Understanding Change and Continuity: A New Approach to Temple Architecture in Anatolia in the Middle and Late Bronze Ages

By

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This is to certify that I have examined this copy of a master's thesis by

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To my family

ABSTRACT

The shift from the Middle (ca. 2000-1600 BC) to the Late Bronze Age (ca. 1600 - 1200 BC) in Anatolia has been identified primarily with the socio-political changes resulting from a shift from fragmented city-states to a centralized power (i.e. the Hittites). This switch is clearly reflected in the material record, from building plans and urban layouts to artifacts and textual evidence.

This thesis provides an extensive and detailed overview of the architectural remains identified as temples and of the related archaeological artifacts. It focuses on both diachronic and regional aspects of continuity and change in the religious architecture of Anatolia during the second millennium BC, comparing this with contemporary evidence in northern Syria (i.e. religious structures at Tilmen Höyük, Tell Atchana-Alalakh, and Aleppo). Moreover, it analyzes the published temple plans of Anatolia for the aforementioned periods through space syntax analyses in order to shed light on inter- and intra-regional patterns of movement and usage of the buildings.

The results show significant regional and diachronic differences in building techniques, planning and usage of religious architecture, therefore demonstrating how temples mirror the increasing complexity characterizing Anatolian societies with the transition from the Middle to the Late Bronze Age. Within this historical framework, religious architecture indicates cultural exchange, state formation, centralization, and influence from neighboring regions in Anatolia at the end of the second millennium BC.

Keywords: Temple Architecture, Middle Bronze Age (MBA), Late Bronze Age (LBA), Anatolia, Shrine, Assyrian Colony Period, Hittites, Space Syntax Analyses, J-Graph, Visibility Graph Analyses (VGA)

ÖZET

Anadolu'da Orta Tunç Çağından, Geç Tunç Çağına geçiş şehir devletlerinden, merkezi bir güç olan Hitit devletine geçiş ile tanımlanmıştır. Özellikle yapı planları, yerleşim planları ve yazılı kaynaklar bu geçişi açıkça göstermektedir.

Bu tez tapınak olarak tanımlanmış yapıları ve onlarla bağlantılı olarak bulunan arkeolojik buluntuları kapsamlı ve ayrıntılı olarak incelemektedir ve özellikle M.Ö. İkinci Bin Anadolu'sunda dini yapıların diyakronik ve bölgesel değişimine yoğunlaşmaktadır. İncelenen tapınak yapıları çağdaş kuzey Suriye tapınak mimarisiyle (Tilmen Höyük, Tel Atchana – Alalakh ve Halep) karşılaştırmaktadır. Dahası, bahsedilen dönemlerdeki yayınlanmış tapınak planlarını daha iyi anlamak, bölgesel ve bölgeler arası yapı kullanımın, yapı içi hareket ve erişilebilirlik modellerini anlayabilmek için Mekan Dizimi Analizleri yapılmıştır.

Sonuçlar yapım teknikleri, planlama ve dini yapıların kullanımında kayda değer bölgesel ve diyakronik farklılıklar göstermektedir. Orta Tunç Çağından Geç Tunç Çağına geçişte Anadolu topluluklarında artan karmaşıklığın, tapınak yapılarına da yansıdığı görülmektedir. Özellikle, M.Ö. İkinci bin Anadolu'sunda, tapınak yapıları ve tapınak yapılarının değişimleri kültürel etkileşim, devletleşme, merkezileşme ve komşu bölgelerden gelen etkilere işaret etmektedir.

Anahtar Sözcükler: Tapınak Mimarisi, Orta Tunç Çağı, Geç Tunç Çağı, Anadolu, Mabet, Tapınak, Asur Ticaret Kolonileri Dönemi, Hititler, Mekan Dizimi Analizleri, Düzenlenmiş Geçiş Grafiği, Görülebilirlik Grafi Analizi.

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their regions

1. CHAPTER 1 - Introduction

This thesis examines the changes in temple architecture in Anatolia from the Middle Bronze Age (ca. 2000 - 1600 BC; hereafter, MBA) to the Late Bronze Age (ca. 1600-1200 BC; hereafter, LBA).¹ It provides an extensive and detailed overview of the architectural remains identified as temples and the related archaeological artifacts; moreover, it analyzes the published temple plans of Anatolia for the aforementioned periods through space syntax analyses in order to bring light patterns of movement and usage of the buildings. Throughout the previous decades, there have been publications on individual sites and their temple architecture, but a full study which surveys all the temple structures, including the changes in their architecture in Anatolia from the MBA to the LBA, is still lacking. Therefore, the purpose of this thesis is to offer a holistic approach to temple architecture in Anatolia.

Architecture constitutes one of the major categories of evidence available to archaeologists, and therefore provides a crucial lynchpin for interpreting the past. Buildings are space constructed to meet social needs such as shelter, belonging, socialization, and construction of communal identity and memory, and the temple serves as the architectural type where the social institution of religion is practiced (Wightman 2007, 898). The temple has simply been defined as "a building devoted to god or gods," but it also held more meaning, since it was believed to be the sanctified image of the cosmos on earth, where a link is created between the world

¹ However, it is important to note that the date of the MBA-LBA transition in various regions of Anatolia is debated, with many central Anatolian sources citing 1650 BC as the beginning of the LBA. In this thesis, 1600 BC is taken as an approximate date that can be applied beyond the borders of central Anatolia (see further below). No definitive statements regarding the precise date of the transition are intended.

and the heavens in order to communicate with the gods; these links are materialized in the form of a dwelling, a structure, or a building (Eliade 1959, 26). For the purposes of this thesis, the term temple is defined as man-built structures devoted to a god or gods where religious and ritual practices took place; it is therefore used as an overarching term which includes shrines, sacred structures, cult buildings, and religious complexes found within settlement boundaries.

However, the identification of a building as a temple is a different matter. Although technological advances help archaeologists in their research, understanding the function of a building remains very difficult. How do we understand that an ancient building was used for religious purposes? Each culture has a different belief system, and this is reflected in the way that they practice religion; these practices affect their material culture, and therefore their architecture and artefacts, which is what we are focusing on here.

Renfrew suggests that some common behavioral correlates can be established to understand ritual and religious behavior in the archaeological record which can be used in identifying religious structures (1985, 11). His 'guidelines' for the identification of religious behavior consist of 18 items (Renfrew 1985, 19-20), the most relevant of which for the purposes of this thesis include: 1) a location with a special geographic setting, where the ritual takes place; 2) continuous occupation of the sacred setting; 3) a special building for sacred functions; 4) attention focusing devices or features in the architecture; 5) representation of the cult image; 6) sacrifices, both animal and/or human; 7) offerings of food and drink; 8) votive objects; 9) equipment used in cult practice; 10) a sacred area indicated with repeated symbols; 11) symbols related to the deity or deities and their myth(es); 12) maintenance of the sacred area, especially clean vs. dirty areas; 13) investment of

great wealth reflected in the architecture, offerings, and equipment. (Renfrew 1985, 20). Whilst these guidelines may aid in understanding artifacts and features found in excavations, one must be wary in applying them to material from a given site, due to the fact that Renfrew created this framework based on his excavations at Phylakopi, a model which may not be fully applicable to other regions and cultures. Various scholars have changed and adapted these guidelines to better fit their own research areas (Barrowclough and Malone 2007; Zevit 2001; Levy 2006; Dion & Daviau 2010). Aside from questions of its universal applicability, these characteristics are not always visible in the archeological record, adding further complications.

In Anatolia, for example, this has been the problem: various structures uncovered by excavators have been identified only tentatively as temples, since what a temple looked like in the given period/area was not well-known. The structures which have been positively determined to be temples, such as the temples at Hattuša and Kuşaklı-Šarišša (Neve 1999; Neve 2000; Müller-Karpe 2017), were identified through texts which openly state that the structure was used as a temple. These structures, which have been positively identified as temples, establish an archetype or a template for structures which are thought to have religious functions. Apart from the textual evidence and the architecture, the identification of a structure also depends on the artifacts found within it, especially the pottery assemblage. For example, it is known from the Hittite period that there were specific pottery types used in rituals and particular material culture assemblages found in association with temples. All these help in identifying cultic structures, but when there are no known religious structures for a specific period and the artifacts are non-specific (as is the case in the MBA in central Anatolia), research either stalls or a process of elimination is utilized (see Özgüç 1993).

Additionally, the indicators listed above should be taken with a grain of salt, since the identification of a temple can become a circular argument. One identifies a temple through other temples, in the absence of writing that indicates otherwise, so that once a given structure is labelled as a temple, other similar structures are also identified as temples, in a self-perpetuating circle. This circular reasoning is a serious problem, especially for early temple/ cultic structures, an issue that this thesis addresses by examining the structures on a case-by-case basis.

In the past, people believed that regular visits to the gods at the temple would grant them control over their fates and the world around them (Hundley 2013, 3). The temple was a place of divine presence and worship, and it was highly charged with religious connotations; without this religious association, it is no different than any other building. Given the presence of both the divine and worshippers, the temple had a central role within ancient societies, which, through time, became more significant, leading to the temple becoming a place of power with the ability to convey specific messages and functions (Hundley 2013, 3). These messages and functions ranged from political propaganda to economic pressures. The study of temple architecture aids us in understanding these social and cultural changes, because different societies have different comprehensions of religion and therefore different understandings of holy spaces. Furthermore, it assists us in understanding the changes in the political stances of governing factions, since the temple played a significant role as the divine mediator between the ruler and the god(s). Given these cultural differences, this thesis also aims to find answers to the questions of interand intra-regional differences in temple architecture in the given periods, while trying to understand where the attested types of temples originated. To further understand temple architecture in Anatolia for the MBA and LBA, this thesis also

reviews three sites from the neighboring region of northern Syria (Tilmen Höyük, Tell Atchana, and Aleppo). These three sites represent well-known examples of temples of both the MBA and LBA in northern Syria and exhibit diachronic changes in their architecture that in some cases correspond to political and social changes as seen in the material and textual record.

The research presented reviews two essential periods in Anatolia: the MBA and the LBA. The transition from the MBA to the LBA is characterized by significant changes associated with the transition from a social landscape of fragmented city-states to one of imperial control: it is therefore crucial to look at the temples to understand to what extent this process affected the cultural understandings of the people of Anatolia.

1.1 Definition of Anatolia and Historical Overview

Every culture has their own understanding of architecture and space. From the MBA to the LBA, we see a shift in culture which led to changes in architectural forms. Thus, it is important to define Anatolia and its borders and to look at the history of Anatolia in the aforementioned periods to get a better understanding of the background and the bases that might be the cause of architectural change.

Anatolia, first coined as a geographical term in the 10th c. AD, is defined as the Turkish peninsula bordered on three sides by the Black Sea in the north, the Sea of Marmara to the northwest, the Aegean Sea in the west, and the Mediterranean Sea in the south (Dent 1907, 14; Georgacas 1969, 24-26; Düring 2011, 5; McMahon and Steadman 2011, 4). However, 'Anatolia' is not synonymous with modern day Turkey (Naumann 2007, 1; Sagona and Zimansky 2009, 1-9; McMahon and Steadman 2011, 4). The eastern and southeastern border of Anatolia is loosely defined by a diagonal line starting from the Gulf of İskenderun at the southeastern end of the Amanos

Mountains and continuing north-northeast to the point where the Pontiac Mountains end at the modern day border of Turkey and Georgia (Fig. 1) (Dent 1907, 14; Mitchell 1995; Sagona and Zimansky 2009, 1-9; McMahon and Steadman 2011, 4; Seeher 2011, 377). It is also true that the definition of Anatolia changes from period to period, depending on the time period under study (Barjamovic 2011, 57-59; Düring 2011, 4-5; McMahon and Steadman 2011, 5-7; McMahon 2011, 16). This definition of Anatolia does not encompass the whole extent of the historical geography of the region, due to the fragmentary evidence, which has been under study for the last five decades by scholars. Various maps have been derived from textual evidence for both the MBA and LBA (Landsberger 1925; Forlanini 1992; Nashef 1992; Kull and Röllig 1991). For the periods concerned in this thesis, the MBA and LBA, Anatolia is defined as described above; this creates a well-structured cultural and geographical boundary for the purpose of this research.

Anatolia in the MBA, according to our current state of knowledge, was politically fragmented. There were several political centers consisting of fortified settlements, each controlling the surrounding territory and its villages, with these centers or states being ruled by a royal couple (Barjamovic 2008, 88; Barjamovic 2017, 311).

In central Anatolia, the Assyrians, who were a prominent feature of this period, came into the picture in the MBA, apparently attracted by the raw materials available in Anatolia, and set up trading posts, creating one of the biggest trading centers in Anatolia (Kültepe – Kaniš), along with other trading posts at a number of other Anatolian cities (Barjamovic 2008, 88; Barjamovic 2017, 311). From the textual evidence found at Kültepe-Kaniš, it is known that there were forty *karum*, the Assyrian term for these trading centers, and *wabartum*, a type of subordinate market

attached to the *karum*. In Anatolia and northern Syria, the most well-documented are Purušhaddum, Durhumit, Hattuš, Wahšušana, and Zalpa (Barjamovic 2011, 5; Özgüç 2003, 23). Although it is known that the trading colonies extended up into northern Anatolia (e.g. Zalpa), due to the dense forests, weathering in the Pontic Mountains, and a lack of textual evidence, not much is known about the region and its political structure in this period (Barjamovic 2011, 107-122).

The Assyrian traders were navigating among the city-states for their trade businesses; for these to run smoothly, the traders were communicating with their partners, correspondents in other cities, and their home country (Michel 2011, 327). This communication was through cuneiform tablets, which marks the first use of a writing system in Anatolia (Barjamovic 2008, 88). The arrival of the Assyrians was not merely political, though: it also changed the economy, leading to Anatolia becoming more prosperous over the course of their influence, which lasted between ca. 2000 - 1600 BC (Yakar 2011, 74-75). The series of interlocking trade and communication routes used by the Assyrians, commonly known as the Assyrian Trade Network, extended across central Anatolia and parts of the southeast, but it is still unknown to what extent these connections penetrated into the west (Barjamovic 2017, 311; Sarı 2013, 312).

These merchants not only brought prosperity to Anatolia, but it is quite possible that they affected the architecture and religious beliefs, and thus the temple architecture, as will be explored in the following chapters. The exact reason why this period came to an end is not known, although the turbulence throughout Anatolia and the hunt for more raw materials might have led to power struggles and the collapse of the MBA system (Bryce 2013, 175; Barjamovic 2011, 1). Western Anatolia in the MBA is markedly different. Although it had previously been believed that during the MBA, the region was excluded from the commercial web of the Assyrians, recent research on textual records has led to the hypothesis that the western *karums* (such as Purushattum and Salatuwar) might actually have played an important role in connecting central Anatolia to the networks of western Anatolia and the Aegean (Barjamovic 2011, 15; Sari 2013, 312). The transition from the MBA to the LBA in western Anatolia is not clear-cut in the material culture. Unlike central Anatolia, there is not a textually attested change in political power (i.e. the Hittites), and the progression of social and political phenomena which characterize the later periods steadily develops from the beginning of the millennium (Pavúk 2015, 87-91). These developments and contacts are seen in the late MBA at Troy V, Panaztepe, Miletus IIIB, and Iasos, which show a slow but steady increase of contact with the Aegean, a prominent characteristic of the LBA in the west (Blegen 1995; Kaiser and Raymond 2015; Momigliano 2012; Erkanal-Öktü and Erkanal 2015).

Anatolia in the LBA presents a different picture. After the collapse of the Assyrian trade colonies, the Hittite kingdom came into power (ca. 1650 BC: Yakar 2011, 77; Klengel 2011, 32). The MBA city-states of Anatolia now became primarily dominated by a single power of Hittite origin, centered at their capital city of Hattuša. The Hittite rule, according to most scholars, is divided into two phases – the Old Kingdom and the Empire Period². The Old Kingdom period is characterized by expanding Hittite territory throughout the Near East and most of Anatolia in all

²² Though there are others who divide the Hittite rule into three periods. This three-tier definition divides Hittite history into the Old Kingdom, Middle Kingdom, and Empire Periods. This division is more linguistically based than archaeological (Beal 2011, McMahon 1989, Archi 2003), and therefore the two phase divison is preferred here.

directions from the base of their power in the central Anatolian plateau. Much of the Old Kingdom infrastructure and culture prevailed until the end of the empire.

The Hittites ruled many vassal states, which extended across Anatolia, Syria, and Syria-Palestine towards Damascus. These vassal states were under the control of local rulers appointed by the Hittite king, and their seat was often secured through marriage with one of the daughters of the king (Bryce 2011, 95-96). These vassal states, though they were connected to the Hittite Empire through treaties and their appointed rulers, were free in their internal affairs if they held up their part of the treaties, which might have led them to freely follow their own cultural traditions (Bryce 2011; 96). This could have enabled them to use their own architectural styles in their buildings, and especially in their temple architecture, leading to different styles in temple architecture among the vassal states of the Hittites, both amongst themselves and between them and the temples seen in the heartland of the Hittites (especially at Hattuša). These vassal states are better documented both textually and archaeologically in southeast Anatolia and northern Syria, and included the polities of Kizzuwatna, Karkemiš, Aleppo, Mukiš, and Ugarit (Beckman 1999). In the north, a group of people known as the Kaška were responsible for various raids on the Hittite Empire throughout the LBA (Glatz and Matthews 2005, 47). The settlements in northern Anatolia are mainly known through texts from Hattuša, as no known Kaška sites have been excavated, except for Kınık-Kastamonu; this is (as mentioned above) due to the dense forests and weathering in the northern highlands, which limit both the preservation of remains and the extent of research carried out (Glatz and Matthew 2005, 56). Similarly, many of the western Anatolian territories (called the Arzawa countries by Hittite texts) are documented mainly in the Hittite archives, as well as through more limited excavations than those in central Anatolia (Hawkins

2002, 94; Casana 2017, 157). The political entities in this area included the Seha River Land, Hapalla, Wilusa, and Mira-Kuwalia. Although their exact locations and boundaries are still a matter of dispute, it is clear that these kingdoms constantly negotiated both their boundaries and the degree of their respective autonomy, both with the Hittite state and each other, throughout the LBA (Alparslan 2015, 132; Hawkins 2013, 30-32; Mac Sweeney 2010, 8). The interplay of external factors (i.e. contacts with the Mycenaean and Hittite powers) and autonomous development created a fragmentary political landscape of pre-state societies connected with both the east and the west, but this system never reached the degree of complexity and centralization achieved in central Anatolia in the LBA (Pavúk and Pieniazek 2016, 533-534; Maner 2015, 836-839).

The exact reasons behind the end of the Hittite Kingdom are not known, but the capital of Hattuša appears to have been abandoned ca. 1200 BC. A crisis, not completely understood, caused the collapse of states in the LBA across the Mediterranean and the Near East around this date. Moving up from the shores of the Mediterranean, this crisis also affected central Anatolia, and thus the Hittites (Genz and Mielke 2011, 19). The last known king of the Hittites is Šuppiluliuma II, but neither the textual sources nor the archaeological evidence give a reason why the Empire collapsed (Genz and Mielke 2011, 20). It has typically been linked to the widespread attacks and destruction attributed to the so-called "Sea Peoples" by Egyptian sources (Genz and Mielke 2011, 20). However, there is no compelling evidence for the Sea Peoples in the Hittite records, and new research indicates that the collapse might have been related to internal struggles within the Empire (Hoffner 1992, 49). For example, the two lines of the royal family might have had a fallout which led to a war (Güterbock 1992, 55). Thus, the end of the Hittite Empire might

have been a more gradual process, rather than a matter of falling victim to a sudden attack (Genz and Mielke 2011, 20). Some of the Hittite vassal states, particularly in the southeast, seem to have weathered this chaotic period relatively intact and to continue more or less directly into the early Iron Age, most notably at Karkemiš, where the Iron Age kings appear to be the direct descendants of the Hittite Great Kings (Hawkins 2002, 148).

1.2 A Short Summary of the Chronology of Second Millennium BC Anatolia

When discussing chronology, one must be aware of how diverse the cultures in Anatolia are. Although Anatolia looks like a singular, united land-mass, the diversity within it is very high. This diversity is one of the reasons why there are variations between the regions and their chronologies. In this section, the chronologies of western Anatolia, central Anatolia and the Cilician Plain are shortly discussed. This short section does not offer a solution, a new synchronization or a complete chronology for Anatolia and its neighboring regions; it only offers a short discussion that summarizes the current state of research.

The MBA, as mentioned above, comprises the four century-long period (2000 - 1600 BC) when the Anatolian city-states were established and fell (Yakar 2011, 74; Özyar 2014, 1545).³ The MBA sequence as we know it, particularly for central Anatolia, has been partly established through the detailed records of the Assyrian traders and the *limu*-eponym lists that have been found in the Kültepe-Kaniš archives (Veenhof and Eidem 2008, 28-34; Yakar 2011, 75). These lists provide timeframes for Anatolian chronology through the activities of the merchants, which are able to be synchronized with the reigns of the rulers of Assur (Yakar 2011, 75). The

³ The Anatolian MBA is contemporary with the Syrian Middle Bronze I-II period in northern Syria (Mellink 1992, 219; Özyar 2014, 1545).

establishment of a precise absolute chronology has been difficult. Further chronological work has been provided through the Kültepe-Kaniš excavations, and these benchmarks create a basis for the MBA chronology in Anatolia. Current research on the various sites' chronologies use scientific dating methods such as dendrochronology and C-14 dating to construct a firm absolute chronology through destruction levels at MBA sites such as Kültepe-Kaniš, Acemhöyük, Konya-Karahöyük, and Kaman-Kalehöyük, which have adopted these dating methods to securely establish their levels (Yakar 2002, 561-563; Newton and Kuniholm 2004, 166-167) (see Table 1).

Period	Historical Chronology	Kültepe – Kaniš – Karum	Boğazköy (Hattuš)	Alişar (Ankuwa?)	Karahöyük	Acemhöyük (Prušanda?)
1600 BC MBA IV	Hittite Old Kindom Muršili I Hattušili I Labarna I	Ia = M6	Büyükkale IVc3		I	
1700 BC MBA III	Assyrian kings Išme-Dagan Šamši-Adad	Ištar-Ebri? Zuzu Perwa Anitta Pithana Waršama Inar Ib = M7	Piušti Buyukkale IVd Lower City 4	10 T	П	3
1800 BC MBA II	Erišum II Naram-Sin Puzur-Aššur	Ic Hurmeli Harpatiwa? II = M8	Buyukkale Va Lower City		III	
1900 BC MBA I 2000 BC	Šarru-kin Ikunum Erišum I	II = M8 III IV	Büyükkale Vb Lower City 5	11T 5M	IV	3

Table 1 Middle Bronze Age chronology of excavated sites (Yakar 2011, 75: Table4.6).

The LBA chronology of central Anatolia is, again, mostly established through textual sources, where royal figures are matched with historical events described in texts; this has created a general chronological framework. The chronology of the Hittite kingdom was able to be partly anchored through synchronizing the reigns of some Hittite kings with neighboring regions' rulers (especially the Babylonian, Middle Assyrian, and Egyptian rulers) (Yakar 2011, 79). These synchronisms, although still much discussed, have been supported by pottery types and distinctive forms derived from well-stratified sites (Dinçol 2006; Schoop 2006; Müller-Karpe 2017). Current research in Hattuša focuses on the chronology of the capital to create a well-established stratigraphy based on C-14 dates (Schachner 2017b, 31; Schachner 2015, 68; Strupler 2013, 5). Work in other Hittite sites such as Kuşaklı-Šarišša has also improved the chronology, especially the discovery of the two Hittite temples, which has helped to better understand the architecture and its dates, and this discovery has pulled the dates of the temples in Hattuša earlier into the Old Hittite Period (Müller-Karpe 2017, 89-108; dating for Hittite temples discussed in detail in Chapter 4).

	Boğazköy –Hattuša			Kuşaklı –	Maşat Höyük	
Period	Lower City	Büyükkale	Büyükkaya	Upper City	Sarissa	
1200 BC	1a	IIIa	1 1.			1
LBA IIb	1b	IIIb	lower plateau	X	IV	
1300 BC		IVa		х	IIIb	2
LBA IIa	2			х	IIIa	
1400 BC		IVb			-	
LBA Ib					II	
1500 BC	3	Vc1	nw. Slope			
LBA Ia					Ι	
1600 BC		Vc2				
MBA IV		Vc3	upper plateau			

Table 2 Late Bronze Age chronology - major sites (Yakar 2011, 79: 4.8; Müller-Karpe 2017, 168).

In western Anatolia, the lack of excavations dating to this period, and lack of publications of the chronologies and stratified sequences, has not helped in understanding the true chronological sequence of the region. The chronology of the entirety of western Anatolia (both costal and inner) has been based mainly on two sites for the second millennium BC: Troy and Beycesultan. Troy and Beycesultan, although important regional centers, do not represent the whole range for western Anatolia (Pavúk 2015, 83). Due to the lack of synchronizations with other western sites, the periodization used for western Anatolia is based on the central Anatolian chronology, which in turn is mainly based on Near Eastern chronology (Aykurt 2006, 118). This causes a debate over how the MBA and LBA should be divided and subdivided in the region – this division is usually looked for in the stylistic changes in the pottery assemblage (Roosevelt et. al. 2018, 126; Aykurt 2006, 118; Pavúk 2015, 83). For example, the MBA division adapted from central Anatolia does not work well at Troy, and thus Blegen decided to name the periods Early, Middle, and Late Troy VI, but the central Anatolian MBA chronological framework was accepted and adapted into the Beycesultan sequence (Lloyd and Mellaart 1965, 128; Aslan et.al. 2003; Dedeoğlu and Abay 2014; Pavúk 2015, 83). Also, the transition to the LBA is problematic, since in the west, the shift is taken as being indicated by the appearance of Mycenaean Late Helladic (LH) IIIA pottery in the coastal sites, but the LH IIIA pottery did not penetrate further inland; instead, there are local wares which give different dynamics, and thus a different division of chronology (Pavúk 2015, 85). Pavúk indicates that the issue of synchronization in western Anatolia is very difficult to solve under the current situation. He expresses that the periodization of western Anatolia should be "independent of the Aegean, as well as of Central Anatolia and Mesopotamia." (Pavúk 2015, 84). However, a new chronology for the

region has not yet been widely accepted. New excavations and C-14 dates on Beycesultan are helping to clear the air, at least for inner western Anatolia, which propose new dates for the LBA layers (Dedeoğlu and Abay 2014). Work in central western Anatolia at the site of Kaymakçı also contributes to the understanding of the second millennium chronology in western Anatolia both locally and regionally (Roosevelt and Luke. 2017; Roosevelt et. al. 2018). The architecture, pottery assemblage and the C-14 analyses from the site provide a basis for resolving the MBA-LBA transition in the region (Roosevelt et. al. 2018, 648). The chronology of western Anatolia is mostly based on the pottery assemblages found within individual sites; these assemblages provide a good distinction between the periods, but it is true that some of the wares and shapes do continue throughout the periods, especially between the MBA and LBA. These chronologies based on pottery should be supported with architectural changes and scientific dating methods. The development of a new chronology specifically for western Anatolia may sound tempting, but the adaptation of all the sites to a common chronology may be difficult; since most of the sites have not even published their own chronologies yet, it may be a better idea to synchronize the chronologies in hand with each other first, before moving on to an overarching regional chronology.

To the south, the chronology of the Cilician Plain has been effected both by central Anatolian chronology and the chronology of northern Syria. The region's chronology mostly has been provided by Tarsus-Gözlükule, due to its undisturbed sequence (Goldman 1956; Gates 2011, 395). Current excavations and the use of dating methods are aiding in improving the chronology of Cilicia, and the development of a region-wide chronological synchronization and a regional chronology has been in progress by all the excavators of the region (Novák et. al. 2017). The excavators created a regional chronology with new terminology and divisions⁴ (see Table 3). Overall, in this new sequence, the general chronological scheme is largely preserved (i.e. the dates of the major transitions have not changed much, such as the transition from the MBA to the LBA), but the dates have been adapted to both local events and the pottery sequences of the individual sites (Novák et. al. 2017).

CI-Period	Dates	Conventional	Dates	
OCI 1	2050-1950		2000 4000	
OCI 2	1950-1700	MBI	2000-1800	
OCI 3	1700-1560		1800-1640	
MCI 1	1560-1522	MBII	1640–1595	
MCI 2	1522-1420	1.01	1505 1400	
MCI 3	1420-1350		1595-1400	
MCI 4	1350-1190	LBII	1400-1190	
NCI 1	1190–1130	LB III/IA la	1190–1130	
			_	

Table 3 New chronologyestablished by CilicianChronology Group (only MBAand LBA have been taken)(Novák et. al 2017, 182-183).

In the MBA, until the first part of the Middle Bronze II, Cilicia remained as

an independent entity, believed to be called Kawa (Schineider 2002; Novák 2010,

⁴ In Table 3, OCI = Old Cilician; MCI = Middle Cilician; NCI = Neo Cilician (Novák et al. 2017, 182).

402). After the reign of Hattušili I, towards the end of Middle Bronze II, Cilicia was added to the Hittite territory. Due to the turmoil within the Old Hittite Kingdom, Cilicia gaiined independence for a short while (and was known as Kizzuwatna), but fell into the hands of the Mittani Kingdom and became a vassal state (Bryce 2005, 104-105). How this happened is not very clear in the historical records. After several generations, it changed back to being a Hittite vassal during the reign of Tudhalia I (ca. 1420 -1400 BC) (Kozal and Novák 2017, 303). In the reign of Šuppiluliuma I, Cilicia became the inner land of the empire (Beal 1986, 320) (See Table 4 for further information).

Time (ca.)	Period (Levantine)	Alalakh-Stratigraphy	Alalakh-History	Kizzuwatna
-1560	Middle	Alalakh VII		OC1 ¹⁰ 3: Independence
1560-1522	Bronze Age	Alalakh v1/Yener Period 6	Secundogenitur of	мсі 1: Old Hittite
	II B		Yamkhad	Kingdom
1522-1420	Late Bronze	Alalakh v/Yener Period 5	Mittani vassal	мсı 2: Independence
1420-1350	Age 1	Alalakh IV (pre-destruction)/	Idrimi	
		Yener Period 4	Niqmepa	мс1 3: Mittani vassal
		Alalakh Castle IV-rebuilt,	Ilim-ilimma	мс1 3: Hittite vassal
		Fortress III/Yener Period 3	Itur-Addu	
1350-	Late Bronze	Alalakh Woolley 11/Yener	Part of the Hittite	мст 4: Inner land of
	Age 11	Period 2	Empire	the Hittite Empire

Table 4 Synchronized chronology of Cilicia and the Amuq (Kozal and Novák 2017, 304: Table 19.2).

Cilicia maintained strong contacts with northern Syria and the Amuq until the annexation of Cilicia into the Hittite Empire. These two regions are neighbors, only divided by the Amanos Mountains, and both were variously independent kingdoms and vassal states of larger, regional empires throughout their respectives histories, making them important touchstones in the process of synchronizing supra-regional chronologies. The chronology of the Amuq was partly understood by the excavations at Tell Atchana, where the deep soundings and detailed excavations by Woolley made it possible to understand what was happening in the region, but the chronology was site-specific and could not be adapted to the whole region (Woolley 1953; 1955;). The Amuq-wide sequence was created in the 1930s using date from the surveys and excavations of the Braidwoods, including both soundings and larger excavations (Braidwood 1937; Braidwood and Braidwood 1960; Haines 1971). One must be aware that, though this sequence was comprehensive, most of it was created from survey data and sites which were not fully excavated and which largely lacked horizontal exposures; pottery assemblages were the basis for the sequence, which led to a chronology which is one dimensional (Braidwood and Braidwood 1960, 4). Reinstated excavations, particularly at Tell Atchana-Alalakh and Tell Tayinat, are working towards a more comprehensive chronology of the region (Yener et al. in prep.). New excavations, such as those at Toprakhisar, may also contribute to refining the chronology of the region (Kara and Akar 2017).

To understand the political developments in both the Amuq and Cilicia, their material culture, how they have affected each other, and how Hittite rule affected both regions, researchers are trying to synchronize the new Cilician chronology with the Amuq sequence (Kozal and Novák 2017, 296). Kozal and Novák's work depends on the historical events (which are murky at various points) and on the pottery sequences, which is problematic, since there are regional differences regarding the times that the same wares were used (Kozal and Novák 2017, 310). Kozal and Novák have managed to come up with a preliminary synchronization (see Table 4). Of course, to establish a better chronology and to synchronize the regions well, different artifact groups and architecture should also be studied⁵. It is also possible that in the

⁵ Yener et.al. in prep provides a full discussion of the Alalakh LB II chronology (defined according to north Syrian chronological terms), both in architecture and pottery sequences, which will contribute to this discussion.

future new textual evidence will help to understand both regions' chronologies better.

As comparative data, sites from northern Syria are utilized in this thesis. Due to the close chronological, cultural, and material culture connections of Anatolia and northern Syria (as mentioned above), it is important to shortly mention the chronologies of this neighboring region.

Period	Mardikh	Alalakh	Hama	Synchronisms	Absolute Chronology
MB IA	IIIA1	XVI-XI	Hiatus H5–H3, Graves III, VI, I	Kültepe <i>karum</i> II	с.2000-1850 вс
MB IB	IIIA2	XI-IX	H3–H2, Graves X, II/1	End of M. IIIA2– beginning of III B1–Hotepibra 13th Dyn.	с.1850–1770 вс
MB IIA	IIIB1	VIII	H1, Grave II/1		с.1770-1700 вс
MB IIB	IIIB2	VII	Graves II/2, XIII, G	Destruction of M. IIIB2 under Mursili I	с.1700-1600 вс

Table 5 Middle Bronze Age chronology of northern Syria (Bonacossi 2014, 474: Table 28.1).

Northern Syrian chronology is based largely on the material culture of both Tell Mardikh and Tell Atchana in the MBA (Bonacossi 2014, 472; Akkermans and Schwartz 2003 293-330). The Syrian MBA is divided into MB I and MB II, with the division placed around 1800-1770 BC (Akkermans and Schwartz 2003, 291; Bonacossi 2014, 473). These sub-divisions are further divided into four sub-periods, but, because there is strong continuity in the material culture, the two main phases are commonly used instead of dividing them further (Bonnacossi 2014, 474). Because of the close contact with the trading colonies in Anatolia, synchronisms for the period have been established with central Anatolia, particularly at Kültepe-Kanišh (see Table 5). The LBA in northern Syria spans from 1600 to 1200 BC (see Table 6) and hinges on a historical chronology of lists of rulers and changes in political power – this is due to the smooth transition of the pottery assemblages, since there is no clean break in the pottery (Luciani 2014, 573; Akkermans and Schwartz 2003, 331). The LBA is also divided into two – LB I and LB II. The end of LB I (ca. 1350 BC) is marked by the end of the Mittani Kingdom and the conquests of the Hittite king Šuppiluliuma I in the region (Luciani 2014, 574). The LB II spans from 1350-1200 BC, with 1200 BC marking the great collapse of the Bronze Age Mediterranean system (Akkermans and Schwartz 2003, 359). This division is not accepted by Akkermans and Schwartz, since they indicate that this is a Palestinian division of the chronology which it does not work well with the data in Syria, where diagnostic data is not as clear (Akkermans and Schwartz 2003, 331).

		Western Syria			Middle Euphrates	Balikh	Khabur	Northern Mesopotamia	Anatolia	Egypt
1200 -	Ras ibn Hani palaces	Ugarit Late Bronze destruction level	Alalakh I Alalakh II		Late Bronze	Sabi Abyad <i>dunn</i> u	Dur-Katlimmu Middle Assyrian occupation	Tukulti-Ninurta I Shalmaneser I	Hittite empire period	Rameses II Dynasty 19
1300 -			Alalakh III		Emar		Brak Mitanni	Middle Assyrian period	Suppiluliuma I	Akhenaten
1400 -			Alalakh IV	Hama G 3–1		Hammam et-Turkman VIIIB	temple	Mitanni kingdom		Thutmose III
1500 -			Alalakh V			Hammam et-Turkman VIIIA				Dynasty 18
1600 -			Alalakh VI							

Table 6 Late Bronze Age chronology in northern Syria (Akkermans and Schwartz 2003, 330: Fig. 10.2).

Overall, it is apparent that chronology in Anatolia is problematic due to the fragmented state of the regions. An overarching chronology works as well as it can, but when looking on a regional basis, it is apparent that a centralized chronology does not work well due to the regions' close ties with other cultures of the same periods. In the LBA, it seems that this chronological fragmentation is partly unified under Hittite rule, but in reality, this is not completely true, because there are

disputes regarding the lineage and dating of various kings (Kühne 1987; Bryce 2005). Also, the fact that Hittite-annexed regions such as Cilicia and the Amuq require synchronization poses a problem, considering the current state of research. Further excavations which can give specific dates (or material which can be dated with scientific methods), more publications of the current excavations, and more discussion of the chronological data are needed across all of Anatolia in order to establish a firm sequence.

1.3 Research History of Anatolian Temples

In Anatolia, although much has been written on second millennium BC architecture in general, comprehensive research on temple architecture in this period has not been conducted. There are scattered publications on the architecture of Anatolia which only give a general overview of temple architecture. One of the leading scholars in Anatolian architecture was Rudolf Naumann. Naumann's work on ancient Anatolian architecture (*Architektur Kleinasiens: Von Ihren Anfängen bis zum Ende der Hethitischen Zeit*, 1971), focuses on every period and every type of structure which can be found in Anatolia. A chapter in the book provides a limited overview of temple architecture from the Neolithic until the end of the Iron Age. Naumann focuses on the temples which are crucial to understanding each period's temple style. For example, for the MBA, he examines the temples at Kültepe-Kaniš and Beycesultan, and for the LBA, the Great Temple of Hattuša is discussed. Since the publication of this work, many other structures dubbed as temples have been discovered which have contributed to our understanding of the nature of temples in Anatolia.

Wulf Schirmer's short overview of Hittite architecture in his article, *Hethitische Architektur* in *Propyläen Kunstgeschichte* (1975), spans from the Early Bronze Age
to the Iron Age and draws examples from the excavations available at the time: Norşuntepe, Hattuša, Kültepe- Kaniš, Alacahöyük, Karkemiš, Tell Tayinat, Zincirli, and Karatepe. Schirmer indicates that although the material culture shows continuity from the MBA to the LBA, the architecture shows changes both in their plans and construction techniques, which are monumental in style (1985, 8).

After his lengthy work in Hattuša, in 1976 Kurt Bittel published *Die Hethiter: Die Kunst Anatoliens vom Ende des 3. bis zum Anfang des 1. Jahrtausends v. Chr.* Bittel's work is an extensive study on the whole history of the Hittites. It not only discusses the history of the Hittites, but also their architecture, material culture, and art. The section on architecture has a brief section on the temples of the Old Hittite Period and the Empire Period. As the Old Hittite Period temple structure, Alaca Höyük is given as a main example (Bittel 1976a, 117), while the Empire Period is represented in the study by the Great Temple and Temples II-V from Hattuša (Bittel 1976a, 123-133). The book on temples of the Hittite Period does not go beyond being an overview of temple architecture and is outdated in content, due to recent discoveries of temples in the last two decades (e.g. Kuşaklı – Šarišša).

Muhibbe Darga's publication, *Hitit Mimarlığı I / Yapı Sanatı: Arkeolojik ve Filolojik Veriler* (1985), focuses on construction details of Hittite architecture and textual references to their use. Although very extensive in understanding the construction techniques, materials, and ritual ceremonies carried out, the sections on temples and temple texts do not discuss any aspects of temple architecture or plans separately.

Wightman's monograph *Sacred Spaces in the Ancient World* (2007) is an overview of temples and shrines throughout all prehistoric and historical cultures, including ancient Mesoamerica, the Greek and Roman world, China, India, and the

Ancient Near East, and, specifically relevant for this thesis, Bronze Age Anatolia. However, the discussion of Anatolia does not cover all that has been published on temples from this region and includes only Beycesultan, Troy, Kültepe, Hattuša, and Kuşaklı-Šarišša (Wightman 2007, 211-235).

In 2011, a chapter entitled "Hittite Temples: Palaces of the Gods" by Caroline Zimmer-Vorhaus in the book *Insights into Hittite History and Archaeology* presented an exceptional overview on Hittite temples in both the Old Hittite and Empire periods. She provides an account of structures securely identified as Hittite temples, their deities, the cult and temple personnel, and their economic roles within the Hittite world. The temples from Hattuša, Kuşaklı-Šarišša, Maşat Höyük, and Alaca Höyük are discussed in her chapter.

Hundley's *Gods in Dwellings: Temples and Divine Presence in the Ancient Near East* (2013) gives an extensive look at temples in the Near East. The section on Hittite temples discusses the layout, decorative elements, and use of the temples, as well as the ideology surrounding them and the ways in which they structured and shaped cityscapes (Hundley 2013, 85-103). However, Hundley draws mainly on the two most well-known examples, Hattuša and Šarišša, in his discussion and does not consider other examples. This restriction to these two temples is justified by Hundley by the fact that these were the only official (state) temples (2013, 14). Apart from these brief overviews, which often focus only on the most famous examples, site reports give more information to work on. These reports, along with the full publications of sites, give more of a detailed view of the architecture and provide more information on them, although they are typically of a more raw character.

1.3.1 Middle Bronze Age Temples

In the MBA, there are only two known sites which yield temple architecture (Fig. 2). These temples are found in central Anatolia, and western Anatolia. The temples presented in the archaeological record are limited, but nonetheless crucial.

The most well-known temple of MBA Anatolia is from Kültepe – Kaniš (Neša) (Özgüç 1999, 48; Özgüç 2003, 138-141). Kültepe – Kaniš is located in central Anatolia, 21 km south of the Kızılırmak River bend. Other temple types resembling the form of these two temples at Kaniš have not been discovered in Anatolia in this period (see Chapter 4). These temples are important because they are the first examples seen in central Anatolia.

In western Anatolia, we see architecturally different temples in the MBA. One of the main examples of this is at Beycesultan. Beycesultan is located in the province of Denizli, 5 km southwest of the town of Çivril (Abay and Dedeoğlu 2015, 183). Here the so-called "twin shrines" have been identified as the religious architecture of the period (Lloyd and Mellaart 1962, 39-48; Yakar 1974, 154-155). The twin shrines were found in the EBA levels and continue into the LBA levels (see Chapter 3).

1.3.2 Late Bronze Age Temples

Temple architecture in the LBA has been a topic of interest, but until recently, research has been mainly restricted to Hattuša. Now known temples in the LBA are distributed all over Anatolia with a concentration in the central Anatolian plateau (Fig. 3). In total, there are 14 sites that yield sacred architecture; Oymaağaç-Nerik (?), located in the north; Alacahöyük, Hattuša, Ortaköy-Šapinuwa, Uşaklı, Kuşaklı-Šarišša, Boyalı Höyük, İnandıktepe, Hüseyindede, and Maşat Höyük, situated in central Anatolia, mainly in the Halys River bend; Beycesultan and Troy in the west; and, Tatarlı Höyük, and Tarsus-Gözlükule to the south in the Cilician Plain. Not all

of the structures found in these sites have been securely identified as temples, and there is still dispute regarding the definition of a temple directly and solely from its architectural remains.

Hattuša, with its extensive architectural inventory, sets the archetype of temples in Hittite Anatolia (see Chapter 4). The site is located 4 km east of the district of Boğazkale in the city of Corum (Neve 1982, 1). Within the last decade or so, our understanding of the Hittite temple, its style, and its construction have become better understood with the ongoing excavations in the rest of Anatolia. The previous restriction of study to Hattuša was mainly because the Great Temple at Hattuša was the first identified Hittite temple, recognized by Charles Texier (1862, 608-609), making it the exemplar for all Hittite temples found throughout Anatolia. Humann, who was a surveyor of the area, was more reserved in calling this monumental structure a temple and cautiously referred to it as "a great ruin". Detailed studies on the temples of Hattuša were carried out by Otto Puchstein (1912) and later by Bittel and Naumann (Naumann 2007, 457-465; Bittel 1976b), as well as by Peter Neve (1993, 107-116; 1995/1996, 11-62; 2002, 66-73). The investigations at Hattuša revealed that the site yielded more than one temple: there are 31 recorded temples in Hattuša (Neve 1995, 41-63, Schachner 2013, 158-159). Although none of these are as large as the Great Temple, they are nonetheless very crucial in understanding the archetype of Hittite temples.

Outside of Hattuša, temples dating to various parts of the Hittite era have also been found at other central Anatolian sites (see Chapter 4). At İnandıktepe, a templepalace that dates to the Old Hittite Period was exposed. İnandıktepe is located on the Ankara-Çankırı road 109 km to the north of Ankara, next to İnandık village (Özgüç 1988, XXI). However, there is a problem of interpretation with the monumental

building here, which does not conform to the archetypal Hittite temple plan⁶ (Özgüç 1988, 76-78). Although Özgüç was fairly certain about the religious function of the structure, this proposition has been disputed by Mielke (2006b, 253-255; 2013, 215-217).

The Hüseyindede settlement offers a religious building which also belongs to the Old Hittite Period (Yıldırım 2013, 228). Hüseyindede is located in the district of Sungurlu in the province of Çorum. It is located 2.5 km east of Yörüklü (Sipahi et.al. 1999, 349). The identification of this structure (Building I) as religious was made by the excavators through texts which refer to religious buildings in sites of comparable size to Hüseyindede (Yıldırım 2009, 236-237). Additionally, and similarly to İnandıktepe, the excavators claim that the religious function of the building can be verified through the discovery of cult vase fragments found in its various rooms (Yıldırım 2013, 230, Yıldırım 2000, 45-49).

