

## Chronology in Hattuša: New Approaches to an Old Problem

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### Abstract

The results of recent excavations in Hattuša together with other deliberations have shown that the model of urban development as postulated by earlier excavators does not comply with reality. At the time of the Old Hittite Kingdom the city was already significantly larger than previously assumed, and the assumption that the Upper City had first emerged in the developed 13<sup>th</sup> century BC must now be revised as well. The earliest settlement layers found thus far in the western Upper City date to the 16<sup>th</sup>/15<sup>th</sup> century BC. Moreover, specific arguments show that the first buildings in the Temple Quarter and in the area of Nişantepe were built at the latest in the 14<sup>th</sup> century BC, some likely even earlier. The consequences of this re-dating concern comparisons to other sites as well, and new possibilities arise for the chronological assignment of architecture, material cultural remains, relief art and architectural ornamentation.

Hattuša was not only the capital of the Hittite Empire; it is the largest site within that realm as well. Furthermore, it looks back upon the longest history of excavations, with 66 excavation campaigns conducted since 1906. If the first tentative investigations by Ernest Chantre in 1893–1894 are also included, then there were in all 68 expeditions. Consequently one would expect that research on the city's history would be well advanced and that the essential features of urban planning and urban development have been well determined. Excavators of the site developed a scheme, according to whose essence it was presumed that the city was expanded immensely and more-or-less completely rebuilt only as late as the developed Hittite Empire period in the middle of the 13<sup>th</sup> century BC (see below). This supposition was scarcely questioned and was, thus, adopted in most of the summarising studies published during the past few years (e.g. Bryce 1998, 354; Hawkins 1998, 75; Seeher 1998; Klengel 1999, 293). Yet, the fact that research following this line came to a cul-de-sac is gradually becoming clear through the new interpretation of old archaeological material and find complexes as well as through new excavation results. Apparently earlier debates

on findings were concluded prematurely in favour of their placement within a rigid chronological framework, that had been formed basically according to various other considerations and that increasingly took on dogmatic features.

### The traditional hypothesis of late urban development in Hattuša

On another occasion I have presented a survey of suppositions made in the past years on urban development in Hattuša (Seeher in press a), so that a detailed review of this aspect can be omitted here. The model of urban development as presented in the 1930s and 1950s by K. Bittel and R. Naumann and modified later by P. Neve was in its final description in the 1980s as follows (cp. Neve 1982, 1 and appendices 2–6; Bittel 1983, 32 pp.; Bittel 1984, 16 pp.):

From an Early Bronze Age core that is presumed to be located on Büyükkale and its north-western slope, the Karum period settlement emerged and expanded into the area in which the Great Temple was later located, as well as to the north (fig. 1). During the older Hittite Kingdom and the early Hittite Empire period the adjoining area to the northwest, today a threshing place, was also occupied. The settlement was enclosed on the southwestern side by a postern wall and on the northeast by a presumed fortification wall along the west bank of the Büyükkaya stream. Only later during the later Hittite Empire period did an enormous enlargement of the city take place, whereby in the north the area of Büyükkaya and the northern city and in the south the area of the Upper City were enclosed with new fortification walls. The great kings Hattušili III and above all Tudḫaliya IV were named explicitly as the instigators of these building measures, to whom the erection or rebuilding of the city walls, almost all known temples, the palace of Büyükkale III as well as the reorganisation of the lower city including Temple I are attributed. It was assumed that the enclosed city of Hattuša was of modest size, containing only about 48 hectares, well into the 13<sup>th</sup> century BC, when it was then suddenly expanded to cover an area of 180 hectares, a process during which the entire city practically became a single construction site (Neve 1999, 146).

Whereas material evidence from the early periods of urban development in Hattuša was too scanty to lead to other conclusions in research, from its very onset the hypothesis of an absolute explosion in urban development during the later Empire period was not sufficiently supported. To begin with, the absence of finds from the area of the Upper City, which might have been assigned to the Old Hittite Kingdom, served as the essential supportive argument for dating the founding in the 14<sup>th</sup> century (Bittel 1938, 9). Later this date was moved to 1300 BC (e.g. Bittel 1983, 64) resp. the 13<sup>th</sup> century BC. Thereby two factors played an important role: the recognition that the hieroglyphic inscription on Nišantepe did not stem from Šupiluliuma I but from Šupiluliuma II, and the view that the enlargement of the city likely occurred only after the royal residence was moved temporarily to Tarḫuntaša in the early 13<sup>th</sup> century BC (Bittel 1984, 17 p.). A further supportive argument was the date of the reliefs on the Lion-, Sphinx- and King's Gates. They were compared with the reliefs from the sanctuary in Yazılıkaya, whose conception Tudḫaliya IV is accredited with (Bittel 1976, 233). The reliefs and the fortifications in which they were integrated were dated accordingly.

