Creating capitals: The rationale, construction, and function of the imperial capitals of Assyria

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The Rationale, Construction, and Function
of the Imperial Capitals of Assyria

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Contents

Chapter 1: Creating Capitals – Approaches, Perspectives, and Methodology

1.1 INTRODUCTION

This study is concerned with the phenomenon of imperial capital creation and the archaeological study of imperial capital cities. Specifically, this study will focus on the creation of new capital cities in Assyria from the 14th century BCE until the fall of Assyria in 612 BCE. These cities are: Kār-Tukultī-Ninurta, Kalḫu (also known as Nimrud), Dur-Šarrukēn (also known as Khorsabad), and Nineveh. The term 'capital creation' denotes the development of a monumental capital either in a new location or through the profound transformation of a pre-existing settlement. I will argue that this development is a practice directly connected to state and empire building processes in world history.

The term 'capital city' has been used widely in relation to modern states and broadly refers to a city that functions as the seat of the government and as the administrative center of a country. Capital cities are complicated entities which vary greatly in their nature (e.g. Hall 2006; Vale 2008). Oskar Spate (1942, 622) offered an influential definition of a capital as: "*the place wherein the political authority of a territorial unit is concentrated, it is the seat of the legislature, the headquarters of the executive, exercising a higher or lower degree of supervision over local administration according to the structure of government is highly centralized or federal*". Capital cities are often, although not necessarily, the most dominant cities of their respective state both in political and economic terms. However, the present study is primarily concerned with capital cities in antiquity, when some parts of this definition do not apply (e.g. as the seat of the legislature, or federal governments). This study defines capital cities of antiquity as: *the political, administrative and ideological centers of their respective states or empires, often containing the primary residence/ palace of a king*.

Capital cities were often intentionally created, from antiquity to recent history. Examples from recent history come from all over the world and include the redevelopment of already existing settlements (e.g. Athens; Budapest; The Hague), as well as the creation of completely new planned cities (e.g. Washington DC; Brasilia; Canberra; Astana) (Vale 2006; Minkenberg 2014b).

The first attestations of capital creation come from states and empires of the Ancient Near East. Starting from the Early Bronze Age, with the creation of the city of Akkad by Sargon (ca. 2350 BCE), this process continued and expanded in the Late Bronze Age with the development of major states and empires. This period also witnessed the creation of numerous large capital cities like Amarna in Egypt, the Hittite capital Hattuša, and Dūr-Kurigalzu, the city which replaced Babylon as the capital of the Kassite kingdom. However, the practice of capital creation is most systematically present in the Assyrian empire, which is the first empire to repeatedly relocate its capital: from the city of Aššur to Kār-Tukultī-Ninurta, back to Aššur, then changing from Aššur to Kalḫu, then Dur-Šarrukēn, and finally to Nineveh. Thus, it presents a perfect case study for the study of the phenomenon in antiquity.

Despite the temporal and geographical pervasiveness of capital creation, it is a rather understudied topic, especially regarding antiquity. To this day, there is no comprehensive study that deals with ancient capital creation as a general topic, or in relation to a specific empire. Therefore, this study addresses two main issues: 1) the comparative study of Assyrian capitals in the context of capital creation, and 2) the concept of capital creation in antiquity.

Primarily, this study will produce the first comprehensive and comparative study of Assyrian capital cities. Each Assyrian capital has been thoroughly studied individually. Kār-Tukultī-Ninurta, the only new capital of the Middle Assyrian

period (see Appendix 1 and below for details on chronology), has seen a limited number of excavation seasons, mainly in its citadel space, as well as two survey seasons (Eickhoff 1985; Dittmann *et al.* 1988; Dittmann 1989; 1997a; Schmidt 1999; Beuger 2011; Dittmann 2011; Dittmann forthcoming). Only a handful of studies have attempted to explore the reasons behind the creation of this new capital, and most have linked it with the personality and initiative of the king Tukultī-Ninurta I (ca. 1233-1197 BCE) (see for example Machinist 1978, 526; Eickhoff 1985, 49; Kuhrt 1995, 357; Dolce 1997).

The same holds true for the Neo Assyrian capitals. Kalḫu has been thoroughly excavated, at least in terms of its citadel spaces, which include palaces, temples, and large houses (see for example the publications of Mallowan 1966; Meuszyński 1981; Oates and Oates 2001). A brief survey took place in its large lower town (Fiorina 2011). Dur-Šarrukēn was excavated during the 19th (Place 1867) and early 20th century (Loud, Frankfort and Jacobsen 1936; Loud and Altman 1938) but has seen virtually no archaeological work since. Once again, its namesake king, Sargon II (721-705 BCE), is seen as the driving force behind its construction (see for example Battini 1998; 2000). Finally, the city of Nineveh has seen thorough archaeological and historical work, albeit once again focusing on its citadel spaces, temples, and palaces (see for example the overviews by Scott and MacGinnes 1990; Russell 1991; Reade 2002b). This city's creation has been directly linked to the initiative of Sennacherib (704-681 BCE), the king under whom it became the capital.

When investigating Assyrian capitals, one thing becomes apparent: the continuous focus of research on elite spaces (see for example the architectural overview of Russell 2017). Extensive excavations have taken place on the citadel area of each of these capitals, but research into their surrounding urban spaces is limited or even non-existent. At the same time, historical and textual studies have focused mostly on the publication of royal inscriptions and other elite documents (see for example Grayson 1987; 1991; 1996), creating an exclusively top down perspective of the construction of each capital. As a result, we are faced with the problem that previous interpretations of Assyrian capital creation were based primarily on elite spaces, and with kings as the prime agents of their creation. Notwithstanding the impressive size of the capitals, and their impact on the administration and wider culture in Assyria (see for example Novák 2004; Cancik-Kirschbaum; Radner 2011), we know very little about how they were constructed, the reasons behind their relocation, and how these capitals functioned.

In addition, very few comparative studies have tried to create a broader understanding of capital creation in Assyria (Joffe 1998; Novák 1999 – looking at city creation in general; Radner 2011 focuses on Kalḫu and Dur-Šarrukēn; Harmanşah 2012; Thomason 2016 only discusses Neo Assyrian capitals; Carlson 2017 examines only Aššur and Kār-Tukultī-Ninurta). Most of these studies, while offering a comparative perspective, are limited only to some of the capitals, or look at city creation in general and do not focus on capital creation as a distinct phenomenon. They also suffer from the same issue as the study of the individual capitals: they offer only the perspective of the elite (be it through architecture or propagandistic texts), and the cities are seen as projects of individual kings. Furthermore, only the study of Joffe (1998) attempted to model the concept of capital creation in antiquity. That study provided a more coherent perspective on the subject through the concept of *disembedded capitals*, which will be thoroughly analyzed in this chapter. No attempt has been made so far to investigate capital creation as a political, ideological, and administrative strategy in Assyria.

This study addresses this fascinating but understudied issue and offers a synthetic approach that aims to model the creation of capitals in Assyria. This will be done through a comparative and holistic investigation of archaeological, historical, and geographical datasets. The comparative study of Assyrian capitals will provide important insights into the administration of the core of the Assyrian empire, its ability to mobilize, manage, and exploit large populations for infrastructural projects, as well as the ideological changes that happened throughout the 700 years of its existence.

Secondly, in doing so, this study will develop an approach to ancient capital creation that can be applied also to other instances of capital creation. In particular, this approach expands the explanatory framework underlying capital creation. In current scholarship, newly created capitals are often connected to the ruler under whom they were created, following textual sources about their construction. This study takes a different perspective and interprets capital creation more holistically, and as a process

connected to state and imperial formation, aligning more with some comparative studies on modern capital creation (e.g. Minkenberg 2014a).

Moving beyond the focus of singular explanations, I will investigate the process of capital creation in its different stages. This first requires an investigation of the historical conditions during the time of creation, then focusing on the process of construction and its social implications. Finally, it interrogates the function, role, and urban environment of these new capitals. Through the examination of archaeological evidence, this study aims to understand and explain the phenomenon of capital creation and its connection to imperial formation, control, and consolidation. For this, Assyria provides a unique case study, as it was the first empire in history to fully embrace and engage with the strategy of capital creation *repeatedly*.

To create the framework of this study, the main question I will be addressing is: *how can we explain the creation of capitals in Assyria?* This is a holistic question that includes the reasons and motivations behind the creation of new capitals, the construction process of those cities, and the function of these new centers. As such, the main question can be subdivided into three research questions, which form the backbone of this study:

1) *Why? The **rationale** behind the creation of new capitals*
2) *How? The **construction** process of the cities*
3) *What? The **function** and nature of capital cities (administrative, economic, urban, etc.)*

These questions will be applied to successive episodes of capital creation in Assyria in order to identify differences and similarities between capitals, and to produce different concepts for the examination and explanation of capital creation. This is a comparative study, in which every capital will be first studied in turn, followed by a comparative chapter, in which the results of each case study will be brought together.

1.1.1 ABOUT THIS BOOK

The creation of new capital cities is a recurring phenomenon in the history of states and empires, from antiquity to modern times. Up to this day, there is no comprehensive research on the newly created capitals of ancient states and empires. The only exceptions are the studies by Novák (1999) and Carlson (2017), both of which are much broader however, and deal with city creation in Mesopotamia in general.

The first chapter of the present study outlines the key concepts and theoretical framework of this research. I will discuss the phenomenon of capital creation and how it is connected with statecraft (i.e. the creation and development of states). I will introduce and analyze theories of this phenomenon and discuss the role of ruling agents in creating capitals. Finally, the methodological approach will be presented, together with a detailed analysis of the research questions posed in the book.

In chapter 2, the focus shifts to Assyria. Firstly, I will discuss the reasons that make it the most appropriate case study for this research. Then I will offer a short discussion on Assyrian construction projects and how they relate to capital creation. I will also introduce Aššur, the traditional capital of Assyria, and discuss its implications for the discussion of capital creation.

Chapters 3 to 6 will be dedicated to each of Assyria's capital cities, paying special attention to the characteristics of each city. The analysis of these capitals will reveal the breadth of possible dynamics behind capital creation, which makes Assyria one of the most interesting subjects to study imperial capital creation with. Subsequently I will discuss the characteristics of imperial capital creation as a phenomenon. Specifically, I examine how these capitals functioned and what the study of ancient capital creation can contribute to the broader study of capitals, as well as city creation in general.

The first city to be analyzed in chapter 3 is the Middle Assyrian capital of Kār-Tukultī-Ninurta, which is one of the most extraordinary cases of Assyrian capitals. Its proximity to Aššur, the preexisting capital of Assyria, is unique and the rectangular structure as well as the massive size are attested for the first time. Finally, its quick demise, which goes hand in hand with the decline of the Middle Assyrian empire, is particularly interesting. In this chapter I will also explore the connection between imperial formation and its connection to capital creation. The purpose is to disassociate the reasons of the city's construction from the biography of Tukultī-Ninurta (1243-1207 BCE), and to embed it in the general imperial process.

Chapter 4 concerns the first Neo Assyrian capital, Kalḫu. The connection between capital creation and empire building will be investigated further. The

creation of Kalḫu has often been described as the attempt of Aššurnaṣirpal (883-859 BCE) to distance himself from existing elites in the city of Aššur. This idea will be discussed in relation to other historical factors and archaeological data. This chapter also addresses an important aspect of capital creation, namely the creation of new capital as a way to shift the geographical focus of a state.

Chapter 5 deals with the creation of Dur-Šarrukēn. In this chapter I will also explore the connection between capital creation and imperial consolidation. An important part of the discussion will examine the administrative and military changes that occurred in the empire from the reigns of Tiglath-Pileser III (744-727 BCE) to that of Sargon II (721-705 BCE). It discusses how these factors might have played a role in the creation of Dur-Šarrukēn. The large textual dataset regarding the construction of the city provides a glimpse into the day-to-day issues of building a new city. Connecting it with the available archaeological evidence will provide a much better understanding of the organization and labor required when creating a new capital.

The last capital city creation under consideration is the relocation of the capital from Dur-Šarrukēn to Nineveh. This immediately followed the death of Sargon and is the focus of chapter 6. In this chapter I will address the possible reasons behind the relocation as well as the choice of Nineveh as the new location. An important part of the discussion here is the long occupation history of Nineveh, and how new capitals were created by transforming pre-existing settlements and urban centers. The fall of Nineveh in 612 BCE also marks the fall of the Assyrian empire.

The discussion presented in chapter 7 compares all of the capital cities. Each research question will be addressed separately, by comparing the concepts and ideas generated by this study. The broader issues arising from the study of capital creation in Assyria will be discussed first. Then I will discuss the questions of *why/how/what*. By identifying the reasons behind capital creation, I will compare the models presented, as well as demonstrate how each capital compares to the other. In the investigation of the construction process, there will be an assessment of the labor force required for the creation of city walls. This example will be used as a way to assess and compare the labor and economic investment required for the realization of a new capital. The different functions of each capital will be analyzed in this section as well. In addition, gaps in our current state of knowledge and research agendas will be brought forward, and I propose perspectives for future research on capital creation.

The conclusions of this book contextualize the process of Assyrian capital creation within the wider context of the Ancient Near East. Finally, I propose avenues of embedding capital creation in antiquity in broader discussions of capital creation in the past, present, and future.

1.2 CLASSIFYING CITIES

As a term, a capital city has two components: it is a *city*, and it is defined as the *capital* of a given state and/or empire. Although these terms seem self-evident, their exact definitions require further definition in terms of past urban environments. When discussing a capital city, therefore, we need to describe what kind of *capital* it is, as well as the urban nature of that particular site (i.e. where it fits in the city taxonomy).

Previous studies have tried to classify modern and ancient cities and urban environments in different ways. Geographical, environmental, and economic sciences have been concerned with the typology of modern cities extensively, both in relation to their economic and physical growth, as well as their future developments (see for example Scott 2014; Rozenblat and Pumain 2018). In particular, urban anthropologists have investigated the idea of taxonomy and typology of western and non-western cities for the past and present (e.g. Fox 1977; Low 1999; Pardo and Prato 2012a). Of great interest to the present study is the foundational and still relevant study by Fox (1977), which dealt with the concept of the city in a much more holistic manner, looking at the structure of a city both in isolation, and at the social and cultural settings in which these cities have developed. It was Fox who thoroughly established the fact that the study of cities should be contextualized in their local, but also in their global system, and that historical analysis is a crucial parameter for this.

Since the 1970s, a lot of work in urban anthropology has been done regarding the categorization and comparison of cities (e.g. Monge 2010; Krase 2012). While these comparative models are useful, some scholars have stressed the importance of understanding the diversity of cities as individual and unique cases, especially modern cities; these

are affected by global forces and by local economic, social, and political conditions (Glick Schiller and Çaglar 2011; Pardo and Prato 2012b, 97-98). Despite these subsequent theoretical developments, I propose that the work by Fox remains relevant and applicable also to ancient contexts, as I will describe below.

This study is concerned with the study of capital cities, and as such, it is crucial to define cities in archaeological terms. Archaeology has dealt with cities, their creation, and their function for well over a century now, making it one of the most thoroughly analyzed topics. In a recent overview of the study of urbanism in archaeology, Osborne (2015, 8) suggested that we have two competing schools of thought: i) cities as analytical objects to be studied with quantitative techniques, and ii) cities as constellations of socially significant symbols. Osborne's approach is an interesting one, especially for this study, as he also deals with Assyrian capitals. Osborne follows the earlier work of Michael Smith, who suggested that cities should be viewed as phenomena in which certain settlements exercise political, religions, and economic influence over surrounding regions (Smith 2007). In Osborne's view, this "functional approach" to urbanism is the most applicable one, as it bridges the two aforementioned frameworks (Osborne 2015, 8-9). He used this approach to study the magnitude of power that Assyrian capitals exercised over their surrounding regions, by investigating the spread and size of the settlements around these capitals (Osborne 2015, 15-16). His results suggest that the creation of new capitals was done by centralized agents, who invested in tailoring the surrounding landscape with state-designed settlement patterns. While this functional approach is useful to investigate the impact Assyrian capitals had on their immediate landscape, and further support the deportation regime of Assyria, it only tells part of the story. I propose that Assyrian capitals had a much wider impact that surpassed their immediate surroundings.

Beyond the relationship between cities and their surrounding hinterland, or the ways in which cities exercised power, I suggest that it is important to understand how they functioned, what their primary role was, and to identify their main institutional, urban and social aspects, following the model proposed by Fox (1977, 32). While some cities can be characterized as primarily administrative cities (i.e. hosting mainly administrative institutions), others can function as primarily industrial centers (i.e. hosting a robust production infrastructure and housing a large labor force). There can be cities that encompass all social and economic classes, or cities intended mainly for elite populations. It is, therefore, important to create a basic taxonomy of ancient cities. This taxonomy does not need to be absolute, or without variations. It also should not act as a checklist of criteria that all cities need to fit. It should rather act as a guiding principle for the investigation of diverse urban settlements.

Fox further organized his typology on the basis of two axes: the extent of state power and the extent of urban economic autonomy. The first axis assesses the relation between the urban environments and the degree of power and control a state could exercise over them. It ranges from weak, segmentary states, to strong bureaucratic states (Fox 1977, 32-33). The second axis assesses the degree of economic dependency of a city on outside sources, and consequently, the type of economic organization most dominant in the city. It ranges from autonomous to dependent (Fox 1977, 33-34; for a broader discussion on the evolution of urban anthropology and the contribution of Fox see Pardo and Prato 2012b). Fox's model is a very useful analytical tool for understanding the role and function of cities, because of its diverse approach to cities and city development. However, it must be noted that Fox based his model on cities within the spatial and chronological limit between medieval Europe to imperial Britain. While the cultural roles he defined are still applicable, some of the types of cities he proposed are not necessarily found further back in time. As such, and in order to use a model similar to what Fox proposed, it is necessary to create an expanded typology of cities that would fit the Ancient Near East, incorporating further works related to that period.

For the Ancient Near East, Elizabeth Stone (2008) has advanced the most thorough discussion on the typology of cities. Stone argued for a variability in interpreting the development in cities and city states. According to her, there is not one fundamental path towards city development. Rather, city states can have different trajectories of development based on their social organizations. In particular, she argued that cities can develop both hierarchical as well as heterarchical social systems of organization (Stone 1997; 1999). Through the study of different urban environments, she suggests that it is possible to identify the relation between the organization of a city (its urban type) and the sociopolitical sphere

(its social structure) (Stone 2008, 163). To illustrate her argument, she used two main examples, the city of Maškan-Šapir (ca. 1900-1720 BCE) in southern Mesopotamia, and the city of Ayanis (7th century BCE) in Urartu.

Maškan-Šapir was a planned city much like the capital cities studied here, and incorporated what Stone suggests were the dominant ideas about urban planning of the time (Stone 2008, 148). An example of this is the placement of the temple away from the palace and separated from the rest of the city by a canal, creating a clear division between the religious center and the rest of the city (Stone 2008, 150). Stone proposes a number of axes that cities can be assessed on, related to the social power relations. The first of these is the inclusivity of city, which ranges from inclusionary cities, which house all elements (i.e. classes) of society, to exclusionary cities, also termed elite enclaves. Another axis assesses the integration of a city, ranging from cities with neighborhoods clearly divided between the rich and the poor, to cities where the populations are economically mixed. I will draw upon the methods and conclusions of both Fox and Stone to propose a typology for studying ancient cities, which combines social and economic aspects of each city.

Based on the theoretical frameworks presented above, I propose the following three primary types for identifying the urban nature of ancient cities. It should be noted here that, as Fox also suggested, this taxonomy of cities is not exhaustive, and a city might include more types. However, I characterize each city based on what can be identified as its primary urban function. The proposed typology is:

i. Elite enclaves: cities that are predominantly or exclusively occupied by members of the elite of a state/empire. These include religious centers, as religious centers often are occupied by members of the religious elite.

ii. Administrative centers: residential cities whose primary functions are related to the administration of a state/empire.

iii. Production centers: cities that have predominantly agricultural or industrial functions.

Following Fox, one of the main axes to assess these will be their urban economy, in terms of its degree of economic dependency on other cities/states.

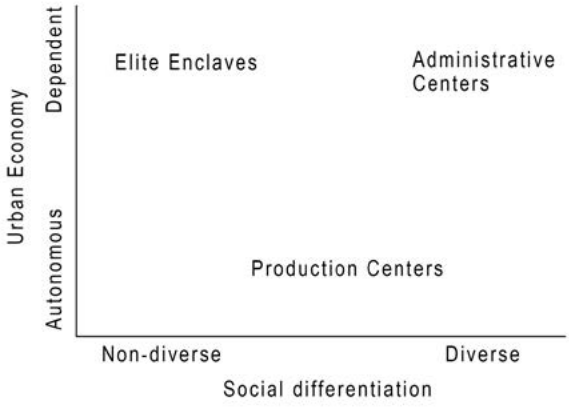

Figure 1: Primary urban types assessed on the basis of urban economy and social differentiation.

The second axis, following part of Stone's model, assesses the degree of social differentiation in a city. The proposed city types and axes are illustrated in Figure 1.

These two axes are relevant to the study of Assyrian capitals for a number of reasons. Traditionally, Assyrian capitals were seen as the administrative centers of the empire. However, it needs to be asked whether this was always their primary role. For example, Gilibert argued that the city of Kār-Tukultī-Ninurta was a capital founded primarily in relation to agricultural production rather than serving as an administrative center (Gilibert 2008). Such hypotheses will be assessed and evaluated in this study.

The social stratum of Assyrian capitals will also be important to consider. As most of our knowledge about Assyrian capitals is restricted to the elite citadel areas, they often have been presented as "empty cities". Despite being large urban creations, this approach has created a fragmentary and misleading picture of these cities. This is exemplified in a recent study by Russell (2017) where, in describing Assyrian cities, he focuses exclusively on the temples, palaces, and citadel, and ignores the houses of common people, or craft production facilities. In order to fully interpret these capital cities, it is necessary to incorporate evidence from their so-called lower cities.

Finally, extensive hinterland restructuring, and large irrigation projects always accompanied Assyrian capital creation to ensure some degree of urban economic autonomy. It must be questioned, however, whether this economic autonomy was actually achieved. After assessing every Assyrian capital city and investigating their differences or similarities, I will discuss the type of cities Assyrian capitals can be categorized as. This will be done by also looking at parallels of other Assyrian cities.

1.3 CAPITAL CREATION AS A FORM OF STATECRAFT

In the definition of capital creation provided above, I mentioned that the creation or relocation of capitals is often connected to state or empire building processes. This section discusses this relationship in more detail. States have taken various forms over the course of history, including city states, kingdoms (Nichols and Charlton 1997; Hansen 2000; Smith 2003a), imperial states (Doyle 1986), and modern nation-states (Barrow 1993; Cudworth *et al.* 2007). The differences and similarities between the different types of states fall beyond the scope of the present study. However, out of these possible forms, Assyria is clearly an imperial state. A state is broadly defined as a territory occupied by a population, under some form of hierarchically organized government which maintains sovereignty and effective control over the population. The process of capital creation is attested in several different types of states and in both modern nations states and ancient empires (for the definition of empire see section 1.4). I will create an overview of capital creation in the past and present and assess whether it is possible to incorporate models from contemporary research on modern capital creation to ancient case studies. These models of modern and ancient capital creation will form the theoretical framework for this study. Based on this I will work towards a new approach to Assyrian capital creation and assess its applicability for other cultures and time periods.

Modern nation states

In modern nation states, the creation of capitals has been linked with the emergence and building of those states, and the creation of their national identity (Hall 1997; Wolfgang 2003; Daum and Mauch 2005; Gordon 2006; Vale 2008; 2014; Minkenberg 2014a). Defining the "nation-state" itself is a difficult task, as it consists of multiple terms that require definition. For the purposes of this study, the nation state is understood as a sovereign politico-military entity with a distinct geographical territory, the population of which manifests, to a greater of lesser degree, a sense of national identity (after Opello and Rosow 1999, 3). A significant part of the discussion on modern nation-state capital creation is connected with the development of national identities and ideologies, and how these are expressed through architecture and architectural developments (see for example Nemes 2010; Kirk 2014). In addition, the changing nature of modern economics had a crucial impact on capital creation as well as on the study of the phenomenon itself (see for example Abbott, 1999, 20f; 2005, 109). Several scholars highlight that in Europe, capitals emerged as part and parcel of state and nation building (see for example Schatz 2004, 114; Kirk 2014, 156). Especially the capitals created during early modernity, such as Berlin (Geyer 2005; Asendorf 2014), are linked to the emergence of early modern European statecraft, as well as the rationalization and standardization of processes of control, like taxation, which greatly enhanced the economic capacity of states (Scott 1998, 3). This redevelopment of states, in addition to the influx of resources and the ideological changes towards nationalism, allowed for the creation of new capital.

An interesting illustration of this phenomenon comes from the study *Capital Cities in the Aftermath of Empires* by Makaš and Conley (2010). That study identifies a connection between the creation of capital cities of Central and Southeastern European nation states, and the historical, ideological and identity building processes and developments in those states during their early stages. Their overview of capital creation in early 20th century Europe illustrates the extent of the phenomenon by examining 14 different cities (Athens, Belgrade, Bucharest, Cetinje, Sofia, Tirana, Ankara, Budapest, Prague, Bratislava, Krakow and Warsaw, Zagreb, Ljubljana, and Sarajevo). In the study of nation-state developments in Europe, the creation of capitals was always connected with the building of national identities and was used as a strategy to consolidate the emergence or creation of states.

A similar case can be made for the relocation of capital cities of states in Africa, Asia, and Latin America during the so-called post-colonial period

(Hall 1993). During colonial rule, the capitals of these states were often located on the coast or at strategic locations along trade routes, making it easier for the colonial rulers to control the movement of resources, goods, and slaves.

However, once colonial rule ended, most of those nations moved their capital cities inland or to more central locations (e.g. Islamabad, Gaberone, Lilingwe, Belmpoan, Dodoma, Abuja, Yamoussoukro). This phenomenon is widespread and happened within about 30 years after the end of the official colonial rule. The use of central territories in the nation-building process has been highlighted by Smith, who suggests that "*the homeland is not just the setting of the national dream, but a major protagonist, and its natural features take on historical significance for the people*" (Smith 1991, 65). The creation of post-colonial capitals in inland territories of states in Africa, Asia, and America are examples of this development, and the connection between capital creation and state formation (see e.g. Vale 2006, 17).

From the aforementioned cases of capital creations in Europe, Africa, Asia and Latin America, we can extrapolate models of modern capital creation. In these cases, there is a direct connection with the birth of nation states and the building of the corresponding national identities. In Europe, when empires were being dismantled and new states emerged, one of the strategies used to create those states was to build new capitals. Similarly, when the colonial system was falling, the nature of the states on different continents changed significantly, but along the same general lines: from directly dependent to and ruled by colonial forces, to politically independent.

It is important to note here that these instances of capital creation are not isolated phenomena but happen as part of a development of a new/different kind of state. It is also significant that the new post-colonial capitals also share another feature: they are in central geographical locations for their respective states. Thus, it can be argued that their creation was related to a shift towards the central area of these states, and away from the colonial centers located at their periphery. Finally, their creation was used as a strategy to bolster the development of a new, national identity.

An interesting recent instant of capital creation is the construction of Astana[1] in 1998. The capital of Kazakhstan was relocated from Almaty, a predominantly Kazakh region, to Astana, a predominantly non-Kazakh region. It has been argued that this was a conscious choice, to strengthen national sovereignty within Kazakhstan, to shift the existing allegiances among powerful tribes, and to distance itself from its Soviet past (Wolfel 2002, 488). Schatz has also argued that in addition to nation building, the creation of Astana was a way of marginalizing specific power holders in favor of new power holders related to the president of Kazakhstan, Nursultan Nazarbayev (Schatz 2004, 123-128). With the creation of a new capital came a massive institutional reorganization of the state, an aspect also related to nation building.

The case of Astana differs from what occurred in the capitals of Europe in the early 20th century and the post-colonial capitals of Asia, Africa, and Latin America. Firstly, it does not belong to a wider regional trend of capital creation in post-USSR states (e.g. Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan did not change their capitals), but is a rather isolated phenomenon of its period. However, Kazakhstan ranks among the world's top 15 oil producing countries and possesses 3% of global oil reserves (Vakulchuk and Overland 2018, 143). This makes it the only country in the area with easy access to resources, which might in part explain why no other country engaged with the rather costly project of creating a new capital.

Another aspect that is different, is that the new capital did not consolidate a change in the nature of the state, such as from a colonial state to an independent nation state. Rather, this strategy was used to strengthen the power of specific groups or power holders at the expense of others, and to exercise control and stabilize the otherwise relatively politically unstable area of Kazakhstan.

It is also worth noting here that the creation of Astana was a major labor project, which provided jobs to a large portion of the population. Such projects can strengthen the position of (often authoritarian) governments in the eyes of the broader population. Similar arguments, related to antiquity, have been put forward regarding the construction of the pyramids (Wynn 2008). The construction of Astana had similar effects. As such, Astana highlights two different paradigms of capital creation: a way to bolster the position of a government to the wider population, and to undermine traditional elites to strengthen the position of new power holders.

1 Astana was renamed Nur-Sultan in March 2019 in honor of the departing Kazakh president Nursultan Nazarbayev. This text retained the naming Astana, as it is addressing the creation of the capital.

The latter strategy can also be described as one of disembeddedness, which has been a crucial paradigm for the study of ancient capital cities (Joffe 1998) and might illustrate possible parallels between modern and ancient instances of capital creation.

Vale (2008, 14) identified and discussed a number of examples of capital creation and the choice of location for modern nation states. This overview was summarized in three main categories of capital cities in nation states: i) evolved capitals, ii) evolved capitals renewed, and iii) designed capitals (Vale 2008). Evolved capitals, in his definition, are capitals with a long and complex history of being capital cities. By evolved capitals renewed, he defines cities which were capitals more than once. Finally, designed capitals are capitals that were architecturally planned to become capital cities. The latter two types align with what I define as capital creation.

The cases of capital creation presented above highlight the connection between the creation of new capitals with the process of statecraft in modern nation states, as well as the complexity and multiplicity of capital cities (see also Hall 2006). Finally, the debate around modern capital creation heavily revolves around regime building and the differences between capital creation in democratic and non-democratic regimes (see in particular Mikenberg 2014c, 2-12). Although the example of Astana was mentioned above, the debate extends to several related topics, such as pre- and post-World War I nation states (see for example Daum and Mauch 2005), the concept of power, architecture and the political use of space in liberal and illiberal regimes.

Looking beyond modernity, capital creation occurred in antiquity from the Akkadian period onwards (ca. 2350 BCE). How then do these past instances of capital creation compare to modern examples? What are the strategies of capital creation used in the past? How can archaeology help us investigate capital creation in antiquity in greater detail? I argue that in antiquity capital creation is linked to imperial state formation, and that Assyria presents an excellent case to illustrate this point.

Capital creation in antiquity

One of the best-known examples of capital creation in antiquity is the creation of Amarna, the city constructed during the reign of Pharaoh Akhenaten (1351-1334 BCE) (Kemp 2012). During his reign, the Pharaoh, together with his wife and with the support of the military, instigated a significant religious change in Egypt revolving around the worship of the god Aten. This change was consolidated with the creation of a new capital, as a place wherein the worship of the new religion would take place and served as a residence for the Pharaoh and court. This change has often been interpreted as centered on religious matters (Redford 1984).

While this instance of capital creation was executed within an already existing state, the relocation attempted to consolidate a significant ideological and religious change. In that sense, creating capital cities can be connected with statecraft, and with the creation and consolidation of a new social order. The creation of this capital was linked to the desire of one group to distance itself from existing centers in order to advance its own political, ideological, and religious agendas.

A different case of capital creation involves the creation of ceremonial capital cities. These ceremonial capitals are created either for the commemoration of an event (usually victories over important enemies) or to be used for ideological and ceremonial purposes. Their creation is initiated from a will to make an ideological statement.

One example is Persepolis, a city created during the Achaemenid empire (550-330 BCE). The main capital of the Persian empire remained Susa, and Persepolis was modelled largely after the palace of Darius at Susa (Garthwaite 2005, 50; Perrot 2013, 423). While Persepolis never functioned as the residence of the Achaemenid kings, it did act as a ceremonial center for the collection of tribute from the provinces of the empire. Persepolis was used to express and consolidate imperial ideology through large scale festivals and ceremonial procession. It is interesting to note here that the capital was created during the reign of Darius I (550-486 BCE), in a period of significant territorial and economic growth of Persia. This period is associated with a widespread construction boom, visible at Susa, Babylon, and Pasargadae (Cuyler Young 1988, 105-111).

The durability of capitals created in imperial states can be illustrated by looking at some examples of imperial capitals through time. A well-known example is the creation of Constantinople. Constantinople was created as the new capital of the Roman empire during the reign of the Roman emperor Constantine I in 330 CE (Harris 2007). The new capital, while it took its name from the founding emperor, was also

known for at least the first few centuries as Nova Roma (New Rome), Second Rome, Eastern Rome, or Roma Constantinopolitana (Georgacas 1947). This probably happened to signify both the legitimacy of the new city as a capital (i.e. to be compared with Rome itself), as well as to give a sense of continuity in the empire, despite the shift towards the east.

An important factor in the relocation of the capital from Rome to Constantinople was the shift of the empire's core from the west to the east (Ball 2016). The foundation was in part an administrative choice, as Rome was very far away from the turbulent eastern frontiers that were important at this time. However, it was also related to the consolidation of the Christian church, a religious movement that had obtained significant power through its connection with Constantine. The case of Constantinople shows that capital relocation can happen on the basis of administrative and geographical reasons, as well as the emergence of new power holders or social conditions (Korolija Fontana-Giusti 2012).

Capital creation appears to be tied to imperial states across the globe, and some examples of this come from the historical capitals of China. Throughout Chinese history, each dynasty, or in some cases each emperor, relocated the capital to a location for which they secured its political allegiance (Cotterell 2008). As this practice continued for thousands of years, it has resulted in a long list of capital cities. Some of the most well-known Chinese capitals include Nanjing, Luoyand, Xi'an, and Beijing, the current capital.

Concluding, it is evident that capital creation is a recurring phenomenon in antiquity and is closely tied to empires. It can be attested in different periods and in different regions, and it can serve widely different purposes. What seems to be the common denominator is that all the presented examples come from imperial states. Egypt, Persia, Rome, and China all represent past empires with vast territories under their control and access to large quantities of resources.

Ancient and Modern Capitals Together

From this overview of instances of capital creation, it is clear that this phenomenon occurs in two types of states: in antiquity in imperial states and in modernity in nation states. For the latter, this is largely to be expected, as nation states have been the dominant type of state for the last 100 years, and every nation state also has a capital city. After the so-called end of empires in the early 20th century, no other type of state has emerged, even though it can be argued that some modern nation states can be described as imperial polities (see for example Bernbeck 2010).

In antiquity, the situation is only slightly different. Capital creation happens only in states with a considerable territorial extent that facilitates capital relocation. As such, we should not expect capital relocation in city-states. Further, capital creation happens in states which have the economic means to perform such an action, and these are predominantly empires.

In terms of capital creation, there is also an important similarity between how it occurs in modern nation states and imperial states of the past. The relocation of capitals is a process connected to significant changes in states. These changes can be related to: the nature of a state (i.e. the change from colonial to nation states); power relations (e.g. role of power holders in creating Astana and Chinese capitals); identity (e.g. the change from European empires to modern nation states); ideology and religion (e.g. Persepolis and Amarna). In addition, it has been shown that capital creation can happen as an isolated event (e.g. Rome to Constantinople in antiquity; the creation of Astana in modern nation states), or as part of a broader trend (e.g. European nation states in modern times; capitals of China in antiquity).

Despite the similarities, we should not consider ancient and modern cases of capital creations interchangeable since imperial and nation states have different political and economic structures. In addition, there are types of capitals which are specific to ancient states. For example, modern nation states do not have ceremonial capitals, as the payment of tribute to a ruler/king does not fit within the ideology of nation states. As such, comparisons between ancient and modern instances of capital creations should be done carefully and with awareness of the differences between the two periods.

1.3.1 DISEMBEDDED CAPITALS

I will now discuss the concept of disembedded capitals mentioned above, as it is one of the central proposals for how capital creation has traditionally been assessed. The investigation of ancient capital creation has proceeded, almost exclusively, from a historical or political perspective. The only archaeological discussion concerned with capital creation as a phenomenon is that of *disembedded capitals*. It was first applied to a Near Eastern context

by Joffe (1998). As a concept however, it dates back to 1976, when the term was first introduced by Richard Blanton. His research focused on the ancient Zapotec capital of Monte Alban, which he thoroughly investigated and mapped (Blanton 1978). To characterize the geographical position and the role of Monte Alban within the ancient Valley of Oaxaca, he described it as a disembedded capital (Blanton 1976a). His definition of the term was broadly explained in a subsequent paper the same year (1976b), which dealt with the anthropological studies of cities.

He based his approach on the central place theory of geography, which seeks to explain the number, size, and location of human settlements in an urban system. He suggested that in cases where there are spatially extended economies (i.e. locations with multiple settlements invested in the economic network of the area), there could be multiple highest-ranking economic centers, rather than a primate one. Therefore, in a location/state with multiple economic centers, the administrative center should be a separate settlement and be smaller than its major economic centers.

In that regard, he proposed that "*there are situations in which one would expect the highest-order decision-making institution to be spatially "disembedded" from the remainder of the central-place hierarchy*" (Blanton 1976b, 257). An apt example of this is Washington, D.C. in the United States, which, at the time of its elevation to a capital, was not an important economic center (Abbot 1999; 2005). Another interesting example here, albeit not used by Blanton, is the city of The Hague. The city acts as the seat of the government and administration of the Netherlands and the presence of the International Criminal Court (ICC) has led to it being described as the "legal capital of the world" (Krieken and McKay 2005). At the same time, it is not the capital of the Netherlands, which is Amsterdam, nor is it the most dominant economic center of the country. Blanton outlines three categories of disembedded capitals: i) capital centers (permanent but neutrally located centers) ii) roving palaces (high-ranking elites moving from center to center), and iii) temporary capitals (the creation of new capitals by every new ruler).

It should be noted that Blanton's basis for categorization is primarily economic. It essentially suggests that there should be a compromise amongst economic centers in order to maintain a balance of power. However, based on the examples of capital creation given in the previous section, it is clear that this is not always the case. In many cases, capitals are created exactly to shift the balance of power towards one elite group at the expense of others. Blanton also does not take into account other factors for the choice of new capitals, such as their geographical location, or the history of the location of the new capitals.

Blanton's identification of Monte Alban as a disembedded capital was also criticized, mainly due to his choice of comparative case studies (Willey 1979; Santley 1980). However, his critics did not object to the idea of disembedded capitals per se. Willey (1979) carried out a comparative study with other ancient examples and suggested that, the concept is inapplicable in ancient contexts (such as Monte Alban or the Ancient Near East), but it could be useful in modern societies.

Joffe (1998) was the first to adopt and re-evaluate the term in an Ancient Near Eastern context. He defines disembedded capitals as "*urban sites founded de novo and designed to supplant existing patterns of authority and administration […] Disembedded capitals were typically founded by new elites […] as part of innovations designed to simultaneously undercut competing factions and create new patterns of allegiance and authority. […] In an evolutionary sense disembedded capitals were short-lived phenomena which tended to create long term societal problems*" (Joffe 1998, 549). Furthermore, he provides a number of expectations that may serve to identify the presence of a disembedded capital (Joffe 1998, 551):

1. *A site being newly founded, or greatly expanded in a particular period or phase.*
2. *Evidence that a site has been founded or expanded by a new sociopolitical or ethnic group, such as changes in pottery and other material culture, architecture, foodways, or administrative practices.*
3. *A significant shift in regional settlement patterns. This may entail either a decline in, or expansion of, rural settlement and similar changes in middle-level settlement.*
4. *Evidence of centralized administrative activities, such as writing, sealing, storage or redistribution.*
5. *Evidence of a sudden appearance or an increase in flows of specialized materials into a site.*

6. *The presence of military equipment and personnel within the new site.*
7. *Sudden shifts in the evidence for political legitimation, such as new iconographic techniques, a new symbolic vocabulary, or the distinctive combination of new and old elements.*
8. *The association of religious and palatial institutions within a new site.*
9. *A non-organic urban pattern, in which residential, administrative, and royal elements are rigidly planned and segregated.*

These expectations, however, are somewhat inconsistent with his primer definition in some points. For example, while Joffe described disembedded capitals as sites founded *de novo*, his point one given above also includes sites that have been greatly expanded. This incorporation is crucial for the study of capital creation because it includes another large subset of the phenomenon: the significant redesign or expansion of already existing urban settlements. Joffe also suggested that evidence for a disembedded capital can consist of centralized administrative activities such as writing, sealing, storage, or redistribution. However, such traits can be found in any major urban center. A similar argument can be made regarding the shifts in evidence for political legitimation.

Some of these issues are, indeed, recognized by Joffe, who acknowledged that several points of his list can be used to identify any city, and not necessarily a capital city. Joffe therefore suggested to look at how many of his listed expectations are present. However, he does not provide a threshold of how many of these factors are needed to qualify a site as a disembedded capital. This is a common issue in checklist approaches, and one that is not solved in this case.

Continuing to interrogate his own arguments, Joffe suggested at some point that even the term "disembedded" was a misnomer (Joffe 1998, 552). He suggested that the only way to understand those capital cities is not by their disembeddedness, but how embedded they were in existing matrices of politics and economics. Also problematic in my opinion is the idea that capitals are created exclusively when elites change. Joffe suggested that on the basis of this argument we should always expect distinct changes in the archaeological horizon related to the new elites. Such an argument can be criticized on two grounds: i) material culture does not always change with the rise of new elites, and ii) it is possible to have new capitals without a change in the ruling elites (see also Yoffee 2005).

In a recent study on Late Bronze Age capitals in Mesopotamia, Carlson briefly discussed the concept of disembedded capitals (Carlson 2017, 270-272). He suggested that none of the cases he investigated (Al Untaš-Napiriša, Kār-Tukultī-Ninurta, and Dūr-Kurigalzu) fit all of the criteria of the term as proposed by Joffe. Further, Carlson suggested that all three cities were actually embedded in their respective regional systems.

I will argue that in order to explain capital creation, one has to investigate the historical circumstances within which a new capital is created. In that sense, capital cities can never be disembedded. The fact that they might be "disembedded" geographically (meaning they are constructed away from the center of a state) or used as a way to undermine specific power groups, can be explained by investigating the conditions in which the city was created.

1.3.2 REFRAMING CAPITAL CREATION IN CONTEXT

I will now address another concept related to the explanation and understanding of capital creation, which in many ways is an extension of the discussion on disembedded capitals: the role of the ruler. The concept of disembedded capitals implies that elites/rulers used capital creation as a strategy to undermine the power of competing elites. Yet, to what extent should attention be given exclusively to the elites or the ruler under whom capital creation took place? In other words, how central is the agency of the individual ruler/king/dictator in the decision to create a new capital? What other parameters or agencies could be at play when a capital is created? This question will come up repeatedly in the study of Assyrian capital cities below. Several existing explanations for the creation of new Assyrian capitals relate the conception and realization of new capitals to charismatic personalities of specific kings (see for example Dolce 1997; Carlson 2017). Each city has been defined as the city of the "king-creator" (e.g. Dur-Šarrukēn as the city of Sargon, and Nineveh as the city of Sennacherib). The attribution of a newly created capital solely to the personality or initiative of a king/ruler, is what I define as a *regal-centric* approach.

Regal-centric approaches have been commonly used to explain capital creation both in modern nation-state contexts, as well as in states and empires of the past. An example in modern history comes from Malawi and the movement of capital from Zomba to Liliongwe. In her paper on the topic, Potts (1985, 188) argues that the most important factor in the relocation of the capital was the vision of President Banda and his charismatic personality. She considers that the regional planning needs of Malawi was not the primary objective of the shift to the new capital but probably a *post-hoc* rationalization. For Potts the "unique decision-making" power of Banda makes the construction a project of personal prestige rather than a rational element to restructure the country's space economy.

The view of the ruler as the main agent behind the creation of capitals, even in modern states, has been tacitly assumed by researchers, journalists, and popular science. Astana, which was discussed above, has often been treated as the product of Nursultan Nazarbayev, president of Kazakhstan. A recent article on the online version of The Guardian argued that the creation of Astana was the creation of a "*big man*" who tried to show off power and wealth (Wainwright 2017). In this article, Adil Nurmakov is quoted: "*Astana is a city in the making, but it is not making itself* […] *It is not being allowed to develop itself, because everything is directed by the one and only architect of Astana*" (Wainwright 2017).

According to other scholars (Wolfel 2002; Schatz 2004), however, there are other factors at play in Kazakhstan besides the personality of Nazarbayev, such as the location of the new capital, and the need for a large labor project. Geographical and political reasons are also related to this case of capital relocation, such as the reorganization of the state and the marginalization of previous power holders. Thus, focusing exclusively on the characteristics or personality of a ruler to explain capital creation is overly simplistic. As Schatz puts it "*to focus on the idiosyncrasies of character may obscure common themes; outcomes should not be reduced to rulers' preferences*" (Schatz 2004, 117, 137).

Regal-centric narratives have been popular in the study of ancient capital cities, which can be attributed to the bias created by the available textual evidence. Often, the only sources for the creation of ancient capitals are propagandistic texts from governments/rulers, which praise the initiative of the king under whom the capital creation took place. This is exactly the situation for the creation of Assyrian capitals, the description of which mainly comes from the royal inscriptions of Assyrian kings.

Such interpretations, which focus on a single actor rather than the broader historical conditions, often fail to take into account other factors, such as contemporary politics, regional planning, ideology, and state development. While several examples were given above of modern capital creation, it must be stressed that this phenomenon does not only occur in authoritarian regimes. There are several examples of democratic regimes (e.g. Brazil, Canada, Australia) that chose to relocate their capitals (Minkenberg 2014b; 2014c). Within those systems of government there was no single actor who initiated or dictated the creation of a capital, although there are certainly agents that play more or less significant roles. In some of these cases there is no shift in ruling elites to justify a "disembedded" explanation in relation to governing bodies. As such, the existence of single (charismatic) rulers or governmental changes is not a necessary condition for capital creation.

I am not suggesting that agents have no role in capital creation. The approach proposed in this study follows the crucial contribution by Sewell (2005) on the role of the agent within social and, more importantly, historical structures. Sewell suggested that historical agency is not opposed to, but constituent of the historical structure. It is this particular dynamism between social relations, historical transformations, and historical actors that informs the new approach taken in this study.

Sewell concluded that there is a continuous and dynamic interaction and interdependency between human agency and the historical process that humans live within (Sewell 2005, 143). Human agents are continuously influenced by the historical conditions of their lifetime, and at the same time, historical conditions are influenced by the actions of the agents. In the present study, I take a similar approach to the role of the ruler in the study of capital creation. Rulers, together with every other contemporary agent, engage in historical processes such as capital creation. Each actor's agency arises from the degree of knowledge and understanding of their historical conditions, and the way they apply this knowledge within their context (Sewell 2005, 143).

In my opinion, the focus and frame of research regarding capital creation should rather be on the examination of the dynamic context (political,

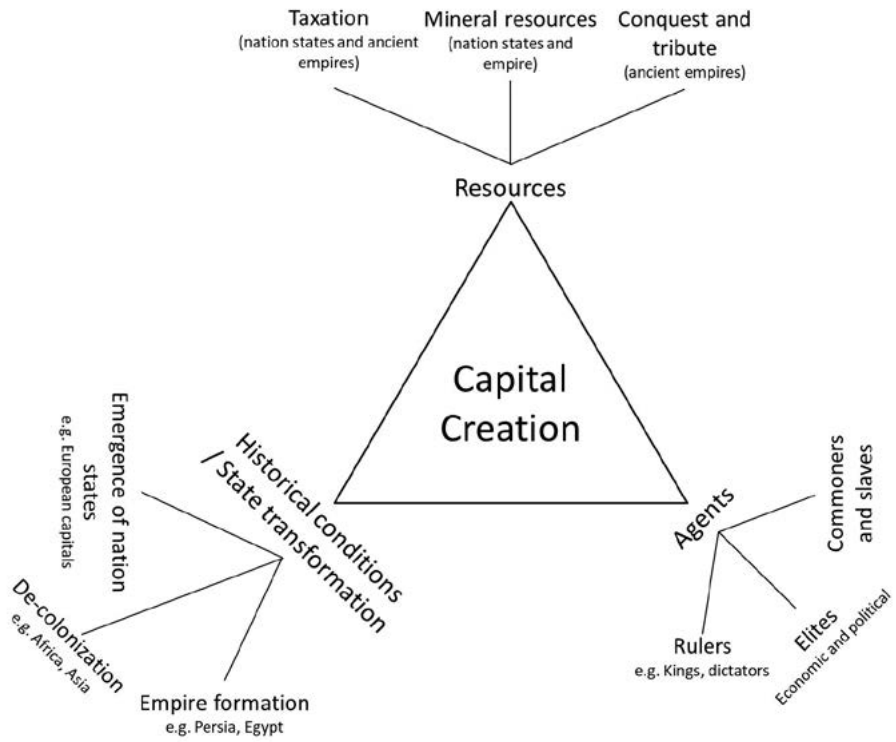

Figure 2: General model for the three main factors related to capital creation.

ideological, religious) in which the capital creation took place. This includes the ongoing changes in a given political system, the construction process of the capital, and its urban planning and subsequent fabric. The agency of important actors during those periods is part of this examination. Historical research provides the information on the actors that participated in the creation of new capitals and the actions taken during capital creation. This information is important but not sufficient to explain capital creation.

Based on the arguments and concepts presented so far, I argue for a synthetic approach to capital creation. I propose a model that sees capital creation as the result of three main factors: i) state transformation / historical conditions, ii) historical agents, and iii) means and resources. This model can be applied to multiple contexts and is illustrated in Figure 2.

The model seeks to explain capital creation by a series of criteria that have to be met for a new capital to be initiated or realized. For example, key agents are always present to initiate or drive the project of a new capital. These key agents always act within particular historical context and their actions and ideas are shaped and influenced by it. We can only understand their initiatives by investigating the historical conditions that facilitated the creation of a new capital. Finally, new capitals are massive infrastructural projects that require a large economic investment for their realization. Investigating the source of the resources used or exploited for the creation of new capitals is crucial if we want to have a clear picture as to why and how a new capital was created.