Boyalı Höyük presents a religious structure tremendously similar to the ones at İnandıktepe and Hüseyindede. Boyalı Höyük is also located in the district of Sungurlu in the province of Çorum 4 km to the east of Yörlüklü (Sipahi and Ediz 2006, 481). This structure, Building A, has also been dated to the Old Hittite Period (Sipahi 2013, 254-255). Building A, Building I in Hüseyindede, and the so-called temple at İnandıktepe all show the same characteristics. All of these structures have a nearly rectangular plan adapted to the terrain of the sites. Unlike İnandıktepe, however, there is no visible courtyard in the plan of the structure at Boyalı Höyük (Sipahi 2013, 225). The high quality ceramics and votive vessels, along with the rhyta found in Building A, verify the function of the buildings as religious structures, according to the excavators (Sipahi 2013, 255-256).

⁶ This will be discussed in depth in Chapter 4.

With the recent investigations at Kuşaklı – Šarišša, the corpora of Hittite temples has been enlarged. Kuşaklı-Sarissa is located 4 km west of the village of Başören in Sivas (Müller-Karpe 1995, 5). Two temples of different sizes have been discovered by the German team led by Andreas Müller- Karpe (Müller-Karpe & Müller-Karpe 2013, 221-224; Müller-Karpe 1995, 9-21; 1996, 70-71; 1997, 134-140; 1998, 95-102; 1999, 57-66; 2000, 311-324). These temples from Kuşaklı-Sarissa are both crucial in understanding the Hittite temple type and setting an outline of features to identify temples in the LBA.

Also in central Anatolia, the monumental structure at Alacahöyük is the subject of much debate. Alacahöyük is located in the province of Alaca in the city of Çorum, 34 km north of Hattuša (Çelik 2008, 4). The structure has been called a "templepalace", due to its unusual architectural plan, which does not display the same arrangement of space and the same alignments as the Hattuša temples (Koşay, 1951, 7-11; 1970; Koşay & Akok 1966, 6-17; 1973, 1-3; Çınaroğlu 2007, 73-75; Çınar & Çelik 2013, 198-199; Çelik 2008, 21-31). Recent research to verify the religious function of the so-called "temple-palace" is underway (Çelik 2008, 21-31).

To the east of Alacahöyük was located the second capital of the Hittites, Ortaköy-Šapinuwa. In numerous texts, the site is referred to as both a political center and a religious one (Süel and Süel 2013, 182). It is located 56 km southeast of the city center of Çorum (Süel and Süel 2013, 180). The excavators have uncovered several monumental buildings, but one in particular (Building C) is mentioned as having a religious function (Süel and Süel 2013, 182-192). The research and publication on this building is not sufficient to draw conclusions, however, neither regarding the building itself nor the religious function of it, and thus will not be

included in this thesis. Further excavations may reveal a temple structure, considering the central role of the site as both a religious and political center.

Located 12 km west of Sorgun, Uşaklı is a site of importance due to its possible identification as Zippalanda (Summers 2013, 42). Intensive geophysical surveys on the site led to the identification of a large structure. This structure, Building II, with massive foundations is believed to be a temple (D'Agostino and Orsi 2016, 339-344; Mazzoni et al. 2016, 44).

Eastwards, Maşat Höyük, near Zile in the province of Tokat, was located in a border region with the Kaška people, who inhabited the lands to the north of the Hittite kingdom (Özgüç 1978, 1). Research here revealed a large citadel containing a structure named Altar-Building C, which is believed by the excavator to have had a religious function (Mielke 2011b, 1047; Özgüç 1982, 80). The presence of an altarlike installation in one of the rooms led the excavators to believe the structure was a temple or a temple-palace (Özgüç 1982, 81).

Farther to the north, a single site, Oymaağaç-Nerik (?), has revealed a monumental structure, 7 km northwest of the village of Vezirköprü in Samsun (Czichon 2013, 299). The site has been investigated with geophysical survey, and the results seem to reveal a monumental building (Czichon 2013, 300). This building is believed to be a temple by the excavators based on the artifacts found inside, such as seal impressions and inscriptions suggesting it was dedicated to the Storm God of Nerik (Czichon 2013, 300). The architecture is only partially exposed and mostly mapped through the geomagnetic analysis, but the preliminary plan of the structure suggests that the monumental building may indeed be a temple similar to the ones at Kuşaklı-Šarišša. For further interpretation on the building, more excavations should

be conducted. The partial exposition and lack of publications on the structure mean that it is not included in this thesis.

Other examples of temples outside of central Anatolia have also been found dating to the LBA (see Chapter 5). Tarsus – Gözlükule which lies in the city center of Tarsus, Mersin, in southern Anatolia in the Cilician plain, revealed a monumental structure which has only been partially uncovered. The structure resembles the plans of other Hittite sacred buildings, but since it has not been fully excavated, the identification of the building as a temple remains uncertain (Goldman 1935, 536-539; 1937, 265-267; 1940, 72-76; 1956, 49-51; Karabulut et al. 2005; Özyar and Ünlü 2015, 30).

Also in the Cilician plain, Tatarlı Höyük, known as Lawazatiya, is located northeast of Ceyhan in Adana (Girginer et al. 2015, 438; Girginer and Collon 2014, 61). In the first excavation campaign, a large building which was believed to be a temple or a palace was uncovered. This structure, Building A, is believed to have MBA levels, but due to the LBA structure above, these could not be exposed. Two levels of the building belonging to the LBA have been uncovered. The structure has a rectangular outline with recesses on the front and back façades (Girginer et al. 2014 184).

Western Anatolia offers few examples of temple architecture in the LBA (see Chapter 3). This lack occurs because sites in this region often consist of many levels of occupation, and the Hellenistic, Roman and Byzantine levels above Bronze Age ones obstruct the remains of earlier periods and prevent excavations from exposing them. Additionally, even if the excavators are able to reach the lower layers, the architecture is usually partially or completely destroyed by the later occupants. Considering these problems of discovery and recovery, there are two known

examples of religious architecture and/or temples in the LBA at Beycesultan and Troy. Since the religious architecture is different in this region from that seen further east, the way that we interpret these buildings changes. The region's religious architecture will draw different comparisons to different styles of building in the LBA, which is why it is important to research and compare them with the rest of Anatolia.

Beycesultan, as mentioned above, has the so-called 'twin shrines' that continue into the LBA (Lloyd 1972, 24-37, Yakar 1974, 154-155), as well as a building complex tentatively identified as a temple complex (Abay 2015, 185-189). Troy, situated 5 km from the coastline of the Dardenelles in the village of Hissarlik (Jablonka 2010, 849) is a multi-level site, and there are known examples of what have been defined as cult buildings. The lower city yielded a *Kultbau* (cult building) dated to the LBA. According to Becks, the artifacts (rhyta, libation vessels, weapons, and figurines) found in the building must be an indication of its cultic function (2008, 63-64; Becks et al. 2006, 27-48). The rectangular, multi-roomed plan of the building, consisting of a central room with rooms built around it, and its location under the Iron Age West Sanctuary might be an indication of its previous use in the LBA as a cultic center (Becks 2008, 69-71; Becks et al. 2006, 27-48). However, due to the fragmentary nature of the structure and the lack of extensive publication on the structure, it is not included in this thesis.

The lack of a comprehensive study on the temple architecture of the Anatolian MBA and LBA overviewed here demonstrates the need for such a treatment. This thesis therefore encompasses and examines the published temple plans of Anatolia in these periods, with the exceptions of Troy, Ortaköy-Şapinuwa, and Oymaağaç-Nerik (?). This is, as mentioned above, due to the lack of plans, publications, and secure

definitions of the buildings as sacred structures. Although, as discussed above, there have been publications of individual sites and their temples, an overarching analysis is called for. This thesis offers a holistic approach to temple architecture in Anatolia and fills in the gap identified here.

1.4 Chapter Breakdown

Chapter 2 presents the theoretical and methodological scaffolding of this study by looking into theories of space and architecture and how built space is conceived by the people who inhabit it. It focuses on the main theoretical framework which creates the basis for theories regarding sacred space. It further explores how space syntax theories and analyses can be used to interpret sacred architecture, the main method which is used in this thesis to interpret temple structures in Anatolia.

Chapters 3, 4, and 5 each focus on a particular region and constitute detailed surveys of the sites with religious structures. Chapter 3 presents the structures found in western Anatolia; Chapter 4 introduces the temples found in central Anatolia; and, Chapter 5 describes the structures found in the Cilician Plain. Each site is discussed individually, and a regional overview is presented as well.

Chapter 6 details the temples from northern Syria chosen as comparatives. The MBA temple of Tilmen Höyük and the MBA and LBA temples of both Tell Atchana – Alalakh and Aleppo are discussed in detail to understand influences to and from Anatolia in both periods.

Chapter 7 presents the results obtained from the space syntax analyses which were conducted on temples from both Anatolia and northern Syria. Furthermore, it attempts to shed light on what the language of the temples was and how this affected the visitors' movements.

Chapter 8 represents the discussion for every temple structure presented in this thesis. It gives a broad and comprehensive view of temple architecture in both the MBA and LBA, as well as the changes across time and space. These changes are discussed in the context of a complete picture and are compared to influences from the surrounding regions.

Chapter 9 outlines prospects of further research which can be conducted in Anatolia and on temple architecture by applying the theoretical and methodological framework utilized in this body of work.



2. CHAPTER 2 – Theoretical Background and Methodology

2.1 Understanding Space

Architecture is space constructed to meet social needs such as shelter, belonging and socialization. Thus, the temple is the architectural type that serves the social institution of religion (Wightman 2007, 898). Humans and their built space have affected each other since people first erected structures. There have been many theoretical approaches to how built space affects humans and vice versa. This chapter gives an overview of the theoretical approaches which will be used throughout this thesis.

The basis of the theoretical analysis of architecture is founded in built environmental studies (Rapaport 1990). This field focuses not only on the architecture of a building but also on human interaction with the structure, looking at the culture that influences the architecture and how this is perceived by humans (Hundley 2013, 4-7). It looks at the perception of the environment (defined as any space, including the built environment), social use of space, and human spatial behavior, and makes connections with other disciplines, especially anthropology (Clayton & Saunders 2012, 1-2). These fields contribute ways to look at humans and how their sociocultural contexts affect the architecture in a culture, using ethnographical examples which can be used as comparisons with ancient cultures (Askland et al. 2014, 286). For example, in the Christian world, the church and the basilica are symbolic microcosms of the world as understood by Christian theology: the cardinal directions are embodied in the four parts of the church, with the altar (symbolically, paradise) to the east, and the realm of the dead to the west. The middle section represents the earth. All of this copies the cosmos, making the church a representation and materialization of the divinized world (Eliade 1957, 61-62).

Similarly, the European Neolithic long house has long been recognized as a symbolic architectural template for the tombs of the period, reflecting the interplay between the conceptual ordering of space in this world (i.e. dwellings) and the next (i.e. tombs)⁷ (Hodder 1984; Hodder 1994).

2.2 Humans and their Built Environment

Frankl, in his work Principles of Architectural History (1968), tried to add human intention to the study of architecture. He examined the existing three principles of monumental architecture: spatial form, the way in which a particular building draws on and adapts previous forms of similar buildings, e.g. churches, palaces or private houses (1968, 5-96); corporeal form, the physical form of a building as seen and experienced from both the inside and outside (1968, 97-141); and, visible form, the ways in which changing perceptions of light and color influence how a building is experienced and understood (1968, 142-156). He also proposed a fourth principle: purposive intention (1968, 157). He believed a building and what it meant could only be understood by looking at the relationship between the structure and the activity within it (Frankl 1968, 159). In ancient buildings, understanding this relationship may be difficult, but Frankl indicates that this is not impossible, because hints remain within a built space through which the purpose of the building can be understood (1968, 160). Frankl theorizes that architectural forms are the arenas for actions of specific time spans, and they provide paths (cues) for sequences of events (1968, 157). He states that there are sequences of spaces, and these spaces have their own logic. This indicates patterns of prearranged circulation

⁷ For further examples on architectural ordering through cultural principles, see Parker Pearson and Richards 1994, 34-36.

within structures, which are dependent on the type of activity that the place was constructed for (Frankl 1968, 158).

In line with Frankl's theories, Rapoport examined the lived experience of space, pointing out that the designer and the user experience built spaces differently. He points out that the users' experience and the meanings they perceive are more important (Rapoport 1990, 18). Accordingly, the design of the built space elicits meanings. These encoded meanings are then decoded by the users. These messages and characteristics are encoded into the design of the building by the designer in such a way that when a person comes in contact with the building, the message is decoded by the user and is comprehended. Thus the meaning is both understood and experienced (Rapoport 1990, 19).

According to Rapoport, there are two levels of the built environment: perceptual and associational. The perceptual aspect is what the user of the building perceives physically (the structure itself and its physical elements), while the associational aspect is the various associations that the user makes about the building's physical elements (Rapoport 1990, 19-20). The behavior a person displays in a specific built environment comes from the relationship between how the person perceives the environment and the associations that person makes through perception. The built environment offers "cues" for an individual via its structure, and the individual's behavior responds to these cues. Thus, people who visited temples knew how to act because of the cues received from the built environment of the temple. For example, a common reaction upon entering a cathedral is a feeling of awe, inspired by the high ceilings, elaborate decorations, division of space and the scale of the building. This awe in turn inspires reverence, which causes people to lower their voices, even if the building is empty. None of these emotional processes

are conscious; they are inspired by the building itself and its built language (Hundley 2013, 8).

2.3 Sacred Space

Temples were constructed to mediate interaction with the divine. Because of this interaction and its supernatural nature, the temple constitutes a liminal space – one not fully of this world, nor fully of the divine world (Eliade 1957, 20-29, 58-62). This limital space was perilous, due to the fact that mortals and the divine, as well as the living and the dead, came in contact here. This perilous environment had to be controlled in a prescribed way through rituals, which divided the sacred space in ways that could contain this peril (Wightman 2007, 932). The level of sacredness within a temple was hardly ever uniform: spaces within the temple possessed different levels of sacredness (Wightman 2007, 929). Accordingly, these levels of sacredness were embedded within the architecture of the temple and were understandable through the architecture of the building (Fig. 4). The way that sacrality was encoded in the architecture varied from culture to culture (Wightman 2007, 929), especially in urbanized cultures, where the construction of the temple directly internalized the levels of sacrality (Wightman 2007, 929). Wightman refers to these sacred hierarchies and indicates that there are four levels of sacredness in a temple: primary, secondary, tertiary and quaternary (2007, 929).

Primary space, the most sacred place within the built environment of the temple, was usually marked by the cult object (see Fig. 4). The space which this divine image occupied was the "god-space" (Wightman 2007, 933). Only certain people were allowed access to the cult object, and these were usually the chief priests. Primary space is usually defined as the "holy-of-holies", i.e. the divine image itself (Wightman 2007, 933). Secondary space is usually considered as the space and

room that surrounds the cult object and is referred to as the cella of the temple. Wightman points out that usually the cella was not available to the lower clergy and the laymen (2007, 934).

Tertiary space was meant to control movement in the temple, restricting and enabling access to the cella. There may be more than one tertiary space in a temple (Wightman 2007, 941). Tertiary spaces are considered either transitional or locular (Wightman 2007, 941). Transitional spaces give access from quaternary spaces to the primary and secondary space and can be understood as mediators. Locular spaces, on the other hand, are the rooms which support the cella and are directly connected to it. These rooms can be treasuries, storerooms, or archives (Wightman 2007, 941). Tertiary spaces also included conductive spaces, such as stairways, corridors, terraces, and ambulatories (Wightman 2007, 941).

Quaternary space is the least sacred place in a temple. This space was the only place where laypeople were allowed to contact the divine. Although people were allowed movement in these quaternary places, they were still mediated by the architecture, absorbing the cues inherent in the building, which restricted movement and denied access to the higher levels of sacred space (Wightman 2007, 947). Wightman indicates that quaternary space usually takes the form of a courtyard (2007, 947). Gates are also included among quaternary spaces. Gates were not only gates but were also indicators of the shift from profane to sacred space, thus serving as further liminal spaces within the overarching liminal space of the temple as a whole (Wightman 2007, 947; Van Gennep 1960, 15-25; Eliade 1957, 25). These levels of sacredness are evident in the second millennium BC temples examined in this thesis, particularly with the tools utilized in space syntax analysis, as discussed in Chapter 7.

2.4 Space Syntax Theory

Space syntax theory and its methods will be also utilized in this thesis to understand the levels of sacredness, accessibility and navigation through a temple. Space syntax theory was first developed in the 1980s by Bill Hillier and Julienne Hanson with their publication of *The Social Logic of Space* (Hillier and Hanson 1984). Its first development was for architects and urban planners, but it later was applied to built space in order to understand how space and social effects correlate. Over the last decade, it came to be utilized also by archaeologists (Osborne 2012, 45; Thaler and Hacıgüzeller 2014).

Space syntax theory builds on the fact that the organization of buildings in a town or rooms in a building will have significant effects on how humans behave in that set environment. Space syntax breaks down a town or a building to its smallest elements (for towns: its buildings; for a building: its rooms). By looking at the relations between these smallest elements (e.g. rooms), not the elements themselves, one can understand the nature of the structure (Hillier and Hanson 1984, 66, 81). Thus, when the structure is analyzed in this way, one can understand the effects of the structure on humans (Hillier and Vaughan 2007, 206). Space syntax theory utilizes multiple techniques for analysis, and certain social conclusions can be derived from quantitative assessments of the relations mentioned above.

2.5 Methodology: Analyzing Temples

Space syntax analysis is a series of graphical representations and quantitative analyses which look at buildings or towns and analyze how people move through their smallest units. In the case of temples, the individual rooms are considered the smallest architectural units (Hillier and Vaughan 2007, 206). By analyzing the relations between these spaces, certain social/behavioral conclusions can be drawn.

These conclusions help understand the hierarchical levels of a building and accessibility to various levels. The two space syntax methods this project utilizes are access analysis and visibility graph analysis.

2.5.1 Access Analysis

Access analysis approaches a built space by reducing the plan to its rooms, represented as nodes, regardless of the size of the room. Access to the rooms is represented by lines. When the graph is completed, it looks like a series of connected lines and nodes; these graphs are called justified graphs (j-graphs) (Manum et.al. 2005, 97; Manum 2009, 4-5). These graphs represent each spatial unit's (room's, in the case of temples) relation to each other and to the outside of the building (referred to as the root) (Hacıgüzeller and Thaler 2014, 207). This analysis easily summarizes and displays the accessibility or the isolation of a room through an easily comprehended graph. This graph provides a way to interpret the temple's overall accessibility, as well as levels of accessibility to certain rooms, such as the cult room, where the cult image was located. Conversely, it also shows different levels of seclusion. Moreover, the analysis enables one to understand if the architectural design of the temple was constructed to prevent people from entering certain sections of the temple.

To do an access analysis, a free software called AGRAPH is available online; it was created by Paul Benze and Bendik Manum from the Norwegian University of Science and Technology (Manum et.al. 2005, 97). The software is user friendly, as the plan which is intended to be analyzed as a JPEG or TIFF file. The plan is set as a background, the nodes are set, and the lines are connected by hand. After a plan is noded and connections established, the depth from the root node is calculated by a simple click (Manum et.al. 2005, 98-99). The time spent to create an access graph

depends on the size of the structure and how many rooms it contains. However, when dealing with archaeological material, doorways must be preserved in the plan in order for this analysis to function properly.

The access analysis can easily summarize the syntax of a space. Although two buildings may have the same number of rooms or even a similar layout, their space syntaxes can differ. This syntax is understood through its degree of accessibility. Hillier and Hanson refer to symmetry/asymmetry and distributedness/nondistributedness in interpreting syntax (1984, 148). A building having a greater level of symmetry (usually) is an indicator that it promotes social integration between the inhabitants (in our case here, these include the god, the cult object, the temple personnel, and visitors). Asymmetry, on the other hand, is associated with segregation between these groups (Hillier and Hanson 1984, 96). Distributedness of a building plan relates to the diffusion of spatial control, or power, while nondistributedness is correlated with unitary, high spatial control (Hillier and Hanson, 97). Looking at the j-graphs of the buildings, these connections can be understood and interpreted.

2.5.2 Visibility Graph Analysis (VGA)

Visibility graph analysis (VGA) is used to understand what was visible from a particular point in a built environment (Turner et al. 2001). This is accomplished through isovists, a term which refers to the space visible from a point. This analysis thus aides in interpreting what a viewer in a given place in a temple could see. A more comprehensive analysis combines multiple isovists to create a graph that helps to understand what an individual would see when in the building (Turner et al. 2001; Osborne 2012, 54). The graphs visually represent hot spots (shown in red) as places of high intervisibility. Visibility, just like access to a place, was an important

component in the control and experience of space (Al-Sayed et al. 2014, 30). With a single isovist, one can understand an individual's perspective from any given point. However, for more comprehensive results, multiple isovists are required. These can be calculated rapidly using Depthmap X software (see below). Creating multiple isovists to acquire a graph is called visibility graph analysis (Al-Sayed 2014, 29). When the visibility graph is created, the building is filled with points considering the width of a human body (around 40 cm) in order to achieve the highest resolution possible (Osborne 2012, 55). The software then calculates the number of points visible from each point on the plan. The amount of points another point can see creates color on the plan.

The VGA analysis used here focuses on two types of maps – a visual connectivity map and a visual integration map. Both plans are filled with colors on a red-blue spectrum: the red parts of the building mean the points are intervisible/integrated with many points, while if the points are intervisible/integrated with a small number of other points, it is given a blue color, (Osborne 2012, 55). Through intervisibility, the connectivity of the building can be understood. Red areas are highly intervisible with high connectivity, and this might mean that these places are areas of high activity. For example, in ancient structures, courtyards, agoras, throne rooms, and reception rooms have high intervisibility and connectivity. However, places such as cult rooms, bedrooms, and storage rooms have low intervisibility and connectivity. Similarly, rooms with high integration values (in red) indicate areas of high pedestrian traffic and accessibility, while low integration values (in blue) indicate areas of low pedestrian movement and accessibility (Osborne and Summers 2014, 302-303).

What inhabitants and visitors could see from a given point is an important part of this research, because temples, as places with social cues, had restricted access: not all visitors were allowed to see the cult image or various parts of the temples, which were reserved for higher officials. These types of places give low intervisibility in the visibility graph.

Visibility graphs can be created through the free DepthmapX software. Alasdair Turner from University College London created DephmapX (Hacıgüzeller and Thaler 2014, 209). DepthmapX requires vector files of building plans in order to create the visibility graphs. When the file is uploaded, the analysis is done automatically.

2.5.3 Limitations

Space syntax analysis facilitates a new way to look at the temples examined here. The analyses are very useful in understanding spatial relations and how these built spaces were conceived by their users. Nevertheless, there are some limitations to space syntax analyses, as they depend on accurate and complete architectural plans, especially the locations of the doorways of the building, since both analyses hinge on access from one room to another (Osborne 2012, 45-46). This usually does not pose a problem with modern buildings, but since this thesis deals with ancient temples, the plan of the building might not be fully revealed, due to incomplete excavation or a lack of preserved doorways. A way to overcome this limitation is to create possible doorways from the known examples of the same architectural type and style. Although this might not be the real plan, it can give a similar result.

The analysis also does not take into account some of the aspects that are crucial to the built environment, such as decorations, room sizes, or artifacts found

in the structure and rooms (Osborne 2012, 45-46). This might lead to the exclusion of the symbolic content of a building. This is surmounted by doing a multifaceted research which includes these contents and compares the importance of the room with the analyses' results. This is why an integrated approach is necessary for space syntax analyses.

2.6 Conclusions

Space is not a blank slate, but is a social construct, produced by culture and society as much as is material culture (Lefebvre 1991). Just as society reproduces itself through objects and artifacts (Hodder 1982), architecture and culture also form a feedback loop, influencing and being influenced by each other. As one of the primary kinds of material culture recovered archaeologically, architecture forms an important category of evidence in the interpretation of past societies. Architectural space is as much a social/cultural product as any other type of material culture (Harmanşah 2013, 154), with different types of buildings able to shed light on different categories of social experience and practice. Temples, as the physical manifestation of the institution of religion (Wightman 2007, 898), have the potential to yield important information concerning this generally difficult-to-read social aspect. Drawing on the theoretical understandings of space as social practice (Harmanşah 2013, 107; Parker Pearson and Richards 1994, 36), this thesis examines the use and function of temples in second millennium BC Anatolia, looking at levels of sacredness, following Wightman (2007), as well as issues of accessibility and visibility through space syntax analyses.

3. CHAPTER 3 – Temples in Western Anatolia

To the west, the only temple architecture we see is located in inner western Anatolia. Excavations on the coasts have not revealed any temple buildings dated to the MBA-LBA. This absence may be explained by the lack of large exposures of Bronze Age settlements in the west, due to later periods' overlaying settlement remains. Also, another reason may be suggested to be a difference in social systems, cultures, and the organization of religion, which may be reflected in the lack of temple architecture. It may have been that religion was practiced in a smaller scale (household or neighborhood) in western Anatolia, which is why research has revealed only two sites with possible religious structures (Troy and Beycesultan). Further research in the region will help determine the reason for the small sample size in the Bronze Age at present. With the current state of research, the only site included in this thesis is Beycesultan.

3.1 Middle Bronze Age

3.1.1 Beycesultan

The site of Beycesultan is located 4 km southwest of the town of Çivril in the province of Denizli (Abay and Dedeoğlu 2014, 386). The site consists of two summits and extends about 500 m east-west. Excavations on site started in 1954, directed by Seton Lloyd and James Mellaart, and lasted until 1959 (Abay and Dedeoğlu 2009, 54). This expedition at Beycesultan uncovered an important stratigraphical sequence that provided one of the key chronological frameworks for western Anatolia (Lloyd and Mellaart 1962, 5).

New expeditions were initiated with a survey which started in 2003 and continued until 2007 (Abay and Dedeoğlu 2009, 54). In 2007, 48 years after the Lloyd and Mellaart mission, excavation resumed under the directorship of Eşref

Abay and has continued until the present (Abay and Dedeoğlu 2009, 54). The excavators had three main goals while designing the new research: firstly, to understand the cultures and the cultural processes in the upper Meander River in the prehistoric periods; secondly, to comprehend the hierarchical settlements, and the reflection of these hierarchies within the communities; and thirdly, to provide a well-established chronology for western Anatolia, independent of the chronology of Troy (Abay and Dedeoğlu 2009, 54).

Beycesultan's settlement history starts with the Late Chalcolithic period and continues until the end of the Ottoman Principality period (Abay and Dedeoğlu 2009, 55). The Lloyd and Mellaart excavations revealed private dwellings, administrative buildings, and sanctuaries belonging to various periods (Lloyd and Mellaart 1962, 10). Moreover, the Abay excavations are reconsidering the chronology of the site and excavating areas which weren't uncovered by the previous excavators (Dedeoğlu and Abay 2014, 2). Although the C14 dates analyzed from the LBA levels give some significant results, there is still some confusion over the separation between the MBA and LBA, and further reassessment of the chronology is still necessary. This chapter considers the newest dates and layers suggested by the new excavations and integrating the previous chronology and levels. Table 7 brings the old and new chronologies together with the corresponding religious structures, but this table should be approached with caution, since it is quite elementary and is subject to change with the data from future excavations.

Structures identified as religious were found by Lloyd and Mellaart first in the Chalcolithic period layers these structures were continuously found in every layer until the end of the LBA in Area R (Fig. 5), located on the northern ridge of the western summit of the mound (Lloyd and Mellaart 1962, 5). In the early publications

of the current excavations, Abay indicated that there might be a monumental structure in the LBA (Layer 5 in the Abay excavations, which corresponds to Levels II-III of the Lloyd and Mellaart excavations) which has a religious function (Abay and Dedeoğlu 2012, 312; Abay and Dedeoğlu 2013, 219-220; Abay and Dedeoğlu 2014, 387-388; Dedeoğlu and Abay 2014, 6 -7). In more recent publications, Abay specifies that this is not solely a religious building, but might have had more of a combined function, as discussed below (Abay and Dedeoğlu 2016, 188).

The focus of this chapter is on the structures in the MBA (Level V, Level IV) and LBA (Level III, Level II, Layer 5). These structures include the Twin Shrines discovered by Lloyd and Mellaart and the so-called "temple complex" currently under excavation by Abay.

Abay Excavations		Lloyd and Mellaart Excavations		
Period	Level	Level	Religious Structure	Period
Seljuk – Ottoman Principality Period	1 (a-b-c)	N/A	N/A	Seljuk and Byzantine
Byzantine Period	2a1-2a2, 2b	N/A	N/A	Periods
Iron Age	3	N/A	N/A	Phrygian Period
Late- Late Bronze	4a	Ia	N/A	
Age	5a	Ib	N/A	
Early- Late Bronze Age	5b	II – III	The Twin	
			Shrines	Late Bronze
			(Area R) and "The	Age
			Building	
			Complex"	
Middle Bronze Age	6	Not Known	N/A	
	7	IVa-b	The Twin	
	8	IVc	Shrines	Middle Bronze
			(Area R)	Age
	9a-b	V	The Twin	
			Shrines	
			(Area R)	
Early Bronze Age	The Early Bronze Age levels haven't been fully discovered			
	and determined in the new excavations and the Chalcolithic			
	Period haven't been reached at all thus they are not included			
	in this table.			

Table 7 Levels for the old and new Beycesultan excavations with the corresponding religious architecture (made by author).

3.1.1.1 The Twin Shrines

The twin shrines of Beycesultan were discovered by Lloyd and Mellaart. Shrines of the MBA (Fig. 6, 7) are found in two levels - Levels V and IV (Lloyd 1972, 36). In both Levels, the religious structures consist of two *megarons*⁸ (Lloyd and Mellaart 1965, 39). They share a party wall through their subsidiary rooms. The plans of the two shrines are very similar in appearance, almost symmetric in both Levels.

3.1.1.1.1 Level V Twin Shrines

As mentioned above, the twin shrines consists of two structures, one to the west and another to the east, with their auxiliary rooms (Fig. 6). The western shrine resembles a *megaron*, which consists of a main room (cella), a vestibule, an open space in front of the structure, and subsidiary rooms. The interior was filled with many religious paraphernalia: these include two so-called 'blood altars,'⁹ placed on the northern and eastern walls, an altar with three built-in jars around it, and a wooden pillar next to the northern wall. The altar is made of a clay pedestal raised 33 cm from the floor level, supported by three jars (Lloyd and Mellaart 1965, 39). Around the altar, votive offerings were found which included stone bowls, a sunken jar, and large quantities of pottery (Lloyd and Mellaart 1965, 39). Excavators suggest that behind the altar was a "light screen" (Lloyd and Mellaart 1965, 40). This was suggested because a line of pebbles and baked clay loom weights were found behind the altar. Lloyd and Mellaart indicate that they suspected that these loom weights were attached to the ends of cords to create a light curtain (1965, 40).

⁸ A megaron is a structure which consists of a porch, an anteroom, and a large rectangular central room with a central hearth (Biers 1996, 71).

⁹ 'Blood altars' are ritual installations where victims (either human or animal) were sacrificed. Their blood was let into the altar/basin and then collected in a vessel (Lloyd and Mellaart 1962, 31).

The cella opens to another *megaron* through a wall on its eastern side to the antechamber of the subsidiary structure. The subsidiary structure's back room connects to a single-roomed structure through a door in its eastern wall. The rest does not connect directly to the eastern shrine. These subsidiary rooms did not contain any significant artifacts, and they were mostly destroyed by later constructions (Lloyd and Mellaart 1965, 40).

The eastern shrine is a small shrine, named room 4 by Lloyd and Mellaart (1965, 41). It measures 6.5 m on its longer side (north-south) and 2.3 m on its shorter side (east-west). Interestingly, the eastern shrine, although small, connects to a series of rooms to the east, creating the Level V "Temple" in Area R. This structure is aligned slightly differently from the western shrine and its subsidiary rooms, facing south. The eastern shrine connects to four other rooms (numbered rooms 5, 6, 7, 8 from west to east) adding up to a complex of five rooms in total (Lloyd and Mellaart 1965, 42). To the south of this row of rooms a small fragment of a wall has been found, rest is not known since the excavation area did not extend up to the south.

Room 4, which is also the eastern shrine, is the smallest of the rooms in this complex. The room is accessed through a door to the south (Lloyd and Mellaart 1965, 41). The inside of it is occupied by artifacts and installations. Upon entering, one could see a large blood altar attached to the eastern wall, which had a drainage leading to a built-in vessel. On both sides of the altar were niches set 40 cm deep into the wall (Lloyd and Mellaart 1965, 42). The one to the north was found filled with remnants of burnt wood, thus the excavators believe there were shelves for storage here (Lloyd and Mellaart 1965, 42). Within the southern niche, a high pile of ashes were found with a few pottery vessels, which was interpreted as the remains of a hearth. Within the room, many vessels were found in various positions (Lloyd and

Mellaart 1965, 41-42). Both shrines were destroyed by fire (Lloyd and Mellaart 1965, 39).

Room 5 is a small, rectangular room measuring 3 x 4.5 m, accessed through a door on the southern side. According to the excavators, this functioned as an outer vestibule and contained three jars, a cooking pot, and a horseshoe-shaped pot stand (Lloyd and Mellaart 1965, 44). This room led to room 6 through a door in its eastern wall. Room 6 was identified as an antechamber, measuring 4 x 4.5 m (Lloyd and Mellaart 1965, 43). In its center, an impression of a metal cistern and the carbonized wood of its support beams were discovered, but the cistern was not found. Apart from the cistern, a large quantity of pottery was discovered within the room, collected mainly in the northeastern and southeastern corners (Lloyd and Mellaart 1965, 43). A door placed in the center of its eastern wall led to room 7. Lloyd and Mellaart indicate that the trouble taken to construct this axial entrance is an indication of its importance (1965, 43). The contents of room 7 were completely emptied. The fact that all the contents of the room were cleared, along with the axial entrance, signposted that this room might have been the inner sanctuary of this complex (Lloyd and Mellaart 1965, 43).

Room 8 shared a party wall with room 7, but it was accessed through a separate entrance on its eastern side. Inside the room, right in front of the door, was a brick pedestal which measured 35 cm in height for offerings (Lloyd and Mellaart 1965, 43). Around the pedestal, as well as inside and outside the door of the room, many votive vessels were found (Lloyd and Mellaart 1965, 43). On the southeast wall, a damaged blood altar was discovered. In the center of the room, a three-sided hearth piled high with ashes was discovered (Lloyd and Mellaart 1965, 43). The

trampled earth floor was reinforced with two wooden beams¹⁰ (Lloyd and Mellaart 1965, 43).

3.1.1.1.2 Level IV Twin Shrines

According to the excavators, Level IV was occupied by a "squatter population" (Lloyd and Mellaart 1965, 49). They rebuilt rudimentary structures over the burnt remains of Level V. These rebuilding activities are also seen in Area R, where the twin shrines were located; the Level IV inhabitants reused the foundations of the Level V shrines to build their (possible) religious structures (Lloyd and Mellaart 1958, 108; Lloyd and Mellaart 1965, 49).

The plans of the shrines change slightly in this Level, and the subsidiary structures increase from two to three rooms for the western shrine, while in the eastern shrine, there are no additional rooms (Fig. 7). The western shrine now consists of a main room (cella), an antechamber, an open space in front of the structure, and subsidiary rooms. It measures 9.5 m north – south and 6 m east-west (Lloyd and Mellaart 1965, 54). The contents of the cella and the exact type of hearth is not known, because the floor level was destroyed (Lloyd and Mellaart 1965, 55). Only the existence and placement of the hearth, which was in the center towards the north, was certain during excavation (Lloyd and Mellaart 1965, 55). In the open space in front of the western shrine, 6 m south of the entrance, a cult pillar was discovered. When uncovered, the pillar was still standing upright, being supported by a clay pedestal fashioned around the base of the wooden pillar. The pillar measured 48 x 38 cm, and it was found carbonized but well-preserved (Lloyd and Mellaart 1965, 56). Some pottery was placed around the pedestal base. To the south of this cult pillar was a ritual hearth (Lloyd and Mellaart 1965, 56). The hearth measured 4

¹⁰ The placement of the wooden beams is not described in the Lloyd and Mellaart 1965 publication.

x 3.5 m and consisted of clay and had a clay curb which surrounded the hearth. Broken sherds of pottery were found inside the hearth, and other ceramic vessels were found placed around the hearth (Lloyd and Mellaart 1965, 56). According to Lloyd and Mellaart, to emphasize the connection of this cult pillar to the *megaron*, the area (the court) was paved with large slabs of stones (Lloyd and Mellaart 1965, 56).

The eastern shrine, as with the western one, consists of a cella with an antechamber and is connected to the western shrine through subsidiary rooms. The cella of this structure contains a circular hearth, which is placed in the center of the chamber towards the north (Lloyd and Mellaart 1965, 56). According to Lloyd and Mellaart, the hearth is surrounded by domestic-looking pottery. The eastern shrine has three doors: one on the southern side, which leads into the structure, another on the northern side (where it leads is not known), and one to the west that led to the subsidiary rooms. The domestic pottery and the connections to the subsidiary rooms creating an architectural unit led the excavators to doubt its religious purpose (Lloyd and Mellaart 1965, 56).

Room 5, located to the west of the eastern shrine, as indicated on Fig.7, is paved with flat stones and has its own independent entrance. The paving led the excavators to think this room might have been used as a lustration room, where one cleansed oneself before entering the shrine (Lloyd and Mellaart 1965, 56).

Overall, does the fact that this whole structure was built on a long sequence of religious structures indicate that the Level IV "shrines" were in fact shrines or that they had some religious significance? The excavators indicate that the excavations did not lead to a definitive conclusion (Lloyd and Mellaart 1965, 56).

The shrines in the MBA show differences from both the EBA and LBA Twin Shrines. This is due to the additional subsidiary rooms between the two shrines. This gives more of a domestic look to the architecture than a religious one. In particular, the rudimentary building style of the Level IV shrines reinforce this impression. The addition of these rooms may be for the people who were taking care of the shrines, but this cannot be verified, considering the subsidiary rooms were found stripped of most of their artifacts.

The Level V shrine, in particular, seems to be a kind of complex, because the structure seems to continue northwards. This complex-like structure was a point of interest to Wightman since he believed that the orientation and the way that the rooms are arranged is similar to the well-known Great Temple of Hattuša (Fig. 8) (Wightman 2007, 230). The Beycesultan example measures 6.5 x 22 m with a possible 2.5 m wide corridor in front of the rooms, while the northwest wing of the Great Temple measures about the same size (7x28 m with a 2.5 m wide corridor). One should be aware that the area around the structure has not been excavated, but the resemblance is intriguing. If this is what Wightman believes it to be, namely an early Hittite temple, it may indeed be the origin of the Hittite temple. One must also be aware that the MBA palace is contemporary with this structure, which is also believed to be an inspiration for Hittite temple architecture. Wightman takes it a step further, indicating that this might have been the earliest (or proto) Hittite temple and that the Hittites might have taken inspiration from both the palatial and religious architecture at Beycesultan (Wightman 2007, 231). This is possible, since, when we look at the architectural similarities, it is true that the structure does possess a cultic/religious function according to the artifacts found within it. The fragmentary wall found on the edge of the unexcavated area also indicates that there is more

underneath the unexcavated section. However, one must be cautious when making assumptions based on a fraction of a building.

Overall, pinpointing the exact function of these buildings beyond indicating that they do indeed have a cultic/religious function is not fully possible, especially because Beycesultan is the *only* excavation of this region with religious structures. I do believe that the structures we see in Beycesultan MBA are religious and that the possibility of the Level V building being an early Hittite-like temple is an intriguing one. Extensive excavation around the structures needs to be carried out to understand their full extent and placement within the western summit and to answer if these MBA structures could indeed be early Hittite temples.

3.2 Late Bronze Age

3.2.1 Beycesultan Continued

3.2.1.1 The Twin Shrines

The twin shrines in the LBA witness a major change. The structures shifted from *megarons* with subsidiary rooms to two *megarons* with a party wall. These shrines are seen in both Levels III and II. From Level III to Level II, there are only minor changes to the plans, and the LBA ends with a conflagration, with no evidence for rebuilding (Lloyd 1972, 24).

3.2.1.1.1 Level III Twin Shrines

The Level III twin shrines, as mentioned above, consist of two *megarons* sharing a party wall (Fig. 9). Both shrines' walls were preserved up to a height of 50 cm, although only the foundations of the subsidiary rooms on both ends were preserved (Lloyd 1972, 24). Their foundations are constructed of medium-sized stones with a mudbrick superstructure (Lloyd 1972, 24). The excavators were able to understand that the shrines were entered from the southern vestibules. The northern

rooms of both shrines are bordered by a 70 cm thick wall, which runs the whole extent of the excavation in this area. Lloyd believes this may be the city wall, since it follows the line of the MBA city wall (Lloyd 1972, 24).

The western shrine measures 3.5 m east – west and 17.5 m north-south. The structure consists of a small room in front, the main chamber (cella), and a back room (Yakar 1974, 153). The shrine is devoid of artifacts, but the cella contains a very elaborate installation (Lloyd 1972, 27). It consists of a free-standing screen wall made of a somewhat convex plastered mudbrick wall opening to the south, preserved to 60 cm in height, with a hole in the base (Fig. 10) (Lloyd 1972, 25). Lloyd describes this hole as "big enough to pass one's arm through" (Lloyd 1972, 25). Constructed in the base of this small wall is a mudbrick platform, measuring 20 cm in height and 1.50 m in length (north-south). Placed in front of the low wall, not touching it, is a pair of terracotta "horns." They are decorated with concentric circles stamped on their southern façade with red paint (Lloyd 1972, 25). The alignment of these horns are parallel with the hole under the low wall. East of these horns is a hearth accumulated high with ashes (Lloyd 1972, 26). Located right to the northeast of the low, free-standing wall is a clay bin which contained a large unbroken cooking pot. Apart from all these installations, the room also contained a clay bench covering the whole northern wall, which meets the clay bin in the northeastern corner (Lloyd 1972, 25; Yakar 1974, 153).

The eastern shrine's plan is nearly the same as the western shrine's, apart from its entrance (Fig. 9), and it measures 19 m north-south and 4 m east-west (Lloyd 1972, 27). The entrance to the cella of the shrine is through a small chamber with a clay bin inside. This shrine has a bent-axis entrance, as opposed to the western shrine, which has a direct-axis entrance. The installation in the center towards the

north is similar to the one found in the western shrine. Two end pieces of a possible low wall were discovered. There was a gap of 30 cm between these mudbrick installations (Lloyd 1972, 27). A mudbrick platform which measures 1.50 (north south) x 1.20 m (east - west) lay in front of these mudbrick remnants (Lloyd 1972, 27). The semicircular terracotta hearth, with stamp decorations of similar kinds to those found on the horns in the western shrine, is located in the northeast corner of the platform (Lloyd 1972, 27). Behind the hearth, a small wall protrudes from the eastern wall, adjacent to a small clay bin (Lloyd 1972, 27). Behind the cella, there is a back room with a small bench in the northwest corner (Yakar 1974, 153).

3.2.1.1.2 Level II Twin Shrines

In Level II, the shrines remain mostly the same, although there are some shifts in the internal divisions of space, and this is especially visible in their southern vestibules (Fig. 11) (Lloyd 1972, 27). The antechambers become bigger, almost as big as the back rooms. To the south, the entrances to the vestibules and the extent of the walls are not known, because it was outside the limits of excavation (Lloyd 1972, 27). The antechamber, the main cella, and a back room. The antechamber is divided by a low wall, which forms a narrow space to the east measuring 3.20 x 60 cm (Lloyd 1972, 27). A fascinating structure was discovered, intact, in this vestibule: short walls mark off a small space along the eastern wall, inside of which was a wooden trough made from a single log (Lloyd 1972, 27). Inside the trough, a carbonized knotted cord basket, two chalice-style drinking cups, and a plain drinking cup were found (Lloyd 1972, 27). In the southwest corner of the antechamber, there was a storage jar that the excavators suggest may have held water (Lloyd 1972, 27; Yakar 1974, 153). It is possible that this room was used as a cleansing room before entering the cella with the cult object. The main chamber's

floor level, as explained by Lloyd, was destroyed during excavation, and thus the only thing that remains from the structure is a storage jar (Lloyd 1972, 27). Consequently, the placement of the ritual hearth within the cella is not known. Considering the twin structure, the eastern shrine must have been placed around the same area, with a similar construction. Adjacent to the western wall, towards the south, another (water?) storage jar was placed, and this is the only thing that is preserved in the cella. The back room was empty.

Whether the western shrine and the eastern shrine were accessible to each other through an intervening room is not known. A probable doorway location is proposed by the excavators, which is a portal located towards the north on the eastern wall of the antechamber, where the possible lustral area is. Still, this is not a very secure identification, since this part was destroyed by a pit from later levels (Lloyd 1972, 27).

The eastern shrine's antechamber did not yield any artifacts (Fig. 11). The cella, on the other hand, was adorned with religious paraphernalia. According to Lloyd, the fact that all the contents of the shrine were found *in situ* is an indication of the rapid abandonment of the building due to the fire that destroyed it (1972, 28). The vestibule contains a very interesting and intricate installation. In the northwest corner, an area paved with stone contained with a low wall on the southern side. Lloyd describes this place as a "lustral" area, although the area was destroyed by an intrusive pit, preventing an understanding of the whole plan (Lloyd 1972, 28). Next to the southern low wall, a jar was found supported by bricks to hold it in place. Across from this "lustral" area was another huge jar. The fact that the jars were discovered around this paved area supports the idea that it is a lustral installation.

Towards the northern part of the center of the cella is another installation. A small slightly convex wall faces southward with a hole in the middle at the bottom. This low wall supports terracotta horns placed 25 cm apart, aligning them with the hole (Fig. 12) (Lloyd 1972, 31). This installation stands on a platform constructed of flat stones coated with baked clay. A large bin, rectangular in shape, which Lloyd indicates was for fuel, was constructed by cutting into the southwestern corner of the low wall. The hearth is located on the right side of the terracotta horns and is filled with ashes; pieces of a cooking pot were found in it (Lloyd 1972, 31). In the subsidiary room to the north, two benches were found, one in the southwestern corner and one in the northwestern corner (Lloyd 1972, 31; Yakar 1974, 154). This room contained what Lloyd named a "child's treasure" (1972, 32). This small hoard of artifacts consisted of clay objects, the tusk of a boar, beads, and pebbles (Lloyd 1972, 31). Lloyd does not give any explanation why a child's treasure would be found in the back room of a shrine, which leaves this interpretation open to question.