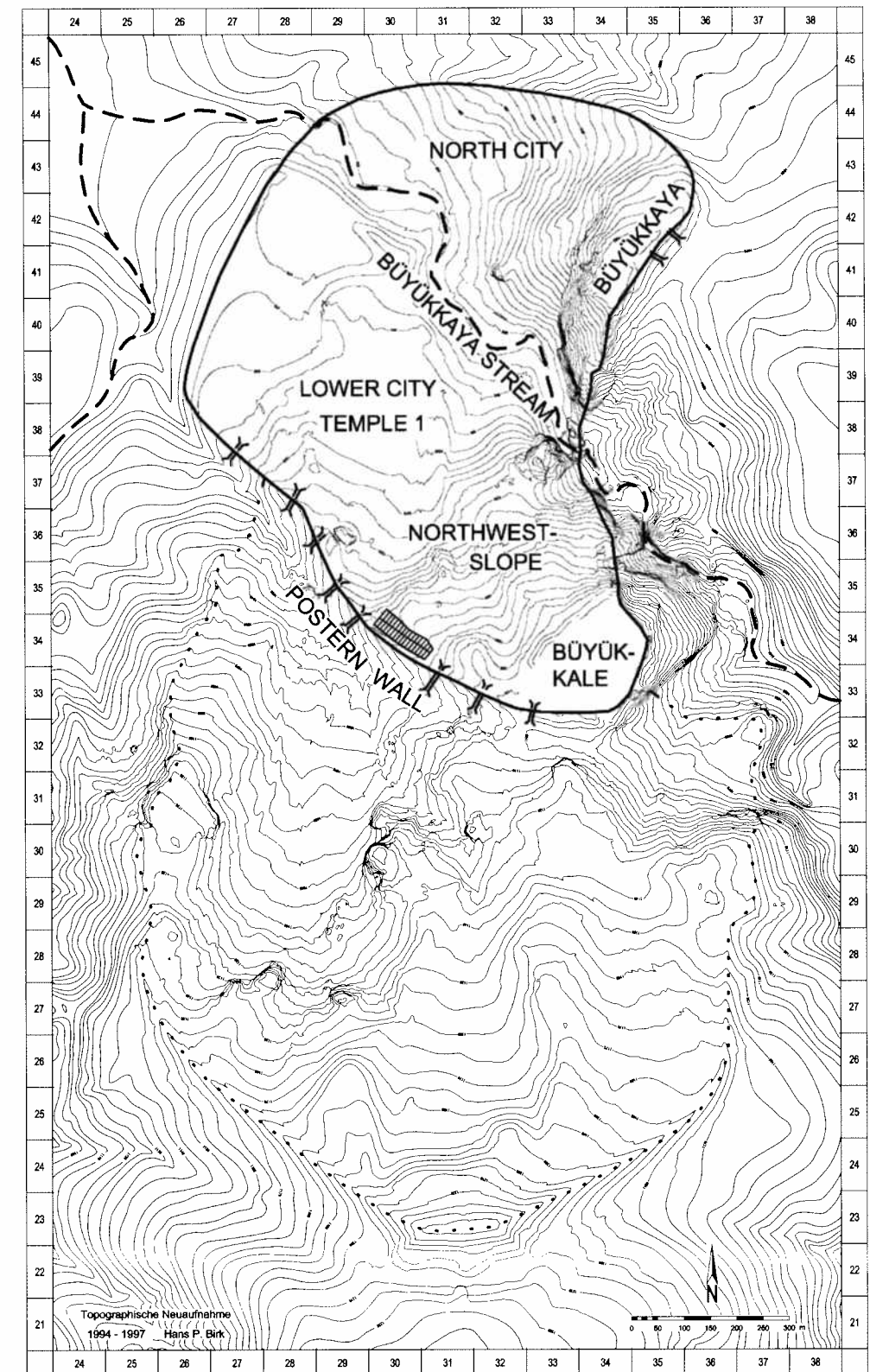


Fig. 1 Hattuša in the 16<sup>th</sup> century BC.  
The dotted lines mark the course of the later wall of the Upper City  
(distance between contour lines 5 m).

Later new finds and findings were also interpreted along this line, so that the date gained in credibility. One example is the hieroglyph stele, which was used secondarily in a Byzantine church located on the northern fringe of the Temple Quarter in the Upper City. Although the stele carries solely the names of Tudḫaliya IV, his father Ḫattušili III, his grandfather Muršili II and a further Tudḫaliya, it was nevertheless viewed as a kind of 'founding document', a monument with which Tudḫaliya acclaimed himself as the builder or the one who completed the Temple Quarter (Neve 1984, 370 fig. 10; cp. Bittel 1984, 27). Even if this stele had indeed once stood in the vicinity of the central temple area, this does not necessarily imply its association with a building program. The stele could as well have simply marked the erection of a single building, if it were connected with building activities at all, which is not more than an assumption. The same applies as well to a similar stele of the same king, which was also found in secondary position within the palace area in Büyükkale. This stele serves as one of the main arguments for the date of the new palace in the period BK IIIb (Neve 1982, 114; Bittel 1984, 18).

Finally, mention should be made of the conclusion brought into play by Güterbock and Bittel, according to which there was written evidence of a "Tudḫaliya-Ḫattuša-city". This evidence was seen to imply that Tudḫaliya IV had bestowed his own name upon the newly built Upper City of Ḫattuša (Bittel 1984, 15). Yet, as the article by J. Klinger in this volume points out, the source of this evidence is by no means unambiguous. And in the case that the designation "Tudḫaliya-Ḫattuša-city" indeed existed, it could be interpreted otherwise just as reasonably, for example, as a declaration of the Great King's claim to power as the ruler of the capital city Ḫattuša – and therewith the entire country (Seeher in press a).

### New excavations:

#### the early urban history of Ḫattuša becomes more distinct

Excavations carried out in Ḫattuša since the 1990s have produced new and decisive results in regard to urban history. Firstly, investigations initiated by P. Neve at Büyükkaya in the northeast of the city revealed that this mountaintop had been settled more or less continuously since the developed Early Bronze Age. It seems that since the Old Hittite Kingdom a fortification wall with posterns ran along the eastern side of the ridge and then turned in a wide curve towards the west, thereby fortifying the north town (fig. 1). In its further course the wall crossed the Büyükkaya stream, continued past the western side of the lower town and then led to the known postern wall on the northwestern slope of Büyükkale. Not only the posterns but the specific construction scheme of the towers in the sections of the wall west and east of the Büyükkaya gorge are comparable (fig. 2): they did not stand as separate structures between two curtain walls, as was the case with the later fortifications (fig. 2.c–d), instead they were set like bastions before the uninterrupted course of crenelated wall (fig. 2.a–b; Neve 1994a, 308 pp. and Seeher/Baykal-Seeher in press). They differ only in thickness, perhaps a reaction to variations in the nature of the terrain. While the postern wall was as a rule 7.5 m thick, the short section of old wall investigated below the northern end of Büyükkaya is only 6 m thick.