When it comes to capital cities in antiquity, I suggest that comparative archaeological studies can help us move away from regal-centric approaches and towards a more comprehensive understanding of capital creation, as proposed in the above model. Historical research can provide us with the historical context, which mostly emerges from the perspective of the rulers. What historical research lacks is an understanding of the material manifestation of capitals that can provide answers for a number of others issues like: urban organization of a capital city, advantages of location in relation to resources or in

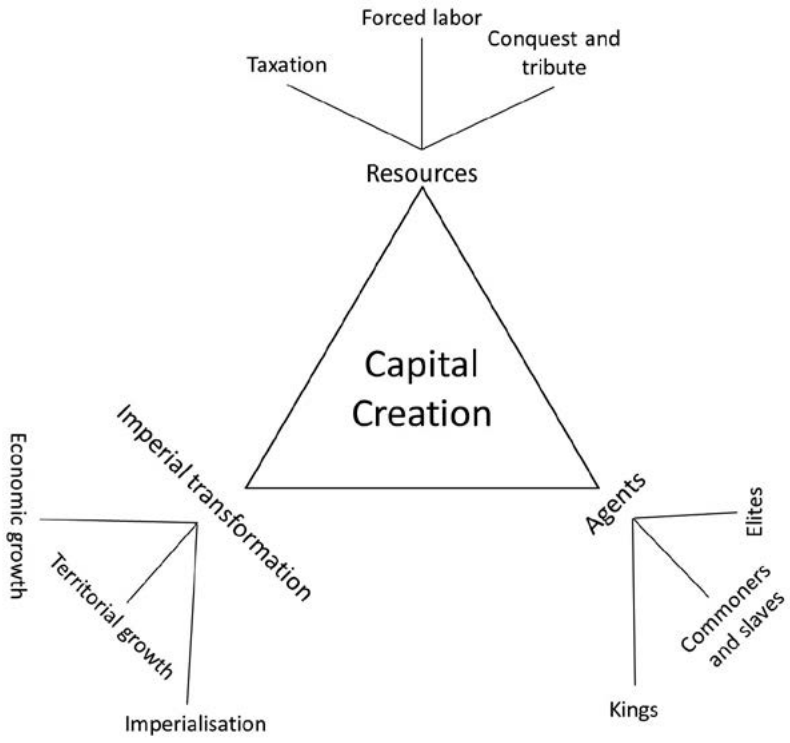

Figure 3: Capital creation in antiquity based on the model proposed in this study.

connection to trade routes, the type(s) of population living in a capital city, and the kinds of functions a capital city has (administrative, industrial etc.). These can be identified through archaeological research and, combined with the textual evidence, provide a holistic view of capital creation (Figure 3).

1.4 CAPITAL CREATION AND THE STUDY OF EMPIRES

In the previous sections I discussed the connection of capital creation to statecraft. This research focuses on the phenomenon of capital creation in empires, namely the Assyrian empire. Earlier, in the definition of state used in this dissertation (section 1.3), I suggested that an integral part of a state is the maintenance of sovereignty and the effective control over a territory and population. Empires have often been described as expansive states, which incorporate other states through some form of annexation (direct conquest, economic dependency, etc.) (Burbank and Cooper 2010).

In this study I will be using Doyle's (1986) definition of an empire as "*a relationship, formal or informal, in which one state controls the effective political sovereignty of another political entity. It can be achieved by force, by political collaboration, by economic, social or cultural dependence*". As such, an empire is understood as a political entity which exercises direct or indirect control over other states. As discussed earlier, capital creation is associated with processes of transformation. A state expanding its territorial control over other states can be such a transformation. This idea will be further explored and investigated in the case studies of Kār-Tukultī-Ninurta (chapter 3) and Kalḫu (chapter 4).

Several of the examples presented in the previous section dealt with the creation of capitals in empires. Imperial capital cities are important for our understanding of the ideological and administrative aspects of an empire (Smith and Montiel 2001). They are often located at the core of empires, are the seat of the king/emperor, the headquarters of the army and the center of administration. They are a large complex urban center with material proclamations

of imperial ideology such as militarism and the glorification of the king or the state (Smith and Montiel 2001, 248-49; Matthews 2003, 134-142).
While this perspective focuses on the size of the capitals and the manifestations of imperial ideology therein, the archaeological study of imperial capitals can also inform us on the life and living conditions of the broader population. In this comparative research of Assyrian capitals, I will investigate the process of capital creation within an imperial framework. I want to identify whether (and if so, how) the process of creating new capitals is connected with broader transformations of the Assyrian state, such as the transformation of the Assyrian state into an empire. I will also study the administrative and territorial shifts in the Neo Assyrian empire and identify possible relations with the creation of new capitals.
In the following chapter I will discuss the selection of Assyrian capitals as the case study for this research. I will briefly introduce Assyria within its historical context and discuss the concept of building projects and the creation of cities in the Assyrian empire. I will also dedicate space to the historical and archaeological exploration of Aššur as the traditional capital of the Assyrian empire.

1.5 METHODOLOGY

The study of capital creation in Assyria so far has been mainly textual (see e.g. Parpola 1995; Radner 2011). Archaeologists have rarely been concerned with the reasons behind the construction of the capitals they excavated. A study of capital creation that only re-examines the same regal-centric and textual dataset would, therefore, not yield any new significant results.
Archaeology can significantly contribute to a comparative analysis of capital creation and, combined with our current knowledge of textual evidence, bring the material manifestations of capital cities to the forefront of the discussion. Firstly, investigating the archaeological remains of cities allows the verification of claims made in contemporary royal inscriptions and propagandistic texts. More importantly, however, archaeological data provide insights on a more human level, such as the living quarters of cities, rarely referred to in textual evidence. Such data will allow for a much more comprehensive and holistic comparison of the newly created capitals of Assyria.

The type of datasets used in this study (Table 1) vary in their quality and quantity in each case study. For example, there are (translated) royal inscriptions for all the kings under whom a capital was made, with the exception of Sargon II. In addition, not every Assyrian capital has been excavated to the same degree. The data and different types of analyses, presented in the table below, will form the methodological toolkit of this study.

Data	**Why?**	**How?**	**What?**
Historical records and textual evidence	√	√	√
Geographic analysis	√	√	√
Excavation data		√	√
Architectural analysis		√	√
Iconographic analysis		√	
Labor investment analysis		√	
Satellite imagery	√		√
Urban zoning			√

Table 1: Types of data and analyses used in this study.

By historical records, I mean historical accounts presented in royal inscriptions, as well as textual and historical research for the relevant period of this study (e.g. Freydank 1974; 2005; Harrak, 1987; Grayson 1987; 1991; 1992a; 1992b; 1996; Frahm 2017a; 2017b; 2017c; Jakob 2017). Historical records will be used to study and create the framework within which capital creation took place. Textual evidence will be used to investigate buildings and materials which are not archaeologically traceable and to understand the perspective of key agents during capital creation. I will discuss the published textual evidence that explicitly refer to the construction of the capitals. This includes two main categories of textual data: i) royal inscriptions and other propagandistic texts mentioning the construction of a capital, and ii) administrative correspondence and other available texts related to the construction of capitals (see for example the corpus on the construction of Dur-Šarrukēn investigated by

Parpola 1995). From the texts, I will be extracting available figures (e.g. number of workers, population numbers, types and amounts of materials, etc.), and then compare them with assessments of labor investment analysis which I will make on the basis of archaeological evidence. Textual evidence also provides information on buildings that have not been excavated or located but can thus be included in this study. Finally, through royal inscriptions we learn about the types of materials used in elite buildings that have not remained.

An important parameter of the study of capital creation is the choice of geographic location. The location of a new city could potentially be a key reason for the relocation of a capital (e.g. more favorable location, closer to resources, or closer to an important region), and heavily influence the process of construction (e.g. landscape constraints, access to materials, connection to trade routes). Firstly, I will investigate the geographical location of each capital in relation to:

1. other important centers of the empire
2. access to resources, trade routes and waterways
3. proximity to regions of interest such as borders

Further, I will use satellite imagery, and in particular the satellite images available through CORONA[2] and Google Earth (Goossens *et al.* 2006; Cultaro *et al*. 2007; Ur 2013), for the identification of features which are otherwise not visible or not excavated such as:

1. canal systems
2. walls
3. landscape features that influence the construction of a city (e.g. mounds)

In this study, I will make a comparison between the different aspects and features of each location in terms of proximity to water sources, available agricultural hinterland, natural defenses, and existing landscape features such as citadel mounds. Through this comparison I will be able to show differences and similarities in the choice of location and geographical characteristics of Assyrian capitals.

2 http://corona.cast.uark.edu

This study is primarily archaeological and, therefore, the excavation datasets of each capital will be central. Access to the research area during the realization of this study was not possible, making a hands-on approach to the architecture and materials unfeasible. Research of the archaeological remains of the capitals will be done through the study of all the published primary excavation data. I will discuss the history of research and the different teams that excavated each capital, with specific attention paid to the architectural remains. I will be comparing the different types of buildings found in each capital, the evolution of architecture, and the materials used for their construction.

One of the core questions of this study is how these capitals were created. For that purpose, I will first investigate textual and iconographic evidence to extrapolate any information regarding the construction process. However, such evidence is often incomplete or provide a top-down view of the construction. These evidence, therefore, will be corroborated with a labor investment taskwork analysis. On the basis of textual and archaeological evidence, I will evaluate the number of workers needed to create these capitals given the known period of construction. Assessing labor investment can provide us with insights into a number of crucial aspects of capital creation. It relates to the economic investment of the Assyrian empire since these people had to be fed and housed. Additionally, it can reveal the intensity of building processes (i.e. small number of workers over long periods or vice versa, or a large labor force over a long period of time), the managing and administrative abilities of the Assyrian state, and more.

For this research I will be following the methodology (taskwork analysis) proposed by Richardson (2015), who assessed the labor investment for the construction of the wall of Larsa. Although there have been relatively few studies regarding labor investment for mudbrick constructions (see for example Mallowan 1966; Oates 1990; Heimpel 2009), Richardson's holistic research approach includes several parameters in the process of mudbrick construction. This approach examines all the phases of creating and laying bricks for wall construction, and focuses specifically on city wall construction, which is also a focus of the present study. I have developed a modified version of his analysis, to better fit the reality of the Assyrian period.

The labor investment in the construction of the city wall of each city is crucial to this study. The reasons for the choice of this dataset are: i) the existence of city walls in each capital offers a good candidate for a comparative study; ii) there is sufficient information on the size and height of the walls, allowing for a study on the basis of their total materials; iii) they are relatively simple constructions constructed in a similar manner, unlike more elaborate buildings; iv) they are made with the same materials (stone and mudbrick), and the same mudbrick size was used in every construction. For all these reasons, assessing labor in the construction of walls provides at this point the most straightforward case study for architectural analysis.

The taskwork analysis will be implemented through a comparative study of published archaeological data from the city walls of Assyrian capitals. The focus will be on Kalḫu, Dur-Šarrukēn and Nineveh, as these are the only newly constructed capitals that provide sufficient data for such an analysis. The existence of a wall in Kār-Tukultī-Ninurta will be problematized in the corresponding chapter.

Finally, I will be looking at the urban zoning of Assyrian capitals to determine aspects of their function. By urban zoning, I mean the spatial division of cities into zones or districts of different function. These zones could include neighborhoods, districts with specific functions (e.g. industrial, military, etc.), or open spaces. Research on the urban zoning of ancient cities has seen a rise recently (e.g. Keith 2003; Garrioch and Peel 2006; Stone 2007). Smith (2010) has provided a comprehensive review on the archaeological study of neighborhoods and districts in ancient cities. Urban zoning analysis provides useful insights into two main crucial factors for the study of cities: i) the function(s) of a city and ii) the living experience of a city. Regarding the function, the existence and size of different types of zones in a city can give important information on the type of activities taking place there. In regard to the living experience, understanding the urban zoning of a city can provide key insights into its social web, such as whether there is an upper class or mixed population, or whether there were exclusively rich or exclusively poor neighborhoods.

In Assyria in particular, there are two notable examples of the study of urban zoning: Dūr-Katlimmu (Kühne 2013) and Tušhan (Matney *et al.* 2017). The site of Dūr-Katlimmu/Tell Sheikh Hamad, located in the area of the Lower Ḫabur valley, served as a supra-regional administrative center for the western part of the Assyrian empire already from the Middle Assyrian period (Kühne 2015, 61). Its 8th and 7th century BCE phase, known as Lower Town II, has been studied in terms of its urban layout to demonstrate the population composition of the site. A particular focus has been on the presence of large elite residences as the main type of building, and the type of activities that took place in the city during that period. The results of this study will be further explored in chapters 4 and 7.

Looking into urban zoning will help generate information on the local function and space organization of the centers of the empire. At the same time, it will help shift the perspective of Assyrian capitals as strictly elite spaces. In this study I will investigate if this model can be feasibly applied to Assyrian capital cities in terms of data availability. If not, I will investigate what kind of work is still required to create a model for the urban zoning of Assyrian cities.

Tušhan, also known as Ziyaret Tepe, is located in the upper Tigris river valley and served as a provincial capital mainly during the Neo Assyrian period. Various parts of the city have been excavated (Matney *et al*. 2017), and its urban composition presents a strikingly different case of urban zoning than at Dūr-Katlimmu. At Tušhan, in addition to the elite residences, there are production facilities, military installations, storage facilities, and agricultural processing facilities. The urban layout of Tušhan will be further explored in chapter 7 as comparative evidence for the urban zoning of Assyrian capitals.

To study the urban zoning, I will be using two main archaeological datasets. Firstly, surveys conducted in Assyrian capitals, and specifically the Kār-Tukultī-Ninurta survey (Dittmann 1990; 1997a; 1997b), the Kalḫu survey (Fiorina 2008; 2011), and the Nineveh survey (Lumsden 1991; 2000; Stronach and Lumsden 1992, 228). Further, I will be looking at satellite images that have the potential to provide us with information such as road networks within a city (see in particular Ur 2013). Despite the limited available data, I will attempt to create a framework for understanding urban zoning in Assyrian capitals and propose ways to advance this particular type of study.

The structure of this study will follow a particular order and will be formed around the three main research questions. Each capital will have a chapter

dedicated to its research and analysis, in which I will look into the history of research, published data, textual evidence, geographical location, etc. In each chapter I will work towards answering the why, how, and what for each capital's creation. The last chapter will provide the comparative analysis, in which the results of the previous chapters will be put together in a thorough examination of similarities and differences between each city, emerging patterns of capital creation, and possible research avenues for the future.

Chapter 2: Assyria and Aššur

2.1 CHOOSING ASSYRIA

The aim of this study is to investigate the phenomenon of capital creation, and more specifically *imperial capital creation*. In order to contextualize Assyrian capital creation, it is necessary to present some earlier examples of the phenomenon from other empires of the Near East. The first empires in global history, such as Akkad, Babylon and the Hittites, are attested in the broader region of the Near East, predating the Assyrian empire (Barjamovic 2013). Sargon of Akkad is connected with the foundation of the first imperial state in Mesopotamia ca. 2350 BCE (Liverani 1993). During that period the city of Akkad developed into what could be described as the first imperial capital. Unfortunately, Akkad has not yet been located and textual sources do not provide much detail about its physical characteristics. Therefore, an investigation of its creation is not possible.

The case of Egypt and the city of Amarna has already been mentioned in the previous sections, in reference to the reign of Pharaoh Amenhotep IV, who changed his name to Akhenaten to signify his devotion to god Aten. During his reign, Egypt experienced a number of significant changes in its cultural sphere: most temples devoted to regional deities were closed, the artistic canon was changed, and the capital of Egypt was moved to Amarna (Kemp 2006). The city has been extensively excavated (Kemp 2012) and has shown that, together with the creation of a large new religious center, Amarna was also a city with workshops, a diverse population, outlying villages, cemeteries, and more. However, the city ceased to function as a capital and was abandoned after the death of Akhenaten.

In itself, Amarna presents a very interesting case of capital creation. It seems to be linked to a singular religious undertaking. It is very likely that it did not have a significant cultural impact on the population of Egypt. Dabbs and Zabecki (2014), for example, who studied the South Tomb Cemetery of Amarna to demonstrate the exploitation of population, demonstrated that traditional burial practices of the New Kingdom did not change even in the new capital, despite the enforced religious change. The uniqueness of the phenomenon within its historical context, in conjunction with its brevity, make it a good case study to examine individually, but difficult to fit within a wider comparative framework of Egyptian capitals.

The Hittite empire had two imperial capitals, Hattuša, the traditional capital of the empire, and Tarhuntašša. The former has been thoroughly investigated both historically and archaeologically, and although it was not a new foundation, its massive redevelopment and expansion during the imperial period makes it an important site to study. The latter has been described either as ceremonial capital (Singer 2006), or as the result of political conflict (Bryce 2007, 122). Yet, like Akkad, archaeological investigations have not identified Tarhuntašša, making a comparison between the two Hittite cities impossible (d'Alfonso 2014).

The Kassite dynasty (ca. 1595-1155 BCE) of the Babylonian empire also created a new capital. The royal palace was relocated from Babylon to the newly founded Dūr-Kurigalzu (Potts 2006). The city was founded during the reign of king Kurigalzu and it functioned as the primary administrative center of the state throughout the history of the dynasty (Clayden 1996; Bartelmus 2010). The limited archaeological and textual data regarding the city, especially pertaining to its residential space, does not offer any conclusions as to why and how it was constructed. It has been suggested that the Kassites created Dūr-Kurigalzu in order to exercise more effective control over other city-states (Carlson 2017, 93); however, evidence for this is lacking.

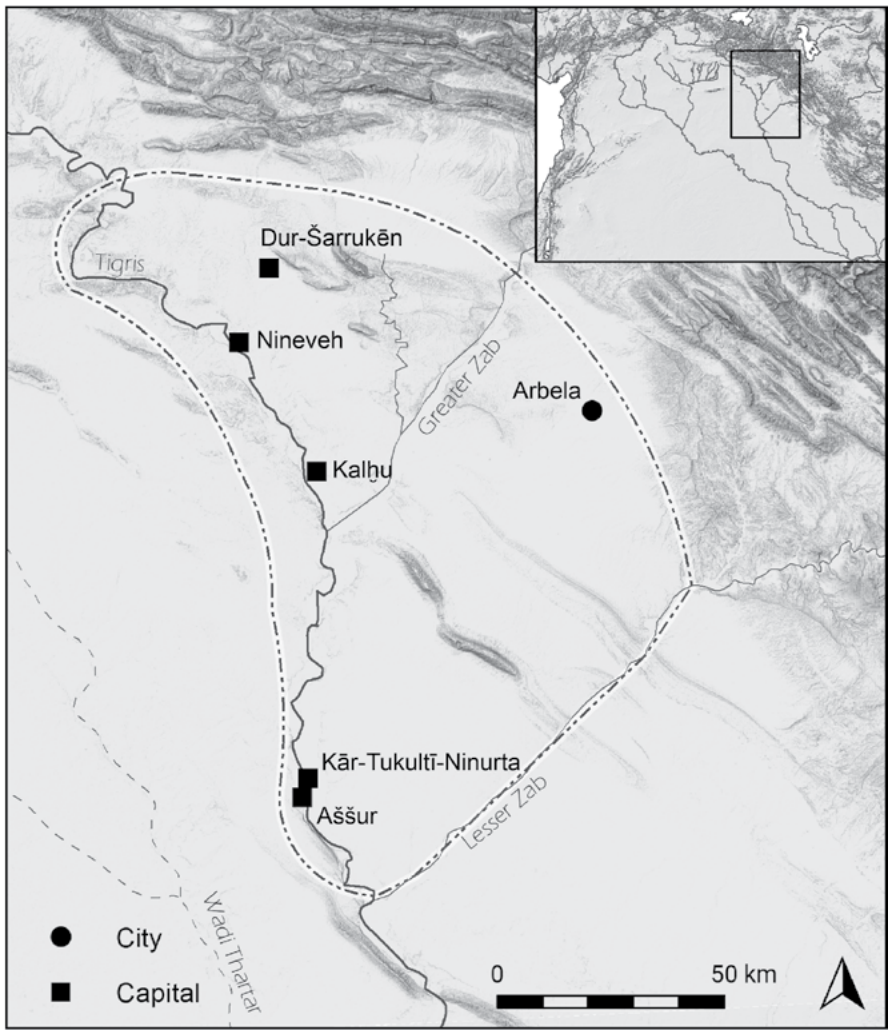

Figure 4: The location of Assyrian capitals (in dotted line the presumed extent of Assyria ca. 1500 BCE – courtesy of Tijmen Lanjouw).

Elam was another large territorial state of the Late Bronze Age that relocated its capital (Mofidi-Nasrabadi 2007). During the reign of Untaš-Napiriša,[3] the large urban center of Dur-Untaš, modern Chogha Zanbil, was constructed 40 kilometers from Susa (Potts 2016). In the Ancient Near East, the city contains the best-preserved ziggurat, which was surrounded by an enclosure with several religious buildings. However, Dur-Untaš was not completed, and major construction stopped after the death of Untaš-Napiriša. After the abandonment of the project, and until it was destroyed by the Assyrian king Assurbanipal (640 BCE), the city was still partially inhabited. Archeological excavations have only revealed small residential areas (Carlson 2017, 249-251).

All these examples of capital creation predate the first newly founded capital of Assyria (Kār-Tukultī-Ninurta). However, all of them are either poorly documented, making them unsuitable for detailed investigation, or are unique within their respective empires, making comparative studies trickier. In that regard, Assyria presents a more suitable subject for the study of imperial capital creation.

Among the other early empires of the Ancient Near East, Assyria was the most durable, and lasted

3 The dating of Untaš-Napiriša is uncertain and could be dated to the second half of the 14th century or the middle of the 13th century BCE.

some 740 years, from 1353 to 609 BCE. In those centuries, the Assyrian empire changed its capital city no less than four times. The repetition of the phenomenon allows for a comparison within the same cultural context, a crucial factor that does not exist in preceding cases of capital creation. In addition, it makes Assyria an exceptional subject in the study of capital creation as it is rare that a state will relocate its capital more than once (another unique case in this respect is China).

The Assyrian sequence makes it possible to compare urban design, architectural features, evolving patterns in planning within the same broader cultural framework. In addition, it makes it possible to identify and compare the historical conditions under which each move took place. It also provides examples of both short-lived capitals and cities which lasted for more than a century. There are several additional advantages that makes a comparative study of Assyrian capitals an ideal case study for examining capital creation in the Ancient Near East.

Firstly, all the Assyrian capitals are located within the same broader region of the Assyrian heartland (Postgate 1992; Barbanes 1999; here Figure 4).[4] While there are small-scale local differences, this broad similarity allows for a comparison between the location of those cities in relation to contemporary access to resources, agricultural land availability, trade routes, and waterways. Secondly, Assyrian capitals present some of the most complete datasets available for the study of ancient capital creation. Archaeological excavation has been carried out at all of the cities, at least on their citadels, and there are textual data from royal inscriptions and other sources. Furthermore, we have relatively secure dates for when each capital was created, how long the construction process took, as well as the historical conditions during the creation of those capitals.

2.1.1 HISTORICAL CONTEXT OF ASSYRIA

This section briefly introduces the historical context and dates for Assyria used in this study. The Assyrian empire has been divided into three broad periods: i) the Middle Assyrian period in the Late Bronze Age (ca. 1353-1197 BCE; Jakob 2017, 119-132), ii) the years of decline in the so-called Dark Ages (ca. 1196-934 BCE; Frahm 2017b, 165-167; Jakob 2017, 132-140), and iii) the Neo Assyrian period in the Early Iron Age (ca. 934-612 BCE; Frahm 2017b 167-196). The Middle and the Neo Assyrian periods correspond to the two imperial phases of Assyria, when it became one of the largest, and in the case of the Neo Assyrian empire, the largest and most dominant imperial power in the Ancient Near East.

The center of Assyria is the city of Aššur, the traditional capital of the Assyrian empire. Throughout the Middle and Neo Assyrian periods there was always a core region of the empire, which was perceived as the land rightfully belonging to Assyria, the so-called *Land of Aššur* (Postgate 1992; Harmanşah 2012, 54-57). The size of this core region varied and extended as the empire grew. All Assyrian capitals are located in what was perceived of as the Land of Aššur.

In this study, the Assyrian empire is understood as one continuous political entity which went through different phases during its history (Frahm 2017a; Kühne 2011; 2015; Tenu 2009, 18). As such, the terms Middle and Neo Assyrian are used simply as chronological terms and not as characterizations of two different imperial states. It is important, however, to underline the factors that show the continuity in the Assyrian state in order to conceptualize the Assyrian empire as a whole.

Düring (2015, 299-301) listed three arguments for the continuity between the Middle and Neo Assyrian periods. The first argument concerns military and political practices. There is a continuous sequence of Assyrian kings and their power in the Assyrian heartland. Additionally, some of the military achievements of the Middle Assyrian kings are comparable to those of the Neo Assyrian kings. Tukultī-Ninurta I (1233-1197 BCE),[5] for example, managed to conquer Babylon (if only briefly).

The second argument is concerned with archaeological sequences, which suggest a large degree of similarity in the material culture from the Middle to the Neo Assyrian periods, especially in the Assyrian heartland and Central and Southern Ḫabūr region. Furthermore, regions which were lost to Assyria for centuries (e.g. the Upper Tigris

4 It should be noted that even though the region can be described as the Land of Aššur (Postgate 1992), there is significant climatic difference between the location of Aššur/Kār-Tukultī-Ninurta and Kalḫu/Dur-Šarrukēn/Nineveh. The first two are located below the rainfed agricultural zone.

5 The spelling of the kings follows the most recent king list presented in Frahm 2017c. The list can also be found in Appendix 1.

Phase		Dates	Capital Creation
Neo Assyrian Period	**VII Fall of Assyria**	630-609 BCE	-
	VI Imperial expansion and consolidation	744-630 BCE	Dur-Šarrukēn, Nineveh
	V Internal problems and brief territorial recession	823-745 BCE	-
	IV From territorial state to empire	934-824 BCE	Kalḫu
Middle Assyrian Period	**III Recession and brief expansion**	1197-935 BCE	-
	II From state to empire	1295-1197 BCE	Kār-Tukultī-Ninurta
	I Independence	1353-1296 BCE	-

Table 2: The division of Assyrian chronology and used in this study is based on Liverani 1988; Bedford 2009; Frahm 2017b, 162-165; 2017c; Jakob 2017; phases described by the author.

and Upper Ḫabūr) and were dominated by regional states (Szuchmann 2007), seem to have been an important *topos* for Assyria in the Neo Assyrian period. During this period, conquests of these regions were framed as a *Reconquista* that liberated Assyrian lands (Liverani 1988; 2017, 119; Postgate 1992).

Finally, the degree of continuity between the Middle and Neo Assyrian empire is substantial in the capital cities of the Assyrian empire. Aššur functioned as a capital in both periods; whenever the location of the capital changed, Aššur remained central to the Assyrian identity, and was the location for the coronation and burial of Assyrian kings (Lundström 2012). At the same time, as discussed below, Kār-Tukultî-Ninurta shares many similarities with the Neo Assyrian capitals both in terms of size as well as in terms of urban design. As such, it is safe to assume that there is a certain continuity in the process of imperial capital creation in the Assyrian empire.

The complete chronology used in this study can be found in Appendix 1. The different chronological periods of Assyria, as I would interpret them, are presented in Table 2:

In the Neo Assyrian period, the empire eventually became the largest empire known at that point (Figure 5). Beyond the military campaigns, land reconfigurations, and population deportations, the empire also engaged continuously in large scale building projects. In the following section I will discuss the notion of kings as builders, how this notion was incorporated in Assyria, and how, and whether, capital creation can be understood as part of a standardized building activity.

2.1.2 KINGS AS BUILDERS IN ASSYRIA

Contemporary texts often recounted the achievements of kings from the ancient Near East, mostly in royal inscriptions and epics. Two of the most common themes in these inscriptions are war and building (Liverani 1995, 2360). The building activity of kings and the motif of a king as builder, is of central interest to this study.

Attestations of the importance of building activity comes from a multitude of sources from different periods and states, from the epic of Gilgamesh (Dickson 2009) to ancient Israel and Ugarit (Ricks and Carter 1994). The most commonly mentioned building activity in textual evidence is the construction or renovation of temples (Kapelrud 1963). Temples have been seen as the places in which gods dwell, the "house of a god", and as places related to the organization of ancient societies (van Leeuwen 2007, 68). Following the earlier Sumerian tradition (Averbeck 2002), Assyrian kings also sponsored building activities of temples and other buildings, usually described as an act dictated by gods (van Leeuwen 2007, 74-76).

In addition, the kings of Assyria sponsored the construction and restoration of palaces, city walls, canals, and entire cities. In a recent paper, Russell discussed the building activities of Assyrian kings in major Assyrian cities (Russell 2017). He based his analysis on three main type of datasets: excavated buildings; inscriptions found on architectural material and/or excavated in secondary contexts; and texts mentioning the activities of a king, or those of his forebears (Russell 2017, 423-424). Based on this

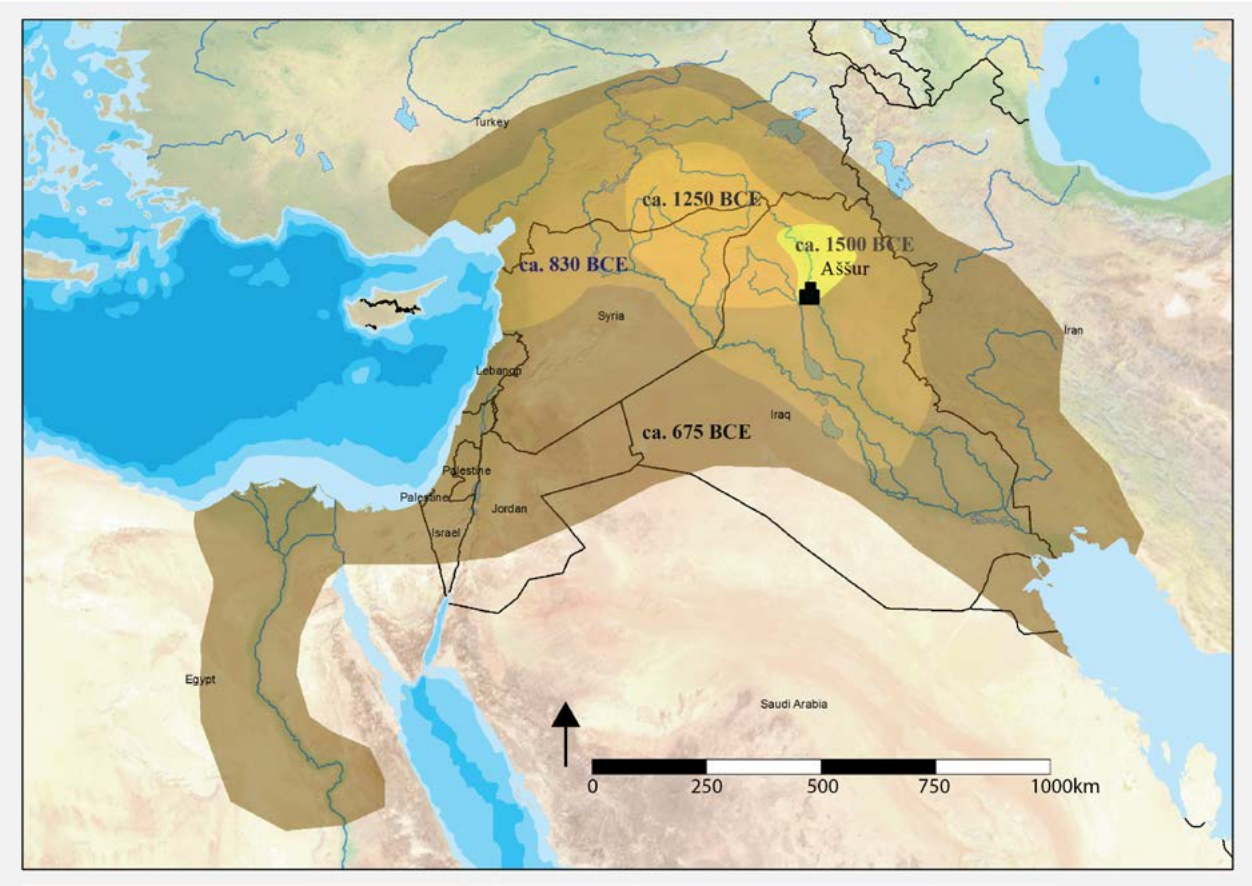

Figure 5: Map with the extent of the Assyrian Empire (courtesy of Tijmen Lanjouw).

evidence, Russell tabulated the buildings constructed throughout Assyrian history in major urban centers.

He concluded that Aššur, and to a lesser extent Nineveh, seemed to be the focus of royal inscriptions during the Middle Assyrian and the intermediate period of recession. The creation of a new capital presented a unique case among the otherwise standardized construction activities featuring in the texts. The focus of royal inscriptions on building projects in Aššur and Nineveh continues during the Neo Assyrian period. In the early stages of the Neo Assyrian period, and until the construction of Kalḫu, inscriptions describe renovations of the wall of Aššur and reconstructions of its palaces and temples. After the construction of Kalḫu, construction projects occur at the new capital, but continue in both the city of Aššur and at Nineveh. The same remains true after the construction of the two subsequent capitals, Dur-Šarrukēn and eventually Nineveh as a capital. Thus, Aššur and Nineveh are the two cities that seem to never be neglected.

Russell's research demonstrated that restorations and constructions are a standard practice, although there is variability in the type of constructions. The major buildings are always mentioned in royal inscriptions and are part of the royal propaganda yet focus always remains on the most important centers: always the capital, Nineveh, and Aššur, even after the latter stopped functioning as an administrative capital. In the royal inscriptions the king of Assyria was presented as a builder, besides conqueror and ruler of the world.

Russell (2017) presents the creation of capital cities as part of the standard spectrum of building activities of Assyrian kings. However, while other types of building activities occur almost continuously, capital cities are constructed only during specific episodes in Assyrian history. I argue therefore, that capital creation is an exceptional practice of the Assyrian empire.

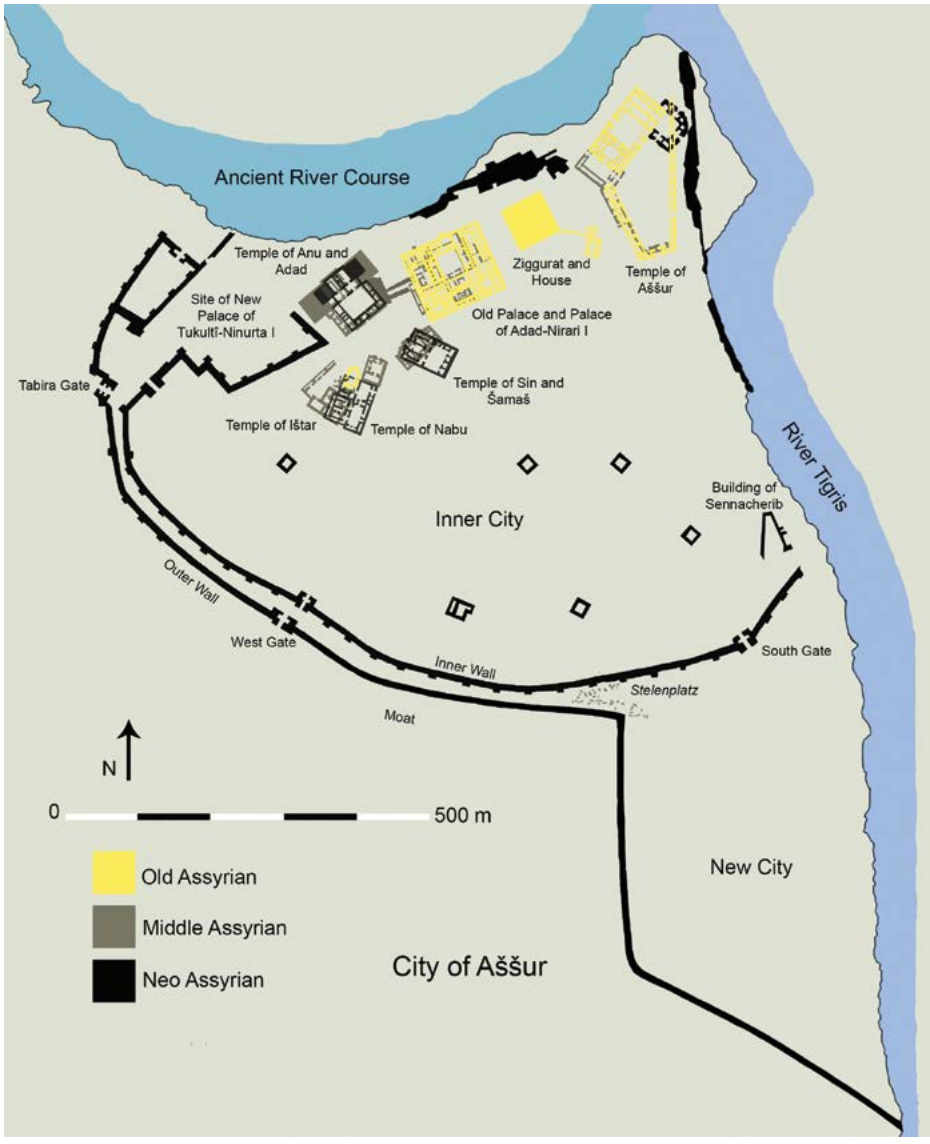

Figure 6: The city of Aššur, drawing by the author (Andrae 1977; Roaf 1990; Miglus 1996; Miglus 2000; 2001, produced by the author).

2.2 AŠŠUR, THE TRADITIONAL CAPITAL OF ASSYRIA

This section briefly discusses the city of Aššur (Figure 6) which was central to Assyrian history. Aššur was the traditional capital of Assyria and the place of origin of the Assyrian state (Cancik-Kirschbaum 2011, 74; Pedde 2012, 853-855; Maul 2017, 337). At the same time, while the Assyrian empire relocated its capital several times, Aššur was never really supplanted, since it remained the burial place for several Neo Assyrian kings (Pedde 2010), and was a place of continuous religious importance (Maul 2017, 349-353) and architectural development (Russell 2017).

Aššur has seen a considerable amount of archaeological research during the early 20th century. The site was first identified in 1821 by Claudius J. Rich and first excavated by William F. Ainsworth in 1840. The first systematic excavations took place from 1903 to 1914, carried out by the German Oriental Society (Andrae 1913; 1977; Pedde 2008). Later expeditions by German teams were conducted by R. Dittmann (in

1988-89), B. Hrouda (in 1990), and P.A. Miglus (in 2000-1), alongside excavations by the Department of Antiquities of Iraq since 1979 (Hausleiter 2011, 59-60; Pedde 2012). The thorough investigation of the city has yielded a good understanding of the chronological sequence of important architectural features, as well as its urban development over time.

2.2.1 AŠŠUR THE GOD

The name Aššur corresponds to three different things in Assyria: i) the god Aššur, ii) the city of Aššur, and iii) the land that rightfully belongs to Assyria or the *mat Aššur* (Postgate; 1992; Liverani 2017, 12). It has often been difficult for scholars to understand what exactly Assyrians texts refer to when using the word Aššur; only recently has research taken steps towards being able to understand the potentially subtle textual differences between these meanings, at least when the term is related to the kings of Assyria (Liverani 2011; Postgate 2011; Valk 2018, 193-282). In many ways, the name of the god and the name of the city were inextricably interwoven (Galter 1996; Maul 2017). Therefore, it is important to have an understanding of the significance of the concept of Aššur as god-city, since it permeates the development of Assyrian identity and ideology, both of which are important for the study of Assyrian capitals.

The god Aššur presents a rather mysterious case of a deity (van Driel 1969; Lambert 1983, 82) and has some interesting differences when juxtaposed with other important deities of the Ancient Near East: he seems to be solitary, without family ties or involvement in divine hierarchies (Maul 2017, 339). Furthermore, it is unclear whether he had any specific qualities or characteristics, or whether he was associated with any specific natural element. In fact, he lacks any stock epithets present for other Mesopotamian gods (Lambert 1983, 83). It rather seems that Aššur actually had no attributes, he was simply a god (Livingstone 1989, 4-6). At the same time, at least for the Assyrians, he was omnipotent and can be described as the central deity around which the world revolved (Foster 2005, 817-819). While the Assyrians worshiped other deities,[6] Aššur was the defining deity for the Assyrian identity (Maul 2017, 345-346; Valk 2018, 282-284).

Aššur was also central for the legitimization of the rule of the Assyrian king, both internally and externally (Liverani 2017, 10-24). The Assyrian ruler was primarily considered the representative of the god (Kryszat 2008), and during the imperial phase of Assyria was elevated to the status of a king (Liverani 2011; Machinist 2011). This status as a proxy for the divine mandate, however, was what justified the Assyrian king's expansionist policies. A quote from a Middle Assyrian coronation ritual reads, "*By your just scepter extend your land! And Aššur will grant you authority and obedience, justice and peace!*" (Müller 1937, 12-13: ii34-36; Liverani 2017, 12). This mandate of expanding the Assyrian rule remained part of the coronation rituals of Assyrian kings until late into the Neo Assyrian period (Oded 1992, 10-27; Fales 2010, 77-78; Machinist 2011, 408-409). The extension of the rule of Aššur is what Liverani described as the basic "mission" of the Assyrian king: to "*constantly advance the frontiers of his realm and to establish order, justice, and peace*" (Liverani 2017, 13; see also Maul 2017, 351).

In addition to the god's connection to the Assyrian identity and to the Assyrian imperial mission and rule, it had a physical manifestation in its namesake city: the rock overlooking the Tigris, on which the temple of Aššur was erected. The cliff, bearing the Assyrian name Abiḫ, was directly linked with the god and his cult site (Maul 2017, 340). Despite several relocations of the capital of the Assyrian empire, the cult center of Aššur was never moved. The temple in Aššur remained his sole place of worship, with the short-lived exception being the creation of a temple for Aššur at Kār-Tukultī-Ninurta, which will be further discussed in Chapter 3.

The importance of the god for Assyria, combined with its strict connection to his namesake city, meant that Aššur retained its status as a defining place for Assyrian identity until the fall of Assyria. Even in the Neo Assyrian period, when the city became less central, kings continued to undertake building projects there, and have themselves buried under its earlier palaces (Pedde 2010; Lundstöm 2012). As such, while Aššur was abandoned as capital, its significance as a place for worship remained. Even when new capitals were constructed, they were always constructed by the command and in the name of Aššur, as is exemplified in the Banquet Stele for

6 The goddess Ištar, for example, one of the most important deities in the Mesopotamian pantheon, had dedicated temples in the city of Aššur (Schmitt 2012), as well as the famous Ištar of Nineveh (Reade 2005).

the construction of Kalḫu: "*Assur, the great lord, cast his eyes upon me and my authority (and) my power came forth by his holy command. Ashurnasirpal, the king whose strength is praiseworthy, […] gave to me, the city Calah I took in hand for renovation*." (Grayson 1991, A.0.101.30, 20b-23)

2.2.2 AŠŠUR THE CITY

For the purposes of this study, I am focusing only on the Middle and Neo Assyrian phases of Aššur. However, it must be noted that there is archaeological evidence of occupation dating to the early 3rd millennium BCE (Hockmann 2010; Pedde 2012, 853). These include: the Early Bronze Age sequence of the temple of Ištar (Schmitt 2012), the plan of a probably unfinished palace dating to the Old Assyrian period under the Old Palace (Pedde and Lundström 2008, 28-30; Lundström 2013), and remains associated with the Aššur temple (Miglus 1989).

Walter Andrae was the first to conduct archaeological work in the lower town of an Assyrian capital, through a series of test trenches made at regular intervals, revealing multiple residential buildings (see Matthews 2003, 13 Figure 1.5; Pedde 2008, 773). Work on the lower town of Aššur, and particularly in the northern and northwestern sections, continued by German teams of the Free University of Berlin and the University of Munich in 1988-90, and in 2001 by the University of Halle (Miglus 1996; 2000; 2002).

The outline of the city is defined by a city wall on the south and southwest, and by the course of the Tigris on the north and east. At the turn of the Middle Assyrian period, in the 16th century BCE, we see the first systematic construction of the circular fortification wall surrounding Aššur's Old Town, encompassing some 47 ha (Miglus 2010). A few decades later, most likely under the reign of Puzur-Aššur III (first quarter of the 15th century BCE),[7] the wall was expanded to surround the so-called New Town, giving Aššur its maximum extent of 62 ha (Andrae 1977, 140-141; Grayson 1987, A.0.69.1). The combination of natural defenses offered by the river in conjunction with the circular wall made Aššur a very well defended city.

During the reign of Tukultī-Ninurta I (ca. 1233-1197 BCE) the city wall was enhanced with the construction of a moat (Grayson 1987, A.0.78.19). Most of the current remains of the wall date to the Neo Assyrian period, as several kings conducted restoration works or reconstructed parts of the wall completely. An example of this comes from the reign of Shalmaneser III (858-824 BCE), who performed extensive restoration work on the outer wall of the city, at the point where it turns sharply southwards (Reade 2004, 456).

Another interesting feature at that location is the *stelenplatz*. Located between the outer and the inner walls, and running east to west for ca. 100 m, Andrae (1977) uncovered about 140 stelas. They date from the 14th to the 7th centuries BCE, mostly rectangular and averaging 2 m in height. Most of them bear small inscribed panels, and only the latest 7th century stele includes an image (Miglus 1984). While the stelas are similar in composition and shape, those of kings were of considerably better quality and placed in more prominent positions than those of officials (Reade 2004, 457). Various explanations have been given, including Andrae's plausible argument that they served as some kind of monumental calendar, acting as an eponym and king list (Reade 2004, 470). Despite the uncertainty of its role, however, the *stelenplatz* is crucial in showing both the continuity, as well as the development of the administration in Assyria.

Excavations in the northern part of the lower city have uncovered several residential buildings, dating from the Old Assyrian to the Neo Assyrian, and also to the Parthian periods (Miglus 2000; Hausleiter 2011). An interesting example comes from the westernmost trenches, ' 'Abschnitt 2' (Milgus 2002, 9, Abb. 2), which contained a sequence of nine buildings. This particular sequence reveals stratigraphic architectural remains ranging from the mid-2nd millennium to the Neo Assyrian period constructed along narrow lanes (Hrouda 1991, 104). In addition, the excavators unearthed a variety of graves (e.g. double urn graves, chambers graves, a vaulted tomb) located under the floors of these buildings. Based on this sequence, it was possible to determine a strong continuity from the Mitannian to the early 1st millennium BCE urban layout, as well as changes in the building organization during the 8th and 7th century BCE (Hausleiter 2011, 8). Findings of the residential buildings of the lower city of Aššur will be explored later in the thesis (section7.4.4).

7 This dating for Puzur-Aššur III follows Frahm 2017c, which is the king-list followed in this study. However, Tenu (2009, 323) dates this king to 1521-1498 BCE.

2.2.3 THE "CITADEL" OF AŠŠUR

The northern part of the city is a raised area that contains all the palaces and the main temples and is often referred to as a citadel. Aššur is the only one of the Assyrian capitals that does not have a walled citadel. Five buildings in this "monumental core" (Micale 2006, 156) existed since the Old Assyrian period: The Old Palace, the temple of Sin and Šamaš (Werner 2009), the temple of Ištar (Bär 2003), the Anu and Adad temple with two ziggurats (Grayson 1987, A.0.59.1001), and the aforementioned Aššur temple.

I argue that from the Middle Assyrian period onwards, the architectural development of the city is directly related to the expansion and growth of the Middle Assyrian empire: for every major expansion phase of Assyria, there is also a surge of architectural activities in the capital (see also Düring 2020). A similar argument is presented by Russell (2017, 430), who identifies three main surges of building activity in Aššur in the Middle Assyrian period: i) during the period when Assyria regains its independence from the Mitanni (ca. 1407-1318 BCE), ii) during the period of imperial growth (ca. 1297-1197 BCE), and iii) during the brief re-expansion period in the so-called Dark Ages (ca. 1332-1056 BCE).

The creation of most of the new buildings and the extensive restorations of old buildings is especially clear during the period of imperial growth (Micale 2006, 156; Pedde 2012, 854; Russell 2017, 431). Under the reign of Adad-nirari I (ca. 1295-1264 BCE), extensive renovations took place in the Old Palace, the city wall, the Aššur temple, and the temple of Ištar (see the royal inscriptions of Adan-nirari I in Grayson 1987, A076.1-49). Shalmaneser I (ca. 1263-1234 BCE) completely reconstructed the Aššur temple, which had been destroyed by fire, adding a large courtyard, and followed this by reconstructing the accompanying ziggurat (Russell 2017, 431). In addition, restoration works were carried out on the Old Palace and the temple of Ištar (see Grayson 1987, A077.1-37; Miglus 1985). Finally, Tukultī-Ninurta I in addition to the creation of his namesake capital, also conducted extensive architectural projects in Aššur, including the attempt to construct a new palace (see section 3.2 for a discussion of the project), and the complete reconstruction of the temple of Ištar (Schmitt 2012).

During the Neo Assyrian period, once again we see a similar pattern, where the biggest architectural projects coincide with periods of growth. Most striking is the fact that extensive architectural works at Aššur also coincide with the creation of a new capital elsewhere, as exemplified during the reign of Aššurnaṣirpal II (883-859 BCE). Alongside the creation of Kalḫu, and despite the relocation of the capital, Aššur was not neglected, but rather witnessed the reconstruction of several important buildings. This included the levelling and rebuilding of the Old Palace (Miglus 1989, 124; Pedde and Lundström 2008, 37–58; Lundström 2013), and the temple of Sîn and Šamaš (Werner 2009, 18). Aššurnaṣirpal was also buried at the south end of the Old Palace (Lundström 2009). Much later, Sennacherib (704-681 BCE), the king under whom Nineveh became capital, also undertook extensive renovation works at Aššur; he took special care of the fortifications, and created a new building for the New Year's festival, as well as a Prince's Palace for his son (Russell 2017, 854).

2.2.4 CONCLUDING REMARKS ON AŠŠUR

From this brief overview of the traditional capital of Assyria it is apparent that Aššur was central for the Assyrian empire in terms of tradition, religion, identity, and the legitimization of rule. As such, and despite the fact that Assyria changed its capital multiple times, Aššur was never really suplanted as the core location for Assyrian religion.