In the whole structure, about forty complete pots were found (Lloyd 1972, 31). The concentrations of the pottery were mainly focused in front of and behind the installation in the middle of the chamber and in southern part of the main chamber towards the wall. Apart from the pottery, many other small finds were also discovered in the eastern shrine; these included two spearheads, an arrowhead, pestles, stone knives, spindle whorls, and pot supports (Lloyd 1972, 32). Three necklaces made of beads with bronze clasps were discovered among the ceramics.

The LBA shrines do not change drastically between Levels III and II. The limited changes in their entrances is an important point, as it seems that in Level III the bent-axis entrance to the cella may be an indication of more seclusion for this shrine, since this type of axis was not seen in the MBA shrines.
3.2.1.2 Interpreting the Twin Shrines

Lloyd emphasizes several points while determining the purpose of these structures. Both Lloyd and Mellaart are certain that these buildings are religious in function. Lloyd indicates that the shrines throughout all the levels (Chalcolithic to the LBA) "conform to a single convention in planning and general arrangement" (Lloyd 1972, 34). In the MBA, the shrines were separated by subsidiary rooms, but their dedication to religion does not change (Lloyd 1972, 34). Lloyd firstly mentions the placement of the shrines, emphasizing their location in Area R, abutting against an enclosure wall or the limits of the settlement, throughout the levels (Lloyd 1972, 34). However, this point does not really signify anything, because enclosure walls are common in Anatolian settlements, as are buildings used as a support or even directly as a wall of the structure (Sagona and Zimansky 2010, 184-196). The continuous and contiguous planning of the structures is also given as an indication of its sacrality (Lloyd 1972, 37). Additionally, the hearth with horns placed in the center of the shrine appears to be a ritual structure. Lloyd also indicates similar hearth installations have been found in Level II private houses. This fact, does not help verifying the uniqueness of the structures (Lloyd 1972, 37). The plans of the on the private houses show that the plans are not similar to what we see with the shrines. The private houses consist of small complexes while the shrines are megaron shaped buildings with the specific elongated shape.

The Burnt Palace of the MBA, when compared to the MBA shrines shows immense similarity (see Fig.8, indicated in green). If one looks close it can be seen that the Burnt Palace consists of multiple megara added to each other creating a bigger complex. When compared what we've seen in the MBA and even in the LBA, considering the very limited excavation area it is possible that these "shrines" may

have actually been a part of some larger complex. In the limited area of excavation many of the structures seem to have walls connected to them on every direction creating the idea of a bigger structure. It is very probable that this complex may have been a temple complex much like what Wrighman stated (2007), and what Abay and his is excavating making one of the earliest MBA religious complexes of western Anatolia.

Jak Yakar's work, "The Twin Shrines of Beycesultan", tries to shed light on these structures (1974). He believes that these sanctuaries are twins, representing a male and a female deity (Yakar 1974, 155). The distinction between the male deity shrine and the female deity one, according to Yakar, is through the blood altars. The shrines with the blood altars are an indication of the female deity, and the ones with the wooden pillar are for the male (Yakar 1974, 155). Yakar suggested that the horns found in the LBA shrines may be parallels to the horns of consecration found in Minoan religious architecture¹¹ (Yakar 1974, 156). Yakar takes more of an Aegean focused stance in the interpretation of these temples while it might be better to look towards the southeast as Abay indicates.

These horns may have been an indication of sacredness and a stylized representation of the deity. The usage of horned hats to indicate an image of a deity in the Mesopotamian and Hittite cultures may be echoed in the horns found at Beycesultan (Yakar 1974, 156). Thus, these horns may be the divine image stressing the sanctity of the place (Yakar 1974, 156). The hearths, or as Yakar calls them "ceremonial heaths," are commonly found in cultic structures in early Anatolian contexts (Yakar 1974, 160).

¹¹ The theory of the horns as "horns of consecration" should be approached with caution. This topic has been discussed by many, especially its connections with the Minoan Horns of Consecration before Yakar's work (see Diamant and Rutter 1969).

Another discussion of these structures comes from Naumann. He does not believe these are "temples or shrines." He writes about these shrines in his book, *Architektur Kleinasiens* (1971), under the heading of domestic dwellings. He argues that there were no cult images or clay statues - instead there were ordinary artifacts that are also found in domestic dwellings (Naumann 2007, 447). Naumann believes that the identification of these structures as "shrines" should be taken with a grain of salt. Instead, he proposes that the people of Beycesultan practiced religion mainly in the home (Naumann 2007, 447).

Eşref Abay indicates that the twin shrines also had many domestic features, but he expresses that these structures were indeed religious since their artifact assemblage did not resemble the private houses and were richer and the new excavations on the Level 5 structure is also revealing the same assemblage as the shrines which they believe helps in understanding the usage of the complex (Abay personal communication).

3.2.1.3 Layer 5 "Temple Complex"

With the start of the current excavations, a new area on the south part of the western summit revealed a large structure (Fig. 13). Although the structure was heavily destroyed by pits of the Byzantine period, a plan and small finds were recovered (Abay and Dedeoğlu 2012, 312). Abay indicates that this structure belongs to the early LBA period, which they named as Layer 5, corresponding to Levels II-III of the Lloyd and Mellaart excavations (Abay and Dedeoğlu 2013, 218). The structure measures 12 x 11 m and consists of 5 rooms (Fig. 13, 14). The foundations of the building are constructed of large stones and the superstructure was comprised of mudbricks (Dedeoğlu and Abay 2014, 4). All the walls and the floors were thoroughly plastered.

Room 25 is believed to be the corridor of the building. The entrance is from the western side through a doorway 90 cm wide (Abay and Dedeoğlu 2013, 220). The floor is white washed, and various pottery was discovered. In the northeastern corner of the room, a platform was discovered, and embedded in this platform were two silos; to the north of the silos, a large pithos was found buried halfway in the floor (Abay and Dedeoğlu 2016, 188). The northern part of the room forms a small chamber with an L-shaped wall. In front of this room, a large quantity of pottery, astragali and spindle whorls were found (Abay and Dedeoğlu 2016, 188).

Room 3, entered through Room 25, is believed to be the cella of the so-called "building/temple complex" (Abay and Dedeoğlu 2013, 220). The southern side of Room 3 is divided by a wattle and daub wall. Inside this wall, various types of pottery, crescent-shaped clay objects, spindle whorls, stone tools, worked stone, and worked bone objects were found (Abay and Dedeoğlu 2013, 220). Excavators believe this division might have been used as an offering area because of its unusual construction and the concentration of artifacts (Abay and Dedeoğlu 2013, 220). The rest of room 3's floor was white washed, and six pottery vessels, including one jar decorated with an abstract human face, were discovered in situ (Dedeoğlu and Abay 2014, 7). In the eastern part of room 3, an altar was also discovered. It is formed of a rectangular panel, and two terracotta horns rise in front of it; directly to the south of it was a pot for offerings, buried to the rim (Dedeoğlu and Abay 2014, 7). The horns (as in the previous Level's altars) are decorated with stamp impressions of concentric circles (Dedeoğlu and Abay 2014, 7). Also, the skeleton of an individual was found, who died in the conflagration that destroyed the building (Abay and Dedeoğlu 2013, 221). On the northwestern corner of the room were two grinding stones and their

grinders, and right next to these, a well-preserved jar was found (Abay and Dedeoğlu 2016, 188).

Room 3 leads to room 6 on its southeastern side. Room 6 is almost square and is only accessible through room 3. This room contained many high-footed goblets, loom weights, pendants, beads and astragali (Dedeoğlu and Abay 2014, 7). A partial human skeleton was also found on the floor of room 6 (Dedeoğlu and Abay 2014, 7).

Room 24, located to the south of room 3, measures 3.70 x 4.40 m. The northern wall was found intact, but the southern wall was heavily disturbed by pits of the Byzantine period (Abay and Dedeoğlu 2013, 221). The room contained pottery sherds, bone fragments, some weights, and pot supports for cooking (Abay and Dedeoğlu 2013, 221).

Room 26 is located south of room 25, and they are connected with a door. The room measures 4.20 x 3.30 m (Abay and Dedeoğlu 2013, 221). Four pithoi were discovered in the south of the room. Grain was found in the pithoi, leading to the idea that this was the depot of the complex (Abay and Dedeoğlu 2013, 221). Another human skeleton was found within this room, but it was heavily damaged by the collapsed roof that fell on it. Next to the hip bones of the individual were beads made of shells and carnelian, as well as some pieces of bronze found in what is believed to have been a leather pouch (Abay and Dedeoğlu 2013, 221).

As mentioned above, when this complex was first excavated, Abay and Dedeoğlu believed that this structure was a "temple complex" (Abay and Dedeoğlu 2012, 312; Abay and Dedeoğlu 2013, 219-220; Abay and Dedeoğlu 2014, 387-388; Dedeoğlu and Abay 2014, 6 -7). The 2013 and 2014 excavations revealed the grinding area in room 3, the silos in room 25, and the domestic nature of some of the pottery, all of which made the excavators reconsider their interpretation. Abay and

Dedeoğlu now call the structure "the building complex," and they believe that the complex had a religious function with production and storage areas (Abay personal communication).

3.3 Conclusions

Overall, it is critical to note that none of what has been discussed above is conclusive, due to the fact that there are no clear-cut examples of temples in this region in the second millennium BC, although the possibility of these structures being temples has been discussed by many archaeologists. However, these buildings contain various distinct ritual paraphernalia such as blood altars, installations with horns and hearths, wooden pillars, lustral areas, and votive vessels. These materials are suggestive of religious activities, and they may be an implication of religious practice on a neighborhood level.

These buildings, instead of being monumental religious structures, might have been used as neighborhood shrines, where blocks of private houses could have contained similar structures where religious activities were carried out by the inhabitants of the neighborhoods. A similar system can be seen today, with nearly every neighborhood having a mosque where locals carry out their religious practices. This could also explain the continuation of the same building type and style since the Chalcolithic period, demonstrating the long continuity of the shrines. This idea can be furthered by more research on domestic architecture. In particular, research on how neighborhoods were formed and how their dynamics developed may shed more light on the twin shrines.

The similarity of the MBA shrines to both the Burnt Palace of the same period and the resemblance of shrines to the palace and to Hittite temples is striking. It is possible that this might be an early temple structure similar to what we see in the

Hittite realm. The construction technique of the Beycesultan east shrine, the Burnt Palace, and the Hittite temple is very similar, particularly the use of stone foundations, mudbrick superstructures with wooden beams, and plank reinforcements. Excavations around the area of the shrines would provide an answer to the question of whether what we see here is a proto-Hittite temple. This interesting connection must be investigated in the future.

Concerning western Anatolia in general, further excavation by existing projects and new excavations at unexplored sites will expand the corpus of religious architecture in the region during the Bronze Age. This will help us to understand the regional religious practices and their relationships to religious architecture in Anatolia more generally. Although the shrines at Beycesultan represent an important example and a start in understanding the religious traditions and how they developed, more research is needed into the rest of the region in order to better understand the place and function of religion in these societies.

4. CHAPTER 4 – Temples in Central Anatolia

Sites that yield temple architecture in central Anatolia are more numerous than in the west and Cilicia combined, and the corpora of temples here is represented by 41 structures, with all but two of the buildings in LBA contexts. The sites discussed here are in rough chronological order according to the dating (both absolute and relative) of the site and the temple. Hattuša is discussed at the end of the chapter, due both to its central role as the capital of the Hittite Kingdom and the number of temples recovered (31) from the site.

4.1 Middle Bronze Age

Even though there are numerous MBA excavations in central Anatolia, to this day only one site, Kültepe-Kaniš, has produced temples. The unique nature of Kültepe in this respect is significant, as discussed below, and may point to intriguing differences between this site and other contemporary settlements.

4.1.1 Kültepe – Kaniš (Neša)

Kültepe is an ancient mound located in central Anatolia, 21 km south of the Kızılırmak River bend, and 21 km northeast of Kayseri (Özgüç 2003, 23). The first excavations were conducted by Ernest Chantre in the years 1893-1894 (Topçuoğlu 2010, 25), followed by two brief excavation seasons led by Hugo Winkler in 1906. In 1925, Hrozny excavated for a short period and discovered a thousand tablets (Emre 2010, 20). The site was subsequently left unexcavated for 23 years (Emre 2010, 20), and excavations were reinstated in 1948 by Tahsin Özgüç, continuing until 2005. In 2009, Fikri Kulakoğlu took over the excavations, and the expedition is still going on (Kulakoğlu 2015, 9). Kültepe, also known by its ancient name Kaniš or Neša, was the administrative capital of the *karum* system in Anatolia during the Assyrian Trading Colonies Period. Kaniš's role was to complete the link between

Assur and the *karum* of Anatolia. Kültepe consists of two parts, the city mound and the lower city (Özgüç 2003, 24) (Fig. 15).

The city mound is circular in shape with the dimensions of 550 m north-south and 500 m east-west, rising 21 m above the surrounding plain (Özgüç 2003, 24). The lower town measures 350 x 250 m and covers an area about 87,500 m² (Özgüc 2003, 25). With its size, Kültepe is considered one of the biggest mounds in central Anatolia. The excavations have revealed 18 levels of habitation on the mound (Table 8), the earliest identified level being EBA and the latest belonging to the Roman period (Özgüç 2003, 24). The mound rises 5 m towards the eastern ridge, where the citadel of MBA Kültepe has been revealed. Both the citadel and the mound are encircled by separate fortification walls (Özgüç 2003, 24). The city mound revealed various architectural units (Fig. 16). On the citadel, the Late Palace (Waršama Palace) was discovered in Level 8, and underneath the Waršama palace, the Early Palace, belonging to Level 7, was found. On the mound, another palace on the South Terrace was uncovered, corresponding to Level 8 (Özgüç 2003, 29). To the north of the palace on the South Terrace, the two temples and the official storage building were also found, dating to Level 7 (Özgüç 2003, 140). The two temples are located 40 m apart from each other and are unique, due to the fact that this type of temples are not otherwise attested in Anatolia before the Level 7 examples.

The lower city-*karum*, which was occupied for 250 years, was established later than the mound, but still dates to the MBA. The lower city is located around the mound, extending up to 2 km in diameter and rising 2 m above the surrounding plain. The first settlement on the lower mound corresponds to the second building level on the mound (see Table 8). The lower city was the residential quarters for the inhabitants of Kültepe. The Assyrian traders settled in a limited part in the lower city,

while the natives inhabited its full extent. This area for the Assyrian merchants was known as the "*Karum* of Kaniš – Commercial Quarter" in texts found in the private houses of the Assyrian merchants (Özgüç 2003, 25). The *karum* has four levels: Level IV is built on virgin soil, representing the initiation of the *karum*, and Level Ia is the last level, terminated by conflagration and destruction.

Kaneš Levels	Period	Karum Levels
1	Roman	
2		
3	Hellenistic	
4	Iron Age	
5		
6	Middle Bronze Age	Ia
7	Assyrian Colony Period	Ib
	Interval	
8	Middle Bronze Age Assyrian Colony Period	II
9		III
10		IV
11	Early Bronze III	
12		
13		
14	Early Bronze Age II	
15		
16		
17		
18	Early Bronze Age I	

Table 8 Levels and the corresponding periods of Kültepe – Kaniš (adapted from Kulakoğlu 2010, 41: Table 1).

4.1.1.1 Temples of Kaniš

Two massive structures were uncovered within Kaniš. These are identified as temples by Özgüç (1993, 167; 1999, 46; 2003, 140). The first temple was discovered to the west of the palace in the citadel. Temple 1 yields a rectangular plan measuring 27 m north-south and 21.50 m east-west (Fig. 17). The rectangular plan is disrupted by the four tower-like projections on each corner of the structure, although the projection located in the northeast was destroyed by the later period's construction activities (Özgüç 1993, 167; Özgüç 1999, 46; Özgüç 2003, 140). In the middle of the

northern and western façades, there are two small buttresses measuring 2 x 1 m. This type of buttress is found also on the palace in the citadel, and is used as structural support within the building. Two projections located on the east side of the structure, where the entrance is also located, extend 4 m farther out from the façade of the structure than the other projections (Özgüç 1993, 167; Özgüç 1999, 46). This extension creates an open space in front of the building. Özgüç asserts that this space must have been covered, although there are no structural elements such as columns or pillar bases found to support this (2003, 140). The deep foundations of the building were established by digging through older architecture. Some of the big foundation stones were worked, while others were not. The inner and outer stones used in the foundations, traces of beams were found. The superstructure of the building was made of mudbrick. The four corners of the building, and the middle of the walls, were mudbrick piers supported by rubble and wooden beams (Özgüç 1993, 167; Özgüç 1999, 46).

The structure consists of four rooms and 4 cells found in the projections which have not been definitively identified. A room on the northern side and a parallel room on the southern side were also unearthed. These rooms had earthen floors, and they were 3 x 10 m in size (Özgüç 1993, 167; Özgüç 1999, 46). Both were long and narrow compared to the third room. These rooms are believed to have been used as staircases, but no stairs or any other artifacts have been found in these rooms. Özgüç proposed that the structure had an upper story, and it might have been accessed by wooden staircases, instead of a flight of stairs, thus leaving no trace of structural features (Özgüç 1993, 170; Özgüç 1999, 47).

Within the southern projection, a cell measuring 4.5 x 1.5 m was discovered (Özgüç 1993, 170; Özgüç 1999, 47). No artifacts were found in this inner cell, and its use is unknown. As mentioned above, other projections had cells of this sort, but they were not been exposed as completely as this one. Other than this inner cell, the projections, or as Özgüç calls them, "towers", were filled with rubble around the cells (1993, 170). The third room, called the central hall, has a trampled earthen floor. It is not exactly rectangular, since the room's dimensions are 14 m on the north, 13.20 m on the south, 12.30 m on the east, and 11.30 on the west (Özgüç 1993, 170; Özgüç 1999, 47). According to Özgüç, this room is the most important unit of the structure, since it is the main room and the only one that yielded a limited number of artifacts. These artifacts are four pots, a stone vessel, a gold cup, a bronze vase, a lion statuette made from rock crystal, some burnt pieces of gold artefacts, and three tablets with Assyrian writing (Özgüç 1999, 51). These artifacts only give a limited insight into what must have been stored in the building, and the fact that they were found burnt verifies the conflagration of the structure. One of the tablets was found in a mixed fill, and the other two were found mixed in the vitrified mudbrick in the structure (Özgüç 1999, 47). Özgüç indicates that at least two of the texts must have been stored in the building (1999, 47). No other information about the tablets are provided by the publications.

Temple 2, located 40 m south to Temple 1, has the same layout with Temple 1 (Fig. 18). Although Temple 2 was damaged by later construction, the plan was preserved (Özgüç 1993, 170; Özgüç 1999, 47). Temple 2, like Temple 1, has a rectangular plan measuring 26.30 x 22 m (Özgüç 1993, 170; Özgüç 1999, 47). The projections on the four corners are also the same in this structure, including the extended two projections to the east, once again creating a partially enclosed space in

front of the building. In this area, a pillar base was found slightly moved from its original place (Özgüç 1993, 170; Özgüç 1999, 48). This might be an indication that the temple had a cover in the front, to create an open space that functioned as a type of shelter for the entrance, as suggested by Özgüç for Temple 1.

Despite its close similarities to Temple 1, Temple 2 lacks the small buttresses uncovered in the former. This might mean that this building was solid enough that it did not require any reinforcements. This temple, too, had three rooms and small cells within each projection. As in Temple 1, the southern and northern sides each had a rectangular room measuring 10 x 3 m, with unpaved and earthen floors (Özgüç 1993, 170; Özgüç 1999, 48). The central room, 12 x 13 m in size, is again the largest room of the building. There were a limited number of *in situ* artifacts found here, consisting of some pottery sherds (Özgüç 1993, 172; Özgüç 1999, 48). These sherds are the same style as the Karum Ib wares (Özgüç 1999, 48). Additionally, in the burnt mudbrick and soil fill of the central hall, a tablet was discovered. The excavators believe that this tablet might have been carried from somewhere else while filling in the structure (Özgüç 1993, 173; Özgüç 1999, 49).

Around the two temple buildings, there are parts of other similar structures uncovered. According to Özgüç, there are remnants of architecture that indicate the presence of at least two more structures in the surrounding areas. The excavators believe that these remnants were built along the same lines as the two temples. Özgüç also believes that this is similar to the situation in Boğazköy, where buildings with similar functions were grouped in the same area of the city (Özgüç 1993, 173; Özgüç 1999, 48; see below).

Özgüç defines these two buildings as temples due to the fact that is known from the Anitta text that Anitta built five temples on the city mound dedicated to

various gods (Neu 1974, 15; Steiner 1989, 473). Özgüç explains that the structures must have been temples because, from this textual evidence, it is known that there were temples on the mound. Since other buildings, such as the palaces and storage buildings, have been securely identified, Özgüç indicates that these structures must be the temples mentioned in the Anitta text (1999, 49).

When compared with other temple structures throughout the history of Anatolia, similar structures are seen in the Urartian period (ca. 1200-600 BC; Sagona and Zimansky 2009, 316; Özgüç 1966, 3-4). These structures have been identified as temples and are similar in plan to the temples of Kaniš, though the Urartian temples were much taller. The walls of the main temple at Altintepe, for example, are both thicker and taller, and the temple is surrounded by a colonnaded structure and a rectangular complex that encapsulates the main structure (Özgüç 1966, 3-4). The resemblance of the main temple in Altintepe and the examples at Kaniš is uncanny. Özgüç has pointed this out in his publications, and has furthermore indicated that the temples at Kaniš may be the predecessors of the Urartian temples (Özgüç 1993, 167; Özgüç 1999, 46; Özgüç 2003, 140).

From the same period, the Aleppo temple and the Migdol temples of the Levant also show parallels to what we see in Kaniš: the same setting within the city, a large single room, thick walls which indicate two or more floors, tower-like projections on the façade, and possible tower-like reconstructions. This may be an indication that the temple type utilized in the capital of commerce with the Assyrian traders took inspiration from northern Syria and Levantine religious architecture (see further details in Chapter 6).

Overall, the temples at Kaniš are very crucial in understanding the religious architecture in central Anatolia in the later part of the MBA, especially in the early

stages of the Old Hittite Period. These structures are unique in MBA Anatolia, as well as in earlier periods. They may be the first examples of temples that proliferate in the LBA. It is important to note that these temples do not have any altars, cult objects, or statues of gods or goddesses, and the lack of textual evidence from within the temples still leaves open the definitive identification of these structures.

4.2 Late Bronze Age

The shortage of temples in the MBA is compensated by the large number of temples in the LBA, which is a result of the establishment of the Hittite Kingdom. With the emergence of written records in this region during the MBA and the extensive Hittite archives that have been discovered from many sites, more secure identifications of temples are possible than in other regions such as western Anatolia, where textual sources are very rare throughout the second millennium BC. One should keep in mind that there are many structures which have been loosely identified as temples, which are also discussed here.

4.2.1 İnandıktepe

İnandıktepe is located on the Ankara-Çankırı road 109 km towards the north next to the İnandık village (Fig. 19). The excavations began when some fragments of relief vases were brought into the Museum of Anatolian Civilizations while the site was being demolished by a bulldozer in order to use the soil for nearby construction work (Özgüç 1988, XXIX). Thereupon, bulldozing was stopped, and the process for the expedition started. The first systematic excavations took place in 1966-1967 under the auspices of the General Directorate of Antiquities and Museums. The excavation was directed by Raci Temizer with a committee including Tahsin Özgüç, Kemal Balkan, and Mahmut Akok (Özgüç 1988, XXIX).

The settlement of İnandıktepe is on a hilltop that has been subject to erosion, causing some of the archaeological evidence, such as the rooms of the structure, to become lost (Fig. 20) (Özgüç 1988, XXI). The site is a multi-period site, and it is most famous for the İnandık Vase, which was found in fragments on the site. Five building levels have been unearthed, spanning from the Old Hittite to Byzantine periods (Özgüç 1988, 1-8). Levels V, IV, and III are the Hittite levels, and they were initially dated to the beginning of the Old Hittite Period. However, new studies on the pottery and architecture, supplemented by the excavation of new sites, such as Kuşaklı-Šarišša, have led to re-dating İnandıktepe's Hittite occupation to the second half of the 16th century BC, which is the end of the Old Hittite Period (Mielke 2006b, 260-264).

4.2.1.1 The Hittite Temple of İnandıktepe

The LBA here is characterized by the so-called temple, although its identification as a temple has not been fully established¹² (Fig. 21). The İnandıktepe 'temple' was discovered half destroyed due to erosion and raiding in both ancient and modern times. The foundation stones of the temple were plundered in order to construct the Byzantine period church of the upper level, leaving the LBA structure's plan damaged (Özgüç 1988, 3). The fragmented plan of the structure gives little information on the nature of the building. Rooms are organized very organically around two courtyards (Fig. 22). According to Özgüç, the temple has a rectangular outline designed to fit the shape of the hill (1988, 2). Since the temple was constructed on a natural hill, the slopes of the hill created level differences within the temple itself (Özgüç 1988, 2). Both the foundation and the superstructure of the

¹² For further details on the various opinions on the structure, see Nauman 2007; Mielke 2006b; Özgüç 1988.

temple were constructed of stone, which were preserved up to 2 m high in places (Özgüç 1988, 2). The inner and outer façade of the foundations of the structure were of big and well-cut stones, the interior between them was filled with rubble. However, the superstructure was constructed with flat stones in the technique and style of mudbrick walls (Özgüç 1988, 2). Most of the stones were worked crudely into brick shapes to resemble mudbricks. Even on 3 m high walls, no mudbricks were found: the use of mudbrick is only seen on the very top of some walls, door jambs, and benches (Özgüç 1988, 3). The foundations of the temple span from 1-1.25 m wide in some places. The excavators believe that the thickness of the foundations is an indicator of multiple stories (Özgüç 1988, 2). Where the foundations are 1 m thick, it is thought to have a second floor, and where the foundations are 1.25 m thick, there might have been three floors (Özgüç 1988, 2). Especially since the ground level was used as depot areas, the excavators think there must have been upper stories used for other purposes, although their use is unknown, since they are not preserved (Özgüç 1988, 3).

The plan of the structure was roughly rectangular, as Özgüç indicates, and it was planned to utilize the natural topography, built on three terraces with no levelling operation undertaken before construction (Özgüç 1988, 72). Terrace I is the northwest area of the structure, including the rooms 1 through 4¹³; these rooms are used as storage space, as demonstrated in room 3, where a pithos secured in place by mudbricks contained a tablet. The translation of the tablet revealed that it was an endowment document. Due to the damage to the tablet, what land was being donated cannot be read (Balkan 1973, 48). Terrace II, which is again on the northwest side of the structure and to the south of Terrace I, consists of rooms 10 through 13. Terrace

¹³ The numbers of the rooms are indicated in Fig. 21.

III is comprised of the courtyard and rooms 28 through 31, which are to the south. Accordingly, the highest point of the whole structure was to the east, in rooms 6 to 9. Additionally, Özgüç indicates that the west of the building, which is demolished, should have been same in height and plan with the east of it (Özgüç 1988, 4).

There are a few rooms that stand out as being of interest, especially room 21, identified by Özgüç as a kitchen since it had a hearth in the center of the room (1988, 4). The room also has a small plastered mudbrick pedestal or bench placed diagonally in the southeastern corner of the room (Özgüç 1988, 5). Özgüç believes this pedestal/bench might have been used as the place for the cult object to be placed (Özgüç 1988, 5). Since neither a cult object nor a text has been recovered to verify this assumption, this idea cannot be substantiated.

Another room that is pointed out as having a cultic function by Özgüç is room 19. In this room, a white vase and polished beaked pitcher were found among burnt mudbrick debris. He indicates that there might have been a mudbrick altar in this room (Özgüç 1988, 6) and that the excavators believed this small room might have been cult room or a small shrine, for lack of any other clear function. He compares room 19 to the small structures found in the courtyards of the Great Temple of Hattuša, Temple V in Hattuša, and the temple at Yazılıkaya (Özgüç 1988, 6). These structures, though their true purpose is not exactly known, have been interpreted by some researchers as having religious functions. According to Puchstein, these must have been places where people visiting the temple purified themselves before entering the cella (Puchstein 1912, 97). Alternatively, Neve explained these structures as "altar towers" (Neve 1967, 85-87), comparing them to the altar tower in the Temple of Jupiter at Baalbek in Lebanon, where sacrifices were conducted (Neve 1967, 85).

Another finding that pushed Özgüç to believe that this structure is a temple was a massive refuse pit, discovered in room 29, which revealed many artifacts. These included a complete bull statue, several fragments of terracotta bulls, a terracotta shrine with a male figure inside, and a bathtub (Özgüç 1988, 6). Excavators indicate that these must have been disposed of when the temple was destroyed, as the pit was constructed in Level III, after the burning of the building. The southern part of the building was repaired following the destruction and was reused for a very short period (Özgüç 1988, 6).

Özgüç pointed out that the planning and construction of the temple rooms here are similar to those of Hittite houses. He believes that the temple was constructed by adding Hittite houses side by side, meaning the Hittite temple was constructed like a Hittite house (Özgüç 1988, 4). Özgüç also says that the temple was constructed according to the Hittite temple style, but it is very hard to believe that the temple is similar to the Hittite style, because the temples in the capital of Boğazköy-Hattuša are rectangular in shape, while the courtyard is also rectangular. In the case of Kuşaklı-Šarišša (see below), the terraces were levelled to create a flat, rectangular base for the temples (Müller-Karper 2017, 90). Özgüç believes that the material culture found in the İnandıktepe temple - small bowls, one-handled goblets, pitchers, and fruit stands - and the rooms dedicated to storage with pithoi *in situ* are indications of the building being a temple (1988, 75).

Overall, the style of planning of the structure does not look like the common Hittite temple type as seen in Hattuša or Kuşaklı – Šarišša (cf. below). It is known from written records that İnandıktepe was an important cultic site, and therefore it is quite certain that there ought to be a temple on the summit of the hill. The fact that in a later period there was a Byzantine church on the same spot may be a verification of

the cultic function of the site. But the intriguing detail is that the architecture of the temple is not similar to typical Hittite examples. Perhaps the building at İnandıktepe can be explained as being both a temple and a palace for a local ruler. The fact that neither a cella nor a cult room was found decreases the possibility of this idea. Mielke indicates that, considering the tablet found in the structure, the so-called temple is most probably a country seat for a Hittite nobleman (2006, 270).

4.2.2 Boyalı Höyük

Boyalı Höyük was discovered during the Çorum and Çankırı District Survey, which took place in the years 1995-2012 under the direction of Tunç Sipahi and Tayfun Yıldırım (Yıldırım and Sipahi 1998, 433; Sipahi 2013, 252). Throughout this survey project, many sites around the district of Çorum and Çankırı were discovered, including Hüseyindede and Fatmaören (Sipahi 2003, 275). The goal of the survey was to understand and record the expansion of Hittite settlements in the area (Yıldırım and Sipahi 1998, 433). After the completion of the survey, excavations at Boyalı Höyük started in 2005 under the direction of Tunç Sipahi (Sipahi & Ediz 2007, 481). The excavations were conducted for four years (Sipahi 2009, 287). Boyalı Höyük is located 4 km northeast the town of Yörüklü in Sungurlu district of Çorum (Fig. 23) (Sipahi & Ediz 2007, 481). The survey and excavations revealed four levels: EBA, Old Hittite, Iron Age, and Roman (Sipahi 2013, 254).

Most of the site is very rocky, and, especially on the slopes, the bedrock emerges to the surface in many places (Sipahi & Ediz 2007, 481). Most of the structures' foundations are laid on the bedrock (Sipahi & Ediz 2007, 482). The excavations, over the four years, exposed a large building of 44 rooms (Fig. 24) named Building A, which they believe might have had both religious and administrative functions (Sipahi 2010, 287).

4.2.2.1 Building A

Building A is located on the western slope of the mound. It measures 41 m northeast by 25 m northwest (Sipahi 2010, 300). The structure is planned in a nonsymmetric fashion, and in accordance to the shape and incline of the hill, the rooms are of various shapes (rectangles and trapezoid) and sizes (Sipahi 2013, 255). Due to the conglomerate bedrock covering nearly half of the site, Building A was constructed to lean on the bedrock on both its south and southeast sides (Sipahi 2010, 289). According to the slope and the thickness of the foundations where the terrain dips, there might have been two stories (Sipahi 2010, 288).

The stones used in the construction of the foundations are cut out from the conglomerate rock on the south of the site, as well as utilizing limestone, sandstone and pebbles collected around the site. They were laid with large stones and small stones on top. The gaps between them have been filled with pebbles (Sipahi 2013, 255). Since the terrain is uneven, the foundations were raised where the terrain is low. Due to the agricultural activities on the site, the mudbrick superstructure of the building has not been preserved (Sipahi 2013, 225). No plastering was found within the rooms (Sipahi 2009, 179).

The layout of Building A seems to be constructed very organically. The excavators discovered that the northwest part of the structure consists mainly of depots. According to Sipahi, the group of rooms that is made up of rooms 30-35 must have been added on to the structure at a later date to meet the needs of available depot space (2010, 290). These rooms have the same construction style with the rest of Building A.

The inventory of artifacts found within Building A presents an interesting picture of the structure. Loom weights and spindle whorls found in rooms 10, 37, 38,

and 39 indicate textile production in the building. Within the western rooms of the building (rooms 2-4), kitchen wares, grinding stones, and measuring cups have been discovered. Room 4 draws particular attention because among the ceramics on the room floor were charred seeds of barley, millet, wheat and legume. Within some of these seeds, charred bugs were also found (Sipahi 2012, 260). The findings within room 4 supports the idea that this room and the rooms around it might have been used as a kitchen and its depots.

Some of the ceramics found in the building have raised the idea of it being a religious building. These were a nearly complete bull rhyton, pieces of a wheeled ram rhyton, votive cups, and high quality ceramics that were not used in day to day life (Sipahi 2010, 292). Additionally, impressions of the *signe royal*, a type similar to the royal mark seen at Kültepe in Level Ib, have been found on sherds. The building's metal object inventory mainly consists of pins (with pyramidal, oval, and vase-shaped heads), along with a bronze knife, a sickle, and an ingot. Metal working activity have not been documented within Building A (Sipahi 2013, 256).

Sipahi, in considering the findings, architecture and the location, believes that Building A might have been the residence of a local administrator with a religious function where daily activities also took place (2013, 261). The land might have been granted to the administrator (Sipahi 2013, 261). The idea that the structure could be both a religious building and an administrative one makes sense, since the site is very small compared to other, bigger sites, such as Šarišša or Hattuša (Müller-Karpe 2017, 89, 108; Neve 2000, 81). Considering the size of Boyalı Höyük, having a "palace" and a "temple" merged into one structure would not be surprising. But still there are some problems which must be raised regarding Building A's religious functions. Firstly, the excavations did not reveal a cella, a cult image, or a pedestal

for the cult image; not even a small shrine was found. The lack of these artifacts makes it harder to pinpoint the religious function of the building. Secondly, there were no texts found during excavation. This again complicates an understanding of both potential administrative and religious functions of the building and the site.

On the other hand, the similarity of the plan and construction style of Building A to the so-called İnandıktepe temple is interesting (Fig. 25). The similarity of the structures indicates a common architectural style of the Old Hittite Period. This architectural unit might have indeed been a mixing of Hittite houses to create a big "house" as the house of the local landlord. Mielke indicated that the structure in İnandıktepe was a residence for the local ruler, and when compared to the structure at Boyalı, it is possible to draw similar conclusions (Mielke 2006b, 271). The ritual and cultic ceramics found within both buildings might be simply an indication of small shrines within the palaces of the local rulers.

4.2.3 Hüseyindede

Hüseyindede, discovered in the Çorum district survey, is well-known for the relief vase sherds which were found on site. The site is located 2.5 km southwest to the village of Yörüklü in the Sungurlu County of the city of Çorum (Sipahi et al. 1999, 349). The excavations, led by a scientific team consisting of Tunç Sipahi and Tayfun Yıldırım, started in 1998 (Sipahi et al. 1999, 349). The site was damaged due to erosion and dense agricultural activities (Sipahi & Yıldırım 2001, 258). The excavations revealed domestic housing, similar to that at other Hittite sites, and a partially preserved structure, which is believed to be a religious building (Yıldırım 2013, 229). There are only two periods of settlement discovered on site: the Old Hittite settlement and a Roman necropolis that covers only part of the site (Yıldırım 2013, 234).

4.2.3.1 Building I

The so-called religious building (Building I) (Fig. 26), is located on a rocky surface above the surrounding structures. It is built to follow the inclination of the slope of the site, like the examples at lnandiktepe and Boyali, in what appears to be a Hittite building technique (Yıldırım 2013, 230). Building I measures 22.5 m east – west by 16 m north – south and consists of five rooms, according to the uncovered plan. The best preserved rooms of the structure are rooms 1-3, which are believed to be storage rooms. Rooms 4 and 5, located on a higher level, were not well-preserved, due to a rock-cut tomb dated to the Roman period located on top of this area (Yıldırım 2013, 229). The largest room of the structure is room 4 - according to Yıldırım, this room must have been a courtyard (2013, 229). Since the northern part of the building is much damaged, it is not clear if the building had other rooms to the north. The superstructure of the walls was not preserved, although the foundations, which measure 60 - 70 cm thick, are constructed of andesite and limestone (Sipahi et al. 1999, 350) and were plastered with mud (Yıldırım 2013, 230).

Artifacts found in Building I, according to the excavators, demonstrate a cultic function. The ceramic inventory of Building I parallels the ceramics found in the İnandıktepe 'temple' (Yıldırım 2013, 231). These are vases with relief decorations, pilgrim flasks, cut-away spouted jugs, and deep plates belonging to the Old Hittite Period (Yıldırım 2013, 228; Yıldırım 2000, 50). Since rooms 2-5 were destroyed by erosion, their artifact inventories are not known. The Old Hittite period in Hüseyindede has been dated to the 16th century BC through the ceramics and architecture (Yıldırım 2013, 237).

Yıldırım indicates that the plan of Building I is built according to Hittite techniques and traditions (2013, 230). It is designed after the multi-roomed Hittite

dwelling model and originally might have had two stories; Yıldırım indicates this can be understood from the thickness of the walls and the size of the building (Yıldırım 2013, 229). The fact that the building is located higher than the other buildings of the settlement and the cult ceramic assemblage found in the building are indications of the religious function of the structure. The excavators state that it is not correct to compare Hüseyindede to other Hittite cities such as Alacahöyük, Boğazköy or Kuşaklı, because the scale of the settlement at Hüseyindede is much smaller. They believe that Hüseyindede is a small rural settlement to the north of the Hittite territory, where the Old Hittite traditions flourished and which was abandoned after the Old Hittite period (Yıldırım 2013, 231). Yıldırım extends this observation with the observation that there are texts referring to multiple temples of various sizes around the Hittite realm, some of which indicate that there were small temples / religious buildings where a priest officiated (Yıldırım 2009, 236). The excavators, therefore, believe Building I in Hüseyindede must have been a small, regional temple with a priest (2009, 237).

Overall, Building I looks like it was an important building among the others uncovered at Hüseyindede. This is supported by the location of the building in a higher place and the pottery assemblage found within the structure, which consists of elaborate cultic vases, known as relief vases. However, the building does not possess many indicators of a temple structure; for example, neither the cult image nor the pedestal for it have been found, and no temple texts (or any texts) indicate that Building I was a religious building. Nonetheless, it is possible that Building I was a religious structure serving the settlement in Hüseyindede, but that it was not a grand building like the ones in Kuşaklı – Šarišša or Hattuša (see below).

4.2.4 Alaca Höyük

Alaca Höyük, known as the first 'national excavation,' and its 'temple', the monumental structure found in the LBA level, is a subject of much debate. The site is situated in the province of Alaca near the city of Çorum. The site is 50 km southwest of Çorum and 34 km north of Hattuša (Çelik 2008, 4). The site is located in an alluvial plain, where branches feed the Kızılırmak (Halys) River. This alluvial plain creates land suitable for cultivation (Gürsan-Salzmann 1992, 1).

W.J. Hamilton was the first to discover Alaca Höyük in 1835 (Hamilton 1842, 374; Çınaroğlu and Çelik 2013, 196). Hamilton made some sketches of the site, which later on sparked interest among other researchers (Hamilton 1842, 374; Çınaroğlu and Çelik 2013, 196). Later on, H.G. Van Lennep did some research on the site in 1869 and believed the Sphinx Gate and its reliefs to be of Egyptian origin (Van Lennep 1870, 129-148). In 1872, G. Perrot and E. Guillaume did some cleaning on the site, especially between and around the Sphinx Gate, the second gate and the orthostats, in the earliest 'excavations' of Alaca Höyük (Perrot and Guillaume 1872, 338-340). Ernest Chantre visited the site and made squeezes of the orthostats, also carrying out some excavations around the Sphinx Gate in 1893 (Chantre 1898, 1-10).

The first official excavations began in 1907, led by Macridy Bey under the auspices of the Ottoman Empire (Macridy 1908, 177). These only lasted 15 days and focused on the cleaning of the Sphinx gate and the surrounding area (Çınaroğlu and Çelik 2013, 196). Von der Osten conducted surveys around central Anatolia, especially around the Kızılırmak bend, and recorded around 250 sites (Von der Osten 1929b, 23, 98, 101; 1933, 91-117): Alaca Höyük was one of these sites he surveyed, and he indicated that Alaca Höyük was an important Hittite site (Von der Osten 1929b, 23).

After the establishment of the Turkish Republic, upon Atatürk's inquiry to him, Von der Osten expressed that Alaca Höyük was of great importance to history and was worthy of excavation. Thereupon, Atatürk commissioned Remzi O. Arık and Hamit Z. Koşay to start excavations at Alaca Höyük under the auspices of the Turkish Historical Society in 1935 (Arık 1937, I; Koşay 1943, 22; Gürsan-Salzmann 1992, 4), thus inaugurating the first national excavation of Turkey (Cinaroğlu and Celik 2013, 197). The excavations took place from 1935 to 1948, followed by hiatus for fifteen years, during which two publications were produced (Koşay 1951; Koşay and Akok 1966). The excavations picked up again in 1963 and continued until 1978, uncovering precious architectural, artifactual and burial evidence spanning from the Chalcolithic to the end of the Hittite period (Gürsan-Salzmann 1992, 5). The objectives of these early excavations focused on examining as much as possible about Alaca Höyük in order to understand its occupation levels and to define the stratification, as well as to establish a relative chronology through pottery typology and sequencing which would help to locate Alaca Höyük in the regional context of central Anatolia (Arık 1937a, 8; Arık 1937b, 211). Excavators currently believe that the site might be the ancient city of Arinna, but no text found on site has verified this yet (Erkut 1992, 165).

The excavations were again resumed in 1997 under the direction of Aykut Çınaroğlu after a pause of nineteen years (Çınaroğlu and Genç 2002, 427; 2000, 327). The current excavations' research objectives are to continue with the goals set by the previous excavators. They hope to expose all Hittite architectural units, especially the Hittite dam, to understand which Hittite period the remnants belong to, and to comprehend the transitional periods (Çınaroğlu and Genç 2002, 427; 2000, 327). Their excavations have not focused on the so-called temple-palace, since all

that remains of the building was completely exposed by the previous excavation (Çınaroğlu and Genç 2002, 427; 2000, 327). Instead, they have tried to understand the surroundings of the temple-palace, where they uncovered a metal workshop and depots, which will be discussed below (Çınaroğlu and Çelik 2010, 136).

Alaca Höyük has yielded four levels of habitation. These levels are, from the earliest to the latest, Late Chalcolithic (Cultural Level IV- Building Levels 12-9), EBA (Cultural Level III – Building Levels 8-5), Hittite (Cultural Level II – Building Levels 4-2), and Phrygian (Cultural Level I – Building Level 1). The excavators hit bedrock below the Late Chalcolithic level (Koşay 1943, 23). The Hittite level yielded a large complex which has been designated the Temple-Palace (Koşay 1943, 23). The exact nature of the building is yet to be deciphered.

The building of interest, namely the temple-palace (Fig. 27), is located on the eastern part of the mound and belongs to the Hittite Level (Cultural Level II, dated to the second millennium BC). Building Level 2 has been dated to the Hittite Empire period; Building Level 3a-3b has been dated to the Old Hittite Period; and, Building Level 4 has been dated to the first quarter of the second millennium through radiocarbon analysis (Çınaroğlu and Çelik 2010, 135). Three to four meters of levelling soil was found in the transition between Cultural Levels III and II (Koşay and Akok 1966, 6). According to Koşay, before the Hittites settled at Alaca Höyük, they leveled the uneven ground to create a flat base for their new building activities (1966, 6).

4.2.4.1 Temple-Palace

The temple-palace is located to the north of the Sphinx Gate, which serves as the entrance to the mound, and it covers around an area of 5000 m^2 (Koşay and Akok 1966, 8). The whole building measures $110 \times 52 \text{ m}$ in its longest sections and

encompasses 56 rooms (Koşay and Akok 1966, L79). It is planned according to the shape of the mound. When entered from the Sphinx Gate of the city, the structure is accessed through the opening of an outer courtyard which leads to the inner courtyard of the temple-palace through a gate-like structure (Koşay and Akok 1966, 8). The outer courtyard contains four rectangular small rooms which, according to Naumann, were added later and must have been used as stables for visitors' horses (Naumann 2007, 411). The complex was constructed around an inner courtyard which consists of five structural groups constructed around a trapezoidal inner courtyard (Fig. 28). Structure Groups I and II are part of the same structure, located to the east of the courtyard. Group I is to the northwest of the court and consists of 18 rooms, while Group II is located to the south of Group I and consists of 16 rooms. Group III is the entrance gate to the building in the south of the complex and is comprised of three rooms. Group IV is the collection of ten rooms to the west of the courtyard, and Group V, with five rooms, is located to the north of the courtyard (Koşay 1951, L.79).