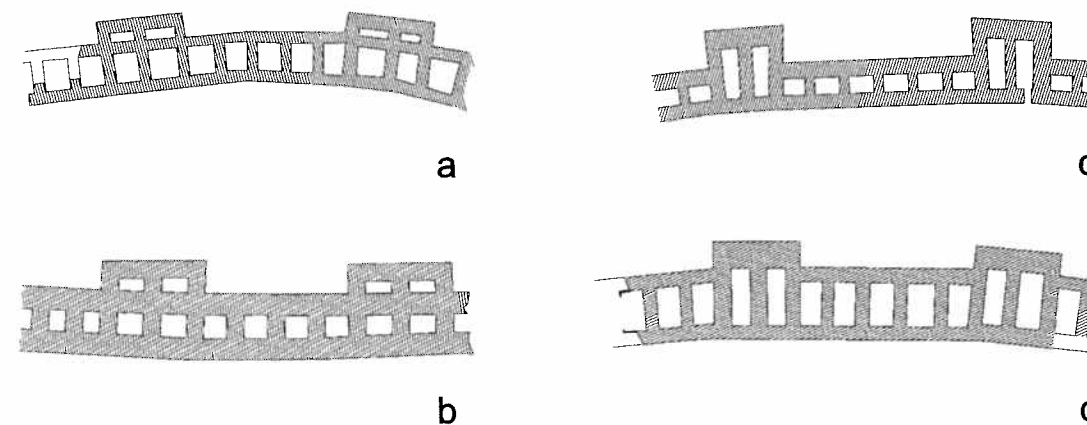


Fig. 2 Plan of the city walls.

a. North city wall at the northern end of Büyükkaya. b. Postern wall.  
c. Upper City wall west of Yerkapı. d. North wall at Büyükkaya.

The postern wall can be dated by means of the large silo-complex on the northwestern slope of Büyükkale. The silo-complex was erected at the same time as the wall, but destroyed by fire in the 16<sup>th</sup> century BC. According to recent evaluations of the <sup>14</sup>C-results<sup>1</sup> this occurred either during the first quarter or around the middle of the second half of that century (Schoop/Seeher this volume). Occasional finds of Old Hittite date collected in the area of the north city indicate this direction in dating as well. It must be assumed that the enwalled city of Ḫattuša already covered an area of about 76 ha in the (early?) 16<sup>th</sup> century (fig. 1) and, furthermore, that the strategically important mountain summit of Büyükkaya was integrated into the Hittite settlement from the very beginning, just as it was already part of the settlements of the late Early Bronze Age and Karum period. The defence wall previously postulated along the west bank of the Büyükkaya stream, traces of which were never detected, evidently did not exist – there was no need for it. A clear indication of the significance that the city already must have held at this early period in time can be seen with the huge silo-complex at the postern wall with a probable capacity of some 4000–6000 tons of grain.

Shortly thereafter the earliest complexes known thus far in the area of the later Upper City of Ḫattuša gradually emerged. As yet only the findings from excavations in the western part of the Upper City can be securely dated. The oldest structure is the grain silo, which is located on a small spur east of the central temple area. It was dated through <sup>14</sup>C measurements and comparisons in pottery to the 16<sup>th</sup> century BC. After the silo came into disuse in the 15<sup>th</sup> century BC, the so-called "Südteiche" or "southern ponds", five large reservoirs for water, were constructed on the plateau (cp. fig. 4). The pools, though, were not in use for any great length of time, as attested by large amounts of sherds found in the fill of pool 1 and dating to around 1400 BC (cp. summary report on the excavations in Seeher 2002, 59 pp.).

<sup>1</sup> In order to avoid any distortions of the measurement results, in recent years only short-life materials, preferably charred annual seeds, are used for radiocarbon dating in Ḫattuša.



Fig. 3 Overview of excavated area in the valley west of Sarikale, 2005 (for the location, see Fig. 4 No. 1): The gray squares and the plan denote buildings possibly used for military purposes in the 15<sup>th</sup> century BC.

At the latest during the late 16<sup>th</sup> century BC settlement commenced in what is now the present excavation area in the valley in front of the rock façade of Sarikale in the western Upper City (fig. 3). This date is indicated by the results of <sup>14</sup>C dating and pottery comparisons, which were applied to the material found in the two so-called “Quadratgebäude” or ‘square buildings’ (Schoop this volume; Seeher 2004, 62 pp; Seeher in press c). These edifices are similar in their rigid interior arrangement. Finds made of diverse weapons and sherds from handmade pottery (besides wheelmade Hittite wares) have led to the likely identification of the structures as barracks for military troops.

This horizon is followed by several settlement phases, which according to the present state of knowledge lasted until the beginning of the 13<sup>th</sup> century BC. The 13<sup>th</sup> century proper is apparently not present or only sparsely represented. Traces of workshops and urban habitations are prominent features of the levels.

Thus, the aforementioned ‘dogma’ of a late date for the expansion of the Upper City can be rejected. Now the question arises as to whether early settlement occurred only in the western part of the Upper City, or did it take place in other areas as well.

