup> GASCHE *et al.* 1998: 6f. seem to imply that the Telipinu edict – “perhaps as much as a century after the event” – is not sufficient evidence of Mursili's sack of Babylon. They duly quote, however, HOFFNER 1975, who edited and discussed the fragment KBo 3.45, in which a contemporary critic of Mursili's sack of Babylon decrees the *damnatio memoriae* of this king. The combined evidence of the Hittite and Babylonian sources – which are independent of each other – leaves no doubt that the duration of Hittite history between the two synchronisms produced by Mursili's sack of Babylon (by plausibility including the end of Samsuditana's reign) and Suppiluliuma's appearance on the Syrian theatre has to be compatible with the dates provided by any chronology of the mid-second millennium B.C.

<sup>5</sup> REINER and PINGREE 1975: 21ff.; HUBER 1982: 19; KUDLEK 1985: 114f.

<sup>6</sup> GASCHE *et al.* 1998: 72.

<sup>7</sup> KÜHNE 1999: 203 n. 1; MICHEL 1997–2000.

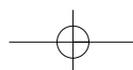
<sup>8</sup> Cf., e.g., GOETZE 1933: 79 (“etwa 1395–55”).

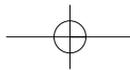
<sup>9</sup> For recent overviews cf. VON BECKERATH 1997 and KITCHEN 2000; Kitchen, however, does not take into account that the Middle Babylonian chronology depends on the Middle Assyrian one and that there is wide agreement now that the latter one has to be reduced; thus the reign of the Babylonian king Burnaburiaš is not an argument for 1334 as a *terminus ante quem* for Amenophis IV's death, nor is 1332 a *terminus ante quem* for Tutanḫa-

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mun's accession; cf. BOESE 1982 for the Middle Babylonian chronology (Burnaburiaš 1354–1328[+2/–3]) and BOESE and WILHELM 1979, FREYDANK 1991 for the Middle Assyrian chronology. GASCHE *et al.* 1998: 66 follow Boese (without quoting him) for the Middle Babylonian chronology. They do not, however, follow BOESE and WILHELM 1979 in reducing the Middle Assyrian dates prior to 1169 by 10 years (p. 51); for the 14<sup>th</sup> century they nevertheless reach figures that come close to the reduced Middle Assyrian chronology, because they calculate shorter year lengths prior to Tiglathpileser (that is prior to the adoption of the Babylonian solar calendar in Assyria) based on a lunar calendar without intercalation. WILHELM 1994: 551 had already tested this theory, but left the question open. VEENHOF 2000: 141f., quoting KOCH 1989, argues in favor of a special kind of intercalation: According to this hypothesis a month was added after the last month of the year and given the same name as the previous one, but was counted as the first month of the new year. This would speak against the assumption that Assyrian regnal years followed the lunar year of 354 days instead of the solar year.

<sup>10</sup> WENTE and VAN SICLEN III 1976: 250 had already (implicitly) noticed this consequence (cf. also BOESE and WILHELM 1979: 37 n. 67). However, it has not always been observed since, especially not in general books on Ancient Near Eastern history. NISSEN 1998: 246f. follows the Egyptian low chronology (Ramses' accession year 1279), while giving 1375 as Suppiluliuma's accession year, a date that is not only based on a reign of 40 years, but also on a higher Egyptian chronology (Ramses' accession year 1290).





What established the assumption of a 40-year-reign is a late source from the time of Hattusili III saying that Suppiluliuma campaigned for 20 years in Anatolia, and that he needed 6 years to subdue the Hurri lands. Conventionally, Suppiluliuma's conquest of Syria and the struggle with Egypt had been estimated to have lasted from 12 to 14 years. This span of time had been combined in one way or the other with the 20 years of Anatolian fightings and the 6 years of the Hurrian war, thus adding up to 40 years for the whole of Suppiluliuma's reign.

Our analysis of the very fragmentary text of the "Deeds of Suppiluliuma, as told by his Son Mursili II" leads us to the conclusion that it is virtually impossible that Suppiluliuma campaigned for 20 years before entering Syria. The details of our analysis cannot be repeated here, but since the results saw highly controversial judgements,<sup>11</sup> the basic lines<sup>12</sup> of the argument are summarized here.