Koşay believes although the Building Groups I and II are connected to each other, they differed in use, because they have different elevations and diverge in the way that their rooms were constructed (Koşay and Akok 1966, 12). Building Group I, as mentioned above, consists of 18 rooms, which are entered through a portico from the inner courtyard (room 18 on Fig. 28). Room 12, located between Building Groups I and II, according to Koşay, acted as a hallway which connects these two Building Groups through two doors on the southern wall and three doors on the northern wall (Koşay and Akok 1966, 12). According to Naumann, the first Building Group to the right (Group II), especially the large square room, must have been used as an audience hall (Naumann 2007, 410). The use of rest of the rooms is not known.

The most interesting group of buildings is Building Group V. In this part of the complex, rectangular blocks of stones with holes big enough to fit wooden beams were found. It is believed that these blocks were used as foundation stones where beams were placed and then the gaps filled in with mudbricks, which marks the foundation construction as different from the rest of the building (Fig. 29). Two types of these blocks have been found: plain ones measuring 300 x 80 cm with multiple holes on top, and ones with two holes on top and a curvature on the side, made to level and fit together with the flooring (Koşay and Akok 1966, 13). But there is one stone block in room 52 that caught Koşay's particular attention. This was a square block of stone measuring 200 x 200 x 55 cm (Koşay and Akok 1966, 13) with a large semi-circular carving on top (the northern facing side), two circular holes on either side of the carving, and a curved projection on the south side of the stone. This enormous block is believed to have been placed within the room before construction of the building began, because Koşay believed that a block of that size and weight could not have been placed in a constructed building because it would likely not have fit through the doorway (Koşay and Akok 1966, 13). Although indications for a sacred image or any sort of sacrifice or libation were not found in the rooms here, the existence of this stone and the way in which the Building Group might have been built around it may indicate that room 52 could be the "adyton", the sacred chamber, of the so-called temple-palace (Koşay and Akok 1966, 13).

The orthostats at the site have been of interest to many and may help identify the temple-palace structure (Fig. 30). Orthostats placed on both sides of the Sphinx Gate are believed to depict a religious festival. They portray the king and queen in front of an altar of the Storm God, represented as a bull. A goddess, believed to be Arinna, is seated before a procession on the other side of the gate. The procession

depicts priests, cult officials, acrobats, and musicians. Some of the reliefs, although out of place, depict hunting scenes, believed to belong to the same composition (Darga 1992, 130-139; Bittel 1976a, 30-46, 186-201). The excavators and many researchers believe this relief program supports the city's religious importance and its role in the cultic life of the Hittites (Bittel 1976a 30-46). Koşay indicates that the orthostats on the Sphinx Gate, which display religious themes, and the lack of a household archive within the temple-palace suggests it might have had a religious function (Koşay 1951, 11).

The construction technique for the temple-palace structure is similar to the other structures discussed here. The foundations consist of large stones placed with their flat sides facing outwards, creating a straight façade of the stones, which are set together with mud mortar (Koşay 1951, 10). The gap between the inner and outer stone façade is filled with smaller stones and gravel. The stones used for the foundations were collected and reused from earlier structures and quarried from nearby available outcrops (Koşay 1951, 10). Finally, the foundations were topped off with a mudbrick superstructure (Koşay 1951, 10).

Many artifacts have been found throughout the excavations, especially in the Hittite levels, but the early excavators do not indicate the context, exact building level, or the room/trench where the artifacts were found. Therefore, this building will be discussed without the help of its artifactual evidence. Overall, the pottery found in the Hittite levels presents a well-known inventory consisting of plates, jugs, trefoil jugs, beak-spouted jugs, rhyta fragments, libation arms and stands (Koşay and Akok 1966, 22-28; Koşay and Akok 1973, 6-34).

The new excavations by Çınaroğlu, on the other hand, uncovered two new structures which are believed to be connected to the temple-palace. These are located

to the east and northeast of the complex. The first of these structures is a metal workshop. Celik indicates that the workshop might be dated to the first quarter of the second millennium BC, which corresponds to Building Level 4 of Cultural Level II (Celik 2008, 44). The foundations of the metal workshop are thicker than the templepalace, consisting of 50-60 cm wide stones parallel to each other with the gap between them filled with rubble (as seen in the temple-palace) and a mudbrick superstructure (Celik 2008, 28). According to the ceramics found within the structure, it is believed to belong to the Old Hittite period (Celik 2008, 30). The workshop consists of about ten rooms, four of these being the depots for the objects (Çınaroğlu and Çelik 2009, 94), identified as such due to their small size and the fact that they were stripped of their furnishings (Çelik 2008, 30). Many pieces of metal slag, crucibles, bellows, molds, stone tools, pieces of gold, gold buttons, silver and bronze pins, bone hammers, and an *in situ* furnace with the ventilation pipe attached have been found in the bigger rooms, which are thought to be the actual workplaces (Çelik 2008, 30). These workshops are believed to have been large enough to support the temple-palace building's worked metal object needs (Çınaroğlu and Çelik 2010, 135).

The other set of buildings that was excavated by Çınaroğlu and his team was the depots, again found east of the temple-palace. Three depot rooms have been found: grain depot I, grain depot II, and grain depot III. Depot I measures 12 x 7 m with a stone foundation, like the temple-palace, and a mudbrick superstructure; the floor was paved with large stones. This depot was cleared, and the floor was found covered with fermented grain, which is a clear indication of it being a depot for cereals (Çelik 2008, 49). Within depot I, a round silo with a diameter of 4 m was found. It is believed that the silo was used to differentiate certain types of grains and

store them (Çelik 2008, 50; Çınaroğlu and Genç 2003, 512). Depot II measures 24 x 11 m (Celik 2008, 51), and the construction technique is the same as the previous depot. Depot III is the smallest of the depots and measures 6.50 x 9.70 m. The construction technique is same as the other two depots, and it was stripped of its contents (Celik 2008, 52). The depots fell out of use and were covered with soil from the site, which led the excavators to date them to the end of the Old Hittite Period, due to the Old Hittite sherds found within the soil (Celik 2008, 55; Cinaroğlu and Genç 2003, 512). The excavators indicate that these depots were big enough to provide for about four thousand people for a winter (Celik 2008, 52). These depots, along with the presence of the metal workshop, may be part of a larger complex which is similar to the Great Temple of Hattuša (Neve 1993, 114). The lack of any textual evidence at Alaca Höyük does not help understand if these depots and the workshop were used as a support for a temple or for an administration. Nonetheless, it is important to mention them because they are similar to the auxiliary buildings we see in Hattuša Temple 1 where we know that they were both used as storage facilities and workshops (Bittel 1976b, 69).

The temple-palace is difficult to identify, due to its unusual architectural plan, which does not display the same arrangement of space and alignments as the more securely identified temples, such as the Great Temple of Hattuša or Kuşaklı-Šarišša's Temple I and Gebaude C (Fig. 31) (Müller-Karpe and Müller-Karpe 2013, 221-223; Müller-Karpe 2002a, 150-154; Neve 1993, 114-116). This is because in the Alaca Höyük temple-palace we don't see the same rectangular arrangement of the whole building, the rectangular and regular court, or a well-defined cult room, complicating the identification of the structure. On the other hand, when compared to the Inandiktepe and Boyalı Höyük complexes (Fig. 31; see above), which are believed to

be country seats for Hittite nobles or residences of local administrators (Mielke 2006b, 270; Sipahi 2013, 261), the shape of the building, fitted to the topography and with an oddly shaped courtyard, seems similar. Additionally, if the metal workshop and depots formed part of a larger complex associated with the temple-palace, this may support the excavators' identification of the building as a temple. When the orthostats depicting a religious festival are also taken into consideration, the possibility increases, yet, again, the lack of textual evidence identifying the structure leaves this issue an open question.

Naumann, however, believes that the stables at the entrance and the similarity of the complex to the Boğazköy Lower Citadel courtyard suggest that this complex is a palace with a room for worship or a small shrine, instead of a full temple-palace (Naumann 2007, 411). In particular, the fact that different types of foundation stones were used in the construction may point to this part of the structure being used as a small shrine (Naumann 2007, 411; 110), as similar methods of using particular types of foundation stones to emphasize increased sacredness are seen at Hattuša (see below).

Overall, it seems most likely that the temple-palace was an administrative complex with a small religious section. The metal workshop and the depots supported the palace, which may have been the seat of a local administrator. Recent research to verify the religious function of the building is taking place (Çelik 2008, 21-31). It is hoped that the current excavations will help to shed light onto the true nature of the temple-palace.

4.2.5 Kuşaklı – Šarišša

Kuşaklı – Šarišša is one of the most important sites for research on the Hittites because its well-excavated stratigraphy and thorough publications shed light

onto both the complex chronology and advanced urbanism of the Hittites. Kuşaklı is located 4 km east of the Basören village in the district of Altinyayla of Sivas province (Fig. 32) (Müller-Karpe 1993, 259; Müller-Karpe 1995, 5; Müller-Karpe and Müller-Karpe 2013, 220). Research activities at Kuşaklı started with a survey by Tuğba Ökse on the mound in 1992, which revealed numerous pottery sherds and remnants of large buildings which were superficially visible on the ground (Müller-Karpe 1993, 260; Müller-Karpe 1995, 5-6). Andreas Müller-Karpe started the largescale research with a topographical archaeological survey in the same year in October (Müller-Karpe 1995, 6). The initial goal of the survey was to completely scan the site with various methods of geophysical prospection and to collect surface findings, especially pottery sherds (Müller-Karpe 2017, 10). However, a tablet fragment of a cult inventory found in the 1992 survey led Müller-Karpe to initiate systematic excavations in July 1993, believing the site to be promising both in terms of textual records and monumental architecture (Müller-Karpe 1995, 9; Müller-Karpe 1993, 259; Müller-Karpe 2017, 11). The results of the Kuşaklı-Šarišša excavations were very fruitful, and the acropolis of the settlement was extensively exposed over the course of 23 years. The research, which took place within an interdisciplinary framework that combined geophysics, archaeobotany, osteology, and dendrochronology, was conducted to obtain a complete picture of the ancient urban community that resided at this site (Müller-Karpe 2002a, 154).

Kuşaklı covers an area of 18.2 ha and was enclosed by a city wall which was measured to be approximately 1.5 km long (Fig. 33) (Müller-Karpe 2002a, 145; Müller-Karpe 1995, 6). Through excavations and magnetic prospections, various structures with administrative and defensive purposes have been found: notable examples include a caravansary, four gates, two monumental temples, three dams,

granaries, stables, and residential buildings for officials (Müller-Karpe 2002b, 176-178).

The chronology of Kuşaklı is quite straightforward, as the settlement was short-lived, unlike its counterparts in other regions of Anatolia. Kuşaklı was founded in the 16th century BC¹⁴ and ransacked and burned in the 14th century BC. The city was rebuilt after the burning, and this phase is represented by small official buildings on the acropolis (Müller-Karpe 2002b, 176). Towards the end of the 13th century BC (ca. 1200 BC), the city was again destroyed by conflagration and was abandoned. It was not resettled on a similar scale until after the downfall of the Hittite Empire, although parts of the city were repopulated during a small Middle Iron Age settlement in the center of the mound, where a tumulus dating to the Hellenistic-Roman period was also found (Müller-Karpe 2002b, 176; Müller-Karpe 2003, 386).

In the second season of excavations, a small cache of cuneiform tablets was found which revealed the city's ancient name to be Šarišša and which also identified Šarišša as a provincial center in the Upper Land of the Hittites (Müller-Karpe and Müller-Karpe 2013, 220; Siegelova 2001, 196-197; Wilhelm 1997, 24; 38). These tablets indicate that the Great King would travel from the capital for the spring festival that took place in Šarišša, which is also an indication of the cultic importance of the city. Thus, the discovery of two massive temples should not come as a surprise. These temples, Temple 1 (Tempel 1), located on a low terrace in the northern quarter of the city close to the northwestern gate, and Building C (Gebaude C), located towards the south of the settlement facing the southeastern gate, are described here.

¹⁴ This was established through the dendrochronological analyses done on various carbonized wood findings. For further, see Mielke 2006a, 77-94; 2006b, 266-269.
4.2.5.1 Temple 1/ Tempel 1 (North Terrace)

Temple 1 was the first of the two temples to be excavated (Fig. 34) (Müller-Karpe 1995, 9). The entire building measures 54 x 36 m at its longest point, covering an area of 1825 m² (Müller-Karpe 1995, 9). The whole structure consists of 51 rooms arranged around a nearly square courtyard which measures $16 \times 17 \text{ m}$ (Müller-Karpe 1995, 10). Müller-Karpe believes that the structure must have had more rooms and consisted, at least in places, of two stories (Müller-Karpe 1995, 10). The temple was destroyed by a raid and a big conflagration, possibly at the same time as other parts of the city, ca. 14^{th} century BC (Müller-Karpe and Müller-Karpe 2013, 225).

The layout of the building is fairly rectangular, with several projections and recesses breaking the straight lines. The foundations are made of cut limestone, with longitudinal wooden beams and mudbricks as a superstructure (Müller-Karpe 2017, 111). The entrance of the temple is located on the southern side, towards the west, facing the acropolis. This entrance gate is symmetrical in design, with two rooms on both sides and three partially preserved doorways with large blocks used as door sills, where pivots were found (Müller-Karpe 1995, 12). The entrance gate leads directly to the courtyard. Remnants of plaster found in the southern part of the courtyard led Müller-Karpe to believe that the whole courtyard might have been plastered (Müller-Karpe 1995, 12). Two sides of the courtyard, the northwest and northeast, are flanked by narrow corridor-like passages, which have been reconstructed by the excavators as open colonnaded halls (Müller-Karpe 1995, 13).

The eastern wing of the building, however, is lower than the rest of the structure, where the terrain descends in a natural slope. Rooms 1-5, 9-11, and 15-23 are 3.5 m below the floor level of the rest of the building (Müller-Karpe 1995, 13). This area was reached through room 14 via a staircase (room 15). Traces of the

wooden staircase and its stone supports have been uncovered (Müller-Karpe 1995, 13). Müller-Karpe believes that there must have been a door on the corner pedestal with two steps before reaching the cellar, which would have had limited access to the basement (consisting of a total of 17 rooms) (Müller-Karpe 1995, 13). A clay seal impression found here supports the idea of a door located at this point (Müller-Karpe 1995, 15).

Across from the staircase that led to the basement in room 14, which must have been a transitory room, was a narrow corridor (room 24), which the excavators believe was the staircase that led upstairs either to the roof or to a second story (Müller-Karpe 1995, 15; Müller-Karpe 2017, 112). If one took the staircase up to the second floor and passed above room 16, one could reach the 7.8 x 9.5 m hall which would have been located right above the two parallel rooms 17 and 18 (Müller-Karpe 1995, 15).

The floor of this upper hall, or the actual main cella, was supported by the partition wall between rooms 17 and 18, as well as by the 11 wooden columns inside these rooms, only the stone bases of which remain. Müller-Karpe believes this degree of architectural support must have been designed to support exceptional pressure, which might be envisioned as the cult image (or images) and votive offerings, but one cannot be sure, since nothing of the upper story or the artifacts survives (Müller-Karpe 1995, 15). The burnt debris in the building indicates a fire which must have taken place after the emptying and raiding of the building in antiquity. It is important to point out that the greatest destruction within the building was found in this area of the proposed main cella; in some places, the mudbricks of the walls were removed, and even the floor was pitted, most likely in the search for valuables while the building was being ransacked (Müller-Karpe 1995, 15-16). It is

possible that the intruders were in search of valuable objects in the area of the cella, where the most valuable objects lay. Müller-Karpe believes that the cella must have been stripped of its valuables, at least the larger metal objects, which were brought to safety before the building fell into the hands of the raiders and was exposed to a great fire (Müller-Karpe 1995, 15-16).

Although the raid damaged the eastern wing, pottery was still found *in situ* in various rooms. The vessels were partially deformed due to the extreme heat, sometimes even merged with each other. Room 9, in particular, revealed several pots and a whole bowl, as well as 63 clay bullae and additional bullae fragments with impressions of hieroglyphic seals (Müller-Karpe 1996, 70-71). These bullae, according to Müller-Karpe, are the indication that room 9 was the place where incoming goods were inspected, and where the sealings were broken and discarded, as the goods were filed and taken to their appropriate storage places (Müller-Karpe 1995, 16). The fact that the other basement rooms were accessed through room 9 verifies that this room might have been used for inspections.

In the north of the building, in room 4, a cache of 12 bronze arrowheads was found. Müller-Karpe states that the northwestern wing (rooms 29-33) was also a basement. This area had its own entrance from room 34 to the five rooms (rooms 29-33) which were arranged side by side. Room 35 might have been a staircase which led up to the level of the courtyard (Müller-Karpe 2017, 119). In the burnt debris of the rooms, pithoi, large pots, jugs and carbonized remains of seeds were found (Müller-Karpe 1995, 17). Overall, considering the palaeobotanical findings that indicate various types of wheat, Müller-Karpe believes that this wing might have been the economic area of the temple, where business activities took place (Müller-Karpe 1995, 19; Müller-Karpe 2017, 119). On the other hand, a grinding stone found

in situ in room 44 is an indication of food preparation activities, and the excavators believe that the southern part of the building (where room 44 is located) is where the kitchen must have been situated (Müller-Karpe 1995, 19; Segschneider 1995, 27-28). Room 38 did not reveal anything that identifies its purpose (Müller-Karpe 1995, 17), but room 39 contained fragments of a container that resembles the type of ceramics used to brew beer in Building C (Müller-Karpe 2017, 119; see below). This led Müller-Karpe to believe that the beer brewing activities were taking place in the western quarter of the temple, as well as cooking activities.

Very interesting installations were found in rooms 27 and 28. These elongated rooms, located on the outer southern wall of the temple, contained various bathing-related paraphernalia and installations, including ceramic bathtubs, channels made of stone and ceramic pipes used to discard dirty water, floors covered with limestone, and spindle bottles (possibly containing precious oils) (Müller-Karpe 1995, 19; Steele and Stern 2017, 654). All these findings naturally led the excavators to believe these rooms were used as ablution rooms (Müller-Karpe 1995, 19).

4.2.5.2 Building C (Gebäude C) / Temple of the Weather God

In 1995, a massive temple that occupies 2.5% of the mound, measuring 76 x 61.5 m and covering an area of about 4660 m², began to be uncovered (Müller-Karpe and Müller-Karpe 2013, 222-223; Müller-Karpe 2002b, 152). Some walls of this building are preserved up to a height of 3 m, and 85 rooms have been exposed, although, including its upper story, it is estimated to have had at least 100 rooms (Fig. 35) (Müller-Karpe 2000, 154). A temple as big as Building C has not been uncovered yet - it is even larger than Temple 1 at Hattuša.

The sloping terrain had to be partially leveled prior to the construction of the building. The southeast façade of the building, located on the foot of the slope, is 7 m

lower than the northwestern wall (Müller-Karper 2017, 90). To achieve a uniform level on the ground floor, the rooms were partially filled for several meters (Müller-Karpe 2017, 90). Rooms 1-36 were formed in this way; they are only one story high and at a lower level than the courtyard (Müller-Karpe 2017, 90). Müller-Karpe indicates that this structure must have overshadowed every other building on site and would have been visible when entering the city (Müller-Karpe 2002b, 184; Müller-Karpe 2017, 91).

The foundations of the building are up to 1.8 m thick, made of limestone with their flat sides facing the inner and outer façades, and the superstructure consisted of mudbricks with wooden beams to reinforce the weight of the building. These beams were completely burnt, due to the violent fire which destroyed the building (Müller-Karpe 2002b, 183). This high-temperature fire also caused the mudbricks to burn, preserving them in certain places up to a height of 3 m; some of upper story's rooms were even found intact (Müller-Karpe 2002b, 183) in rooms 9, 10, 22a, and 23. In the case of rooms 9 and 10, the ceiling was pierced from above in order to excavate it, and in the other case (rooms 22a and 23), the rooms were excavated from the side so as not to damage the ceiling (Müller-Karpe 2000, 319). Müller-Karpe specifies that the monumentality and topographical position of the structure indicate that this sacred building was dedicated to the highest deity of the Hittite pantheon, the Weather God (Müller-Karpe 2002b, 183). The pair of clay bulls found in room 21, which are the companions (Hurri and Šerri) of the weather god, support this interpretation (Müller-Karpe 1998, 116).

The building was accessed through six entrances, two of them monumental (one located on the northern side and the other on the western) and four plain (Müller-Karpe 2002b, 183). The two monumental entrances originally consisted of

two large wooden doors: the doors are, naturally, not preserved, but the threshold slabs and the pivot stones were (Müller-Karpe 2002b, 183). Symmetrical guard rooms on both sides of the entrances show that access to the temple was strictly controlled (Müller-Karpe 2002b, 183). The other entrances (from rooms 8a, 24, 59, and 63) were narrow and consisted of a single door. Müller-Karpe believes that they probably served as "supplier entrances", through which cellars and other storage rooms could be reached (Müller-Karpe 2002b, 183).

Both of the main entrances led directly into the massive courtyard, which measured 34 x 43 m and was lined with colonnaded halls on the northeastern and southeastern sides, where the limestone bases of the wooden pillars have been preserved (Müller-Karpe 2017, 94; Müller-Karpe 2002b, 184; Müller-Karpe 2000, 314). On the western and eastern edges of the courtyard, remnants of a 3 m wide strip of limestone pavement were found. Müller-Karpe believes that this ran on all sides of the courtyard, except the northwestern side (Müller-Karpe 2000, 314). The exact nature and the use of every single room of the temple is not known; the ones that have been understood are explained below.

Through the courtyard, one could reach the southern wing where the cult rooms were located. The cella (rooms 4 and 5), covering an area of 210 m², is the largest room in the whole structure (Müller-Karpe 2017, 97). The roof of this room was supported by wooden pillars with limestone bases placed at relatively close intervals. Müller-Karpe indicates that the structure of the room was able to carry a heavy load without these pillars, so their addition was probably intended to add importance to what the room was carrying (Müller-Karpe 2017, 99; Müller-Karpe 2000, 318). A rectangular broadening on the northern part of the partition between rooms 5 and 4 is being interpreted as base for the cult image, which was placed

above these two rooms in the second story (Müller-Karpe 2017, 99; Müller-Karpe 2000, 318).

On the western side of rooms 4 and 5 was a group of rooms numbered 1-3(a, b, c). This particular formation of rooms is important because they are found in many Hittite temples. Müller-Karpe believes that this group of rooms corresponded to the same group of rooms on an upper floor and had a specific function connected to the practice to the cult (Müller-Karpe 2017, 99). Textual descriptions of cultic practices often refer to a group of rooms called an É.ŠÀ, an "inner sphere" in which, for example, statues of the deities were washed, anointed and clothed regularly (Naumann 2007, 468). According to Müller-Karpe, rooms 1-3(a, b, c) are likely the É.ŠÀ¹⁵ where the statue of the Weather God may have been attended to (2017, 100).

The southern wing of the temple was composed of a basement, much like Temple 1. There were two main ways to reach the basement: via ground level access from the southwest façade of the building through room 8a, and from the level of the courtyard via a staircase in the middle of the southern colonnaded hall in room 22b (Müller-Karpe 2017, 102). All the rooms of the basement (rooms 1-36), accessed from these simple entrances, were used for economic purposes, mainly to store temple goods (Müller-Karpe 2017, 102). As dark, windowless rooms they were not suitable for residential purposes. Clay sealing fragments from various containers, mainly sacks, were found in several rooms of this building wing and show that goods were stored here (Müller-Karpe 2017, 102).

The ceramic inventory of rooms 57 and 58, adjacent to the north entrance (room 59), revealed several *in situ* ceramics of different sizes that contained

¹⁵ The É.ŠÀ is known as the place where the cult image was washed, incensed, anointed, dressed, and clothed. Although some believe these rooms are a group of rooms next to the cella, the true nature or the location of these room within the temple is not known. For further, see Nauman 2007.

carbonized grains (Müller-Karpe 2017, 102). The examination of the vessels' contents showed that the grains were barley. Some of these grains had already germinated prior to the conflagration. The excavators believe that this germination indicates the production of beer (Müller-Karpe 2017, 105). The ceramic inventory found in this room revealed two similar sets of vessels which Müller-Karpe believes were used for beer production; two brewing operations could therefore have been performed side by side, possibly of two different types of beer (Müller-Karpe 2017, 105).

The entire building was probably completed in the 16th century BC. During its period of use, it was severely damaged by an earthquake but was soon repaired (Müller-Karpe 2002b, 185). According to current research, it was destroyed in the first half of the 14th century BC. Arrowheads on the floor of the northern main entrance indicate that this end was not peaceful: the arrows pointed towards the building's interior, and were thus likely launched by attackers (Müller-Karpe 2002b, 185). The temple was systematically plundered and then set on fire. After this catastrophe, Building C was not repaired or reconstructed, because in order to create a sufficiently stable building ground for its re-establishment, one would have had to remove the ruin damaged by the fire, because too many cavities and areas with loose ash and debris were present (Müller-Karpe 2002b, 185).

These two temples found in Kuşaklı – Šarišša shed immense light on both Hittite architectural style and the history of temple building practices. Both of the temples exhibit similar planning and divisions for storage and production where beer was produced and the temple "donations" were stored.

The well-structured ground plan of both temples shows obvious similarities with religious buildings known from the Hittite capital Boğazköy (Hattuša; see

below). Both structures are comparable to the monumental structures in Hattuša while Building C is similar to the Great Temple in Hattuša, Temple 1 is similar to Temple 7 (Fig. 36). The temples of Šarišša are important because they are direct comparanda to the temples of Hattuša, verifying that a specific temple style was being used in the Hittite realm. The construction of the temples show that the temples were not just a place of worship for the deity/deities but more of a complex of its own where production and other economic activities took place. The structural model of the Hittite temple was a self-sufficient entity in and of itself.

4.2.6 Maşat Höyük- Tapigga

Located at the frontier between the Kaška people inhabiting northern Anatolia and the Hittites's territory in central Anatolia, Maşat Höyük was an important defensive site against the Kaškeans. Today, Maşat Höyük is situated in the province of Tokat 20 km southwest of the town of Zile (Özgüç 1978, 1) and has been identified as the Hittite city of Tapigga¹⁶ through the corpus of texts found at the site, mostly consisting of letters, which sheds a great amount of light on the Hittite state and settlement system (Özgüç 1978, 12; Alp 1980, 58-59). The letters also uncover the responsibilities of the city to defend the northern border of the Hittites from one of their greatest enemies – the Kaška people (Özgüç 1978, 12; Alp 1991, 5-6).

Maşat Höyük was first discovered by Güterbock in 1943, when he translated and published a cuneiform tablet he had found on the surface of the mound (Güterbock 1944, 389). Following this discovery, a short excavation was conducted by Güterbock in 1945 (Özgüç 1980, 305). However, for the next 28 years, the site did not see any research. The first full-scale excavations were undertaken by Özgüç

¹⁶ This identification has been debated by some scholars: for further information, see Yakar 1980, 175.

between the years 1973-1984 with the support of the Turkish Historical Society (Özgüç 1978, 2; Özgüç 1980, 305). The goals of the excavation, although not openly stated in any of the publications, were to understand the relations of the Kaška people with the Hittites, Maşat Höyük's role in both the area and the chain of command within the Hittite empire, and to gain a comprehension of the stratigraphy of the site and the region. Some of the other objectives were to understand the longdistance trade relations of the site and the region, along with relations with Eastern Greece, since Mycenaean ceramics were found on site (Özgüç 1978, XIV; Özgüç 1982, XXI).

The höyük, which is also the citadel, measures about 224 x 400 m (Özgüç 1982, 4). The citadel is connected to a lower city, located on the southeast side of the high mound (Fig. 37). The excavations mainly took place on the citadel; the lower city is not fully exposed. This is due to the accumulation of colluvium on the plain throughout the years, which has made it difficult to excavate the lower city (Mielke 2013, 210).

The earliest known occupation at Maşat Höyük is from the EBA, and the site was continuously occupied until the Iron Age. Although the site provides significant information on the EBA and Iron Age, the most substantial information comes from the Hittite levels (Table 9). The Hittite levels are characterized by three occupational levels - Levels IV-II. Excavations revealed that each Level of the Hittite period was destroyed by conflagrations which completely demolished the city (Özgüç 1982, 2). Each fire was followed by a rebuilding of structures, resulting in different buildings in nearly every level. Özgüç postulated that these fires were the work of external forces, possibly the Kaškaeans (Özgüç 1982, 10).

Age	Period-Level	Dates	Buildings
Iron Age	Phrygian Period (Building layers I-III)	1 st quarter of the 1 st Mill. BC 4 th Century BC	Recycled buildings of the previous level, many pits.
Late Bronze Age	Late Hittite Empire Period Level I	13th Century BC	Small buildings
	Hittite Empire Period Level II	14th Century BC	Altar-Building C
	Middle Hittite Level III	15th Century BC – first half of 14th Century BC	Large administrative complex
	Old Hittite Level IV	16th Century BC	Partially preserved buildings in the Lower City.
Middle Bronze Age (The Karum Period)	So-called Hittite Level V – Karum Period	Circa 17 th Century BC	Some residential and larger buildings in the Lower City but fragmentary
Early Bronze Age	Level VI	N/A	Only exposed in a very small area, mostly identified through monochrome pottery.

Table 9 Levels of Maşat Höyük, the proposed dates and the corresponding buildings (By author).

Level IV, dated to the 16th century BC in the Old Hittite period, yields some partially preserved buildings in the Lower City (Mielke 2013, 211), while Level III, belonging to the Middle Hittite period (spanning the 15th century BC and the first half of the 14th century BC), revealed a building complex. This is believed to be the administrative complex of Tapigga, because its elements are typical of a palace¹⁷ (Mielke 2011a, 165). The texts found within the building enable the functions of rooms to be determined, along with how they were divided according to the activities that took place in them. The archival rooms are believed to be on the second story, while the storage rooms with pithoi and silos were located on the ground floor (Mielke 2011b, 1046). These texts also aide in understanding the position of Maşat Höyük within the Hittite realm and administrative system. Level II, dated to the later

¹⁷ Typical elements of a palace include an entrance gate and a central courtyard with rooms facing towards the courtyard, surrounding its three sides (see Mielke 2011a, 165).

14th century BC, has yielded a structure called Altar-Building C, discussed in detail below. Level I, the final level of the Hittite occupation of the site in the 13th century BC, does not provide much evidence other than some partially preserved, small residential buildings (Özgüç 1978, 15). Although Maşat Höyük is most well-known for its palace structure dating to Level III, this section focuses on the Level II Altar-Building C. This building is believed to have had a religious function.

4.2.6.1 Altar – Building C

Altar-Building C has been dated to the second half of the 14th century BC, which is identified as the early Hittite Empire period (Mielke 2011b, 1047; Özgüç 1982, 80). The structure is located in the northwestern part of the citadel. It measures 35 m north to southeast and 26.50 m east to west (Özgüç 1982, 9). The excavators are not certain about the exact nature of the complex (Fig. 38).

The courtyard of the previous palace structure was expanded in the west and reused as Altar-Building C's courtyard (Özgüç 1982, 9). The foundation trenches and the foundations themselves extend down into the EBA levels and in some parts to the bedrock. Where the foundations reach the bedrock, the unstable and weak bedrock was filled with stones and soil to create a steady base for the foundations (Özgüç 1982, 9). The foundations of the walls were constructed by placing smooth faced stones on the inner and outer facades and filling the middle with gravel (Özgüç 1978, 13). Although the superstructure consisted of mudbrick reinforced with wooden beams, the exact nature of the wooden beams and how they were placed between the mudbricks are not known, due to the fire that destroyed the building (Özgüç 1978, 13), but it is known that the inner faces of the walls were plastered and then covered with whitewash (Özgüç 1978, 13). The foundations of the outer walls measured 1.50 m thick, while the inner walls' thickness ranged from 1.75-2.00 m in

some parts (Özgüç 1982, 9). It is believed that this was to support larger rooms on the upper story (Özgüç 1982, 9). In some parts of the building, especially where the terrain is lower, the foundations were found to be 1.5 m high (Özgüç 1982, 10). Özgüç believes that the building must have had two or three stories; the activities taking place in the upper stories are not known, although the basement contained depots (Özgüç 1982, 10).

The structure consists of 16 rooms of various sizes. Only two wings of the building were discovered; the full extent of the building is not known (Özgüç 1982, 80). Eight rooms are located in the northwestern part of the building, which curves inward according to the shape of the terrain, while seven rooms are located in the northeast, aligned in two linear rows (Fig. 38). The excavators believe that the rooms were entered through the courtyard, since the outer walls lead directly to steep rock outcrops (Özgüç 1982, 9). The use of the small, rectangular opening between the two wings (room 8) is not known (Özgüç 1982, 9); it might have been used as a transitory room which connects rooms 7 and 9.

Information on many of the rooms, except for rooms 1, 4, and 5, is not provided by the excavator (Özgüç 1982, 9-10). In room 4, large storage jars were found *in situ*, and in room 5, a granary divided by a low mudbrick wall was found (Özgüç 1978, 64). What these storage units contained is not indicated by the excavator. More information is available concerning room 1, though, which is the room with the "altar" and measures $4.5 \times 4.5 \text{ m}$. The altar is located in the middle of the room, connected to the northeastern wall by a low wall. The altar itself is square and measures $1.70 \times 1.70 \times 1 \text{ m}$ (Özgüç 1982, 9-10). The altar base was covered with plaster, as were the walls (Özgüç 1982, 81). The low wall measures 1 x 1.30 m and is

slightly taller than the altar base (Özgüç 1982, 81). Özgüç states that he does not know of any parallel for this type of altar base in this period (Özgüç 1982, 9).

Within Altar-Building C, various artifacts have been found. Specifically, in room 1 there were a fragment of a text¹⁸, a seal of "Tabarna", an impression of the seal of Šuppiluliuma I, stone mosaics, and tall necked jar sherds (Özgüç 1982, 10). The 50 mosaic pieces found in the building are from a variety of stones - marble, serpentine, tufa, dolerite and also terracotta (Fig. 39) (Özgüç 1982, 119). These pieces are smoothed and flat on one face and pierced in the middle. According to Özgüç, they must have been used as inlays to adorn either the altar, the walls, or the floors as a type of *opus sectile* (Özgüç 1982, 119). Özgüç 1978, 14). It might be that these rectangles were hung as offerings to the shrine, but of course this is pure speculation.

The seal, and especially the seal impression, help place the structure's construction at the time of Šuppiluliuma I (Fig. 40). The construction was swift, and the remnants of the Level III palace were used as building material (Özgüç 1982, 10, 27). Özgüç states that he believes Altar-Building C was destroyed in the reign of Muwatalli between the years 1305-1282 BC in the second wave of the Kaška attacks (Özgüç 1982, 27).

The pottery found in the building is mixed, and few complete vessels are found. These vessels are various types of bowls, lids, pitchers, bottles, tankards, fruit stands, and a teapot. Also, some fragments of red-slipped bathtubs were found (Özgüç 1982, 99). Votive juglets (Fig. 41), also seen at Boğazköy, Fraktın and Alaca Höyük, have been found within Altar-Building C (Özgüç 1982, 99).

¹⁸ No translations have been provided for the tablet fragment.

Overall, the Altar-Building C, is too fragmentary to come to any certain conclusions. The absence of religious texts indicating that this structure was a temple or a religious building, and the lack of half of the building, makes it difficult to identify the structure securely. Nonetheless, it is very important to remember that the building is equipped with an altar-like installation which was decorated with some sort of mosaic. This so-called altar is the most troublesome part of the whole structure, because without it, one could easily identify the building as a palace. This is also due to the placement of the structure within the citadel in a position where the whole plain can be easily observed, in order to monitor an approaching enemy and alert the military accordingly. This is no surprise, since Maşat Höyük was wellknown as the primary defense against the Kaškeans. As seen at Alaca Höyük, İnandıktepe, and Boyalı Höyük, Altar-Building C might have been a building serving as the residential palace of the governor or the commander of the northern border of the Hittite lands that also had a sanctuary within it (room 1).

4.2.7 Uşaklı Höyük

Uşaklı Höyük is located 12 km west of Sorgun, south of the Yozgat-Sorgun highway that connects the two cities, which is also northwest of Mount Kerkenes (Fig. 42) (Mazzoni et.al. 2011, 91). The site was first discovered by Emil Forrer in September 1926, who mentioned the site as Kusachakly (Forrer 1927, 25-26). The following year, Henning von der Osten visited the site, where he referred to the site as simply 'hüyük', recognizing the gateway foundations as Hittite (von der Osten 1929a, 37). Piero Meriggi also mentions Uşaklı in a publication where he refers to the site as Uçaklı (Meriggi 1971, 62). In 1993 and 1994, an archaeological survey was undertaken by Geoffrey Summers under the auspices of the Kerkenes Project (Mazzoni et al. 2010a, 110). This survey revealed Hittite pottery and stones with

Luwian inscriptions on the surface of the mound, which led researchers to believe that this site, being close to Mount Kerkenes (Mount Daha) and Alişar Höyük (Ankuwa), may be the Hittite city of Zippalanda (Fig. 43) (Gurney 1995, 69; Summers et al. 1995, 56-57; Summers 2013, 42).

Stefania Mazzoni and her team from the University of Florence started a new set of surveys on and around Uşaklı Höyük in 2008-2012 (Mazzoni et al. 2016, 43). The main goal of the survey was to understand the long-term settlement patterns and occupation development within the area, as well as to reconstruct the ancient fauna, flora, sources of raw materials, and geologic and geomorphologic structures (D'Agostino and Orsi 2016, 334). After the survey, excavators understood that the site of Uşaklı was of great importance and decided to excavate with the aims of reconstructing its chronology, hoping to shed light on the changes between periods, structures, and material culture, as well as to explore the identification of the site as Zippalanda (Mazzoni et al. 2014, 245). The excavations at Uşaklı therefore started in 2013 and have been continuing ever since (Mazzoni et al. 2014, 254).

The site of Uşaklı consists of a 10 ha terrace around a 2 ha mound (Fig. 44) (Mazzoni et al. 2014, 253). The geophysical, geomagnetic, and resistivity research at the site revealed the existence of large buildings within the mound. These consisted of casemate walls, foundations of very large structures, a possible circuit wall, and an entrance to the city (Mazzoni et al. 2014, 254). The site covers multiple periods: the earliest known is MBA, followed by LBA, Iron Age, Phrygian, Hellenistic, Roman, and Byzantine periods (Mazzoni et al. 2016, 43-46; Mazzoni et al. 2010b, 132). The excavations took place in four main areas, named Areas A-D (Mazzoni et al. 2016, 44-45).

Area A revealed a building with large foundations, Building II, which led the excavators to believe this building may have been of great monumentality and had a public function. Further inspection and excavations uncovered large, deep foundations across 600 m² (D'Agostino and Orsi 2016, 339). This large building has been dubbed the Hittite Temple, and believed to possibly be related to the cult of the Storm God (Mazzoni et al. 2016, 44). Excavators also uncovered Roman and Hellenistic architectural remains in Area B, in which some of the so-called Hittite Temple's stones had been reused (Mazzoni et al. 2016, 45). Area C revealed Iron Age defense walls and a *glacis* (Mazzoni et al. 2016, 45), and Area D yielded another building dated to the Hittite period through the pottery recovered (Mazzoni et al. 2016, 44).

4.2.7.1 Building II

Building II is a massive building which covers an area of 875 m² on the eastern slope of the site and was discovered through geomagnetic survey (Mazzoni et al. 2016, 44). With the initial revelation, the team decided to focus on this area. To date, a 600 m² area and 11 rooms of the building have been exposed (Fig. 45) (Mazzoni et al. 2016, 44). Excavators believe that the building extends beyond the area indicated by the geophysical survey results. The building has been disturbed and destroyed in many parts, due to modern agricultural activities and the ancient reuse of foundation stones (Mazzoni et al. 2016, 46).

Building II is constructed over a massive 2 m thick terrace (D'Agostino and Orsi 2016, 340), exposed in a sounding located on the northeast of the building. The terrace consists of eight layers of cobble floors with thin layers of clay soil in between (D'Agostino and Orsi 2016, 341). The excavators believe that this massive preparation for the building was due to the unevenness of the ground, necessitating

the creation of a flat and stable surface for the massive structure (D'Agostino and Orsi 2016, 341). Nevertheless, Mazzoni does not rule out the idea that this might have been linked also to a purification/foundation ritual conducted before the so-called temple was begun (D'Agostino and Orsi 2016, 341). The foundations of the building are placed on this terrace, then placed on a deep foundation of smaller stones, with two rows of massive granite boulders placed atop them and filled with smaller stones in between (Fig. 46) (Mazzoni et al. 2016, 44; D'Agostino and Orsi 2016, 339). The width of the walls measure 2.10-2.70 m in various places (D'Agostino and Orsi 2016, 339). The excavators believe the structure must have been two stories, considering the massiveness of the foundations (D'Agostino and Orsi 2016, 341). The construction material of the superstructure of the building is not known, due to agricultural activities (Mazzoni et al. 2016, 44).

The building consists of 11 rooms of various sizes. Most of the rooms are oriented northwest to southeast and are elongated rooms, with measurements ranging from 4.25 x 1.6 m to 4.60 x 7.50 m in size¹⁹. Some of the rooms revealed trampled earthen floors, but most of them were poorly preserved (D'Agostino and Orsi 2016, 339-344). There is no evidence for the collapse of the building or any signs of destruction (D'Agostino and Orsi 2016, 340).

Building II was found mostly cleaned of any artifacts before it was abandoned. Orsi indicates that none of the artifacts were found *in situ*, but there was a mixed corpus of pottery (Mazzoni et al.2016, 48) consisting of LBA pottery types such as miniature cups, plain ware for daily use, and sherds of storage jars, Drab Ware, and red slipped pottery. According to Orsi, the miniature cups, which

¹⁹ The authors do not give detailed information about the individual rooms (D'Agostino and Orsi 2016).

consisted of an ointment vase, a conical cup, and a plate, are part of the ritual pottery corpus of the LBA (Mazzoni et al. 2016, 48).

As mentioned above, the excavating team proposes the identification of the site of Uşaklı with the sacred Hittite city of Zippalanda. The identification and location of this important sacred city mentioned in the texts has been one of the research interests of the Italian team (Torri 2015, 365; Daddi et al. 2014, 671). The epigraphic evidence locates Zippalanda to the south of Hattuša, along the route connecting the Hittite capital to the city of Ankuwa, commonly identified with the site of Alişar (Torri 2015, 365). Texts translated by Laroche also mention festivals and religious ceremonies that took place in Zippalanda (Mazzoni et al. 2016, 50). The excavators stress that tablets mention that the journey to Zippalanda took four days, and this matches will with the location of Uşaklı; moreover, the presence of Mount Kerkenes facing the mound matches the description of Mount Daha as understood from the textual evidence (Torri 2015, 365; Daddi et al. 2014, 674). Although convincing, it should be stressed that this is still a hypothesis, not confirmed in any way by the epigraphic evidence recovered at the site to date. During the survey, in 2008 and 2009, fragments of seal impressions were found on the southeastern slope of the Upper City, together with a clay bulla dated to the Old Hittite period (17th-16th century BC), and four fragments of cuneiform tablets dated to the late Hittite Empire have been found (Mazzoni et al. 2016, 50; Daddi et al. 2014, 673). Fragment 1 is a fragment of a mythological text, the Kumarbi cycle (Mazzoni et al. 2016, 51), fragment 2 is a piece of a land ownership document, fragment 3 could not be translated because it was very eroded, and fragment 4 is a letter about poor and/or deceptive people (Archi et al.2015, 351-352). Two additional pieces of cuneiform tablets have been recovered in excavation, although not in situ.

Fragment 1 is a fragment of a ritual where bread is being offered to the goddess Ninatta, and fragment 2 is an oracular tablet specifically about divination using a liver (Archi et.al. 2015, 354-353). The researchers indicate that although the recovered texts do not give any geographical names or indications, they are important because they show that Uşaklı was an important religious and administrative city (Mazzoni et al. 2016, 51). Despite their value, these artifacts do not provide any information regarding the identification of the site, nor regarding the possible function of Building II as the Temple of the Storm God.

On the whole, the plan of Building II in Uşaklı does not provide many details. According to Mazzoni, the plan of the structure resembles Temples 2 and 3 in Hattuša (Mazzoni et al. 2016, 44; see below). However, there is not a vast amount of architectural evidence to support this. The excavation area has not revealed enough of the plan, which restricts the interpretations of the building, and thus it is crucial not to jump to conclusions. When the epigraphic evidence is considered, one might postulate that Building II had a religious function, but this unclear at present. Mazzoni argues that the alignment of Building II to Mount Kerkenes may be an additional indication of its religious function. This is a stretch, because as mentioned above, the artifactual evidence is mixed and not found *in situ*; also, there are no texts found within Building II itself to validate these ideas. Therefore, further research on Uşaklı's monumental Building II should be conducted - without the full plan being revealed, and without artifactual evidence support (which is significantly lacking in this case), one cannot be sure of the identification of the building. Hence, Building II should not be dubbed as a Hittite temple, but, more conservatively, as a monumental structure of importance.

4.2.8 Boğazköy - Hattuša

The well-known Hittite capital, Hattuša – Boğazköy is located in central Anatolia, 65 km south of Çorum on a rocky outcrop, covering an area of 180 ha (Fig. 47) (Neve 1982, 1). Boğazköy has drawn interest from various countries and has attracted many travelers. Excavations at Hattuša can be considered as one of the oldest in Anatolia, spanning more than a century. The large corpus of temples at the site, its importance as the political and religious center of the Hittite state in the LBA, and its status as the 'type site' for Hittite-style temples all highlight the importance of both the site and its temples to the study of religious architecture in Bronze Age Anatolia.