## The founding of the Upper City: new interpretations of old hypotheses

The model of development of the central Temple Quarter, as proposed by P. Neve, comprises three periods of Hittite building construction (Neve 1999, 146 pp.; Neve 2001, 97 pp.), as follows: Period O. St. 4 (O.St. = “Oberstadt” or Upper City) is supposed to fall into the time of Hattušili III or Tudḫaliya IV and primarily encompasses the erection of the first city wall with the Yerkapı bastion and the city gates as well as Temples 2–4 and 30. These structures fell victim to a conflagration, whose cause is conjectured to have been an attack by Kurunta of Tarḫuntašša, who intended to but failed to seize his rightful royal title from Tudḫaliya IV (Neve 1992, 19 pp.). Afterwards Tudḫaliya IV had most of the temples built anew or renewed (Temples 2–4). An additional wall was set in front of the fortification wall, and the gates were rebuilt in monumental size. During this time the new palace of Büyükkale period IIIb as well as the buildings in the area of Nişantepe were erected. In period O. St. 2, the very end of the Hittite Empire, many temples fell into decay, while some habitations and workshops developed in the southern part of the Upper City.

At this point it would exceed the intentions of this paper to review all of the problematic dates of earlier excavations in the Upper City which led to the chronological scheme just mentioned (cp. Seeher in press a). Here I shall only comment upon the major critical points:

1. The existence of period O. St. 4 has not been verified. Consolidated within this period are – above all – the remains of diverse walls and burnt layers belonging to the “old buildings” of Temples 2–4 as well as the remains of preceding buildings discovered below the Lion- and King’s Gates. There are no finds that date the beginning, duration and end of this period, nor is the coevalness of buildings or conflagrations confirmed, since there are no stratigraphic associations. The buildings could well stem from different times, and – in particular – they could have been built, destroyed and rebuilt considerably earlier than assumed. This subsequently touches upon the question concerning the position of the Old Hittite temples mentioned in cuneiform texts: what argues against their location in the Upper City of Hattuša, especially since 30 of the 31 temples known until now are located there?
2. The recognition that neither the existence of period O. St. 4 nor a terminating fiery destruction horizon can be proven further eliminates the basis for the statement that in period O. St. 3 a single effort followed to built or rebuilt most of the temples, the city’s gates and the additional vanguard wall. Since here as well there is no stratigraphic association between most of the structures, nothing speaks against the assumption that renovations on the city wall and the erection of the temples were not undertaken at the same time, but occurred over a longer period of time. Over and above, the assertion that the central Temple Quarter was built according to a ‘presiding general plan’ (Neve 1999, 9) seems unconvincing to me, in view of the map of excavated buildings in this area (cp. fig. 4). There perhaps some groups of structures were planned and built at the same time, but the irregular position of many



others clearly relays the impression of a gradual increase in structures, which adapted to those already present as well as to the particularities of the terrain. In like sense, the assumption of symmetrically arranged sectors in the southern part of the Upper City (Neve 1992, 22 fig. 44) cannot be affirmed in the terrain either.

3. With this the finds from the area of the Temple Quarter come into play. According to the hypothesis of the excavators the mass of finds from the Upper City belongs to the 13<sup>th</sup> century BC (e.g. Bittel 1984, 27). Today we know that this statement, referring mainly to Hittite pottery from the area, was premature, owing to the fact that at that time too little was known about this category of finds. As U.-D. Schoop's contribution to this volume shows, the definition of the gradual development of Hittite pottery is quite complicated. Only through the evaluation of series of different date can a somewhat distinguishable picture be attained. And this was almost impossible during the examination of pottery from the Temple Quarter, due to the lack of securely dated, comparable find complexes (Müller-Karpe 1988; Parzinger/Sanz 1992). However, since no scientific dates were available at that point, the ceramic finds dealt with in both studies had to be ordered within the dictated chronological framework. This situation in turn later provided the basis for the statement that the pottery analysis would confirm the late date of the Temple Quarter (Neve 1999, 12). In both pottery studies note was made of older ceramic forms, but these were interpreted as heirlooms. Based on his experience with well-dated material from Kuşaklı/Sarissa and other considerations, A. Müller-Karpe has since distanced himself from this older chronological system for the Upper City of Hattuša (Müller-Karpe 2003, 391).

Yet, among the many cuneiform tablets and seals or sealed bullae there are numerous examples, which can be dated prior to the Empire period and would approve an older date for the beginning of the central Temple Quarter. As J. Klinger's contribution to this volume shows, among the stray finds from the Temple Quarter one third or more are cuneiform tablets dated to the Middle Hittite Kingdom, while the number from Temples 8, 12, 15 and 16 even amounts to 95%. Moreover, amongst the rest of the textual and glyptic finds are pieces that can be dated long before the time of Tudḫaliya IV. Examples of older date to be mentioned here are: a bulla from Muršili III and an Old Hittite land grant document by the Great King Alluwamna from Temple 7 (Neve 1999, 44); diverse clay bullae in addition to texts of Middle Hittite Kingdom date from Temple 8 (Neve 1999, 81; Otten/Rüster 1990, Nr. 201–204); a clay bulla from Temple 15, also dated to the Middle Hittite Kingdom (Neve 1984, 360 Abb. 34); from Temple 16, in addition to a series of Middle Hittite cuneiform tablets in Hittite and Hurrian, also a bulla from Arnuwanda I is of Middle Kingdom date (Neve 1999, 72; Neu 1996); a bulla from Muršili II and the Tawannana in house 21 (Neve 2001, 94); and, finally, six large clay stoppers with the impression of a cruciform seal of Muršili II from Temple 2 as well as nine such pieces from Temple 3 (Neve 2001, 59, 82; Dinçol et al. 1993). Three miniature cuneiform tablets with oracle texts were found in Temple 30, one of which G. Wilhelm could date with certainty to the Middle Kingdom, a second one in all probability. The third tablet gave no clue to its