The Deeds of Suppiluliuma are preserved in several copies which differ in the length of columns (caused by differences in the size of the handwriting and/or the tablet). One copy (e.g. KBo 14.3) with very small handwriting is numbered "tablet 2" within the series of 7 to 12 tablets which contained the whole *res gestae* of Suppiluliuma. Another copy (KUB 19.18) is labeled "tablet 3", but its first column corresponds to the last column of "tablet 2" due to its larger script. Still

another tablet is numbered "tablet 7". Its handwriting is "extremely large". The columns of this tablet amount to only 62 lines, whereas the "tablet 2" has 78 lines per column. The content of this "tablet 7" must have been recorded at the end of tablet 5 and the beginning of tablet 6 of the version with the small handwriting.

In the copy of the version with small script, the tablets no. 1 and no. 2 (until col. iii inclusively) record events which took place while Suppiluliuma was still serving as a general during his father's reign. The death of Suppiluliuma's father and the events leading to Suppiluliuma's accession to the throne may have been told at the beginning of tablet 2 col. iv (which is not preserved) or even later. "Tablet 7" of a series with "short columns" reports the so-called *dahamunzu* episode, the story of an Egyptian queen who after the death of her husband Niphururiya asked for a son of Suppiluliuma's to become her husband and king of Egypt.

The beginning of this report in column iii of "tablet 7" (tablet with "short columns", large handwriting) would correspond to the first column of tablet 6 (tablet with "long columns", small script). Our calculation proved that the space between the (lost) report on Suppiluliuma's seizure of the throne and the *dahamunzu* episode is not larger than three tablets of the largest size. To judge from the preserved parts of the "Deeds of Suppiluliuma" we calculated appr. 10 years.<sup>13</sup>

It is evident that the *dahamunzu* affair provides

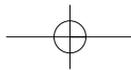
<sup>11</sup> KITCHEN 1989: 157 („W. & B. indulge in very speculative reconstructions of broken Hittite tablets“; in his further critical remarks the author is mistaken in keeping up his former argument [KITCHEN 1962: 1f., especially p. 2 n. 2] that all of Suppiluliuma's "three queens" [p. 156] were his successive wives, though today there is no doubt that Taduḫepa is the [second?] wife of Suppiluliuma's father Tudḫaliya II. [cf. KAMMENHUBER 1976: 166–171, 176, corrected by GURNEY 1979; cf. also BRYCE 1989: 26]. Kitchen also misses the point when reproaching us to "rely in highly uncritical fashion upon the *diktat* of Krauss and Fecht" [p. 156] – actually we had quoted their theory in indirect speech [German *Konjunktiv*] and tried to put forward a counter-argument against the linguistic identification of *Niphururiya* with *Nfr-hpr.w-r<sup>c</sup>*, cf. WILHELM and BOESE 1987: 100f.). FREU 1992: 87–90 (critical review, accepting a moderate reduction of Suppiluliuma's reign to 31 years; Freu bases his reconstruction of events on a co-regency of Amenophis III and Echnaton of appr. 11 years and dates Suppiluliuma's accession to the throne to 1353; cf., however, VON BECKERATH 1997: 110, who states that the question can be regarded as

being solved; a long co-regency can be excluded, a short one of one or two years is possible, but cannot be proven and is chronologically irrelevant). - BRYCE 1989 accepts the method of textual analysis employed by us, suggesting some changes in the course of events and gives 1344–1322 as the dates of Suppiluliuma's reign, i.e. 22 years. O.R. Gurney (who, according to an oral communication Gothenburg 1987, had carefully cross-checked our analysis of the Deeds of Suppiluliuma), follows Bryce in his 4<sup>th</sup> edition of his standard work on the Hittites and attributed the same dates – 1344–1322 – to Suppiluliuma's reign (GURNEY 1990: 22, 181); in the latest general histories of the Hittites, BRYCE 1998 repeats his views of 1989, whereas KLENGEL 1999 refers to the length of Suppiluliuma's reign only vaguely and avoids giving absolute dates.

<sup>12</sup> A more extensive English summary was provided by BRYCE 1989: 21.