The site was first discovered in 1834 by Charles Texier. He identified the ruins of a structure now known as the Great Temple of Hattuša (Temple 1) (Texier 1862, 609). Later on, between the years 1893 to 1894, the efforts of Ernest Chantre, with his trial trenches on the site, revealed clay tablets written in a language then unknown (Güterbock 1953, 211; Neve 1982, IX; Neve 2000, 78). After obtaining an excavation permit from Osman Hamdi Bey, the director of the then Istanbul Museum, Theodore Makridi and Hugo Winkler started the first systematic excavations in 1906 at Boğazköy (Neve 1982, IX; Neve 2000, 78). Makridi and Winkler exposed about ten thousand tablet fragments (Güterbock 1953, 212). The research on site continued simultaneously with the teams of Makridi and Winkler and Otto Puchstein with the support of the German Archaeological Institute in 1907 (Bittel 1937, 1). Makridi and Winkler did not publish anything extensive from their excavations, while Puchstein published a volume where he presented his results (Bittel 1937, 1). The excavations were reinstated by the German Archaeological Institute in 1931 under the direction of Kurt Bittel (Güterbock 1953, 212). Bittel

excavated until 1963, with an interruption between the years 1940-1951, due to World War II (Neve 2000, 78; Seeher 1995, 63; Güterbock 1953, 214). In 1964, Peter Neve was appointed as the head of the excavations (Seeher 1995, 63), and he excavated until 1994, before retiring and leaving his position as director to Jurgen Seeher (Seeher 1995, 63-67), who carried on until 2005. Since 2006, the excavations have been conducted by Andreas Schachner (Schachner 2007, 67).

The goals of the initial excavations were not openly stated, but it is known that they were primarily executed to obtain tablets. It is the excavations that took place under the German Archaeological Institute that were interested in Hittite culture. The excavations' purpose is to study Hittite culture, its predecessors and successors, the seat of the great kings, and the imperial administration, as well as the central cult place of the Hittites (Schachner 2017a, 37; Schachner 2017c, 33). In addition, the excavators aimed to understand the religion and cult, state politics, the historical geography, and many other aspects of life in Anatolia through the texts of the uniquely rich cuneiform archives. With the current excavations, aspects of the economic history and settlement topography are also being investigated closely (Schachner 2017a, 37; Schachner 2017c, 33).

The settlement at Boğazköy consists of a Lower City to the north and an Upper City to the south (Fig. 48). Between these two sections and to the east of their borders lies the royal citadel, Büyükkale. The settlement, according to Schachner, might have been established in the last century of the third millennium BC, but one must be wary, since the archaeological evidence of the earliest periods is sparse (Schachner 1999, 114-116; Schachner 2012, 83-84; Schachner 2017b, 30-31). The transition between the EBA and MBA is represented through some small-scale exposures (Schachner 2017b, 30). The settlement continued into the MBA, known by

the name Hattuš, as known from tablets found at the site; the excavations also revealed MBA levels and buildings which have been dated through radiocarbon analysis (1850-1720/1650 BC) (Schachner 2017b, 31; Schachner 2015, 68; Strupler 2013, 5). The LBA levels of the site, named in the archives as Hattuša, are wellknown, since the site was the capital of the Hittites (Schachner 2017b, 7). Boğazköy was also settled in the Iron Age, the Hellenistic period, the Roman period, the Byzantine period, and the Ottoman era (Schachner 2011, 16). The excavations over the years have revealed various buildings, both political and domestic, ranging from fortifications, residential structures, and storage units to ponds and temples. This section focuses on the 31 excavated temples of Boğazköy.

The temples of Boğazköy, especially the Great Temple, are essential, because their discovery aided researchers in comprehending the structure of temples of the Hittite empire. The construction of these temples were not unsystematic: they were constructed according to a greater plan for the city of Hattuša (Schachner 2013, 165). These temples also helped researchers to understand the building techniques and the materials which Hittite builders used for their religious structures (Schachner 2013, 161-163). This section starts with the Great Temple (Temple 1) and carries on with the temples according to their numerical sequence. Some of the temples have been identified but have not yielded enough architectural evidence to procure a plan; these temples are mentioned, but not detailed.

4.2.8.1 The Great Temple (Temple 1)

The Great Temple (Temple 1) of Boğazköy is located, unlike the other temples, in the Lower City and is believe to be dated to the late 17^{th} – early 16^{th} century BC (Schachner 2017b, 32). The Great Temple consists of the temple building surrounded by storage units on all four sides, with a South Area used by the

temple personnel (Fig. 49, 50). The whole temple precinct is set on a temenos which measures 200 m northeast-southwest and 130 m northwest-southeast (Neve 2000, 78). The complex is set on man-made stone terraces which incorporate the jutting bedrock, creating a stable base for these large constructions and leading to the preservation of the walls (Neve 2000, 79, 87). The terrace on which the temple itself sat was the most elaborate, because it was made of even rows of elaborately fitted cyclopean stone blocks which ascended to a flat platform 12 m above the surrounding city (Neve 2000, 88).

The whole precinct is divided into two by an eight m wide street. The temple structure and its storage buildings are located to the north of this street, while the south is occupied by a complex of rooms and additional storage areas (Neve 2000, 79). The temple, as well as the storage rooms around it, revealed 2 m thick foundations. Doorways and heavily burnt floors with remnants of carbonized wood from the collapsed roofs were detectable (Neve 2000, 80). Neve indicates that this violent conflagration was the event that brought the temple precinct to an end (Neve 2000, 80).

The north area of the temple precinct is accessed through four entrances: two located on the eastern side, one on the north, and one on the west. The main entrance, which is located on the northernmost side of the eastern border, was constructed as a multi-roomed gateway, flanked by guardrooms (Neve 2000, 81). This entrance led to an opening where one could reach the storage units around the temple, as well as the temple proper. The other entrances, which were not as elaborate as the main entrance, are believed to have been used as side entrances for temple personnel and deliveries (Neve 2000, 81).

The temple building, located in the center, measures 42 x 65 m. The whole structure is designed as a complex containing an entrance unit, a courtyard, numerous rooms, and a wing attached on the north which contained the cellas. The foundations of the building are very well preserved: even the door slabs were found *in situ*. The foundations measure 2 m in width and consist of colossal stones worked into fine squares, sometimes reaching 6 m in length, made of large gray limestone, whereas the foundation of the holy of holies was constructed of dark green gabbro (Neve 2000, 81). The superstructure of the building was made of mudbricks stabilized by horizontal wooden beams at regular intervals with rubble filling between them, and the outer and inner surfaces of the walls were plastered (Neve 2000, 89). Overall, the floors of the building consisted of trampled earthen floors, although in the temple proper, the floors were coated with an additional lime plastering (Neve 2000, 90).

It was possible to access the temple through two entrances: a monumental entrance on the southern side and another simple entrance through the western side. The monumental entrance, much like the entrance to the precinct, was a multiroomed, symmetrical gateway flanked by three rooms on both sides, reserved for guards. The entrance on the western side was a single-doored entrance; when compared to the ones in Kuşaklı (both Temple 1 and Building C), this was most likely for personnel (Müller-Karpe 2017, 102; Müller-Karpe 2002b, 183). The main entrance leads directly into the large courtyard, which measures 20 x 27 m, while the side entrance leads first into a small vestibule which gives access to the western wing (Neve 2000, 81). The floor of the courtyard is paved with stone slabs, and the courtyard is interrupted on its eastern side by a wall with windows set at intervals to create a corridor. The northern side of the courtyard consists of a colonnaded hall

which leads to the cult room. The column bases of this hall are made of green gabbro, like the foundation stones used for the main cult room (Neve 2000, 81). Through the colonnaded hall on the north, one could reach the cult wing. The main cult room could be accessed through two rooms (rooms 43 and 44). According to the excavators, these rooms were not sealed by doors, and the entrance to the cella could not be sealed either (Neve 2000, 81).

In the northeastern corner of the courtyard is a small structure. This rectangular structure, usually called the $Hofbau^{20}$ in publications, is 2 x 3 m in size. Its entrance faces towards the cella, and it is constructed of green gabbro (similar to the main cella). According to Neve, there must therefore have been a functional association with the cella (Neve 2000, 81-82). Puchstein interpreted this structure as a place for ablution, where visitors cleaned themselves before entering the most sacred place of the temple (Puchstein 1912, 97), while Krause disputed this idea by saying that the pipes which run through the courtyard do not go under this structure, and that it is not connected in any way with water (draining or supply) (Krause 1940, 45). Naumann, although he believes the idea posed by Puchstein, also indicates that it is a space connected directly to the cult room and crucial for cultic activities (Naumann 2007, 469). Neve, on the other hand, expands the discussion by drawing on comparisons from the Temple of Jupiter at Baalbek, indicating that this structure might have been a high altar constructed in the form of a tower, similar in form to a libation stand, where sacrifices could be conducted (Neve 1967, 85-87). This structure is important because it is not often paralleled in other LBA temples within the Hittite realm, except for Temple 5 (see below) and, perhaps, at Inandiktepe (see above).

²⁰ Courtyard building.

The cella (room 50) is located on the eastern side, where it juts out from the façade. The room measures 7.9 x 10.4 m, with an entrance located on its western wall and four windows, one each on the east and west and two on the northern wall on either side of the stone pedestal (Neve 2000, 82). In the center of the northern wall was a stone pedestal, on which the divine image was placed. The cult room, and especially the cult image, must have received a lot of sunlight through the four windows (Neve 2000, 82). Another cult room (room 47), roughly as big as cult room 50, is located to its west. One should be wary about the identification of this second cult room though, because Neve indicates that the excavations revealed quite damaged and dispersed foundations (Neve 1969, 9). Nonetheless, the plan was able to be established. This second "cult room" measures 7 x 11 m, but the interior furnishings are not known, due to the poor preservation. Room 42 is the vestibule for the western cult room. This room is interesting because the southern side of the room is occupied by a block of gabbro weighing 40 tons, which was integrated into the walls and worked into a low pedestal (Neve 2000, 82).

Each side of the courtyard is lined with rooms which most probably had secondary roles, but they were stripped of their possessions: thus they do not provide much information about their functions within the temple context (Bittel 1976b, 69). The western wing was found in a ruined condition, but six rooms (rooms 30-36) were distinguished (Puchstein 1912, 103). Entrance to this wing was possible through two doorways in rooms 33 and 36. Room 34, which was accessible through room 33, had installations of pilasters in the middle of each wall. Four rooms with the same features were found within the temple proper: one in the west wing (room 34), one in the southeastern corner (room 1), one in the east wing (room 22), and one on the southeastern side (room 19). Puchstein labeled these rooms as state rooms

because of the pillars found in the center of each wall (Puchstein 1912, 101). Although their exact function is not known, Naumann believes these might have been secondary rooms where the unused divine images were stored; he says that some of the texts indicate that the cult images were carried during specific celebrations, and thus the unused cult images could have been kept in these state rooms (Naumann 2007, 468). However, Neve believes that these rooms might have been used as cult rooms, possibly for subsidiary divine couples (Neve 2000, 82).

In the west, rooms 1-6 formed a unified group, accessible only from room 29, almost like a self-contained apartment. A very large anteroom (room 3), with the entrance on the long wall, gave way to the rest of the rooms, including the so-called state room (room 1) (Puchstein 1912, 101).

The disposition of the rooms in the southeast corner of the temple is different than in the southwest, but again the arrangement of the rooms and their doors could be understood (Puchstein 1912, 102). The entrance to the southeastern rooms was in the southeast corner of the courtyard through room 20, only the threshold of which has been preserved. This small room formed the anteroom to the two groups, or apartments, of rooms 17-19 in the south and rooms 21-24 to the north (Puchstein 1912, 102), each of which had a state room (room 19 in the south and room 22 in the north). Similar to the western rooms 1-6, these two groups also create small apartments of three to four rooms.

Another important area is the corridor-like room 16, which had access from two sides. The shape of the room suggests that 16 included a staircase to the roof or to an upper floor, as well as to a guard room (Puchstein 1912, 102). This is not unexpected, considering the parallel structures at Kuşaklı-Šarišša, which are also believed to have had a second story (Müller-Karpe 2017, 112).

4.2.8.1.1 Temple Magazines

The storerooms around the temples are designed as four separate sections (Fig. 49). The elements of the individual rooms are consistent throughout, uniformly forming similar block of rooms 4 m wide and 5-25 m long, with narrower corridors and staircases (Neve 1969, 9-12). The rooms were connected to one another, as suggested by the intact thresholds (Neve 2000, 82). The deep and thick foundations, as well as the partially intact staircases found within these depot structures, suggest that these wings consisted of multiple stories, with the southern and eastern depots consisting of two stories, and the northern and western ones of three (Neve 2000, 82). The excavators determined that if one includes the possible upper floors, the total room count would have been at least 200 (Neve 2000, 84).

The southeastern magazines cover 84 x 27.5 x 17 m, divided into 16 approximately equally wide rooms separated in three sections, each with its own entrance (Neve 1969, 12). The southern group consisted of four rooms accessible from the entrance hall (room 3) and directly connected with each other: a plan that is encountered again and again in the basic design of the magazine tracts (Neve 1969, 13). This wing is important, because the temple archives were found stored here (Neve 2000, 85). Thousands of cuneiform tablets were found, indicating that these storerooms were archives and served as offices and workshops for the administration and maintenance staff in charge of the temple goods. Chiseled on the stones in front of these rooms were scribes' names, which may mean they were also used as offices for temple scribes (Neve 2000, 85).

In contrast to its southern neighbor, the northeastern magazine (rooms 19-32) forms a single closed group, which was also connected to the western wing through room 32. Only the heavily burned foundations, along with parts of the basement

walls (8 m below the level of the temple streets), have been preserved (Neve 1969, 13). However, we do not have a detailed plan of these facilities, because, apart from the traces of the foundations, no remains of the structures were preserved (Neve 1969, 13). Based on the huge amounts of debris, excavators believe that the structure was originally 12-15 m high. The greater part of it must have eroded over time and washed away into the valley (Neve 1969, 14).

The northwestern magazine consisted of a seven-room block, detectable through its lowest foundations, and was directly connected with the adjoining rooms to the northeast. It is reconstructed as originally being three or four stories tall (Neve 2000, 84; Neve 1969, 14). The entrance, though not preserved, might have been through either room 35 or 36. A total of 68 pithoi were housed in the northwestern magazines, distributed among rooms 33, 34, 37, 38, and 39. Rooms 37, 28, and 39 housed the larger 2000 lt pithoi, while rooms 33 and 34 housed the smaller 900 lt pithoi (Neve 1969, 14-15). They were all set in double rows, deeply embedded in the floor.

The western magazines project outwards to the north and are separated from the northwestern magazines by a 3 m wide paved lane (passage 40) (Neve 1969, 15). In total, there are 25 rooms, and eight of these belong to the basement level (41-48). They were connected to the floor level by the staircase (room 49), which connects to the wing's entrance through rooms 45 and 50 (Neve 1969, 15-16). Over 100 pithoi were found in rooms 41, 44, 46, and 48. In room 41, vessels were found stacked upon each other, leading Neve to conclude that this was where empty vessels were stored (Neve 1969, 16). The rest of the western magazines (rooms 50-64) are half a story below the street level, making the ground floor level a half cellar (Neve 2000, 84; Neve 1969, 16). The presence of shelves in these rooms is testified to by stone

bases with remnants of burnt wood above them, which excavators believe stored smaller items (Neve 1969, 16). Neve also documents the presence of metal locks and clay seals within the storage rooms, indicating that some of the goods were transported and stored in perishable containers, such as straw baskets and cases (Neve 2000, 85).

The southwestern magazine is separated from the western magazines by a 5 m wide paved road (Neve 1969, 17). It consists of 26 rooms in total. Three entrances were recovered in rooms 71a, 73a, and 79a. The structure is believed to have had a second floor, which must have been reached from staircase 72b (Neve 1969, 17). Apart from the remains of pithoi in magazines 66-70, there were no other *in situ* finds, due to the generally poor state of preservation. However, fragments of several clay tablets were found in the filling of vestibule 72a (Neve 1969, 18).

The extensive storage units, the offices, and the records recovered from this area distinguish the Great Temple as an economic center, as well as a religious one. The textual records recovered indicate various economic units such as fields of the deity, q kitchen of the deity, peasants of the deity, and large and small cattle of the deity (Seeher 2002, 136). Many cultivated crops and animals were delivered to the temple for the cult festivals and as taxes; these, apart from their usage in cultic activities, were also used to supply the temple staff. Workers and slaves for the temple cultivated the lands and delivered produce (Seeher 2002, 136). Craftsmen are also mentioned in texts, and they would provide their talents to manufacture various objects; scribes were also part of the working group, and they were responsible for recording the cult texts, temple inventories, and land agreements (Seeher 2002, 136). As a whole, the Great Temple was a self-sufficient unit, and it is also possible that

the depots and workers here provided materials and services to the temples of the Upper City.

4.2.8.1.2 South Area

The south area is part of the larger temple precinct. It is located across from the paved street that separates the temple proper and its magazines from this area (Fig. 49, south area). The entrance to the complex is through a single gate in the north situated directly across from the temple complex's southern entrance (Neve 2000, 86). The South Area consists of sixteen groups of rooms arranged around a small courtyard. These groups are referred to as clusters by the excavators, and they can be described as apartments with shared walls. Each cluster has its own entrance and ranges in size from 3-16 rooms. The foundations are constructionally similar to the magazines of the temple and are 2 m thick.

In the better-preserved clusters, several rooms with pedestals have been discovered (cluster II, room 2 and cluster IV, rooms 4 and 5) (Neve 1969, 23-25; Neve 2000, 87). A basin carved into a monolithic stone block was found in cluster I, room 2 in the northern section of the room (Neve 1969, 22; Neve 2000, 87). The artifacts found within these structures consist of many votive and libation vessels. Neve indicates that these rooms may have had cultic functions, calling them "auxiliary small side temples" (Neve 2000, 87).

A tablet fragment found within cluster III reveals a text concerning a 'house of labor' ($^{\acute{E}.GIŠ}kinti$) with 208 members, and it lists various types of workers for the temples, such as 18 religious clerks, 29 musicians, 19 clay tablet scribes, 33 wood tablet scribes, 35 oracles, and 10 singers (Seeher 2002, 136 ; Naumann 2007, 474). According to Naumann, the South Area might have been reserved for the people working these various jobs for the temple (Seeher 2002, 137; Naumann 2007, 474).

Room clusters XIII and XVI consisted solely of storage rooms, much like the ones around the temple proper. Although some vessels were found *in situ* in these clusters, the southern part of the structure, including both of these clusters, seems not to have been completed, based on the unworked foundation stones in this area (Neve 2000, 87). It seems that this section may have been the living quarters for temple personnel and contained shrines for their day to day practices (Seeher 2002, 137). The compact and apartment-like nature of the complex may confirm this.

4.2.8.2 Temples of the Upper City

Temples 2-31 are located in the Upper City of Hattuša (Fig. 51), where there are three areas in which the temples are concentrated: the central temple quarter, the King's Gate precinct, and the Lion's Gate precinct, although Temple 31 is located on its own, closer to Büyükkale (Neve 1999, 10; Neve 1993, 108, 121). The central temple quarter revealed Temples 4 and 6-29, the King's Gate precinct contained Temples 2, 3, and 5, and Temple 30 was discovered in the Lion's Gate precinct (Neve 1999, Neve 2001).

Neve believed the planned construction of the Upper City began in the reign of Tuthalia IV (c. 1235-1216 BC) and continued on at the time of the reign of his son, Suppiluliuma II (c. 1210-1190 BC) (Neve 1993, 108). This puts the building of the whole Upper City, and thus the temples, at the end of the Empire Period. Neve postulated three phases of construction: Oberstadt 4, Oberstadt 3, and Oberstadt 2 (Neve 1999, 12; Neve 1993, 108-109). However, Schachner has revised the dating of the temples, placing the construction of the Upper City in the late 16th/early 15th century BC (Schachner 2017b, 34). This revision was necessary due to the newer excavations in central Anatolia (such as Kuşaklı-Šarišša and Uşaklı), the exposure of the *karum* levels of Hattuša itself, changing methods in radiocarbon dating, and

better correlations with the central Anatolian sequence as a whole, for which Hattuša is the main reference. The new C14 analyses were obtained from destruction layers in more secure contexts than previous samples (Strupler 2013, 5). Although there are problems in precisely dating the individual temples, the earliest temples of the Upper City are believed to be Temples 2-5 (Schachner 2017b, 35). This is mainly due to the construction technique of the temples, where the plan can be seen to develop organically, whereas the later temples are constructed along a refined, singular form (Schachner 2017b, 35-36; Neve 1999, 9-13; Neve 1993, 108-109).

The central temple quarter contains Temples 4 and 6-29 (for plans, see Fig. 52, 53). Nine of these (11, 13, 14, 16, 23, 25, 27, 28, 29)²¹ were found in ruins, although the sparse remains of their architecture, rectangular plans, and artifacts were sufficient for the excavators to identify them as temples (Neve 1999, 24). The remaining sixteen temples were well-preserved, revealing plans and various religious artifacts (Neve 1999, 24). Apart from Temple 4, the temples discovered in the central temple quarter are similar in their construction and plan. Neve indicates that these temples can be identified as the later type (Neve 1999, 24). These later temples were designed as sloping houses, copying the grade of the terrain, resulting in the buildings' extensive basements. The forms and rooms of the upper stories copy the substructures' plans (Neve 1999, 24). This was also the case with the temples found in Kuşaklı-Šarišša, where the upper story was preserved in places. As Müller-Karpe demonstrated in this latter case, the actual cella of the temple was located in an upper story, and in order to support the load of the upper story's walls, the cella, and the heavy divine image, an intermediate wall was built across the basement space

²¹ These temples will not be detailed here, since they have not yielded plans. For further, see Neve 1999; Neve 2000; Neve 2001.

directly underneath the cella (Müller-Karpe 1995, 15). This intermediate wall, designed to provide additional support, is also seen in the Upper City temples and is placed either longitudinally or transversely at Hattuşa (Neve 1999, 24).

The temples of the central quarter are separated into a large type of 1200-1500 m² (der große tempeltypus; Temples 4, 6, and 7) (Fig. 52, 53) and a small type of 400-800 m² (der kleine tempeltypus; Temples 8-29) (Fig. 53) (Neve 1999, 26; 46). Both types were constructed similarly to Temple 1 (see above), but the large temple type's foundations are constructed of dressed stone blocks supporting wooden pillars filled with rubble and faced with mudbrick, while the small temple type does not have the monumental block masonry but rather small stone blocks (Seeher 2002, 138). In some cases, painted plaster recovered indicates that the walls were faced with frescoes (Neve 1999, 24). All temples of both types also contained a central courtyard (rectangular or nearly square in shape). The main entrance led to the courtyard, which gave access to the anteroom and the cella. The cella is flanked on both sides by small groups of three or four rooms, usually symmetrically arranged (Neve 1999, 24). A staircase connected this three-part plan of the anteroom/cella and the flanking rooms to the basement floor below. The remainder of the rooms appear to be arranged according to the individual temples' needs, but the generally poor preservation prevents a detailed room-by-room accounting of their functions, although the objects found inside fall into three general categories – objects of daily use (mostly coarse kitchen wares), cult objects (especially miniature vessels, armshaped libation vessels, and spindle bottles), and tablets/bullae/seals (Neve 1993, 109). The tablets consist mainly of land donations and various ritual texts, along with inventory lists (Neve 1993, 109).

The only temple in this central temple precinct that warrants special attention is Temple 4. Though not particularly well-preserved, the plan of the ground floor is reconstructable (Puchstein 1912, 157). It appears to be one of the earliest temples built in the Upper City, belonging to Oberstadt 4, according to Neve, as its form is distinct from the rest of the (later) temples in this district (Neve 1999, 20). The single entrance of the temple is on the northern side, with the guard rooms located to the east (rooms 2a-b) (Puchstein 1912, 158). From the courtyard, access to the cella was through a tripartite entrance: the courtyard let into a vestibule on the northern side, where a stone bench was placed on the eastern side of what is believed to have been a waiting area (Puchstein 1912, 162). The vestibule led to the first anteroom (room 11), and then to a second anteroom (room 12), and from there into the cella. The cella, much like the Temple 1 eastern cella, would have been lit with four windows (Puchstein 1912, 158). The reconstruction of this wing of Temple 4 should be approached with caution, since it was discovered in a highly damaged state (Puchstein 1912, 158). The two small groups of rooms on either side of the antechamber/cella seen in the smaller temples of this area are also present in Temple 4, but they are more irregular in both shape and placement than those of the later temples. Additionally, the staircase is placed in the far southeast corner of the temple (room 3), separated from the cella and its attendant room groups, rather than adjacent to it, as in the other temples of the central district (Neve 1999, 21). This staircase leads, not down to the preserved basement, as in the case of most of the other temples, but up to a second story. The building apparently did not have a basement, as in the later temples. Finally, although most of the western and southern portions of Temple 4 were very badly preserved, and are thus hypothetically reconstructed, the temenos on which it sat was intact, again marking this temple as different from the
others in the area and linking it to the Great Temple, which was built upon a similar terrace (Neve 1999, 21). The non-regular layout gives the impression of groups of rooms added as needed, rather than planned as a block, as Neve pointed out for the earliest temples (Neve 1993, 108).

The King's Gate precinct is composed of Temples 2, 3, and 5. Temples 2 and 3 are nearly identical in plan, and closely resemble Temple 4. All three of the King's Gate temples were built originally in Oberstadt 4, destroyed by fire at the end of that period, and then rebuilt in Oberstadt 3 (Neve 1993, 108; Neve 1999, 9-13). The construction technique of all of them is similar to Temple 1 and the temples in the central district. In both Temples 2 and 3, a central courtyard is surrounded by rooms of various sizes. Both also contained statue fragments of lions and sphinxes.

Temple 2 was surrounded by a temenos wall that closely follows the outline of the building (Neve 2001, 48). The temple plan is, again, rooms arranged around a central courtyard, preserving the rectilinear outline, but with recesses and projections (Fig. 52). The courtyard is surrounded by a colonnaded hall on the northern and western sides and is entered from the main gateway in the east (Neve 2001, 48). The main cella (room 13) is located in the south wing, accessible through rooms 10-12. As in Temple 1, the entrance to the cella from the courtyard is colonnaded, and the bases are made of green gabbro (Neve 2001, 50). A rectangular stone base was found in the north-central part of the main cella, where possibly the long-gone divine image was located (Neve 2001, 50-52). Like Temple 4, the ground floor is preserved, and there is no basement. Rooms 3 and 3a might have been the staircases that led up to a second story or the roof. Cuneiform tablets and tablet fragments were found in rooms 14b and 16, indicating an archive, and bullae were found throughout the central rooms (rooms 5-7, 10, 10a-b, and 11), providing further evidence of administrative

activities taking place here (Neve 2001, 59). Nothing other than fragments of statues was left of the temple's furnishings (Neve 2001, 55). 77 fragments of lion statues (reconstructed as belonging to at least ten statues), as well as multiple sphinx statue fragments, were found in and around the temple grounds: based on their find-spots, these statutes were placed in and around the entrances (Neve 2001, 56).

Temple 3, like Temple 2, is preserved on the ground floor and had an upper floor, but no basement. The main entrance is on the eastern side of the courtyard, flanked by two guard rooms (Fig. 52) (rooms 1a and 2a) (Neve 2001, 73). Four lion statues and several sphinx statue parts were found in the central courtyard and the rooms immediately to the north (rooms 10, 10a, and 11) (Neve 2001, 79-80). Neve, according to their locations, believes that the lion statues were located on either side of the antechamber's entrance, while the sphinxes were located on either side of the temple entrance (Neve 2001, 83). The cultic wing of Temple 3, which is the north wing of the structure, is nearly the same size as that of Temple 2 (except for the additional rooms 15, 16, and 16a in Temple 2) (Neve 2001, 76-77). The entrance to the cella takes a similar path through room 10 to the subsidiary rooms (rooms 11 and 12). Bullae and oracle texts were recovered mainly from rooms 11-11a: Neve indicates that these rooms might have been the temple archive (Neve 2001, 83). In room 8, bullae and impressions of leather straps, braids, and reeds indicate that containers made of perishable material were stored in this room. Other small finds in rooms 5a-5b and 3a-3b, such as pins and metal fragments and some sherds of spindle bottles, indicate that these areas might have been workshops or economic areas, according to Neve (2001, 83). However, one must be cautious because most of these were not found *in situ*, but rather in fill contexts (Neve 2001, 83). Although slightly less elaborate than Temple 2, the plan and layout of Temple 3 is much the same.

The last temple in this district is Temple 5 (Fig. 52, 54). This is the largest and presumably the most important temple in the Upper City, covering an area of at least 3000 m² (including the area enclosed by the temenos) and possessing two cult rooms (Krause 1940, 5). The special character, and perhaps increased sacredness, of the building is indicated not only by the double cellas, both of which have bases for the cult images preserved, but also because of the presence of a *Hofbau* in the courtyard in the same relative position as that of the Temple 1 example. The temple was closed off with a temenos, where the temple and four subsidiary buildings (A-D) were located (Neve 2001, 45).

As with its parallels Temples 1, 2 and 3, Temple 5 also contains a central courtyard, but in this case, four separate wings can be distinguished, in a much more complex building plan (Fig. 54). However, the annexes make it unlike Temple 1, and these led Neve to suggest that this temple was a temple-palace complex (Neve 2001, 26). The northwestern wing was the main entrance; the southeastern wing held the main cult room (rooms 23-24) and its subsidiary rooms; the northeastern wing contained the smaller cult room (rooms 7-8) and its subsidiary rooms; and the southwestern wing consisted of the residential-like annex (rooms 45-61) (Neve 2001, 23). A staircase (room 14) leads up to a second (unpreserved) story/roof. In total, the temple had at least 60 rooms, although the southwestern part was not preserved well, making it possible that there were originally more (Krause 1940, 5).

The main entrance in the northwest was a symmetrical structure with two guard rooms on each side (rooms 1a-b) (Krause 1940, 8; Neve 2001, 23), and it led into the rectangular courtyard. On the courtyard's northern corner, a *Hofbau* is located (Neve 2001, 23). The main cult room in the southeastern wing was accessible through vestibule 21, through room 22, which led to the anteroom 23, and then to the

main cella 24 (Neve 2001, 25). In the northeastern wing, the secondary, smaller cult room is located, which is accessible through the courtyard, the colonnaded space (room 3), and the antechamber (room 7) which leads to the cella (room 8), though the entrance of the cella is lost to us (Neve 2001, 26). Neve believes that the entrance to the annex on the southeastern side was through room group 49-57, which, according to him, formed a gate house, much like the one in Temple 1, but the doorways were not found (Neve 2001, 26). The central room or court of this wing is believed to have been room 60, where one could access the rest of the annex. There were no artifacts found that point to the function of the rooms (Neve 2001, 26). Lastly, adjacent to the annex on the southeastern side, rooms 37 and 38 were equipped with lime flooring; room 38 was equipped with a channel and an associated drain in the form of a stone with a chiseled groove. These rooms are interpreted as laundry rooms or kitchens by Krause (1940, 77), while Naumann believes room 38 is a bathroom/ablution room (2007, 211). No other finds have been recorded to indicate the use of the rooms.

The four subsidiary buildings located on the temenos to the northeast of the temple proper are believed to have been placed there so as to be located directly in the path of anyone entering the city from the King's Gate (Fig. 54). Building A is believed to have been a sanctuary dedicated to the deified Tudhaliya IV after his death; this is because a block with a relief of Tudhaliya depicted as a warrior with horns on his cap was found here²² (Seeher 2002, 138). Buildings B and C were possibly dedicated to the deified ancestors of Tudhaliya IV (Mursili II and Hattusili III), and, Structure D is a platform where cultic activities for the dead kings were believed to have taken place (Neve 2001, 44-45). The complex as a whole, then, is

²² Horned caps of this kind were a standard method of depicting deities (Collon 1987: 165).

thought to be a sacred district dedicated to Šarruma, the Sun God of the Hittites and the patron god of Tudhaliya IV, and the ancestors of the Great Kings (Neve 2001, 45).

The Lion's Gate precinct consists only of Temple 30 (Fig. 55). This temple is similar in design and construction techniques to Temples 2-4, and Neve suggests it was built at the same time as them in Oberstadt 4 (2001, 83). However, when it was destroyed, it was not rebuilt, as the others were. Instead, houses and workshops were built over the ruins of Temple 30, making the reconstruction of the plan highly speculative (Neve 2001, 84). The southern half of the temple is completely missing, thus leading Neve to indicate that they could not obtain a detailed plan, dimensions and layout of the structure (Neve 2001, 85). What is known is that the entrance was located on the western facade of the building, and room 2 was a guard room, which is similar to Temples 2-4 (Neve 2001, 86). The remaining half of the courtyard is colonnaded on the eastern and northern sides. Neve believes that room 15 was the cella, while room 10 was the vestibule (Neve 2001, 87). Neve indicates that the construction looks much like Temples 2 and 3, but that many of the subsidiary rooms are missing; this may have been due to the state of preservation (Neve 2001, 87). The temple was identified, though, by the foundations built in the same style as Temples 1-5, as well as by votive miniature vessels and oracle texts found here (Neve 2001, 88). Like Temple 5, it may also have had a residential portion, although Neve says that in this case the residential area was separated from the temple proper.

Finally, located near the Nişantepe district to the south of Büyükkale lies Temple 31 (Neve 1993, 129; Seeher 2002, 138). The evidence for Temple 31 is very sparse due to later building activities on the area (Fig. 56) (Neve 1993, 129; Seeher 2002, 138). The remnants led excavators to believe the structure was a temple which

consisted of an interior courtyard and a cella with a vestibule (Neve 1993, 128). The northeastern and southwestern parts of the temple were destroyed, and therefore the entrance to the temple is not known (Neve 1993, 128). The identification of the structure as a temple was also supported by the cultic pottery (miniature vessels) found within the structure (Neve 1993, 132).

As stated above, the temples uncovered in Hattuša are crucial because they provide the standard temple "type" of the various stages of the Hittite period. Studies over the years at Hattuša have helped to understand the underlying commonalities of the temples and what can be classified as a temple.

The two temples that clearly stand out from this large group are Temples 1 and 5. Both are distinguished from the rest by their double cella and by the presence of a *Hofbau* in the courtyard. Temple 1, based on its location in the Lower City, as well as its extensive complex of storage and residential buildings, is the main temple of the city, dedicated to the main deity of the Hittites, the Storm God of Hatti, and his consort, the Sun Goddess of Arinna (Seeher 2002, 137). The enormous capacity of the storage magazines in the complex indicate that it was a large central redistribution center that almost certainly controlled and supported its own craftsmen and laborers, in addition to priests and other temple personnel. This is also verified through textual findings, which indicate that temple employees were expected be in the temple precinct at all times, as well as illuminating the need for resources and their distribution and storage within the precinct (Seeher 2002, 136).

Like Temple 1, Temple 5 may also have included a residential unit. Temple 5, however, has an additional association with both the King's Gate and with multiple shrines to the ancestors of Tudhalia IV, making it possible that this temple was the center of a royal cult of the dead. These unique temples, therefore, are

distinguished both from the rest of the temples and from each other by these peculiar features.

Overall, the temples consist of a multi-chambered gate, a central courtyard, an antechamber, and a cella making up a loosely standardized and recognizable plan, although there are individual variations on this theme. The cella is typically located on the short side of the temple in a central position, flanked by two groups of three to four rooms. Access to the cella was through these rooms, in all cases where doorways were preserved, meaning that access to the cult image was in a bent-axis pattern.

The room group to the left of the cella is typically accessible only from the cella itself, leading to the speculation that this may have been where the cult image was tended to (an area called É.SÀ in textual records) (Naumann 2007, 468). The room group to the right of the cella was more accessible, and thus it is believed to be the storage area for the cultic paraphernalia (Naumann 2007, 468). This arrangement of a cella flanked by two room groups creates a general tripartite structure to the temples. This tripartite division is better defined in the smaller, later temples of the Upper City. The rooms flanking the courtyard may have been used as storage or administration areas, but since the temples were generally found emptied of their contents, it is difficult to reconstruct the exact function of many of the rooms (Naumann 2007, 469). There are some exceptions to this, such as the bathroom in Temple 5 and the state rooms in Temple 1 (Naumann 2007, 211; Puchstein 1912, 101).

The construction techniques used to build these structures are also roughly standardized. They usually sit on a stone foundation that supports a wooden framework with mudbrick facing and rubble fill. The buildings were typically two

stories: either a ground floor and an upper story/roof, or a basement and a ground floor. The quality of the stone working seen in the foundations decreases throughout time, with the highest quality craftsmanship evidenced in Temples 1-5. These earlier temples are also those in which gabbro is used in foundations to indicate the sacred areas (cella, pillars in front of the cult room area in the courtyard, and the *Hofbau*).

As the stone working quality decreases, the outline of the temples regularizes, as do their plans. This is evident when comparing Temples 1- 5 with Temples $6-29^{23}$, with the earlier temples showing a much more organic development than the later temples. This organic development leads to a niched appearance with many recesses and projections interrupting the linear outline seen in the later temples. This led the excavators to believe that rooms were added if needed to the façade of the temple, resulting in this *ad hoc* plan. In contrast, the later temples seem to have been planned and built *en bloc*. This may mean that Hittite architects had already devised a set plan for the temple structures by the time these were constructed.

Although precise dating for each individual temple is not available, due to the current chronological reconsiderations at the site, the most recent dating of the foundation of the Upper City to the late 16th century BC (Schachner 2017b, 34) suggests that the earlier temples in this area, Temples 2-5, were constructed at this time (Schachner 2011, 88). The Great Temple may be contemporary with this date or it may precede it slightly (late 17th/early 16th century BC; Schachner 2017, 229; Schachner 2011, 86) although, again, precise dates are not currently available. The very early excavation of many of these buildings, and the poor preservation of more, leads to a lack of reliable, radiocarbon dates from these contexts (Zimmer-Vorhaus 2011, 213-214; Schachner 2011, 89). Thus, much of the evidence available at present

²³ Temple 30 is not well enough preserved to determine the building's outline.

is based on the typological considerations detailed above. If a late 16th-early 15th century BC date is taken as the initial construction of Temples 2-5 during Neve's Oberstadt 4, then the later temples of the Upper City can be assumed to date sometime towards the 15th or early 14th centuries BC (Schachner 2011, 88-90; Schachner 2017, 226). Temple 31, however, is dated to the late 13th century BC, making it the perhaps the final temple built at the site (Schachner 2011, 95-96). As the chronology and stratigraphy of the site as a whole is reconsidered, more precise dates for the temples' initial foundations can be untangled.

4.3 Conclusions

Due to the many excavations in the region, the corpus of LBA temples in central Anatolia is very large, although some of the examples may prove not to be temples with further investigation. The secure identification of a handful of temples is owed to the texts found within them or in other locations within the site, but again this is not the case for all structures, some of which have been identified only through texts found in other Hittite cities. Some of the temples discussed here may in fact be examples of temple-palaces, or simply the residence of a local ruler which was provided with a shrine, particularly the earlier examples at İnandıktepe, Boyalı Höyük, Alaca Höyük, and Maşat Höyük, as well as the examples at smaller sites, such as Hüseyindede. Securely identified, proper, 'Hittite temples' are found only at Hattuša, Kuşaklı-Šarišša, and possibly at Uşaklı Höyük, where more exposure of the structure is needed.

The contrast between the two documented MBA temples and the large number of LBA temples in central Anatolia is striking. This interesting difference and the abundance of LBA temples raises questions concerning social/religious changes which took place with the MBA-LBA transition – why are not there more

MBA temples in central Anatolia? What was the need for the abrupt increase in the number of temples in the LBA? These questions will be discussed further in Chapter 8.



5. CHAPTER 5 – Temples in the Cilician Plain

Temple structures in the Cilician plain are represented by two sites, Tarsus-Gözlükule and Tatarlı Höyük, both of which date to the LBA. The sites excavated in this region have not revealed any MBA temples. It is known from the Tatarlı Höyük excavations that an MBA version of the temple lies beneath the LBA temple, but it has not been excavated yet. This may be an indication that at other sites in the region, religious structures of earlier periods also lie underneath later ones.

5.1 Late Bronze Age

5.1.1 Tarsus – Gözlükule

The site of Tarsus – Gözlükule is located in the province of Mersin in the city of Tarsus. The mound, named Gözlükule, is in the city center of Tarsus (Goldman 1935, 526-528; Goldman 1950, 3) (Fig. 57). Gözlükule is formed by twin hills and measures 320 m east-west and 130 m north-south, creating a massive settlement mound (Goldman 1950, 3).

Goldman's interest in Cilicia was fueled by the academic discourse on the Hittite references to Ahhiyawa and its connections to the Achaeans and the Hittites (Goldman 1935, 526; Mellink and Quinn 2004, 320). Ahhiyawa was a country mentioned in Hittite texts, which was proposed by Emil Forrer to be identified with the Mycenaean state, though this was later rejected by various archaeologists (Goldman 1935, 526; Özyar 2005, 2; Güterbock 1984, 114; Forrer 1924, 21-22). With these discussions in mind, Goldman conducted a survey in 1934 on the Cilician plain; after surveying 41 sites, soundings were made on the Gözlükule mound, which was deemed promising²⁴ and was chosen for further research (Goldman 1935, 256).

²⁴ Some Hittite and Mycenaean pottery were found, marking the connection Goldman was searching for.

The systematic excavations at Tarsus – Gözlükule started in 1935 under the direction of Hetty Goldman and continued until 1949 with an interlude of nine years due to the Second World War (Goldman 1950, V). The excavations were initiated with the purpose of establishing a cultural sequence of the prehistoric periods in Cilicia (Goldman 1935, 528; Goldman 1950, V). Research revealed an entire undisturbed chronology of habitation from the Neolithic until the end of the Ottoman period (Goldman 1950, 3; Goldman 1956, 60-64; Goldman 1963, 14)

This exceptional continuity is the reason why Gözlükule is one of the most important sites of the region, which helps to understand the overarching settlement history of the Cilician Plain. 52 years later, the investigations at Tarsus – Gözlükule were resumed under the direction of Aslı Özyar from Boğaziçi University (Özyar 2005, 1). Preliminary research took place from 2001-2006 and consisted of an investigation of the area between the mound and the coast in order to understand the geological formation of the plain, along with the transfer and registration of the Goldman excavations' study collections from the Adana Museum to the Tarsus Museum under the auspices of the Tarsus Museum, preparing for new excavations, work on the preservation of the mound, and the establishment of a research center (Özyar et al. 2003, 274). Following the preliminary research, the excavations started in 2007 under the direction of Aslı Özyar. The goals for the excavation are to examine the transition from the LBA to the Iron Age and to understand the cultural change due to this transition and what it implies (Özyar et. al. 2007, 199). Özyar indicates that their aim is "to study, from the particular vantage point of Cilicia (Tarsus-Gözlükule), the collapse of the Eastern Mediterranean Bronze Age world system"(Özyar et.al. 2017, 199).

The LBA of Tarsus – Gözlükule consists of two historical periods, which correspond to two levels within the site. The LB I (1600-1400 BC) corresponds to the local dynasty of Kizzuwatna, and the LB II corresponds to the site's annexation into the Hittite Empire under Šuppiluliuma I, as well as its destruction (Goldman 1956, 63-64; Gates 2011, 395; Özyar and Ünlü in Novák et.al. 2017, 162). The LB II is divided into two sub-levels, LB IIa (1400-? BC) and LB IIb (?-1100 BC)²⁵ (Özyar and Ünlü in Novák et.al. 2017, 162). LB IIa is identified as the Hittite level, and the "Hittite Temple" in Section A and the domestic area in Section B are dated to the period (Gates 2011, 396; see details below). LB IIa ends with a conflagration in both areas, and the following level, LB IIb, revealed a squatter population with Mycenaean pottery in LH IIIC, Granary Style; the end of this level marks the end of the LBA at Tarsus-Gözlükule (Goldman 1956, 63-64; Gates 2011, 395-396).

The excavations in the 1930's and 1940's focused on two areas, Sections A and B (Fig. 58). Section A is located on the eastern hill of the mound, while Section B is located on the western part. In the Goldman excavations, in Section A, the corner of a large structure was unearthed and a 19 m long wall could be traced uninterrupted, with further extensions found in fragments (Goldman 1956, 49). This circuit wall is 3 m wide, and it encircles a large structure dubbed the Hittite Temple by Goldman (see Fig. 59). Goldman believed that the characteristics of this wall were similar to Hittite walls found in Boğazköy, because the wall was constructed of enormous stones (Goldman 1956, 49). She also indicates that the large structure, the Hittite Temple, is similar to the plans of temples at Boğazköy (Goldman 1956, 49). Goldman does not provide an exact reason why she believed this structure is a

²⁵ The date that separates LB IIa from LB IIb is not exactly known. While Gates 2011 places LBIIa at 1450-1225 BC and LBIIb at 1225-1100 BC, Özyar and Ünlü in Novák et al. 2017 do not specify a date for the shift from the LBIIa to LBIIb.

temple, other than the resemblance of the building's plan to the west wing of Temple V in Boğazköy (for comparison, see Fig. 60), where both structures had rooms around a central courtyard in a similar arrangement (Goldman 1940, 73). While the so-called Hittite Temple was towering in the summit of Section A; in Section B various buildings both of domestic and administrative nature have been found. According to Goldman the building named East House might have been an administrative complex, thought to be the residence of the governor (Goldman 1956, 56). She indicates that the abundant findings of bullae with official and royal Hittite names, the existence of a manger room (much like the Alaca Höyük palace-temple) and the service quarters for a large household, implies a residence for someone very high in the ranks- a governor (Goldman 1956, 56).

5.1.1.1 The Hittite Temple

The so-called Hittite temple occupies the whole summit of Section A (Goldman 1956, 49) and has been partially exposed on its southern side (see Fig. 59) (Goldman 1937, 262). The exposed plan of the structure presents rooms around a partially preserved courtyard. The plan of the structure measures 29 m east – west, while the north – south extension is preserved up to a maximum of 18 m (Goldman 1937, 262; Goldman 1956, 50).