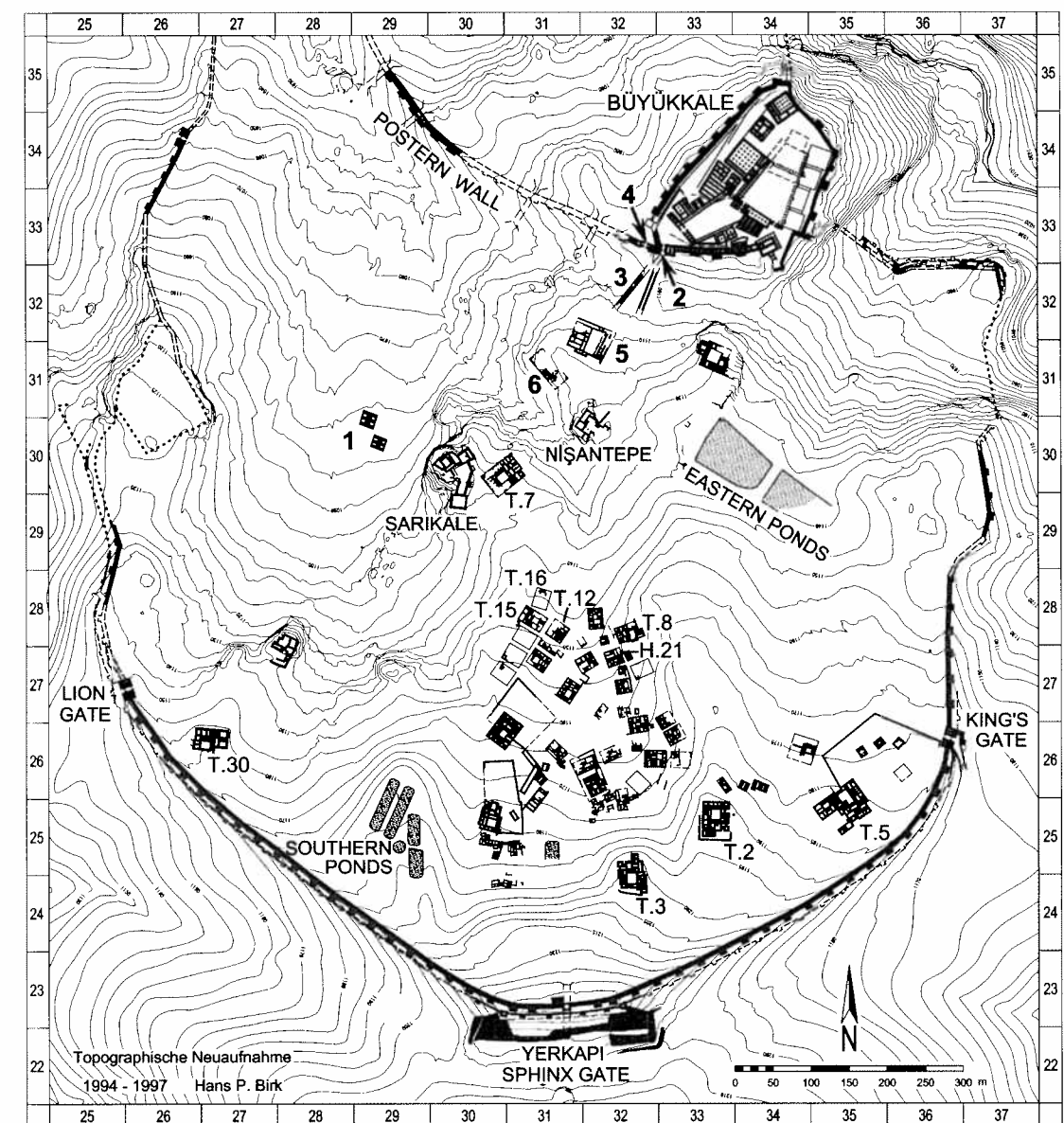


Fig. 4 Upper City of Hattuša (without temporal differentiation of find complexes):  
 1. Present excavated area in the valley west of Sarıkale. 2. Southwest gate of Büyükkale. 3. Viaducts.  
 4. South gate of the postern wall. 5. "Nordbau" near Nişantepe. 6. "Westbau" near Nişantepe.  
 T. = temple, H. = house (distance between contour lines 5 m)

date; however, its contemporaneity with the others seems likely, in view of the similarity in form as well as the location in foundation pits. The excavator designated them as possible foundation deposits (Neve 1992, Abb. 126; Neve 2001, 89). This list of early finds from the central Temple Quarter must still be augmented by numerous clay bullae with impressions of officials' sealings from the Middle Hittite Kingdom and early Empire period (pers. comm. A. Dinçol). Unfortunately, many of these temples did not provide sufficient datable pottery that might serve as a further evidence. Nevertheless, it is obvious that the cuneiform texts and other finds of early

date – found practically everywhere – cannot all be heirlooms, pieces passed down through the times or parts of transplanted archives.