At the same time, Aššur is unique in many ways among Assyrian capitals. It is the only capital that was not created, but rather grew naturally. Even Nineveh, with its long history, was massively expanded and redeveloped. Aššur is the only capital that does not feature a rectangular shape, which is a result of its organic growth and its location. Finally, it is the only capital that did not have an elevated platform as a citadel, or a wall that divided its monumental core from the rest of the city. It seems like kings were mostly concerned with conserving the historical core of the city rather than redesigning Aššur.

Aššur's unique position among capitals also meant that there was never an attempt to copy it or replace it as a religious center. Each new capital came with its new set of innovations, but Aššur retained its status. Comparatively, therefore, it is more fruitful to compare the new capitals to each other, rather than to Aššur.

Chapter 3: Kār-Tukultī-Ninurta – Capital Creation in the Middle Assyrian Empire

3.1 INTRODUCTION

In the Late Bronze Age (LBA, 1550-1200 BCE), the Near East witnessed an unprecedented growth of imperial states. The Mitanni, Middle Assyrian, Hittite, and Egyptian kingdoms all developed into imperial political entities with considerable territorial extent and comprising various politically distinct societies (Mieroop 2007; Barjamovic 2013; Düring 2015, 302-304). One of the main developments in these empires was the creation of an imperial capital as the administrative center of the state. Many of these capitals were new foundations: Dūr-Kurigalzu in Babylon, Tarhuntašša in the Hittite empire, and Amarna in Egypt. In Assyria the first instance of capital creation also belongs to the LBA and consists of the creation of Kār-Tukultī-Ninurta.

3.1.1 HISTORY OF RESEARCH AND ARCHAEOLOGICAL EVIDENCE

The site was identified as modern Tulūl al-Aqar in 1911 (Sarre *et al*. 1911, 1:212; 4:2), and was first excavated by Bachmann and Andrae in 1913-1914 (Figure 7). Their results were not published, and the only substantial report was produced by Tilman Eickhoff in 1985, based on the original notes and sketches. The focus of the excavation was on the citadel of the city, and it was assumed that the citadel constituted more or less the entire extent of the site.

The main buildings identified in this mission where: i) the north palace (*Nordpalast*); ii) the south palace (*Südpalast*); iii) the Aššur Temple (*Aššurtempel*); and iv) the *Wohnhaus*, a building which was considered residential (Figure 8). In addition, parts of the citadel's walls were excavated, together with one tower (K) and a gate (D). The extent of the wall is visible on the basis of the elevation difference on the plan of Bachmann (Eickhoff 1985, Plan I). The excavators estimated that Kār-Tukultī-Ninurta was a single period site of about 62 ha.

The aim of the excavations was to produce mostly architectural plans of the buildings, which were excavated mostly as a sequence of trenches targeting walls. Rooms were rarely excavated, thus leaving us with little information regarding their use. Both of the buildings designated as palaces were placed on top of a large mudbrick terrace of about 8 m in height. They are located on the northwest side of the citadel and there is a distance of about 140 m between them. The south palace comprised a large terrace surrounded by rooms. These rooms contained a large number of small finds, and Bachmann also located colored plaster fragments and frit-rosettes (Nashef 1992, 310-1). The north palace complex contained 18 rooms and also showed indications of mural decorations (see section 2.5.2 for a more detailed discussion).

The only temple discovered during Bachmann's excavations was the temple of Aššur, located directly southeast of the south palace. The temple was constructed on top of a 1 m high platform (Bachmann 2016, 76). The building has entrances on its eastern and northern sides, and contains a central courtyard surrounded by several rooms. Once again, Bachmann focused more on tracing the outline of the building rather than the intention of the rooms, so we know very little about the function of each section of the temple. Some of these rooms, however, probably functioned as shrines. The temple itself resembles the temple of Aššur at Aššur, but measures half the size (Gilibert 2008, 182). At the western side of the temple was a ziggurat, in proportion with the temple in size.

Bachmann also located the wall surrounding the citadel, which was thought at the time to mark the extent of the city. Tower K and a Gate D, as well as part of the wall were partially excavated. Finally, another building was identified and designated as a *Wohnhaus*.

A more recent survey was undertaken in a two-season mission (1986 and 1989) by Reinhard Dittmann. The results of these two seasons were published only in the form of brief articles (Dittmann *et al.* 1988; Dittmann 1989; 1997a; Schmidt 1999; Beuger 2011; Dittmann 2011), and a full publication is not yet available (Dittmann forthcoming). Due to time and funding constraints, the survey was conducted using the existing field borders as survey units (Dittmann 2011, 165; see here Figure 8). Given the lack of published data, it is currently unclear what ceramic collection procedures were used, making the evaluation of the results difficult.

Regardless of its shortcomings, Dittmann's work has revealed a new picture of Kār-Tukultī-Ninurta. It became clear that the extent of the city was not limited to its walled citadel but extended roughly 1300 m to the south from the citadel's wall. The 1986 survey showed a total of 120 ha, and in the 1989 survey it was determined that Kār-Tukultī-Ninurta covers at least 240 ha, leading Dittmann to speculate that the city could be as big as 500 ha (Dittmann 1997b, 269). The limits of the city and the finds of the survey will be further discussed in section 3.5. However, it is interesting to note here that for the first time in Assyria, there is a walled citadel, which creates a clear division between elite space and a lower, residential town.

The 1986/1989 campaigns also showed that the north and south palaces were probably connected, based on finds in the survey units 14-15 (Dittmann 1992, 311; numbers indicated here in Figure 8). Excavations in survey unit 7, the area designated A-F to the north of the north palace, showed that the latter extended more to the north, beyond the previously assumed border of the inner wall (Dittmann 1990, 165-167).

About 450 m north of the tentative border of the city (at the *Wohnhaus*), the 1986 survey located an elevation designated as Tell O. The surrounding survey units (10 and 12 on Figure 7) produced pottery data, which according to Dittmann were enough to show that it belonged to the city area. Excavation at Tell O in 1989 uncovered a temple for an unknown deity. Its cella was decorated with frit-rosettes and palm trees (Baster and Dittman 1995, 17-24). To the southeast of the cella along both long sides of the temple were benches of baked bricks with small tables/pedestals in front of them (Dittmann 1989, 168-171).

The most recent archaeological work in the citadel area was conducted by Iraqi archaeologists in 2002 (Sulaiman 2010; Mühl and Sulaiman 2011), with the opening of several trenches in the general area of the city's citadel. At a place Dittmann had identified as Mound A, one of the most interesting finds was a courtyard, 32 m wide and paved with rhombi tiles (Mühl and Sulaiman 2011, 382). The work of the Iraqi archaeologists allowed for a better understanding of the use of the so-called North Palace of the city and it confirmed the idea that the two palatial buildings were actually connected (for details see section 3.5.2).

Despite the limited available archaeological evidence, Kār-Tukultī-Ninurta remains, together with Amarna, one of the best documented newly created capital cities in the Ancient Near East in the Late Bronze Age. Its Neo Assyrian descendants give us a better idea of what Kār-Tukultī-Ninurta could have looked like: a walled citadel (albeit not elevated), surrounded by an (unfinished) wall, with large canals running through it, temples at various locations inside and outside of the citadel, and several concentrated neighborhoods.

3.2 SETTING THE STAGE – HISTORICAL OVERVIEW OF MIDDLE ASSYRIA

The 14th century BCE marks a significant change in the history of the Near East with the gradual disintegration of the Mitannian empire. It is beyond the limits of this study to explore the causes and effects of this change. However, the decline of the Mitanni provided Assyria with an opportunity for independence and expansion.

Aššur-Uballit I (ca. 1353-1318) was the first "*LUGAL (šarru)*", or "Great King" of Assyria (Grayson 1987, 114-115; Harrak, 1987, 9-10 *EA* 16; Postgate 1992, 247; Szuchman 2007, 4). After the combined military powers of the Hittites and Kassites crippled the Mitannian state, Aššur-Uballit seized the opportunity to establish an independent Assyrian state and capture some of the bordering territories. He got rid of the tribute he had to pay to the Mitanni (as mentioned in Beckman 1999, 44-45), and set the foundations which made Aššur a major political power. In addition to the honorary titles of the Assyrian kings, the royal inscriptions now present him as a great king, and a brother to the Pharaoh and the Hittite king.

The 13th century BCE is the zenith of the Middle-Assyrian empire. During the reign of three successive kings, Adad-nirari (ca. 1295-1264 BCE),

Figure 7: Kār-Tukultī-Ninurta today (image from Google Earth; produced by the author).

Shalmaneser I (ca. 1263-1234 BCE), and Tukultī-Ninurta I (ca. 1233-1197 BCE), the empire grew to its maximum territorial extent, covering the area from the Baliḫ river to the city of Babylon (Jakob 2017, 122-132).

Adad-nirari led a number of campaigns against the crumbling Mitanni empire and in one of these campaigns the Mitanni king, Šattuara I, was captured and brought to Aššur. He returned to his throne, but as a vassal of the Assyrians. Adad-nirari's royal inscriptions mention eight conquered cities, most of them part of the Mitanni state (Grayson 1987, 136).

Adad-nirari's successor was his son Shalmaneser I, who managed to establish control over the region of Hanigalbat (modern Northern Syria) with his victory over a coalition of Hittites, Hanigalbateans and the

Phase #	Middle Assyrian Kings
Phase III: Recession and brief expansion	ca. 1197-935 BCE (Aššur-nādin-apli I, Aššur-dān I, Aššur-rēsa-isi I, Tiglath-Pileser I, Aššur-bēl-kala, Aššur-nāsir-apli I among others)
Phase IIb: From State to Empire	ca. 1233-1197 (Tukultī-Ninurta I)
Phase IIa: From State to Empire: Expansion	ca. 1295-1234 BCE (Adad-nirari I, Shalmaneser)
Phase I: Independence	ca. 1353-1296 BCE (Aššur-Uballit, Enlil-Nirari, Adik-dēn-ili)

Table 3: The expansion phase s of the Middle Assyrian empire.

Ahlamu-nomads of the region (Harrak 1987, 169-171). Royal inscriptions mention a number of cities which Shalmaneser conquered or reconquered; the empire expanded across the land of Hanigalbat. The area was not completely stable, but the Assyrians started to exercise control over the Ḫabūr region (Jakob 2015,178). Of importance was the conquest of Dūr-Katlimmu and the expansion of Assyria to the Lower Ḫabūr. Based on textual evidence, Shalmaneser also undertook administrative changes, including massive population deportations, in order to consolidate the conquered territory (Harrak 1987, 190-205).

After the death of Shalmaneser, Tukultī-Ninurta I became king during the most expansive periods of the Middle Assyrian empire. During his 36 years as king, Assyrian power grew to unprecedented levels. Extensive campaigns took place to the west and the south. For the first time, Assyria managed to conquer Babylon and other Kassite cities. In addition, Tukultī-Ninurta imprisoned the Kassite king, deported a large number of Kassites into Assyrian lands, demolished the walls of Babylon, and moved the statue of Marduk to Aššur (Harrak 1987, 256-257).

Those years were also marked with extensive architectural projects both in the city of Aššur and elsewhere. More importantly for this study, however, was the creation of the first newly created Assyrian capital, Kār-Tukultī-Ninurta. During the last years of the king's reign, Assyria entered a phase of territorial decline, losing most of its territories. This decline continued over the following centuries, with the exception of some intervals of short-lived expansions, such as during the reign of Tiglath-Pileser I (1114-1076 BCE).

Overall, I suggest that the expansion of the Middle Assyrian empire can be divided into four phases[8] (Table 3). Phase I corresponds with the downfall of the Mitanni empire and the gradual independence of Assyria from the Mitannian yoke. Phase IIa corresponds with the large expansion and consolidation of the state, and Phase IIb comprises its gradual transformation into a major imperial power of the LBA Near East (Düring 2015, 303-304). This continuous military and territorial growth went hand in hand with the development of the imperial core, with associated massive building projects, especially on the citadel of Aššur. The royal inscriptions of both Adad-nirari I and Shalmaneser I inform us about several reconstructions and restorations of important buildings (Grayson 1987). The largest development projects at Aššur, however, were conducted during the reign of Tukultī-Ninurta I. Renovation activities can be seen on the city walls, with the incorporation of a moat at the end of the king's reign (Grayson 1987, A.0.78.19), the Old Palace (Pedde and Lundström 2008, 163–165), the Aššur Temple (Schmitt in press), and the Temple of Sîn-Šamaš (Werner 2009). More importantly, however, two *ex novo* projects were undertaken: the construction of the New Palace and the reconstruction of the Temple of Ištar (Schmitt 2012) in a new location.

The first of these new projects had a profound impact on the urban fabric of the city. The palace was probably constructed during the start of the king's reign on top of a massive terrace in the northwestern part of the city, covering an area of approximately 29.000 m^2 (Andrae 1997, 162-

8 For a complete list of all kings and their dates see Appendix 1.

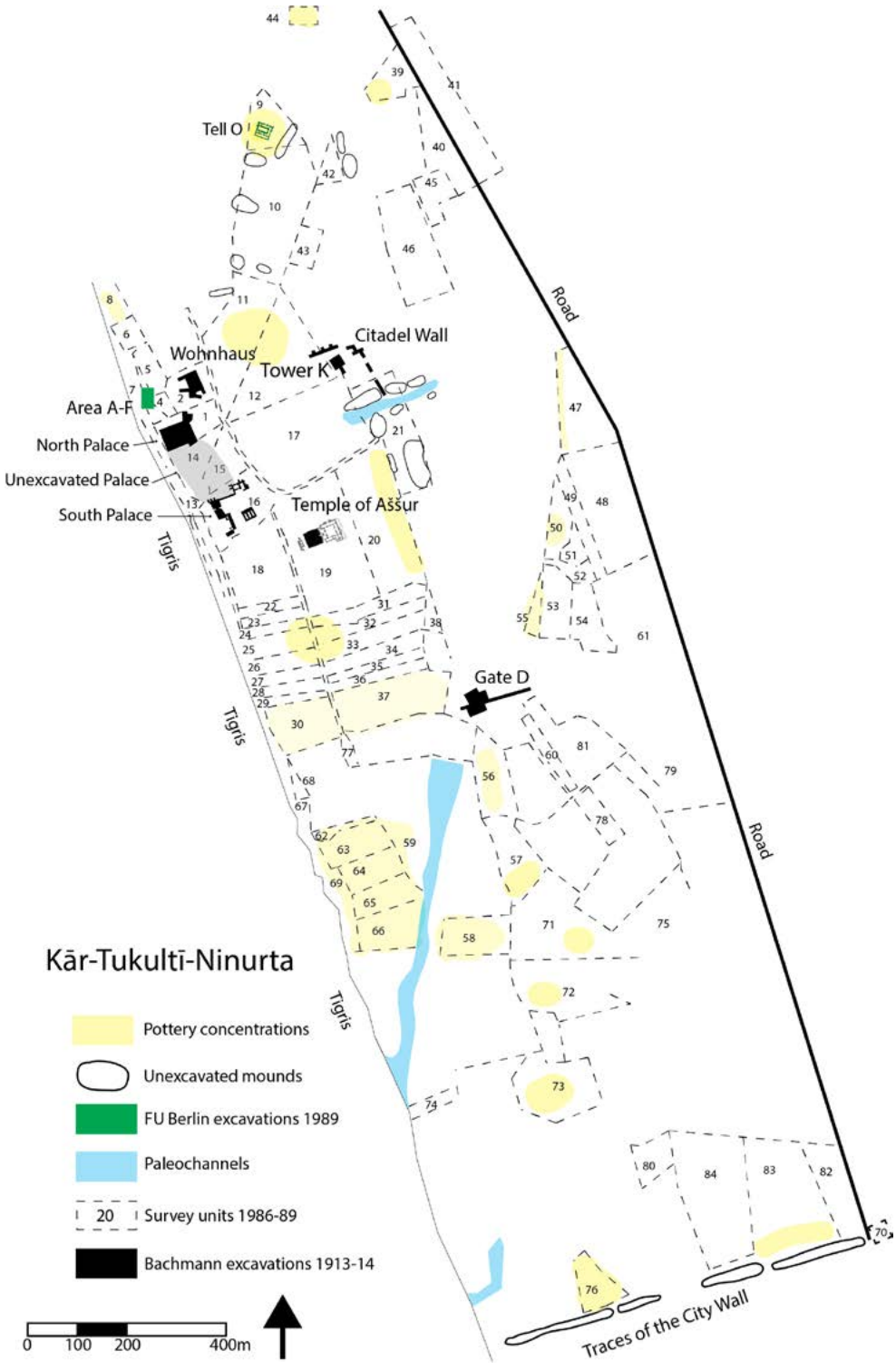

Figure 8: The city of Kār-Tukultī-Ninurta showing the excavated buildings, the known extent of the city, and the survey units of the German Archaeological Institute Survey 1986-89 (Dittmann 1990, Abb. 5, produced by the author).

163). In order to create this platform a number of residential buildings had to be destroyed. There are only limited archaeological traces of the palace, since the area was redeveloped an additional time into residential spaces during the Neo Assyrian period (Miglus 1996, 89-93). It is unclear how this palatial project compared with the palace(s) at Kār-Tukultī-Ninurta, since the plan of the new palace at Aššur is unknown, and since excavations have not revealed the full extent of the palace at Kār-Tukultī-Ninurta. However, the two palatial buildings at Kār-Tukultī-Ninurta, including the unexcavated space between them has an area of about 50.000 m^2 (Beuger 2011, 182), thus considerably larger than the new palace at Aššur.

Recently, Carlson has suggested that the new palace at Aššur was created in order to counterbalance the prominence of the temple of Aššur (Carlson 2017, 142-145). By building it on opposite sides of the "citadel" area of Aššur, he argues, the two buildings physically and spatially counterbalance each other, elevating the palace into a sacred space of the gods, and creating a duality with two "shrines" to worship the king and the god Aššur/Enlil. He bases this argument on the fact that the foundation tablets for the palace refer to the building through mountainous imagery (Grayson 1987, A.0.78.3), which the foundation inscriptions for the Aššur temple from Shalmaneser I also use. Finally, Carlson suggested that with the creation of the New Palace, the palace and the temple "*dominated the Aššur skyline, showcased the two national Mesopotamian gods and the king as equal but separate entities, and represented the king's divine and terrestrial natures*". While plausible, this argument remains somewhat speculative, as it is based solely on the use of mountainous imagery in inscriptions for both buildings. I do agree that the new palace probably had a significant visual role in the city's skyline. The lack of knowledge regarding the palace's plan, however, makes it rather difficult, if not impossible, to evaluate the symbolic visual effect of the palace and the temple, as they would be seen from the city of Aššur.

This period of dynamic changes to the city, however, peaks with the remodeling projects undertaken during the reign of Tukultī-Ninurta, and they reflect the changing perspective of the state itself into a power of imperial size. It was precisely at this moment when the empire decided to create a new city, close to Aššur, the role of which will be discussed.

3.3 WHY – BUILDING A CAPITAL, BUILDING AN EMPIRE

3.3.1 PREVIOUS INTERPRETATIONS – REGAL-CENTRIC APPROACHES

Researchers who have dealt with the question of "why Kār-Tukultī-Ninurta was built", have focused mainly on textual evidence, and more specifically, royal inscriptions. This limited scope of study has resulted in research that attempts to explain capital creation as determined by the personality of the Tukultī-Ninurta I (Dolce 1997). Even when broader perspectives (like Gilibert 2008) include other parameters, they always focus on royal motives rather than historical conditions for the creation of a new capital.

The available textual evidence consists of eight royal inscriptions that extensively refer to the construction of the city (Grayson 1976, 231-99; Deller *et al.* 1994), the Epic of Tukultī-Ninurta (Machinist 1976; Machinist 1978; Foster 1996, 211-230), and several administrative texts (Freydank 1974; Harrak 1987, 213-229). Several studies have dealt with the complicated subject of the precise chronological arrangements of the events of Tukultī-Ninurta's reign, and especially his conquest over Babylon (Freydank 2005, 45-56; Röllig 2004 18-51; 2008; Jakob 2003, 104-107; Yamada 2003). Here I am only going to focus on the research that directly bears on the creation of Kār-Tukultī-Ninurta.

The first, and most common, interpretation on Kār-Tukultī-Ninurta's creation, is to associate its construction with the conquest of Babylon, which should be dated after the 13th year of the king's reign. Researchers have suggested that the new capital was built as a commemorative monument celebrating the king's major achievements. This would mean that Kār-Tukultī-Ninurta was constructed *after* the fall of Babylon.

Harrak (1987), likewise, proposed that Kār-Tukultī-Ninurta was realized after the end of Assyria's major war against Babylon. However, more recent research has shown that the struggle between the Assyrians and Kassites lasted much longer, with fighting continuing even after the fall of Babylon (Llop-Raduà 2011, 213-5). Harrak does not explain why the capital was relocated; he suggested that religious factors may have influenced the decision, but he also hesitates to describe the city as a religious capital (Eickhoff 1985, 49; Harrak 1987, 274). He does repeatedly mention that it was built at the king's initiative.

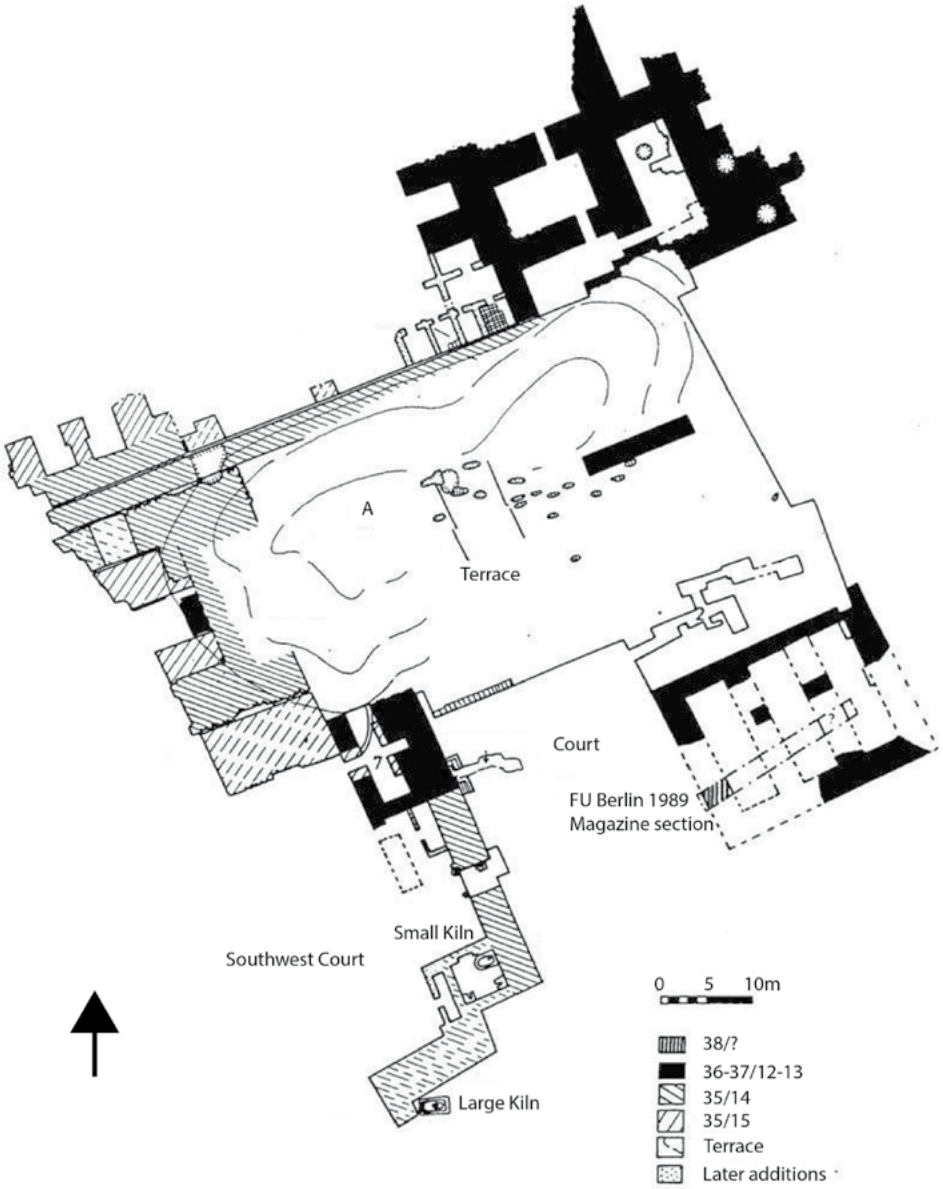

Figure 9: Plan of the South Palace at Kār-Tukultī-Ninurta (after Dittmann 1997a, Abb. 6).

Harrak presented the creation of the new capital as a "building project", similar in nature to the construction or reconstruction of palaces and temples. In Harrak's view, Kār-Tukultī-Ninurta was created to commemorate the victory of Tukultī-Ninurta over the Kassites (also Carlson 2017, 155).

Cifola (2004) challenged Harrak's sequence and discussed the chronology of the Babylonian campaign based on the titles mentioned in the royal inscriptions. It is important to note that he had access to two additional royal inscriptions that were unavailable to Harrak (Deller *et al.* 1994). Cifola's restructuring, however, also raises issues about the construction of Kār-Tukultī-Ninurta. One of the new texts (IM 57821), which has an identical section of text about the city as one of the royal inscriptions (Grayson 1987, A.0.78.5), should be dated after the victory but before the conquest of Babylon, therefore between ca. 1225-1219 BCE (Cifola 2004, 12). If this dating is correct, then the city might have already existed, or been in

the process of construction before the final conquest of Babylon (see also Yamada 2003).

Both Harrak (1987, 273) and Cifola identified an increasing influence of non-Assyrian aspects in the Assyrian language and titulary at this time. They suggest that Tukultī-Ninurta created this new city as an attempt to imitate Babylonian kings and that he drew inspiration from the Kassites who had also created a new capital, Dūr-Kurigalzu (see section 2.1). Carlson even suggested that Tukultī-Ninurta, having encountered the palace at Dūr-Kurigalzu, realized that the palace at Aššur "*no longer sufficed as a symbol*" (Carlson 2017, 154). Thus, he proposed that the king had to "complete" his imperial narrative by creating a new city. This idea, however, cannot be supported by either historical or archaeological data.

Based on these studies, we should not connect the creation of Kār-Tukultī-Ninurta directly with the conquest of Babylon. At a later stage, when Babylon was conquered, it is possible that Assyria used the inauguration of Kār-Tukultī-Ninurta as a commemorative event to their victory. This would be, however, a *post hoc* event, and not the driving reason for the creation of a new capital. Indeed, Gilibert (2008) suggested that the construction of the city should be dated to the early years of the king's reign and that it was completed already by the time Babylon was conquered. Furthermore, she suggested that Kār-Tukultī-Ninurta was built to function complementary to Aššur and not as a new capital city.

The main archaeological evidence for dating the city before the victory over Kaštiliaš derives from Mound A and the Southern Palace (Figure 9; see also section 3.5.2). Gilibert suggested that the palace at Mound A should be identified with the palace mentioned in the inscription A.0.78.22 (48-51), mentioning "E.GAL.ME.SAR.RA" / "*House of the Universe*". Based on the text, the building of the palace should be dated after the conquest of Babylon. She states however, that pre-existing structures found encased in the palace (Eickhoff 1985, 36-37) clearly antedate the terrace. Additionally, differences in the size and patterns of joining of the building's mudbricks, deriving from Bachmann's notes and a sketch (republished by Dittmann 1997a, fig. 6), are interpreted as evidence of earlier building phases, since they involved structural changes in design and orientation.

The data regarding the brick sizes were published by Eickhoff (1985, 36). On the eastern part of the building three different sizes of bricks were observed: 36 x 36 x 12/13 cm, 37 x 37 x 12/13 cm, and 35 x 35 x 15 cm. Eickhoff suggested that the first two types were laid first, while the latter type was laid on top at a later dating. Based on this, the building was interpreted as having multiple building phases.

The interpretation of different mudbrick sizes as representing different phases is not necessarily straightforward; such differences could also indicate different contemporary work groups and not necessarily different building phases or renovations. The Middle Assyrian phase of Tell Sabi Abyad, located in the Baliḫ valley, provides similar data where different mudbricks are attributed to different groups of builders, or batches of bricks, rather than different stages of construction or renovations (Lanjouw forthcoming). The textual description of the wall construction of Dur-Šarrukēn also reveals the use of mudbricks from different locations and sources (see section 5.5). Both examples have mudbricks of different sizes and coloring that belong to the same architectural phase.

In addition, it is important to note that there are no similar finds in the western part of the building. There is no other evidence in the eastern section which would imply multiple building phases. Eickhoff also concludes that, in the end, the dating of these supposed phases is impossible to determine (Eickhoff 1985, 36).

Gilibert (2008, 183) proposed that the creation of the city is connected to the exploitation of the surrounding agricultural land and that the project must be related to the need for intensified agricultural production. This is supported by a number of written sources related to agriculture that were analyzed by Freydank (2009). Gilibert concludes that the new city served as a "complementary" center to Aššur. The main goal, according to her, was the exploitation of the land to support a growing population, and not the creation of a new administrative center. However, Gilibert's interpretation does not explain the need for the creation of a new citadel, with a new palace and temples.

To summarize, scholars have traditionally related the creation of Kār-Tukultī-Ninurta to the personal motives of the king and attempted to explain its creation on the basis of chronology. However, as shown above, the argument that the city was created to commemorate the victory of the Assyrians over the Kassites is not supported by the textual and material evidence. I further argue that mono-causal

explanations limit our understanding of the period. In the following section I will connect the creation of the new city with the imperial growth of Assyria during the centuries since its independence from the Mitanni. The relocation of the capital was part of the transition from a territorial state to empire.

3.3.2 FROM A TERRITORIAL STATE TO EMPIRE

Kār-Tukultī-Ninurta does not fit with the model of disembedded capitals (Joffe 1998; chapter 1.3.1). The city was very close (ca. 4 km upstream) to the previous capital and in order for such a project to be undertaken, there had to be co-operation with existing and even competing, power holders.

Gilibert (2008, 180-183) views Kār-Tukultī-Ninurta as the agricultural extension of Aššur, created almost exclusively for the exploitation and development of the land on the eastern bank of the Tigris. However, the creation of Kār-Tukultī-Ninurta included the building of several new administrative buildings, including a new palace. Textual information, such as Chronicle P, inform us that Kār-Tukultī-Ninurta became the primary residence of the king, and that it had a central administrative role making it more than an agricultural project

Carlson proposed that Kār-Tukultī-Ninurta and Aššur were "*dual capitals*" (Carlson 2017, 214), symbolizing the pan-Mesopotamian control of Assyria as well as the "duality" of the Assyrian king, as ruler of Assyria and ruler of the world (Carlson 2017, 216). This argument is based on the proclamations of the king in his royal inscriptions. I argue that it would be more profitable to try and contextualize the construction of the new city in the wider transformation of the Assyrian state into an imperial state. I argue that it is exactly this transformative process that allowed for and led to the construction of the new capital. Related issues are: i) a *perceived* (at the time) inadequacy of the city of Aššur to act as an imperial center for Assyria, and ii) the creation of an economically stable imperial core.

The transformation of a state into an empire is the culmination of longer processes of expansions (either military, economic or cultural) and consolidation (territorial and administrative), through which the expansive state obtains the characteristics of an empire (see section 1.4). The Middle Assyrian empire provides a good example of such a transformational process. The combination of massive territorial expansion, a clear change in administrative policies (Düring 2015; 2018; Kühne 2015; Pongratz-Leisten 2015), the redevelopment of the Assyrian core (Miglus 2011; Mühl and Sulaiman 2011; Mühl 2015a), and the development of an imperial ideology (Pongratz-Leisten 2011; Caramelo 2012), signify the development of an imperial state.

In this framework, the creation of a new capital is directly connected to and acts as a way of consolidating the imperial development of the Assyrian state. However, it needs to be explained why the capital was created at that specific moment in the history of Assyria and not earlier. Using the model presented above in the introduction, (section 1.3.2) capital creation is linked to three main factors: i) historical conditions; ii) the role of the historical agents; and iii) access to resources. I argue that Kār-Tukultī-Ninurta was created at a peak point in the development of the Middle Assyrian empire. To demonstrate this, we should look at each factor separately.

Starting with the territorial growth of the empire, during the last years of the reign of Shalmaneser I and the first years of Tukultī-Ninurta, Assyria grew to its maximum extent and stabilized its control over the Jazira region, modern Northern Syria. Historically this is clearly illustrated in the relationship between Assyria and the Hittites (Yamada 2011). The latter's influence in northern Mesopotamia resulted in several revolts against Assyria, such as the one by Šattuara II, the king of what remained of the Mittanian state (Grayson 1987, A.0.77.1). However, after a series of conflicts between the Hittites and Assyria, the most notable of which is the battle of Niḫriya (Dietrich 2004; Yamada 2011, 202-203), and during the first years of the reign of Tukultī-Ninurta, Assyria firmly controlled northern Mesopotamia.

In addition to this, Tukultī-Ninurta judged that Assyria had achieved sufficient military power to control northern Syria, and to start an invasion of Babylonia on its southeastern front. Scholars have viewed the war against Babylonia different ways: as an unprovoked attack (Cancik-Kirschbaum 2003, 51), a preventative war against possible aggression from an enemy of similar strength (Llop 2003, 205), or as a quarrel over control of the eastern Tigris region (Jakob 2017, 123). What is of interest here is the ability of Assyria to sustain two large different military fronts at the same time and to continue expanding its territorial control in an unprecedented way. This is specifically the case in the years before and during the construction of Kār-Tukultī-Ninurta.

Furthermore, this expansion yielded increased access to resources for Assyria, both in the form of conquest, but also in the form of tribute received "from the four quarters" (Grayson 1987, A.0.78.24, 16-20).

Important in this regard are the administrative developments during the 13th century in Assyria, which also allowed for a maximization of accumulation and production of resources before the creation of Kār-Tukultī-Ninurta. In the 13th century there is evidence for the creation of a number of new peripheral centers (or transformations of previously existing settlements) to control the conquered territories, such as Dūr-Katlimmu, Tušan, Kulišhinaš (Szuchman 2007; Tenu 2009; 2015). Significant changes in regional settlements system accompanied these new centers, as did the intensification of agricultural production through large irrigation projects and forced deportations (Wiggerman 2000; Parker 2001; 2003; Kühne 2013; 2015). In border regions the creation of a number of fort settlements, such as the *dunnu* of Tell Sabi Abyad (Akkermans 2006; Akkermans and Wiggermann 2015) further corroborate these developments (Tenu 2015, 80-82).

In regard to ideology, during the 13th century, and most clearly during the reign of Tukultī-Ninurta, there is the development of what Düring described as a "culture of empire" (Düring 2015, 302). He further defined this as "*an ideologically charged distinction between an imperial high culture and vernacular traditions*" (2018, 24-5). In addition, through the creation of a distinct Assyrian imperial identity, vassals or conquered elites now had the potential to opt into Assyrian culture, which would both legitimize their rule through association with the dominant empire and secure the safety of their lands (Düring 2015, 305). Finally, this period witnessed the popularization and development of imperial titles such as "king of the universe" and "king of the four quarters" (Novák 1999, 121-122; Cifola 2004; Caramelo 2012), as well as the creation of propagandistic texts such as the Epic of Tukultī-Ninurta (Machinist 1978).

An increase in building activity and development at Aššur also accompanied this transformation of Assyria into an empire (Russell 2017). Starting from the reign of Adad-nirari I onwards the city of Aššur experienced extensive reconstructions and restorations, including: large scale renovations to the city wall, the restoration of the Ištar temple, the rebuilding of the temple of Aššur after a fire, repairs to the city's ziggurat, and the reconstruction of the Old Palace (Miglus 1985; Grayson 1987, 128, 138-159, 162-174, 185-200; Pedde – Lundström 2008, 163-165; Russell 2017, 431-432; Schmitt in press). At the same time, there are a number of new buildings constructed in the city, including: a new temple for Ištar, the construction of the Temple of Sîn-Šamaš, a moat around the city walls, and the extension of the city to the south and the accompanying city wall (Grayson 1987, 253-256; Werner 2009; Schmitt 2012).

Finally, in regard to the agents of that period, Tukultī-Ninurta was certainly one of the key players. It was during his reign that more ambitious campaigns and extensive architectural projects took place in the core of Assyria (Russell 2017). However, I do not agree that his persona was the sole factor behind the creation of the new capital (as suggested by Dolce 1997). It is difficult to identify other key agents related to the construction of Kār-Tukultī-Ninurta, as the correspondence related to the construction is limited. However, it is possible to speculate that important figures of the time, such as the Great Vizier Ilī-Padâ, who controlled the western part of the empire (Wiggerman 2000), supported the project by providing the required resources for its realization.

Bringing all these strands together, it can be seen that Assyria reached a peak during the last years of Shalmaneser's reign and the first years of Tukultī-Ninurta's reign that made the realization of such a project possible. Therefore, I argue that the building of this first new capital is a direct result of the contemporary transformation of Assyria into an empire. Figure 10 illustrates the important factors related to the creation of Kār-Tukultī-Ninurta. These factors present the context within which the new city was created and illustrate why a new capital could be realized. Yet, they require further examination to explain why the creation of a new capital was deemed necessary. This point is discussed on the basis of two factors: i) the perceived inadequacy of Aššur, and ii) the creation of an economically stable core.

The "perceived" inadequacy of Aššur

The first point is connected to the perceived inadequacy of Aššur to transform into a large imperial center, mainly due to its lack of space, but also due to the limited available agricultural hinterland directly to the south-west of the city (Arnold 2004; Mühl 2015a, 45-56). During the reign of Tukultī-Ninurta, the Assyrian court alongside the king repeatedly

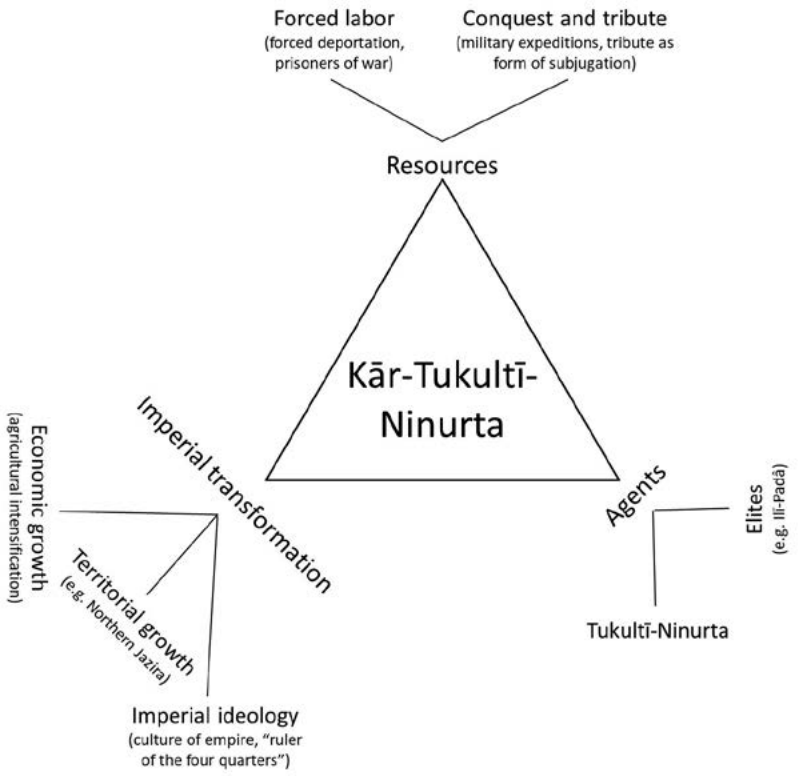

Figure 10: Model for the creation of Kār-Tukultī-Ninurta, produced by the author.

remodeled the citadel of Aššur. According to the royal inscriptions A.0.78.1-10, the king constructed a new palace, named *é-lugal-umun-kur-kur-ra*, a Sumerian name (Grayson 1987; Lambert 2004, 198), which translates as the 'house of the king of all the lands'. The palace was probably constructed during the beginning of his reign on top of a massive terrace (Andrae 1977, 162-163).[9] In order to create this platform a number of residential areas had to be destroyed (Figure 11).

Other building projects undertaken by Tukultī-Ninurta in the traditional Assyrian capital were the restoration of his father's palace (A.0.78.6), the construction of a new temple for Ištar (A.0.78.11-13), the reconstruction of the Dinitu shrine (A.0.78.14-16), and the completion of the Ninuaittu temple begun by his father (A.0.78.17). Space, however, specifically on the citadel of Aššur, was limited and seemingly inadequate for large scale projects.

One of the problems Aššur posed is that it did not allow for large scale monumental projects, which seems to have been the intention of the Assyrian court at that point. While the residential part of the city could be expanded towards the south, the citadel area was confined to the north and east by the Tigris river, and in the south by the city itself. This difficulty could be solved with a creation of a new administrative center, which would allow for the creation of a new and larger palace, as well as the housing of new temples without disrupting existing constructions.

The creation of temples was probably an act of some significance, since royal inscriptions inform us about a number of new temples in Kār-Tukultī-Ninurta. The most commonly mentioned is the new Temple of Aššur, with its accompanying ziggurat (Dittmann

9 Text A.0.78.3 mentions eighty *mušaru* of space was cleared for the construction of the new palace. The exact dimensions of the area are unclear (Grayson 1987, A.0.78.3).

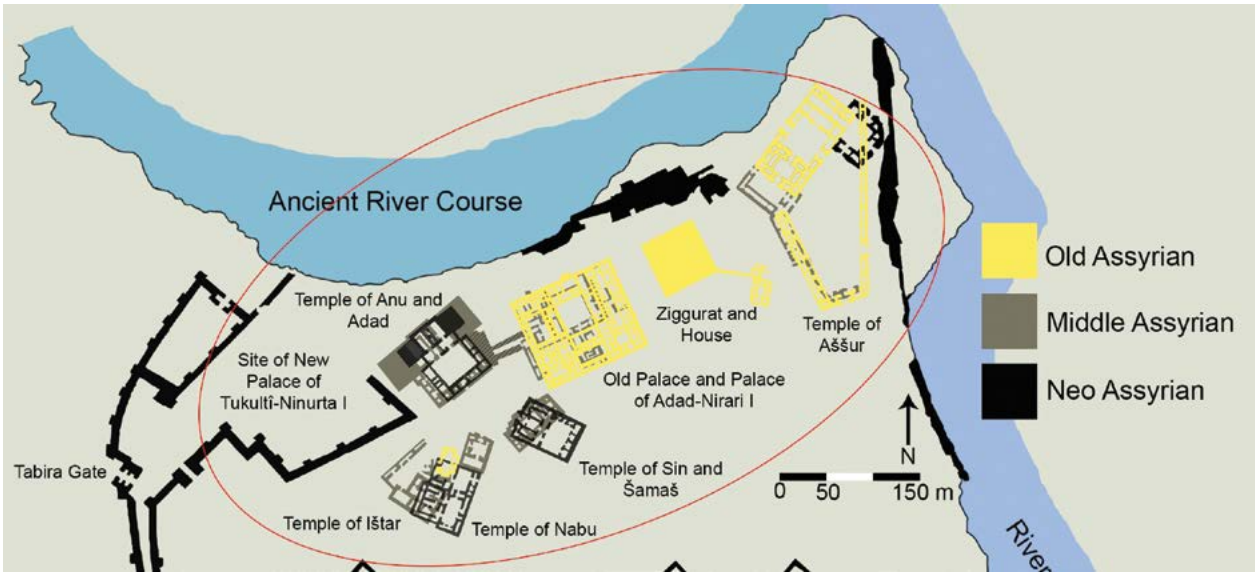

Figure 11: Detail of the citadel of Aššur indicating the limited available building space (detail of Figure 6).

1997a, 106-107; Figure 10).[10] It is the only temple dedicated to Aššur outside of its eponymous city. The royal inscriptions list the existence of at least seven more temples and/or sanctuaries at Kār-Tukultī-Ninurta.[11] These temples have not yet been identified archaeologically, with the exception of the temple of Aššur and a temple building at Tell O (see section 3.1.1), which is to an unknown deity. Finally, the royal inscriptions often mention the city as a cult center, adding to the importance of the religious aspect and the large number of temples (Grayson 1987, A.0.78.22).

The importance of religion in the new city can also be identified in the large palatial structure of the city. Beyond its monumental size and administrative functions, it had a large space dedicated to religious matters (Palace III; Mühl and Sulaiman 2011). Thus, there is a clear focus on creating religious buildings, both in the citadel with the palace and the temple of Aššur, as well as in the lower town with a large number of temples.

Therefore, the creation of Kār-Tukultī-Ninurta offers two new avenues that Assyria pursued, which were not possible previously at Aššur: i) the construction of monumental buildings on its citadel, and ii) the building of a large number of new temples. With the creation of Kār-Tukultī-Ninurta, the Assyrian administration had a *tabula rasa* to create a new, grander narrative, without having to interfere with the existing spatial or political structures at Aššur.

The creation of an economically stable imperial core

The second point in discussing why the creation of a new capital was deemed necessary concerns the sustainability and intensification of agriculture in the imperial core. During the Middle Assyrian period, the Assyrian empire spent considerable resources developing the region around Aššur. This is demonstrated by the creation of a number of settlements and administrative infrastructure (e.g. Tell Hanas) in the area opposite the city of Aššur, particularly on the north and south parts of the eastern bank of the Tigris (Miglus 2011; Mühl 2013, 40, 175-175; 2015a, 48-51). The continuous growth of a dense rural settlement system allowed Assyria to transform the landscape around Aššur and Kār-Tukultī-Ninurta and increase its agricultural capabilities (Mühl 2015a, 51), thus creating a more politically and economically stable core. As a culmination of the development of this area directly opposite to Aššur, the creation of Kār-Tukultī-Ninurta established a center that would allow for a more direct administration of the process.

10 The implications for the existence of this temple will be discussed in section 3.5.

11 The temples mentioned are dedicated to Adad, Šamas, Ninurta, Nusku, Nergal, Sibitti, and Ištar (Grayson 1987, A.0.78.22; Deller *et al*. 1994, 463).

To further add to this, the location of the new city on the eastern bank of the river allowed a more direct and stable access to the region of the Erbil and Makhmur Plains that witnessed a marked increase of Middle Assyrian settlements. The area saw the revitalization and repopulation of existing settlements as well as the creation of new ones, and the growth of urban sites such as Qasr Shemamok and Erbil (Ur et al. 2013; Ur and Osborne 2016).

Reculeau (2011, 205) has argued that regional climatic conditions declined over the decades of Tukultī-Ninurta's reign. At the same time, increased and standardized agricultural production was required to support the continuous military expeditions, growing population, and the extensive territory of the empire (Novák 1999, 122). As mentioned above, Kār-Tukultī-Ninurta was located in the most favorable geographical and agricultural area outside of but in close proximity to Aššur. This ensured a sustainable level of agricultural production, because of the large extent of available agricultural land (Bagg 2000a, 309; Arnold 2004; Mühl 2013, 51, pl. 10; 2015a, 45). The royal inscriptions describe the construction of an elaborate system of irrigation canals around the new city to facilitate this agricultural production (Grayson 1987, A.0.78.23, 105-106).

The city' canal system was embedded within the broader irrigation projects already taking place west of the Makhmur Plain (Altaweel 2008, 76). The canal system at Kār-Tukultī-Ninurta was identified and partly mapped (Eickhoff, 1985, 18, plan 1; Dittmann 1997a, 95-102; see section 3.4 below for the archaeological evidence of this system). The texts refer to two canals: the "Canal of Justice" (Grayson 1987, A.0.78.22, 39-48) and a *miritu* canal. According to Bagg (2000a, 308), the latter came from water sources in the mountains and directed spring water to the city in order to convert terrain into irrigated fields. A later royal inscription (IM 76787) mentions two *miritu* canals that possibly give evidence for later additions to the canal system.

This massive restructuring of the land, as well as the large-scale architectural projects conducted at Kār-Tukultī-Ninurta required the mobilization of a large labor force. One of the main imperial practices of the Middle Assyrian empire was the deportation of populations all around their empire and the subsequent exploitation of the deportees for large building projects (Düring 2015, 304). Most of these deportees were housed either within or in the immediate vicinity of Kār-Tukultī-Ninurta and worked both on the construction of the city and the newly created agricultural fields (Freydank 1974; 1975; 1976; 1980; 2001; Harrak 1987, 219-229).

Kār-Tukultī-Ninurta served as a new administrative and economic center for the continuously developing core region of Assyria. The city's considerable extent allowed it to support the large population brought to construct and subsequently populate it.

To conclude this section, I argue that the reasons behind the creation of Kār-Tukultī-Ninurta were twofold: the creation of an imperial center to project an imperial ideology, and the creation of an economically stable core. This city manifested the new imperial status of Assyria. It was an administrative center, a cult center, and had large agricultural capabilities.

3.4 HOW – THE REALIZATION OF A NEW CAPITAL

Here I would like to address a recurring issue with the investigation of the construction of Assyrian capitals. While royal inscriptions and archaeological evidence provide information about the cities and some of the buildings in them (mostly inside the citadels), little is known regarding their construction process. The construction of Kār-Tukultī-Ninurta is often praised in the royal inscriptions, but few details are provided. As a result, we have limited knowledge about the number of workers and officials engaged in the funding or managing of the construction, or the exact dimensions of buildings. Only a handful of textual sources dealing with construction and management of the city exist. More importantly, archaeological evidence for crucial parts of the city is lacking. For example, while the full extent of the walls of all other Assyrian capitals is known, this is not the case with Kār-Tukultī-Ninurta.

One of the royal inscriptions of Kār-Tukultī-Ninurta mentions a two-wall system: one wall surrounding the city, and a second wall surrounding the citadel (Deller *et al.* 1994, 467). The city wall is described as having heaps of earth in front of it and a moat surrounding its circumference. This only partially coincides with the scarce archaeological data of the walls. The only part known of the city wall is along the southern limit of the city (Dittmann 1990) and is visible in the satellite images. Little is known of its exact dimensions. The city wall of Aššur, which may give some indication about the style of construction

and size of the walls of Kār-Tukultī-Ninurta, was replaced during the Neo Assyrian period, making any comparison problematic. In an attempt to calculate the labor investment required for the city wall's construction, some conservative figures can be produced based on Dittman's assessment of the extent of the city: 240-500 ha (Dittmann 1997b).