<sup>13</sup> BRYCE 1989 basically follows these calculations, though he is forced to extend the span of time to 17 years, because he – as most scholars – dates the *dahamunzu* episode to the time following Tutanḫamun's death. According to his reconstruction of the sequence of





an important synchronism between Hittite and Egyptian history. If it were possible to fix this event exactly within the Egyptian history of the late 18<sup>th</sup> dynasty and within Suppiluliuma's career and subsequently calculate the time between this date and Mursili's sack of Babylon, the central riddle of the Ancient Near Eastern chronology would be solved, and the "floating block" of ca. 700 years of Late Early Bronze and Middle Bronze Age Mesopotamian history would be tightly knotted to the chronologically well-established younger history of the Ancient Near East.

In the context of this colloquium it is not necessary to discuss the many details which are still more or less controversial. For our purposes it suffices to state that Suppiluliuma I ascended the throne in the 40ies of the 14<sup>th</sup> century.

The difficulties of Hittite chronology are obvious: There are no year-names, no eponyms, no counting of regnal years, no era, no kinglist. There is, however, institutional continuity, despite the many political disruptions apparent in regicides, dethronements and usurpations, and this continuity is embodied in the royal clan that seems to have ruled the country from the earliest old Hittite period to the end of the empire period (and in some regions beyond). Thus generation count is the best Hittitology can offer to help solve the problems of Ancient Near Eastern chronology. In addition to this, there is a much-debated solar omen that took place in Mursili II's 10<sup>th</sup> regnal year on a campaign to the land of Azzi in northeast Anatolia. It is likely to be an eclipse, but the possibility of a different phenomenon cannot be excluded. If indeed it is an eclipse, two dates can be calculated that belong to the period

defined by synchronisms with Egyptian history: June 24, 1312<sup>14</sup> or April 13, 1308.<sup>15</sup>

The generation count is necessarily rather inaccurate and only applicable for long periods in which irregularly long or short generation intervals are evened out.<sup>16</sup> How is a generation interval defined? The most regular result would be a count based on regular natural<sup>17</sup> conditions: The distance between the birth of a man's eldest surviving son and the birth of this son's eldest surviving son. But even here culture mixes with biology: It makes a big difference whether any son, regardless of what rank within the harem his mother enjoys, is eligible for office (as the princes in the Ottoman house) or whether the role the mother plays is mirrored in the rank of the king's sons (as in Hatti). Even more so, if the eldest son is not automatically heir apparent (also, as in Hatti), then in the case of the death of or divorce from the first queen, the second queen will be likely to scheme against the king's elder sons in favor of one of her own sons. Apart from that, the culturally defined marriage age of the crown prince is unknown.

Various calculations of the lengths of generation intervals have led to very different results. This is not astonishing because the variables mentioned above are mostly unknown or differ from one another. ROWTON 1958: 100–102 checked various Ancient Near Eastern dynasties for a seven years' generation sequence and calculated a generation interval between 21.1 and 31.7 years. Comparing the British royal family, GURNEY 1974: 108f. established a generation interval of 29/30 years. WILHELM 1990: 523 n. 97 used the Ottoman dynasty for the same purpose and calculated 21.5 years. More extreme positions have

events, the „one year's war“ (“First Syrian war”) took place four years before Aḥenaten's death. This, however, seems to be excluded by EA 75, which clearly refers to the “one year's war” (“May the king be informed that the king of Ḥatti has seized all the countries *that were vassals* of the king of Mitta<ni>.” MORAN 1992: 145), a passage which belongs to the older group of vassal letters still mentioning Abdi-Aširta of Amurru as an active opponent. EA 75 cannot be dated that late; BOESE and WILHELM 1987: 88 calculated what they considered as the lowest possible date, namely seven years before Amenophis IV's death and opted for a slightly higher age. FREU 1992: 53 even thinks the addressee is Amenophis III, but at a time when Amenophis IV was already in his seventh year as coregent (p. 94). Also MORAN 1992: XXXV f. n.127 puts forward an argument in favor of Amenophis III as addressee. Considering the many difficulties of an identification of

the Nipḥururiya of the “Deeds” with Tutanḥamun (KRAUSS 1978 passim, MURNANE <sup>2</sup>1990: 131–136) it seems still to be a preferable option to think of Smenḥkare-Anḥḥeperure, survived by his powerful wife Meritaten, who made herself reigning queen under the feminine form of her deceased husband's name, Anḥḥeperure, buried her husband's mummy in due time, tried to solve two problems at the same time – the Hittite military threat and her domestically difficult situation –, and when failed, was killed to be replaced by the boyish husband of her younger sister (cf. also KRAUSS 1994: 76).