4. An important factor in the problematic dating of the Upper City in Hattuša is the hypothesis that the expansion of this section took place at the same time as the construction of the new palace on Büyükkale in the period BK IIIb (Neve 1999, 12). This hypothesis is seen by the excavator as being confirmed by the spatial connection between the palace and the Upper City, which was previously missing but could now be recognised at the newly erected southwest gate (fig. 4.2) and at the affiliated viaducts that lead to Nişantepe (fig. 4.3). This led to the impression that with the building of the palace in period BK IIIb a new orientation in the city's layout took place. That, however, is not the case, for a mere 20 m to the west, below the southwestern height of Büyükkale, was the south gate of the postern wall that had stood for centuries of time (fig. 4.4). And through this gate there was always a connection from the Lower City as well as the palace (the old palace was located just on the upper plateau of Büyükkale) to the area of the Upper City. In addition, a preceding structure was discovered in a trial trench near the westernmost viaduct at the foot of Büyükkale. Based on the accompanying pottery finds it could be dated to a time within the early Empire period to the Middle Hittite Kingdom (Neve 1991, 303). If the southwest gate of Büyükkale had actually been erected as late as the period BK IIIb, then it was intended to replace the south gate of the postern wall. Namely, access to the latter was quite difficult due to the apparently newly built northwest wall on Büyükkale.
5. In this association we are faced with the question as to the all-inclusive late date for buildings in the area of Nişantepe. Here as well none of the dates were attained through comparison with archaeological material or scientific dating. A fragmentary sandstone slab carrying the name of Tudḫaliya IV, found in the debris, has supplied a date for the so-called "Nordbau" (fig. 4.5; Neve 1993, 629). The large inscription of Šupiluliuma II on Nişantepe is seen as marking the date of the structure erected upon the cliff and with that of the gate sphinxes and other architectural ornamentation as well (Neve 1992, 63). Further, in view of the strong resemblance between the sphinxes at the entrance to the building complex on Nişantepe and those of the Sphinx Gate in Alaca Höyük, Neve accordingly set the date of the Sphinx Gate in Alaca Höyük – dated by most scholars in the early Empire – in the late part of that period (Neve 1994b). Yet, this flow of logic could also work in the reverse direction: if the inscription on Nişantepe is not automatically seen as a dating point for the whole complex, but as a later addition, then the sphinxes on Nişantepe could – in comparison with those in Alaca Höyük – be set at a considerably earlier time.<sup>2</sup> The rejection of a late date for the buildings on Nişantepe would also lessen the pressing explanation for the findings in the 'palace archive' in the so-called "Westbau" on

<sup>2</sup> Bittel has also contemplated this possibility, but still tends to date the whole building complex to a later time (Bittel 1984, 25).

Nişantepe, where thousands of clay bullae were discovered (fig. 4.6). Neve views it as a short-term collection of documents that was established under Šupiluliuma II (Neve 1992, 58). But the temporal distribution of the land grant documents and seal impressions in the Westbau indicate, on the contrary, that this archive was in use from the middle or end of the 15<sup>th</sup> until the end of the 13<sup>th</sup> century BC. The quantitative distribution of seal impressions of the Great Kings has revealed that this was an archive from which in the course of time superfluous or outdated records were removed, that is, 'old files' are distinctly scarcely represented (cp. Bawanypeck in this volume; Herboldt in this volume).

6. Examination of the Sphinx Gate on Nişantepe leads again to the question of the date of the three city gates located in the southern curve of the city wall, which are likewise decorated with reliefs. The excavators maintain that the relief of a deity on the King's Gate shows a close affinity with reliefs in Yazılıkaya, especially the portrayal of Šarruma in Chamber B (Bittel 1976, 228 pp.; Neve 2001, 44 p.). And since the three city gates were supposedly constructed around the same time, the date for the King's Gate and Yazılıkaya would be the same as that of the Sphinx- and Lion Gates. As propounded by Bittel: Yazılıkaya and the gate reliefs in Hattuša are closely affiliated in form and style (Bittel 1976, 233). Moreover, without any detailed explanation it is presumed that the unnamed deity on the King's Gate is Šarruma (Bittel 1984, 22; Neve 2001, 45 fn. 126). This assumption is used again by Neve as further argument that Tudḫaliya IV, whose personal protective god was Šarruma, was responsible for the building of the Upper City in general and the nearby Temple V in particular. Aside from the purely speculative identification of the relief as being Šarruma, which does not count as dating evidence anyway, the assignment of such a precise date for these artistic works is – in my opinion – extremely daring. There is neither one specific parallel for the sphinxes nor for the lions in Yazılıkaya. Furthermore, the representation of the deity on the gate corresponds in principle to the Hittite standard depiction of males, as can be recognised on early relief vessels and as was common during the Empire period. K. Kohlmeyer observed that the main common feature in relief art was the like use of principles in portraying persons, a stereotypy which finds similarities in written evidence (Kohlmeyer 1983, 103).

Consequently, the arguments for dating the gate sculptures to the second half of the 13<sup>th</sup> century BC are refuted. Nonetheless, Bittel's supposition made thirty years ago, that the gate sculptures could not be dated much earlier than 1300 BC, presumably still holds validity (Bittel 1976, 233).

Neve views the gate reliefs in association with the concept of a "sacred street", that is, a processional avenue (Neve 1992, 17 pp. and fig. 44; Neve 1999, 10). It begins and ends on Büyükkale, whence it passes by Nişantepe and leads to the King's Gate (as suggested earlier by Krause 1940, 3). From there the avenue goes out of the city to the bastion at Yerkapı, then up the east stairs to the Sphinx Gate and via the west stairs down again and on to the Lion Gate, through which one entered the city once more. The principal evidence for this concept is the circumstance that the relief

ornamentation is on the interior surface of the King's Gate and on the exterior of the Lion Gate, meaning that the procession was departed from the city by the relief of the god and welcomed back by the lions. With the supposed commencement of the procession in the area of the palace (dated to Büyükkale BK IIIb), the date would again automatically fall into the reign of Tudḫaliya IV. Here as well the impression arises that a hypothesis was later augmented with material, without supplying any real and decisive evidence.<sup>3</sup>