To achieve the lower-end estimate of 240 ha, I will use Dittmann's estimated northern limit of the wall, 250 m north of Tell O (see Figure 8), as well as the modern road as the limit of the city to the east, since this was the limit for the survey. The wall would thus be at least 4,3 km long, or ca. 6,7 km long if it extended the riverbank. For the 500 ha estimate we should expect a wall of ca. 6 km long, or 8,4 km with a wall along the riverbank.

I attempted to identify the city wall on the basis of available satellite images.[12] One way to identify the wall would be to look for features similar to the southern wall or to the citadel wall. However, no such remains were detected. Accepting Tukultī-Ninurta's claim that the city wall was surrounded by a moat, finding this moat would indicate the course of the wall. Unfortunately, the only traceable canal-like features consist of the *Canal of Justice*, the main canal of the city's large irrigation system (Menze *et al*. 2007) (Figure 12). The satellite images did not preserve any features along this canal that could be related to the city wall.

From this evidence, it seems that the city's wall was never actually completed. In every other Assyrian capital, the wall features are immediately clear in aerial photography and satellite imagery. Also, all Assyrian capitals are located in areas of intensive modern agriculture or heavy urbanization. Despite these circumstances, their walls remain visible. This is not the case with Kār-Tukultī-Ninurta. Is it possible that agricultural activity has been so impactful that it completely erased any trace of the wall? This seems unlikely as it has not been the case anywhere else. With the currently available evidence, I would argue that the wall was never completed, regardless of the claims made in the royal inscriptions. Further investigation on the ground is mandatory if we are to delineate the full extent of the city, and its corresponding city wall.

12 The available CORONA images for Kār-Tukultī-Ninurta can be found at http://corona.cast.uark.edu/atlas#zoom=16&center=4817623,4230032 [accessed 3-4-2018].

Labor description	Source	Identified groups
Builder, Building the city wall	VAT18087+ VAT 18002 VAT 17999	Shubrians
Work in the palace of Kār-Tukultī-Ninurta, Work on the New Palace	VAT 17999 VAT 18007 VAT 18007 VAT 18007	Nairians

Table 4: Different types of work associated with different groups of deportees during the construction of Kār-Tukultī-Ninurta (after Harrak 1987).

Be that as it may, the number of texts concerning deportees (Harrak 1987, 219-229; Freydank 1974; 1975; 1976; 1980; 2001) provide some information on the construction process and labor investment for Kār-Tukultī-Ninurta. Unfortunately, most of these texts refer to deportees working on the new capital and do not specify numbers or time spent working. Harrak (1987, 270) estimated the number of deportees, based on the amount of grain supplied to them. According to these calculations, Harrak estimated that there would have been 7320 Kassite prisoners brought here (1987, 271). Harrak's estimations provide a good ballpark figure for the labor required for the construction of the city. They also are useful to create a picture of the administration of the construction as well as the diversity of the deportees.

Some texts mention more precise figures for the deportees working at Kār-Tukultī-Ninurta. Text VAT 18002 (Harrak 1987, 219-220) divides deportees into small groups of different numbers: 200, 188, 180 and 153 Shubrians, and 99 Nairians.[13] The text discusses the allocation of different amounts of wool to these groups, each of which was entrusted to named Assyrian officials. Although their numbers are unclear, some of these groups are designated as builders (Table 4).

13 The fact that deportees are organized by ethnic groups is particularly interesting. In the same period, archaeological and textual vidence from inscriptions indicate that working groups at the *dunnu* of Tell Sabi Abyad were also administered on the basis of ethnicity (Wiggerman 2000).

Figure 12: Corona image from December 1967 and Dittmann's sketch of the overlaid with possible canal features related to the Canal of Justice. Produced by the author.

The text VAT 17999 also mentions small groups of people (Freydank 1974; 1976; Harrak 1987, 220-221; Gilibert 2008, 179). It mentions an unclear number of Shubrian people who worked under the command of an Assyrian official on the construction of the city wall. An even smaller group of people from the land of Nairi, again under an Assyrian official, 'executed work in Kār-Tukultī-Ninurta'.

Although the two texts relate that deportees worked in the palace of the new capital, it is impossible to know in which part of the palace they worked, or what exactly was the nature of their task (VAT 18007; VAT 18087+). Both texts list Nairians as working in the palace or carrying out other tasks in Kār-Tukultī-Ninurta, while Shubrian builders are only mentioned as working in the city itself.

Among these texts, only brief mentions are made of deportees working in agricultural production. It appears that the campaigns in Hanigalbat and Babylon supplied the workforce for these building projects. The diverse groups of people occupied in constructing the different buildings might explain some of the differences in construction between buildings and within them as well (e.g. the difference in mudbrick size mentioned above).

It is not possible to reconstruct the construction process of Kār-Tukultī-Ninurta. What can be said with a certain degree of certainty is that the construction process of the city was tied up with the administrative and territorial growth of the empire. This can be seen in the large number of deportees which were brought here and managed for this project. At the same time, resources were necessary not only to feed the laborers, but also for the imperial army. The amount of resources required to realize such a project could not have been amassed without the growth that Assyria witnessed in its transformation to an empire. The creation of Kār-Tukultī-Ninurta is directly tied to this transformation and likely would not have been possible otherwise.

3.5 WHAT – THE FUNCTION AND 'DEMISE' OF KĀR-TUKULTĪ-NINURTA

Here I will discuss the function of the new capital through an investigation of historical evidence and archaeological remains. I will start by exploring the urban landscape of Kār-Tukultī-Ninurta, its known architectural features, and its irrigation system. This will be done mainly on the basis of the available archaeological evidence. Then I will discuss other aspects of the function of the city, and whether it should be considered a new capital or an 'extension' of Aššur.

3.5.1 THE PLAN AND URBAN LANDSCAPE OF KĀR-TUKULTĪ-NINURTA

As discussed in the introduction of this chapter, after Bachmann's and Andrae's excavation, the city was initially thought to be about 62 ha in size. The excavations were limited to the official district which was walled and also divided by an inner wall. The identified buildings were: the northern and southern palace, the temple of Aššur, Gate D, Tower K, and a building above the northern palace labeled *Wohnhaus* (Eickhoff 1985, Plan 1), which was considered as the northern border of the city.

The survey and excavations conducted by Dittmann showed that the site has a size of at least 240 ha, leading the excavator to suggest that the city could even have been 500 ha, (Dittmann 1997b, 269), since the eastern and northern boundaries of the city were not found yet. Dittmann argued that the city probably extended to the north at least as far as Tell O. It is unclear from the current data whether temple at Tell O belonged to the citadel area, or whether it was part of the lower city. Based on the wall of the citadel, it seems most probable that it was outside of the citadel. What can be said is that the temple at Tell O was not unique, as surface data indicated the existence of other small temples in other areas of the city (Dittmann 1992, 312).

Because of the unknown course of the wall, the city plan of Kār-Tukultī-Ninurta is unclear. It is tempting to reconstruct the city in a roughly rectangular shape, similar to the later capitals of the Neo Assyrian period. This idea seems feasible based on two main factors. Firstly, the remaining part of the wall on the southern side of the city seems to follow a straight line. Furthermore, the landscape of the area is relatively level, with no major natural obstacles requiring the wall to curve. The second argument is that the wall of the citadel seems to have a rectangular construction. If the wall of the city follows that of the citadel, then it is likely that it did have a rectangular construction, similar to Dur-Šarrukēn (see below chapter 5).

It is not possible to reconstruct the daily urban life of the city because of the lack of evidence. We do not know in what type of houses these people lived, what their living conditions were, or what their neighborhoods looked like. Dittmann has argued for the possibility that deportees were settled in specific districts of Kār-Tukultī-Ninurta based on their ethnicity (i.e. place of origin), and that an Assyrian official would be put in charge of that district (1997, 110-101). This interpretation is based on of distribution of ceramic concentrations in the fields he surveyed, which particularly focused on the southern side of the city (see section 3.1.1). The methodology used for the estimations of this pottery is unclear, as the work of Dittmann remains unpublished, and as such it is not possible to accurately assess these interpretations. However, the possibility that the living quarters of deportees were organized on the basis of ethnicity may also be supported by a

number of texts dealing with the construction of the city (Freydank 1974; 1976; Harrak 1987, 219-229). Based on his survey findings, Dittmann also suggested that several more prominent buildings existed within these neighborhoods in the lower city which could have had administrative functions (Dittmann 1997a, 101). If this is the case, then Kār-Tukultī-Ninurta would look even more like the Neo Assyrian capitals, where such buildings are also attested (see section 4.5.2), but we should remain critical to such an idea until the data from the survey are fully published.

Summarizing the urban layout of Kār-Tukultī-Ninurta, it seems that at least a part of the lower city had a residential function. The city was definitely populated by the deportees brought in for its construction, but also by a certain number of Assyrian officials.

3.5.2 THE CITADEL

The citadel of Kār-Tukultī-Ninurta is the only excavated area of the city. Located on what is probably its northern/north-western side, the citadel is directly on the eastern bank of the Tigris, it is the first walled citadel of a capital in Assyrian history. Only the few buildings mentioned in section 3.1.1 have been identified in the citadel. While the available plan of the citadel is rather incomplete, there are three buildings which are important for our understanding of the function of the city: the two palaces and the Aššur Temple.

It has already been discussed that the two palatial structures were probably connected, forming a monumental palace ca. 5 ha in size. The 2002 excavation trenches conducted by Iraqi archaeologists further supported this position by uncovering a courtyard located between the 'two palaces' (Mühl and Sulaiman 2011, 381-382, Plate XXVIIIb). The fact that the two palaces might be part of the same structure is important for a number of reasons. The existence of two different palatial buildings in the same citadel was puzzling. Although multiple palaces exist in all Assyrian capitals, none of the other capitals had two palaces constructed at the same time in the main citadel.

As discussed, a new palace was constructed in Aššur during the reign of Tukultī-Ninurta (section 3.2). The existence of a larger palace in Kār-Tukultī-Ninurta shows the intention to make the city the primary residence for the king.

In terms of its size it significantly exceeds the New Palace at Aššur by approximately 20.000 m^2. In terms of structure, the palace shows a wide variety of rooms and several courtyards, although the southern part of the palace is poorly preserved. A large central court is surrounded by a series of fragmented rooms. It seems like most of the terrace walls were painted white.

The south palace provided a large number of small finds including lead objects, faience, stone knobbed-plaque fragments, terracotta idols, bronze arrowheads, armor scales, faience animal figurines and tablets (Bachmann 2016, 293-295). Based on the fragmented nature of the rooms and the incomplete plan of the south palace it is not possible to determine the function of this part of the building. Bachmann also identified fragments of blue, red, white, and yellow painted plaster, possibly indicating mural designs (Bachmann 2016, 295). Andrae (1925) published watercolor copies of these decorations, indicating floral and rosette motifs, similar to the frit and faience versions uncovered in Tell O (Bastert and Dittmann 1992). Common shapes in these decorations include rosettes, palmettes, and small dotted circles from which several types of plants sprout (Andrae 1925; Eickhoff 1985, 36f.). Similar decorations of both the rooms and the terrace have been uncovered in the Central Palace of Tell Ḥamīdīya, which dates to the Mitanni period (Wäfler 1990).

The north palace is a complex of 18 rooms with thick walls (ranging from 4 to 9 m in thickness). The area was paved with bitumen-coated and palace-stamped baked bricks placed on top of bitumen and sand (Eickhoff 1985). The walls were also probably decorated, as Bachmann identified traces of red, blue, and white plaster (Bachmann 2016, 301-303).

The north palace was originally interpreted as an entrance leading to the rest of the palace (Eickhoff 1985, 42). However, the recent work done by Iraqi archaeologists to the north of the north palace revealed another part to this structure, which makes Eickhoff's interpretation improbable (Dittmann 1990, 167; Mühl and Sulaiman 2011). Based on the excavations in the western part of this area by Dittmann and Iraqi archaeologists (Sulaiman 2010) Mühl and Sulaiman (2011, 381-382) created a plan which incorporates both results. This research revealed a large courtyard that measures ca. 32 x 28 m with a center paved with green and yellow tiles. The assessment by Mühl and Sulaiman (2011, 382) incorporated this section with the palatial complex based on its plan, layout, decoration, and the bricks inscribed with the king's name (Figure 13). Although it is not possible to reconstruct the palace, it is possible to assess its functions. We are

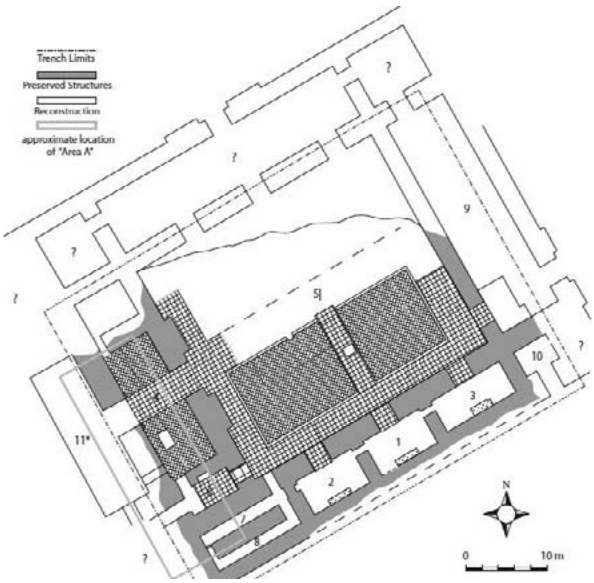

Figure 13: The plan of the so-called north palace after the synthetic work of Mühl and Sulaiman (2011, Fig. 8).

informed by texts that it had residential suites where the king lived. It was organized, similarly to Neo Assyrian palaces, along a series of courtyards with different functions.

An interesting aspect of the architecture in the citadel of Kār-Tukultī-Ninurta are its similar manifestations in the palace as well as in other buildings. In the southern palace, Bachmann (Eickhoff 1985, 36f) and later cleaning work (Mühl and Sulaiman, 2011, 382) revealed that the façade was decorated with columned pillars within buttresses and niches. Similar decorations have been uncovered in Tall Hamidiya (Wäfler 2003, 35 fig. 10, Pl. 1), showing the potential influence of older Mitannian architecture. For the northern palace and the rooms uncovered in Area A, Mühl and Sulaiman argued that the spatial organization of this section of the palace followed the temple architecture of the Old Babylonian period (Mühl and Sulaiman 2011, 382). Babylonian influences can be observed more broadly as well, as it has been argued, and discussed earlier here, that part of the reason Tukultī-Ninurta wanted to construct the capital is to imitate Babylonian kings (Cifola 2004). In addition, Babylonian influences can be seen in the royal texts and other textual data of the period (e.g. the Epic of Tukultī-Ninurta: Machinist 1978).

One of the controversial topics for the city of Kār-Tukultī-Ninurta is the existence of a temple dedicated to the god Aššur (Figure 14). The reason for this is the fact that Kār-Tukultī-Ninurta is the only Assyrian city, apart from Aššur, which had a temple of Aššur. Gilibert has suggested that the new temple of Aššur in Kār-Tukultī-Ninurta should be considered a "branch" temple of its counterpart in Aššur (Gilibert 2008, 182). The reasoning behind this proposal is that the perimeter of the ziggurat in Kār-Tukultī-Ninurta measures virtually half of that in Aššur. Additionally, Gilibert's "branch" idea is based on: the "*compact layout of the temple*" with many doorways, cult niches, and rooms, as well as the ability to access the main cult room from multiple entrances (2008, 182; based on Miglus 1993, 199-204). This branch temple would be fitting only for ritualistic purposes and not as the main temple for worshipping the god.

While indeed the temple at Kār-Tukultī-Ninurta is smaller in terms of size, other data do not necessarily point towards a "branch" interpretation. First, the temple of Aššur is the largest archaeologically attested temple in Kār-Tukultī-Ninurta (Dittmann 1997, 106-107). Additionally, there are no textual data which would indicate that the temple of Aššur in Kār-Tukultī-Ninurta would be of secondary use. On the contrary, the temple is specifically mentioned in the royal inscriptions, while other temples have only a brief mention. Text A.0.78.23 states:

(109-118): At that time I built in my city, Kār-Tukultī-Ninurta, the cult center which I had constructed, a holy temple, an awesome sanctuary for the dwelling of the god Aššur, my lord. I called it Ekurmešara. Inside it I completed a great ziggurat as the cult platform of the god Aššur, my lord, and deposited my monumental inscriptions.

After this comes an injunction compelling any later kings to restore the temple to its previous condition in case it becomes dilapidated. This is more extensive than in other royal inscriptions which refer to the city, and includes not only the god Aššur, but also Enlil and Šamaš. This could indicate that the king paid specific attention to this new temple and that it was by no means something unimportant. Based on this evidence, I would suggest that it is not yet possible to determine the exact function and purpose of the temple of Aššur in Kār-Tukultī-Ninurta. The uniqueness of the phenomenon makes it, I believe, a special case. On the other hand, the smaller size of the building indicates a possible lower status in comparison to the corresponding temple at Aššur.

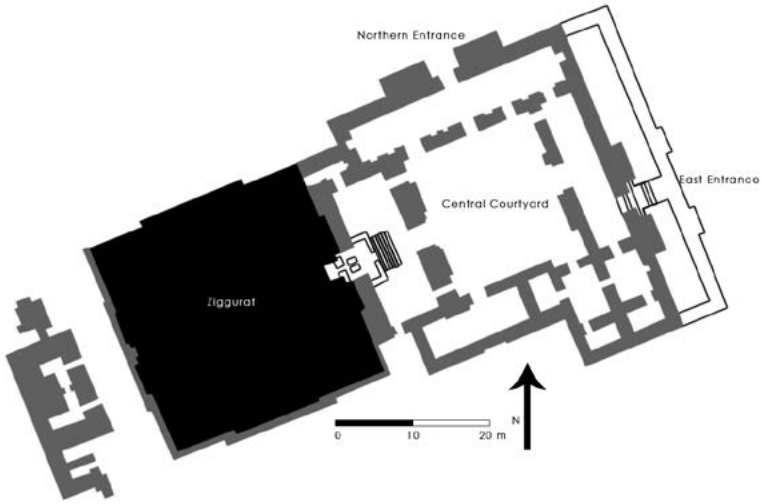

Figure 14: Temple of Aššur and ziggurat in Kār-Tukultī-Ninurta (after Nigro in Matthiae 1997, 24, produced by the author).

The citadel of Kār-Tukultī-Ninurta incorporated a number of unique features that significantly distinguish it from the one at Aššur. Several of these reoccur in Neo Assyrian capitals. The citadel served as: i) the main residence of the king, ii) an administrative center, and iii) a religious center. The much larger palace, the spatial distinction between citadel and the rest of the city with a wall, and the existence of several temples and shrines are enough to suggest, in my opinion, that the function of the city's citadel was to serve as the new administrative center of the empire.

3.5.3 IRRIGATION SYSTEM AND AGRICULTURAL PRODUCTION

In the reasons for the construction of a new capital I included the creation of an economically stable core. The area around Kār-Tukultī-Ninurta provided a large fertile open space which could be remodeled into a landscape of intense agricultural production. This required an extensive and elaborate irrigation system.

The new city is located in an area where the average annual rainfall is close to, or under, 100 isohyets (Bagg 2000a, 209). This is not sufficient for dry-farming agriculture, which requires 250 mm annual rainfall at least. Extensive irrigation systems had to be constructed in order to transform the area into a fertile region that would support its growing population. This might be the reason the area was 'laying waste' before the foundation of the new capital (although there are indications for some small old Assyrian settlements). According to Bagg (2000a), the Tigris river is not ideal for the creation of large irrigation canals because it is deeply incised and has unpredictable and violent floods caused by heavy rainstorms. However, recent research shows that Assyrians did have the technology to overcome such difficulties (Reculeau 2013), especially in an area such as the Makhmur Plain, by tapping into side rivers.

According to the royal inscriptions two canals were constructed, the 'Canal of Justice' (Grayson 1987, A.0.78.22, 39-48) and a *miritu* canal. The latter possibly came from sources in the mountains and directed spring water to the city in order to convert uncultivated land into irrigated fields (Bagg 2000a, 308). Unfortunately, there is only limited archaeological data for these canals since the original courses were reused or obscured by later irrigation programs (Mühl 2015a, 55). However, the large number of Middle Assyrian sites between the new

capital and the Lesser Zab confluence, in conjunction with textual data, argue for intensified agricultural production (Bagg 2000b).

It has been claimed that the main reason for the construction of Kār-Tukultī-Ninurta was the restructuring of the land into irrigated fields of high production (Gilibert 2008, 183). This was required, according to Novàk, in order to avert the problems caused by population growth in the center of the empire (Novàk 1999, 122). These arguments are problematic for two reasons. Firstly, if the city's main purpose was agricultural, it does not seem necessary to build an entire urban area with a palace and temples. If this was the intended function, then it would have been better to create smaller agricultural settlements, as occurred in other areas of the empire. The second point regarding population growth also begs the question: if you want to combat population density,[14] why bring in several thousands of deportees to settle in the new city? While the city of Aššur was relatively densely populated, there never is no evidence for issues related to population density. As a matter of fact, we often have Assyrians populating other parts of the empire, where there was more opportunity for economic gain (e.g. Tell Sabi Abyad, Wiggerman 2000). The only spatial problem in the city of Aššur was related to its citadel, where residential areas had to be destroyed to create space for new monumental buildings.

Text MARV IV 115 (Freydank 2009, 21; 73-75) might offer some useful insights on the role of agricultural production in the new city. According to Freydank's interpretation of the text, officers of the new capital provide barley wheat in Aššur in the form of sacrifice at the temple of Aššur, on behalf of the new city. Based on this text, it seems plausible that the newly established agricultural infrastructure provided the old capital with grain as well. Through other texts we know that taxes in the form of tribute were collected in Kār-Tukultī-Ninurta (Freydank 2009). This kind of texts, together with the creation of administrative buildings like the palace, indicate that the new capital functioned as an administrative and agricultural center for the empire (Reculeau 2011).

14 There is an argument to be made that population growth of the center of the empire is actually the goal. With the creation of a large capital like Kār-Tukultī-Ninurta, population growth is a definite outcome.

3.5.4 THE END OF A CAPITAL

Kār-Tukultī-Ninurta was abandoned as an administrative center after the death of Tukultī-Ninurta. Several theories have been advanced in regard to this abandonment. Scholars who have associated the creation of the city directly with the personality of the king, directly connect its abandonment with his assassination (see for example Dolce 1997). Adding to that line of thought is a Babylonian text ("Chronicle P"), which informs us that the king was killed in his own city by his son (Grayson 1975, 175-176)[15]. Also, it has been argued, albeit without evidence, that the construction of a temple to the god Aššur in Kār-Tukultī-Ninurta was perceived by the court and the priesthood as a major sacrilege (Eickhoff 1985, 49).

Recent studies have demonstrated that there are no concrete data to support such a thesis (Gilibert 2008; Schmitt in press). On the contrary, the king's name was never undermined in later texts and there does not seem to be a "*damnatio memoriae*" imposed on him (Schmitt in press). Additionally, there is no evidence which would imply that the new temple of Aššur in Kār-Tukultī-Ninurta undermined the religious importance of its counterpart in Aššur.

I would suggest that the abandonment of Kār-Tukultī-Ninurta should be associated with the recession the Middle Assyrian empire experienced during the last years of the reign of Tukultī-Ninurta and afterwards (Jakob 2017, 132-134). In that period, continuous competition between Assyria and Babylon frequently destabilized the southern border of the empire, and there were internal conflicts among Assyrian pretenders to the throne (Llop and George 2001/2; Yamada 2003, 156-159; Glassner 2005; Jakob 2017, 132). It is beyond the scope of this dissertation to investigate the exact reasons behind the decline of the Assyrian empire from the 12th century onwards. I suggest, however, that the abandonment of the city is directly connected with the aforementioned recession and power struggle.

I have argued that the new capital was created as part of the imperial transformation process Assyria experienced. It became a center which could support extensive administrative functions and the increased agricultural production of its surrounding region.

15 It must be noted that Chronicle P is poorly preserved and its dating is uncertain. As such, information from this text should be treated with caution.

With the decline that followed the death of Kār-Tukultī-Ninurta, neither of these functions could be fulfilled any longer. Alongside this, the development of the imperial core that Kār-Tukultī-Ninurta was part of, was no longer tenable. Conflicts came ever closer to the city of Aššur and coincided with significantly lower crop yields (see for example Grayson 1991, A.0.89.1, A.0.89.2, A.0.89.7; Frahm 2009, 41; Jakob 2017, 138-139). This made the further development and maintenance of such a large and demanding project like Kār-Tukultī-Ninurta impossible to sustain, especially without the revenue from taxes and conquest, and as the agricultural production of the center dropped significantly (see for example Freydank 2009, 78).

It is, however, important to note that the site was never completely abandoned. Parts of the agricultural infrastructure associated with it, as well as parts of its residential quarters likely continued to be inhabited until even the post Assyrian times, although mostly as small villages (Dittmann 2011). Yet, the city's temples and its administrative buildings, such as the palace were abandoned.

To conclude, I suggest that Kār-Tukultī-Ninurta functioned as the first example of Assyrian capital creation. It was not constructed to be an extension of Aššur, but rather as a new center for the empire, which would reflect its newly expanded status. This was expressed through the size of the city, the creation of several temples, and the construction of a new palace. These new features suggest an attempt to differentiate, as well as magnify, the situation in Aššur. While the central administration did shift to Kār-Tukultī-Ninurta, it did not aim to challenge Aššur's role as a religious center, but to complement it.

Chapter 4: Kalḫu – The First New Neo Assyrian

4.1 INTRODUCTION

After a decline in power during the so-called dark ages, the Assyrian state entered its second period of imperial expansion, which lasted for more than three centuries (934-609 BCE; see Appendix 1). This period is referred to as the as Neo Assyrian and marks another transformation of Assyria into the largest empire the world had ever seen. The Neo Assyrian empire shares several aspects and characteristics in administrative, ruling, and military practices with those of the Middle Assyrian empire. For the purpose of this study, the most important shared practice is the creation of new capitals. Kalḫu is the first newly created capital in this period.

Kalḫu, also known as Nimrud, or Calah, is located in the modern Nineveh Governorate of Iraq, some 30 km south of Mosul (Figure 15). The city lies on the eastern bank of Tigris, like all other Assyrian capitals except Aššur. The previous capital, Kār-Tukultī-Ninurta, ceased to function as a capital city with the death of its eponymous king. In contrast to this, Kalḫu was constructed during the reign of Aššurnaṣirpal II (883–859 BCE) and retained its status for some 175 years, until the reign of Sargon II (721-705 BCE), when the capital was moved to Dur-Šarrukēn (705 BCE). Kalḫu's longer period of existence offers more material to assess the historical contextualization of this specific instance of capital creation, especially in regard to urban development and function.

In this chapter I will argue that, similarly to Kār-Tukultī-Ninurta, the creation of Kalḫu occurred during a change in the *status quo* of Assyria, and its transformation, once again, to an imperial state. Rather than trying to explain the change exclusively through king or elite motivations, I will try to contextualize the change in the historical processes of the time and in those conditions that *enabled* or *facilitated* the creation of a new capital.

4.1.1 HISTORY OF RESEARCH AND ARCHAEOLOGICAL EVIDENCE

Kalḫu has been the focus of several archaeological campaigns throughout the 19th and 20th century. The site was first mentioned by a British traveler, Claudius James Rich, in 1820. The first excavations at the site were conducted by Layard in 1845-1847 and 1849-1851, when the site was still thought to be Nineveh (Layard 1849). His excavations were continued by Hormuzd Rassam in multiple campaigns until 1879 (Rassam and Rogers 1897).

Max Mallowan resumed archaeological work at the site resumed in 1949, and his work really laid the basis of our understanding of the city (Mallowan 1966; McCall 2008). His work focused on the citadel mound, located on the southwestern corner of Kalḫu. The 1950s campaigns of Mallowan and his team uncovered a large number of buildings, including the Ninurta Temple, the Ištar Temple, the North-West Palace (N.W. Palace), the Central Palace, the 1950 Building, the Burnt Palace, the Nabu Temple, and traces of the South-West Palace (S. W. Palace); he also identified a number of houses and part of the wall on the northeastern part of the citadel (Figure 16). Excavations were also conducted on Fort Shalmaneser, the secondary citadel of Kalḫu (Mallowan 1966, vol. 2).

Mallowan's work on the citadel was continued by David Oates after 1958, focusing mostly in Fort Shalmaneser (Oates 1961; 1962; 1963), and Julian Orchard in 1963, the last year of excavations of the British School in Iraq. Restorations and further work, especially on the N.W. Palace was done by archaeologists from the Directorate of Antiquities of the Republic of Iraq (Postgate and Reade 1980, 306).

Janusz Meuszyński from the Polish Center for Mediterranean Archaeology conducted research that re-investigated the Central Palace. Some work

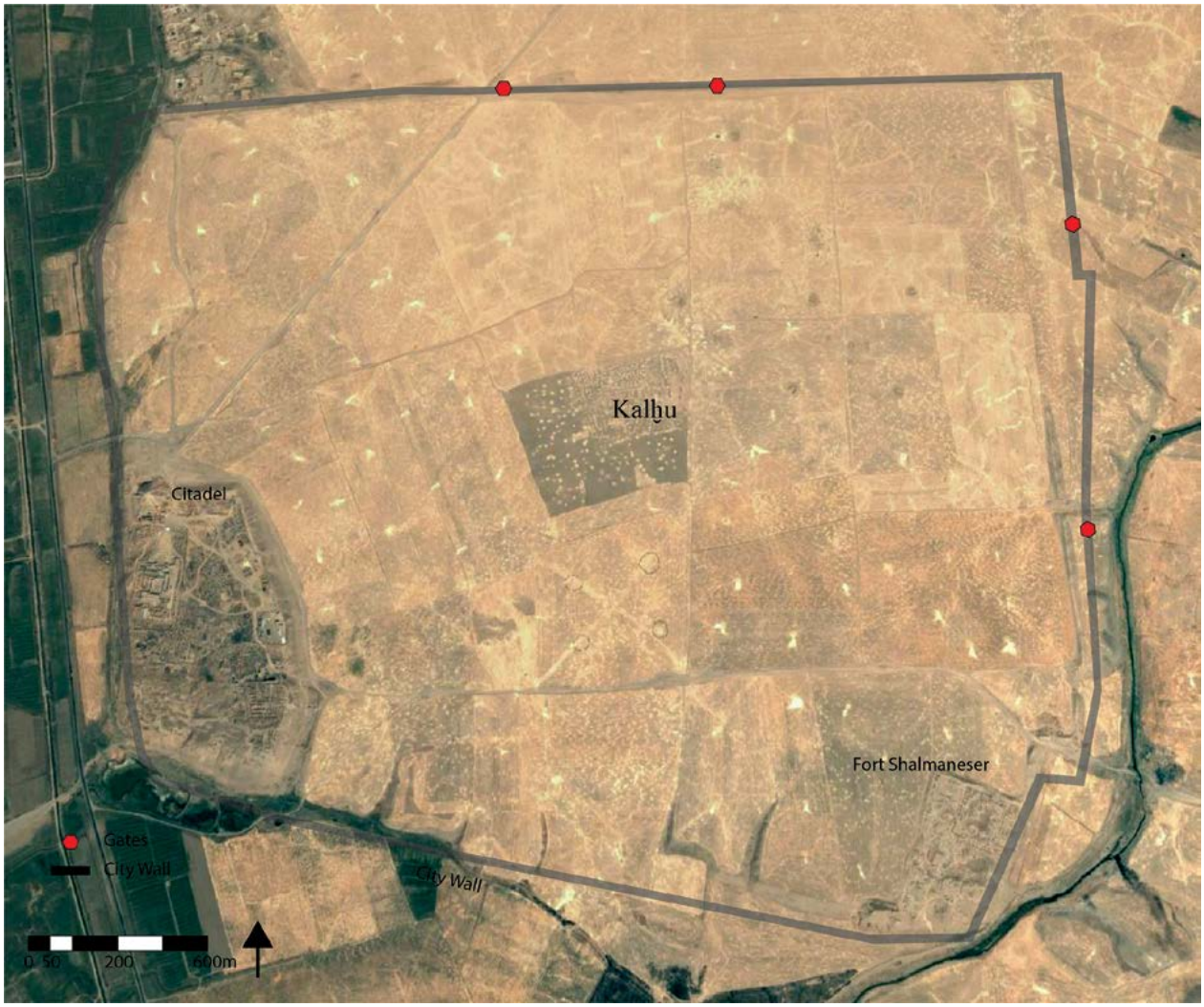

Figure 15: The city of Kalḫu as seen today, with traces of the wall still visible (image from Google Earth).

was also done around Courtyard Y of the N.W. Palace (Meuszyński, 1971-1978; 1981).

An extensive survey of the lower city of Kalḫu took place between 1987 and 1989, under the supervision of Paolo Fiorina (Fiorina 2008; 2011). Roughly 160 of the total 360 ha of the city were surveyed. In addition, Fiorina undertook some excavations at Fort Shalmaneser. Further work on the citadel and the residential quarters of the N.W. Palace were conducted by Muzahim Mahmoud Hussein (Hussein 2002).

The citadel of Kalḫu, located in the southwestern corner of the city wall, is the most well-documented part of the city. It is comprised of a number of buildings, including palaces, residential buildings, and temples. In this section I will briefly present the buildings of the city and summarize the archaeological work conducted on each building, while detailed archaeological discussion of relevant buildings will be explored further in this chapter.

The N.W. Palace is probably the most prominent building of the citadel, measuring 200 m by 130 m (Figure 16 and 24). As one of the first major constructions of the city and the primary residence of the Assyrian king it is also one of the best studied buildings of the capital (Mallowan 1952; 1966, 93-

183; Hussein *et al*. 2013; Kertai 2013a; 2014; 2015). It is located on the westernmost part of the citadel overlooking the Tigris and was probably not visible from the lower city.

To the south of the N.W. Palace is another complex, the palace of Adad-nirari III, also referred to as the Upper Chambers. The Upper Chambers is a number of rooms organized around a courtyard, and it was originally interpreted as a separate building, possibly a new palace (Oates and Oates 2001, 70). It is more plausible however, that these rooms were additions to the N.W. Palace (Kertai 2015, 77-79).

Another building designated as palace is the Central Palace. It is located to the south-east of the N.W. Palace, in a very central position on the citadel. It dates to the reign of Aššurnaṣirpal and is one of the oldest buildings on the citadel. We know little concerning its architecture and use compared to other buildings of the area; its identification as a palace is still debated (Meuszyński 1971-1978; Oates and Oates 2001, 71-74; Hussein *et al*. 2013, 96-98; Kertai 2013a, 11-13). The current state of the building is such that it is impossible to reconstruct a plan of it or describe its architectural composition.

On the southwestern corner of the citadel there is a building designated as the S.W. Palace (Mallowan 1952, 5; Kertai 2015, 156-158). Its dating is unknown, but its surviving parts can be dated to the reign of Esarhaddon (680–669 BCE). Little is known of its plan and the building seems to have remained unfinished. However, the remains of the palace seem quite similar to some parts of the palace of Sennacherib at Nineveh (see section 6.8.1). This is especially the case given the oblong north-south chambers on either side of the complex, and the south reception suite with its two long east-west antechambers. Such similarities further support a later date for the construction of the S.W. Palace. Two human-headed winged lions made of limestone were also uncovered here, which have the particularity that they have four legs; this number of legs is characteristic of a later date than the time when Kalḫu was constructed. The role and purpose of this building is unclear, but it is possible that it was constructed much later than the creation of Kalḫu, and that some parts even date to after Kalḫu was abandoned as a capital.

On the southeastern corner of the citadel there are a series of buildings, as well as one of the entrances to the citadel, the Shalmaneser Gate. The buildings located there are the Nabu Temple complex, the Burnt Palace, and the Governor's Palace. The Nabu Temple complex, also known as Ezida, is one of the temples constructed during the construction of the city and has been restored by the Directorate-General of Antiquities in Iraq. It contains two large courtyards, a throneroom, and the Nabu Sanctuary. To the west of the temple complex is the Burnt Palace, one of the buildings with the longest stratigraphic sequence, as part of it possibly dates to the Middle Assyrian period (see section 4.3 for details). Finally, the Governor's Palace, located to the north of the Burnt Palace, is a large administrative and residential building. Large quantities of tablets have been found there and several of them refer to the affairs of governors (Oates and Oates 2001, 134). However, there is no evidence to prove that the building was actually the residence of the governor of the province of Kalḫu.

Directly north of the Central Palace there is a large residential building designated as the so-called "1950 building" (Mallowan 1950). Unfortunately, little can be discerned of its plan, although it bears some resemblance to the Governor's Palace, especially in terms of its decoration. The building is crucial, however, for its long stratigraphic sequence (see below section 4.3.2), which preserves multiple occupation layers of the citadel area.

A large ziggurat and temple complex are located in the northwestern corner of the citadel. The ziggurat was one of the most prominent features of the cityscape and could be seen from a considerable distance. A temple complex located at the foot of the ziggurat contained the Ninurta Temple and a temple dedicated to Ištar. Finally, in the northeastern corner there is a series of smaller residences which will be further discussed in section 4.5.2.

Besides the citadel, the only other excavated area of the city is Fort Shalmaneser, designated as the military palace of Kalḫu. The palace was constructed during the reign of Shalmaneser III (858–824 BCE), son of Aššurnaṣirpal. A building designated as the Lower Town Palace is the only building excavated in the lower town of Kalḫu. The architectural designs and archaeological evidence for these buildings will be explored below in this chapter.

In recent years, Kalḫu has suffered significant damage from the destructive forces of the Islamic State. On March 5th, 2015, it was reported that forces of ISIS bulldozed the area of the N.W. Palace and destroyed the lamassu statues of the gates of the palace.[16] In

16 A detailed analysis of the destruction was presented by Mühl 2015b.

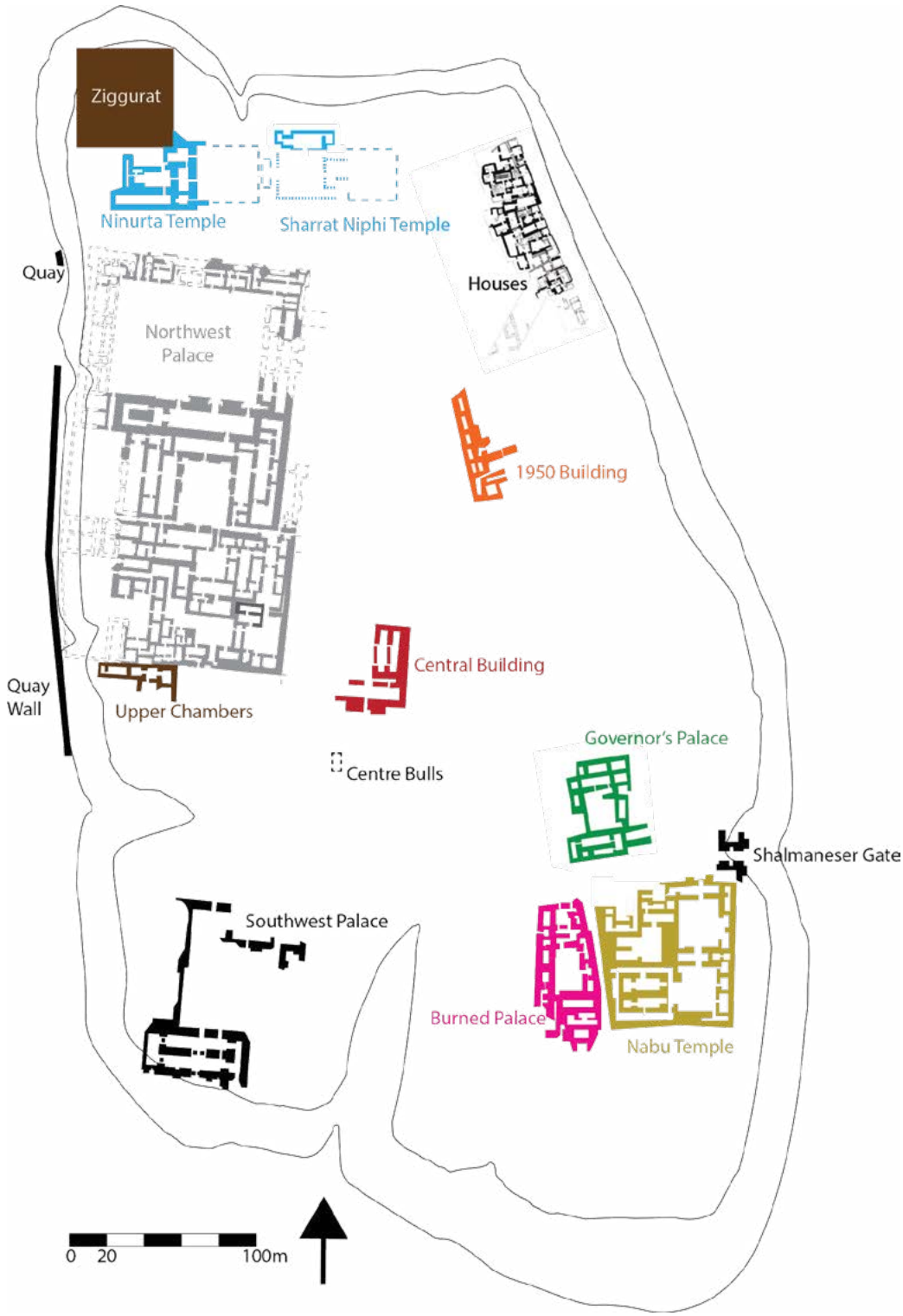

Figure 16: Plan of the citadel mound of Kalḫu (after Oates and Oates 2001 and Kertai 2015, produced by the author).

2016, it was reported that the ziggurat of the city had been leveled, and that the Nabu temple had suffered significant damage, while parts of the reconstructed temple of Ištar were destroyed (Danti 2016). The area of Kalḫu has since been liberated from IS, but the continuous instability in the area hamstrings the efforts of the Iraqis for reconstruction works.

4.2 FROM DECLINE TO EMPIRE - POLITICAL HISTORY OF THE EARLY NEO ASSYRIAN STATE

In order to examine the historical context in which Kalḫu became the capital of Assyria, it is necessary to explore Assyria's history during the early stages of the Neo Assyrian empire, starting from the decline of the Middle Assyrian empire up to the construction of Kalḫu.

The previous chapter discussed the creation of Kār-Tukultî-Ninurta as an expression of the wider transformation of the Middle Assyrian state into an empire. The abandonment of Kār-Tukultî-Ninurta and the death of its eponymous king (in 1197 BCE) was followed by a period of political turbulence and territorial recession, such as the loss of Babylon. However, the military expeditions undertaken during the periods of Aššur-reša-iši I (1132-1115 BCE),[17] and more importantly those of Tiglath-Pileser I (1114-1076 BCE),[18] brought a period of resurgence to the state. Successful campaigns were waged against the Arameans and the Mušku to the west and Babylon to the south (Oates and Oates 2001, 15). While this resurgence was brief, it was not until the end of the 10th century BCE that Assyria started to regain its imperial status, which helped the state to sustain an imperial identity.

The first king under whom the Assyrian restoration begins was Aššur-dan II (934-912 BCE) (Frahm 2017, 167-73). Aššur-dan's campaigns focused mainly on the north, north-east and north-west against the Arameans (Grayson 1982, 248-9; Parker 2001, 44). During the reign of Adad-nirari II (911-891 BCE), a large number of expeditions occurred on every frontier of the empire (Grayson 1982, 249-251; Grayson 1991, 142). Major campaigns were launched against the Arameans and Babylonia. In addition, we have the first military action in the north against Katmuhu and Nairi. Additional campaigns targeted the Cizre plain to assist the king of Kumme (Parker 2001, 45).

According to the annalistic inscriptions of Adad-nirari, his campaigns were so successful that in one of them (894 BCE) there was hardly any resistance to the collection of tribute during the Assyrian march (Grayson 1991, A.0.99.2, 105-119). According the "Synchronistic History", during the reign of Adad-nirari, new borders were drawn between Assyria and Babylon at this time (Glassner 2005, 180-181). Building projects took place in the citadels of Aššur (Grayson 1991, A.0.99.1-4 and 6) and Nineveh (Grayson 1991, A.0.99.4-5 and 7).

During the kingship of Tukultī-Ninurta II (890-884 BCE) there was a pause in the territorial expansion of the state and a brief period of consolidation. There is only one surviving version of his annals (Grayson 1991, A.0.100.5), which show that his primary military focus was the northern frontier and more specifically the land of Nairi, modern Turkey's Van and Hakkâri provinces, against which he launched three military operations. In a wider "sweep campaign" to the south and the west in 885 he met little opposition. However, he did not progress much further beyond the territory conquered by his father (Grayson 1982, 252; Frahm 2017, 168).

This notion that this was a period of consolidation is supported further by the building projects undertaken during that short period (Russell 2017, 435). Extensive construction occurred in the city of Aššur, such as the wall of Baltil (Grayson 1991, A.0.100.2), the palace terrace (Grayson 1991, A.0.100.3 and 5), the Anu-Adad temple (Grayson 1991, A.0.100.15). Nineveh also witnessed large building projects (Grayson 1991, A.0.100.12-13 and 17) although there is no detailed account for that activity. Additionally, projects were undertaken in the cities of Kaḫat and Terqa (Grayson 1991, A.0.100.1004). It is possible that the king spent extensive periods of time in Nineveh (Grayson 1982, 252) which, one could argue, was connected with the campaigns to the north.

This was followed by the large territorial growth, military activities, and large-scale irrigation and building projects, that the Assyrian state underwent during the period of Aššurnaṣirpal II's kingship (883-859 BCE). As stated above, scholars have traditionally credited rulers as the sole reason for the growth (or fall) of empires/states/kingdoms.

17 For the royal inscriptions of the king regarding his campaign, see Grayson 1987, 309-327.

18 For the royal inscriptions of the king regarding his campaign, see Grayson 1991, 5-84.

Likewise, Aššurnaṣirpal has been credited with the establishment of imperial Assyria (Oates and Oates 2001, 16), with Kalḫu as the natural result of his actions. However, the process of constructing Kalḫu is perhaps better described as an imperial strategy, rather than the personal initiative of a king. There are two key issues in the creation of Kalḫu that need to be addressed: 1) whether Kalḫu was a new foundation or an already established provincial center, and 2) the geographical advantages of Kalḫu.

4.3 WHY – THE CASE OF A NEW(?) FOUNDATION

In order to understand the phenomenon of capital creation, one of the key issues is to clarify whether the capital was an *ex novo* foundation. Above, I defined capital creation as the construction of capital cities at *a new location or through a profound transformation of a preexisting settlement*. It is therefore crucial to review the available data for Kalḫu to assess the status of the city before its elevation to the capital of Assyria. Aššurnaṣirpal's royal inscriptions claim that Shalmaneser (probably referring to Shalmaneser I, 1263-1234 BCE) had founded the city four centuries earlier, and that the city was in ruins at the moment of Aššurnaṣirpal's reign.[19] Various texts replicate this statement with only minor variations: "*the ancient city of Kalḫu which Shalmaneser, king of Assyria, a prince who preceded me, had built – this city had become dilapidated; it lay dormant (and) turned into a ruin hill. I rebuilt this city.*" (Grayson 1991, A.0.101.1). This information about the "original" founder of the city possibly derived from surviving stamped bricks that workers might have encountered during the construction of the new capital (Reade 2002a, 138).

A number of cuneiform texts from Mari that date to the 18th century (earlier than the Middle Assyrian period), mention the city as Kamilhu, Kawalhu, and even once as Kalḫu (Postgate 1985, 96; Ziegler 2002a, 270f.; Ziegler 2004, 20 n. 10). It is unclear whether the name Kamilhu was associated directly with the city of Kalḫu or with a smaller city in this region that was incorporated within the boundaries of the new capital (Hallo 1968, 773).

19 These texts can be found in Grayson 1991: A.0.101.1 iii 132-36; A.0.101.2 52-62; A.0.101.17 v 1-24a; A.0.101.23 14b-22; A.0.101.26 46b-58a; A.0.101.28 v 1-7a; A.0.101.29 lines 9-17; A.0.101.32 7b-11a.

The archaeological data from Mallowan's excavations (1966) show a lengthy occupation of the site, but it is hard to assess the size or the role of the city based on the admittedly scarce evidence. Most of the evidence comes from the south-eastern part of the citadel where the Burnt palace, the Nabu Temple, Ezida, and the Governor's palace are located (Figure 16). This area contained Ninevite V (late 4th – mid 3rd millennium BCE) painted pottery, together with flint arrow heads from the same period (Mallowan 1966,74; Oates and Oates 2001, 15). A deep trench also identified a later burial, dating roughly to 1750 BCE, which contained a prolonged socketed copper axe (Gadd 1936, Appendix 9-10).

During the Middle Assyrian period there were clear indications of occupation, although it is hard to prove continuous occupation, or periods of hiatus or abandonment. Mallowan speaks of deep soundings made on the eastern side of the acropolis, the so-called '1950 Building', which exposed mudbrick walls. Based on surrounding finds and a clay seal impression found in association with these walls, they were possibly dated to the period of Shalmaneser I (Mallowan 1950, 175). Another sounding made on the western part of the '1950 Building', produced a number of faience rosettes. Originally, they were attributed to an earlier phase of the building, but of an uncertain date (Mallowan 1950, 174). Comparative evidence, however, later demonstrated that they are certainly Middle Assyrian in date and could possibly be related to the other deep soundings (ca. 6 m) in the area (Trucker 1992).