To build this structure, a levelling of the building site was carried out, and the foundation trenches were dug up and filled in with alternating layers of red soil and pebbles with a mixture of crumbled limestone (Goldman 1938, 30). Fourteen layers of pebble mixture was found in these foundation trenches (Goldman 1938, 30). According to Goldman, this great preparation for the structure was an important indication that the building was indeed very important, either being a temple or a palace (Goldman 1938, 31). This type of foundation purification/cleansing is seen in

the foundations of the Temple Oval in Khafajah (Delougaz 1940) in the third millennium BC, as Goldman details (Goldman 1938, 31).

The thickness of the outer walls of the building ranges between 1.30-1.50 m, and the inner walls are about 1 m thick (Goldman 1956, 50). The walls are of heavy construction, with the foundations built of large stones on the outer sides and the gap between filled with smaller stones and rubble, laid up to a depth of 2 m (Goldman 1937, 265; Goldman 1956, 50). The superstructure consisted of two horizontal wooden beams lying on the edges of the foundation, over which mudbrick walls were constructed (Goldman 1937, 265). The height of the walls is not known, since the full extent of the walls was not preserved (Goldman 1956, 50).

On the western side, the courtyard is flanked by a double row of small rooms, whereas the southern side is bordered by an ambulatory which turns to the north to also run along the western side. This ambulatory leads to a row of rooms on the southernmost part of the building. In total, 14 rooms have been exposed, which were used for various activities. According to Goldman, room T1 was a bath (Goldman 1956, 50), as shown by the lime cement traces found on the thick pebble flooring and drainage pipes which let the water out of the room from the south side (Goldman 1956, 50). The drainage system was maintained throughout the building's lifespan and was constantly renewed; according to Goldman, this is another indication of the importance of the building (1938, 31).

Rooms T10-T12, however, show signs of a different usage. The many slags found within these rooms and the part of a clay crucible with bronze inside indicates that these chambers were dedicated to metalwork (Goldman 1956, 50). A jeweler's mold found south of this group of rooms indicates that one of the rooms, which Goldman believes was room T11, must have been used for more intricate

craftsmanship of precious metals, such as gold and silver, for jewelry (Goldman 1956, 50).

The entryways to the rooms and the entrance to the whole structure is not known. On the basis of a pivot stone found nearby, though disturbed, Goldman believes that the main entrance of the structure might be on the southern side, around room T14 (Goldman 1956, 50). According to Özyar, though, the main entrance might have been from the north, and she believes that they will find it in the current excavations (Özyar et al. 2012, 422).

The artifacts found within the temple consist of pottery and various small finds. The pottery assemblage is made up of jars, pitchers, narrow necked juglets, Plain Ware pottery, bowls, and trefoil mouthed pitchers (Goldman 1956, 203-230). The pottery assemblage does not indicate any special function, nor does it have clear any religious or ritual associations, as it does not include forms such as libation arms or votive miniatures (Slane 2006, 6). The assemblage can be defined as typical Hittite Empire pottery (Goldman 1956, 183, Slane 2006, 6). The small finds, on the other hand, indicate that there is evidence for production within the building, including items such as beads and spindle whorls, bronze knives, scrapers, parts of spearheads, a tang with a rivet hole, nails, needles, crucible fragments, pieces of gold and lead, and a clay mold for awls and chisels (Goldman 1956, 281-319).

The current excavations are focusing on the northern part of the temple structure. Only some traces of walls, which belong to the so-called Hittite temple, have been identified (Fig. 61). The lack of evidence is due to the damage caused by later building activities and intrusive pits (especially during the Roman period) and World War I trenches (Goldman 1937, 267; Goldman 1956, 49; Özyar et al. 2012, 422,).

Overall, this 'Hittite temple' structure in Tarsus-Gözlükule is indeed very intriguing, but inconclusive due to the lack of further evidence. There is a possibility that the structure might be a temple, but the limited fraction of the plan does not provide any tangible support. The plan, as Goldman indicated, indeed shows similarities to the plans of Temple 2 and Temple 5 in Boğazköy (Goldman 1937, 267; Goldman 1940, 76), with its series of rooms and corridors situated around a large courtyard, as also seen in Temples 1-3 and 5 of Boğazköy (Neve 1993, 114-116; Chapter 4), as well as the Building C and Tempel 1 in Kuşaklı-Šarišša (Müller-Karpe and Müller-Karpe 2013, 221-223; Müller-Karpe 2002a, 150-154; see Chapter 4). Although the plan of the "Hittite Temple" at Tarsus-Gözlükule may be similar, the whole plan of the temple has not been revealed, and the function cannot be positively identified. Particularly considering the fact that temples and palaces are planned similarly (see Chapter 4), this structure may also be a palace; Naumann, in fact, discusses the Tarsus-Gözlükule "Hittite Temple" as a palace and indicates that the construction of the "Temple" is similar to the Waršama Palace of Kültepe (Naumann 2007, 412). This not a good comparison, though, since the Waršama Palace is much earlier than Tarsus-Gözlükule's "Hittite Temple". Instead, it can be compared with the Maşat Höyük Level III palace (see Chapter 4), since both structures are dated to the same period (the reign of Šuppiluliuma I) (Özgüç 1980, 307-308). When we look at both structures, one can see some similarities (Fig. 60). Again, these similarities, however, do not go further than a structure consisting of rooms arranged around a central courtyard. Even Naumann himself openly expresses that the temples and places of the LBA are very similar in plan, construction methods, and the way that they spread through the landscape (Naumann 2007, 413). One point that has to be taken into account among all this discussion is that there was

in fact a building that might have already controlled administrative activities – the East House in Section B. The East House is a good candidate because the numerous bullae with Hittite names found here indicate an administrative function (Goldman 1956, 51-56; Özyar 2017). If we consider this, the probability of the so-called Hittite Temple being an actual Hittite temple, as opposed to a palace, increases.

However, the artifacts found within the structure do not resemble a temple inventory. There was no cult image, texts, cella, pedestal, or altar to indicate the building's sacred function, as have been recovered from temples at Hattuša (Neve 1993, 109). Through elimination, one can possibly identify the monumental structure as a temple. It is also possible that it had both an administrative function and a religious one. It may have had a place for religious activities, perhaps a small shrine. The current excavations are crucial, since new evidence will stimulate further discussion and help secure the identification of the building, as the information in hand does not lead to a definitive conclusion.

5.1.2 Tatarlı Höyük

Tatarlı Höyük is located 23.44 km northeast of the town of Ceyhan in Adana (Girginer et al. 2010, 453) in the village of Tatarlı (Fig. 62). The lower city of the mound is located under and around the village of Tatarlı (Girginer et al. 2010, 470). Research on the region first started with a survey of Cappadocia and Cilicia in 2002. It was directed by Serdar Girginer and lasted until 2007 (Ünal and Girginer 2007, 18). After the survey, Tatarlı Höyük was chosen as an excavation site which the researchers believed would shed important light on the region (Girginer et al. 2010, 453). Excavations started in 2007 and have continued up to the present. The main goal of the excavation is to reveal information on the Kingdom of Kizzuwatna and its exact borders (Girginer et al. 2010, 454). Another key aim of the excavation is to

understand and create a chronology for the area which can be compared to other sites of the region and to neighboring regions²⁶ (Girginer et al. 2010, 454).

Tatarlı Höyük consists of a citadel and a lower city (Fig. 63). The citadel measures 250 m x 360 m and the lower city covers an area of 2.5 km² around the citadel (Girginer 2016, 92). The excavations revealed eight levels of occupation on site, from the Neolithic to the early Byzantine period (Table 10).

Period	Level	
Byzantine Necropolis	Ι	
Hellenistic Period	II a-b	
Late Iron Age	III a	
Middle Iron Age	III b1	
Late Bronze Age II	IV a	
Late Bronze Age I	IV b	
Middle Bronze Age	V	
Early Bronze Age III (?)	VI	
Late Chalcolithic Period-	VII	
Early Chalcolithic Period		
Neolithic Period	VIII a-b	



The location of Tatarlı Höyük led the excavators to believe that Tatarlı was known as Luhuzatiya in the Assyrian Colony Period, Lawazantiya in the Old Hittite period, as city with a significant temple which belonged to the kingdom of Kizzuwatna²⁷ and in the Iron Age as Lusanda (Girginer 2016, 95; Girginer and Collon 2014, 61). The temple of Lawazantiya is important because the text known as the "Apology of Hattusili" states that his wife, Puduhepa, who was the daughter of the priest of Shaushga-Ishtar, was from the city of Lawazantiya (Girginer and Collon 2014, 61). Another text in Boğazköy documents that there were seven water springs in close vicinity to Lawazantiya (Girginer and Collon 2014, 61). Girginer states that that although there is no direct or written evidence found within or around the site, there

²⁶ For recent research see Novák et al. 2017.

²⁷ Kizzuwatna was a country/kingdom in the Late Bronze Age located in the area of modern day Adana. It is known that this land was periodically at odds with and subservient to the Hittite Kingdom over the course of its existence (Bryce 2005, 104-105). See also Chapter 1 - Historical overview.

are other indications pointing to its identification: the has a lower city; seven streams of water run near the site; it is located along the crossroads of northern Syria and at the western edge of the Amanos Mountains; there is continuous occupation from the MBA to the Iron Age; some artifacts such as a cylinder seal with writing have been dated to the reign of Telipinu (1525-1500 BC; Yakar 2011, 78; Girginer et al. 2011, 67).

In the first year of excavation, a building of monumental character was discovered on the citadel. This discovery raised questions regarding the nature of the building, and Girginer, after two years of partially exposing the building, thought it might be either a temple-palace or a temple (Girginer et al. 2010, 460). Multiple phases of construction, refurbishing and reuse of this building have been documented.

5.1.2.1 Building A

The monumental building, Building A, has been identified as the temple of the mound for the MBA and LBA (Fig. 64). The MBA plan of the building has not been exposed due to the LBA levels sitting directly on top, but it is known from partial walls found under the rooms that there is an earlier MBA version of the structure (Girginer et al. 2016, 493). However, in the Iron Age, the building's rooms were mostly used as trash pits, and only some parts of the structure was inhabited, but not with religious purposes according to Girginer (Girginer 2014, 183). The LBA structure consists of two phases, named Early Phase, dated to 1635-1590 BC²⁸ (Girginer et al. 2017, 448) and Late Phase, which corresponds to the late LBA (Girginer et al. 2014, 183). The whole building was abandoned towards the end of

 $^{^{28}}$ These dates have been established through C14 analysis on carbonized seeds found within the Early Phase (Girginer et al. 2017, 448).

the second millennium BC. (Girginer et al. 2014, 183), although some of its rooms were reused in the Middle Iron Age. The architectural remains have been destroyed in some parts due to Iron Age and Hellenistic trash pits (Girginer et al. 2014, 183).

The first phase of the structure – the Early Phase – consisted of 23 rooms and measured 35 x 25 m (Fig. 65) (Girginer 2016, 94). The walls of the building were made of medium-sized basalt stones, with their gaps filled with smaller-sized ones secured with mud mortar (Girginer et al. 2014, 184). The quality of the walls' craftsmanship was not high, evident in the rough nature of the walls (Girginer et al. 2014 184). The structure's entrance is symmetrical, with two projections and a cluster of four rooms located on both sides. Although neither the doorways of the so-called monumental entrance nor all the rooms within the building are known, it is possible that the entrance led into a hallway which was connected to the largest room²⁹ of the whole building. From this room, it is possible that the other rooms were accessible. The excavators believe that this structure was used mostly as a depot, because most of the findings were pithoi and storage jars. In some of these jars and storage areas, grape seeds were found, which led the excavators to believe wine was produced in this structure (Girginer et al. 2014, 183).

In its second phase – the Late Phase – the structure went through a downsizing; the rooms in its western wing were closed off and filled in (Fig. 66) (Girginer et al. 2014, 184). In this phase, the whole building measured 21 x 20 m (Girginer et al. 2014, 184). The earlier phase's walls were used as foundations, and over them, walls of cyclopean masonry were built. The stones used were large, with the outer façade worked and the inner side left rough. The thickness of this phase's

²⁹ I am calling this area a room, although in the usual LBA temple plan as seen in central Anatolia (see Chapter 4), this space would normally be a courtyard. However, there is no information given by the excavators which indicates that it was a courtyard.

walls alternated between 1.40-1.50 m (Girginer et al. 2014, 183). Black basalt stones alternating with white limestone were used to decorate the entrance on the eastern side of Building A (Girginer et al. 2014, 183).

In front of Building A's entrance and slightly to the east, a so-called water well has been found³⁰. This well measures 0.7 m at its rim; it is 0.8 m deep, and its widest part measures 1.60 m; five rows of stone lining were found within the well (Girginer et al. 2015, 434). The exact use of this so-called well is not known, but the excavators believe that this might have been used as a pit/well for libations. They think that is not a water well because there is no lining within the well to stop the water from seeping through into the surrounding earth, thereby muddying the water inside (Girginer et al. 2015, 434).

The artifactual evidence for the religiousness of the structure does not come from within the building itself, but from the excavation activities that took place on the western side of Building A. The excavators discovered eight duck/bird-shaped votive vessels, a ring-shaped vessel, a bull rhyton, various offering pots and juglets, and basalt offering containers here (Fig. 67) (Girginer 2016, 94; Girginer and Collon 2014, 61; Girginer et al. 2011, 111). These apparently cultic objects may indicate that the building was associated with ritual depositions of 'special' objects, leading Girginer to believe that Building A and its premises were used for religious purposes (Girginer 2016, 94).

Overall, Building A in Tatarlı Höyük is definitely an important and monumental structure. The architecture of the structure starts off symmetrical at the entrance in the east and descends into an asymmetrical, more organic plan.

³⁰ The excavators do not indicate which level the well belongs to - thus, one assumes that the well was made in the first phase and was in use during both phases (for further information, see Girginer 2016; Girginer et al. 2015).

Especially compared to the other possible temples of the same region, the so-called Hittite temple in Tarsus-Gözlükule (see below), there are some differences. The plan of the structure at Tarsus-Gözlükule is more of a rectangular plan, and it is known from the exposed area that there is a large, open, rectangular courtyard in the center (Goldman 1937, 262; Goldman 1956, 50); these features are not present in Building A at Tatarli. Also, the artifacts found within Building A do not lead to a certain conclusion about the building's religious nature. The religious "paraphernalia" was found outside the building at its western side, which might mean that rituals were conducted outside, but this does not directly connect this religious activity to the building itself. In addition to this, the excavation team did not reveal any altar, altar base or cult room inside the building. The fact that within the building were found storage jars, pithoi, and storage rooms with grape seeds does not confirm or deny the possibility of its being a temple, but this identification should be approached with caution. The building, considering the lack of evidence for its religiousness, may well be a small palace or residential building of a local ruler. If the city is ever certainly confirmed to be Lawazantiya, then one can make bolder claims that indeed the settlement had a temple or temple complex. The claims of Girginer hopefully will be clarified with the continuing excavations on the citadel and its lower city, which still encompasses a vast amount of unexplored land.

5.2 Conclusions

Tarsus-Gözlükule and Tatarlı revealed structures which are believed to be temples, but no cultic paraphernalia, altars or divine images have been found to verify this at either site. Both structures have been identified through their similarities to the Hittite temples we see in Hattuša; this similarity with the Hittite

building style shows that the annexation of Kizzuwatna to the Hittite Empire affected their building methods³¹. It is true that the Hittites had a very easily recognizable building style that can be easily detected (Naumann 2007). The Tatarlı Höyük temple is similar to the temples at Hattuša, but looks like a cruder version of them, which may indicate that it was built locally to resemble Hittite temples of the period. While what we see in Tarsus-Gözlükule's so-called Hittite Temple is perfectly in line with the Hittite style of planning and building. This variation shows that Hittite influence in the two different sites in the same region is different, and that each site represents it differently.

³¹ This is not surprising, as both sites were located in Kizzuwatna, which has a long history of textually attested relations of partnership with and subservience to the Hittite Empire (Bryce 2005, 96-120).

6. CHAPTER 6 – Looking For Influences: Three Neighboring Temples

Three sites have been chosen as comparisons for the scope of this thesis, firstly because they are identified definitively as temples through textual, architectural and artifactual evidence. Secondly, they represent the shift to Hittite control and how this rule affected temple architecture at the sites, and, thirdly, the close proximity of these temples to Anatolia helps to understand the mutual influence between northern Syria and Anatolia. These sites are Tilmen Höyük, Tell Atchana-Alalakh, and Aleppo.

Tilmen Höyük is representative of an MBA temple which was not altered by Hittite rule, although it is believed by its excavators that the site as a whole shows both Anatolian and Syro-Mesopotamian influences. Tilmen is comparable to both the Kültepe-Kaneš and Beycesultan MBA temples. Tell Atchana-Alalakh and Aleppo represent a continuous sequence of temples spanning the MBA and LBA, where the architecture before, during, and after Hittite occupation is visible, demonstrating how political influences can affect religious architecture. The comparison of these sites to the Anatolian examples already outlined is important in understanding the multidirectional exchange of architectural traditions in both periods and in understanding the development of Anatolian temple types.

6.1 Tilmen Höyük

Tilmen Höyük lies 10 km east of the district of Islahiye in the province of Gaziantep in the north-south oriented plain of Islahiye, which is bordered on the east by the Amanos Mountains, by the Taurus Mountains on the north, and by Mount Kurt in the east, and is connected to the Amuq Valley in the south (Fig. 68) (Marchetti 2004, 191). The initial excavations at the site were undertaken by Bahadır Alkım between the years 1959-1972 with a pause from 1964-1968 when the team

conducted work on the nearby Gedikli Tepe (Duru 2003, 9). Tilmen Höyük was chosen for excavations because of its location between Mesopotamia and Anatolia. Alkım believed that Tilmen would shed light on the then unknown history of the region and its chronology, since Tilmen Höyük was large and covered a large time span from the Late Chalcolithic until the Islamic period (Alkım 1960, 9). After the untimely death of Bahadır Alkım in 1981, Refik Duru was given the task of publishing the excavations of Tilmen Höyük, where he also conducted a season of restoration work in 2002 (Duru 2003, 9).

The excavations were renewed in 2003 by a Turkish-Italian team directed by Nicolo Marchetti (Marchetti 2004, 129). The purpose of the Italian excavations was to understand the chronology of the site better while also examining the development of urbanism. Through excavations, the researchers aimed to comprehend the seriation of its architecture and material culture, placing the site within regional and historical frameworks of Anatolia and northern Syria both in the MBA and LBA (Marchetti 2006b, 199).

The site of Tilmen Höyük measures 220 x 150 m at its longest points, covering an area of around 5 ha and rising 21 m above the surrounding plain (Fig. 69) (Duru 2003, 8). The large mound consist of a fortified citadel (also-called the acropolis) and a lower town fortified with casemate walls (Marchetti 2008, 125). The excavators believe the site must have had an important role in the region, possibly being the capital of a small kingdom which the name is not known but is thought to be "Zalbar" (Marchetti 2006b, 199; Forlanini 1985, 54-56). The mound revealed five settlement periods: Late Chalcolithic, EBA, MBA, LBA, Iron Age, Roman, and

Islamic periods³² (Duru 2013, 12; Marchetti 2006a, 276). This section focuses on the monumental structure found which is believed to be one of the temples of the MBA settlement, Building M located on the lower town, which has been securely identified as a temple unlike its counterpart Building E which is why it will not be discussed here.

6.1.1 Building M

Building M (also referred to as Temple M) lies on the highest point of the western lower town (see Fig. 69). Marchetti indicates that Building M is a temple with a *temenos* located in front of the building (Fig. 70) (Marchetti 2007a, 153). Building M measures 13.5 x 10 m, and it is in the *in antis* style. The structure is rectangular, with a single large chamber (the cella) measuring 9 x 6.4 m, the floor of the room is not preserved. The foundations of the building are directly set onto the bedrock and are made of large stones with their flattened surfaces used as the inner and outer façades and the gap between them filled with smaller stones. The first phase of the building is dated to MB II; the excavators indicate there is a second building phase which belongs to the LB I, but due to erosion, it was not preserved (Marchetti 2007a, 153). The walls of the building on its front façade protrude outwards, which creates a covered space in front of the building. On the back wall of the building, there is a buttress that projects towards the north for a depth of 0.6 m (Marchetti 2007a, 153). Marchetti believes that this created a niche within the building, to store the divine object/image (Marchetti 2007a, 153).

Within the cella, near its entrance, a stele ($66 \times 53 \times 24 \text{ cm}$) was discovered lying face down (Fig. 71). This stele is believed not to be an orthostat because of two

³² These latter two levels were found mixed on the mound, with no architectural evidence; only pottery was found. They believe that the mound must have been a small and impoverished settlement during these periods (Duru 2013, 50).

vertical frames on each side (Marchetti 2007a, 154). The image on the stele consists of two standing figures facing each other. The figure on the left has been identified as a god³³ because of its horned hat. The figure on the right, which is a male figure, which is believed to be a dignitary (Marchetti 2007a, 155-157). Marchetti indicates that this stela is a dedication to a deity by the depicted dignitary, which was placed in the temple (Marchetti 2007a, 157).

The area in front of the building, the *temenos*, was found with preserved flooring (Marchetti 2007a, 153) and was enclosed by a wall. Several benches have been found in this *temenos* area, and the entrance to the building is marked with a stone slab laid on the floor (Marchetti 2007a, 153). Within Building M and its *temenos*, Marchetti indicates that two crucible fragments, multi-sided stone moulds, possible weights, and fragments of various, large stone basins were found, but no slag was discovered (Marchetti 2007a, 153). The pottery and the small finds also belong to MB II, but more details on the type and style of pottery is not indicated (Marchetti 2007b, 358).

Building M, with its *in antis* plan and the votive stele found within its chamber, presents an interesting case. In particular, the uncanny similarity of the building to other known temples of MBA Syria is a strong indicator that this building was indeed a temple. Temples belonging to both the third and second millennia BC in Syria have the same *in antis* plan with the same arrangement of rooms, similar massive walls, and also high degrees of monumentality (Akkermans and Schwartz 2003, 301). When Building M's plan is compared to temples of the third millennium BC at Halawa (Temple *in antis*) and at second millennium BC Ebla (Ištar Temple

³³ The specific identification of the god is not known. Marchetti indicates that this might be a noncanonical representation of the Storm God; for further discussion, see Marchetti 2007a.

'Temple D'), there is no doubt that Building M carries on this Syrian tradition, despite being in such close proximity to Anatolia (Fig. 72) (Orthmann 1989, Beilage 10; Matthiae 1990, 349-353). Although the finds within the structure do not help to understand the real purpose of the building, in drawing on comparisons from neighboring Syria, Marchetti's interpretation of the structure as a temple seems to be valid. This is also an indication that Tilmen Höyük was strongly affected by the religious tradition and architecture of Syria in the MBA and can help explain the difficulty in understanding the deity depicted on the stele since, instead of an Anatolian one, it may be depicting a Syrian one.

The temple of Tilmen is what has been categorized as the *in antis* style, which is very similar to the shrines we see in Beycesultan in both the MBA and LBA. The similarity in their plan raises the question of whether the building we call the megaron in Beycesultan actually is a temple *in antis*. According to Müller, the megaron is an architectural form which occurs first in Mesopotamia (Müller 1944, 342). So yes, what we call the *in antis* temple, and even the broad-room type, are the same as the megaron – they have only been named differently because they were found in different regions. This is why the temple type we see in MBA Tilmen and MBA (and LBA) Beycesultan is similar. According to Abay, the megaron type at Beycesultan is the same structure as the temple *in antis* we see in the Near East, and must have been adapted from the east (personal communication). This indicates, when compared with Tilmen, that the Aegean influence expected in Beycesultan is not present, at least in the temple structures. This will be explored further in the spatial analysis (see Chapter 7).

6.2 Tell Atchana - Alalakh

Tell Atchana is located 16.73 km southwest from Reyhanlı in Hatay (Fig. 73). The site lies in the Amuq Valley, east of the Orontes River bend (Yener 2010, 1). The Amuq Plain was first surveyed by Robert Braidwood in the 1930s (Braidwood 1937); he found 178 mounds in the region, and Tell Atchana is one of the largest among them (Yener 2010, 6). Leonard Woolley, after concluding work at Ur in 1935, was commissioned by the Trustees of the British Museum to look for a new site to excavate; in light of Braidwood's surveys, Woolley chose Tell Atchana because he believed it to be a royal city controlling the main trade routes (Woolley 1955, 1). The excavations began in 1936, but in 1939, they were interrupted by World War II. After Hatay became a part of Turkey in 1946, the excavation continued with the support of the Turkish government, concluding in 1949 (Woolley 1955, 1-2). Woolley aimed to understand and determine the connections between the Near East, Anatolia, and the Aegean, especially the link between the Minoan culture and the Near East (Woolley 1953, 14-15).

After a gap of 46 years, a new round of research was initiated. The Amuq Valley Project started in 1995 to obtain a better recording of the economical and sociocultural history of the region through multidisciplinary research (Yener 2005; Yener 2010, 1). The research at Tell Alalakh was reinstated in 2000 as a survey, and excavation began again in 2003 under the direction of K. Aslıhan Yener with the main aim of understanding the chronological sequence, which has been long challenged by many over the years (Yener 2010, 4-5; Yener and Akar 2013, 264).

Tell Atchana, which has been revealed to be ancient Alalakh (Speiser 1954, 19), measures about 750 m x 325 m, covering approximately 22 ha (Fig. 74). The mound rises 9 m above the present day level of the Amuq Plain (Yener 2010, 43).

The site's sequence starts with the end of the EBA³⁴ and ends with the scanty and poorly preserved settlement of the Iron Age (Yener 2013, 11-12). The excavations have revealed palaces, temples, fortifications, domestic dwellings, and gates that span 18 Levels (Woolley 1955, 32; Woolley 1953, 41). This section will be looking at the long temple sequence unearthed by Woolley. Such a sequence is crucial in understanding the changes in temple architecture from the MBA to the LBA.

As stated above, the chronology of Alalakh has been a topic of much discussion. The Woolley Levels and the Yener parallels have been given in Table 11 with the corresponding archaeological period. There are 18 levels of temple remains found in Alalakh, named by their respective levels, spanning from the MBA to the end of the Late Bronze Age. While some of these temples were found well preserved, others were found in a ruinous state (Woolley 1955, 33). Although there is not a single inscription that directly dedicates this temple sequence to one specific god or goddess, there are some indications that point in certain periods of history to the temple being dedicated to Ishtar, the city goddess of Alalakh³⁵, as first suggested by Woolley (Woolley 1955, 33; Smith 1949, 69; von Dassow 2008, 23- 27; Yener 2015a, 204; Yener 2017, 216). The location of the temple, adjacent to the palaces in Levels VII and IV, does not change (witnessing only small shifts in the same area) throughout all 18 levels of occupation. This section surveys this temple sequence starting from the earliest excavated temple (which belongs to the MBA) to the last one of the LBA.

³⁴ Provisionally dated, because this level is under the water table, see Woolley 1955, 35.

³⁵ For the dedication inscription, see Smith 1949 and von Dassow 2008.

Period	Woolley Levels	Yener Levels	Corresponding Political Entity	
Iron Age	Level O	Period 0	N/A	
Late Bronze II	Level I	Period 1 a/b	Hittite Rule	
	Level II	Period 2		
	Level III	Period 3		
Late Bronze I	Level IV	Period 4	Mitanni Vassal	
	Level V	Period 5		
	Level VI	Period 6		
Middle Bronze	Level VII	Period 7	Vassal of Yamhad	
II^{36}	Level VIII			
	Level IX			
Middle Bronze I	Level X			
	Level XI		Independent small regional Kingdom of Mukish	
	Level XII			
	Level XIII			
	Level XIV			
	Level XV			
	Level XVI			
	Level XVII			

Table 11 The chronology of Alalakh, with the corresponding Woolley levels, Yener periods, and political entity (created by author, based on Woolley 1955; Yener et al. in press; Yener 2013; Yener 2015b; Yener 2017).

6.2.1 MBA Temples of Alalakh

The MBA temples of Alalakh have been found in Levels XVII to VII. Woolley specifies that a Level XVII temple existed, but no architectural remains were distinguished from those of Level XVI because of the flooding of the excavation area at this depth (Woolley 1953, 41). The Level XVI temple, as Woolley indicates, was excavated with great difficulty, due to the water table of the plain being high and waterlogging the trench (Fig. 75) (Woolley 1955, 35). The walls of the building were destroyed and levelled, and a preserved pavement of terracotta tiles was found, but the full extent of the pavement was not understood. An interesting feature, which is also seen in other levels of the temple, is a brick mass which

³⁶ The division of the MBA I and MBA II are not clear.

Woolley calls "the mastaba" (Woolley 1955, 40). This brick mass, located in the main court of the building, was a solid mudbrick structure 2.5 m high and measuring 5.75 x 1.45 m, set on virgin soil (Woolley 1955, 38). Woolley indicates that the mastaba did not have any practical purpose and further suggests that it served more of a ritual significance, perhaps symbolizing the gateway to the waters under the earth and possibly being associated with libation offerings (Woolley 1955, 39). Nevertheless, Woolley openly states that the excavations of the Level XVI temple did not give any certain data or remains to construct a tangible plan (Woolley 1955, 36).

The Level XV temple is also very fragmentary, because it was razed by the builders of Level XIV (Fig. 75). According to the archaeological evidence, the mastaba remained in use in this Level (Woolley 1955, 41). Woolley openly states that the evidence unearthed is not intelligible, although appears to show continuity in plan; however, all the deductions for the Level XV temple are made based on the Level XVI temple (Woolley 1955, 42).

The temple was completely rebuilt in Level XIV (Fig. 76). We have to take Woolley's word for this, because the earlier level plans of the temples consist of fragmentary walls and parts of mudbrick flooring, and this is the first temple for which a plan exists (Woolley 1953, 46). The plan consisted of an outer courtyard, an antechamber, and an inner chamber/cella. The courtyard was surrounded by a wall, which was fragmentarily preserved on the southeastern and southwestern sides (Woolley 1955, 43). The northeastern side of the courtyard, which corresponds to the façade of the temple, was raised about 30 cm higher than the rest of the courtyard. On the floor was a thick deposit of discarded sacrifices consisting of animal bones, pottery sherds, and ashes (Woolley 1955, 46). In a later phase of the building, the

whole courtyard, including the platform, was repaved with large mudbricks and whitewashed. The entrance to the courtyard is not known, but Woolley believes that it may have been located on the northeastern side (Woolley 1955, 46).

The antechamber of the temple also gives clear evidence for two phases. This room was rectangular in shape and contained hearths from both phases and two benches on its northeastern wall. It was remodeled with an additional wall on the southwestern end, which reduced the size of the room, and a bench was added on the northeastern wall, while a fireplace corbelled with mudbricks was built in the southern corner (Woolley 1955, 46). This antechamber led to the inner chamber (cella). The inner chamber, according to its condition upon excavation, was a plain room of rectangular shape with the so-called "mastaba" preserved off-center towards the east as a long, low wall within the room (Woolley 1955, 43). The floor of the chamber was clay with whitewash, while the walls were also plastered with mud and whitewashed over. The entrance to the cella was through a door located on the west in the southeastern wall. In the later phase, the northeastern wall was reinforced with another row of bricks (90 cm thick), which filled in the gap between the original wall and the "mastaba" (Woolley 1955, 43). No information on the findings within the whole temple is provided in detail: this might be due to the razing of the temple. Woolley indicates that this temple must have been utilized for more than one level, considering the raise in the temple floor level (about 70 cm) throughout its use (Woolley 1955, 46). Also, he indicates that Levels XIV and XIII are represented by one layer of settlement, and therefore he believes it should be reasonable that the temple was in use for both, with minor adjustments (Woolley 1955, 46). The temple, according to an earlier publication of Woolley, was symbolically destroyed by burning only the façade (Woolley 1953, 54).

The Level XII temple, although constructed along the same outline as the previous, witnessed a change in interior plan (Fig. 77). The walls of the Level XIV temple were taken down, and the rooms were filled in (Woolley 1955, 47). The antechamber was filled with mixed deposit, and the inner chamber filled with clean, light soil; Woolley states that the soil was so clean that there was not even a single pot sherd within this fill (Woolley 1955, 47). This filling operation made the earlier temple into a compact platform, and the stumps of the old walls were used as foundations for the new temple (Woolley 1955, 47).

Timber beams were used on the northwestern wall, probably to strengthen the thickest wall of the whole building, whereas the other walls were constructed directly on top of the earlier wall stumps, with the superstructure consisting of mudbricks (Woolley 1955, 47). The base of the courtyard area (which covers spaces A, B and C) was covered with a *glacis*. This glacis was coated with white plaster, as were the floors of the courtyard (Woolley 1953, 54).

The entrance to the structure was through a door in the east corner. There is a passage (A) which runs along the southeastern side of the temple, connecting to area B. This long and narrow passage, because of the thick walls on both sides to support it, might have been covered with a roof or vaulted chamber (Woolley 1955, 52). Area B is believed to be unroofed, firstly because there is a window that looks out to this area on its northern wall, and secondly because the walls on both sides of area B were not thick enough support a roof (Woolley 1955, 52).

The antechamber of the previous level's temple (room E) was reduced in size by a wall on its northwestern side. Entrance to the antechamber was possible by going through B to C. C was a transitory room with a bench on the southeastern wall. The wall and the bench were both whitewashed (Woolley 1955, 52). The narrow

opening left by reducing the size of E was used as a staircase that connected area B up to top of the wall which led to the high cella (Woolley 1955, 48). Under the staircase, which corresponds to room E's southwestern wall, a cupboard and shelves were found. The shelf consisted of beams anchored in the wall and supported with an upright post. The supporting beams went under the floor level, where they were supported by a possibly reused basalt altar (Woolley 1955, 49).

The inner chamber (F) of the temple was filled in with 2 m of mudbrick to create a room on the second floor, higher than the rest of the structure and accessible by the staircase (Woolley 1955, 51). This room is not preserved, but it is known that the staircase also reached a height of 2 m, which, Woolley believes, verifies the existence of this high room (Woolley 1955, 52).

Multiple floor levels had signs of burning in room B. Both burnt and unburnt animal bones and wood ash were found in a rectangular fire pit in the southeastern corner. This shows that the sacrifice burning was moved from the antechamber in Level XIV to the courtyard in Level XII (court B). Woolley suggests this is due to the inaccessibility from room E to the cella (F): since now court B had direct access to F, the sacrifices were burnt there (Woolley 1955, 52).

In the final phase of the building, all the internal walls were demolished, which created a single open court paved with mudbricks. A new fireplace was placed above the old one in court B. The reason for the destruction of the inner walls is not known, but Woolley suggests that this was for the start of a podium for the new temple (Woolley 1955, 53). Only the external walls of the temple were found to be lightly burnt: Woolley states that the destruction was deliberate, and that it must have been a symbolic burning with fire on the outer walls (Woolley 1955, 52). This was also the case with the temple from Level XIV (Woolley 1955, 53).
In the construction of the Level XI temple, the outer rooms of the Level XII structure (antechamber and courtyard) were filled with mudbricks up to the level of the high cella. The walls were trimmed down, and the platform was extended on both the southwestern and northeastern sides, so that the width became nearly double that of the Level XII temple (Woolley 1955, 54). Based on the placement of timbers in the platform, Woolley suggests that Level XI may also have had a raised cella, but no superstructure was recovered from this period. This is purely a speculation of Woolley's based on the earlier temples (Woolley 1955, 55).

In the temple of Level X, the Level XI walls were torn down to the level of the foundations, although the size of the platform remained the same as that of the Level XI temple. A reed matting was spread down across the whole platform, which allowed Woolley to separate the two levels (Woolley 1955, 55). Buried in the south corner of the remaining wall stumps was a small cache containing a miniature painted jug and a small lump of lapis lazuli, along with a carnelian bead and a piece of gold leaf (Woolley 1955, 56). Nothing else was found of the Level X temple.

With the construction of the Level IX temple, the platform shifted 4-5 m to the southwest. Nothing of the superstructure remains, and only on the east corner of the platform is a corner of a room preserved. Woolley believes that this room corner may have been a service chamber facing the front courtyard, based on its position on the platform (Woolley 1955, 56). A matting was laid down after the platform preparation, as in the previous Level. On top of the platform, some of the mudbrick rubble was burnt, which suggests that the temple was once again destroyed by fire (Woolley 1955, 56). Towards the north corner of the platform, some burnt bird bones, a large gold bead, a fragment of gold leaf decorated with circles in relief, a

coil of gold spiral, a small chunk of gold, and a carnelian ball bead were found lying on the surface of the platform (Woolley 1955, 56).

Right above the old mastaba, a sunken basin was found, the inside of which was mud-plastered and divided into two compartments. It was found filled with a greenish soil, and the sides and base were coated with multiple layers of organic material (Woolley 1955, 56). Inside the basin, there was the eye of a composite statue, a clay sling pellet, a small crushed pot, a fragment of bronze, a fragment of lapis paste, and several beads made of gold, agate, carnelian, jasper, and shell. Between the basin and the edge of the platform, a small pit had been dug into the platform, which was found filled with rubbish, including many coarse potsherds (Woolley 1955, 56). On the southeastern edge (directly across this pit), another feature which was not well preserved was found: a border of mudbricks with crumbled mudbricks inside suggested a curved basin of some sort. This poorly preserved feature was found burnt. Next to this, one carnelian and one crystal bead, a fragment of bronze, a platter, a bowl, and animal bones were found lying in an ash deposit (Woolley 1955, 57). This, according to Woolley, suggests a burnt sacrifice altar at the entrance to the temple (Woolley 1955, 56-57). This is similar to what was found in the previous temples of Levels XIV and XII.

The builders of the Level VIII temple destroyed all the walls of Temple IX and laid down a reed matting, as seen in the previous Levels (Woolley 1955, 57). The remnants of this temple were found completely burnt and destroyed, and therefore the plan is not known (Woolley 1955, 58). Woolley speculates some possible placements of the rooms, but these are not secure.

After the destruction of Temple VIII by fire, the remaining walls were taken down to create a podium for the Level VII temple, and the top of the podium was

covered with reed matting as a base, as in previous levels (Woolley 1955, 59). In front of the temple stood a large courtyard, floored with cobblestones, which articulates with the western wall of the Level VII Palace (Fig. 78) (Woolley 1955, 60). The courtyard leads into both the temple and a small service room which flanks the temple on the eastern side. This small service room has basalt orthostat door jambs, but was otherwise poorly preserved (Woolley 1955, 60). The northern part and the section behind the service room was completely destroyed; according to Woolley there might have been more rooms around the temple building (Woolley 1955, 60-61).

The temple is rectangular in plan with heavy and thick foundations measuring 4 m (on the west wall), which led Woolley to believe the structure must have had more than one story (Fig. 79). The staircase was unfortunately not preserved, but he believes it might have been located in the much-destroyed western section of the temple (Woolley 1955, 62). This is because, on the western side of the entrance chamber, the smooth cement floor was found with undisturbed, leading him to believe that if there was a staircase it would have been, much like the previous temples of Levels XIV and XII, on the western side (Woolley 1955, 61-62).

Within the temple, two rooms were found: the antechamber and the inner shrine room, both of which had cement floors. The inner shrine had long benches along the northwestern and southeastern walls, and the cement floors extended up the sides and across the top of the benches. These benches were hollow and had originally contained boxes (Woolley 1955, 63). In the northwestern bench was found red painted wall plaster fragments, several cuneiform tablets, a cylinder seal, part of an ivory comb, bone and ivory inlay pieces, rock crystal and obsidian inlay, two composite statue eyes, several small pieces of gold foil, many beads made of various

stones and vitreous materials, a scarab, part of a lapis lazuli fish amulet, fragments of an alabaster vase, an ivory egg-shaped artifact, and two spindle whorls made of shell; however, in the southeast bench, only more inlay pieces were found (Woolley 1955, 64-65).

A three-stepped altar was found in front of the bench along the northwestern wall (Woolley 1955, 63). This altar was made of mudbricks with the cement flooring extending up on the sides and onto the top of the first step. The second step was made of ashlar masonry, and above the second step, rough stones implied a third; behind this were three stones which partly overlapped the bench. One of these overlapping stones had a hollow on the top with a spout jutting out from its southeastern side (Woolley 1955, 63). This whole installation was topped with a basalt altar; libations poured into the basalt altar probably would have emptied into the hollow, and then onto the floor (Woolley 1955, 63). This intricate installation stood on a raised, semicircular platform. There were two gaps along the edge of the platform: next to one of the gaps, a basalt pedestal lamp was found which likely filled one of the gaps. Woolley speculates that an elaborate pot stand, decorated with female figurines, that was found nearby could have filled the second gap (Woolley 1955, 64).

The floor of the inner shrine was found covered with a thick deposit of ash and burnt debris, including burnt mudbrick. In this deposit was found the diorite statue head (assumed to depict Yarim-Lim), an Egyptianizing statue head, a basalt bull head, pieces of composite statues³⁷, and burnt tablet fragments. Outside the door of the shrine, more inlay pieces were found (Woolley 1955, 65).

³⁷ These consisted of beard and hair pieces (Woolley 1955, 64).

The end of the temple is marked by a violent destruction and looting, contemporary with that of the Level VII Palace. The boxes in the benches were ripped open and emptied, and the pot stand and the basalt lamp were shattered all over the floor, testifying to the violent looting. The whole structure was then razed (Woolley 1955, 64).

The MBA temples in Levels XVI, XV, XIV and XII don't show any unorthodox changes. The temple seems to be constructed in the same fashion - a rectangular structure with a cella at the back, an antechamber, and a court. The complexity of the temple increases from Levels XVI to XII as more elaborate plans are evident, especially in the courtyard of the Level XII temple. The stability of the temple is understandable, since it corresponds to the time of a single political unit where Alalakh was the capital of the small regional kingdom of Mukish. The biggest change in the temple plan comes at the end of MB II, which corresponds to the period when Alalakh was a vassal of Yamhad³⁸. The temple is connected to the palace in Level VII, both physically and likely also functionally, and the plan completely changes into a square structure with massive walls. This is not the only example of this phenomena where the temple is found connected with the palace: a similar situation is also seen in Kültepe-Kaneš where the proximity of the temples to the palace is very close, which may indicate a similar temple palace connection.

Although it is not known when Yamhad took political control of Alalakh, it appears to have occurred sometime between Levels XII-VII. However, the only preserved temple plan from this period (after Level XII) is Level VII; Level VII is strikingly different from Level XII. This later temple type may be related to the

³⁸ It is unclear which Level corresponds to the period when Yamhad first gained control over Alalakh, due to the lack of textual records from the site, as well as the limited exposures, before Level VII. However, the lack of preserved temple plans for Levels XI-VIII mean that the Level VII temple is likely the only representative structure from the Yahmadian vassalage at the site.

Yamhad hegemony, but we cannot evaluate either the period in which this change took place or, therefore, the motivations behind it, due to the lack of plans in Levels XI-VIII.

Similarly to Tilmen Höyük, the MBA Alalakh temples belong to the Syro-Mesopotamian tradition. Many of the preserved MBA temples at Tell Atchana are the Syrian-style temple *in antis* that is also seen in Tilmen Höyük's Building M and other temples as Ebla and Halawa. The temple of level VII is especially interesting, the thick angular walls and the stern façade is comparable to what we see in central Anatolia in this period³⁹. It is possible that the idea of a single roomed temple with a strong façade is inspired from the same cultural horizon.

6.2.2 LBA Temples of Alalakh

After the sacking of Level VII, there was a change in the area of the shine, but not the location of temple itself. The area of the Level VII shrine was left in ruins, and rubbish pits from Levels VI and V were found there (Woolley 1955, 66). The back wall of the new LBA sanctuaries are built over the façade of Temple VII, so that the new temple is shifted towards the south, corresponding to the area of the Level VII temple court (Woolley 1955, 56). Of the Level VI temple, only a wall foundation fragment, associated with a patch of pebble flooring and some disarticulated wall fragments to the south of the flooring, were discovered (Woolley 1955, 66). Probably belonging to the Level VI temple was a fragment of a bowl rim, made of Egyptian blue with the handle in the form of a lion. This handle is like the one that was found in the Level II temple treasury (see below) (Woolley 1955, 65-66).

³⁹ Also seen at Aleppo in the same period see below.

Nothing is preserved of the Level VI temple because the Level V sanctuary was below ground, and therefore the construction of it destroyed the Level VI temple completely (Woolley 1955, 66). Not all of Temple V is preserved: only the sunken inner chamber was found, with what Woolley calls the service chambers surrounding the main temple on its northern and eastern sides in an 'L' shape (Fig. 80) (Woolley 1953, 95).

The inner chamber was rectangular in shape, and the entrance was located on the southeastern wall. Upon entering, one had to go down a flight of stairs to reach the floor level, as the cella was sunk 1.8 m below ground level (Woolley 1955, 68). The chamber itself had a mud-plastered bench on the northwest and northeast walls, and the walls and the floor were also mud-plastered (Woolley 1955, 67). The rectangular mudbrick altar, also mud-plastered, was across from the entrance door against the bench on the northwest side. The altar had a rectangular depression on the top with signs of heavy burning (Woolley 1955, 67). In the southwest of the room was a sunken circular basalt column base, on top of which were two shallow cupmarks. On either side of the altar, there was an upright wooden post, perhaps indicative of some sort of superstructure (Woolley 1955, 68).

Outside of the temple, there is believed have been an open courtyard, where several pits were found which revealed various elaborate artifacts (Woolley 1955, 71). These artifacts include a gold filigree brooch, a faience bowl with Egyptian scenes and hieroglyphics painted on it, and Black Impressed Ware beakers (Woolley 1955, 71). Woolley suggests that these were disposal pits for objects that were dedicated to the deity of the temple (Woolley 1955, 71).

The service chambers found around the temple include two lavatories (rooms 1, 2), although the function of the other rooms is unknown. Room 3 had

whitewashed walls, a pedestal, and a staircase, and room 4 was also plastered. More information on the other rooms is not given, and, furthermore, all of them, based on the amount and quality of the filling found inside of them, were left to decay naturally after their use-life, rather than being deliberately destroyed or leveled (Woolley 1955, 70).