## Conclusions

The points raised above now place the reconstruction of the urban history of Ḫattuša heretofore in a different light. It can be clearly shown that the late date of the Upper City, which would press all of the finds and find complexes into a time span of a few decades in the 13<sup>th</sup> century, is no longer tenable. The consequence is a far more plausible explanation of urban development, according to which the city developed into a centre of cult over centuries of time. As described above, the view today is that the Hittites occupied the area of the Upper City beginning in the (late?) 16<sup>th</sup> or early 15<sup>th</sup> century BC. Changes in this regard are still to be expected, for the present excavation in the Sarıkale valley is still in its initial stage. That the vicinity was already settled prior to this time is indicated by a layer of fill beneath the floor in a building from the Empire period, which was discovered in 2003. The fill contained, in particular, sherds of the late Karum period and the Old Hittite Kingdom, that is, transposed material that had been brought there together with earth to form the floor of the new building. A simple construction measure such as this would likely not necessitate that earth be brought in from the known older settlement layers in the Lower City, and would, thus, indicate that habitations of the Karum and Old Hittite periods were in the direct vicinity. In addition, one must keep the disastrous effects of erosion in mind, which has caused considerable damage to the slopes of the Upper City of Ḫattuša: once existent settlement layers have been completely washed away.

This leads us to the question as to when was the Upper City enclosed with a fortification wall? Find complexes known thus far: the large grain silo and the so-called "Südteiche" on the spur to the west of the central Temple Quarter as well as the structures possibly used by the military in the Sarıkale valley, could theoretically have been located outside of the fortified city, whose southern and southwestern limits were formed by the postern wall. In view of the importance of grain and water supplies, however, the question arises as to whether at this early time, that is, in the late 16<sup>th</sup> or early 15<sup>th</sup> century BC, an initial defence wall was already present, whose course was followed more or less by the later wall around

the Upper City. This track runs largely along the natural incline of the terrain. From a strategic military point of view it would seem more sensible to confront aggressive forces at this natural defence line rather than allow them to reach the postern wall. In the case of the latter, this higher lying area of the Upper City that offered a view of the city and the area of the palace on Büyükkale would be left to the enemy without a struggle.

However, traces of a forerunner to the visible southern city wall are difficult to find. One must reckon that the older defence wall was built differently, that is more simply, and that much of it disappeared in the course of later construction measures. Hence, for the time being the supposition of an Old Hittite fortification line at the south end of the city must remain a hypothesis. Only new excavations can throw more light upon the matter. For example, soundings in the area of the interior of the King's Gate and the exterior of the Lion Gate would seem promising; namely, several burnt horizons were discovered there, when information signs were put up for tourists. The burnt layers are clearly located below the present level of the gate entrance, which as the threshold stones confirm corresponds to the final state of the gate complex. With some luck new clues to the history of the gate buildings might come to light.

In the 14<sup>th</sup> and early 13<sup>th</sup> centuries BC a substantial, architecturally urban-like settlement was present in the Sarıkale valley. In my opinion, the beginning of this epoch marks the latest possible date for the construction of the wall around the Upper City that is visible today. This assumption is supported by the arguments presented above in proposing an earlier date for different structures in the Upper City. Namely, as early as the 14<sup>th</sup> century BC there surely were structures in the area of Nişantepe and the central Upper City that were in use, and nothing contradicts the thought that Temples 2, 3 and 4 with their apparent antiquated, monumental socle architecture and open ground plans did exist even earlier. This would support the proposal that fortifications had been erected earlier, even though sanctuaries located outside of Hittite cities are known, as in the case of Yazılıkaya near Ḫattuša and Lake Supitassu near Sarissa.

A further argument for the existence of previous temples in the Upper City are the aforementioned layers of sherds in Südteich 1. Radiocarbon dates and pottery analyses point to a date around 1400 BC. There mainly cult vessels were found; fragments of some 50–55 small and 40–50 large libation arms as well as 55–60 spindle bottles are of special note. Thereby, not one single vessel was found complete; instead larger parts were missing in each case. This makes it seem likely that these cult vessels, having been broken elsewhere, were actually disposed of here. Since about one fifth of these pottery fragments were burnt, the thought arises that they stemmed from the inventory of one or more temples that had been destroyed by fire. Of course, the sherds could have been transferred from any other place. However, the conjecture that they derived from the original inventory of the nearby temples 2–4 and 30, all "older buildings" that were destroyed by fire, seems a plausible explanation to me, even though it can hardly be confirmed.

The turn away from a late date for the expansion of the Upper City has fundamental consequences for dating the finds. The change in factors used in evaluating pottery has been acknowledged and applied accordingly in the study by U.-D. Schoop (cp. Schoop in this

<sup>3</sup> W. Andrae (Andrae 1941, 14 pp.) also speculated about a processional avenue in Ḫattuša. However, he came to other conclusions, since he assumed that the lions had been also been applied to the side of the gate facing the city. J.V. Canby (Canby 1975, 244 pp.) envisioned a procession that took place only within the area of the Sphinx Gate and Yerkapi. In a very noteworthy objection during a conversation H. Otten once argued the following: The narrow, steep stairs at Yerkapi are not suitable for processions, in which cult objects and other paraphernalia are carried. The probability that the objects might fall or be dropped while going up and down the steps, and therewith cause great misfortune, was imminent. The conductors of cult would hardly have taken such a risk.

volume). Our future aim is to compare ceramic find complexes from past investigations with the results of recent excavations and, thereby, perhaps correct the former's date. This endeavour will be difficult with other categories of finds, since the number of finds is usually quite sparse.