The southeast area of the citadel, where the Burnt Palace is located, has the longest historical sequence of the site with nine distinct phases, labelled A-I (Mallowan 1966, 223, 286; Oates and Oates 2001, 125). Phases A-C are roughly dated between the 13th and the 9th century, although without specific dates known (or given?) for each phase. These phases were found only in isolated spots. The combined evidence from these earliest levels came from a number of platforms and pavements (Figure 17), streets associated with these earlier phases of the buildings, Nuzi potsherds, and Kassite and Middle Assyrian seals. It is worth noting that the pavement seems to be warped in phase B of the Burnt Palace, indicating considerable damage from an earthquake, definitely before the 9th century (Oates and Oates 2001, 125). Finally, the following phases D-F comprise the Neo Assyrian palace, when the city became a capital, and indicate a "radical change in

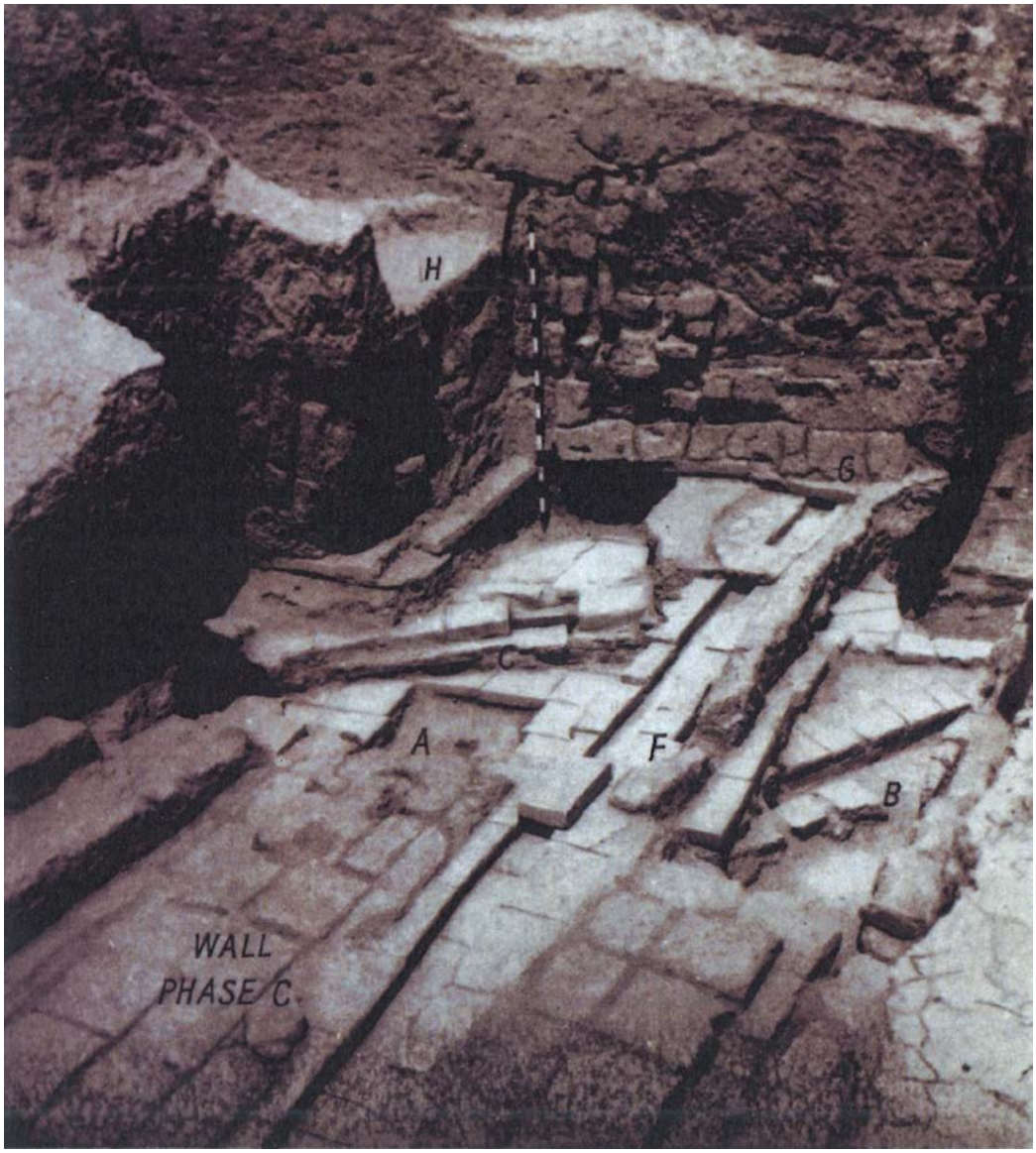

Figure 17: Successive levels in the courtyard of the Burnt Palace. A-B-C date to 1300-900 BCE. F dates to the reign of Sargon. G dates after 614 BCE, and level H is post-Assyrian (Mallowan 1966, fig. 184).

the alignment and purpose of the building, and in methods of construction" (Oates and Reid 1956, 37). This drastic change occurred across the citadel, but evidence from this part proves the major restructuring and repurposing of the tell. The subsequent phases are post-Assyrian and fall beyond the limit of this study.

A number of trenches were dug parallel to the citadel wall on the northeastern part of the tell. Those trenches produced evidence of non-palatial residential buildings. The area provides one of the best-preserved chronological sequences with eight levels spanning the Middle Assyrian to the Hellenistic period. Together with the evidence from under the Burnt Palace, this material confirms the existence of a settlement at this site in the Middle Assyrian period (Oates and Oates 2001, 135).

Despite this evidence, it is not easy to definitively characterize the role of the city in earlier periods, especially. The 9th century royal inscriptions speak of

an existing city (Postgate 1985), which is confirmed by archaeological evidence of Middle Assyrian finds from different parts of the tell, mainly in the eastern part. The Ninevite V surface pottery suggests a possibly longer occupation, although the thinness of these earlier layers combined with the continuous occupation have left little to no evidence for these early phases.

It is hard to determine the role and size of the Middle Assyrian settlement, and whether it was a provincial center as Postgate (1985) argued and, if so, for how long. If the royal inscriptions are to be believed, then the "city lay in ruins" when Aššurnaṣirpal II came to power (Grayson 1991, A.0.101.1). Indeed, there seems to be a gap of occupation in the early Neo Assyrian period. The aforementioned phase C of the Burnt Palace shows damage from an earthquake to the structures dating before the 9th century BCE. The subsequent phase, which corresponds with the construction of the city in the early 9th century, shows a completely different alignment and plan of the new buildings. It must be noted however, that the incompleteness of the currently available dataset strongly cautions against interpreting the absence of material as absence of occupation. It is also interesting to highlight here that the city was not given Aššurnaṣirpal's name. This might further point to an already established settlement.

4.3.1 LANDSCAPE RESTRUCTURING

Kalḫu is located ca. 70 km north of Aššur and lies at a very central position in what we could call the *Land of Aššur* (see section 2.1.1). The city sits on the east bank of the Tigris river roughly 8 km north of its confluence with the Greater Zab. In relation to the other two major Assyrian cities of the region, Kalḫu is 60 km from Arbela and 35 km from Nineveh. As such, the city occupied a central position between the main cities of the empire (Altaweel 2008, 66-68; Radner 2011, 323-324).

The city is located in a rather favorable location for dry farming, as well as irrigated cultivation, and the natural water sources from Tigris and perennial tributaries support high agricultural yields. The area witnessed agricultural intensification in the Middle Assyrian period, which continued and expanded in the 9th century (Kühne 1995, 69-72). However, the creation of a large city in the area must have had a significant impact in reducing the available agricultural land of the region as the city of Kalḫu was built on older agricultural fields. Agricultural land in its hinterland would have needed to expand (Wilkinson *et al*. 2005, 26).

According to Jason Ur, the current evidence for the surrounding hinterland of Kalḫu, based on the satellite image visibility, suggests that at least 30 additional ha of settlements on the northwest and 15 ha on the east, which were agricultural settlements (Ur 2013). Additionally, the water sources in the hinterlands of Assyrian capitals often were highly improved with extensive canal systems (Altaweel 2008).

One major program for supplying Kalḫu with water was built during the foundation of the capital. The royal inscriptions of Aššurnaṣirpal II mention a major canal by various terms: *Babelat Ḫegalli* – 'Bearer of Abundance' (Grayson 1991, A.0.101.17 v 1-23), *Patti Ḫegalli*, or *Patti Nuḫši* – 'Canal of Abundance' (i.e. A.0.101.1; A.0.101.26; A.0.101.30). Grayson suggested that this overlap in the name means that the canal did not have a specific name (1991, 222-223). After the city was no longer a capital, the royal inscriptions of Esarhaddon mention restoring a canal built by Aššurnaṣirpal II (Leichty 2011, 170; Radner 2017b).

The *Patti Ḫegalli* could be identified with the large Khazir-Upper Zab canal system (Figure 18) (see the reconstruction by Oates-Reade and that of Ur in Ur and Reade 2015, 43-44; see also Bagg 2000a; 2000b). It was probably primarily used for irrigation to increase the agricultural production of the area. The hinterland had to be able to sustain, at least to a certain extent, the population of the new city. Additionally, we are informed by the royal texts that the canal was used to water the large gardens of Aššurnaṣirpal. Its complex design testifies to the uniqueness and ingenuity of this canal system, which combines several elements of Assyrian canal construction (tunneling through stone, deep cuts through watersheds, subterranean segments, etc.). This system also was the longest-lived Assyrian canal in the Assyrian core (Ur and Reade 2015, 47).

Recent finds showcase the possible existence of a network of river navigation on the Gomel and Khazir rivers that cross the Navkur Plain (Morandi Bonacossi 2014). This interpretation still requires a more detailed chronology in order to securely identify the contemporary spread of these networks (see criticism in Ur and Reade 2015, 47). However, there is clear evidence for connectivity through rivers in relation to the city (Reade and Anderson 2013,

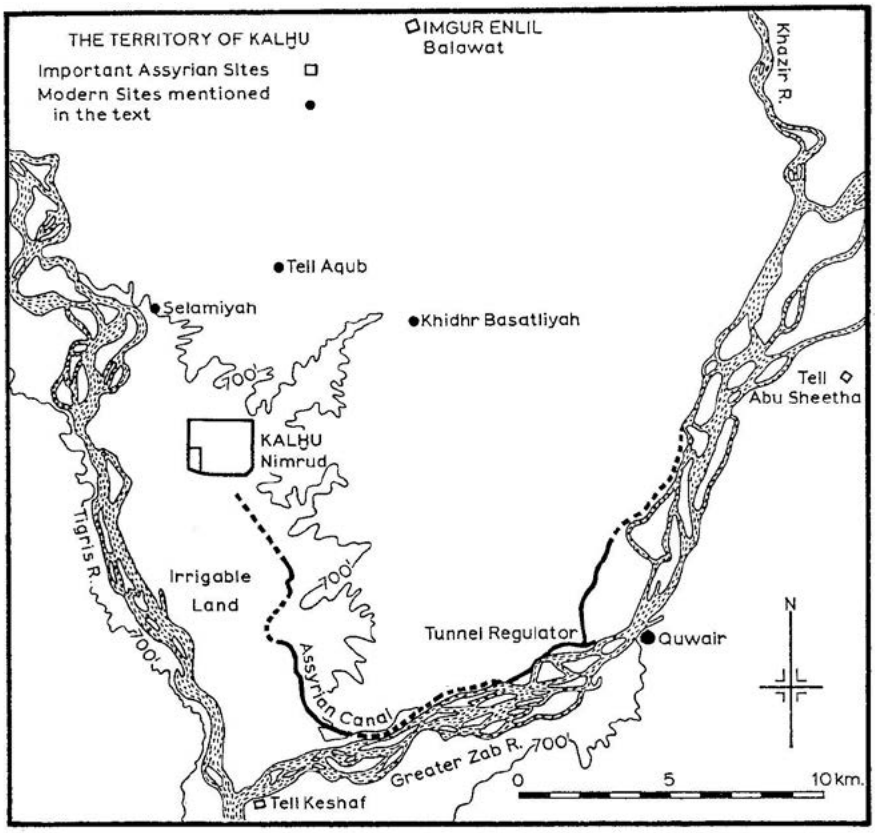

Figure 18: The irrigation system of Kalḫu (Oates 1968, fig. 3).

47). These finds suggest that the creation and control of large canal systems were important to increase riverine connectivity both around the city and to the rest of the empire.

Finally, in terms of the landscape and the potential for sustainable agricultural production, the land around Kalḫu is rather favorable (Bagg 2000a; 2000b). The restructuring of the landscape, although difficult to date, was a process that extended throughout Neo Assyrian history even when the city was no longer the capital. This speaks in favor of the centrality and agricultural productivity of the region and, as such, the choice of location for the construction of a capital city. The proximity to the northern regions of the empire, examined in the following section, is an additional determining factor of the location of Kalḫu.

4.3.2 NEO ASSYRIAN IMPERIAL TRANSFORMATION

What were the potential motives behind the creation of Kalḫu? Oates and Oates point out that Aššurnaṣirpal gave no clear reason for the move, although they suggested that the central location of the new capital would have been strategically and economically advantageous (Oates and Oates 2001, 16).

The royal inscriptions state that Kalḫu's function as a capital begun in the fourth year of Aššurnaṣirpal's reign, in 879 BCE. Even though there is no direct textual evidence for its construction, it would be safe to assume that this took place earlier in order to have a functional, if incomplete, capital by the date of its inauguration. The continuous architectural work in the city during the kingship of Aššurnaṣirpal, as well as that of his son Shalmaneser III (858-824 BCE)

indicates careful and long-term urban planning by those involved in the construction of the new capital. One of the few discussions dealing explicitly with this question was formulated by Joffe (1998, 558), who included the move to Kalḫu in his case studies of "disembedded capitals". According to Joffe, the Assyrian "disembedded" capitals served a number of functions, with one of the most important being the separation of the king from existing power structures. Following that line of argument, he suggested that the lengthy construction period and the massive building project created a new structure of allegiance. Further, he argues that "*in the end, disembedded capitals were successful adaptations to highly fluid internal and external conditions which helped sustain Assyrian hegemony […]. But despite their success […] disembedded capitals helped propel Assyria into instability and irreversible collapse*" (Joffe 1998, 562). While Kalḫu was created many centuries before the collapse of Assyria, a period of instability did follow the construction of Kalḫu (823-745 BCE, see Table 2 and Appendix 1).

Radner (2011) criticized Joffe's inclusion of Kalḫu in the list of disembedded capitals. She argued that it was not previously a small, unimportant settlement (as per Joffe's requirement of a site to be founded *ex novo*), but rather was an integral part of the regional trade and road network of the Assyrian state (Radner 2011, 323). As shown in this chapter, the settlement did indeed exist before its elevation to capital, possibly even as a regional capital during the Middle Assyrian period. However, the lack of textual and archaeological evidence makes it impossible to determine the size and position of Kalḫu in the regional power structure before its elevation to a capital city.

Radner's argument in fact, is quite similar to Joffe's definition of disembedded capitals. She suggested that the foundation of Kalḫu was "*part of an intentional strategy designed to strengthen the position of the king at the expense of the old urban elites*" (Radner 2011, 324). Additionally, it is proposed that the elevation of Kalḫu to a capital happened in order to undermine the political power, cultural significance and regional dominance of other important centers, such as Aššur, Nineveh, and Arbela. Radner continues the regal-centric approach, and considers Aššurnaṣirpal as the main, if not the only, proponent of the move so as to secure his pre-eminence over other power centers and agents (Radner 2011, 323-4; 2017, 213).

Instead, I argue that the creation of Kalḫu, like that of Kār-Tukultī-Ninurta, was primarily related to an imperial transformation. This transformation took place during the reign of Aššurnaṣirpal, after almost 50 years of continuous territorial expansion and consolidation. The growth of Assyria into an imperial state has been broken down into two phases: i) the first fifty years of expansions from the reign of Aššur-dan II (934-912 BCE) to that of Tukulti-Ninurta II (890–884 BCE), and ii) the creation of Kalḫu and the elevation of Assyria to an empire during the reigns of Aššurnaṣirpal II (883-859 BCE) and Shalmaneser III (858–824 BCE) (Frahm 2017b, 167). An investigation of these two phases is of great importance to create a context for the creation of Kalḫu.

Starting with territorial expansion, Aššur-dan II focused on reconquering areas to the northeast and northwest of the core Assyrian territory (Frahm 2017b, 167). Of particular importance to these first years of expansion was the conquest of Katmuḫu, a city located to the east of the Ḫabur triangle, because it would act as a blueprint for future conquests in the following century. While Katmuḫu was completely destroyed, the Assyrians did not turn it into a province, but rather into a vassal state that had to pay tribute and provide troops (Grayson 1991, 133-134). This meant that Assyria was able to extract economic gains while not investing significantly in the military protection of the area. In addition to this, Assyria implemented a project of re-establishing Assyrian populations in some of the conquered area by creating new settlement systems and providing land to increase the agricultural and production capabilities of the conquered areas. Overall, these policies created a sustainable and profitable strategy of expansion that provided significant economic gains to Assyria (Frahm 2017b, 167-168).

Adad-nirari II (910-891 BCE) further continued conquests to the west, reaching the Ḫabur, but more important were the campaigns in the east. The latter resulted in the taking the city of Arrapḫa (in modern Kirkuk), which would act as an important military center in the following decades (Fuchs 2011, 262-4). He also expanded the southern borders with a peace treaty with the king of Babylon (Glassner 2004, 180-1). Tukultī-Ninurta II, while not adding much territory to Assyria, implemented a strategy of economic growth and imperial consolidation. He consolidated a number of already conquered territories, extracted significant amounts of tribute, and cemented power over various vassal kingdoms (Grayson 1991, 163-188).

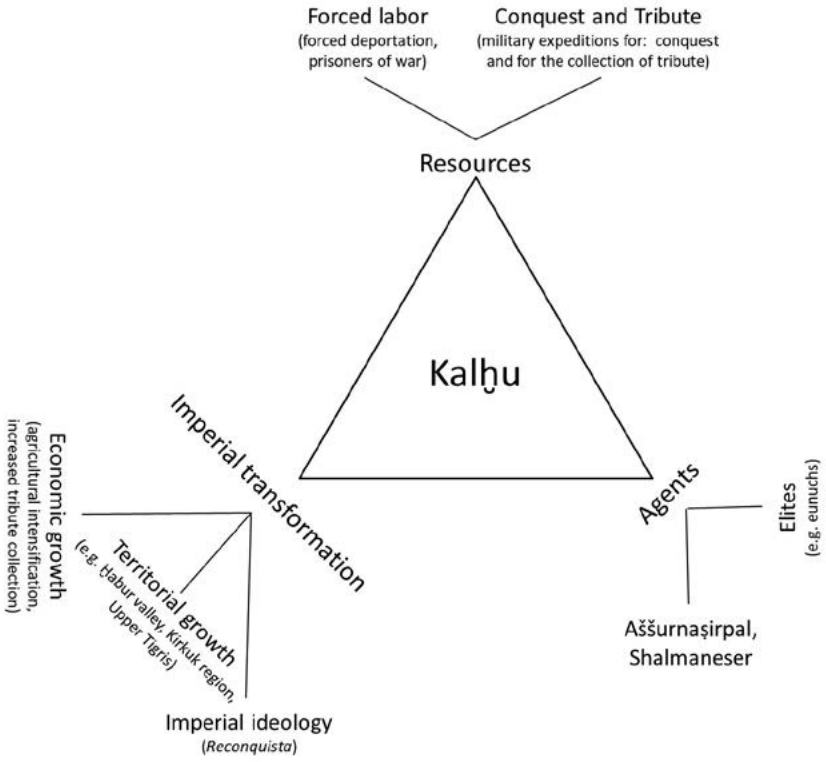

Figure 19: Model for the creation of Kalḫu, produced by the author.

Aššurnaṣirpal's reign does not mark a switch in the policies of previous rulers but rather continues the consolidation and expansion laid out by previous historical events and actors. There do not seem to have been any internal turbulences, revolts or explicit opposition to the actions of this king, or any questions of his legitimacy to the throne. On the contrary, during the reign of Aššurnaṣirpal we see a "boom" in military campaigns, in architectural projects (e.g. at Nineveh, Aššur, and elsewhere), and in administrative changes, such as the use of eunuchs in the administration (see for example Oates and Oates 2001, 15-6; Bagg 2011, 192-4; Fales 2011; Frahm 2017b, 169-70).

Particular focus was given by Aššurnaṣirpal to the relatively unstable Upper Tigris region, which became very important for the Assyrian economy from that point onwards. This is due to the type and amount of materials imported from there; this was an area that required the continuous attention of the center and was a place of innovative administration and imperial strategies (Parker 2001; 2003; 2015; Fuchs 2010; 2017)

Kalḫu became the new capital very early in the reign of Aššurnaṣirpal. There are two important points to note here. The first is the fact that the new city retained its previous name, unlike other new capitals. The second point is that this shift happened early in the king's reign, and therefore cannot be associated with any specific military or political achievements of the king.

In terms of geographic and strategic location, a new focus on the region of Kalḫu makes sense at this time. The new city was closer to important centers of the north such as Nineveh and Arbela. Nineveh was the only city with a dedicated military palace until the end of the reign of Aššurnaṣirpal (see chapter 6. The creation of a new capital allowed both political and military administration to be concentrated in one place. After the construction of Kalḫu, Aššurnaṣirpal's royal inscriptions mention that all military expeditions started from here. The construction of Kalḫu seems to be an economic and strategic choice and was embedded in the continuous growth and nature of the Assyrian state at that moment and can be associated with the

large economic and territorial expansion during the reign of Aššurnaṣirpal (Figure 19). Its location in the central part of the imperial core provided: i) increased agricultural production at the core of the empire, and ii) better control over contemporary military expeditions. At the same time, the imperial expansion brought increased economic gains and a large labor force into the center, both of which were required for the construction of the new capital. The creation of the new capital is also associated with the shift in the *status quo*, since Assyria regained its imperial status.

At this point it is important to investigate the construction and urban development of the city. So far, I have argued that the reasons of the relocation of the capital were primarily economic and strategic rather than to help the king dominate his political enemies. This will become increasingly apparent as we investigate the continuous construction and development process of the city over the centuries.

4.4 HOW – THE CONSTRUCTION AND OPENING FESTIVAL OF KALḪU

It seems that the decision to construct the capital was one taken with the cooperation of the imperial administration system and was a widely accepted decision. The building projects in the city were a continuous effort which went well past the original structures of the city. This section assesses the textual and archaeological information available for the construction process. Unfortunately, relatively little data is available about the construction of Kalḫu.

4.4.1 TEXTUAL SOURCES FOR THE CONSTRUCTION OF THE CITY AND THE BANQUET STELE

The textual evidence regarding the construction process of the city derive mainly from the royal inscriptions of Aššurnaṣirpal. There is almost no information regarding specific numbers of workers, material quantities, or related information. As expected in such texts, the king enumerates the building projects under his reign and, in the case of the construction of a new capital, offers a detailed account of the buildings constructed in the city.

The last section of one of the largest inscriptions coming from the Ninurta Temple at Kalḫu is dedicated to the construction of the city (Grayson 1991, A.0.101.1 iii 132b-136). It refers to a number of deportees coming "*from the land Suḫu, (from) the entire land Laqû, (from) the city Sirqu […], from the entire land of Zamua, from Bīt-Adini and the Ḫatti, and from Lubarna, the Patinu. I settled (them) therein*." That section of the text lists deportees that were settled in the city and also, probably, used as a labor force for its major constructions. However, it remains unclear what exactly those people were expected to do in terms of building in the new capital. Duplicates or parallels of this passage listing deportees, with no changes in the origins of those people, can be found in at least five more royal inscriptions.[20]

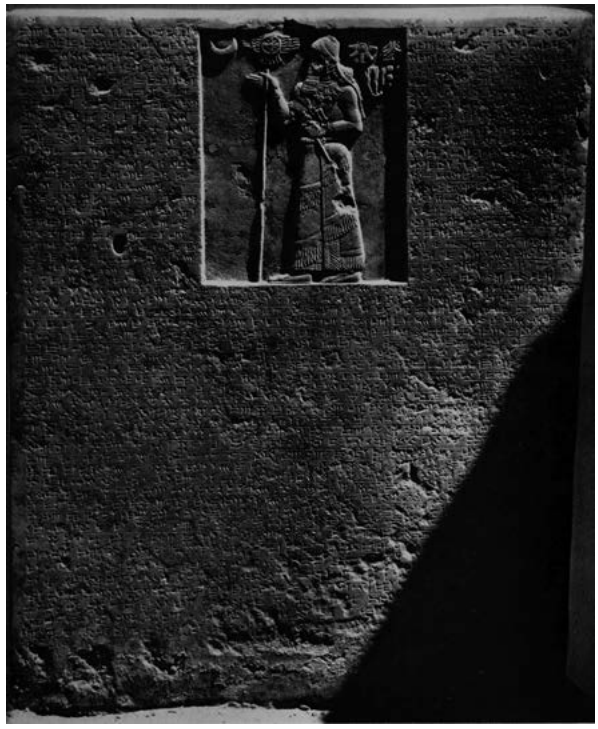

Figure 20: Banquet Stele (Mallowan 1966, Fig. 27).

The Banquet Stele (Grayson 1991, A.0.101.30; Oates and Oates 2001, 40-42; Harmanşah 2013, 115-119) is the most detailed account regarding not only the construction but also a vivid description of the ten-day-long celebration for the inauguration of the new city (Figure 20). It is crucial to mention here

20 Grayson 1991, A.0.101.23; A.0.101.26; A.0.101.28; A.0.101.29; A.0.101.30.

some of the important building projects mentioned in this text, together with the propagandistic nature in which these were presented.

The stele was originally located in room EA, next to the throneroom of the N.W. Palace (Oates and Oates 2001, 40). It has been argued that the location of the object was related to ceremonial practices (Mallowan 1952, 8). The upper part has an inset panel which depicts Aššurnaṣirpal together with a number of divine symbols: the moon god Sin, the sun god Šamaš (the winged disc), the horned helmet of Aššur, the storm god Adad, and the Sibitti. The stele has a height of roughly 127 cm with 150 lines of text.

The inscription of the stele begins with an abbreviated version of the campaigns and achievements of the king (lines 1-19). The rest of the inscription is concerned with building activities at the new capital, the creation and plantation of gardens, the reconstruction of the hinterland and hunting activities. The last part of the text (lines 102-154) presents the great festival that took place on the opening day of the new city, including the number of guests and the amount of food and drink consumed.

The inscription mentions the creation of a large terrace with 120 courses of bricks as a foundation (lines 23-24), with the N.W. Palace constructed on top of it. The text lists a large number of materials used in the building (lines 25-36), including boxwood, cedar, cypress, terebinth, tamarisk, bronze, lapis lazuli and more. The palace is stated to have several areas heavily decorated with reliefs that depict the king's campaigns and victories. Interestingly, this section concludes by mentioning that deportees from conquered lands were settled in the city. This is very similar to the textual and archaeological evidence of Kār-Tukultī-Ninurta, which again involved the relocation of deportees in the new capital (see sections 3.4).

Following that is a mention of the *Patti Ḫegalli* canal discussed above, and its use to water the gardens of the king (lines 36-52). The text then specifies the varieties of trees (lines 41-47), which come from all the lands conquered by the Assyrians. The main canal is described as cascading from above into the gardens, creating several smaller streams. There is also a description of a ritual by which the city is dedicated to the god Aššur.

The text mentions a number of temples and the materials used to build them. Temples included in this section are: the temples dedicated to Enlil and Ninurta, the temple of Ea-šarru and Damkina, the temple of Adad and Sala, the temple of Gula, the temple of Sin, the temple of Nabû, the temple of Šarrat-nipḫi, the temple of Sibitti, and the temple of Kidmuru. These temples are said to be decorated with cedar beams, bronze bands, images of the gods, and many more precious goods (lines 53-78). The most vividly described temple is the one dedicated to the god Ninurta (lines 68-72), to whom two festivals in two different months were dedicated. Among these temples, only the temples dedicated to Ninurta, Nabû, and Ištar are known archaeologically.

The following section (lines 84-101) of the stele discusses the reconstruction of other cities and palaces during the king's reign. Although these places are not mentioned by name, the text specifies that new people were brought to settle in the reconstructed cities, much like at the new capital. In the next section, a number of animals, brought in from all over the empire, are named as prey for hunting sessions of the king and attractions to the royal 'zoo'.

This account of building activities at Kalḫu is equally useful and problematic. The inscription only discusses the elite spaces of the city, the palace, the temples, the main citadel, the gardens, and the zoo. Although these do constitute part of the city, they definitely do not constitute the entire city. Nothing is told about the city's walls, gates, or any of the buildings in the lower city. Neither is anything mentioned regarding the construction process of the new capital.

The conjunction of building projects and activities such as hunts, cult festivals, and ceremonies has led Harmanşah to describe the construction of Kalḫu as a "program of cultural renewal" (Harmanşah 2013, 118). Specifically, he mentions that "*precisely by way of these social events, the monumental complexes of Kalḫu were fashioned, socialized, allotted places in the collective consciousness*" (Harmanşah 2013, 118).

I find it problematic to have the spaces described in the inscription, such as temples and palaces, represent the social sphere of the city as a whole. Palaces and temples must have had restricted access, and the vast majority of the population probably never experienced these spaces. They lived in the lower city, of which we know nothing. The "collective consciousness" that Harmanşah describes is one only accessible to elites.

The final part of the stele is also unique as it presents the 'opening ceremony' of Kalḫu (A.0.101.30 lines 102-154), describing the copious amounts of food offered in the festival as well as the amount of people invited:

When I consecrated the palace of Kalḫu 47,074 men (and) *women who were invited from every part of my land, 5,000 dignitaries* (and) *envoys of the people of the lands of Suḫu, Ḫindānu, Patinu, Ḫatti, Tyre, Sidon, Gurgumu, Malidu, Ḫubušku, Gilzānu. Kummu* (and) *Muşaşiru, 16,000 people of Kalḫu, (and) 1500 zarīqū* (officials) *of my palace, all of them – altogether 69,574* (including) *those summoned from all lands and the people of Kalḫu – for ten days I gave them food, I gave them drink, I had them bathed, I had them anointed.*

There is a very long list of all the foods and drinks provided to the guests for the 10 days in which they ate, drunk, and bathed. Once again, we see an imperial historical narrative proclaiming a cohesive and consolidated state which embraces the new capital in unity.

4.4.2 LABOR INVESTMENT

There is currently no available textual evidence discussing the actual construction process of Kalḫu. However, based on texts like the Banquet Stele, it is safe to assume that the construction involved the exploitation of large numbers of people, similar to the construction of Kār-Tukultī-Ninurta. The only available figure of just how many people might have been involved is the one from the Banquet Stele: 47,074 people. This figure refers to "men and women who were invited from every part of my land" without providing any specific information about them, while for other groups it does (i.e. 16,000 inhabitants, 1,500 officials and 5,000 envoys). Therefore, it is possible that the 47,047 people comprised the labor force that worked for the construction of the city or at the extensive surrounding hinterland.

In section 3.4, I discussed the labor investment required for Kār-Tukultī-Ninurta. It was suggested that several thousand if not tens of thousands of people would have been required for the realization of that city. These people worked, as described by contemporary textual evidence, in small groups, and divided on the basis of their place of origin. While the size of Kār-Tukultī-Ninurta is debated, the current low estimates put it at 240 ha, which is 120 ha smaller than Kalḫu. This significant difference in size suggests that Kalḫu would require a larger workforce than Kār-Tukultī-Ninurta, if it was built in the same amount of time.

From the known building projects in Kalḫu, we can also conclude that it probably required a larger labor force, namely for the construction of its city wall. While of the estimate length of the wall at Kār-Tukultī-Ninurta was 4.3 km in length, Kalḫu had ca. 8 km, thus almost double. Based on Mallowan's estimations, which will be discussed later in this chapter, Kalḫu's wall was ca. 17 m high and 14 m wide, which is significantly larger than the known wall segment at Kār-Tukultī-Ninurta. Therefore, the labor force required for Kalḫu would have been larger just for the city wall.

However, the citadel of Kalḫu is smaller than that of Kār-Tukultī-Ninurta (ca. 32 ha at Kār-Tukultī-Ninurta to ca. 21 ha at Kalḫu). On the other hand, the citadel of Kalḫu was more densely built up. We are also informed by the Banquet Stele that significant work was required to repair and straighten the citadel's terrace. Therefore, it is likely that at least the same, if not more labor had to be invested for the construction of the citadel of Kalḫu.

For Kār-Tukultī-Ninurta, I argued that the number of workers easily would have exceeded 10,000 people. The available figure of 47,047 for Kalḫu is more than four times higher, but this does not seem unrealistic. In addition, the above figure specifies that the number includes both men and women. This might imply that some of those people worked in tasks that might not have been directly related to the construction.

4.5 WHAT – CITY DESIGN AND FUNCTION OF KALḪU

I will now discuss the function of Kalḫu both as an administrative center as well as an urban and residential center. This will be done through the study of currently available archaeological data regarding the plan of the city, the palaces of Kalḫu, Fort Shalmaneser, the gardens, the temples, the residential buildings, and the proposed urban fabric. Through this assessment I hope to reveal the degree of planning implemented in the city's creation, the later continuity of the city, as well as its function first as a capital and then as a local administrative center. I will argue that the city was not the manifestation of

a single king to distance himself from existing power centers. Instead it was related to the transformation of Assyria into an imperial state.

4.5.1 CITY DESIGN, WALLS AND GATES

The city of Kalḫu follows a relatively regular shape (Figure 21). Its wall extends nearly for 8 km in length, with straight lines on the north and eastern sides. Its western side follows the course of the river and connects the citadel mound and Fort Shalmaneser on the south.

The wall was constructed from mudbrick and stone foundations and was reinforced by a large number of towers (Mallowan 1966, 76-83). Layard observed 58 high mounds alongside the north section of the wall at a distance of 2.1 km from each other, and some 50 mounds on the east side. These mounds were interpreted as towers (Layard 1853, 656-657). The southeastern wall comprises the external defense of Fort Shalmaneser and was reconstructed with a different plan in the 7th century by Esarhaddon. On the southern side there are almost no visible parts of the wall, although it is likely that it was fortified.

Access to the city was possible via a number of gates. Archaeological evidence indicates two gates on the northern side and possibly two gates in the eastern part of the wall, thus a total of four known gates. The largest gate seems to be the southernmost one on the eastern side (Fiorina 2011). However, an Italian survey project was not able to identify archaeological evidence of this gate in the large artificial gap where the gate is supposedly located (Fiorina 2011, 130).

Access to the main citadel from outside of the city wall was probably achieved through a quay wall (Mallowan 1966, figs. 33-34; Tadmor 1994, 173; Oates and Oates, 31, Fig 12). The entrance to Fort Shalmaneser was placed in the southern side of the southeastern corner of the city and was later reconstructed and reinforced by Esarhaddon. As such, the exact planning of the original gate from the reign of Shalmaneser remains unclear (Oates and Oates 2001, 153).

Kalḫu can be divided into three main elements, the two ‘monumental’ mounds, the citadel mound and Fort Shalmaneser, and the lower town. These features will now be examined on the basis of the currently available archaeological data to showcase the stability and continuation of the construction of the city.

4.5.2 URBAN FABRIC AND RESIDENTIAL AREAS

In this particular case of capital creation, it is important to ask whether Kalḫu was a city only for the elite or whether it was an actual residential city. In the latter case, it would house people from every class or ethnicity from the broader imperial landscape and contain workshops and other urban features.

A relevant point for this discussion is Radner’s position, that the population of the city was handpicked by the king’s official (2011; 2017a, 213). This, she argues, was done in order to create a city that would be loyal to the king, away from other competing power holders in Aššur. This paints the picture of a city which is exclusively political. It suggests that Kalḫu was a center only for the residence of the king, and not a large residential capital. In the following analysis I argue that this is not the case.

The only excavated building in the lower town was found in 1956 along a stretch of mudbrick wall between the citadel and Fort Shalmaneser (Oates and Oates 2001, 141). Excavations revealed a structure which was named the “town wall palace” by the excavators; it is the latest in a sequence of large buildings at this location. An inscribed bird’s head with the name of Assurbanipal (668-631 BCE) was found under the floor of a building that was cut by the “town wall palace” (Mallowan 1957, pl. 11). This find suggests a *terminus ante quem* for the construction of the building during or after the reign of Assurbanipal, revealing the occupation of the city and its outer town even after it ceased to function as a capital (Oates and Oates 143). The role of this building is unclear but could possibly have an administrative function.

Little is known about the urban fabric of Kalḫu and its lower town. Most of the past excavations focused on the citadel and Fort Shalmaneser and only recent projects have started to investigate the lower town. Fiorina (2008; 2011) carried out a topographical survey, and Ur (2013) used satellite imagery to investigate the spatial configuration of the lower town. In both studies there is an attempt to reconstruct major road networks, for example the existence of a road leading from the eastern wall (just north of Fort Shalmaneser) to the Shalmaneser Gate in the Citadel (Fiorina 2011, 131). Both studies reveal roads that were rather wide and there seems to be a substantial amount of open spaces of different

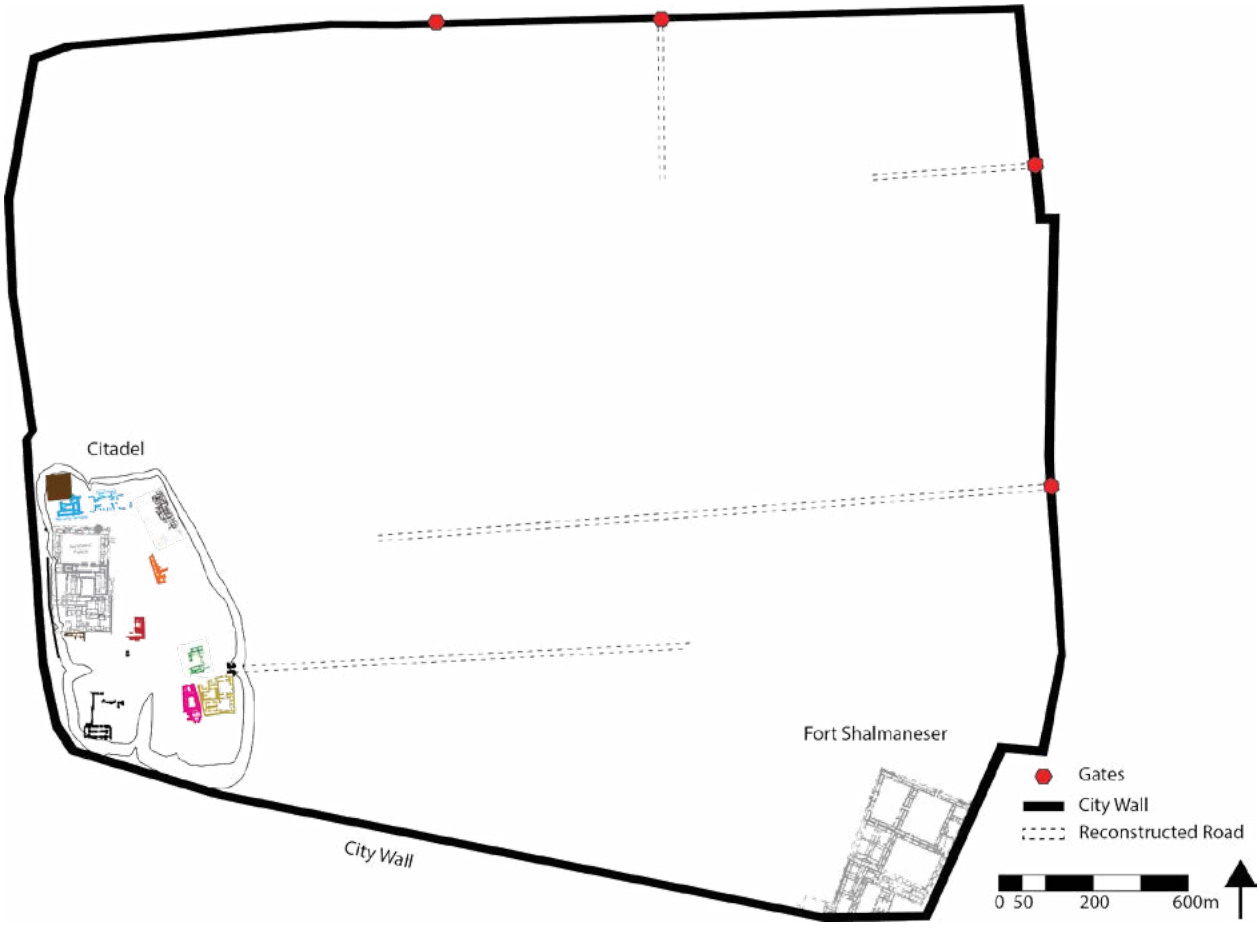

Figure 21: Plan of Kalḫu, produced by the author.

sizes (Ur 2013, 15-16) (Figure 22). An open space on the eastern side of the citadel has been interpreted as a large garden (see section 4.5.5).

Ur, who assessed the CORONA satellite images of the city, suggested that about 54% of the lower city was built up, which is 185.4 ha of the 340 ha of the lower city (Ur 2013, 17; here Figure 22). This assessment was done on the basis of soil coloring differentiation analysis. Various archaeological features become visible in wet and dry periods. Thus, by comparing CORONA satellite images from wet and dry seasons, Ur could assess the built area up of Kalḫu. While the distribution of the houses in the lower city of Kalḫu is unknown, examples from other excavated lower towns may be informative in this regard.

A possible comparative case study is the Lower Town II from Dūr-Katlimmu (Kühne 2011; 2015, 66-67). Its urban layout, however, mostly consists of large residential buildings for high ranking officials, while the rest of the population probably lived outside of the walled area.[21] The Lower Town II at Dūr-Katlimmu includes open spaces, gardens, streets, residences, and workshops. Its size of roughly 60 ha is slightly less than 1/6 of the size of the lower city of Kalḫu. While it does not include lower-status residences, it is possible that the Lower Town of Dūr-Katlimmu can act as a proxy for a "high-class" neighborhood of Kalḫu.[22]

Residential buildings at Dūr-Katlimmu range between 3,500 and 5,400 m^2 (0.38 to 0.54 ha).

21 For more about the social conditions of the upper class living at Dūr-Katlimmu, see Radner 2002; Kühne2006-8; 2011, 146.

22 Such neighborhoods existed at other major Assyrian cities as well, see Nineveh, section 6.6.3

This is comparable to Kalḫu's so-called "town wall palace", which measures more than 4,800 m^2. One would expect such buildings to be for an official with his family and their personnel, or other kinds of elite individuals (Radner 2002, 9-14). The "town wall palace" is located some 400 m to the east of the citadel wall (Mallowan 1957, 4), which would place it between two squares where Ur identified about 57% and 81% built space respectively (Figure 22 area marked with red).

A building that appears to be similar to the "town wall palace", also was identified as a palace by Mallowan, and was located in the northwestern corner of the city (Mallowan 1954, 70-71). Its designation as a "palace" is probably a concession to its size rather than an accurate description of its actual function. Due to the limited amount of excavation in the area, the building's full plan remains unknown. An inscribed brick with the name of the king Adad-nirari III (810-783 BCE) was found at the location. Based on the its excavated size, it could be comparable to the "lower town palace". On Ur's map, the building is located in a square, of which 28% is built area (Figure 22 area marked with yellow).

Although the exact layout of the lower city is unknown, its composition can be estimated by calculating how many houses would fit into the 185.4 ha of urban area proposed by Ur (2013). In that way, we can assess whether the 16,000 people listed as inhabitants in the Banquet Stele is too many or too few for the size of the city. For this exercise I will use as a proxy the large houses found at Dūr-Katlimmu and the two buildings found at Kalḫu. The average size of these buildings is roughly 4,600 m^2, or 0.46 ha. Given the intramural area of Kalḫu, this would mean that 403 buildings of this size would fit in the city's built space. This is far too low of a number considering that the Banquet Stele suggests a population of 16,000 people plus 1,500 officials from the palace; it also implies that each building would need to house about 40 residents. However, the lower city of Kalḫu likely was not constructed only to house a small number of high-ranking officials. Therefore, it is plausible that the city had smaller types of residential buildings.

A number of houses were excavated along the inner face of the northeastern part of the citadel wall (Mallowan 1966, 184-199; Oates and Oates 2001, 135-139). These houses preserve a wide chronological sequence from the Middle Assyrian to Achaemenid, and even to the Hellenistic periods. They are the only domestic buildings available from within Kalḫu, even though they are not in the lower city. These houses consisted of irregular groups of rooms around paved courtyards. It is possible that one of these houses, House III, belonged to a eunuch named Šamaš-šarru-uṣur (Oates and Oates 2001, 137). The largest of these houses (House II) measures about 3,000 m^2 (Mallowan 1966, 186), which is already much smaller than the average used before. Not all the houses in this area have been excavated completely, but their size seems to fluctuate between 1,300 and 3,000 m^2 based on the published plans and excavation data, which is still a substantial size (Figure 23).

Considering that these were also residences for officials and member of the elite, the average size of an elite residential building is much lower than the 4,600 m^2 calculated above. Being a little more conservative, we can argue that an elite residence in the lower town would be slightly smaller than the ones on the citadel, with some exceptions of large official or administrative buildings like the "lower town palace". This would give us an estimated range of 1,000 to 3,000 m^2. If we propose that the average size of a house at 2,000 m^2, then the lower town of Kalḫu could fit about 927 such buildings. This assumes the city consisted only of elite residences of medium to large size.

However, we know that other Assyrian capitals like Nineveh and Aššur, and at Fort Shalmaneser did contain neighborhoods of workshops and of smaller residences, which would cover significantly less than 1,000 m^2 (Miglus 2000; 2002). It is not possible to create an estimated average size for these types of buildings because they would likely vary considerably depending on the location within the city. Their existence, however, can also be argued on the basis of building density in the squares calculated by Ur. If we refer to the layout of houses at Dūr-Katlimmu, then the location of large buildings would be in squares with large open areas. Areas that are much more densely constructed could potentially indicate workshops and smaller residential buildings. The number of buildings in the lower city could therefore have even exceeded 927.

Returning to the estimated population of the city, the available figure is that of 16,000. It must be emphasized that it is unclear whether this number includes all residents, officials and non-officials, workers, servants, women, children, or other groups. Yet, taking the number as it is, this would imply 86

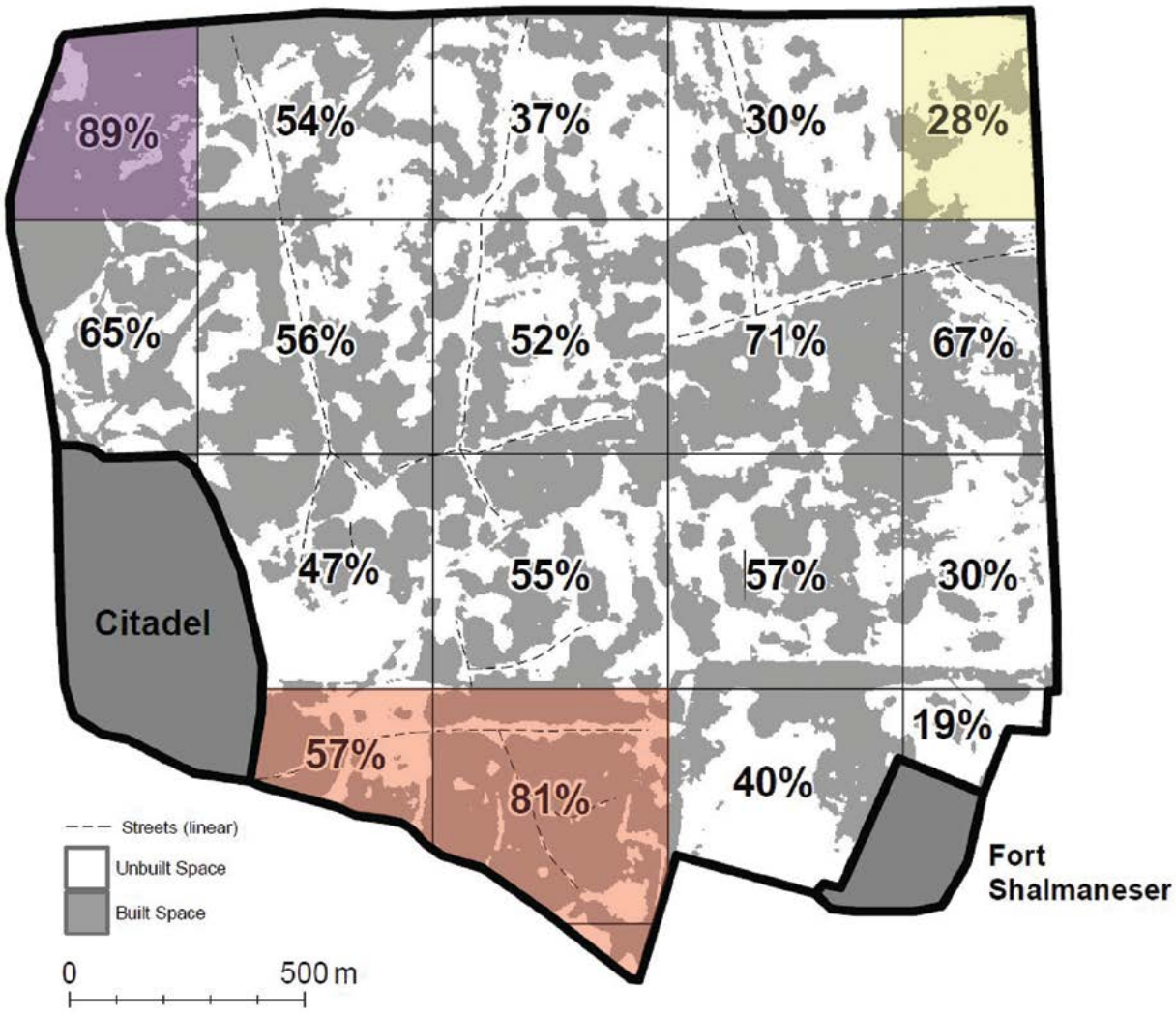

Figure 22: Distribution of built area and open space at Kalḫu after Ur (2013, Figure 5; annotated by the author and referenced in the text).

persons living in each hectare in the 185.4 ha of built space. This number is exceptionally low, especially when compared with estimates from earlier Mesopotamian cities (see for example Kramer 1980, 322-7; Adams 1981, 349-5; Zettler 1987; and more crucially Postgate 1994). An argument can be made that the city was not populated fully when the city opened its gates at the opening ceremony. At that time, the population of the city might have been as low as 16,000 people. During the city's lifespan, however, I suggest that this number likely increased considerably as more buildings were constructed, like the "town wall palace" and across the lower town.

The quantified analysis suggested above is by no means conclusive. The main issue with estimating the population density of Kalḫu is the complete lack of knowledge of the type and distribution of buildings in the city. As stated, an assumption can be made that locations detected by satellite imagery with high building density had smaller buildings, but a higher population density. In addition, these densely built areas make it difficult to distinguish the amount of space taken by roads. It is probably

Figure 23: Plan of the Town Wall Houses excavated in 1953 (after Mallowan 1966, 185).

safe to assume that large elite residential buildings, with several large open spaces would not be situated next to densely built, lower class residences and/or production areas. An example of the latter can be seen in the northwestern corner of the city, where Ur estimated 89% of the square was built space (see Figure 22 marked with purple). This area is approximately 20 ha, meaning that 17.8 ha of it was built space. Even accepting the very low estimations of 86 persons per ha, we are looking at approximately 1,531 people cluttered in that small corner of the city. It remains unclear how such an area would have looked like, and why it was thought necessary to put so many people in such an area if the city still had plenty of open spaces.