The Level IV temple is a rectangular structure with three broad chambers which lead onto one another (Fig. 81). The temple's northeastern wall is by far the thickest - 4.75 m thick with a stone-lined drain running through it. The drain opens out to the first chamber, identified as a porch (Woolley 1955, 71). Woolley believed that the wall was so thick because a staircase might have been located in the middle of two walls, creating this gigantic wall (Woolley 1955, 72). However there cannot be a second story, because the other walls are too thin to support another level. Additionally, the niche in the back wall of the innermost room suggests that this was the main cult room, leading Woolley to suggest a flat, open roof that was accessible from the staircase, rather than a second story (Woolley 1955, 72). In the niche, below the floor level, were some burnt bones, two short strips of lead, and beads made of amber and vitreous materials (Woolley 1955, 73). Although the Level IV palace was destroyed by conflagration, the temple remained untouched (Woolley 1953, 114).

The Level III temple layout is completely different than any of the previous temple plans (Fig. 82). This may be connected to the fact that towards the end of the Level III period the Hittite occupation starts. The big change of the temple may be connected to the re-building by the Hittites. The old walls of the Level IV temple were pulled down and a platform 2 m high was constructed (Woolley 1955, 73). The new temple complex consisted of two buildings connected to each other with a wall, but facing opposite directions. Woolley reconstructs an outer court with a white

cement floor, although only the northeastern corner of this so-called court is preserved (Woolley 1955, 74). This outer court leads into an inner court with an altar placed before the entrance to the temple proper. The entrance is wide, with two square mudbrick pillars encased with wood, and gave way to the portico (Woolley 1955, 75). To the southwest of the portico, a staircase curves to the north and leads to a transitory room. This room leads to a large chamber in the northwest which seems to be the main cella where the direct axis of the previous period has been shifted to be a bent one, much similar to what we see in Hittite temples. However, Woolley indicates that the staircase in the northeast may have led to the actual sanctuary on a second story, which is lost to us (Woolley 1955, 73-75). To the southeast of temple proper is another structure called shrine B.

Shrine B is roughly square in shape with unusual rounded corners. The entrance to the shrine is from the northwest and cannot be accessed through the main temple's inner courtyard. In the entrance of the shine sat a central column, the material of which is not known (Woolley 1955, 76). The entrance leads to a small room with a square, central hearth. Along the northeast and southwest walls were plastered mudbrick benches. The room led to a staircase, which gave way to a second story where the main chamber was likely located, much like its counterpart in the temple proper (Woolley 1955, 77). Under the shrine's room floor were several large copper slags. The whole complex was destroyed by a massive fire (Woolley 1955, 77).

To construct the Level II temple (Fig. 83), the walls of the Level III temple were razed to create a base, raising the level of the courtyard 1.4 m (Woolley 1955, 78). The old wall stumps were used as the foundations for the new temple, but the plan of the temple does not change dramatically, although now the cella is divided

into two and shrine B was not rebuilt. The whole building, including the courtyard, had cement flooring (Woolley 1955, 78-82). The courtyard in front of the temple, again, had an altar (Woolley 1955, 78) and a flight of stairs leading up into the temple itself, which gave way to a small portico. The antechamber was entered through a doorway with a basalt threshold with a gap in the middle, which may have held a wooden column (Woolley 1955, 78). The antechamber leads to two separate rooms, which are referred to as the double cellas. These were likely intended for the worship of double deities, which is reminiscent of the cellas of Temple 1 at Boğazköy⁴⁰, as well as perhaps the shrines in Level V (Yener et al. in press).

Over the Level III shrine B was built a solid mudbrick platform. The additional subsidiary building in the form of an annex was moved to the northwest behind the temple. This annex was a later addition, not built with the temple itself, and the southwest part of it is an open court. The building was not very well constructed, and therefore the preservation was poor. The floor of the square building is of cement, and in the center there is a mudbrick platform only 150 cm high with whitewashed sides and a cement top (Woolley 1955, 81). Traces of burning were found on top of it. In the northern corner, there were the remains of a cupboard, inside of which was found a lapis lazuli goddess figurine, a bone figurine of a naked female carved in a somewhat Egyptianizing style, a human head of glazed frit, the remains of a toilet box carved in the shape of a water bird, a vase of Egyptian blue with the handle in the form of a lion (like that associated with the Level VI temple; see above), and fragments of glass vessels (Woolley 1955, 81).

Level I has three temples (Fig. 84); these were called, from earliest to latest, Ia, Ib, and Ic, and all had roughly the same plan (though no plan of Ic was recorded)

⁴⁰ For Temple 1 in Boğazköy, see Chapter 4

with interior variations. The Level Ia temple was constructed by using the wall stumps of the Level II temple and consists of a rectangular plan with a large cella and a smaller antechamber which was entered from a large courtyard (Woolley 1955, 82). In the main cult room, three recesses, each 2 m deep and separated by thick buttresses, were found. The central recess was open and lined with wood panels, based on the traces found on the floor. The buttresses on either side were fronted with basalt orthostats (Woolley 1955, 84). The side recesses were likely also lined with wood, but they were closed by lines of orthostats that extended across them from the buttresses. Nothing was found within these side recesses, although they may have served as cupboards for storing cultic paraphernalia or other temple goods (Woolley 1955, 82-84). In the wall behind the northeastern recess was a bronze dagger, a burnt alabaster base, glass vessel fragments, and burnt potsherds. These objects were built into the wall during construction, perhaps as a kind of foundation deposit (Woolley 1955, 84). Woolley believes that the other walls were also lined with orthostats, but there is only scanty evidence for this (Woolley 1955, 84). On the southern end of the doorway of the cella, a circular basalt stone slab was found. The wooden column placed on top of this slab burned, and the heat cracked the stone (Woolley 1955, 84). Woolley reconstructs a second column and corresponding base to the north of it, based on the off-center placement of the recovered column (Woolley 1955, 84). Although a column is also reconstructed in the entrance of the antechamber in Woolley's final plan, there is no actual evidence for it. The courtyard was floored with white cement, and in the north corner of the court was a deep, brick-lined well. Before the final destruction of the temple, the structure was systematically demolished, and some of the basalt orthostats were robbed. The end of the Level Ia temple came through fire and violent destruction (Woolley 1955, 85).

The Level Ib temple was rebuilt on the same lines, although with some new interior divisions. The new floor was level with the remaining (un-robbed) orthostats (Woolley 1955, 85). The courtyard was at the same level as before, creating a rise in elevation from the courtyard to the temple. The back wall of the cella was thickened, erasing the recesses on the back wall from Temple Ia (Woolley 1955, 85), and the cella door was narrowed; the columns in the entrance were not repeated. The antechamber was divided into three, and the door into the antechamber also had no column, based on the three basalt threshold slabs found *in situ* (Woolley 1955, 85-86). To get into the antechamber from the courtyard, a flight of stone steps was constructed. The platform containing the stone steps was flanked by two lions, which were built into the sides of the platform (Woolley 1955, 86).

One of the steps was an orthostat, turned face down, depicting and naming Prince Tudhaliya, Great Priest, and Princess Ašnu-Hepa (Yener et al. 2014, 136). The lions were probably reused from Level II, when they may have been placed flanking the entrance to the temple (Woolley 1955, 82)⁴¹. In the courtyard, which was repaved several times over the course of Level Ib, was a plain basalt column base centered between two large basalt blocks (Woolley 1955, 86). The entrance to the courtyard was columned, and a hand-shaped ivory libation pourer was found in the doorway; next to the pourer was a basalt altar broken into two (Woolley 1955, 87). Also near the entrance to the courtyard, a miniature juglet of North Central Anatolian type (the same type as the miniature juglets found in temples at Boğazköy; see Chapter 4) and an arrow head were found (Horowitz 2015, 170; Akar 2017, 6, 8). In the southern corner of the court, Woolley reconstructs a small room on the basis of a raised basalt threshold. In the northern corner of the courtyard, there was an *in situ*

⁴¹ Woolley believes these lions belonged to the Level II because a fragment of a similar lion sculpture was found below the foundations of the Level Ia temple, thus tying the lions to Level II.

basalt basin. The whole complex, including the courtyard, was covered with cement floors (Woolley 1955, 86-87).

To the east, sharing a wall with the temple proper, was a small annex. This annex was built on the large platform of Level II, above Level III's shrine B. The floorplan of the annex is heavily reconstructed, as Woolley was able to reveal only traces of the walls by scraping the floor of this area; the only *in situ* architectural feature is the basalt threshold (Woolley 1955, 86). Based on the floor traces, Woolley restores this place as containing three rooms in an 'L' shaped arrangement. All the objects found *in situ* on the floor belong to the destruction level of Temple Ib (Woolley 1955, 86). In the southwestern room of the annex was a statue base and an altar, as well as a Hittite bulla⁴², a basalt altar decorated with swans' heads, and a limestone statue of a seated figure which is very heavily damaged⁴³. In the northeastern room, a bronze spearhead with two lions holding the blade⁴⁴ was found, and within this area was a pit that had been sealed with two orthostats and a basalt footed column, below which the well-known statue of Idrimi was recovered (Yener 2011, 270; Woolley 1955, 86). The statue base found in the annex belonged to this statue of King Idrimi (Woolley 1955, 87). Idirmi's head had been deliberately broken off, likely in an act of ritual destruction or 'killing'. Woolley states that this annex might have been a memorial chapel for the commemoration of Idrimi's possible ancestor cult (Woolley 1955, 89). In the debris on the floor of these rooms, fragments of pot stands have been found, which may have been used for offerings (Woolley 1955, 89).

⁴² The biconvex bulla can be dated to the Hittite Empire period on the basis of both form and style (Boehmer and Güterbock 1987). The inscription reads 'Pa-lu-wa, son of the king, lord of the land' (Woolley 1955, 266).

⁴³ Woolley believes this to be the statue of a goddess; see Woolley 1955, 88-89.

⁴⁴ These lions are similar to those depicted in the Sword God relief at Yazılıkaya; for more, see Yener 2011.

The Level Ic temple had no new walls, and no changes were made to the plan (Yener et al. in press). The courtyard was repaved several times, raising the level and eventually burying the steps and the lions, so that only the heads of the lions were left exposed (Woolley 1955, 89). Woolley indicates that this temple was destroyed by fire (Woolley 1955, 89). The new excavators believe that it might be possible that Temple Ic is a sub-phase of Temple Ib (Yener et al. in press).

The strongest parallels for the LBA temples as a whole are in Syria, for example at Ugarit (Baal Temple and Temple of Dagan), Tell Munbaga, Emar (Temples to Baal and Astart in area A- M1 and M2), and Tell Brak (Mitanni Temple) (Akkermans and Schwartz 2003, 338-339; Pitard 1996, 17-21). The Level V temple, while Atchana was a vassal of the Mittani Empire, sees a change in style, with the temple itself being single-roomed and sunken into the ground. This is a feature which was not visible in the MBA, when, quite the contrary, the temple's main cella was usually constructed above the rest of the structure. This may be an indication of change in religious practice, where the cella being under the floor level was preferred for some reason. But I believe the option that Woolley suggests, with the Level V temple taken as a forerunner of the Mithras cult, is a stretch (Woolley 1955, 68). Also, the rooms found around the temple structure are very interesting, because such a complex is not seen in the other levels of Tell Atchana. Under the rule of Niqmepa, in Level IV, the temple again changed; it was now a rectangular building reminiscent of the Level VII temple. The sunken cella of the earlier period is abandoned, indicating a change in rituals or worship. The Level III temple changes completely while still under Mittani rule. The temple changes from a single entity to more of a complex once again, with both the temple proper and an annex. This may have developed from a need for the representation of a lesser deity. With the Hittite

domination in Level II, the temple changes again. This temple is referred to as a Hittite-style temple because of its double cella (as mentioned above). It is indeed very interesting, because the worship of two deities in one temple was not seen in Alalakh until this period. This possible influence from the Hittites seen in the temple is also visible architecturally in the Northern and Southern Fortresses at the site, which also display Hittite-style construction methods (Akar 2013, 46-48). Lastly, the Level I temples yet again reveal a new plan which is partly reminiscent of the Level XIV temple, where a courtyard, an antechamber, and the cella were easily distinguished, much like the Level I temples.

Overall, the temples of Alalakh give an unprecedented sequence of religious architecture in Anatolia and therefore, represent a crucial dataset. This is due to the visibility of the shifts of rule in the temple architecture throughout its existence. It is indicative of the trends in temple building both in northern Syria and the Amuq. The most important shift, which is our interest here, is the change of rule from the Mittani to the Hittites. Due to the problems with the dating of the Hittite rule at Alalakh, it is possible that the Hittites affected the temple structure either in Level III onwards or only at Level II. According to Kohlmeyer, the Level III temple is an indication of Hittite rule over the site and a consuquent change in the architecture (see further below). It is clear that Alalakh's architecture did not affect Anatolia; rather, Anatolian architecture affected northern Syria in the LBA⁴⁵. The (possible) shift in the temple axis in Level III and the double cella in the Level II are indications of these interactions. The changes in architecture at Alalakh are not completely different from the previous traditions, which also informs us about the position of religion when a foreign city is occupied (see further below).

⁴⁵ Also see Akar 2013 for further discussion.

6.3 Aleppo

The ancient citadel of Aleppo lies in center of modern day Aleppo, Syria (Fig. 85). The citadel is not an inconspicuous mound – on the contrary, it towers above the modern city. The citadel is one of the most important Islamic medieval military structures in Syria (Gonnella et.al. 2005, 78-80). Underneath the medieval architecture, a temple was discovered by George Ploix de Rotrou while doing restoration work on the medieval citadel (Kohlmeyer 2000, 17). De Rotrou found an orthostat with winged geniuses in the 1930s, which led him to start a small sounding that revealed part of the temple (De Rotrou 1931, 8; Kohlmeyer 2013b, 512).

Systematic excavations on the citadel started in 1996, led by Kay Kohlmeyer in collaboration with the Aleppo Museum (Kohlmeyer 2000, 18). The sounding opened by de Rotrou was used as a starting point for their research (Kohlmeyer 2013b, 512). The structure could not be fully excavated because it is underneath important later monuments, especially a Zangrid mosque and an Ayyubid palace (Kohlmeyer 2013b, 523). The excavations ended in 2005; throughout these nine years, the excavators were able to uncover the cella of the temple and fragments of the mostly destroyed entrance (Gonnella et. al. 2005, 73; Kohlmeyer 2013b, 512). It is known that the citadel was partially destroyed due to the Syrian Civil War, but it has been reported that the citadel is currently under reconstruction (World Monuments Fund).

Before its discovery, the temple and its history were known through cuneiform tablets found at Ebla which indicate that the rulers of Ebla were offering sacrifices to Adda and restoring his temple (Hawkins 2011, 36-38). In MBA texts found in Mari, the divine image of the god in the Aleppo temple is detailed (Durand

2002, 32). In the LBA, the Storm God of Aleppo is also mentioned in the archives of Hattuša (Haas 1994, 553-555).

Kohlmeyer's excavations reached a depth of eight meters, uncovering the earliest known level of the temple, which is dated to the mid-third millennium BC^{46} (Kohlmeyer 2009, 191). The temple structure spans from the EBA until the end of the Iron Age (Table 12) (Kohlmeyer 2009, 197). It is certain that the EBA temple is the earliest, because the excavators hit bedrock 20 cm beneath the floor level (Kohlmeyer 2012, 60; Kohlmeyer 2013b, 513).

1	Date	Period	Historical Event	Change in Temple
	2500 B.C.	Early Bronze Age	Kings of Ebla restores and gives offerings in temple	First temple, foundation deposit of Early Dynastic period
	2000 B.C.	Middle Bronze Age	Kingdom of Yamhad; cult image described in Mari texts	Renovation of temple with limestone orthostats
		Late Bronze Age I	Aleppo under Hurri- Mittani rule	Renovation with basalt orthostats
	1500 B.C.	Late Bronze Age II	Suppiluliuma I conquers Aleppo, and it falls under Hittite rule	Temple destroyed by fire – presumably during conquest Extensive restoration, change of cult direction to a bent axis, new relief decorations
	1200 B.C.	Iron Age	Luwian-Aramean minor states 11 c. B.C. Aleppo under the rule of the Kingdom of Taita (Palistin) Aleppo under control of Bir Agusi	Temple destroyed by fire again Reconstruction, change of sculptures, shift back to direct axis Change of reliefs, final destruction level due to fire

Table 12 Levels of the temple at Aleppo, corresponding historical events, and architectural changes (After Kohlmeyer 2009, 197).

⁴⁶ This early temple is believed to be the temple mentioned in the Ebla archives (Kohlmeyer 2009, 194).

6.3.1 MBA Temple of Aleppo

The whole temple could not be exposed due to the restricted excavation area: only the cella, entrance room, and parts of the two adjacent rooms have been unearthed (Fig. 86). The temple lies on top of the EBA temple, and the wall stumps of the EBA structure have been used as the foundation for the MBA temple (Kohlmeyer 2012, 60).

The cella of the temple is broad-room style, measuring 27 m x 17 m (Kohlmeyer 2009, 194). According to the excavators, if their reconstruction is correct, the temple's outer boundaries must have measured 42 m x 42 m during its use (Kohlmeyer 2012, 58). On the center of its northern wall, a cult niche (4 m deep, 8 m wide) is located which is positioned directly across the entrance of the structure, creating direct access to the divine image (Kohlmeyer 2009, 194). When the northern side of the temple was excavated, a 10 m thick wall was exposed; this led the excavators to believe there was more than one story. The outer façade of the wall is preserved up to 4.5 m (1.5 m smooth limestone slabs with a 3 m tall mudbrick superstructure), while the inner façade consists of 1.2 m high limestone orthostats, with the exception of the niche, which was constructed of massive, rough-cut limestone blocks (Fig. 87). Three round bases with diameters of 1.2 m were found within the cella. These bases are located 1) in the northwestern corner, 2) 4.5 m to the east of the first one, and 3) halfway between the cult niche and the eastern wall, although this third is preserved only in fragments (Kohlmeyer 2012, 59). The exact function of these bases is not known, but Kohlmeyer believes that they might have been used as bases for cultic paraphernalia (Kohlmeyer 2013b, 513).

The entrance of the structure is from the south, through a 3.8 m wide doorway where two pivot stones were found, indicating the use of a double-leaf door (see Fig.

86) (Kohlmeyer 2012, 60). The excavators determined that the antechamber was flanked by two rooms. The room to the east was found completely destroyed, except for a foundation stone, while the room to the west was better preserved. Kohlmeyer reconstructs these two rooms as symmetrical in their appearance and size. The western chamber is believed to be the staircases which led up to a second story (Kohlmeyer 2012, 61; Gonnella et.al. 2005, 90). This assumption is based on the great amount of burnt wood debris found within the confines of this room, which Kohlmeyer believes indicates the presence of a wooden staircase (Kohlmeyer 2013a, 188).

Artifacts found in the MBA temple consist mainly of worked stone. A relief block with two worshippers in kilts and upraised arms was uncovered (Fig. 88, right), which is believed to be part of a larger scene, since whatever the figures are worshipping is missing (Kohlmeyer 2013b, 516). An Old Syrian style sculpture corner fragment was also found, which is decorated with fighting men and two figures which may be bound men lying on the floor (Fig. 88, left) (Kohlmeyer 2013b, 516).

The broad-room style of the temple links it to tower temples, which are common in the Levant (Kohlmeyer 2012, 516). Religious structures similar to the temple at Aleppo are also found in Anatolia (Kültepe-Kaniš) and in the Near East (Alalakh, Hazor) (Fig. 89) (Kohlmeyer 2012, 59).⁴⁷ Since the building has been identified through texts and artefacts as a temple, it especially may aid in positively identifying the so-called temples at Kültepe-Kaniš. The similarities are uncann,y indicating that a common temple type was in fashion throughout the period in these regions. This is not unexpected, since these cultural spheres were in constant contact

⁴⁷ See also Chapter 4.

due to their trade relations, and these close connections might be the reason we see the same temple type at Kültepe-Kaniš. The similarity of the Aleppo temple may indicate that the Kültepe-Kaniš temples were built according to Near Eastern traditions; this is very probable, since the presence of the Assyrian traders could have effected the architecture on the mound throughout the years of trade.

6.3.2 LBA Temple of Aleppo

The LBA temple consists of two phases – the first phase is ascribed to the period of Hurri-Mittani rule (LB I) (see Table 12), while the second phase is dated to the Hittite rule over Aleppo (LB II). The MBA temple transitioned to the first phase of the LBA with minor renovations. The only changes were those made to some of the orthostats (Kohlmeyer 2009, 194), with those on the western wall replaced with plain basalt ones; apart from this, there were no other changes in this level (Kohlmeyer 2013b, 514). At the end of the LB I period, the structure was completely incinerated, and the burnt mudbricks show the force of the destruction of the fire (Gonnella et.al. 2005, 90).

The destroyed temple was reconstructed in the later LBA, specifically the late 14th –early 13th centuries BC, corresponding to the Hittites' rule, with a few alterations (Kohlmeyer 2009, 194). The inner dimensions⁴⁸ of the cella were reduced by widening the northern wall from 10 m to 13.4 m (Fig. 90). The rebuilding left the cella narrowed on its north-south axis, measuring 13.3 m (Kohlmeyer 2012, 62). This expansion of the wall caused the plain orthostats of the MBA period to be buried under the wall, whereas the orthostats on the other walls of the cella were all replaced with relief-decorated ones.

⁴⁸ The outer dimensions of the temple are not known, because the excavations could not be expanded that far.

Within the cella, orthostats depicting false-windows, bull-men, and the Storm God, as well as the top of a basalt altar, were found. The orthostat with the Storm God had a central place on the eastern wall and was flanked by bull-men on either side, which were also flanked by the so-called false (pseudo) window orthostats (Kohlmeyer 2013, 197). According to Kohlmeyer, the orthostat with the Storm God must have been the cultic focal point (Kohlmeyer 2012, 61-62). The Storm God relief is two meters high and depicts the Storm God in a smiting pose, accompanied by an identifying inscription. The excavators believe that the location of the Storm God on the eastern wall indicates that the axis of the temple had shifted from a direct one to a bent axis (Kohlmeyer 2009, 194). This is interesting, since the restoration of the temple coincides with the Hittite domination of the settlement. It is known from Hittite temples in the Empire's heartland that in order to access the divine image, one enters the cella and executes a 90 degree turn to view the divine image. Additionally, Kohlmeyer indicates that the use of the false window motifs was intended to resemble the design of Hittite temples. It is known that there were windows in the cella to let in sunlight in Hittite temples, but since the architects at Aleppo were not going to be able to open windows through the 10 m thick walls, they solved the problem by adding these pseudo-windows to give a similar illusion (Kohlmeyer 2013, 202). Kohlmeyer also believes that a similar imitation of Hittite temple design is visible in the plan of the entrance – because it would not be possible to change the location of the entrance, they changed the focus of the cult image in order to mimic the bent access of Hittite temples. This change in the axis, along with the new false window orthostats, led Kohlmeyer to believe that the temple was altered according to Hittite beliefs (Kohlmeyer 2012, 63).

South of the northern wall of the cella, a "pedestal wall" was found (Kohlmeyer 2009, 195). It consisted of three reliefs with dowel holes on top, indicating a wooden mounting (Kohlmeyer 2013b, 514). These bas-reliefs were found *in situ*, and they depict a god (believed to be a mountain god) raising his arms, a winged lion with a human head and another lion head located on its breast, and a composite figure with a lion body and a raised tail, though the rest of this last figure was not recovered (Kohlmeyer 2013b, 516-517). The entrance to the cella was also decorated with sculptures and orthostats. The western side was adorned with a lion, a sphinx, and an orthostat of a fish genius (Fig. 91), while another (fragmented) lion was found along the eastern side (Kohlmeyer 2013, 198). The sphinx and the lion show features which are Hittite, and they are similar to the sphinxes seen at Alaca Höyük and Hattuša, while the fish genius is a Mesopotamian figure (Kohlmeyer 2009, 195). The LBA temple was destroyed by fire, and was reconstructed in the Iron Age, when the former direct axis of the temple was restored, and new orthostats were installed.

The temple shows dramatic changes, though not in its plan, but in its axis. It is important, again much like at Alalakh, to see how Hittite rule over a settlement affected their religious architecture. One can see that though they choose to keep the original structure, various architectural and decorative features were changed to accommodate Hittite religious beliefs. This is also further indication that the Hittites believed their religious beliefs were an integral part of their culture and needed to be imposed over the settlement which had been incorporated as a vassal state.

Compared with the cella of the Great Temple at Hattuša (Fig. 92) and the location of the windows, the door and the pedestal for the cult image correspond with those in the Aleppo temple. In particular, the fact that the bent axis only coincides

with the Hittite occupation in Aleppo, along with the axis being restored to its previous state in the Iron Age, supports the blatant Hittite influence on the temple. This shift is also visible in the Level III⁴⁹ temple in Alalakh, where the direct axis of the previous temple was shifted into a bent axis, along with other renovations within the structure (see above) (Woolley 1955, 77; Yener et al. in prep).

The temple of the Storm God is one of the most important religious buildings in northern Syria, mainly due to its preeminent position within the city and the continuous occupation from the EBA until the Iron Age. The architecture and decorations used within embody the artistic representations of religious subjects in various periods and how these stylistically and ideologically changed with foreign influences. Especially in the LBA, where local elements have been fused with foreign (Hittite), this is also an indication of the adaptability of the Hittites.

6.4 Conclusions

Overall, it can be observed that in the MBA, when we compare northern Syria with the two examples in Anatolia (at Beycesultan and Kültepe-Kaniš), the structures are fairly similar. The temple at Tilmen is parallel to what we see in Beycesultan in the MBA, while what we see at both Aleppo in the MBA and the Level VII (MBA) and Level IV (LBA) temples of Alalakh are comparable to the temples at Kültepe – Kaniš. The similarity in these two regions in this period is important, because for the Beycesultan shrines, it indicates that their religious architecture may have been influenced from the Near East in the MBA and even in the LBA, considering the continuing use of the megaron structures. This also opens

⁴⁹ The later part of Level III at Tell Atchana has been associated with the Hittite occupation, and therefore this might have been the reason why the shift happened, just as it did with the Aleppo temple; nonetheless this has to be taken with a grain of salt, since the stratigraphy and chronology is being revised by the excavators and may not reflect what has been stated above (Woolley 1955; Yener et al. in prep).

up an interesting discussion on the terms used for similar structures used in different regions. When regions like these are compared, one sees that the megaron of the west and the temple *in antis* of the east describe the same type of structure with the same layout.

What we see when central Anatolia is compared to northern Syria is very similar. The temples of Kültepe-Kaneš are one of a kind, as no other structure has been discovered in the MBA or earlier at the site, and to find parallel structures both at Aleppo and Tell Atchana is interesting. It is known that this temple type, also known as the Migdol or tower temples, is seen in the Levant as well. This similarity may indicate that religious architecture in MBA central Anatolia was influenced by the Syro-Mesopotamian cultural sphere of the same period; as mentioned above, this should not come as a surprise, because of the active trade between the Near East and central Anatolia in this period. In these four centuries, it is very likely that Near Eastern beliefs and architecture influenced Anatolian ones.

In the LBA, the plans of temples in northern Syria do not change dramatically, but there are small changes we see architecturally, especially when the region was annexed into the Hittite Empire. In this period, influence does not come from the east to Anatolia – instead, is looks like Anatolia developed a monumental and complex structural style for their religious architecture and that this culture influenced northern Syria. What we see at both Aleppo and Tell Atchana is that, with the shift to Hittite rule, their architecture underwent small but significant changes. These changes are seen in the axis of the cult, which before Hittite rule was direct, but following Hittite occupation shifted to a bent axis. Changes are also seen in the decorative elements of the temples, especially in the Aleppo temple, where Hittitestyle reliefs were used, along with false-windows. These windows were used to give

the illusion of actual windows on both sides of the divine image, copying what it would have been like in the capital of Hattuša. At Tell Atchana, we see a similar change of axis in the Level III temple and a possible architectural copy of the double cellas in the Great Temple in Level II. These changes in the northern Syrian temples in this period indicate that the previous flow of influence from Syria to Anatolia reversed, at least in areas where the Hittites ruled. These changes of axis and decoration observed at both Tell Atchana and Aleppo switched back to previous models after the Hittite Empire's fall.

However, one important decorational element of northern Syria was adapted into the Hittite's architectural style: the orthostat. The first examples of these as a building technique are found in northern Syria as early as the early second millennium BC in public buildings, and their use is part of the Old Syrian building tradition (Harmanşah 2013, 176). This indicates that in the LBA, Anatolia was still influenced by the Near East. In the following chapter, the discussion is furthered with the aid of space syntax analysis.

7. CHAPTER 7 – Space Syntax Analysis – Results

As mentioned in Chapter 2, space syntax analyses includes a variety of analyses which can be utilized to read the language of the buildings. In this chapter the results of the temple analysis are discussed. Although the results are discussed below, reading the results from the graphs may be challenging to the untrained eye. In the jgraphs each line of nodes indicate a depth, bottom – up the depth gets higher which means that the accessibility of that specific level of node/nodes are difficult. Distributedness and symmetry is explained best by Fig. 93. Both of the structures yield the same layout but the doorways are constructed differently, which leads to two different j-graphs. The j-graph of building A shows a high degree of symmetry and distributedness where these are seen from the interconnectedness of the nodes, whereas building B shows a non-symmetrical and non-distributed building which can be understood from the linear j-graph and the single route one has to take to reach certain rooms.

The VGA graphs are straightforward as red spots are hot areas whereas blue spots indicate cold areas meaning: in visual connectivity maps the red areas indicate that visual connectedness, openness and visibility is high, and in the blue areas these are low; in visual integration maps the red areas indicate high visual integration, accessibility and encouraged pedestrian activity, and in the blue areas these are low and not encouraged. If both of the graphs show red spots in similar areas this is believed to indicate higher interaction between the people residing the structure.

Keeping these in mind further conclusions can be drawn from plans since each culture applies their own traditions and way of living to their buildings; these are visible by aforementioned graphs and these reveal regional patterns. The following section aims to come to similar conclusions through these analyses.

7.1 Site Results: Middle Bronze Age Anatolia

7.1.1 Western Anatolia

7.1.1.1 Beycesultan

The Level V shrines consist of the western shrine and its subsidiary rooms and the eastern shrine and its subsidiary groups. The building shows symmetry and non-distributedness in its j-graphs (Fig. 94 B), meaning that it was accessible to most people, especially considering the fact that where the cellas are believed to be located are either found at a depth of one or two nodes with direct access. In the western shrine, the node depth is highest in its subsidiary rooms, indicating that these might have been storage rooms, where valuables were stored and thus harder for the public to reach. On the other hand, in the eastern shrine, nodes 6, 9, and 1 are known to be cellas⁵⁰ (Fig. 94 A). 6 and 1 are directly accessible at a single depth, while node 9 (indicated as being a sanctuary) has a depth of three nodes, indicating that access was not as easy as the western cella. The variety of access depths in this single religious structure may indicate that various deities required different levels of accessibility. The visibility graph analysis (VGA) results confirm the access analysis: the visual connectivity map (Fig. 95 A) shows that visual control of the structure is located outside of the rooms, while the visual integration (Fig. 95 B) map suggests that pedestrian traffic is focused on the doorway of the western shrine and the singleroomed cellas of the western shrine.

The Level IV structure shows a depth of three nodes, where the deepest node is not the cella itself but a subsidiary room located between the two megara (Fig. 96). Access to the cella in both the western and eastern shrines is through easy, direct

⁵⁰ This is because of the decorated hearths found in them.

access. The j-graph of the structure shows symmetry, which means that the structure was made to promote social integration, but it is non-distributed, indicating spatial control over the structure and suggesting that certain rooms, such as node 5, were inaccessible for public use (Fig .96 B). Both visual connectivity (Fig. 97 A) and visual integration maps (Fig. 97 B) conform to the access results. The visual control over the structure is located outside, specifically at the outer doors, but, interestingly, is also concentrated in the open spaces and within the cellas where they connect to other rooms; this indicates that visual control was high in the inner rooms, and they were not available for pedestrian traffic.

7.1.2 Central Anatolia

7.1.2.1 Kültepe – Kaniš (Nesa)

Both buildings of Kültepe have a depth of one node (Fig. 98), since they were single-roomed structures with easy and straightforward access. No spatial control within the structure was necessary, but this does not mean that there were not guards or religious personnel in and around the structures. The VGA (Fig. 99) results are the same for the two buildings, due to the similarity of the plans. The visual integration (Fig. 99 B) shows that the most trafficked part of the structures was the outside open area, while the visual connectivity (Fig. 99 A) maps show the most visible parts are the centers of the cellas. These results are not unexpected, since the structures consist of only one chamber.

7.2 Site Results: Late Bronze Age Anatolia

7.2.1 Western Anatolia

7.2.1.1 Beycesultan

The Level III shrines, although they are called twins, have different depths in their access analysis (Fig. 101). The main cult room of the shrine to the west is at a higher depth (by one node) because the shrine to the east has more rooms. Similarly, the entrance to the eastern shrine, unlike the western, is not on a direct axis, as entrance is directed through a room which creates a bent axis. In both shrines, the altar is placed in front of the small wall in the middle of the main room. The greatest control over access in these two shrines is at the entrance, which is predictable, since the shrines are linear in plan and are not interconnected (Fig. 100 B).

The visual integration map (Fig. 101B) likewise indicates that pedestrian traffic was concentrated in front of the shrines and in the bent axis entrance of the eastern shrine. The bend that one had to take to enter the shrine also causes access to be more discouraged than in its western counterpart. The visual connectivity map (Fig. 101A) shows the greatest control over visibility at the entrance and in the western shrine's main room. This may be an indication that the shrines, although they look very similar, had different levels of sacrality, meaning it is possible that the eastern shrine contained a higher grade of deity which was less accessible to the public. This can also be understood through the bent axis entrance.

The Level II shrine's access analysis shows that the depth of access shifted between the shrines (Fig. 102). While the western shrine became more secluded, the eastern shrine is more accessible (Fig. 102 B). The control points, according to the access analysis, seem to be nodes 3 and 6, as they are the most connected and are both transitional places. This means they are places to pass by and that no sacred activity took place here, but they nonetheless affect behavior within the structure, since they are the indicators that one is approaching the sacred room. The integration map (Fig. 103 B) shows that pedestrian movement is still centered mostly in the entrances of the shrines and cellas. The visual connectivity (Fig. 103 A) suggests that the shrines are more visible than in the previous Level, and that hot spots are located directly in front of the cella entrances. Although visual control might be higher in the shrine to the east, overall visibility is higher within the two shrines than in the previous level.

7.2.2 Central Anatolia

7.2.2.1 Alaca Höyük

The access analysis of the temple-palace indicates the burden of access distribution throughout the structure is in the inner courtyard (node 4) (Fig. 104). The j-graph of the temple-palace shows that access to the whole complex is controlled by node 2, which is the room directly after the outer court (Fig. 104 B). The fact that this control point is accompanied by a small room on the side supports the suggestion of a place for guards or purification. After this checkpoint, one is led directly into the inner courtyard, where access to the rest of the complex is enabled. The whole structure is relatively symmetrical but non-distributed. This indicates that the interaction of the inhabitants of the building was promoted, but the non-distribution of the syntax shows that certain areas, especially the eastern section, were harder to access. This might be because it was the living quarters for the ruler/administrator.

The visual connectivity map (Fig. 105 A) indicates the complex's entrance and its small control point are visually strong, with the line of sight from here covering the whole courtyard. The visual integration map (Fig. 105 B) shows integration of the outer and inner courts, with high integration centered at the two doors. The rooms around the courtyard are less integrated, especially the eastern quarter, which is divided into two segregated areas. Due to the lack of visibility and integration here, it is possible that these places were administrative quarters (north) and/or living quarters (south).

7.2.2.2 Boğazköy - Hattuša

7.2.2.2.1 The Great Temple (Temple 1)

The access analysis reveals that the temple is multi-leveled: seven levels of depth are apparent from the j-graph (Fig. 106). The connectedness is highest in nodes 22 (ambulatory space) and 24 (courtyard). The connectedness of the courtyard is no surprise, since it is the central space to which all others connect. It is interesting that the colonnaded ambulatory is very connected - this may be because after entering the courtyard to reach either one of the cellas, one has to pass through this space. Nodes 48 and 51 are the deepest nodes of the whole structure; as mentioned in Chapter 4, these rooms were preparation rooms for the cult images, which were not accessible to anyone other than the assigned priests. This is why the syntax of the building made them so secluded, to the point that there is only one route to reach the cella and its subsidiary rooms.

The VGA correlates with the results of the access graph (Fig. 107). Both the visual integration (Fig. 107 B) and visual connectivity (Fig. 107 A) maps show that the courtyard has the most connectivity and is integrated with the rest of the temple. Although the visual control is mainly in the courtyard, some of this control is also distributed towards the colonnaded ambulatory and the entrance of the building. The entrances are especially interesting, due to their high visibility, while the rooms around are not as visible, likely because of their function as guards' rooms. These rooms had to be visually deep, and therefore not very visible to the visitor, but also had to be controlling for the guards. The rest of the temple is less integrated, especially the two cult rooms. It is no surprise that the cult rooms and their subsidiary rooms are out of sight and secluded. As mentioned in Hittite texts, only a select few were able to access the holy of holies (Miller 2013, 242-259; Wightman 2007, 932). This seclusion also

applies to the so-called "state-rooms", indicating that what Puchstein proposed might be right (see Chapter 4).

7.2.2.2.2 Temple 2

The access analysis reveals twelve levels of depth and is symmetric but nondistributed in its syntax (Fig. 108), as indicated by its j-graph, where the symmetry of especially the lower levels is apparent (Fig. 108 B). This indicates high levels of social interaction, suggesting that most of these lower level rooms were tertiary spaces used by temple staff. The upper level rooms show less symmetry; this must have been purposeful, since no one other than a chosen few were supposed to enter these areas and interact with the divine image. As with the Great Temple, the most secluded area in Temple 2 are the rooms for the upkeep of the divine image. The syntax of the temple is non-distributed, suggesting that a high degree of familiarity with the building was needed to successfully and easily navigate it. This further implies that there was a high degree of spatial control in these more secluded areas, which can be identified as the nodal levels above three. The visual connectivity map (Fig. 109 A) shows the highest connectivity in the courtyard, as expected based on the j-graph. When entering, one could only see the courtyard and nothing else, indicating visibility control. The visual integration map (Fig. 109 B) shows that pedestrian traffic was mainly concentrated at the entrance and the courtyard, while the cella and its subsidiary rooms were out of public reach, which agrees with textual evidence regarding the temples (see Great Temple analysis above). Visual and pedestrian movement to certain places are often obstructed by changing the axis of the doors from the entrance of the courtyard, verifying that everyone was not allowed everywhere. From the map, some access to the rooms around the courtyard is less strictly controlled than seen in the Great Temple, which may indicate their use as daily activity rooms (such as kitchens or workshops).

7.2.2.2.3 Temple 3

Temple 3, although similar in plan to Temple 2, gives a different syntax. There are nine levels of depth, and the plan is symmetric but non-distributed (Fig. 110). As with Temple 2, the lower depths are easier to access, since their symmetry is higher, but upon reaching certain areas, the plan becomes non-distributed, making it difficult for the visitor to navigate if they are not accustomed to the building. The access to the cella and its subsidiary rooms is through only one route and is non-distributed; this suggests, as with the Great Temple and Temple 2, that the cella, and especially the preparation rooms, were off-limits. The control of this area was provided by node 23 (Fig. 110 A). The visual integration and connectivity maps are also similar to Temple 2. The entrance and the courtyard are integrated (Fig. 111 B), but the integration of the courtyard and the surrounding rooms is higher due to the lack of a solid wall behind the columned hallways and direct access to various other surrounding rooms. The visual connectivity map (Fig. 111 A) gives high connectivity to the courtyard and to the colonnaded halls, but the connectivity does not allow the visitor to see further into the inner areas of the temple.

7.2.2.2.4 Temple 4

In Temple 4, interestingly, there is higher symmetry in the temple, but it is even more non-distributed than its counterparts at Hattuša (Fig. 112). When we look closely at nodes 16 and 20, it can be seen that these were key control points within the temple. The visual connectivity (Fig. 113 A) and integration (Fig. 113 B) maps both show a concentration in the courtyard, which is expected, as this is the diffusion point for the rest of the temple. In the integration map, the concentrations in the upper hall and its side rooms indicate heightened integration, showing these spaces were more open to pedestrian movement. However, this may also be due to the side door here creating a false visual integration point that would not have contemporarily functioned this way, since it is known from Hittite texts that these types of doors were used only by temple staff (see Chapter 4).

7.3 Site Results: Middle Bronze Age Comparative Sites from Northern Syria

7.3.1 Tilmen Höyük

Tilmen Höyük is asymmetric and nondistributed (Fig. 114). The building leads the visitor along a linear path with no available branching. To access the main cult chamber, one had to pass through two areas, giving a depth of three nodes.

The visual integration map (Fig. 115 B) shows that the most integrated area is the outer courtyard, whereas the cella, although not completely segregated, is less visually incorporated, due to the turn the visitor must take when entering the inner courtyard. The connectivity map (Fig. 115A) shows connectivity in the complete inner courtyard; this is the most connected area of the whole structure and the most visually dominant and controlling point, indicating one could see what was in the cella and outer courtyard easily upon entering.

7.3.2 Tell Atchana – Alalakh

The access analysis of the Level XIV temple (Fig. 116) reveals three degrees of access⁵¹ and an asymmetric and non-distributed plan. This suggests that the plan was constructed for easy control over the visitors. It is known from the Woolley excavations that the cella was located at the back, making this the deepest node. This is expected, as the cella, as the most sacred space, is often concealed at the back and harder to access. Visual integration (Fig.117 B) shows that the northern area of the cella was not visually integrated, meaning that it was meant to be secluded and

⁵¹ Here there are three degrees due to the missing doorway to the outer area.

perhaps indicating that the cult object was placed along the wall or near the mastaba. This might have been an area where visitors were not allowed frequently, though it also could be connected to the fact that the axis of the door shifts to the west from the entrance of the antechamber, making most of the cella even more visually secluded. The hot spot located in the entrance of the antechamber is parallel to the findings within the chamber: there were benches in the room where visual integration is the most dominant, and this may indicate a point of control, possibly a space for preparation before entering the cella. Visual connectivity (Fig. 118 A) is highest in the courtyard, possibly because it is the largest area, but since the entrance to the whole structure is not known, we do not know the exact visual effect.

In the Level XII temple, several things should be explained before interpreting the analyses. Node 7 on the access analysis is a cupboard under the stairs, while node 5 indicates a staircase, and node 6 (the cella) is located on an upper floor (Fig. 118). The building shows five degrees of access and is asymmetric and non-distributed overall (Fig. 118 B). There is a higher depth in the nodes than the previous level, indicating more of a seclusion of the cella. The VGA of the structure for the cella in the maps here is probably not indicative of the full picture, because it is located on the unpreserved upper floor (Fig. 119). From the maps, two points are visually integrated and controlling: the entrance of the building and the corner of the corridor. This indicates that the visitor would take this path, since it is the most visually available and would have been directly led to the cella on the upper floor.

The Level VII temple shows a drastic change in its plan, shifting from a multi-roomed structure to a simpler two-roomed plan. This causes a drop in depth of the access analysis from five to three (Fig. 120). Due to the linear syntax of the structure, the plan is asymmetric and non-distributed (Fig. 120 B). The syntax of the

temple leads the visitor directly to the cella without any alternate paths. This indicates strict control over people who reached the cella. The visual integration map (Fig. 121 B) shows high integration at the fragmentary part of the courtyard, which should not be taken into account because the entrance dimensions are not known. The cella was visible and reasonably integrated, suggesting that if one stood in the entrance or the antechamber, the cult object would have been visible, but not the whole room. The visual connectivity (Fig. 121 A) map also shows similar results, with the entrance to the courtyard and the courtyard itself being where connectivity and visibility are highest.

7.4 Site Results: Late Bronze Age Comparative Sites from Northern Syria

7.4.1 Tell Atchana – Alalakh

The Level IV Temple consists of a nearly square building divided into three rooms. The access analysis shows three levels of depth, and each room is connected to the others in a linear fashion (Fig. 122). The j-graph is asymmetrical and nondistributed (Fig. 122B). The depth of node 3 indicates it is the most segregated room of the temple, while nodes 1 and 2 can be considered as transitional spaces.

The visual connectivity map (Fig. 123A) shows that visibility was highest along the northwest axis of the temple, and the most visible area is in front of the niche. This means the cult object that was presumably placed in the niche of the back wall was highly visible, suggesting that this temple was built to show the cult object openly. The visual integration (Fig. 123B) suggests that pedestrian traffic was also directed along the northwest axis.

The Level III temple gives a completely different plan than the earlier levels (Fig. 124). The architecture is more complex, and the depth of the structure is
heightened to four. This means more units must have been passed to get to the most secluded rooms. The j-graph suggests that the temple is symmetric but non-distributed (Fig. 124B). The symmetry of the temple is due to the separation of the two sections, and I do not believe it indicates integrated social interaction, as would normally be the case. The visual connectivity map shows that the main visual control is in the outer courtyard (Fig. 125A). The visual integration map (Fig. 125B) also locates high pedestrian traffic in the courtyard. This analysis is not conclusive and should be approached with a grain of salt due, to the fragmentary nature of the outer area of the temple.

The j-graph of the Level II Temple shows symmetry in its deepest nodes but not distributedness (Fig. 126). This symmetry, with nodes 4 and 5 at the same level of access, agrees with Woolley's suggestion of two deities being worshipped here. The visual integration (Fig. 127B) is highest outside of the courtyard, but this is caused by the fragmentary nature of the plan and should be disregarded. The linear access to the temple is weighted towards to the western cella (Fig. 127A) - this cella and what it contained would have been immediately visible upon entering the temple, while the cella on the east would have been more secluded, since the visibility is lower here, due to the longer path and turn that a visitor would necessarily make to access this cella.