<sup>14</sup> Wente and Van Siclen III 1976: 250.

<sup>15</sup> WILHELM and BOESE 1987: 107 (as a possible alternative to the earlier date).

<sup>16</sup> ROWTON 1958: 101.

<sup>17</sup> GOETZE 1952: 72 n. 32 quoted by GURNEY 1974: 108: “after all there is a biological factor involved”.



been expressed by STEINER 1989, who suggested a generation interval of 40 years, and HAGENBUCHNER 1992: 116, who quotes the middle-Assyrian laws for a marriageable age minimum of 10 years. In the case of the Hittite royal house, there are so many open questions and irregularities that the lack of agreement among scholars is not astonishing. Nevertheless, the available data have to be examined again by using the method of defining maxima and minima of possible dates as far as possible. In a generation count this has to be done on two levels: the number of generations and the average lengths of generation intervals.

In the line of Hittite kings between Mursili I<sup>18</sup> and Suppiluliuma I there are several kings who are (a) the sons of their respective predecessors, several others who are (b) sons-in-law or (c) brothers-in-law of their predecessors. The relation of some kings (usually called (d) “usurpers” by modern hittitologists) with the royal clan is unknown. At least in one case it is likely that a king is an (e) adopted son.

A minimal count would only ascribe the full length of a generation interval to case (a). Taking into consideration the relationship between Tušratta and his “son-in-law”, the much older Amenophis III, one could even speculate about a “negative generation interval”. One should not argue that this is typical of political marriages, and that it does not apply to marriages of all members of the royal clan; within a political elite every marriage is likely to be “political”. The same, of course, is even more true of brothers-in-law. Here a “negative generation interval” is even more probable. On the other hand, it can reasonably be excluded that an adopted son is older than his adoptive father. Fig. 1 lists all the attested Hittite great kings together with the available

information on their family relationship.

- (a) sons of their predecessors: (8) Ammuna, (13) Ḫantili II, (18) Tudḫaliya I,<sup>19</sup> (20) Tudḫaliya II, (21–22) (Tudḫaliya III<sup>20</sup>) / Suppiluliuma.
- (b) sons-in-law: (7) Zidanta I, (12) Alluwamna, (19) Arnuwanda I.
- (c) brothers-in-law: (6) Ḫantili I, (10) Telipinu
- (d) “usurpers”: (9) Ḫuzziya I, (11) Taḫurwaili, (16) Muwattalli I
- (e) adopted sons: (19) Arnuwanda I (?)
- (f) unclear: (14) Zidanta II, (15) Ḫuzziya II, (17) Kantuzzili

In a radical minimal calculation of attested generation intervals we get the following sequence: Mursili I – Ammuna – Telipinu (?) – Ḫantili II – Tudḫaliya I – Tudḫaliya II – Suppiluliuma I.

In an equally radical maximal calculation we attribute half a generation interval (symbol:  $-\frac{1}{2}$ ) to every son-in-law and a full generation interval (symbol:  $-1$ ) to adopted sons and to the kings (14) and (15). Though the family relationship of kings (14) and (15) is unclear, they seem to have had a legitimate claim to the throne (at least this is suggested by the offering-lists). Only brothers-in-law and the “usurpers” are not counted: Mursili I  $-\frac{1}{2}$ – Zidanta I  $-1$ – Ammuna  $-1$ – Telipinu  $-\frac{1}{2}$ – Alluwamna  $-1$ – Ḫantili I  $-1$ – Zidanta II  $-1$ – Ḫuzziya II  $-1$ – Kantuzzili  $-1$ – Tudḫaliya I  $-1$ – Arnuwanda I  $-1$ – Tudḫaliya II  $-1$ – Suppiluliuma. In the first count the addition results in 6, in the second case in 11 generation intervals.