It is evident, therefore, that the cityscape of Kalḫu was quite variable. The figures presented above suggest a city which would not be exclusively for the elite, but rather a residential city, populated by people of different class and status. These figures provide a starting point from which the living space of Kalḫu can be reconsidered.

Research on the lower city of Kalḫu could indeed bring very useful results for the daily life in the capital as well as the use of open spaces. One of the latest studies (Harmanşah, 2013) regarding cities and the use of space within them focuses more on the open spaces of citadels and the use of festivals. I would argue however, that the actual public spaces would be the plazas and open roads and markets within the city itself, from which we know next to nothing. Other large cities of that period, like Nineveh (see section 6.3) or Aššur for example, even though smaller, contained workshops, smaller residences and other urban features. Whether that's the case with Kalḫu we don't know, as no workshops have been identified in its lower city. They do exist however within For-Shalmaneser, which might give an indication of the type of workshops that could exist in the lower city. Based on the massive population of the city, I suggest that Kalḫu qualifies as a residential city.

4.5.3 THE CITADEL

The citadel mound is located in the southwestern part of the city and is founded on top of an earlier mound (see Figure 16 and 21). It contains the major administrative and religious structures of the city. The review of its archaeological evidence begins with the North-West Palace (N.W. Palace), the largest and most prominent building of the citadel (Figure 24).

The palace is divided in three main courtyards. It has been suggested that each courtyard was divided in two different spaces: the 'public' (*babānu*), and the 'private'-internal (*bītānu*) (Oates and Oates 2001, 36-38; Margueron 2005). The throneroom courtyard is associated with the term *babānu*, and the two internal

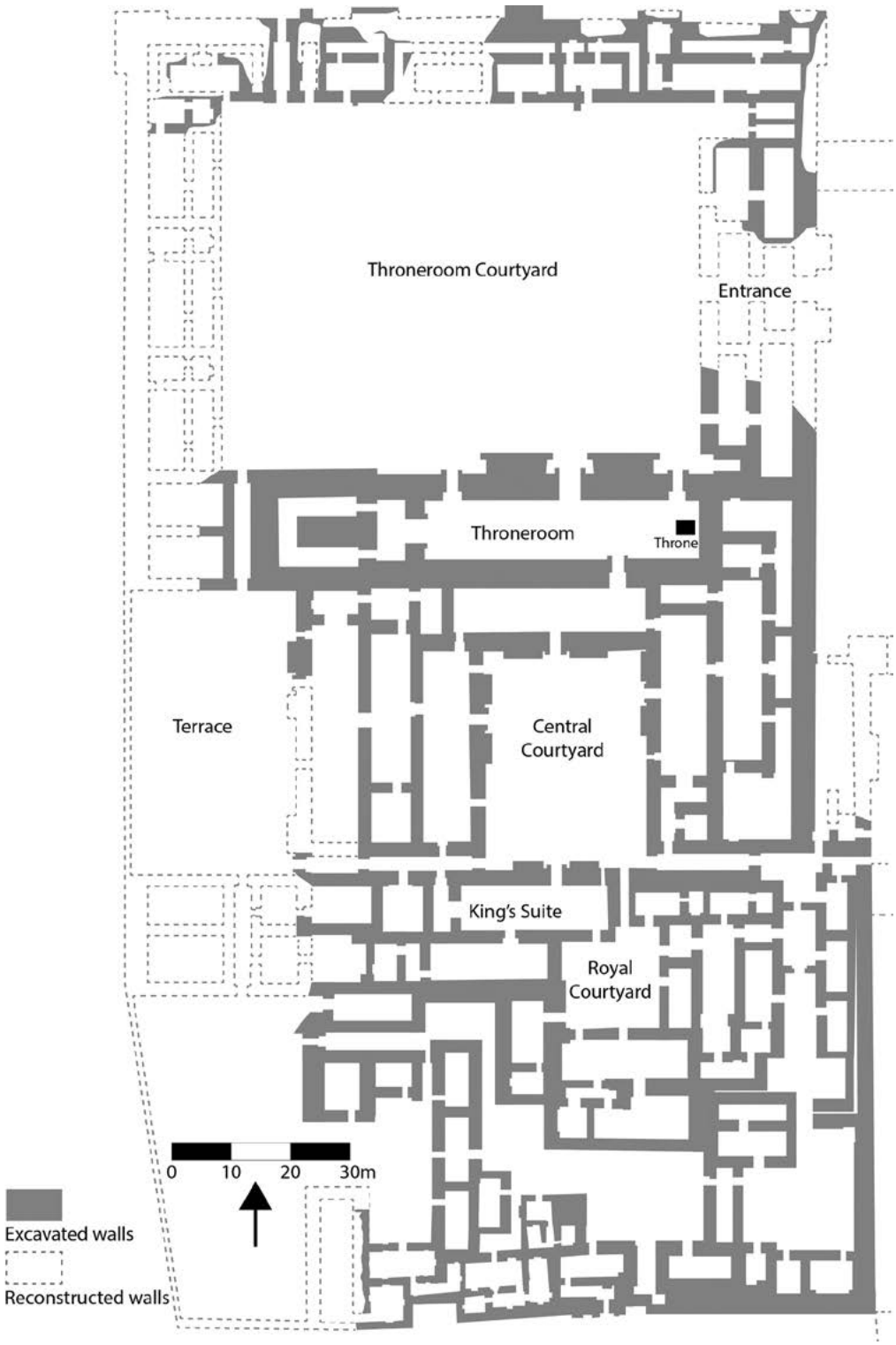

Figure 24: The North-West Palace of Kalḫu (after Mallowan 1966; Paley and Sobolewski 1987; and Kertai 2015, produced by the author).

courtyards are associated with *bītānu*. Rooms of a likely domestic function surround these latter two courtyards. The idea of public spaces in Assyrian capitals is discussed in greater detail below (chapter 7.4.1), but already in the case of the N.W. Palace several observations can be made.

Firstly, a simple distinction between public and private spaces is too simplistic. The citadel itself is already distinguished geographically and spatially from the rest of the city and as such, it is not public. The palace itself was probably not visible from the lower city, based on its location in the innermost part of the citadel and the fact that it was blocked partly by the citadel wall. In addition, access to the palace was only possible through a sequence of gates and spaces of controlled access, and as such it is extremely hard to describe any space as truly public.

The spatial organization of the N.W. Palace suggests very careful planning, with the building best described as a "*combination of independent suites, integrated into a single palace structure*" (Kertai 2014, 340). The main entrance to the palace was located on the northeastern side, which led to the throneroom Courtyard (indicate on figure 24). This courtyard was surrounded by a number of storage and administrative rooms and provided view and access to the throneroom on the south. The throneroom courtyard was also the only one decorated with reliefs (Paley and Sobolewski 1987; Russell 2008, 181-183; Kertai 2014, 341). Most of these reliefs were inscribed with the so-called Standard Inscription (Russel 1999, 9-63), and were decorated with hunting or military scenes or apotropaic figures. The N.W. Palace remained the primary royal residence for more than 100 years, with small changes, and was possibly used by Sargon II before the relocation of the capital to Dur-Šarrukēn (Kertai 2013a, 18). The building itself was probably not completed until the reign of Shalmaneser III (858-824 BCE), who implemented a number of additions (Oates and Oates 2001, 69; Kertai 2015, 47). Significant additions to the palace were implemented by Adad-nerari III (810-783 BCE) with the so-called Upper Chambers to the south of the N.W. Palace; these consist of an added residential suite for the king's mother, Šammuramat (Layard 1853, 14; Reade 1968, 69-70; Oates and Oates 2001, 70; Kertai 2015, 77-79).

The citadel contains a number of other buildings designated as palaces by the excavators, although this definition characterization is not always correct. The Central Palace is located southwest of the N.W. Palace, roughly in the center of the acropolis. Excavations in 1993 showed that the Central Palace is a small complex surrounding a single courtyard. Wall decorations and the presence of lion and bull colossi, of which only the bases remain, have made the interpretation of the building difficult (Meuszyński 1976). The only similarly decorated buttresses in the city can be found in the façade of the N.W. Palace's throneroom and in front of the entrance to the Nabû Temple (Meuszyński 1981, 31-35; Kertai 2013a, 12). As such, the building has been interpreted as both a temple (Oates and Oates 2001, 71-71) and as a forecourt or part of the N.W. Palace (Postgate and Reade 1976-1980, 311; Reade 2002a, 19; Kertai 2013a, 12-13). Based on the currently available data, this latter interpretation seems more plausible.

According to the royal inscriptions, nine temples were constructed (or reconstructed) during the reign of Aššurnaṣirpal. A number of these temples stand in the general vicinity of the ziggurat, like the Ninurta Temple and the sanctuaries of Šarrat-Nipḫi and Ištar-Kidmuru (Mallowan 1966, 85-92; Oates and Oates 2001 107-109; Reade 2002a, 167-181; Harmanşah 2013, 124). The Ninurta Temple was associated with the citadel's ziggurat and it has been suggested that the latter also might have been dedicated to Ninurta (Oates and Oates 2001, 107; Reade 2002a, 191).

Reade suggested that these temples (i.e. the Temple of Ninurta and the Temple of Ištar-Šarrat-Nipḫi), form a single temple complex because of their proximity to each other (2002, 191-192). Based on that reconstruction, the complex would contain temples and shrines for the gods Ninurta, Sîn, Adad, Ea, Šarrat-Nipḫi, and Gula. Such a reconstruction, however, cannot be definitive, as a significant part of these temples remains unexcavated.

Regardless of whether they form a single temple complex or not, the choice of gods represented indicates an evolving but stable religious framework. The court of the king probably chose forms of gods already established in major cities such as Aššur and Nineveh, maintaining an existing ideological perception of the world order (Reade 2002a, 199). At the same time, the evolution of the god Ninurta and his association with the god Enlil, a supreme deity in the Mesopotamian pantheon, might indicate an attempt to establish theological supremacy in the new capital over the conquered lands (Reade 2002a, 199).

Lastly, it is important to note that the god Aššur, unlike at Kār-Tukultī-Ninurta, did not have a

dedicated temple in Kalḫu. The royal inscriptions do state that the city is dedicated to Aššur, but there was no attempt to move the cultic center of the god to the new capital: Aššur remained the most important religious center of the empire. Several architectural projects occurred at Aššur simultaneously with the construction of Kalḫu. Some examples are the rebuilding of the Sin-Šamaš temple and the reconstruction of the old palace into a smaller Neo Assyrian palace (Pedde and Lundström 2008, 37-58; Lundström 2013).

The fact that the city of Aššur was not neglected or abandoned could suggest that the court had no desire to create a divide between the old center and the new. Aššur was too important to the Assyrian identity to supplant. Assyrian kings were still anointed and, in some cases, buried there. Such a suggestion is in line with Reade's suggestion that the new city maintained, rather than supplanted, the existing religious order. This further proves that Kalḫu was not constructed as a disembedded capital. Kalḫu's religious landscape is clearly not in opposition to the religious world order of Assyria, but in line with it.

Considering the different buildings on the citadel, the citadel itself had three primary purposes: i) the main residence of the court; ii) the location of the main administration of the empire; iii) a religious center of the empire, complementary to Aššur.

The function of the citadel never really changed for as long as the city functioned as a capital. The only attempt to construct a new primary palace in the citadel, took place during the reign of Tiglath-Pileser III (744-724 BCE) with the construction of the Southwest Palace (S.W. Palace). Although it was probably meant to replace the N.W. palace, the building was never completed. Polish excavators managed to locate this palace within the citadel directly south of the N.W. Palace, but its surviving architectural evidence is extremely limited (Meuszyński 1976). Esarhaddon later built another palace almost in the same location, obscuring the earlier palatial plan.

To summarize, the data from the citadel seem to indicate a well-organized and carefully executed plan. There were no major later changes in the function of the buildings besides some additions. The later building projects of Shalmaneser seem to follow exactly the intentions of the original planning of the city. The city's citadel remained in use even after the relocation of the capital, although its role did indeed diminish.

4.5.4 FORT SHALMANESER

Fort Shalmaneser, also known as the Military Palace or *ekal mašarti*, lies on the southeastern corner of the city (Figure 25) (Oates and Oates 2001, 144-198). A military palace is an administrative building dedicated to the encampment, maintenance, and administration of the Assyrian army (Kertai 2011, 71-72). It was one of the most important additions to the city during the reign of Shalmaneser III (858-824 BCE). Shalmaneser's annals are ample and carefully written, providing a secure chronological sequence in terms of events (Grayson 1996, 5). The fort itself was finished probably around 844 or 843 BCE (Russel 1999, 70).

Kalḫu was the first capital city of Assyria to include a dedicated military palace. It is likely, however, that Nineveh also contained a palace with a similar purpose also known as *bīt kutalli*, and this can be attested to royal inscriptions as early as the reign of Aššur-rēsa-isi I (1132-1115 BCE) (Grayson 1984, A.0.86.4). It has been be argued that the designers of Kalḫu used Nineveh as a 'blueprint' for its planning (Kertai 2015). It is clear that with the construction of a Military Palace, one of the main purposes of the new capital was to concentrate all administrative functions of the empire.

The fort was walled on all sides in a way that represented its military function. The wall probably had towers on every side and on the west side it reproduces the arrangement of the east wall of the N.W. Palace (Mallowan 1966, 377-378; Oates and Oates 2001, 149). The Fort was accessible from the inner city through one gate in the north and one in the west. From these, the western gates have the best preservation, with an opening of 4 m opening and a height of about 4 m.

The northern part of the palace, where most military functions were taking place, was organized in four quadrants: north-west, north-east, south-west and south-east. These quadrants seem to have had various functions with several workshops, especially in the north-west and north-east quadrants, and others including residential areas, storage rooms and offices (Oates 1962). The most commonly accepted function of the quadrant complex is as barracks (Mallowan 1966, 379; Oates and Oates 2001, 162), although if that is indeed the case, then only a small fraction of the army could have resided within the arsenal. The residential rooms could host only a few hundred people and the bulk of the army would have needed to camp outside of the palace (Kertai 2011, 73).

The only distinct quadrant is on the south-western side, which is not organized around a main courtyard but is subdivided in four smaller courtyards. Large storage magazines arranged around these smaller courtyards contained great quantities of treasures, such as carved ivories, as well as several unusual objects such as a bronze and iron brazier with wheels (Brill 1978; Herrmann 1986; 1989; 1992; Fiorina 1998). Most of these objects date to later periods, from the 8th and 7th centuries BCE, and come from various places of the empire mostly as tribute (Oates and Oates 2001, 226). Limited excavation of the area allows only for a simple reconstruction of the magazines, and the function of certain rooms, such as the ones with large quantities of ivories, cannot be determined with certainty.

An interesting feature of Fort Shalmaneser is its throneroom and a number of state apartments on its southeast section. The throneroom is probably the largest and the highest room in the building and mimicked closely the one from the N.W. Palace. The residential suites of this section, however, do not reflect the ones from the N.W. Palace and it is unlikely that the king actually resided in the building (Kertai 2011, 75). It could be argued that those rooms were for officials or commanders of the army, or for the hosting receptions, although it is possible that the king might have used them on occasion.

The construction of a palace with dedicated military functions in the new capital is particularly interesting when discussing the function of the new city. It suggests a further centralization of power, which started with the increased functions of the main citadel. Since the fort was constructed during the reign of Shalmaneser, it is unclear if its construction was something anticipated in the first conception of the city.

The lack of evidence of pre-existing buildings at the area might suggest that the fort was constructed in an uninhabited part of the city. It is also possible that the construction of the city had not been fully completed by the time of Shalmaneser's reign. I find, however, such a suggestion unlikely. The irregular shape of the wall at this location does not seem to serve any functional purpose to the fort. If there was no pre-existing wall at this location, why not construct the fort in a more regular shape, much like the other corners of the city? Therefore, I suggest that the city-wall was already completed, and the fort was constructed against the wall and in an empty area of the city.

The function of the fort seems to be primarily military, serving both as headquarters of the army, and as a location for maintaining equipment. However, it also carried out other functions, such as the storage of treasures were present, and it might be the case that the fort served more functions than purely military ones. After its construction, all of Shalmaneser's campaigns start from Kalḫu, making the city also the primary center of military administration.

4.5.5 GARDENS

Kalḫu was the first Assyrian capital city with a 'universal' garden. Although the idea was not new, Tiglath-Pileser I's royal inscriptions mentions such a garden (Novák 2002, 445). The exact location of this garden is unknown, but several propositions have been made on the basis of written and topographical evidence. An empty large platform is considered to be the necessary archaeological evidence of the city's garden. Such a platform was observed through satellite imagery (Ur 2013) and topographical investigation (Fiorina 2011), along the eastern edge of the citadel. That location has a similar elevation to Fort Shalmaneser, and although it would have been possible to bring water for the gardens from the canal flowing south of the city, this would have required a supply channel, the evidence for which is lacking (Ur and Reade 2015, 45). For similar reasons, the possibility that the gardens were located in the southern part of Fort Shalmaneser should probably be excluded (Novák 2002, 446). The most recent proposition locates the gardens close to Fort Shalmaneser but outside of the city walls to the south (Ur and Reade 2015, 45).

The Banquet Stele (mentioned above), gives a detailed account of all the plants collected in the royal gardens, including more than 40 different plant species. It is possible to interpret the political inferences for the use of such gardens (see for example Foster 2004; Dalley 2013). The large collection of plants from different parts of the empire could have been used to represent the vast lands Assyrians have conquered. It is likely that only a limited amount of people had access, and as such the gardens should not be interpreted as public spaces. However, they were probably visible to people entering the city from the eastern side and created a charming view.

Ascribing an exact function to the gardens of Kalḫu is problematic. Possibly, the gardens were a place of leisure for the kings and members of the elite.

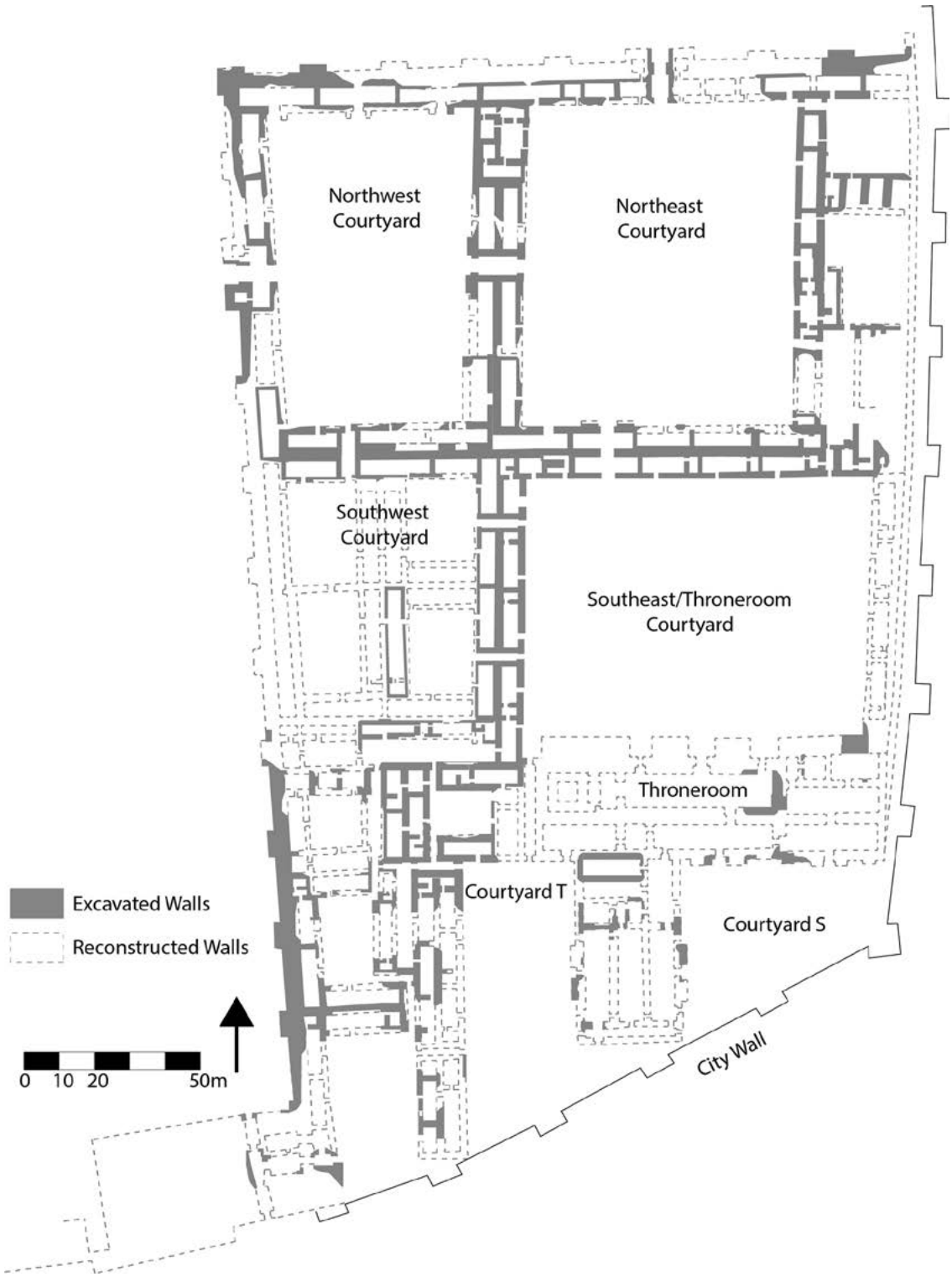

Figure 25: Fort Shalmaneser (after Oates and Oates 2001 and Kertai 2015, produced by the author).

The fact that they left limited archaeological traces makes it difficult to assess their size or layout. At the same time, however, the royal inscriptions do offer information on the gardens, focusing heavily on the collection of plants and animals from all around the empire for this garden.

It is possible that gardens were used as a symbol to express imperial ideology, and to depict the power of the empire and the extent of its rule. Envoys, guests and other high-status visitors entering the gardens would probably have been awed by the exotic plants and strange animals present there. In a way, it can be argued that the gardens had a similar function to the city's religious buildings. The palaces and temples in the empire's capital clearly proclaimed the power of the empire, and the captured flora and fauna of the gardens gave a living example of that.

4.5.6 CONCLUSIONS ON THE FUNCTION OF KALḪU

To conclude this section, Kalḫu functioned as the main administrative and military center of the empire in the 9th and 8th centuries BCE. It was expanded significantly in terms of size in relation to its predecessor, Aššur, and was the first Assyrian capital to incorporate a secondary military palace.

It is important to clarify that Kalḫu was not an elite city, nor can it be characterized as a disembedded capital. Kalḫu was a residential city, with a population composed of different cultural backgrounds and classes. The people living in the lower city created and interacted with a large and diverse urban space, which has yet to be studied by archaeologists. The hinterland of Kalḫu was also populated with smaller agricultural settlements, involved in the intensified agricultural production of the area (Ur 2013; Ur and Reade 2015). Once the lower city of Kalḫu is archaeologically investigated, our image of the city will no doubt change significantly.

4.6 CONCLUDING REMARKS ON THE CREATION OF KALḪU

Kalḫu is the most long-lasting of the newly created capital cities. I suggested that the imperial transformation of Assyria led to the creation of this new capital. The new capital was the product of the contemporary territorial and economic growth of the empire and the shift of focus towards the northern provinces. The careful planning and the adoption of the new city by subsequent kings shows that there was some level of support by the Assyrian elites for this major undertaking. Attributing the relocation of the capital to Aššurnaṣirpal II's personality discounts the importance of the process itself for the broader empire.

The size of the construction, the large labor force required, and the very complex process of construction reinforce the argument that a functioning empire was key in capital creation. However, the fact that the city was constructed during Aššurnaṣirpal's and Shalmaneser's reign is not arbitrary. As was shown, the city's creation came only when Assyria reached the status and economic growth to realize such a project, building upon the administrative and economic changes already set in motion.

The concentration of imperial power in a new, more central location, was important for the consolidation of the empire and the continued control of the newly conquered territories. This concentration is reflected in the major administrative infrastructure of Kalḫu and the continuity of its institutions. Additionally, proclamations of the imperial ideology are reflected in many aspects of the city, including palaces, temples, gardens, and the transformation of the hinterland. The inclusion of a multitude of deities and the gardens collecting plants and animals from all the regions of the empire really showed the 'global' scale the Assyrians wanted to present.

Chapter 5: Dur-Šarrukēn – A Short-lived Capital

5.1 INTRODUCTION

The creation of Dur-Šarrukēn in the last two decades of the 8th century BCE marks a shift in the phenomenon of capital creation in Assyria. In the previous two cases I argued in favor of associating the creation of capitals with the transition of Assyria from a state into an empire. In this case, Dur-Šarrukēn was created at a moment when the empire was already well established. However, it remains of crucial importance to understand the historical context within which the creation of the new capital took place. This requires an investigation of both the contemporary conditions of Sargon's reign, as well as the broader historical events that led the empire to the growth it experienced in those decades. In this chapter I will use the available evidence to answer the three main questions of this study: why Dur-Šarrukēn was created, how it was constructed, and what its function was.

5.1.1 HISTORY OF RESEARCH AND ARCHAEOLOGICAL EVIDENCE

Dur-Šarrukēn, also known today as Khorsabad, is located in the plain of Jebel Basiqa centuries (Figure 26) and has witnessed intense archaeological excavations during the late 19th and early 20th. The city is walled, has a roughly square shape and two citadel mounds, a walled main citadel mound, and a secondary citadel mound (Palace F).

The site was first investigated by Paul-Émile Botta between 1842-1844 and was mistakenly associated with Nineveh. His work was continued and expanded by Victor Place between 1852-1855 (Place 1867), with special focus given to the area of the citadel and the main palace. The Oriental Institute of Chicago worked on the site for seven years (1928-1935), focusing on one of the gates (Gate 7), the citadel, the palace and the palace's temple complex, as well as the secondary citadel (Loud, Frankfort and Jacobsen 1936; Loud and Altman 1938). Finally, in 1957, the Iraqi Department of Antiquities excavated the site of the Sibitti temple (Safar 1957). The focus of past archaeological research has been on the main citadel area of the city (see Figure 29 and 32), on the secondary citadel, and only one building of the lower city has been partially excavated.

The palace of Dur-Šarrukēn is the most exhaustively excavated complex in the city. Several research projects have discussed its plan in detail (Place 1867; Loud and Altman 1938, 54-56). A very comprehensive study by David Kertai recently re-evaluated these previous studies (2015, 83-120).

The secondary citadel of the city was located almost in the corner of the southern wall (see Figure 34) and probably contained only one building. Only a small part of it has been excavated, (the throneroom and its surrounding rooms), and most of its restoration is speculative (Loud and Altman 1938, 76, pl. 69).

The architectural remains of the two citadels played an important role in our wider understanding of Assyrian architecture, art, and ideology. It is, however, important to realize that the data from the excavations of Dur-Šarrukēn were produced many decades or in some cases more than a century ago. Additionally, no new excavations have been carried out recently to correct or re-evaluate the initial dataset or some of the interpretations of the original excavators. Several scholars have worked on the published material, especially focusing on the palaces and art (e.g. Russell 1999, 100-123; Albenda 2003; Kertai 2015), but research related to the archaeological remains of the city has been relatively stagnant for decades.

Furthermore, unlike Kār-Tukultī-Ninurta and Kalḫu, no comprehensive survey of the lower city of Dur-Šarrukēn has been undertaken. The absence of investigation in the lower city means that Dur-Šarrukēn's urban fabric is almost completely

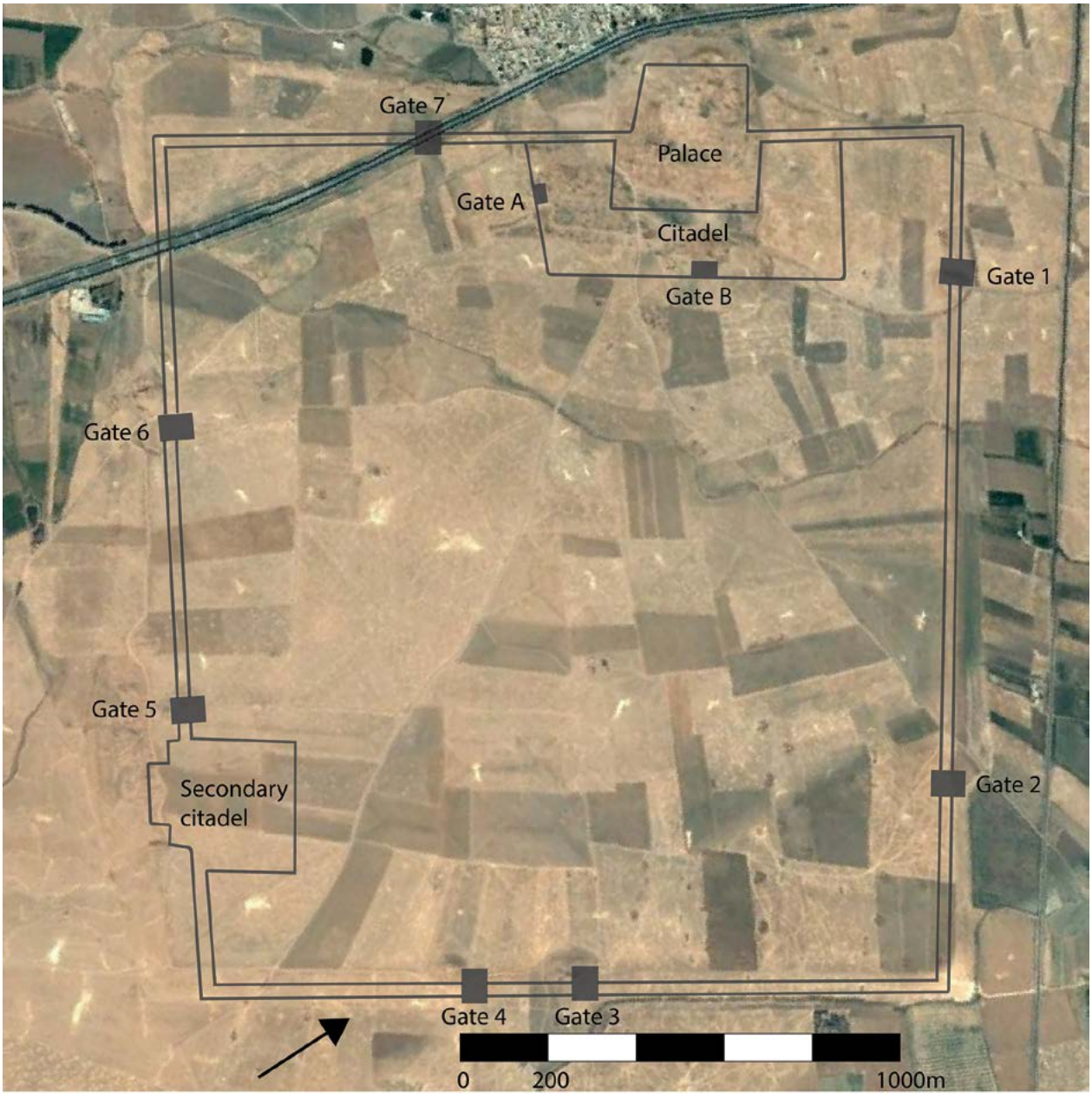

Figure 26: Dur-Šarrukēn today (image from Google Earth, produced by the author).

unknown. This has created a decisively elitist view of the city in scholarship, even compared to Assyria's other capital cities. Dur-Šarrukēn is seen exclusively as the city of Sargon (see for example Battini 1998), since it was finished just a couple of years before his death and abandoned immediately after his 'tragic' death.

5.2 PAVING THE WAY – FROM DECLINE TO TIGLATH-PILESER III

While the historical context of Sargon's reign is of great importance when discussing the construction of Dur-Šarrukēn, it is also important to briefly discuss the events which led to his kingship.

As shown in the previous chapter, Assyria managed to reclaim and sustain the status of an imperial state with its massive expansion and large consolidation projects (934-824 BCE), like the construction of Kalḫu and the expansion of the empire into the Levant (Frahm 2017b, 172). However, a steady decline began at the beginning of the 8th century BCE and the reign of Adad-nirari III (810-783 BCE); Grayson (1982, 276) calls the years between 823-745 BCE an "interval" period". Three kings reigned in those years, namely: Shalmaneser IV (782-773 BCE), Aššur-dan III (772-755 BCE), and Aššur-nirari V (754-745 BCE). The interval is characterized by the loss of territories, the increased power of surrounding states, and internal conflicts (Frahm 2017b, 173-176).

This decline ended during the reign of Tiglath-Pileser III (744-727 BCE). It is unclear in what way, or even if, he was connected to the royal family, and the royal inscriptions of the king never mention the name of his father. The exact circumstances under which Tiglath-Pileser took the throne are not known, but it was connected with the revolt that took place in Kalḫu in 746, which resulted in the death of Aššur-nirari (Zawadzki 1994).

Tiglath-Pileser III pursued a very aggressive policy of military campaigns every year on all fronts. One of the major achievements of these campaigns were multiple victories against the kingdom of Urartu (Grayson 1992a, 75-77). He also managed to re-establish control over Babylon in 729 BCE. Detailed accounts of his campaigns can be found in the published royal inscriptions (Tadmor 1994; Tadmor and Yamada 2011).

It seems that the main focus of Tiglath-Pileser III was to expand and maintain the empire. Several administrative changes were implemented during his reign, paving the way for the so-called Sargonid empire (Garelli 1991). The military transformed into a professional army, and updated its logistics, strategy and weaponry (Dubovský 2004-5). The army now also incorporated large numbers of soldiers from defeated kingdoms, such as foreign cavalry (Postgate 1974; Matilla 2000, 149f; Radner 2010).

A very important reform, which significantly impacted the way in which the Assyrian empire was ruled is the reconfiguration of provinces and the appointment of governors. In an attempt to reduce the increasing power of magnates, several provinces were reduced in size (Garelli 1991). At the same time, governors were now anonymous eunuchs appointed by and reporting directly to the central government (Garelli 1991, 46; Lumsden 2001, 34; May 2015, 107).

The large cost of the professional army and the focus on establishing control in the new or reconquered territories left little to no time or resources for large building projects. The only known important construction at this time was the so-called Central Palace in Kalḫu (see previous chapter). Tiglath-Pileser's reign has been described as the "*beginning of a new era*" for Assyria, which allowed his successors to maximize and sustain the empire (Grayson 1992a, 85). The extensive administrative transformations facilitated the massive expansion of Assyria that occurred afterwards.

Following the death of Tiglath-Pileser, his son, Shalmaneser V (726-722 BCE) ruled for five years. Little is known about his kingship since he did not leave any royal inscriptions (Baker 2008). It is possible that he acted as the administrative ruler of the empire while his father was campaigning (Grayson 1992a, 85). In his brief reign, only a few military campaigns took place. He also continued the policy of his father, acting as king of Babylon under the name Ululayu. In 722 BCE he was murdered, and Sargon II (722-705 BCE) became king. He was responsible for another relocation of the Assyrian capital.

5.3 THE HISTORY OF THE SARGONIC PERIOD

The events of Sargon's accession to the throne are unclear. The current historical consensus suggests that Sargon was also a son of Tiglath-Pileser III and brother to Shalmaneser V (Fuchs 2009, 53). There are still a number of controversies surrounding his claim to the throne. He was perhaps not the chosen heir of Tiglath-Pileser and seemed determined to establish himself as a rightful ruler. Certain historical and philological issues hint in that direction, like the fact that his name (*Šarru-ukin*) means "the legitimate king" (Fuchs 2009, 52), although it is unclear when or whether this name was acquired. These succession issues are often brought forward in interpreting the construction of Dur-Šarrukēn.

While the royal inscriptions of Sargon remain unpublished,[23] his reign and campaigns have received a great deal of attention (Grayson 1992a, 85-102; Fuchs 1994; 2009; Melville 2016). The accession of Sargon to the throne was followed by turmoil both in the Assyrian heartland as well as on the borders of the empire. He did not conduct any campaigns in his first year, probably because he needed to secure his position internally. However, the king conducted extensive military expeditions in the following years to re-establish control over territories lost by his predecessors, and he extended the borders of the empire for the first time to Egypt. During the first years of the king's reign, Babylonia briefly threw off Assyrian rule under the leadership of Merodach-baladan (721-710 BCE). In 710 BCE, Assyria launched an attack against the combined forces of Babylonia and Elam, and despite fierce resistance, Sargon managed to conquer Babylon (Grayson 1992a, 97-99).

Sargon's reign, thus, was one of continuous military campaigns and control over annexed territories. But beyond the military achievements, the most crucial developments were the creation of a well consolidated foreign policy for controlling conquered territories and the changes in the administration of the empire (Lanfranchi 1997; May 2015). The reign of Sargon witnessed even more reformations of the provincial system (Lanfranchi 1997). The policy of semi-independent vassal states started to shift towards systemic annexation of conquered territories. This, however, did not happen necessarily with a fierce military policy, but rather through providing benefits or power to elites so that they would agree to be subjugated completely to Assyria (Lanfranchi 1997, 82-83). Assyria was presented as a force of stability, and the only guarantee for peace in conquered territories was through close cooperation. This shift in foreign policy allowed for the consolidation of the vast territories.

The imperial court also shows significant changes. Firstly, the immediate family of Sargon, and especially his brother Sīn-aḫu-uṣur, obtained crucial political positions in the court (May 2015, 89; see also section 5.7.1). During that period, several new offices were introduced for the administration of the empire, possibly in an attempt to restructure the existing power relations in the court. For example, the importance of magnates diminished significantly, while at the same time court scholars became very influential in the administration of the empire (May 2015, 91). During the Sargonic period, the empire had to manage the consolidation of the reclaimed or newly incorporated territories, while at the same time bringing about a relative internal stability.

5.4 WHY – AN ATTEMPT OF IMPERIAL CONSOLIDATION

The construction of Dur-Šarrukēn started early in the reign of Sargon (717 BCE). The opening festival took place in September/October 707, while the new palace was inaugurated in April/May 706 (Russell 1999, 107). The new city has been viewed in past scholarship as an exceptional case among the capital cities of Assyria (Joffe 1998; Battini 1998; 2000; Novák 1999, 143-152; Albenda 2003; Radner 2011, 325-327). The main arguments for this include: the fact that it was located on virgin soil (in contrast to Kalḫu and Nineveh); that it was constructed very carefully, with a well thought-out plan; and that it was constructed as an attempt of Sargon to disentangle himself from existing power-structures and impose his legitimacy on the throne. All these interpretations mostly derive from the idea that Sargon was the initiator and the visionary behind the creation of a new city, and that the main motive for the creation of the city was to support Sargon's claim to the throne.[24] However, it seems that after the first years of his reign, Sargon was securely established on the throne (Frahm 2017b, 180), undermining this argument.

In this section I would like to address this idea of exceptionality and argue that, while Dur-Šarrukēn does have its own unique features, it was not fundamentally different from the other capitals. As stated above, Dur-Šarrukēn was constructed at a historical point of growth of the Assyrian empire. It was argued in the previous chapters that capital creation occurred following the transformation of Assyria into an empire, and that capitals are created after sustained of expansion and imperial transformation. Similarly, Dur-Šarrukēn was created at a high point of Assyrian expansion.

23 At the time of this study (2019), the completed publication of Sargon's royal inscriptions in Novotny, J. *Sargon II (721-705)* was not published.

24 See for example Radner (2011, 325): "*Without a doubt Sargon's decision to move the court and the central administration to a new center was in part motivated by the lack of acceptance and the active and fierce resistance his rule had met with in the Assyrian heartland*".

The difference in this case is that Assyria already was an established empire. The historical conditions are otherwise very similar to earlier instances of capital creation: Assyria was experiencing a phase of major re-expansion, an influx of wealth and resources, as well as the transformation of its administration (Frahm 2017, 176). I suggest that the creation of Dur-Šarrukēn occurred during a profound *imperial transformation* (Figure 27). The creation of Dur-Šarrukēn occurs in a period of relative stability and with a substantial economic growth. The latter is a crucial factor to realize this large-scale project.

I argue that possibly in this context, capital creation was also used by Sargon and his court to legitimize their rule. This was, however, only part of the motivation behind capital creation, and not the sole purpose. In many ways, Dur-Šarrukēn fits Joffe's "disembedded capital" model, since it was: i) constructed on virgin soil, ii) used to distance the king from previous power centers and, iii) created a shift in regional settlement patters (see following section).

5.4.1 GEOGRAPHICAL LOCATION AND HINTERLAND

The location of Dur-Šarrukēn is of considerable interest as it shares similarities and differences with other Assyrian capitals. Kār-Tukultī-Ninurta and Kalḫu have several geographical and agricultural advantages, while this is not the case for Dur-Šarrukēn.

Dur-Šarrukēn is located in the plain of Jebel Basiqa and close to the river Khosr, which now flows some 3 km away from the city. It is the only Assyrian capital built in an almost completely uninhabited area, although the texts mention a possible small settlement called Magganubba; no traces of this earlier settlement have been found. Considering the existence of two mounds at the site, it is possible that Magganubba could have been located on either of the citadel mounds. Sargon claims that he was the only one who realized the great benefits of that location. In a cylinder seal we read:

"*Magganubba, which lies at the foot of Mount Muṣri and towers above a spring and the surroundings of Nineveh – none of the 350 earlier regents (of Assyria) ... realized its (favourable) location, understood (the benefits of) its settlement or commanded to dig a canal there*." (Radner 2012)

The latter part of the statement is particularly interesting. Irrigation projects were a standard practice when constructing a major urban center. The text comments on the fact that no predecessor had thought to construct an irrigation system here, to reap the benefits of the fertile area. Other textual evidence also indicates the interest of the planners to create sufficient agricultural land in the hinterland of Dur-Šarrukēn (Fuchs 1994). However, other than the seal just mentioned, there is no archaeological or textual evidence of any realized irrigation project near Dur-Šarrukēn (Bagg 2000a, 314).

The only known irrigation project in connection with Dur-Šarrukēn is for the gardens of the city, which is attested in textual evidence and orthostats (Novák 2002). The location of the gardens themselves is unknown, as is whether they were inside or outside the city. Novák (2002, 446-447) suggests that they were outside of city along the southwest and northwest section of the walls, so that they could be seen from the citadels without, however, significant evidence to support this.

Some of the palace orthostats do depict a botanical park – known as *kirimaḫḫu*, which proves there was indeed such a park here (Bagg 2000a, 315; 2000b, plates 32-36). One of the slabs has a park scene, with two men on the left side of the panel, a lake with two boats in front of a two-pillared building in the middle, and several trees and birds on the right (Figure 28). Those trees seem to be located on a hill with an unidentified structure on its summit (Reade 2008, 22). Such evidence suggests that there were constructions of artificial watercourses related to the city (Bagg 2000b, 156-159).

Satellite images (Figure 29) do not show any indications of major canal systems. It is possible that some short canals coming from the mountains in the north had the same course as later canals (Cultaro *et al*. 2007). The construction of the new capital did not seem to have a discernable impact on the surrounding hinterland, although systematic surveys are still lacking. Scholars have already suggested the possible existence of canals going running through or outside of the city either for the watering of gardens or other uses and have attempted to map them (Margueron 2013; Reade 2019).

In particular, Margueron (2013, 204-208) has argued for the existence of three interconnected canals: i) one moving from the NE (below gate 1) part of the wall to the SE (above gate 6; see figure 31), ii) one parallel but further to the south, and iii) one that stems from

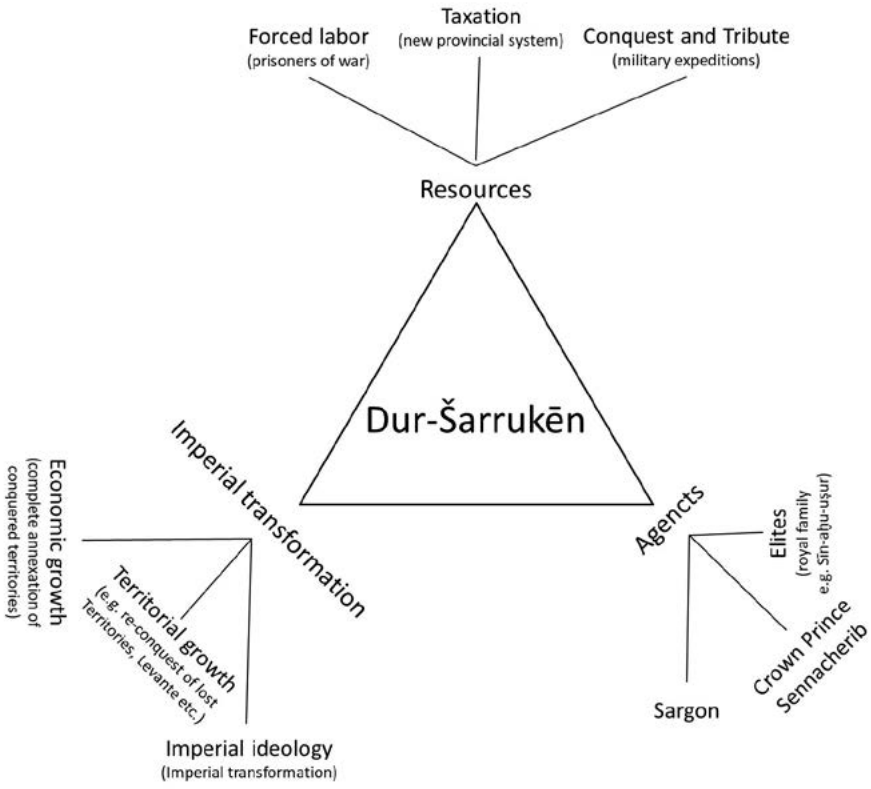

Figure 27: Model for the creation of Dur-Šarrukēn, produced by the author.

the first canal with a southeastern direction exiting the city between gates 3 and 4. Margueron argues for the existence of these canals based on topographical irregularities and erosion on these sections of the walls (Margueron 2013, 204). While compelling, such an argument can only be tested on the ground, as such erosions could potentially have happened at a later period.

Reade has recently argued for the existence of a canal system on the NE of the city stemming from the watercourses of Mount Misri based on Sargon's royal inscriptions (Reade 2019). He locates the source of such a system close to the modern village of Barimeh, 4 km north of Dur-Šarrukēn, in relation to a waterfall mentioned by George Smith (1875, 99) and a potential archaeological mound found through Google Earth in close proximity. It is further argued that these watercourses would have been diverted with a series of dams, allowing the water to flow both above the city, close to the citadel, and below. While no archaeological evidence of such a canal system exists, Reade suggests that it is possible to see these multiple streams in the representation of the gardens of the city in reliefs (see Figure 28; Reade 2019, 90-94).

Both propositions by Margueron and Reade reveal the potential existence of an elaborate, although seemingly relatively small, canal system created for the needs of Dur-Šarrukēn. However, they must remain as hypotheses until further archaeological work takes place in the area.

The location of the city in relation to other important centers of the Assyrian heartlands is of interest in discussing the reasons for its creation. The city is not located on the Tigris, unlike every other Assyrian capital, but on its tributary, the Khosr. The new capital was located 45 km north of Kalḫu, 75 km northwest of Arbela, and 115 km north of Aššur. The best way to reach almost all these cities would be through Nineveh, where the Tigris and Khosr rivers meet, strengthening the geopolitical importance of that city (Radner 2011, 325).

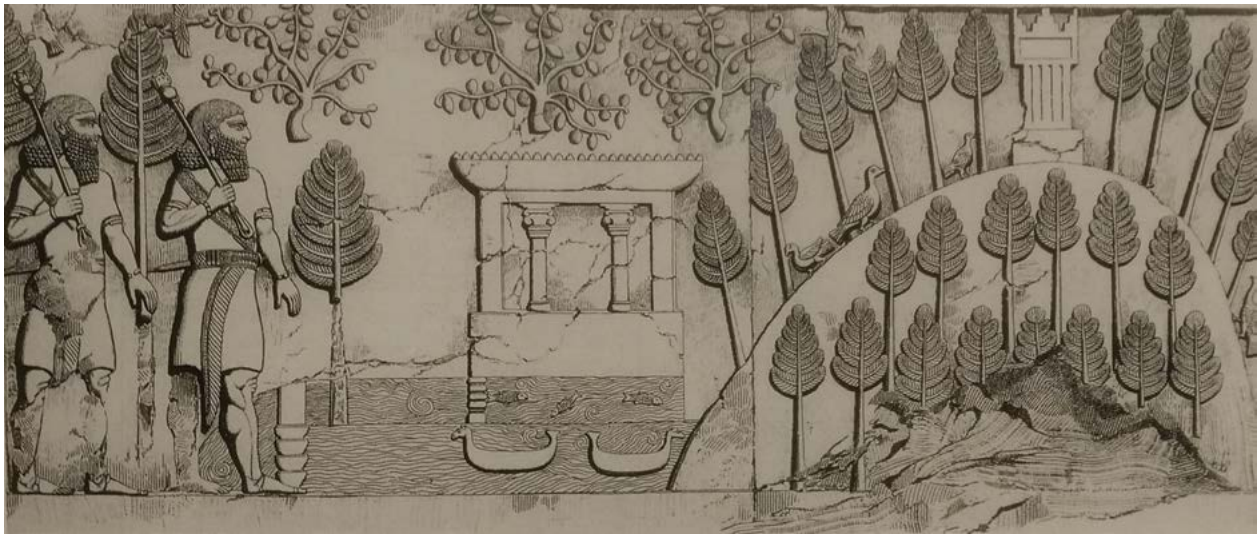

Figure 28: Botanical park in Dur-Šarrukēn (Botta and Flandin 1849, Taf. 113-114).

During the construction of Dur-Šarrukēn, it was decided that the new capital needed its own imperial province. To create this province a large part of the Nineveh province was re-assigned to the new province. Radner (2011, 325-326) has argued that this was done because the designers of Dur-Šarrukēn knew about the agricultural limitations of the new capital and wanted to undermine Nineveh. She argues that Sargon aimed to supplant the regional political and economic importance of Nineveh through the creation of an independent center.