The recognition that the emergence of the Upper City of Hattuša was protracted has also consequences for comparisons with other sites. This applies to the archaeological material, especially pottery. However, find complexes can also provide evidence, as A. Müller-Karpe has encountered. Using the results from Kuşaklı/Sarissa as a comparison, he sees the possibility that the temple complexes with a somewhat rectangular ground plan can be divided into a developmental series, whereby the older and larger are distinguished from the later and small complexes (Müller-Karpe 2003, 389). Still this must necessarily remain a hypothesis, as thus far there are no supportive dates through finds or scientific methods available in Hattuša. Yet, this could be a step in the right direction.

A further consequence is the change in possibilities for evaluating Hittite sculpture and reliefs in Hattuša as well as other sites. Following his hypothesis of a late date for the Upper City, Neve considered the use of architectural sculpture as an innovation of the second half of the 13<sup>th</sup> century BC (Neve 2001, 100). He dated the lions and sphinxes on the gates of the city and on Nişantepe in accordance, and, furthermore, saw them as a means of dating fragments of architectural sculpture in Temples 2 and 3, in Büyükkale and Yazılıkaya (Neve 2001, 55 pp.). However, the diverse fragments of lion figures differ with a distinction that would rule out the idea of their production by the same school of sculptors and thus dating to a certain period only. On the contrary, if one should envision a longer span of time into which these diverse sculptures were to be ordered, the formal differences could be explained with ease. This indeed would warrant detailed study, and with it a renewed investigation on the extent to which the advent of Hittite architectural sculpture and relief work can be followed back in time. Do only the 14<sup>th</sup> and 13<sup>th</sup> centuries come into question, or are there indeed some examples of sculpture from earlier times, as J.V. Canby attempted to prove with noteworthy arguments (Canby 1976).

The reliefs in Alaca Höyük, which are generally considered of early date, were certainly not the first of their kind. A forerunner might be seen in the relatively simple relief at the entrance to building D in Ortaköy/Şapinuva, depicting a male with a lance, bow and quiver (Süel/Süel 2004, 60). Unfortunately, the shoulder zone as well as the head are missing, but otherwise the depiction displays the typical manner of stride, skirt and shoes. According to the vague information published thus far, the relief should perhaps be dated to the pre-Empire period. Yet, here one could question whether or not there is a difference between the art of the capital and that of the provinces. And if there is, does this apply in general or only to certain epochs in time. Questions such as these are difficult to answer due to the paucity of Hittite relief sculpture. Representations in relief on clay vessels might eventually play a decisive role in dating the Hittite rock reliefs, since they are definitely more numerous. It seems, though, that the present state of research and number of pertinent publications are not sufficient; new stratified finds will provide the necessary material for argumentation.

The recent excavations in the western part of the Upper City have brought forth evidence of settlements that are of much earlier date than the 13<sup>th</sup> century BC, basing on stratigraphic observations as well as the analyses of small finds and radiocarbon dates from secure contexts. At first glance the change in the date of the Upper City recalls corresponding information from as early as the 1930s, which at that time was suppositional. Now it can be applied as evidence and draw us closer to actuality. Yet, there are still many uncertainties, for thus far we are unable to determine the exact beginnings and the duration of use of various structures. Hopefully, this state will change in the course of further investigations in Hattuša. Progress is already foreseen in dating pottery and small finds, and specifically placed soundings will deliver further evidence. Therefore, at this point I consider it premature to proffer new hypotheses concerning the questions as to which ruler was responsible for which building measure and to which historical events burnt horizons should be assigned. First we must attempt to construct a closely woven network of dates.

With this contribution I hope to have shown that the Hittite capital, even and especially after decades of excavations, still contributes essentially towards answering the question of dating and structuring Hittite archaeology. The corrections in the framework of settlement history in Hattuša, which was generally used until now, have their effects upon the evaluation and interpretation of archaeological material and findings at other sites, and new possibilities for the evaluation of Hittite history have emerged. This applies especially with reference to the role of the Hittite great king Tudḫaliya IV. There seemed to be a remarkable contrariety during his reign: the monarch, who had to confront inner unrest, wearisome conflicts and loss of power in the west and southeast of his Empire, nevertheless had the capital expanded two and a half times in size and almost completely rebuilt. Now we must assume that these measures were not his work nor those of another ruler either. Hattuša grew and expanded gradually, and, indeed, long before Hattušili III and Tudḫaliya IV the city had reached the immense expanse that we know today.

Translation: Emily Schalk

#### Hattuša Kronolojisi: Eski Soruna Yeni Yaklaşım

Hattuša'da yeni kazılardan elde edilen sonuçlar ile eski kazıların yeniden değerlendirilmesiyle eski hafirlerin geliştirdiği kentin gelişim modelinin önemli noktalarının yanlış olduğunu ortaya çıkmıştır. Kent, Eski Hitit döneminde şimdiye dek sanılandan çok daha büyüktü. Yukarı Şehrin MÖ 13. yüzyılda oluştuğu varsayımı da bugün çürütülebilmektedir. Yukarı Şehrin batısında bilinen en erken yerleşim tabakası M.Ö. 16./15. yüzyıldan olup, Tapınak Mahallesinde ve Nişantepe kesiminde ilk yapıların en geç M.Ö. 14. yüzyılda, kısmen daha erken bir zamanda yapıldığını gösteren çeşitli deliller vardır. Tarihlelendirmenin değişmesi diğer buluntu yerleriyle karşılaştırmalara da yansımaktadır: Mimari, buluntular, kabartma sanatı ve mimari bezeme konularının yeniden sınıflandırılması olanakları doğmuştur.



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