In the following diagram we combine these figures with the lengths of generation intervals according to the aforementioned suggestions (leaving aside the two most radical and less than likely ones, 10 and 40) and in a parallel column we add them to Suppiluliuma’s rounded accession year 1350:

Author	generation interval	Maximum (11)		Minimum (6)	
ROWTON (low)	21.1	232.1	1582	126.6	1477
ROWTON (high)	31.7	348.7	1699	190.2	1540
British Royal Family (GURNEY)	29/30	319–330	1669–1680	174–180	1524–1530
Ottoman Imperial Family (WILHELM)	21.5	236.5	1587	129	1479

<sup>18</sup> It is not known whether Mursili was murdered upon his return from his Babylonian campaign or whether he had a couple of years to enjoy his unheard-of achievement. The question is irrelevant for the following count of generations.

<sup>19</sup> Tudḫaliya I is a son of Kantuzzili (OTTEN 1987, 2000), who is not attested independently as a king, but who took part in killing (16) Muwattalli I. Since Tudḫaliya’s

annals (CARRUBA 1977; DEL MONTE 1993: 143ff.; for the Middle Hittite origin of the annals cf. NEU 1986) refer to his father’s death (“father” restored), Kantuzzili should be included in the king-list.

<sup>20</sup> Tudḫaliya was killed to be succeeded by his (half)brother Suppiluliuma I. It is unknown whether Tudḫaliya had already been formally established as a king, though this is likely. In a generation count he is negligible.



	Hittite Kings	Family Relationship	Dates
1	Ḫuzzia <sup>1</sup>		
2	Papaḫdilhaḫ		
3	Labarna		
4	Ḫattusili I	nephew of (3) (?)	
5	Mursili I†	grandson <sup>2</sup> (?) of (4)	
<i>sack of Babylon</i>			high: 1659 middle: 1595 low: 1531 ultra-low (a): <sup>3</sup> 1499 ultra-low (b): <sup>4</sup> 1467
6	Ḫantili I	brother-in-law of (5)	
7	Zidanta I†	son-in-law of (6)	
8	Ammuna	son of (7)	
9	Ḫuzziya I#		
10	Telipinu	son of (8) (?) brother-in-law of (9)	
11	Taḫurwaili ¶		
12	Alluwamna	son-in-law of (10)	
13	Ḫantili II	son of (12)	
14	Zidanta II		
15	Ḫuzziya II† <sup>5</sup>		
16	Muwattalli I† <sup>5</sup>		
17	Kantuzzili (?) <sup>*6</sup>		
18	Tudḫaliya I (= "II")	son of (17)	
19	Arnuwanda I	(adopted) son, son-in-law of (18)	
20	Tudḫaliya II (= "III")	son of (19)	
21	Tudḫaliya III (?) <sup>*†</sup>	son of (20)	
22	Suppiluliuma I	son of (20)	
<i>dahamunzu episode</i>			after death of Amenophis IV: <sup>7</sup> 1341/1333 after death of Smenḫkare: <sup>7</sup> 1340/1332 after death of Tutanḫamun: <sup>7</sup> 1330/1322
23	Arnuwanda II	son of (22)	
24	Mursili II	son of (22)	
omen of the sun in Mursili's 10 <sup>th</sup> year (if eclipse)			June 24, 1312 or April 13, 1308
25	Muwattalli II	son of (24)	
Battle of Qadeš			1274 <sup>8</sup>
26	Mursili III (Urḫi-tešsub)#	son of (25)	
27	Ḫattusili "III"	son of (24)	1265±2 – 1236±2 <sup>9</sup>
Treaty with Egypt			1259 <sup>9</sup>
28	Tudḫaliya IV	son of (27)	
29	Arnuwanda III	son of (28)	
30	Suppiluliuma II	son of (28)	