While this might have been the case, it must be noted that Sargon had already consolidated his position during the first years of his reign (Frahm 2017, 180-182; see also section 5.3). At the same time, the administration of the construction of Dur-Šarrukēn was orchestrated from Nineveh, as most of the materials had to travel through there to reach the new capital (Parpola 1995).

Therefore, the available evidence presents us, and likely the contemporary Assyrians, with few reasons for the selection of this particular site. It seems that the location itself was not the prime motivation for moving the capital. Dur-Šarrukēn offers no clear geographical advantages. However, like all other Assyrian capitals, it is located within the traditional "Land of Aššur" (if at the fringes), on a riverbank, and with available, if limited, surrounding hinterland.

5.5 HOW – BUILDING DUR-ŠARRUKĒN

The construction of Dur-Šarrukēn is exceptionally well documented, due to the existence of a large textual dataset. There is a total of 113 correspondence letters that deal with building and related activities in the new capital (Parpola 1995, 50, 71, note 17 for a full list). Thanks to that corpus, in conjunction with the available archaeological remains, it is possible to reconstruct the eleven years of the city's construction. These letters name a number of officials, governors and contractors, with Tab-šar-Aššur mentioned most frequently. He was the State Treasurer and coordinated the largest part of the project. In addition, there are six letters from the king himself and one from prince Sennacherib (Parpola 1995, 51). These offer us a rare window into the large number of people from across the empire involved in the realization of the project. As Parpola puts it, "*it seems accordingly clear that practically the whole empire was, through the governors, committed to the realization of the project*" (Parpola 1995, 51). It appears that a project on the scale of an imperial capital can only be realized with the cooperation of the court and elites of the Assyrian empire.

The information in these letters (Parpola 1995) is vastly different from what is usually found in royal inscriptions, as they deal with the 'day-to-day' issues of the building project. Texts referring

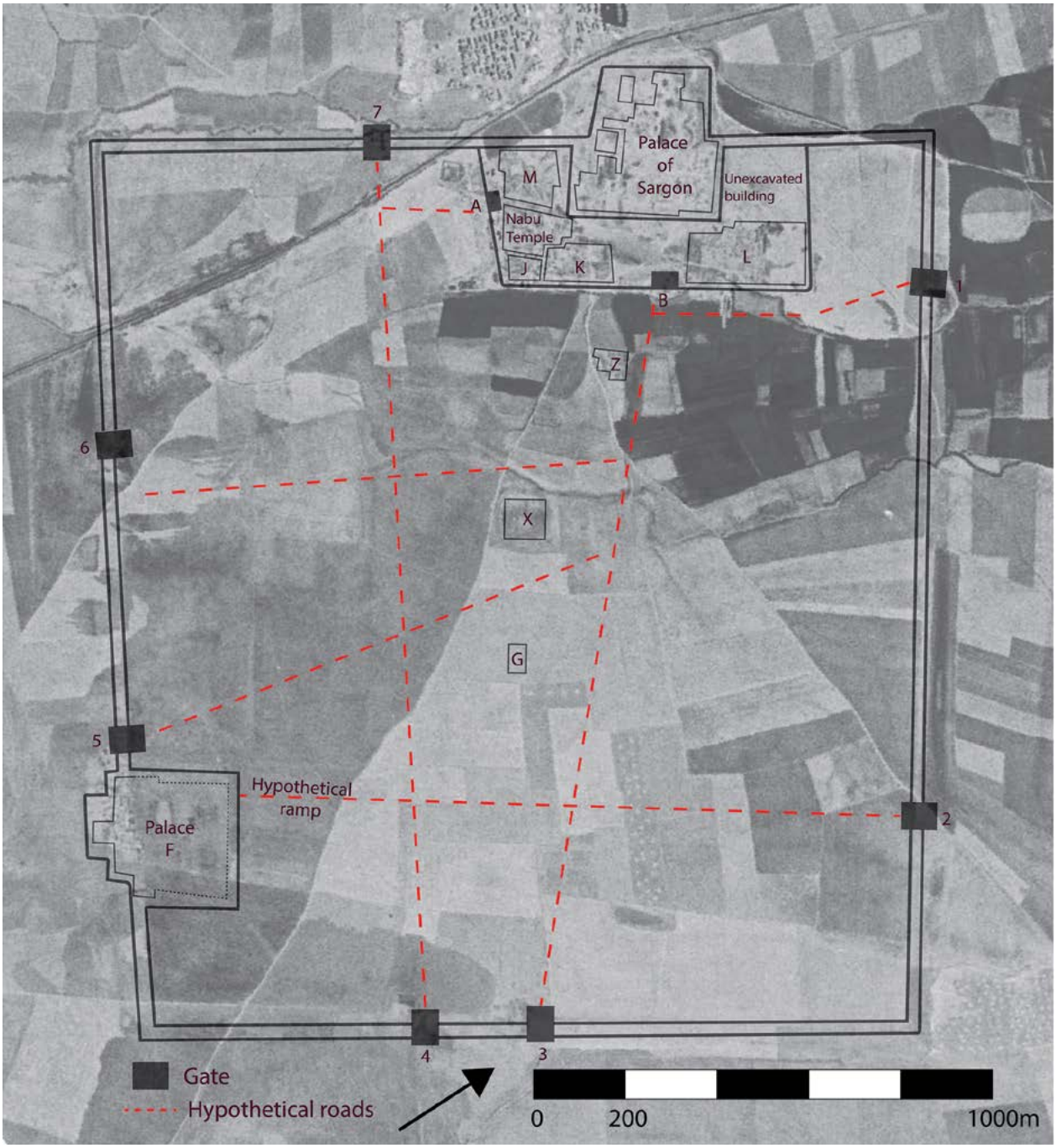

Figure 29: CORONA satellite image of Dur-Šarrukēn with annotated schematic plan of Dur-Šarrukēn produced by the author (after Loud and Altman 1938, produced by the author).

to the delegation of tasks to different officials and contractors are very important, since it is impossible to establish such relations archaeologically. An interesting letter by the crown prince Sennacherib refelcts this process (SAAo 01 039). In that text, the crown prince is acting in the place of his father, possibly in the latter's absence, and gives orders to several different people.

A series of officials and contractors supervised transportation of materials and work in the city. The actual labor was undertaken by deportees brought from around the empire, as well as Assyrians who were subject to military service (Parpola 1995, 54-55). Deportees were the cheapest labor force, and their use in construction seems quite similar to what the texts describe for Kār-Tukultī-Ninurta. One of the texts informs us that the deportees were settled inside the city, and that officials were appointed to "teach them correct behavior" (Parpola 1995, 54).

The housing of the deportees at Kār-Tukultī-Ninurta happened in specific districts (see chapter 3), and it is possible that a similar policy was in place at Dur-Šarrukēn. However, there are no archaeological data to prove this. A text recording a dispute over the use of some buildings informs us of an official wanting to settle Marqasians (from an Anatolia city state conquered in 711 BCE) in a specific set of houses/district (SAAo 01 124). Although not certain, the use of ethnically distinct districts seems plausible.

Another group of people working in the construction were specialized craftsmen. Several craftsmen had to work on parallel projects at the same time, and the corpus of building texts states that there was regularly a shortage of specialized workers (Parpola 1995, 55). For example, an unassigned letter mentions master builders probably working on the city wall stating: "Perhaps the magnates will say in the Palace: 'They have deprived us of master builders'" (SAAo 01 165). In another text, one Aššur-dur-paniya pleads with the king not to take more master builders away from his project because he has already given enough, and the task he has been assigned cannot be completed if he suffers more casualties.

These texts reveal the structural organization and a chain of command in the construction of the capital. It seems like coordination of matters seemingly was done by the king himself, but the crown prince Sennacherib and Tab-šar-Aššur, the State Treasurer, were probably more involved in the day-to-day issues. It is through the letters of these people, in addition to the letters coming directly from the king, that there is a clear desire to finish the city as soon as possible. However, the creation of the city was done in a similar time frame as the other cases of capital constructions, in ca. 10-15 years. This is perhaps less impressive considering that the city was smaller than Kalḫu, and possibly smaller than Kār-Tukultī-Ninurta.

An interesting aspect of the construction process revealed by the texts is the fact that the workers were organized in groups of moderate sizes (i.e. ca. 100-150 people; Parpola 1995, 65), and led by specific officials. A similar organization of labor was observed at Kār-Tukultī-Ninurta (see above section 3.4). This suggests that the construction process of capital cities did not change much over the centuries. Considering that Dur-Šarrukēn was the smallest of the newly created capitals (see Table 5 in section 7.2.2), it is possible to suggest that it was the "slowest" of all capital city constructions.

The reasons for this are not clear. Perhaps one reason was that the city was not as easily accessible by a major river as the other capitals. The texts do mention shortages of material, and often it was hard to navigate large objects like bull colossi through the Khosr (Parpola 1995, 62-63).

An important part of the correspondence on Dur-Šarrukēn pertains to the acquisition and management of raw materials, such as straw and reeds, limestone, saplings of fruit trees, and timber. In addition, we are informed about the places of acquisition and methods of transportation for each of these materials. Straw and reeds, for example, are essential for making mudbricks (see Table 13 in section 7.3.2) and were obtained mostly from surrounding provinces. The number of mudbricks for the construction of the city (see section 7.3.2 and Appendix 2) was so large that it caused significant shortages of straw in the provinces from which it originated (Parpola 1995, 57-8).

Several types of materials are not easily detectable archaeologically, such as seeds and timber. We are informed about the existence of exotic trees in the gardens of Dur-Šarrukēn (see section 5.4.1). The seeds and saplings required to plant these gardens had to be brought from several different regions and in abundance. A letter informs us about 2,350 bundles of apple tree saplings and 450 medlar tree saplings from the middle Euphrates (Parpola 1995, 58). Timber, like straw for mudbricks and reeds, is another type of material that is required in very large quantities for architectural purposes, such as roof beams. Once again, the amount of timber obtained for the construction of the city was so large that several locations, such as the Upper Tigris River region, were completely deforested (Parpola 1995, 61; Parker 190). Also, it was difficult to transport logs over very large distances.

Logs obtained from the Amanus mountains would be floated down the Euphrates to the point it reached

Figure 30: Wall relief detail from the palace of Sargon at Dur-Šarrukēn depicting the transportation of cedar from Lebanon with boats. (Albenda 1983; Musée du Louvre AO 19888-19891).

the Tigris (Parpola 1995, 59-60). Then they would be towed by boats upstream to Nineveh. In other cases, they would be brought to Aššur and stored there for some time, before being transported to Nineveh and from there to Dur-Šarrukēn. This process is likely depicted in a wall relief from the palace (Figure 30). Required amounts of stone were available more locally. Transportation was done with carts and sledges (Parpola 1995, 61), as well as perhaps on water (Morandi Bonacossi 2014). The transportation of large objects was challenging, and there is one case in which a boat transporting a bull colossus sunk in the Khosr, and it was not possible to retrieve the statue.

This correspondence is crucial also to identify the perishable materials used in the construction of a city and which are not identified archaeologically. Since this corpus of texts is primarily organizational, it rarely gives exact figures of materials, or the final purpose of each one of them.

Despite the lack of description of some aspects of the construction process, the texts clearly show that

building a capital has many practical implications. Resources had to be obtained from the provinces and a large labor force was required to transport the material and build with it. This required strong administrative institutions which could support both the construction of the capital, as well as the continuous military campaigns. This argument will be further explored with the case study of city-wall construction in section 7.3.2.

The textual dataset for the construction of Dur-Šarrukēn provides concrete evidence for the process of construction that has been suggested for the previous capitals. The work was divided into several smaller projects that were overseen by different officials and members of the elite. Each project had various different workers and specialists and was assigned specific tasks. The planning was central and directed by members of the court of the king, in this case the crown prince Sennacherib and the imperial treasurer. The latter two often speak in the name of the king, but it is unclear to what extent the king was personally involved in the actual construction process or if he was simply informed about the status of the construction.

5.6 WHAT – URBAN DESIGN OF DUR-ŠARRUKĒN

Dur-Šarrukēn served as a capital for only two years, making it difficult to assess its function as an imperial capital over time. As such, regarding its function, I will only discuss its urban design and the excavated buildings in the citadels.

5.6.1 THE DESIGN OF THE CITY

Dur-Šarrukēn has an almost rectangular shape with two irregular exterior protuberances on its north and west sides formed by the two citadel mounds (Bunnens 1996). To date, there are no comprehensive studies of the urban aspects of the city and no recent surveys have examined its lower city (see for example Battini 1998; 2000; Novák 1999, 141-152). Therefore, I will evaluate the currently available data for the city, including a recently produced contour map (Figure 31), and the accessible satellite images (Figure 29).

5.6.2 WALLS

The fortification walls of the city can be separated into two categories: city walls and citadel walls. Both types rest on stone foundations, which made it much easier for the excavators to identify their location and orientation (Loud and Altman 1938, 18). The city wall encloses an almost trapezoidal area of ca. 300 ha that is approximately 1760 x 1635 m. The general shape of the wall is immediately visible from aerial and satellite imagery (Scardozzi 2011).

Assessing the width and height of the walls is a challenging task and the size estimated by Loud and Altman (1938, 18; 90-91) is followed in this study. Their assessment is based on Botta's detailed inspection of the wall along a specific stretch and their own work on the citadel wall. As such, the estimated thickness of the city wall was 14 m with three courses of foundation stones (Botta and Flandin 1850, 31). Loud and (Loud and Altman 1938, 90) estimate the height of the citadel wall at roughly 12 m. This estimation is based on the assumption that the walls had to exceed the maximum height difference between the palatial terrace and the street level which is a bit less than 12 m (between the terrace and the street level at Gate A). Although this estimation is half of Botta's original assumption, the authors argue that Botta was known for doubling the estimated dimensions of constructions.

Loud and Altman argue for the existence of a plastered inner side of the city wall and buttresses on the outside, based on the presence of these features on the citadel wall. It is possible that there would have been bastions at regular intervals, considering that they existed in the citadel wall. However, there is no archaeological evidence to support this. Based on the contour map, it is possible to suggest the existence of some higher points where tower structures existed. The landscape is rather irregular, and the height of the wall might also have varied, making such estimations difficult.

For the citadel wall, the dimensions are better known: an average of 12 m in height; 7.5 m wide at its base and roughly 6 m at its top; it was buttressed on the outside with regular bastions 11.5 m in length that projected outwards for 5.5 m, and lay 14-19 m apart from each other (Loud and Altman 1938, 18; 90). Matting was used as binder every nine courses of brick for the mudbrick portion of the wall making it rather weak, but its purpose was less defensive than the city wall.

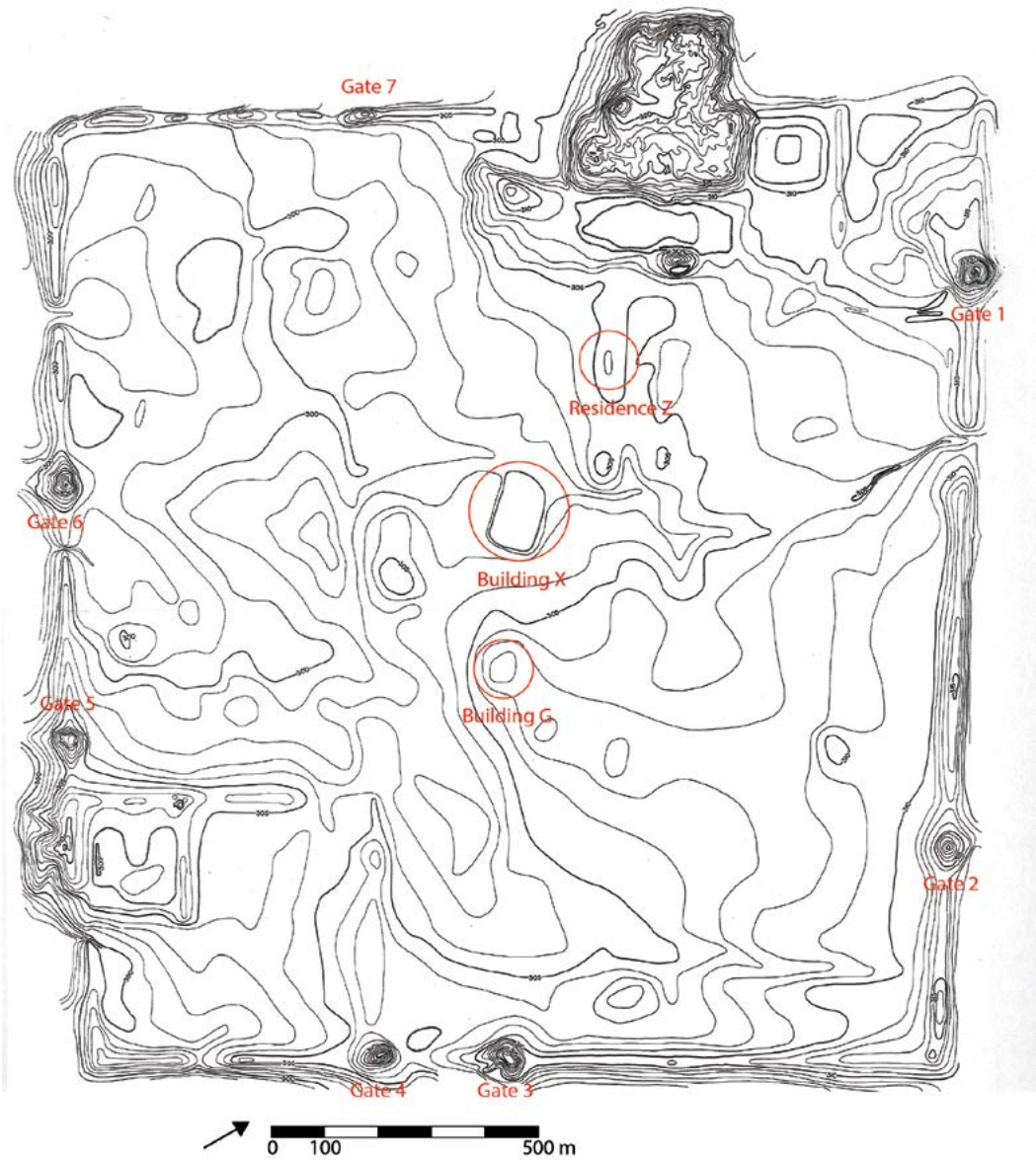

Figure 31: Contour map of Dur-Šarrukēn (Loud and Altman 1938, Plate 68, annotated by the author).

The shape of the city was probably affected by the existing landscape. The northern corner of the city has a higher elevation than the rest of the city. The wall starting from the northern corner and going to the southwest gives the city its trapezoidal shape. The city also slopes downwards from the northeast to the southwest, which might have affected the alignment of this section of the wall. The rest of the walls, located on a more even terrain, followed an almost square model.

5.6.3 CITY GATES AND URBAN FABRIC

Dur-Šarrukēn has a total of seven city gates, and the main citadel has two gates. At this point, no proper gate has been identified for the secondary citadel. Battini (1998, 42-44) has attempted to connect the city gates with names recorded in textual evidence. Here I will use the numbering of the gates as designated by the excavators (1-7), which proceeds

clockwise starting from the gate located at the northeast side of the city.

The only fully excavated gate was Gate 7 and it provides a good blueprint of what the other gates of the city might have looked like (Loud, Frankfort and Jacobsen 1936, 1-11). The gate was arched on the inside and the outside sections, with large stone slabs placed on top of projecting stones. On the outside of the gate, a section of the mudbrick part of the arch had been preserved; pieces of mudbrick and plaster were found on the ground, possibly belonging to the top part of the arch.

One of the most interesting excavated features however was the blockage of the gate. The pivot stones which should hold the outer gate had no traces of use, indicating that the wooden door had probably never been placed (Loud, Frankfort and Jacobsen 1936, 7). The gate was probably blocked while the building was still in a good condition, possibly without it ever been used. This information is particularly useful when assessing the potential function of the seven gates of the city.

All seven gate mounds are visible on the contour map and correspond to the number of gates listed in the textual evidence (Battini 1998, 42). The number of gates exceeds that of Kalḫu, for which we know of only four gates. Dur-Šarrukēn has two gates on each of its sides, except on its northwestern side, where the main citadel is located. Given the regular shape of Dur-Šarrukēn, one would assume the gates to be regularly spaced apart. However, the position and distances between gates is quite varied. Because of the limited availability of satellite images and the absence of any survey of the lower city, it is not possible to reconstruct an urban road network, as Ur (2013) and Fiorina (2011) have done for Kalḫu.[25]

Gates 1 and 2, located on the northeastern side of the wall, are the farthest apart from each other. Gate 1 is located roughly 350 m away from the northern corner of the city, and Gate 2 lies about 410 m away from this corner; they are about a kilometer apart from each other. Gate 1 is almost parallel to the wall of the main citadel, and a road starting from there would probably have to curve slightly to avoid the citadel's wall and reach the main gate of the citadel (Gate B). Starting from Gate 2, a direct line can be drawn directly to the entrance of the secondary citadel.

The southeastern side of the city has Gates 3 and 4, with the latter being closer to the secondary citadel. Strangely, these gates are only 190 m apart. Gate 4 is nearly opposite Gate 7, creating a potential straight road between them. There is no evidence that Gate 3 had any specific role, nor is there evidence of any important road beginning here. It is possible that one of these mounds is actually a large tower, similar to the mounds identified at Kalḫu (see section 4.5.1). However, the lack of excavation of these mounds leaves this as a question for future excavation.

It is unclear whether defensive strategies dictated the position of the gates, since having seven gates would make the city more vulnerable in case of a siege. It is likely that Gate 7 was the least important or had the least functional potential in relation to road networks, since it was sealed and never used (Loud, Frankfort and Jacobsen 1936). The most important gates could potentially be Gate 5 and Gate 6: a road leading directly from Nineveh to Dur-Šarrukēn would probably end on this side of the city. Also, the position of the secondary citadel gives it a view over Gate 5.

After discussing the gates, it is important to discuss the urban anatomy of the city, and to assess the usefulness of the gates and potential street systems within the city. Other than the gates, the other two large features along the wall are the two citadels, whose individual buildings are discussed in greater detail below. The main citadel is located in the northern part of the northwestern side, about 240 m away from the northern corner of the city. The secondary citadel is located, in a similar fashion, on the southern part of the southeastern side, about 270 m from the southern corner.

The contour map (Figure 31) and available satellite images provide little to no information regarding potential buildings in the city. Only one building has been securely identified archaeologically in the lower city, Residence Z. It is the only excavated building in the lower city of Dur-Šarrukēn (Loud and Altman 1938, 78-79). It is comparable in size with the smallest building on the citadel (Residence J), and the similarity of the architectural plan of both these buildings possibly signifies that Residence Z belonged to a member of the lower elite.

25 Battini (1998) attempted to explain the irregularities of the position of the gates based on the existence of underlying geometric modules that governed the city's construction. Based on this, the palace is located in such a position in the city that it represents the "center of the empire". However, the measurements proposed by Battini exist only for specific gates, and any possible alignments seem to be coincidental rather than definitive.

An additional building was found but not excavated, Building G. I suggest that at least one more building can be identified by combining the satellite imagery and the contour map (Figure 31, X indicated), which I will call Building X. This suggestion is based on the size of the mound as seen on the contour map and its clear visibility on the satellite images.

Another crucial feature in the city's urban plan is the location of the secondary citadel, the so-called Military Palace (Kertai 2015, 117-120). It has been argued that the complex expanded beyond the secondary citadel to form a rough square formed by the space between Gates 4 and 5 (Heinrich 1984, 170; Kertai 2015, 118). This argument is based only on the contour map, however, re-examining those data together with satellite images does not offer concrete proof for the existence of such a complex.

Firstly, there is no archaeological evidence that the area had walls. Every other major wall in the city is preserved to a certain extent and is visible in the satellite imagery. In the case of the secondary citadel, there is nothing to indicate the existence of an outward expansion of its walls. The contour map can be misleading, as it seems to show two higher elevation lines that create a square in this area: one starting from Gate 4 and another one protruding from the norther corner of the citadel. The latter could be part of the proposed ramp of the citadel. Loud and Altman (1938, 76) explain that their restoration of a ramp in this location is purely imaginative, but the existence of an entrance ramp to the palace is possible given the topography. The topographical feature extending inwards from Gate 4, which is also visible in the CORONA satellite image, is puzzling. The feature seems to lead directly to the gate, neither including nor excluding it. It follows the general sloping of the city, which is higher on the eastern side and lower on the western side.

Within the confines of the hypothesized square extension there are no ground features which would indicate the existence of buildings. If the secondary citadel had a definitively military function, it could be argued that tents would be set up for the military in this area. This could be compared to the secondary citadel of Kalḫu, even though we do not have a wall surrounding the secondary citadel there. Only survey and test trenches can verify the existence or absence of such an enclosure.

An earlier study attempted to reconstruct the city's road network, and the researchers drew straight lines from each gate for the sake of a simple reconstruction (Cultaro *et al.* 2007). I attempted a similar exercise for a street system but incorporated the evidence from the contour map (Figure 29). The only direct connections possible are from Gate 4 to Gate 7 in a straight line and from Gate 2 to the speculative ramp of the secondary citadel. Gate 3 is the only gate leading directly into the citadel (Gate B).

It seems that the regularity of the city's wall does not exist in its internal urban features such as the gates and possibly its streets It is possible that there is too little information to determine the function of each gate, or that the position of some of the gates were the result of an inherently flawed design, or that even most of the gates were never actually used (like Gate 7).

This initial assessment of the gates and the existing buildings of the lower city of Dur-Šarrukēn shows that future archaeological research will significantly enhance our knowledge of the city, especially because it had probably not been extensively developed yet. Unlike Kalḫu, the short lifespan of this city would not have been lived in and re-appropriated by its citizens, with all the potential changes this brings to an urban space. Thus, whatever urban features do exist here would give us an insight into the urban design of this city and other capitals.

5.7 WHAT – THE CITADELS

Archaeological work in Dur-Šarrukēn has focused heavily on the main citadel area (Figure 32). Thus, while very little is known of the lower city, the distribution and position of buildings within the citadel have been well established (Loud and Altman 1938, 53-72; Kertai 2015, 83-120). The citadel was a walled area of 25 ha divided into two sections, a lower one with the residential buildings and the Nabu Temple, and a raised section with the main palace. This division is unique among Assyrian capitals.

Another unique characteristic of the citadel of Dur-Šarrukēn is that it does not face a river. Aššur, Kār-Tukultī-Ninurta, Kalḫu and Nineveh are all on the bank of the Tigris and they have infrastructure for bringing water up to the citadels. For Dur-Šarrukēn, it is unclear how water was brought up to the citadel to support all the bathrooms, temples, and daily needs, although the potential existence of yet unidentified canals in and around the city might had accommodate for the lack of a river in the direct vicinity of the citadel (see e.g. Reade 2019).

Although considerable work was done to level the ground of the citadel, it followed the general topography of the city, which slopes downwards from northeast to southwest (Loud and Altman 1938, 53). Entrance to the citadel was through two gates, Gates A and B: the former is a side entrance on the western side of the citadel wall, and the latter is located on the long south/southeastern side. While Gate A was preserved remarkably well (see section 5.7.1), there are almost no traces left of Gate B. The wall of the citadel has not been completely uncovered, although Botta (and Flandin 1850) conducted a detailed excavation of one stretch of it.

Gate A is not positioned along the same alignment as the citadel wall but askew. Its entrance is flanked by two differently sized towers, and its outer portal is lined with reliefs of genii, winged human-headed bulls, and winged human figures with cone and bucket (Loud and Altman 1938, Pls. 9, 10 and 77-78). The interior of the gate comprised four chambers.

There is no currently visible way to connect Gate A with any potential roads coming from within the city. Its proximity to Gate 7 means that the two were probably connected in some way (see Figure 29). Gate A highlights an overarching theme of this citadel, that of grandiose architecture combined with architectural irregularities. Although there are no data to reconstruct Gate B, it is safe to assume that it must have been equally, if not more impressive that Gate A, as it probably was the main entrance to the citadel from the city.

Finally, Reade (2019, 85) argues for the existence of another gate outside of the city but located on the protruding part of the citadel. This suggestion is based on Sargon's claim, through royal inscriptions, that there were eight gates around the city, rather than the seven described above. If such a gate existed, it would require a ramp that would allow access to the palace mound. Neither a ramp or a gate have been identified archaeologically and, while this hypothesis is tempting, since it would solve the issue of bringing water to the citadel, it must be treated with caution until further archaeological work takes place.

5.7.1 THE LOWER CITADEL

Starting with the lower part of the citadel, all the structures lie at the same level as the rest of the city, with the exception of the Temple of Nabu, which is placed on top of a platform and is accessible by a ramp. In total the lower citadel has the following excavated structures: four excavated "residence" buildings (J, K, L, M), the Temple of Nabu (H), and two empty areas, one on the northern side[26] and one as you enter from Gate B.

Entering from Gate B, there is a large residential building to the north, Residence L (Loud and Altman 1938, 69-71). Residence L is the only building for which we can safely identify the owner based on textual evidence found within the building: it was the residence of the Grand Vizier Sīn-aḫu-uṣur, brother of Sargon II. It is also by far the largest building in the citadel. The building is structured around a series of courtyards: the forecourt, a central courtyard, and possibly another one or two courtyards in the back of the building. This construction typology is the same for all residential buildings of the citadel. To the north of Residence L is a large open space, which probably contains the remains of an unexcavated building.

To the south of Gate B there is a large open area, followed by Residence K. Although it is smaller than Residence L, they both have very similar layouts. Behind Residence K, confined to a small area on the southern corner of the citadel, is Residence J. This is an even smaller version of the residential buildings known on the citadel. While the entrances to both Residence L and Residence K are located in the front of the buildings, the entrance to Residence J is on its side.

The only known temple of the lower citadel is located above the residences (K and J) (Loud and Altman 56-64) and is dedicated to Nabu. This temple is the only building of the lower citadel that lies on top of a high terrace, which was about 3-6 m high. A ramp in the northern section of the temple functioned as the building's entrance. The temple has a similar layout as the residential buildings, with a forecourt, a central court, and a small inner temple. About half of the temple's area was occupied by priests' quarters and service rooms.

Finally, Residence M is located on the northwestern corner of the citadel. Due to its confined location on the southwestern corner it was constructed in a roughly square shape, making it more comparable to the Nabu Temple rather than the other residential buildings. Little is known about its use and actual

26 There is space here for another building if it were the same size as the other known residences. Based on surface finds, Loud and Altman (1938, 10-12) suggested that there was indeed a building here, but no excavations have taken place.

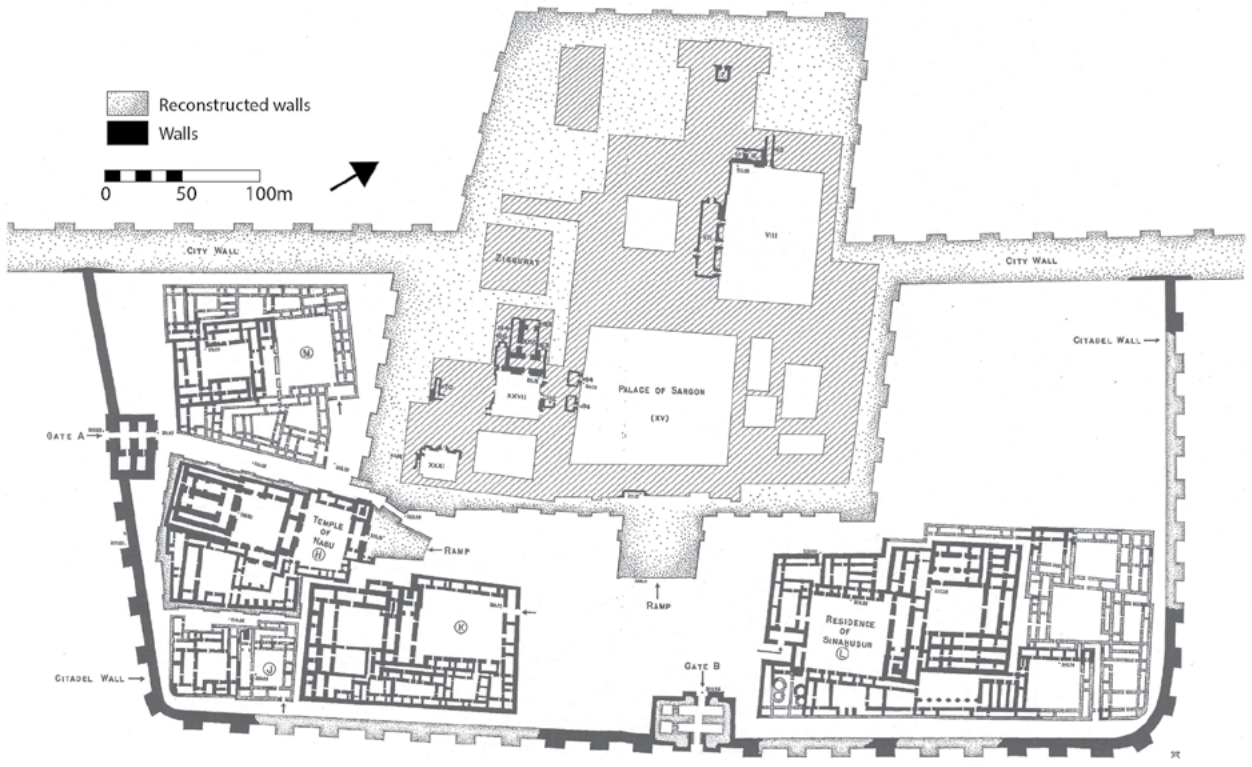

Figure 32: : The citadel of Dur-Šarrukēn (Loud and Altman 1938, Plate 70).

construction since previous excavation focused exclusively on its central courtyard (Loud and Altman 1938, 71-72).

The observations made by Loud and Altman (1938, 10-12) are convincing and are key for interpreting the citadel area. The buildings here almost completely exhausted the available space, they vary in size, and they lack any shared orientation. The irregular shape of the buildings likely was dictated by spatial limitations.

If the lower city was rather empty at this point and had a simplified road system that connected the gates with the citadel as is currently assumed, the citadel itself was rather full. Unlike the citadel of Kalḫu, which must have been quite open at the inauguration of the city, the citadel of Dur-Šarrukēn had no large open spaces besides the one immediately after Gate B. This is unlike every other new Assyrian capital city, where open spaces were a characteristic.

All buildings in the lower citadel have two major courts, with the forecourt being the largest. Around these courts, lesser courts and rooms are grouped. Entrance to each building was through a single chamber, but its orientation could vary (i.e. as in J and L). In addition, the rooms surrounding the forecourt seem to follow the same blueprint: smaller, individual rooms were placed at the "sides", often used as entrances to the smaller courts and service areas. The rooms placed at the "front" are the most inconsistent in terms of their layout, varying considerably in number and size between different buildings, and their function is unclear.

The rooms at the "back" of the court are similar in all "residential" buildings but these are different in the temples and the palace. In the first category, the back rooms were the most important reception suites, which gave access to the central courts. The central courts, in the case of residential buildings, were probably used as intermediate "communication" courts between the different apartments of each building (Loud and Altman 1938, 11).

In the case of the temples and palaces, the back rooms of the forecourt gave access to the central courts, which led either to the functional religious suites of

the temples or the throneroom of the palaces. What is striking however, is that the principal reception suites of the residences and the thronerooms of the palaces do not vary considerably, but have a standardized architectural expression, based on the size of each building. The palaces and large buildings K, L, M have three portals with one central portal, while the small buildings J and Z have only one portal. Little is known about the occupants of the residences, with the exception for Residence L which belonged to Sīn-aḫu-uṣur.

5.7.2 THE PALACE TERRACE

The palace, located on top of a natural mound, was the most prominent building of the entire city. While Kertai (2015, 83-120) recently discussed the construction of the palace extensively, there are some important features which need to be addressed here regarding its construction, its organization as well as some of its functional aspects. This is crucial to identify some of the reasons behind the relocation of the capital.

The palace platform was created on top of the existing mound but was expanded and reinforced with courses of mudbrick to create the area needed for the complex (Loud and Altman 1938, 54). It also has a slight downward slope from the northeast to southwest, with a difference of almost 3 meters. The terrace was, as discussed before, an integral part of the city wall, protruding to the outside as well as inwards towards the city. The outer face of the wall was probably in mudbrick like the city wall, while on the inside of the platform it was faced with limestone blocks.

Access to the terrace was possible by two ramps (Loud and Altman 1938, 29). The main ramp lead from Gate B and the open space of the citadel to the bull-flanked entrance of the palace. Interestingly, the ramp is not located on the axis of the gate, but slightly to the left. There does not seem to be any functional reason for this asymmetrical position. On the contrary, it would be much more impressive, both visually as well as practically (i.e. for processions) if the gate and the ramp were aligned.

This ramp has impressive dimensions; it is 25 m wide, rises up to a height of 7.5 m at the entrance of the palace, and has a length of about 20 m. It is likely that a limestone pavement covered the ramp, and that limestone blocks covered the vertical sides, similar to the terrace wall.

The second ramp, while not monumental, is even more interesting. It is located in the southern corner of the palatial terrace and faces Gate A. Unlike the main ramp, the street starting from Gate A leads almost directly to the secondary ramp. It is not freestanding, but rather is attached to the southern wall of the terrace. In terms of size, it is 4 m wide and only 7.5 m of its total length remains. Its surface has been washed away but it is likely that it was also paved with flagstones like the main ramp (Loud and Altman 1938, 29). This ramp acted as a non-monumental "back door" to the palace. The street leading to it lies between the residential building M and the Nabu Temple.

An arched bridge connected the Nabu Temple with the southern corner of the palatial terrace where the secondary ramp is located (Loud and Altman 1938, 56). While the existence of this bridge could explain the unusual proximity between the Nabu Temple and the southern corner of the terrace, Loud and Altman were clearly puzzled about the awkward choice of the positioning, role, and usefulness of the bridge: "*A more awkward handling of bridge and ramp can scarcely be conceived. Granting such difficulties as the oblique angle and the difference in level between the palace terrace and Nabu temple ramp, one cannot refrain from wonder at such clumsy treatment in the hands of architects capable of the town and citadel gates*" (Loud and Altman 1938, 56).

The palace terrace contained a number of buildings: the main palace, the temples, and monument X (Figure 33). The main palace dominated the terrace in terms of size and differs significantly from all the other buildings. Sargon's palace, in fact, differs from nearly every other Assyrian palace in terms of its layout. According to Kertai (2015, 94-95), the organization of the palace can be divided into four main quadrants, a unique feature among Assyrian palaces, only comparable to the Military Palace of Kalḫu. Entrance to the palace was through the southern quadrant and the Entrance Courtyard. A monumental gate was located at the top of the ramp, which consisted of three adjacent rooms (Kertai 2015, 95). Remarkably, the gate to the courtyard was not centered either on the courtyard itself or on the palace. The same goes for every other access point to the rest of the palace in the Entrance Courtyard. All of the gates, although they were less monumental than the main one, were not centered but placed closer to the corners. The courtyard provided entrance to every other main area of the palace, all three other quadrants, and the temples.

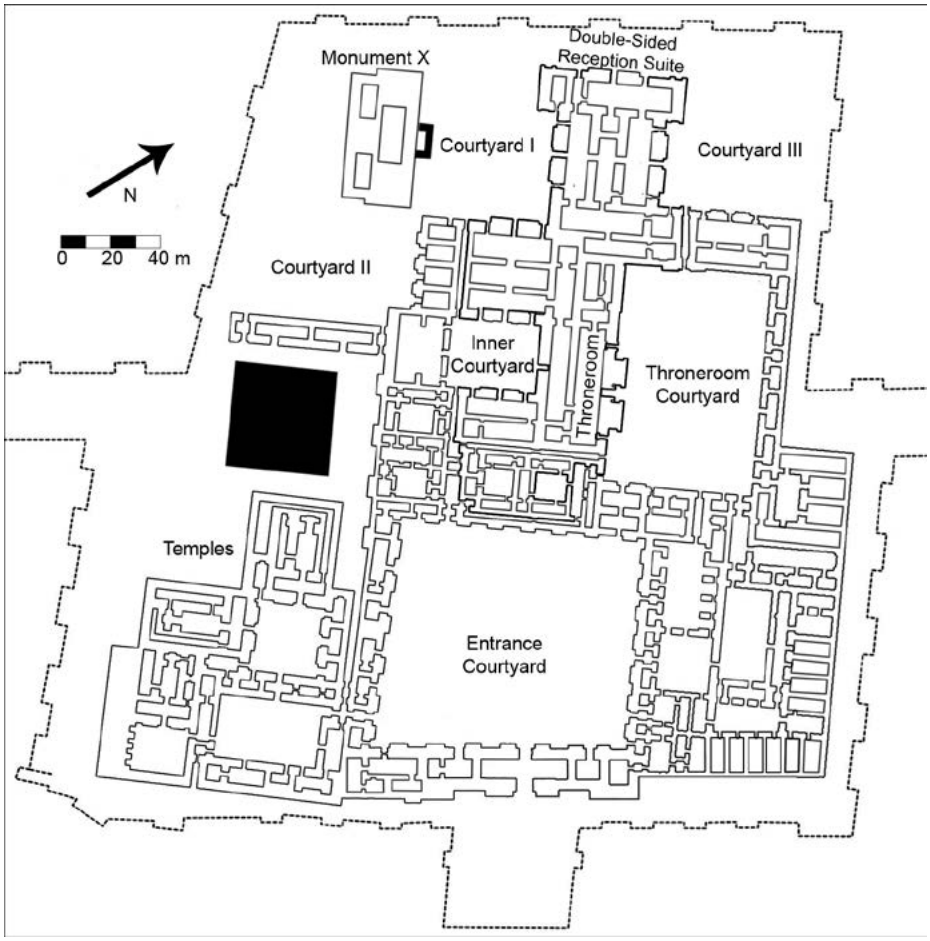

Figure 33: The Palace of Sargon at Dur-Šarrukēn (after Place 1867; Loud, Frankfort and Jacobsen 1936; Kertai 2015, produced by the author).

To the north was the throneroom courtyard. One had to pass through the northern corner of the entrance courtyard to access the throneroom courtyard. As at Kalḫu, the main feature of the main courtyard was the monumental entrance to the throneroom itself, and the combination of apotropaic figures and tribute bearers (Kertai 2015, 103). The façade of the throneroom had three doors decorated with five pairs of human-headed bull colossi: one at each door and two placed on the buttresses between the doors. Those buttresses also carried colossal human figures (Russell 1999, 103). The southwestern and northwestern walls of the courtyard were decorated with carved courtiers and tribute bearers moving towards the king, who stood closest to the throneroom.

While there are significant similarities in sculptures and decoration in the throneroom courtyard between Kalḫu and Dur-Šarrukēn, the text inscribed on the bull colossi differ in each place (Russell 1999, 106). Aššurnaṣirpal II devoted an extensive part of his text to his campaigns and military achievements, and barely a sixth of the inscription mentioned the construction of Kalḫu. On the contrary, Sargon's text gives only a brief titulary, names a few Assyrian and Babylonian cities to which he gave tax exemptions, and has a brief summary of his conquests, which are arranged geographically rather than chronologically. The remaining two-thirds of the text is devoted to the construction of the new capital and ends with a concluding blessing for Sargon's hands (Fuchs 1994, 61-66). This focus on the construction of the capital is significant and unique.

The throneroom itself was similar to Kalḫu but unfortunately its decoration is mostly unknown. The American excavators managed to recover pieces of painting from the walls and the roof, together with some inscribed relief fragments (Loud, Frankfort and Jacobsen 1936, 56-68). The lack of decoration in some parts of the throneroom (e.g. niches opposite to the central door and at the end of the room), as well as some unfinished features (e.g. tram-rails without grooves) might indicate that even one of the most important locations of the palace, while functional, was left unfinished (Kertai 2015, 104).

A novel inclusion is the terrace courtyard that expands at the northwestern side of the palace, where the citadel protrudes from the city wall. The terrace itself incorporated a double-sided reception suite, two courtyards (I and III), and its southern side has Monument X.

5.7.3 THE SECONDARY CITADEL (PALACE F)

The area surrounding the secondary citadel, where Palace F was located, has already been discussed (section 5.6). The existence of such a secondary citadel closely resembles the two citadels of Kalḫu. Based on that city, Palace F has been interpreted as the Military Palace, the *ekal māšarti*. Unfortunately, this palace has been poorly excavated, and the published results heavily exaggerate the actual excavated area (highlighted with black on Figure 34).

In terms of size, Palace F is only slightly smaller than the main palace but they both have comparably thick walls (Loud and Altman 1938, 75). The terrace of Palace F is also comparable to the main Palace, having a trapezoidal shape and constructed on top of a mound. No ramp has been identified, but the height of the terrace would require one to access the palace.

The plan of the building follows the 'blueprint' of every other building in the citadels of the city, with a forecourt and a throneroom court. The two other courts indicated on the plan by Loud and Altman are admittedly "*imaginative*" (1938, 76, pl. 69). Excavation focused on the back of the palace, where the mound protrudes beyond the city wall. It revealed a throneroom, which was even larger than its counterpart in the Royal palace, although the decoration in the throneroom of Palace F was significantly simpler. The entrances here were decorated with large bull colossi (Loud and Altman 1938, 76; Kertai 2015, 118).

A double-sided reception suite was located, once again, behind the throneroom, dividing the back part of the terrace into two spaces. It has been suggested that this suite was where the principle resident of the complex spent his private hours (Loud and Altman 1938, 77). However, the lack of a bathroom, the lack of a direct connection to the throneroom, and the unequal configuration of doors makes the use and function of the suite unclear.

No further excavation has taken place in the rest of this palace. Additionally, no areas related to military activities have been found here comparable to Fort Shalamaneser, the military palace of Kalḫu. The latter had evidence for workshops related to the maintenance of the army, and, at least in the early periods of its function, its function was primarily related to the military (see section 4.5.4). Such archaeological evidence does not exist for Palace F, although it needs to be considered that the city, and as such the secondary citadel as well, was not used for more than two years.

Although this mound and its structure closely resemble the Royal Palace, there does not seem to be any form of enclosure like that in the main citadel. Furthermore, there are no textual data known at present that refer to the military palace of the city. The only exception might be text SAAo 01 039: r 7', a letter from the crown prince Sennacherib, in which he gives orders regarding construction at the new capital. The relevant passage reads: "*....] in the presence of the ki[ng, my lord ……]. He and his brothers had become very scared, so I gave them new [orders]: 'This will do for this (neglected) king's [work] of [la]st years.' Now they are present and do their work in the Review Palace.*" (SAAo 01 039: r 2'-8'). Even in this passage however, it is not clear to which secondary citadel the crown prince refers.

Textual evidence regarding the construction of the city seems to refer to the "review palace" of Kalḫu quite often, giving it a more complex status from its assumed explicitly military purposes (i.e. SAAo 05 206, r 1'-3'). It is possible that the secondary palace was used more for other administrative purposes and less for direct military organization. Kertai (2011) discussed the need for an Assyrian king to have two palaces, one for war and one for peace. I would suggest however, that this was possibly not the case at Dur-Šarrukēn. It is possible that the role of the secondary citadel had evolved by this time to accommodate other administrative functions in

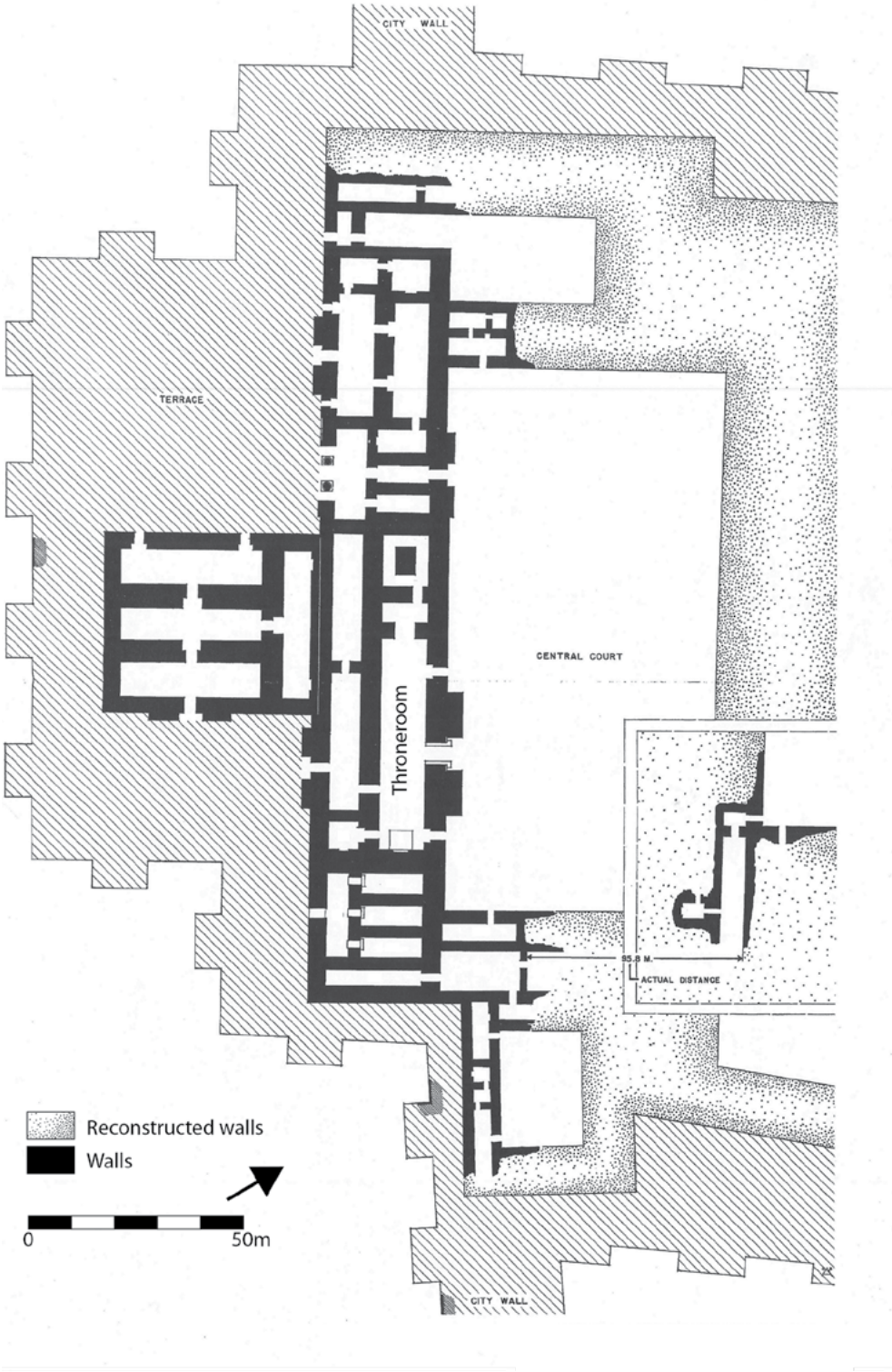

Figure 34: Plan of Palace F (Loud and Altman 1938, Plate 75).

addition to the military administration, as is the case at the secondary citadel of Nineveh (see section 6.8.2).
It is possible that the planners of the city would have accounted for the existence of a secondary citadel on the basis of the "customary" layout of major Assyrian centers. The similarities to Kalḫu are apparent, and perhaps the construction of a secondary citadel was planned to outsource some of the other administrative matters, like local administration.