The Level Ib Temple suggests a return to a similar style of the Level IV temple, but with more complex internal divisions. The access analysis (Fig. 128) and the jgraph (Fig. 128B) show non-distributedness, but it is symmetric. Spatial control is centered at node 4, which is the unit that accessed most rooms, located in the middle of the temple. The symmetry of the graph may be an indication of social integration. Although the plan of the temple is partial, the dynamics of the space are much different than the previous level. The visual connectivity map indicates that the most visually connected part of the temple is the entrance, which might indicate that this was where the highest control was (Fig. 129A), although the view here is obstructed by a column. Apart from its weight-bearing properties, the placement of the column might have been a way to obstruct the view of the cult object. It is no surprise that the entrance of the temple was a place of control, as this was also true for many of the other temples from the site. The visual integration map (Fig. 129B) suggests that the most traversed area of the structure was the entrance leading along a straight axis towards the cella. It seems that the pedestrian traffic must have been concentrated at the entrance and in the courtyard.

The Level Ia Temple is very similar to Level Ib, but with slight changes in the internal organization of space. The j-graph indicates that only two rooms had to be traversed in order to access the cella. Of course, one should be aware of the missing section of the plan, which might have heightened the node depth (Fig. 130). Overall, the j-graph shows asymmetry and non-distributedness (Fig. 130B). The visual connectivity map of the temple gives visual control to the outer court (Fig. 131A). This correlates well with the j-graph, since this is the first access point of the temple. The visual integration map (Fig. 131B) indicates that visitors, when entering, would have been able to see the inside of the temple and the cult object. The integration drops after the first entrance; this may be due to the three columns located in the entrances which create a visual barrier for the niche where the cult object would have been placed, much like Temple Ib.

7.5 A New Perspective: Chronological, Regional and Inter-Regional Comparisons

In MBA western Anatolia, we see symmetry, but the syntax is non-distributed; however, in the LBA, the results shift to an asymmetrical and non-distributed syntax. This may indicate a change from a structure where social integration was possible to a structure where it was physically prevented. The depth of the j-graphs of the Beycesultan shrines range from 3-4 levels in both periods, suggesting simpler structures. The cult area and object are accessible by direct access, and the visual control and pedestrian movement is focused mainly outside of the structure at the entrance. When a person approached the shrine, the primary (cult object) and secondary (cella) spaces were accessible through only one transitory (antechamber) space. The transitory space might have been a liminal space where one could see the cult object and prepare oneself. Both analyses do not show immense change, which indicates that throughout the two periods, religious traditions had great continuity. The fact that there are two shrines may indicate there was two deities worshipped side by side, which may have been a divine couple.

The MBA in central Anatolia is represented by one site (Kültepe-Kaniš). The two temples are single-roomed structures with only one depth node, which does not yield particularly significant results in this type of analysis. Overall, both the analyses suggest that, if the divine figure was located along the back wall, it must have been visible from the doorways, and access to it would have been easy.

The shift to the LBA in central Anatolia is dramatic. The complexity of the syntax rises up to a depth of 6-12, and the j-graphs indicate a high degree of symmetric relations between rooms, whereas the distributedness is very low. The courtyards are the access points for other levels of access, and they are also visual control points. At Hattuša, all the analyzed temples show that the most secluded rooms are the cultic quarters (cella and subsidiary rooms), which is expected, since only high priests and the king were able to access these (see Chapter 4). Overall, they were closed structures where visual and pedestrian control was clearly important. The analyses of the Hattuša

Temples suggest that the primary and secondary spaces were out of reach; the tertiary spaces, especially locular areas, were also secluded, while the transitional spaces were more connected and visible. Quaternary spaces were the most visually and physically connected and open for movement. In the Great Temple, state rooms around the courtyard, which are thought to be more locular spaces, revealed low visibility and limited accessibility; it is possible that this supports Neve's idea that these side rooms were used as smaller shrines for the lesser gods of the Hittites (2002, 58).

However, the results of the Alaca Höyük temple-palace analysis suggest very different patterns of control and movement than in the Hattuša Temples, with the concentration in visual connectivity centered at the two entrances to the courtyards, presenting a different syntax and type of control over visibility. The fact that the second gate shows high connectivity may indicate that this complex might in fact be a palace with an area dedicated to cultic activity.

From the comparative temples only Tell Alalakh and Tilmen Höyük were analyzed. Aleppo could not be analyzed because the plan is fragmentary and the analyses only work on fully exposed plans. The MBA the temples show asymmetrical and non-distributed syntaxes. These indicate that social integration was not promoted, and spatial control was distributed evenly in the structure. The VGA analyses indicate that visual control and traffic were concentrated in the courtyards. Although the cella, and possibly the divine image, was directly visible from the entrance in most temples of this period, with the exceptions of two structures - the Level XII Temple at Tell Atchana and Building M at Tilmen Höyük. The lack of direct visibility of the cella in the Tilmen Höyük example is due to the courtyard located before the temple structure but if one stood in front of the entrance to the temple they would have been able to see the cult image directly. The access analysis and the VGA show similar patterns to MBA western Anatolia indicating similar levels in building complexity, which should not be that shocking since the way the temples are planned are more or less the same. Especially the similarity between the MBA temples of Beycesultan with the Tilmen Building M is uncanny, while the complexity of central Anatolia in this period was much lower this is because the structures in central Anatolia did not have a courtyard or a surrounding temenos; they were free-standing structures this significantly drops the depth.

In the LBA, the site of Tell Atchana is the only example with comparative structures that could be analyzed but one must expect similar results from the Aleppo temple (3-4 nodal depths at most). The distributedness of the temples does not change throughout the LBA, remaining non-distributed. This indicates that there was spatial control all over the building. There are changes in the level of symmetry between the Levels, though, with Level Ib showing the highest degree of symmetry and therefore, perhaps, also the most integrated social interaction. The visibility graph analyses indicate that visual control was mostly in the courtyard or outside the temple, as in the MBA. The j-graphs show significant differences with central Anatolia, where there is more complexity. Also, a significant difference in the nodal depth between the regions (west, central, northern Syria) show there was more seclusion of the cult object in the Hittite realm. This may be because Tell Atchana in this period was more closely connected to Syro-Mesopotamian culture than to Anatolian, even with the Hittite occupation (see Chapter 6).

Overall, it is very clear that there are vast regional differences. Central Anatolia, which was the heartland of the Hittites, favored concentrating visual control and connectivity in the courtyard, and the levels of access are much deeper and more complex. These are the most elaborate and complex examples of temples in second millennium BC Anatolia. In western Anatolia, though, the accessibility of the temple and the god is less strict, as also seen in Tell Atchana and Tilmen, though here the accessibility changes with time. While western Anatolia is overall simpler than the northern Syrian examples, both regions have considerably lower degrees of complexity than LBA central Anatolia. Visual control in the west, Tell Atchana, and Tilmen tends to be concentrated at temple entrances, including in the outer courtyards; this also confirms what has been discussed above, that the Beycesultan shrines are structurally close to the Near East, and this is apparent in the analysis. Conversely, the LBA central Anatolian temples of the Hittites are characterized by visual control within the temples themselves. This control, along with the highest areas of integration, is also centered in the courtyards, but these are placed within the temples, rather than outside of them as in the other regions. This means that one had to be allowed access to the temple and enter into the courtyard before being able to access the rest of the rooms. This shows a higher degree of seclusion in the realm of religious life than is seen in the western Anatolia and northern Syria, perhaps suggesting that religion was more separated from the daily lives of cities' inhabitants in these areas. This is also supported by the fact that the LBA central Anatolian temples tended to be physically segregated from other buildings within the city, as is seen in the Upper City of Hattuša, for example (see Chapter 4), while temples in the western Anatolia and northern Syria tended to be closely associated with domestic buildings, palaces, or workshops. Whereas the temples in northern Syria, especially Tell Atchana, are located in more crowded settings, being located within the heart of the settlement where privacy is provided through a wall around the temple in various levels.

The analyses discussed above reveal regional differences within and between the two periods, indicating that in both periods, the different regions were practicing their own religions in their own architectural styles and syntaxes. With the beginning of Hittite domination over Anatolia, these syntaxes only change significantly in central Anatolian structures, but not in other regions (Fig. 132, Fig. 133). According to Woolley, in the Level II Temple at Tell Atchana, there was Hittite influence on the building, but both the analyses carried out here do not show any change (syntax or visibility-wise) from the previous levels, indicating that, although there may be Hittite influence visible in other aspects, the space syntax of the Level II Temple was not affected. This also indicates that the capital did not fully interfere with the religious architecture of the cities they've occupied. The comparison with the northern Syrian temples indicate that as mentioned above in the MBA Syrian influence is prominent in Anatolia and the syntaxes are more complex in northern Syrian examples; while the roles change in the LBA where the central Anatolian examples indicate more complex structures whereas the temple traditions in north Syria do not change much syntaxwise. This approach has therefore enabled a deeper understanding of the use of space in the temples examined here and has provided the basis for new understandings of temples in the second millennium BC both in Anatolia and in northern Syria.

8. CHAPTER 8 – Discussion

Religious and ritual practices took place in many different contexts in MBA and LBA Anatolia, such as open air sanctuaries (e.g. spring sanctuaries: Eflatun Pınar; rock sanctuaries: Yazılıkaya; and, rock faces: Gavurkalesi, Karabel), domestic contexts (within households), and public contexts (Ökse 2011, 220-237). Temples represent the architectural manifestation of the divine presence and religious practices within a culture. Although religious practices can be traced through artifacts and texts, the architectural remains of temples preserve better and therefore are easier to track in the archeological record. For this reason, this thesis focuses on temples in order to illuminate state/city-sanctioned religious practices and their changes throughout the second millennium BC. The following section discusses the findings presented in this thesis, including the spatial analyses results, in order to reach a holistic and diachronic picture of temple architecture in Anatolia in this period.

8.1 Middle Bronze Age: Local Rulers and Simple Structures

MBA temple architecture of Anatolia is represented by four temple buildings (Fig. 134); all have analyzable plans. The plans of the temples show small-scale and simple structures, and construction techniques are not standardized or refined. The space syntax analyses show low nodal depths ranging from 2-4, indicating simple, more accessible structures, due to the low room count and their simple arrangements. Most temples have direct access to the cella, both visually and physically, as seen in the pedestrian pathways indicated by the VGA.

Western (Beycesultan VI, III) and central Anatolia (Kültepe-Kaniš) pose an interesting question, because in these two regions, these sites are the only examples

where temples/shrines are attested in the MBA. What does this mean, exactly? In the west, at least, it might mean that religion was not institutionalized to a level where there were central temples. When the size of Beycesultan is compared to the size of the shrines, it seems that these two shrines could not have been the only places of worship for the whole settlement. This is not to reduce the importance or sacrality of these structures, but to suggest that these shrines may have been neighborhood shrines, and that there were other similar structures serving other neighborhoods within the site. However, the amount of excavated MBA material is relatively low in western Anatolia, and so with more research, more comparative material may become available.

In central Anatolia though, there are many excavations that have exposed layers dating to the MBA, and yet still only Kültepe-Kaniš has yielded temple architecture. Textual evidence indicates that there were five temples on the mound, although only two have been discovered, as well as temples located in the *karum*, none of which have been found. This lack of temples in central Anatolia is surprising: according to Schirmer, such temples must have existed, but because we have not identified them, we do not know what they looked like (1982, 8). These cult structures might not have been constructed in an easily recognizable way (e.g. large, complex structures) and may instead have been house-like or simply rooms inside houses (1982, 8). Another possibility is that a lack of non-palatial MBA contexts has resulted in no temples being excavated at sites apart from Kültepe-Kaniš (e.g. Acemhöyük, Alişar) and has limited our ability to recognize central Anatolian temples of this period.

Although the Kültepe-Kaniš temple style is unprecedented in Anatolia, some similar structures are found in the early third millennium BC at Ninevite 5 sites in

Syria, such as Kashkashuk III, Raqa'i, Halawa, and Qara Quzak (Akkermans and Schwartz 2003, 216-217; Suleiman and Taraqji 1995, 178; Orthmann 1989, 93). These temples consist of a single, roughly square, room with an altar. Also, similar temple structures with tower-like projections on the façade are seen in Israel in MB IIB (Wright 1985, 200), especially at Megiddo and Shechem (Wright 1985, 245-247), and Aleppo (see Chapter 6). These parallels suggest that the form of the Kültepe-Kaniš temples may have come from the south, perhaps brought by Assyrian traders, and that modified Near Eastern forms were applied in central Anatolia (Schachner 2006, 157-158).

Regardless of the factors contributing to this apparent lacuna, the fact that no temples appear to be associated with MBA palaces at other sites outside of Kültepe-Kaniš indicates that religion was not institutionalized in this region to the same extent as in the Near East in this period or in LBA central Anatolia. It appears more likely that cultic practice was centered within the household in this period, similar to the probable situation in the west. This would not be surprising, due to the fragmented political landscape of this time: each city-state may have had its own traditions, leading to a diverse body of evidence that we have not yet recognized.

The temples analyzed as comparatives from northern Syria in the MBA are the most developed and complex examples analyzed here, and their j-graphs show more depth, although they are still relatively simple compared to LBA temples. The MBA temples of this region influenced the LBA temples of Anatolia. The use of orthostats was adapted into Hittite culture from northern Syria; this technique, developed in the 20th-19th century BC, is highly visible in the Aleppo and Alalakh temples (Harmanşah 2013, 157-162; 169-180). The proximity of the temples at Tell Atchana to the palace and their multiple re-buildings in the same location (a

characteristic also seen at Aleppo) are indications of the temple's central role in the social and political life of cities. This also suggests that temples and religion were subject to a much higher degree of institutionalization at this time than compared to Anatolia.

Overall, the plans of the temples compared to their j-graphs show that all levels of sacrality are present. However, the tertiary level is limited mostly to transitional spaces, and the quaternary level is limited to courtyards which are usually located outside of the temple structures. The MBA temple plans do not show many tertiary locular spaces, which is another indication of non-complexity, since the structures were made to be simple and to the point and did not form the types of complexes seen in the LBA.

8.2 Late Bronze Age: Increasing Complexity and Expanding Central Control

The LBA temple corpus of Anatolia consists of 43 structures (Fig. 135), significantly more than in the MBA, 7 of which could be analyzed with space syntax methods. According to the j-graphs, the overall nodal depth rises to 4-11 in this period, indicating a rise in complexity, which is also apparent from the plans of the buildings. Despite this, the VGA indicates that the structures were more secluded than the MBA temples. High seclusion, as well as visual and pedestrian control of both the cella and its subsidiary rooms, are phenomena that we see in central Anatolia in this period.

The west shows continuity: the twin shrines consist of the same 'megaron' form, although the plans become narrower, and their subsidiary rooms are removed. Similarly to the MBA shrines, ritual objects and installations were found in the Levels III-II twin shrines, as well as in a few other buildings within contemporary

domestic quarters at Beycesultan. This suggests that the shrines continued to be used as neighborhood shrines for that specific area, rather than as formal temples, indicating that communal, neighborhood religious areas remained of importance to the community. On the other hand, the appearance of the Layer 5 complex, if it is a temple, may indicate that centralization of religion was beginning in the LBA⁵². This structure is not a megaron, but rather it was constructed through the addition of units to a central room (room 3). This change of style is very intriguing, because the same phenomenon happens in central Anatolia in the Old Hittite Period (early LBA), as seen in the early temples (Temples 1-5) at Hattuša (see Chapter 4); is this an indication that the west was being incorporated into the central Anatolian Hittite horizon? Perhaps, but further excavation and research must be conducted before conclusions can be drawn. It is also important to mention that the term megaron used for the shrines in Beycesultan is the same plan as what we call the temple *in antis* in northern Syria.

Central Anatolia in this period witnesses a massive shift from the singleroomed structures of Kültepe-Kaniš to multi-roomed complexes. This change is also apparent in the construction style, which is more standardized and refined. Orthostats are used for the first time in Anatolia (Naumann 2007, 79), an architectural and decorative feature which seems to have been adopted from Syro-Mesopotamia and is also seen in other types of monumental architecture of the Hittites in this region, such as palaces and city gates (Harmanşah 2013, 178-180). However, the central Anatolian temples seem to introduce a unique innovation in the use of different type of stones to indicate sacredness. This is seen particularly in the Great Temple and Temple 2, where green gabbro was used for the foundation stones of the cella and

⁵² Maybe even earlier, if what Wightman proposes is true (see Chapter 3).

surrounding areas (see Chapter 4 for details). This is a technique not seen in northern Syria, indicating that it was a feature particular to the Hittites. Overall, the central Anatolian temple is more regulated, more cohesive, and more standardized than what we see in other regions. This standardization has been noticed by several researchers and has led to a list of features which can be used to identify a Hittite temple.

The most diagnostic of these are 1) access to the temple through a separate gate known as the KA.GAL, which does not lead to other rooms, but directly to the courtyard (Müller-Karpe 2013, 337; Vorhaus-Zimmer 2011, 205); 2) the rectangular inner courtyard (hila), around which the various rooms are placed, usually containing a columned section which is found on two sides of the courtyard; 3) a hilammar, a pillared hall, which was constructed in front of the cella or the adyton (Zimmer-Vorhaus 2011, 205); 4) the placement of the cella (cult room, adyton) of the temple where the divine image on the shorter side of the temple, creating a bent axis, since the entrance was from the longer side of the cella (Müller-Karpe 2013, 338); and, 5) the É.ŠÀ, a group of three rooms found to either side of the cella (Müller-Karpe 2013, 338). Lastly, the small single-roomed structure (Hofbau) found in the courtyard of some Hittite temples (the Great Temple and Temple 5 in Hattuša) is also a feature that is considered a diagnostic indication of Hittite temples, although it not as common as the rest of the features listed above (Naumann 2007, 469). Taken together, these features facilitate the identification of a Hittite temple and show that there were certain standards for them, but that all features may not be present in every Hittite temple.

The temple type utilized by the Hittites in this period is not a form seen used as a religious structure in other periods in Anatolia. Many have discussed the origins of these structures - they were believed to have no precursor, since none of the earlier

structures (domestic or public) in the EBA or MBA had similar plans. In the last couple of decades, a discussion has been sparked on the issue, with Naumann's suggestion that MBA palaces may have been the architectural precursor of Hittite temples, due to the similarity of their forms and arrangement of space (2007, 464). Naumann believed that the reason these structures are so similar is rooted in the fact that the Hittite temples were also conceived as palaces, not for kings and rulers, but for gods (Naumann 2007, 464). The belief that temples are the houses of the gods is attested as early as the Uruk period in the Near East, where the temple was simply referred as the 'house of god' (Liverani 2006, 59-60). This ideology was also adopted by the Hittites, and Hittite texts referred to the temple as É, followed by the name of the god, or as *parna*-, followed by the name of the god, both of which translate to 'house' in, respectively, Sumerian and Hittite (Güterbock 1997, 81). It is possible that the reference to the temple as the 'house of god' may have led the building to resemble a palace, which was the house of the ruler. The resemblance of the temple to a palace was also argued by Müller-Karpe; he believes that the plans of the Kuşaklı-Šarišša temples are similar in form and arrangement to the Waršama Palace of Kültepe-Kaniš. When comparing the Hittite temples to the MBA palaces of Anatolia (especially the Waršama Palace, the Sarıkaya Palace at Acemhöyük, and the Beycesultan Burnt Palace), one can see that there are similarities in the monumentality, the rectangular outline of the plan, and the central courtyard and the rooms arranged around it. It is highly likely that the form and arrangement of the rooms were copied from what was known from the palaces of the MBA. Also, although the MBA-LBA transition is considered a great change in the political landscape of central Anatolia, the change did not affect the culture and the style of

artifacts; instead of disruption, there is continuity, which may also mean continuity in architecture (Müller-Karpe 2000, 105; Zimmer-Vorhaus 2011, 215).

In the Cilician Plain at Tatarlı Höyük, we see Hittite influence. The structure found at Tatarlı is very similar to the earlier Hittite temples found in Hattuša (Temples 2-5), with a central courtyard, rooms surrounding the courtyard, and a projecting façade, all reminiscent of the Hittite temple style, but with local elements. As understood from the plan, however, the temple is not exactly what is seen in central Anatolia, which may indicate that the builders in Tatarlı incorporated their own touches while planning and constructing the building. This temple is especially important, since it may be the temple where Puduhepa's father was the priest of Ishtar (see Chapter 5).

Tarsus-Gözlükule poses more of a mystery than its counterpart Tatarlı Höyük, though the partially recovered plan is similar to both temples and palaces known from the LBA, especially in central Anatolia. Although dubbed a Hittite Temple by Goldman, the structure cannot be securely identified as a temple, since the findings do not aid in understanding the true nature of the structure, which could be either a temple or a palace according to the architectural traditions in Anatolia. We can be sure that the building technique and the plan of the structure (a central courtyard with corridors and rooms around it) is very Hittite, which is expected since the region was the annexed into the Hittite Empire (see Chapter 5 for details). Although it remains uncertain, the bulk of evidence, particularly considered in combination with the East House remains, leans towards the positive identification of the building as a temple.

In northern Syria, Aleppo and Tell Atchana show continuity in their temple forms. Shifts in styles are visible throughout the levels, but they are not extreme (as

most of the LBA temples continue to be in the temple *in antis* style seen in the MBA) and may in some cases be related to changes in political authority. At Tell Atchana, this is especially apparent in Level III, where the more typical direct axis shifted to a bent one, and in Level II, when a change in the temple structure is seen by the division of the cella into two - this is taken as an indication of the worship of two deities and both of these temples coincide with Hittite rule over the city. The double cella of Level II has been compared to the Great Temple, where there are also two cellas, likely for the worship of two deities. No other temple at the site has this double cella, making it likely that this change was either dictated by or made in deference to the new Hittite rulers (Yener et al. in prep). It might be that the Hittite ruler of Alalakh influenced the religion and architecture, either changing it or incorporating Hittite elements. In Aleppo, a similar shift in axis, along with the usage of Hittite decorative elements is also seen in the period of the Hittite rule. These changes indicate that the influence of Anatolia was visible but not very strong in the architecture; importantly, however, it is a reversal in the flow of cultural influence in the MBA, which seems to primarily have been from northern Syria to Anatolia, to an Anatolian influence on Syria in the LBA.

All four levels of sacral hierarchies are seen in the LBA temples across all of Anatolia, but there is an expansion of the tertiary level when compared to the MBA: all types of tertiary space (transitional, both mediate and conductive, and locular) are visible in the larger and more complex temples of the LBA. Among all the temples seen in Anatolia, the most developed ones are the Hittite temples. This is also visible from the j-graphs, which are larger and have more nodal depths. Interestingly, the inaccessibility of the cella and its subsidiary rooms to visitors, as seen both in the

VGA and j-graphs, reflects the seclusion described in Hittite texts about the accessibility of temples (Miller 2013, 242-259; Darga 1985, 55-58).

Although temples seem to be a widespread phenomenon in LBA Anatolia, some of the structures have not been securely identified, and they may be residences of local rulers with a shrine for the use of the ruler himself or the elite. In contrast to their popularity in the MBA, Beycesultan is the only site where neighborhood shrines may have continued. The examples found at Alaca Höyük, İnandıktepe, Boyalı Höyük, Maşat Höyük, and possibly the Beycesultan Layer 5 complex are palace-temples, where both functions (administrative and religious) are present, whereas the structure at Hüseyindede may be a local shrine, small-scale temple or even a house!⁵³ The large building at Tarsus-Gözlükule may either be a temple or a palace, though this cannot be definitively determined due to the partial preservation. Because Tarsus-Gözlükule is a large and important site for the whole region, it is most likely that it had both a separate temple and palace, rather than combining them into a single building. It is likely, therefore, based on the assemblages recovered, that the "Hittite Temple" represents the temple and the East House represents the palace. The Hittite style of the temple's plan suggests that the site was well-incorporated into the Hittite realm. The difficulty in identifying buildings as temples has always been a problem, mainly because they look similar in structure and construction technique. This is why the buildings at many of these sites cannot be labeled definitively as either temples or palaces (Mielke 2011, 167).

The other temples found at Hattuša, Kuşaklı-Šarišša, Uşaklı, and Tatarlı Höyük, have been definitively identified as temples, indicating a higher level of centralization and institutionalization of religion in the LBA. These temples, and the

⁵³ As its plan does not resemble any known structure, it is very difficult to identify.

so-called palace-temples, may be an indication of the existence of a palace-temple economy in operation throughout much of Anatolia, similar to the Mesopotamian style. This model constituted a high level of involvement in economic affairs (including the production, control, and distribution of food, land, and goods) by the temple as an institution and by temple personnel (Liverani 2013, 99-101). Such involvement is visible in the storage rooms, workshops, treasuries, seals, sealings, and textual records found within many Anatolian LBA temples, as well as in the proximity of the temples to the palaces and the existence of the palace-temple. These all indicate that the temple was playing an important role in the economy of the whole settlement and period. These types of temple economies can be traced back to the Uruk period in southern Mesopotamia (Liverani 2006, 32-57) and are seen throughout the Near East until at least the end of the Bronze Age (Garfinkle 2013, 111-114). These parallels may suggest that, beyond simply architectural similarities, there are also ideological similarities between the Hittites and Syro-Mesopotamian cultures, as is also seen in the conceptualization of the temple as the house of the god, as discussed above.

Overall, the changes in the three regions show a mixture of continuity and innovation. The west shows continuity throughout the MBA and the LBA, preserving its megaron-style shrines with minor changes to the plan. The main influence to the region seems to be from the Near East, and the analysis results indicate simple structures with easy access. It seems that religion in the region was not as highly institutionalized as in the Near East in this period, as seen through comparisons with Alalakh and Tilmen Höyük. In central Anatolia, though, there is a massive change from the MBA to the LBA from simple, single cella shrines to multiroomed, cohesive and standardized complexes. This change is primarily related to

the Hittites, who took over central Anatolia, the Cilician Plain and most of northern Syria. There is a clear change from more open temples to closed temples from the MBA to the LBA, and as complexity rises, the seclusion of the cella and the temple also rises immensely. This does not indicate that religion was not practiced by the people, as the laymen were likely practicing in their own households, but it means that accessing the divine and having direct contact was not allowed. Where the Hittites took their temple style from is not known, due to the lack of MBA temples in the region, but, as discussed above, it is believed to be from the MBA palaces of the region. It also appears that they adapted and incorporated some architectural elements from the Syro-Mesopotamian realm, since they were in constant contact with the region, such as the use of orthostats, a palace-temple economy, and the understanding of the temple as the house of the god.

9. CHAPTER 9 – Conclusions and Future Directions

Religion is a key element of many people's lives, influencing social norms, everyday practices, and understandings of the world and the cosmos. Temples, as the architectural manifestation of institutionalized religion and religious beliefs, can provide important clues about a society's conceptions of these ideas, and are therefore important subjects of study. This thesis has demonstrated the diversity of MBA and LBA Anatolian temples and is an attempt to shed light on Anatolian religious practices within the context of a temple.

This variety of temple structures exemplified in this thesis show that, in both the MBA and LBA, Anatolia was diverse in religious practices. This diversity gave way to a new concept developed in the LBA under Hittite rule, especially in central Anatolia and the Cilician Plain. The Amuq and northern Syria betray the impact of Hittite Anatolia but remain closely tied to Syro-Mesopotamian architectural traditions. The west, on the other hand, was a separate entity in both periods. Cultic paraphernalia seem related to Aegean traditions, but temple plans also resemble what we know as temples *in antis* in Syro-Mesopotamian archaeology, indicating close relations.

Religion appears to have been highly institutionalized in the LBA in central Anatolia. In western Anatolia in the MBA and LBA, however, religion and religious practices seem to have been more personalized and less structured, as according to my new reading of temple architecture. In areas where no temples have been securely documented thus far, religion may have been primarily located in the domestic sphere or existing structures have yet to be discovered, such as in MBA central Anatolia. These changing understandings of the role and practice of religion indicate different beliefs, including, perhaps, different perceptions of relating to the

gods, of community ethos, and of access to the divine, which, in turn, may point to different conceptions of the cosmos. These can only partially be understood from the architectural remains. Textual evidence, when available, helps to build a better case.

One must be aware that the conclusions drawn here do not give definite answers and are subject to change with new results of excavation campaigns throughout Anatolia.

In some cases, conclusions for entire regions have been tentatively drawn from single sites, especially in western Anatolia and the Cilician Plain. As excavations reveal more of Anatolia's religious structures, these can be analyzed and added to the existing corpus. The methodology of this thesis can be employed to study other types of structures, such as palaces and domestic residences, and can also be applied at a larger scale, that is, to the plan of an entire site, if enough remains have been recorded.

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11. APPENDIX A – FIGURES



Fig. 1 Map of Anatolia with its borders indicated in orange (Wikimedia commons).



Fig. 2 Middle Bronze Age temples of Anatolia examined in this thesis 1-Beycesultan, 2- Kültepe-Kanis (created by author on Google Earth).



Fig. 3 Late Bronze Age sites examined in this thesis: 1- Troy; 2- Beycesultan, 3-İnandıktepe, 4- Boyalı Höyük, 5- Hüseyindede, 6- Alaca Höyük; 7- Kuşaklı-Šarišša; 8- Maşat Höyük, 9- Uşaklı Höyük; 10- Boğazköy-Hattuša; 11- Tarsus-Gözlükule; 12- Oymaağaç-Nerik (?); 13-Ortaköy-Şapinuwa; 14- Tatarlı Höyük (created by author on Google Earth).



Fig. 4 Sacred hierarchies within temples (Wightman 2007, 832: Fig. 20.1).



Fig. 5 Site plan of Beycesultan combining old and new excavations. Areas mentioned in text are marked in red (adapted from Lloyd 1972, 2; Fig. 1).



Fig. 6 Level V Shrines (MBA) of Beycesultan with room numbers indicated (after Lloyd and Mellaart 1965, 41; Fig. A.17).



Fig. 7 Level IV Twin Shrines (MBA), "Squatter Population" (after Lloyd and Mellaart 1965, 55; Fig. A 24).



Fig. 8 Beycesultan Level V shrine (left), the Great Temple at Hattusa (center), and Burnt Palace at Beycesultan (right). Red square shows row of rooms similar to the ones at both temples; green square shows rows of megara (adapted from Wrightman 2007, 229: 4.12; Lloyd & Mellaart 1965, 6: A.3).



Fig. 9 Level III Twin Shrines (LBA) (after Lloyd 1972, 25; Fig. 7).



Fig. 10 Level III Twin Shrines - Western Shrine Altar Installation (after Lloyd 1972, 26; Fig. 8).



Fig. 11 Level II Twin Shrines (after Lloyd 1972, 28; Fig. 10).



Fig. 12 Level II Twin Shrines – Eastern Shrine Altar reconstruction (after Lloyd 1972, 32; Fig. 13).



Fig. 13 Abay Excavation Trenches, Beycesultan. Green square indicates the "building complex" with room numbers indicated (Layer 5) (adapted from Abay and Dedeoğlu 2016, 192; Çizim 2).



Fig. 14 Detailed plan of the Building Complex of Layer 5 with room numbers indicated (adapted from Abay and Dedeoğlu 2016, 193; Çizim 3).



Fig. 15 Aerial view of Kültepe and the *karum* (http://arkeofili.com/wp-content/uploads/2015/05/k%C3%BCltepe1.jpg).



Fig. 16 City mound of Kültepe- Kaniš (after Kulakoğlu 2010, 42, Fig. 3).



Fig. 17 Left: Plan of Temple 1. Right: Reconstructed plan of Temple 1 (adapted from Özgüç 1993, 168, Fig. 1, Fig. 2).



Fig. 18 Left: Plan of Temple 2. Right: Reconstructed plan of Temple 2 (adapted from Özgüç 1993, 169, Fig. 3, Fig. 4).



Fig. 19 İnandıktepe and its environs (from Özgüç 1988, Harita – Map 1).



Fig. 20 İnandıktepe: the mound, excavation areas, and the road cut through the mound (adapted from, Özgüç 1988, Harita-Map 3).



Fig. 21 Plan of the so-called temple at İnandıktepe, with room numbers (Özgüç 1988, Plan 1).



Fig. 22 Plan of the so-called temple of İnandıktepe with possible reconstruction (Mielke 2006, 215, Fig. 8).



Fig. 23 Map of the sites around the town of Yörüklü (After Sipahi 2007, 489: Harita: 3).



Fig. 24 Plan of Building A of Boyalı Höyük with room numbers indicated (after Sipahi 2013, 255: Fig. 6.).



Fig. 25 Inandıktepe (left) and Boyalı Höyük (right) structures (adapted after Özgüç 1988, Plan 1 and Sipahi 2013, 255: Fig. 6.).



Fig. 26 Hüseyindede excavations, Building I, and the surrounding domestic buildings (adapted from Yıldırım 2003, 228, Fig.1).



Fig. 27 Excavations at Alaca Höyük (current and previous) (adapted from Çelik 2008; Çizim 1).



Fig. 28 Alaca Höyük, the so-called Temple-Palace with doorways and rooms numbered (after Koşay and Akok 1966, Lev. 79).



Fig. 29 The possible altar or pedestal and its construction technique (Koşay and Akok 1966; Lev. 85).



Fig. 30 The orthostats and their reconstructed drawing (After Feldman, H. M. 2015; 346, 16.5).



Alaca Höyük Temple-Palace

Fig. 31 A comparative image of the religious buildings from various Hittite cities (Özgüç 1988, Plan 1; Sipahi 2013, 255: Fig. 6.; Neve 2002; 80; Müller-Karpe 2002, 150, Fig. 6; Müller – Karpe 2000, 313, Abb.2; after Koşay and Akok 1966, Lev 7).



Fig. 32 Location of Kuşaklı - Šarišša (Müller-Karpe 1995, 5: Abb. 1).



Fig. 33 Plan of Kuşaklı – Šarišša with the two temples visible as the largest buildings (Müller-Karpe 2002b, 3).



Fig. 34 Temple 1 – Temple on the North Terrace (Müller-Karpe 2017, 109: Abb. 107).



Fig. 35 Building C – Temple of the Weather God (Müller-Karpe 2017, 89: Abb. 76).



Fig. 36 A comparison of two Hattuša temples to the temples of Kuşaklı-Šarišša (Müller-Karpe 2017, 89: Abb. 76; Müller-Karpe 2017, 109: Abb. 107).



Fig. 37 Maşat Höyük – the Citadel and Lower City. (after Özgüç 1982, Plan 4).



Fig. 38 Plan of Altar-Building C of Maşat Höyük with rooms numbered (adapted from Özgüç 1982, Plan 8).



Fig. 39 The so-called mosaic pieces from room 1 of Altar-Building C (Özgüç 1982, Lev. – Pl. 51).



Fig. 40 Seal impression of Šuppiluliuma I found in room 1 (Alp 1991, Tafel 3).



Fig. 41 Votive vessel found in Altar-Building C (after Özgüç 1982, Lev. - Pl. 45).



Fig. 42 Location of Uşaklı (D'Agostino and Orsi, 2016, 335; Fig.1a).



Fig. 43 Location of Uşaklı Höyük among other sites in Central Anatolia (Mazzoni et. al. 2010c, Figure 1).



Fig. 44 The mound of Uşaklı and its surrounding terrace (D'Agostino and Orsi, 2016, 337; Fig. 2a).


Fig. 45 The excavations of Building II in Area A – the so-called Hittite Temple (http://usaklihoyuk.org/en/area-a image).



Fig. 46 Massive stones –the stones are almost as big as a person (http://usaklihoyuk.org/en/area-a image).



Fig. 47 Location of Hattuša (Google Earth image by author).



Fig. 48 Plan of Boğazköy-Hattuša (Mielke, D. P. 2011, 1033: Figure 48.2).



Fig. 49 Plan of the Temple 1 Precinct (The Great Temple) of Hattuša (adapted from Bohemer, R.M. 1972, Beiltrag 5).



Fig. 50 Temple 1 – Great Temple plan (detail) (adapted from Neve 1999, 148: Abb 72a).







Fig. 52 Temples 1 to 5, indicating the Large Temple type (Neve 1999, 148: Abb 72a).



Fig. 53 Temples 6-10, 12, 15, 17-22, 24, 26, representing the Smaller Temple Type (Neve 1999, 148: Abb 72b).



Fig. 54 Plan of Temple 5 and Buildings A-D (Neve 2001, 22: Abb 17).



Fig. 55 Plan of Temple 30 (southern half not preserved) (Neve 2001, 86: Abb 46a).



Fig. 56 Plan of Temple 31 and its environs (Neve 1996, 68: Abb. 194).



Fig. 57 Location of Tarsus-Gözlükule (Google Earth image, 2017).



Fig. 58 Location of the Goldman excavations, Sections A and B indicated (after, Goldman 1956, Plan 25).



Fig. 59 Plan of so-called 'Hittite temple' and circuit wall unearthed in Goldman's excavations with World War I and later disturbances indicated (Goldman 1956, Plan 22).



Fig. 60 Plans of (left to right): Temple II of Hattuša, Temple III of Hattuša, the so-called Hittite Temple of Tarsus-Gözlükule, and the palace of Maşat Höyük (adapted from Neve 1993, 116-117, Fig. 7a, 7b.; Goldman 1956, Plan 22; Özgüç 1980, 1).



Fig. 61 Plan of current excavations, and possible continuation of the so-called 'Hittite Temple'. Reconstruction of the new plan in red and previously excavated part in green; trenches excavated in 2010 in blue (adapted from, Özyar et. al. 2012, 428, Çizim 8).



Fig. 62 Location of Tatarlı Höyük in the Adana Plain (after Girginer et. al. 2011, 66).



Fig. 63 Tatarlı Höyük, its citadel, the lower city, and Tatarlı Village (after Girginer and Collon 2014, 61: Fig. 3).



Fig. 64 Aerial photo of Building A (Girginer et. al. 2016, 501: Resim 5).



Fig. 65 Plan of Building A in its 1st Phase – Early Phase (adapted from Girginer et al. 2016, 499: Resim 2).



Fig. 66 Plan of Building A in its 2nd Phase – Late Phase (adapted from Girginer et al. 2016, 499: Resim 2).



Fig. 67 The ritual pottery found west of Building A (Girginer 2016, 104: Resim 18).



Fig. 68 Location of Tilmen (adapted from Marchetti 2011, 7).



Fig. 69 Tilmen Höyük and its various units. The two red circles enclose Buildings E and M (after Marchetti 2011, 27).



Fig. 70 Temple/Building M and its temenos, with walls drawn over an aerial image (adapted from Marchetti 2007, 364: Fig. 10).



Fig. 71 The stele found in Temple/Building M (left: Marchetti 2011, 35; right: Marchetti 2007, 167: Fig. 21).







Tilmen Höyük Temple M

Ebla Ishtar Temple (Temple D)

Temple in antis, Tell Halawa

Fig. 72 A comparison between the temples from Tilmen (second millennium BC), Ebla (second millennium BC) and Halawa (third millennium BC) (left: Mazzoni 2007, 161: Fig. 2; center: Akkermans and Schwarz 2003, 302: Fig. 9.8; right: Akkermans and Schwarz 2003, 251: Fig. 8.13).



Fig. 73 Location of Tell Atchana-Alalakh (Google Earth).



Fig. 74 The mound of Tell Atchana / Alalakh (after Yener 2010, 9: Figure 1.3).



Fig. 75 The composite plan of Levels XV and XVI (Woolley 1955, 36: Fig. 19).



Fig. 76 Plan of the Level XIV Temple with the "mastaba" visible in the northern part (Woolley 1953, 47: Fig. 5).



Fig. 77 Plan of the Level XII Temple (Woolley 1955, 47: Fig. 22).



Fig. 78 The plan of both the palace and temple of Level VII at Alalakh with the connecting room 48/1 visible between the two buildings (Woolley 1955, 93: Fig. 35).



Fig. 80 Level V Temple (Woolley 1955, 67: Fig. 19).



Fig. 81 The Level IV Temple (Woolley 1953, 113: Fig. 16).



Fig. 82 The Level III Temple with the annex in the east (Woolley 1955, 76: Fig. 32).



Fig. 83 The Level II Temple with possible Hittite influence in the double cella (Woolley 1955, 79: Fig. 33).



Fig. 84 The temples of Level I. Left: Level Ia; Right: Level Ib (Woolley 1955, 83: Fig. 34b, 34c).



Fig. 85 Location of Aleppo-Halab and other ancient sites in sorthern Syria and Anatolia (Kohlmeyer 2000, 6: Abb. 1).



Fig. 86 Aleppo MBA temple (Kohlmeyer 2012, 61: Abb. 2).



Fig. 87 The MBA cult niche (Kohlmeyer 2009, 190).



Fig. 88 Orthostats found in the MBA temple (Kohlmeyer 2013, 191-192: Abb. 9-10).



Fig. 89 Comparison between MBA temples: 1- Aleppo, 2-Alalakh, 3-Hazor, 4-Shechem, 5-Kültepe-Kaniš (adapted from Kohlmeyer 2012, 54: Abb. 1; Özgüç 1993, 168: Fig. 1).



Fig. 90 Aleppo LBA temple with the cultic focus in the red circle and the cult axis indiated by arrow (adapted from Kohlmeyer 2012, 63: Abb. 3).



Fig. 91 Sculptures at the entrance. Left to right: lion, fish-genius, sphinx (Kohlmeyer 2013, 196: Abb. 14; 200: Abb. 19).



Fig. 92 Comparison between: 1-Aleppo LBA Temple, 2-Alalakh Level III Temple, 3- Hattuša Great Temple cella (adapted from Kohlmeyer 2012, 63; Woolley 1955, 76; Neve 1999, 148).



Fig. 93 Similar buildings with similiar layouts but different j-graphs (Osborne 2012, 48: Fig. 14).



Fig. 94 Beycesultan Level V Shrines; A- noded plan, B- j-graph.



Fig. 95 Beycesultan Level V Shrines VGA; A- Visual Connectivity Map, B- Visual Integration Map.



Fig. 96 Beycesultan Level IV Shrines; A- noded plan, B- j-graph.



Fig. 97 Beycesultan Level IV Shrines; A- Visual Connectivity Map, B - Visual Integration Map.


Fig. 98 Kültepe - Kanesh Temple 1 (Upper), Temple 2 (Lower): A- Noded Plan, B- jgraph.



Fig. 99 Kültepe - Kanesh Temple 1 (Upper), Temple 2 (Lower): A - Visual Connectivity Map, B - Visual Integration Map.



Fig. 100 Beycesultan Level III Shrines; A- Noded plan, B- j-graph.



Fig. 101 Beycesultan Level III Shrines; A - Visual Connectivity Map, B- Visual Integration Map.



Fig. 102 Beycesultan Level II Shrines; A- Noded plan, B- j-graph.



Fig. 103 Beycesultan Level II Shrines; A- Visual Connectivity, B- Visual Integration Map.



Fig. 104 Alaca Höyük Temple-Palace: A- Noded plan, B - j-graph.



Fig. 105 Alaca Höyük Temple-Palace: A- Visual Connectivity Map, B- Visual Integration Map.



Fig. 106 Boğazköy- Hattuša Great Temple: A- Noded plan, B - j-graph.



Fig. 107 Boğazköy - Hattuša Great Temple: A- Visual Connectivity Map, B - Visual Integration Map.



Fig. 108 Boğazköy- Hattuša Temple 2: A- Noded plan, B - j-graph.



Fig. 109 Boğazköy - Hattuša Temple 2: A- Visual Connectivity Map, B - Visual Integration Map.



Fig. 110 Boğazköy- Hattuša Temple 3: A- Noded plan, B - j-graph.



Fig. 111 Boğazköy - Hattuša Temple 3: A- Visual Connectivity Map, B - Visual Integration Map.



Fig. 112 Boğazköy- Hattuša Temple 4: A- Noded plan, B - j-graph



Fig. 113 Boğazköy - Hattuša Temple 4: A- Visual Connectivity Map, B - Visual Integration Map.



Fig. 114 Tilmen Höyük, Building M: A- Noded plan, B - j-graph.



Fig. 115 Tilmen Höyük, Building M: A- Visual Connectivity Map, B - Visual Integration Map.



Fig. 116 Tell Atchana-Alalakh Level XIV Temple: A- Noded plan, B - j-graph.



Fig. 117 Tell Atchana-Alalakh Level XIV Temple: A- Visual Connectivity Map, B - Visual Integration Map.



Fig. 118 Tell Atchana-Alalakh Level XII Temple: A - Noded plan, B - j-graph.



Fig. 119 Tell Atchana-Alalakh Level XII Temple: A- Visual Connectivity Map, B- Visual Integration Map.



Fig. 120 Tell Atchana-Alalakh Level VII Temple: A- Noded plan, B - j-graph.



Fig. 121 Tell Atchana-Alalakh Level VII Temple: A- Visual Connectivity Map, B - Visual Integration Map.



Fig. 122 Tell Atchana-Alalakh Level IV Temple: A- Noded plan, B - j-graph.



Fig. 123 Tell Atchana-Alalakh Level IV Temple: A - Visual Connectivity Plan, B - Visual Integration Map.



Fig. 124 Tell Atchana-Alalakh Level III Temple: A- Noded plan, B - j-graph.



Fig. 125 Tell Atchana-Alalakh Level III Temple: A - Visual Connectivity Plan, B - Visual Integration Map.



Fig. 126 Tell Atchana-Alalakh Level II Temple: A- Noded plan, B- j-graph.



Fig. 127 Tell Atchana-Alalakh Level II Temple: A - Visual Connectivity Plan, B - Visual Integration Map.



Fig. 128 Tell Atchana-Alalakh Level IB Temple: A- Noded plan, B- j-graph.



Fig. 129 Tell Atchana-Alalakh Level IB Temple: A - Visual Connectivity Plan, B - Visual Integration Map.



Fig. 130 Tell Atchana-Alalakh Level IA Temple: A- Noded plan, B- j-graph.



Fig. 131 Tell Atchana-Alalakh Level IA Temple: A - Visual Connectivity Plan, B - Visual Integration Map.



Fig. 132 Middle Bronze Age regions, their corresponding sites, and their j-graphs.



Fig. 133 Late Bronze Age regions, their corresponding sites, and their j-graphs.



Fig. 134 All Middle Bronze Age temples discussed in the thesis, divided according to their regions.



Fig. 135 All Late Bronze Age temples discussed in the thesis, divided according to their regions.