\* no proof for kingship; † assassinated; # deposited; ¶ position not clear

Fig. 1

1) According to DIŇÇOL *et al.* 1992. 2) According to the Aleppo treaty; STEINER 1996: son. 3) GASCHE *et al.* 1998. 4) ÅSTRÖM, 1992. 5) OTTEN 1987. 6) OTTEN 2000. 7) Dates according to von BECKERATH 1997: 119 (the low versus high dates are based on 11/15 regnal years for Sethos I, 26/31 regnal years for Haremhab and 3/4 regnal years for Aya. 8) In Ramses II's 5<sup>th</sup> regnal year (1275/74); Ramses ascended the throne "ab 31. Mai 1279" (VON BECKERATH 1997: 118), Ramses left his residence for the campaign on day 9 of 2<sup>nd</sup> šmw, i.e. in the middle of April 1274. (According to VON BECKERATH 1997: 10, during the New Kingdom the regnal year was counted from the day of the accession to the throne until the same date in the following calendrical year.) 9) BOESE and WILHELM 1979: 36 n. 65. In the chronological system suggested by GASCHE *et al.* 1998 Ḫattusili's last year would be 1243.



The extreme dates, 1477 and 1699, are certainly highly unlikely. In theory one could narrow the probability by mathematical procedures, but this would leave aside the different aspects of each individual case, which are subject to ongoing philological and historical debates. The only chronology which can be confidently excluded is the variant of the ultra-low

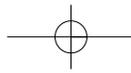
chronology which dates the sack of Babylon to 1467.

Though the present writer himself used lengths of generation intervals in the past when arguing about Hittite history,<sup>21</sup> he would like to suggest that one should rather neglect the Hittite data in the discussion of Ancient Near Eastern chronology, as long as we do not have more information.

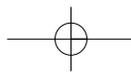
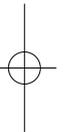
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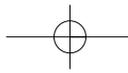
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<sup>21</sup> WILHELM and BOESE 1987: 109, WILHELM 1989: 65f.



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## Abbreviations

- |                |   |              |  |
|----------------|---|--------------|--|
| <i>AfO</i>     | <i>Archiv für Orientforschung</i>   | <i>OLZ</i>   | <i>Orientalistische Literaturzeitung</i>                                       |
| <i>AnSt</i>    | <i>Anatolian Studies</i>  | OPNE         | Occasional Papers on the Near East   |
| AOAT           | Alter Orient und Altes Testament  | PIHANS       | Publications de l'Institut historique et archéologique néerlandais de Stamboul |
| AOAW           | Anzeiger der phil-hist. Klasse der Österreichischen Akademie der Wissenschaften | <i>PP</i>    | <i>La Parola del Passato</i>   |
| <i>ArchAnz</i> | <i>Archäologischer Anzeiger</i>   | SAOC         | Studies in Ancient Oriental Civilizations                                      |
| <i>AuOr</i>    | <i>Aula Orientalis</i>  | <i>SCCNH</i> | <i>Studies on the Civilization and Culture of Nuzi and the Hurrians</i>        |
| <i>BASOR</i>   | <i>Bulletin of the American Schools of Oriental Research</i>                    | SGKAO        | Schriften zur Geschichte und Kultur des Alten Orients                          |
| BBVO           | Berliner Beiträge zum Vorderen Orient   | TTKY         | Türk Tarih Kurumu Yayınları  |
| BM             | Bibliotheca Mesopotamica  | TVAO         | Testi del Vicino Oriente antico  |
| HSS            | Harvard Semitic Studies   | UAVA         | Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie              |
| IBK            | Innsbrucker Beiträge zur Kulturwissenschaft                                     | <i>UF</i>    | <i>Ugarit-Forschungen</i>  |
| <i>JCS</i>     | <i>Journal of Cuneiform Studies</i>   | WVDOG        | Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft         |
| <i>JEA</i>     | <i>Journal of Egyptian Archaeology</i>  | <i>WZKM</i>  | <i>Wiener Zeitschrift für die Kunde des Morgenlandes</i>                       |
| <i>JEOL</i>    | <i>Jaarbericht “Ex oriente lux”</i>   | <i>ZA</i>    | <i>Zeitschrift für Assyriologie</i>  |
| <i>JNES</i>    | <i>Journal of Near Eastern Studies</i>  |              |  |
| <i>MDOG</i>    | <i>Mitteilungen der Deutschen Orient-Gesellschaft</i>                           |              |  |
| MHE            | Mesopotamian History and Environment  |              |  |