5.8 WHAT – CONCLUSIONS

I would like to conclude with addressing the three main questions of the study: why was Dur-Šarrukēn constructed; how the construction was realized; what the function of the city was, or in this case, why was it abandoned so soon.
In the previous case studies, I discussed extensively the relation between the creation of a capital and the changing nature of Assyria from a territorial state into an empire. In the case of Dur-Šarrukēn, there is a similar change: the empire witnessed significant territorial expansion and experienced a series of changes in its administrative and military structure. In addition to accommodating these structural changes, the creation of Dur-Šarrukēn formed a new center of administration. The new system of a more centralized administration is reflected in the citadel's construction, which differs from that of other Assyrian capitals.
The issues of the legitimacy of Sargon as the king of Assyria have often been foregrounded to explain the creation of Dur-Šarrukēn. It is, in my opinion, valid to say that Dur-Šarrukēn is the Assyrian capital that more closely fits the model of disembedded capitals proposed by Joffe. The distancing from existing elites and the creation of new political power structures was definitely a factor for the creation of the new capital.
This creation, however, could only had been realized within the phase of expansion and restructuring of Assyria. At the same time, Sargon's position on the throne had already been secured after the first years of his reign (see section 5.3). As such, while the creation of a new power center away from older elites might have played a role, it is unlikely that issues of legitimacy were at play. Rather, Dur-Šarrukēn fits within the general model of Assyrian capital creation, following a period of continuous growth.
The construction of Dur-Šarrukēn was, in the end, realized for the most part: the city was constructed and functional. Its location away from the main roads, however, meant that building materials could not be brought directly to the construction site but had to first go through Nineveh. The textual evidence gives great insights into miscommunications, material shortages, and labor problems.
Finally, I would like to address the abandonment of the city, a topic which is tied to the reasons for the construction of Nineveh, discussed further in the next chapter. Above (section 5.4.1) I discussed the location of Dur-Šarrukēn. Indeed, as analyzed at the end of this study, there are certain characteristics that fit with the general blueprint of capital creation in Assyria. The city was built next to a river, with access to Tigris, at a new location, had two citadel mounds, a certain degree of natural defenses, and access to hinterland.
However, of all the newly created capitals of Assyria, the location of Dur-Šarrukēn offered the least advantages. Its hinterland had to be "created" at the expense of Nineveh, access to the Tigris was only possible via the Khosr, and the major route for accessing major trade routes and resources was through the city of Nineveh. The core region of Assyria had to be re-crafted in order to incorporate Dur-Šarrukēn within the existing river and road networks. The new capital was thus created in relatively isolated location, which was more difficult to access than other capitals.
Despite these irregularities, Dur-Šarrukēn was not an exceptional capital. On the contrary, it fits well within the general framework of Assyrian capital creation. However, it seems like Dur-Šarrukēn failed to live up to the desired aims of its planners, as did Kār-Tukultī-Ninurta. In the end, the court decided to relocate the capital to Nineveh, and the possible reasons behind this choice will be explored in the next chapter.

Chapter 6: Nineveh – The Largest Capital of Assyria

6.1 INTRODUCTION

Nineveh is an exceptional city in many ways. From its long history to its biblical implications, and from its importance in ancient Assyria to its modern relevance of heritage and the destructions by ISIS, Nineveh is a key place for understanding the history of the Near East (Petit and Morandi Bonacossi 2017; Figure 35). In addition, it is the first time that the new capital of Assyria was located in an already existing, established, and thriving city. It should be clarified that the key difference between Nineveh and Aššur is that the latter was not a created capital, but rather evolved gradually into the capital of the Assyrian empire. Nineveh, on the other hand, was the only city which had a contemporary importance and was elevated into a capital. Such an alteration to the 'standard' paradigm of capital creation requires a shift in the perception of the phenomenon.

6.1.1 HISTORY OF RESEARCH

Nineveh covers an area of ca. 750 ha and is surrounded by a monumental wall. Its two most prominent features are the two citadel mounds: Kuyunjik, the main citadel mound, and Nebi Yunus, the secondary citadel mound. Both mounds are located along the inner side of the long wall of the city that has a northwest to southeast orientation (see Figure 36). The river Khosr runs through the city, separating it in a northern and a southern part.

The site was first discovered and investigated by Paul-Émile Botta in 1840, before he moved to excavate Dur-Šarrukēn. Botta's success there inspired further research in the broader area, and Austen Henry Layard, after a few seasons at Kalḫu, began excavating at the mound of Kuyunjik in 1849. Following his death, the British Museum continued research on the site, directed by George Smith (for one season) and Hormuzd Rassam. The site yielded impressive finds, including the palace of Sennacherib, the palace and library of Assurbanipal, several bas reliefs, bull colossi.

Excavations here continued in the beginning of the 20th century, again organized by the British Museum, under the direction of Campbell Thompson. The latter also excavated a building to the north of Kuyunjik at an unspecified location. Campbell Thompson also conducted some work at the secondary citadel of the city, Nebi Yunus. After World War II, several Iraqi archaeologists from the Iraqi Department of Antiquities continued work at the site on several occasions. Most notably, work was conducted under the direction of Mohammed Ali Mustafa (1951-1958), Tariq Madhloom (1967-1971), Manhal Jabur (1980), and Abd as-Sattar (1987) (Scott and MacGinnes 1990, 63). Their work significantly expanded our understanding of the city, especially with their excavations at the gates of the city. Excavations were conducted in several parts of the city, including the two citadels, several gates, bridges, the city wall, the river walls, and a small number of buildings in the lower parts of the city. Several gates were also restored, like the Nergal Gate and the Adad Gate. Significant research was done by Mohammed Ali Mustafa at the mound of Nebi Yunus and the surrounding area; in addition to the Assyrian phase of the city, he identified several later layers that dated until the Hellenistic period (Mustafa 1954).

The last large-scale project that took place at the site was conducted under the supervision of David Stronach and the University of California, Berkeley. Stronach conducted a survey of the northern part of the lower city, and also excavated the Halzi Gate, where he found the remains of several skeletons (Lumsden 1991; 2000; Stronach and Lumsden 1992, 228). The signs of battle at this gate point towards the last siege of the city and the fall of Nineveh (Stronach 1997).

Figure 35: Nineveh today, surrounded by the city of Mosul (image from Google Earth).

The Land of Nineveh Archaeological Project, directed by Daniele Morandi Bonacossi (2016; 2018), carried out the most recent archaeological project in the surrounding hinterland of Nineveh. A comprehensive review of archaeological research at the site can be found in Scott and MacGinnes (1990), Russel (1991, 34-44), Reade (2002, 392-394), and recently an edited volume by Petit and Morandi Bonacossi (Curtis 2017; MacGinnis 2017a; Mario Fales 2017; Petit and Morandi Bonacossi 2017; Stronach 2017). The following sections treat the archaeological remains at the city from the Middle Assyrian period onwards, until its elevation to the capital of Assyria.

In recent years the city of Mosul, in which the archaeological site of Nineveh is located, was occupied by the Islamic State, which caused significant damage, destroying the reconstructed gates and causing significant damage to city's citadel. After the recent liberation of Mosul, tunnels constructed by ISIS through the mound of Nebi Yunus revealed the existence of several wall reliefs that could date to Esarhaddon's reign (680-669 BCE) and thus signify new additions to the palace. Although news outlets heavily discussed the importance of the archaeological finds at Nineveh after the liberation of Mosul as of yet there has been no opportunity for archaeological study on this material.[27]

6.2 MIDDLE ASSYRIAN NINEVEH

While Nineveh has a very long history of habitation, starting from the 6th millennium BCE (Stronach 1994; Reade 2000, 395-396; Iamoni 2017), I will focus exclusively on the Assyrian phases, especially the Middle Assyrian phase, when Assyria first became independent from the Mitanni. Nineveh initially was part of the Mitanni empire. On at least two occasions there are textual attestations that Mitannian kings, Šuttarna II (c. 1400-1385 BCE) and Tušrata (c. 1380-1350 BCE), sent the effigies of Ištar in Nineveh to the Egyptian pharaoh Amenophis III (c. 1386-1353), for healing purposes (MacGinnis 2017b).

Almost immediately after Assyria became independent, Nineveh came under the rule of king Aššur-uballit I (c. 1353-1318 BCE), who conducted renovation works at the temple of Ištar. This is recorded in royal inscriptions, although these renovations have not been identified archaeologically (Grayson 1987, A.0.73.1001; Tenu 2017). The temple seems to have been a primary focus of the Assyrian kings, as numerous texts proclaim the renovations done to the Ištar temple, especially those from Shalmaneser I and Aššur-rēsa-isi I (ca. 1133-115 BCE). Tiglath-Pileser I (1114-1076 BCE) worked on the terrace connected to the temple, and erected the obelisk found outside the North-West Gate (Reade 2005, 373). Two more obelisks, the so-called 'Broken Obelisk' and the 'White Obelisk', as well as a statute of a woman, possibly Ištar, belong to kings of the second millennium. It appears that the importance of the cult of Ištar for Assyria was great. This was an important trade center (Tenu 2004, 29).

Temples were not the only building projects that took place in the city. Nineveh occupied a unique position among Assyrian cities, particularly in the Middle Assyrian period, as it became an official royal residence in addition to Aššur. While the Assyrian king would visit other cities, Nineveh was unique in having a royal palace where the king would spend some time of the year. This is illustrated by the construction of three palaces, gardens, and administrative buildings (Russell 2017, 430-4; Tenu 2017, 121). Once again, the evidence is mainly textual, with scarce archaeological data due to the heavy building activities of the late Neo Assyrian period.

A palace was constructed by Shalmaneser I and is recorded on a cone fragment dating to his reign (Grayson 1987, A.0.77.30). The same palace was restored by Mutakkil-Nusku (1133 BCE) and Tiglath-Pileser I. Inscriptions mention that Aššur-rēsa-isi I also constructed a palace in the city which was finished by Tiglath-Pileser I (Grayson 1991a, A.0.87.10). In the latter's description of the palace, we read that the palace was decorated with bricks glazed the color of obsidian, lapis lazuli, *pappadilū*-stone, and *parūtu*-alabaster. A garden was planted in connection with this palace, which was watered by a canal diverted from river Khosr (Grayson 1991a, A.0.87.24-7). A third palace in the city may have been a summer house (Reade 2002b, 411). Despite these textual descriptions, the actual position of these palaces remains unknown.

It is interesting that the texts of Aššur-rēsa-isi I mention the construction of a *bīt-kutalli,* which can

27 Information can be found in news outlets, e.g. https://www.theguardian.com/world/2017/mar/08/mosul-iraqi-troops-find-assyrian-treasures-in-network-of-isis-tunnels [accessed 07-05-2018].

be interpreted as an arsenal or storage house. They also state that the construction of the building had already started but was damaged by an earthquake (Grayson 1987, A.0.86.4). Its location is unknown and could have been located in the lower town rather than on the citadel mound of Kuyunjik or Nebi Yunus. For several centuries Nineveh remained the only city with a possible arsenal, until Shalmaneser III constructed Fort-Shalmaneser at Kalḫu. It has, therefore, been suggested that Nineveh was actually the main military establishment of the Assyrian empire starting in the Middle Assyrian period (Russell 1999, 222).

In terms of the urban layout of Middle Assyrian Nineveh, our knowledge is even more limited. It is most likely that a lower town, probably even a city wall existed located in the northern part of the Neo Assyrian city. That can also be supported by the University of California, Berkeley's excavations in 1990 (Lumsden 1991; Stronach and Lumsden 1992, 228-230). Despite the limited Middle Assyrian data produced, the size of the mound of the northern part of the lower city implies a long occupation sequence. It is impossible to estimate the size of the city, its population, or its layout. It is also unclear whether or not the mound of Nebi Yunus was even part of Middle Assyrian Nineveh.

During the Middle Assyrian period: i) Nineveh assumed the role of an important provincial capital of the Assyrian state, and ii) Nineveh became a city where the king resided, especially towards the end of the Middle Assyrian period. The need of the king to reside temporarily in other places of the empire might be a result of the continuously expanding empire.

6.3 NEO ASSYRIAN NINEVEH

Nineveh remained part of the Assyrian state even during its decline during the 11th and 10th centuries BCE. The reformation of the Assyrian empire during the 9th and 8th centuries has already been addressed above. Those events culminated in the re-centering of the empire further to the north with the creation of Kalḫu. Nineveh's importance increased during the Neo Assyrian period, even before Sennacherib's transfer of the capital (Frahm 2017, 164-170). Architectural work always occurred at Nineveh contemporary with the construction of other capital cities. Kings resided in its palace and its temples were restored or reconstructed (Stronach 1994, 97).

Once again, our knowledge of the actual urban environment of Nineveh is limited. The Lower Town probably grew significantly, as did the pressure for space on the mound of Kuyunjik. Reade (1970, 65-66), attempted to identify the area occupied by the city based on textual account of building activities.[28] The perimeter of the area mentioned in the text was calculated at 5,115 m and could refer either to an area exclusively around Kuyunjik or an area including Nebi Yunus. Inscriptions do describe a palace located on top of Nebi Yunus, but it is uncertain whether the mound was incorporated into the city at this time (Stronach 1994, 98).

Some information can be derived from the royal inscriptions of Sennacherib regarding the city's canal system. An example is the "Tebilti River", which is possibly a water canal that came from the northern part of the city (RINAP 3 Online Corpus, Sennacherib 002, 44-53). The river, according to the inscription, ran within the city walls and had caused damage to residences, tombs, Gand possibly the Kuyunjik mound as well as one of the palaces. During the reconstruction works at Nineveh, the inscription informs us that the river was diverted, possibly outside of the city and its original location was filled in, creating a large terrace close to the Tigris.

The considerable work done on the expansion and building activity of Kuyunjik must have had dramatic implications for urban life of Nineveh, which must have had a high population density.[29] In addition, the parts added to the city would have created a new urban reality. The biggest addition to Nineveh was the area south of the Khosr river, where there is no evidence of previous occupation. It is possible that this part of the city comprised of agricultural fields that were transformed into a more urbanized area. The elevation of Nineveh to imperial capital raises many questions about the functioning of this new part of the city, as well as how it was connected to the old Lower Town.

28 For the most recent reading of thistext, see RINAP 3 Online Corpus, Sennacherib 8, 9'-11'.

29 At this point, it is not possible to give an estimation of the pre-Sennacherib population of Nineveh due to the lack of available data on the Lower City.

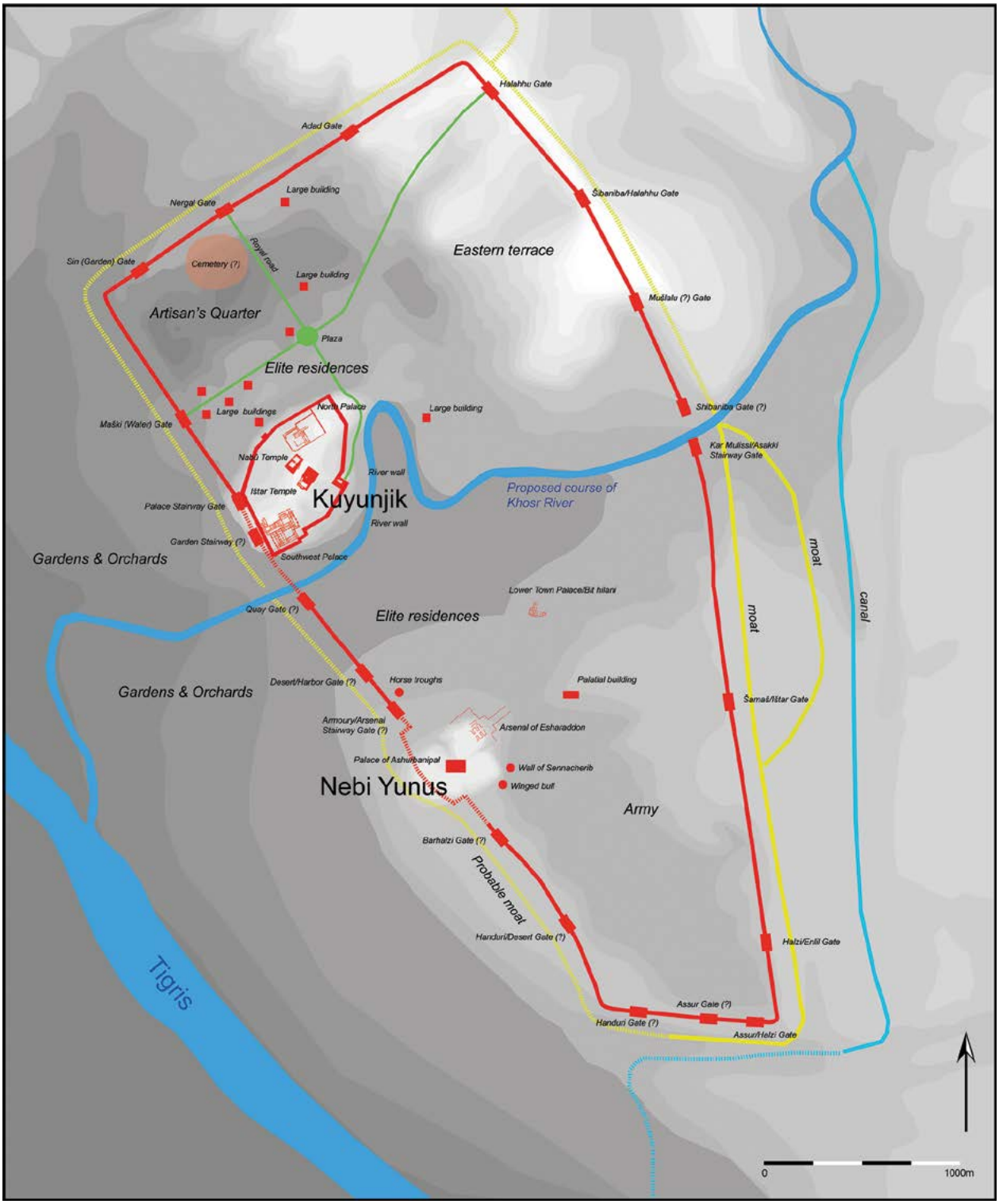

Figure 36: Plan of Nineveh (Petit and Morandi Bonacossi 2017, Figure 23.1, published with permission).

6.4 HISTORICAL CONTEXT

During Nineveh's lifespan as an Assyrian capital (704-612 BCE) three subsequent kings carried out significant building projects in the city and expanded or changed its urban fabric: Sennacherib (705/4-681 BCE), Esarhaddon (681-669 BCE), and Assurbanipal (668-627 BCE).

Sennacherib's reign was a very dynamic period for Assyria (Frahm 2017, 183-186; Lippolis 2017). Alongside the construction of Nineveh, the Assyrian army conducted several campaigns on all fronts. One of the most notable aspects of Sennacherib's kingship is the so-called "*Babylonian problem*", connected to the continuous revolts by Babylon (Parker 2017). The status of and relation with Babylon always played a central role in Assyrian foreign politics. A number of conquests of Babylon have already been mentioned in this study and, without delving too deep into the problem, almost all Assyrian kings had to deal with Babylon in one way or another.

Sennacherib took this situation to the extreme by waging multiple campaigns to control the area, but the initial results were relatively poor.[30] Eventually, in 689 BCE, the Assyrians decided that brute force was the only solution to the problem (Frahm 2017, 186). Babylon was conquered after a long siege, and Sennacherib's inscriptions record that the city was plundered and completely destroyed.

Sennacherib's reign followed in the footsteps of the previous kings with continuous campaigns. While the results of these campaigns seem mixed, Assyria managed to sustain its growth. His invasions of Palestine, for example, resulted in the withdrawal of the Assyrian force from the area (Parker 2017). Nevertheless, Judah remained an ally to Assyria until the end of the empire.

Esarhaddon ascended to the throne in 680 BCE after his father was murdered, possibly by his other sons, but under mostly unknown circumstances (Parpola 1980; Frahm 2017, 186). Military campaigns under his reign were equally, if not more successful than Sennacherib's on territorial terms, and his reign was characterized by more cohesive strategies (Parpola 1983, 231-236; Frahm 2017, 187). Conquest of kingdoms on the Phoenician coast, Palestine, and Anatolia solidified the Assyrian presence in the area but, more importantly, paved the way for his reign's grand achievement. After multiple invasions, Egypt was conquered by the Assyrian empire in 671 BCE (Grayson 1992b, 123-126). In addition, a peace treaty with Elam was completed in 674 BCE and Assyria aided in the reconstruction of Babylon (Porter 1993).

The consistent administrative policies during that period, and a continuous suspicion of conspiracies (Frahm 2010; 2017, 187-188), had its effect on the building projects undertaken during Esarhaddon's reign. Nebi Yunus was favored, with the construction of another palace here. At the same time, the military palace of Kalḫu, Fort-Shalmaneser, saw extensive restorations and expansions (see chapter 4).

Esarhaddon divided the rulership of the empire by appointing his son Assurbanipal as heir to the throne of Assyria, while his other son, Šamaš-šuma-ukin, was appointed to the throne of Babylon (Parker 2017). The king died in 669 BCE on the road to Egypt, where an anti-Assyrian rebellion was taking place.

Assurbanipal's kingship (668-631 BCE) is marked by a series of events that brought significant losses to Assyria. He initially suppressed the Egyptian rebellion already underway since the end of his father's reign, but Egypt eventually managed to regain its independence. On the Babylonian front, the relationship between the two states became tense. With the support of Elam, Šamaš-šuma-ukin renounced his brother's claim to the Assyrian throne. After a long campaign (652-648 BCE), Elam was destroyed, and Assyria regained control of Babylon (Grayson 1992c).

Assurbanipal was also the last king to undertake major architectural projects in Nineveh, with the construction of the North Palace (Grayson 1992c). In addition, another important building was created as part of the Southwest Palace, probably with the personal supervision of the king: the Library of Assurbanipal (Fincke 2017).

Several of Assyria's 'misfortunes' have been attributed to the king's short-tempered personality which "*allowed personal rivalries to influence his decision-making*" (Parker 2017, 146). Scholars have tried to identify aspects of his character and unique features in his kingship, such as the fact that he rarely accompanied military campaigns (Radner 2017c). While indeed Assurbanipal can be described as an atypical king in some ways, the historical events which led to the loss of control of several Assyrian territories had already been set in motion before his ascension to power. More generally, this was a period influenced by the continuous turmoil in the succession of kings, as well as the territorial over-extension of the empire. Some of these developments are also visible in the changing landscape of Nineveh, to which we now turn.

30 For a detailed account, see Grayson 1992b, 105-109.

6.5 WHY – A CAPITAL WAITING TO HAPPEN?

In recent scholarship, the relocation of the capital to Nineveh is treated as an event 'waiting to happen'. Oates and Oates (2001, 16) question why Kalḫu was chosen to be the capital instead of Nineveh in the 9th century. They suggest that the abandoned site of Kalḫu provided a wider variety of construction possibilities. Russell proposed that the question we should ask is not "*why did Sennacherib move the capital to Nineveh?*" but rather, "*why hadn't it been done long before?*" (Russell 1999, 243). The question suggests viewing the motivations of Sennacherib as "*refreshingly transparent*" from our modern point of view. Such a statement, however, requires a large number of assumptions and *post hoc* knowledge of the importance of the city.

I suggest that the question "why not Nineveh?" is a misguided one, given our modern knowledge and perception of Nineveh. As for the previous Assyrian capitals, research has traditionally framed the creation of Nineveh as a choice presented to the king: create a new capital or move the capital to Nineveh. There is, however, no evidence of such binary considerations. At no point does any textual or archaeological evidence suggest Nineveh was a candidate for becoming the capital of Assyria before Sennacherib. Several kings did construct buildings in Nineveh, but never moved the court and the central administration of the empire to this city.

As a matter of fact, Sennacherib's inscriptions (RINAP 3 Online Corpus, Sennacherib 003) state that he pays tribute to several Assyrian kings who "exercised domination" from the palaces of Nineveh. For example, one of the inscriptions reads (with my emphasis added):

At that time, Nineveh, the exalted cult center, the city loved by the goddess Ištar in which all of the rituals for gods and goddesses are present; […] in which since time immemorial earlier kings, ***my ancestors, before me exercised dominion over Assyria*** *and ruled the subjects of the god Enlil, and wherein annually, without interruption, they received an income unsurpassed in amount, the tribute of the rulers of the four quarters (of the world);*
(but) not one among them had paid heed to (or) shown interest in the palace inside it, the seat of lordly dwelling whose site had become too small; nor had anyone (of them) conceived of and put his mind towards the straightening of the city's street(s) and the widening of (its) squares, the dredging of the river, (and) the planting of orchards:
(But) as for me, Sennacherib, king of Assyria, the performing of this work came to my attention by the will of the gods and I put my mind to it. (RINAP 3 Online Corpus, Sennacherib 003, 34-41)

This passage is of interest for a number of reasons. It informs us about the status of the palaces of Nineveh before Sennacherib, as well as the religious and administrative importance of Nineveh. I would like to highlight two other important sections in this passage: i) the palace was considered too small, and ii) changing the city's design was significant. These points are interesting because they highlight the fact that both elite spaces as well as urban development were part of the urban planning, something not attested in previous royal inscriptions. This point is also elaborated by Liverani (2017, 171-173) who discusses the evolution of the royal inscriptions of Sennacherib in relation to the progress of various constructions in the city, from the palaces and temples initially, to urban planning and surrounding landscape later on[31]. Despite the extensive mention of constructions in royal inscriptions, however, at no point there is any reasoning as to why did the relocation happened in the first place.

It might be, indeed, "refreshing" to finally have an Assyrian capital which makes sense from our perspective due our knowledge of its eventual development as a capital. This seeming "transparency" in motivation, however, does not answer the question of why make Nineveh the capital at all. What are the reasons and motivations to create a new capital immediately after Dur-Šarrukēn had been constructed? One of the dominant narratives revolves around the circumstances of Sargon's death (see most recently Lippolis 2017). Sargon's death on the battlefield, and the failure to retrieve his body for a proper burial was interpreted as a horrible omen, a divine punishment. Scholars have associated the lack of Sargon's name mentioned in Sennacherib's inscriptions and the relocation of the capital to Nineveh with the ill fortune of Sargon. This might indeed have been part of the religious narrative, although it is not mentioned as a reason in any royal inscription. It seems, however, too reductive to attribute such a massive and expensive project solely on Sargon's unfortunate death, especially in the absence of relevant evidence.

31 See for example: RINAP 3 Online Corpus, Sennacherib 001, 63-67; 015, 31-32; 016, 54-55; 022, 36-38; 044, 33-37.

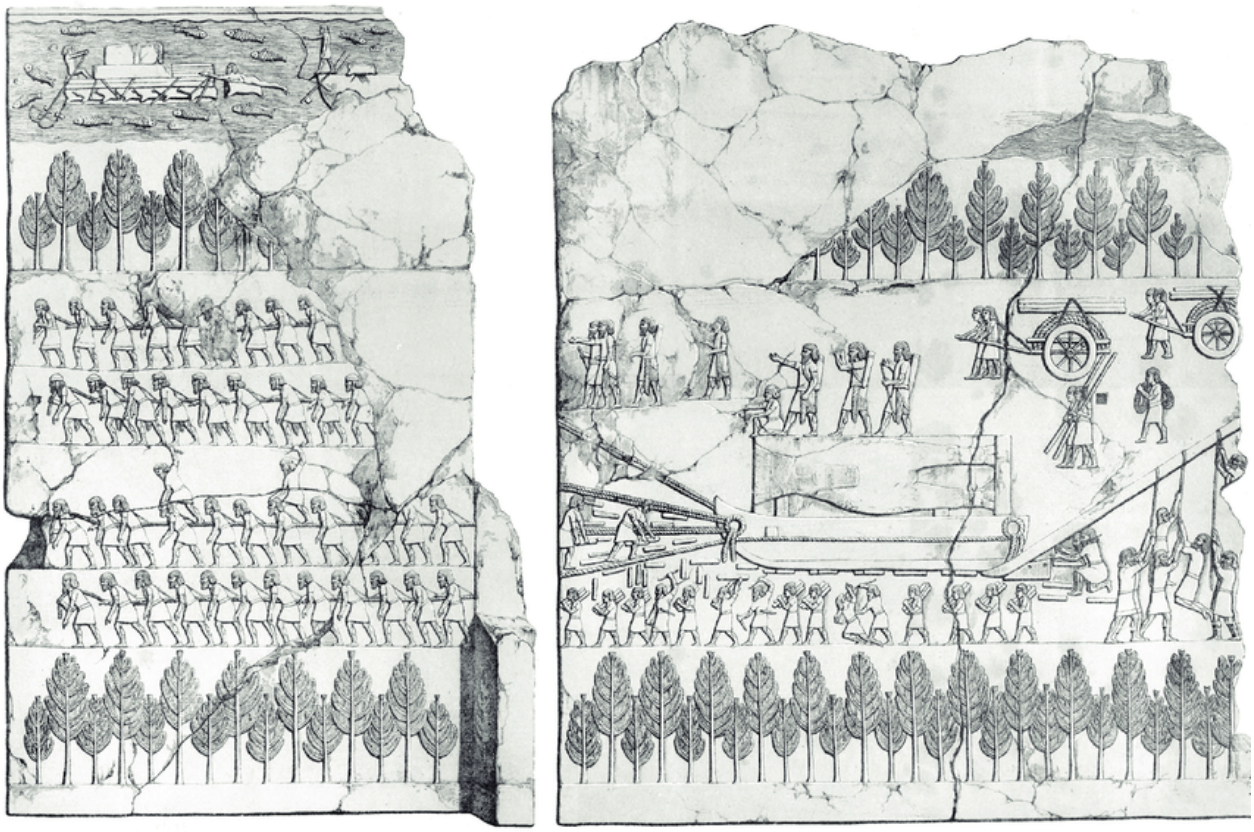

Figure 37: Stone panel from the S.W. palace of Sennacherib (court 6) showing the transportation of a lamassu to Nineveh (The British Museum).

An argument can be made that the location of Nineveh was significantly more advantageous. As shown in the previous chapter, the location of Dur-Šarrukēn caused logistical difficulties, both for its construction, as well as its connectivity to other important Assyrian centers like Nineveh and Arbela. At the same time, the coordination for the creation of Dur-Šarrukēn took place mostly at Nineveh, which might add to the argumentation of why the latter would be preferred over Dur-Šarrukēn. While the fact that Nineveh was located at a more central and advantageous position cannot be disputed, one has to wonder as to whether this was the main reason for the relocation of the capital.

It is possible to speculate that the reasons for moving away from Dur-Šarrukēn would have been political. I discussed earlier that the creation of Dur-Šarrukēn could be linked to a distancing from existing elites. It might be that these elites that felt threatened by the creation of Dur-Šarrukēn could seize the opportunity of Sargon's death to pressure the new king Sennacherib in abandoning his father's city. Such a hypothesis could be supported by the fact that Nineveh was a commonly accepted Assyrian center because of its economic importance and central location within the empire. As Liverani puts it, "*Sennacherib's choice of Nineveh as capital is repeatedly justified with reference to its prior glorious history, which is a complete inversion of the motif of an untouched site*" (Liverani 2017, 170).

None of these hypotheses can, however, be fully supported with the currently available data. It seems, in fact, that rather than the relocation of Nineveh being "*refreshingly transparent*", as mentioned above, it is probably the most puzzling choice. It is puzzling to such extent that we cannot really answer why Nineveh was created as a capital. We can assess the advantages and the new city itself, but not the reasons for its creation.

I would argue that, moving forward, the best way to understand the reasons for the elevation of Nineveh to a capital should be seen in the context of the creation of Dur-Šarrukēn. I suggest that these two capitals are

the product of the same historical processes related to the territorial and economic growth of Assyria. The short time span between the construction of the two capitals means that: i) Assyria used the same pool of resources for both creations, and ii) to a large extent, many of the same, competing or cooperating, elites were probably involved in both projects. It is currently impossible, however, to determine with any certainty the reasons behind the creation of Nineveh.

6.6 HOW

In contrast to the construction of Dur-Šarrukēn, little evidence exists for the construction process of Nineveh (Figure 37). However, there is no reason to imagine that the construction process of Nineveh was dramatically different than its predecessor. The project was likely executed in part by the same people, such as Sennacherib, who already was involved intimately with the creation of Dur-Šarrukēn.
The evidence from the creation of Dur-Šarrukēn clearly states that Nineveh was a hub through which most of the construction materials had to pass. As such, it follows that the building of Nineveh must have been significantly smoother. The central administration had already moved to Nineveh and was overseeing the creation of the city from within, without the need for a distant "middleman".
Given the lack of evidence and the similarity in the construction process between Dur-Šarrukēn and Nineveh, I will not investigate the building aspects of Nineveh in greater detail. Several specific aspects related to construction will be explored in the following section, as well as in the discussion chapter (see section7.3.2), where there will be a focus on the city wall of Nineveh.

6.7 WHAT – URBAN LAYOUT

Nineveh, as a capital, covered about 750 ha and was surrounded by a ca. 12 km long city-wall, which gave the city a trapezoidal shape. Unlike Dur-Šarrukēn, the design of the city was heavily influenced by existing landscape features, namely the edge of the flood-plain of the Tigris on the west and the conglomerate extrusion which defines the city-wall on the east (Stronach 1994, 100).

The long sides of the city are on the east (ca. 5 km long) and west (ca. 4.1 km), with the northern part of the wall extending some 2 km and the south being the narrowest side of the city at ca. 900 m long. From space, the wall is still visible today, though less clearly than in the 1960s (Figure 38). Besides the wall, the other distinct features of the city that can be seen from the air are the two citadel mounds, and the Khosr river that divides the city in two.

6.6.1 CITY-WALL – FUNCTION AND CONSTRUCTION

The city-wall comprised two distinct elements, an inner mudbrick wall and an outer stonewall (also known as a curtain wall) and was constructed within twelve years (702-690 BCE) (Figure 39). Sennacherib's royal inscriptions give a vivid description of the construction of the wall:

(11') [I laid the foundation of its great wall, Badnigalbilukurašušu, (which means) "Wall Whose Brilliance Overwhelms Enemies," upon limestone and made (it) 40 bricks thick]. I raised its superstructure [180 cou]rses of brick high.

(12') [I opened up a foundation pit for the outer wall, Badnigerimḫuluḫa, (which means) "Terrorizer of Enemies," then I dug down forty-five nindanu and made (it) reach] the water table. [I bound together strong mountain stone in the water below and above] I expertly carried out its construction [with large limestone (blocks) up to its copings] (RINAP 3 Online Corpus, Sennacherib 8, 11'-13'),

Archaeological work has shown that the numbers presented in the text are very close to reality (Scott and Macginnis 1990, 67-69; Stronach 1997, 311-312; Reade 2002b, 399-401). The standard size of the mudbrick used for the wall was 37 x 37x 12 cm, which would give a height of about 22 m without mortar (180 courses x 12 cm), and somewhere between 24 and 25 m including mortar. Stronach's early suggestion of a possible height of 30 m is probably exaggerated (Stronach 1994, 100). The 40 bricks would give a thickness of roughly 15 m, which corresponds with the available data (see for example Madhloum 1967; Madhloum and Mahdi, 1976, 55).[32]

32 For a more detailed analysis on the size and the labor required for the construction of the wall see the corresponding section in the discussion chapter 7.3.2.

Figure 38: CORONA satellite image of Nineveh (11/12/1967 http://corona.cast.uark.edu/atlas#zoom=14&center=4805080,4350270 accessed 19/02/2018).

Figure 39: Part of relief depicting the multiple walls of the city of Nineveh. Nineveh, Iraq (after Nadali 2017, Figure 32.2).

The total volume of the mudbrick walls with these measurements can be calculated at ca. 4,320,000 m^3. The outer, or curtain, wall was much lower, 4 to 6 m, and projected from the mudbrick wall at varying distances between 4 and 11 m (Reade 2000, 400). It had a stone core and a façade of carefully carved limestone block. Rectangular turrets or towers projected from the wall at roughly 15 m intervals, while crenellations topped the wall, allowing for quick movement and deployment of the army along its entire length. Parts of the curtain wall have been excavated at different places (Madhloum 1969, 54; Pickworth 2005, 302-305). While the features described seem to be consistent throughout the wall, the quality of stone carving and construction indicates variations in workmanship (Reade 2002b, 400).

A surrounding moat lay about 80 m away from the curtain wall. Several suggestions have been made regarding whether the moat was dry of filled, or which parts of the wall actually had a moat in front of them. Jones (1853, 318-323 in Reade 2002b, 400) suggests the existence of a canal system that would feed the northeastern part of the moat. However, this section is regarded as dry by Stronach (1994, 101), especially in the north because of the of the steep slope of the ground.

Moving to the southeastern part of the moat, the satellite image is not clear exactly below the Khosr river, and I hesitate to conclude on the existence of a moat there. The moat feature seems to continue, but the coloring of the soil is different, possibly suggesting that the southern part of the eastern moat would have been dry. The reasoning for leaving part of a moat dry is unclear, especially if there was consideration for an even further line of defense (Stronach 1997, 312, fig. 2). It might be the case that certain parts of the defenses were left unfinished, much like certain parts of the wall were qualitatively poorer.

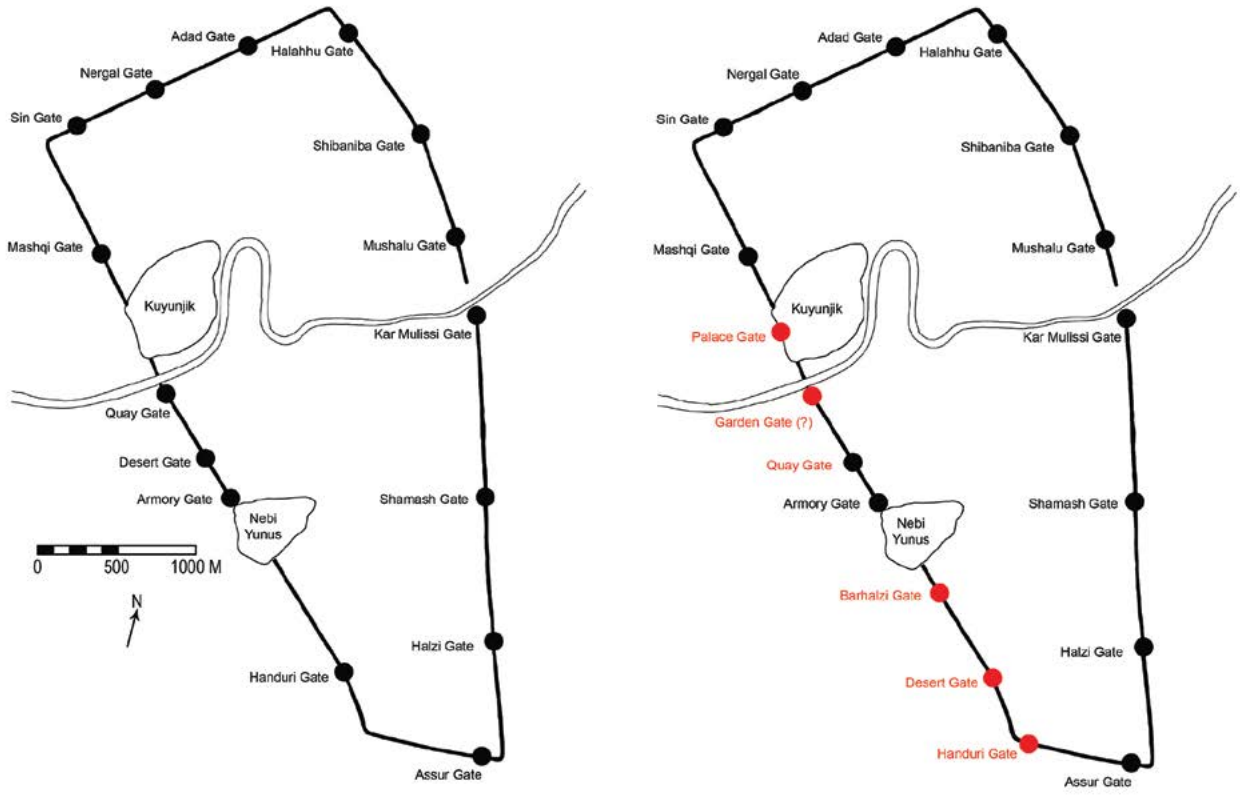

Figure 40: Plan of Nineveh with 15 and 18 gates (drawing by the author).

It is clear that the city wall was designed to impress, which contrasts with the vulnerabilities introduced by the construction of the gates. Yet, the visual effect of a roughly 25 m high wall must have been stunning. This also was probably the intention of the design, suggested by its name: "Wall Whose Brilliance Overwhelms Enemies".

6.6.2 CITY GATES – FUNCTION AND VULNERABILITIES

The number of gates of Nineveh present an extraordinary case of Assyrian urban design. When discussing Dur-Šarrukēn, the presence of numerous gates in a city was seen as problematic for defensive purposes. Major roads already existed in Nineveh, because of the central role of the city for centuries. The challenge for Sennacherib's designers was: i) how to embed the new parts of the city in the existing road system, ii) how to create gates that were functional but also secure, and iii) how to deal with the issue of the river Khosr.

The royal inscriptions of Sennacherib inform us about the existence of first 14, then 15, and eventually 18 gates (697-690 BCE) (Russel 2017, 448). Most of the gates have been located and identified with specific names mentioned in the inscriptions. These are the names I will be working with, although it must be stated that the location and attribution of each gate is not entirely secure. The 1990 review of archaeological works in Iraq mentions 15 city-wall gates: 7 of these are excavated or partially excavated, 4 are of uncertain location, and 4 are completely unknown (Scott and MacGinnis 1990, 63-67; 73, fig. 4; 1997, 312, fig. 2) (Figure 40).

Reade subsequently presented 18 gates and discussed the certainty of their identification and location and offered new propositions for their location/

identification (Figure 40) (2002, 401-403; also 390, fig. 1). That study first discusses the location of the Handuri Gate, which is mentioned in the texts as facing both south and west. The gate has not been identified archaeologically. In the plans presented by Stronach and Scott and MacGinnis mentioned above, the Handuri Gate is located on the western section of the corner. In Reade's figure, this location is occupied by the Desert Gate and the Handuri Gate is located on the southern part of the corner.

The gate identified as the Palace gate (the *Mušlālum* of the Palace, included in Reade's plan as gate 13), could be identified as a passage leading downwards from the South-West Palace and outside of the city. This passage would probably end at a gate, but no remains of one have been identified. Finally, there might have been another gate exactly south of Nebi Yunus, which appears very late in the textual evidence. This gate is associated with a governor named Barḫalzi and it was possibly left incomplete (Reade 2002b, 403). These propositions are also suggested in the recent publication by Petit and Morandi Bonacossi (2017, 126, figure 23.1).

Regardless of the exact position and identification of the gates, their number is simply unprecedented. The names associated with the gates sometimes reveal part of their function (for example the Quay gate) or importance (for example the Nergal gate). Unfortunately, the lack of archaeological data does not allow for a direct connection between the size, location, and role/importance of each gate. From the few gates that have been excavated it is evident that there is no single design, and that gates could include: a projection from the city wall, lateral chambers, multiple courtyards, defensive towers, multiple arched entrances, and different degrees of sculptural decoration.

The excavations and restorations conducted at the Nergal Gate (Layard 1853; Madhloum 1967), and Adad Gate (Madhloum 1967; 1968), as well as the excavations at the Shamash (Madhloum 1967; 1968; 1969) and Halzi Gates (Stronach 1992; Pickworth 2005) demonstrate that they could be monumental in size, reaching perhaps higher that over 25 m (i.e. higher than the mudbrick wall), and with width of more than 7 m. Unfortunately, the abrupt ending of the excavations at the Halzi Gate and the destruction of the reconstructed gates (Nergal, Adad, Mashqi) by ISIS have left us with no available plans for the gates and an immediate need for conservation works.

Embedding the new parts of the city into the existing road networks seems to have been an easily solvable problem. The gates were equally spread between the northern and southern parts of the city (7/8 in the north, 9/10 in the south) and were connected to major roads. The most prominent gates were probably located in the northern and eastern "open" parts of the city, while the gates on the bank of the Tigris were probably less monumental in size. In addition to the western Mashqi Gate, the northern gates were closer to the main citadel and were associated in textual sources with rituals and processions, and thus probably were the more elaborate gates.

In the south, the Halzi Gate and the Shamash gate lie more than a kilometer apart from each other but can be considered as main entrances to the city. Both looked towards the east, had broad facades (70 and 66 m wide respectively) protruding from the wall, and incorporated 8 and 6 turrets respectively (Pickworth 2005, 302). Access to Nebi Yunus was through the "Armory" Gate, just to the north. However, the citadel had another main gate from within the city (Scott and MacGinnis 1990, 64-66). Given that gates are usually the most vulnerable parts of a wall, in the case of Nineveh, it seems like there was no serious concern with defense: it is certainly a challenge to defend gate openings that are up to 7 m wide. This is clear from the archaeological evidence of the Halzi Gate (Pickworth 2005), which show that the gate was narrowed from its original width down to 2 m when the city was under siege.

However impressive and functional the wall must have been, the large number of gates and the indifference of the kings after Sennacherib to enhance the defenses of the city, reinforce weathered gates, or simply finish the incomplete ones shows that Assyrian elites did not expect to be besieged. I suggest that the wall of the Nineveh acted primarily as a symbol for the invulnerability of the empire, and that its defensive function was secondary.[33]

6.6.3 THE LOWER CITY

Little is known about the lower city of Nineveh. In previous sections I discussed the Lower Town Mound in the northwestern part of the city, since it probably comprised the core part of Nineveh.

33 For the multiple roles of walls, including walls as symbols of sovereignty and dominance, see Tracy 2000a; 2000b, 4.

One survey and deep trenches in the north of the city have revealed limited yet crucial information (Lumsden 1991; 2004; Stronach and Lumsden 1992, 227-229). The southern part of the city has seen only limited excavations and only a few buildings and monuments are known. Modern urbanization has resulted in a significant loss of information. Considering the long history of the city, however, there is no question that at least some parts of the city were dedicated residential areas.

An area which can be described as having 'elite residences' has been found around the inner part of the Mashqi Gate, directly to the north of Kuyunjik. This part of the city was probably quite spacious, consisting mostly of large courtyard buildings surrounded by broad roads (Stronach and Lumsden 1992, 228; Stronach 1997, 314, fig. 3a). A densely populated "artisan's quarter" was identified in the northwest of the city, near the Sin Gate (Lumsden 1991, 3). It is the only area so far that has produced a significant amount of kiln slags for pottery production (Stronach 1994, 102). The type of production carried out in that space is not clear, but it was probably a more "industrialized" part of the city (Figure 36).

From the Nergal Gate runs a wide and straight road, which has been connected to the Royal Road mentioned in the texts; it leads directly to the citadel (Stronach 1994, 101). Several worn and flat stone paving blocks were found *in situ* or ploughed out of the ground during the survey of the area (Lumsden 1991, 3).

One of the most interesting aspects of the northern part of the city is the northern part of the eastern mound (Figure 36). This area probably contained only a limited degree of residential buildings, and for the most part it seems like it was an empty space. This eastern mound approaches Kuyunjik in height, and because of its open space it would have provided a view of the entire northern part of the city, including the main gates, the main citadel and the river Khosr. On the basis of the very limited residential spaces known elsewhere at Nineveh Lumsden suggested that the area mostly contained gardens and other open spaces (Lumsden 2000). This elevated location created a very different perspective for the broader population, since in other Assyrian capitals, the elevated corner spaces were citadels. It has been argued that it was a deliberate choice to include this mound within the city wall, since it made the perception of the city "*legible, understandable and clear*" (Lumsden 2004, 192).

While this is indeed a possibility, there are some other factors that might have affected this viewing experience, namely the limited knowledge of the buildings located on the terrace. Lumsden, however, recognized the weak points of his arguments and the fact that his proposal is heavily based on phenomenology (2004, 187). If the situation in the north of the city is mirrored in the south, this suggests Nineveh had several open or empty spaces in between some tightly packed neighborhoods. This is very similar to what Ur has suggested for Kalḫu (see section 4.5.2).

6.8 WHAT – CITADELS

Nineveh included two citadel mounds, Kuyunjik, with the main palace, and Nebi Yunus, interpreted as the military palace. Those mounds both were located on the western side of the city, overlooking both the city to the east and the Tigris to the west. Kuyunjik occupied part of the northern section and was used as the main citadel for centuries, and Nebi Yunus was on the southern side of the city.

6.8.1 MAIN CITADEL

Kuyunjik underwent significant changes during the elevation of Nineveh to a capital city. The royal inscriptions of Sennacherib provide a vivid description of parts of the spatial organization of the mound before its restructuring:

The former palace, which was 360 cubits long opposite the zamû-wall of the ziggurrat, 80 cubits wide opposite the tower of the temple of the goddess Ištar, 134 cubits wide opposite the tower of the Bīt-Kidmuri, (and) 95 cubits wide (on the other side); (45) which earlier kings, my ancestors, had had constructed for their lordly dwelling, but whose construction they had carried out inexpertly (RINAP 3 Online Corpus, Sennacherib 003, 44-46)

Afterwards, I decided to increase the height of the terrace, then I added 20 courses of brick to the former (terrace) and (thus) I raised (it) to a (total) height of 180 courses of brick. (55) I made the area larger than before, added (it) to the former dimensions of the palace, and (thus) enlarged its structure. (RINAP 3 Online Corpus, Sennacherib 003, 54-55)

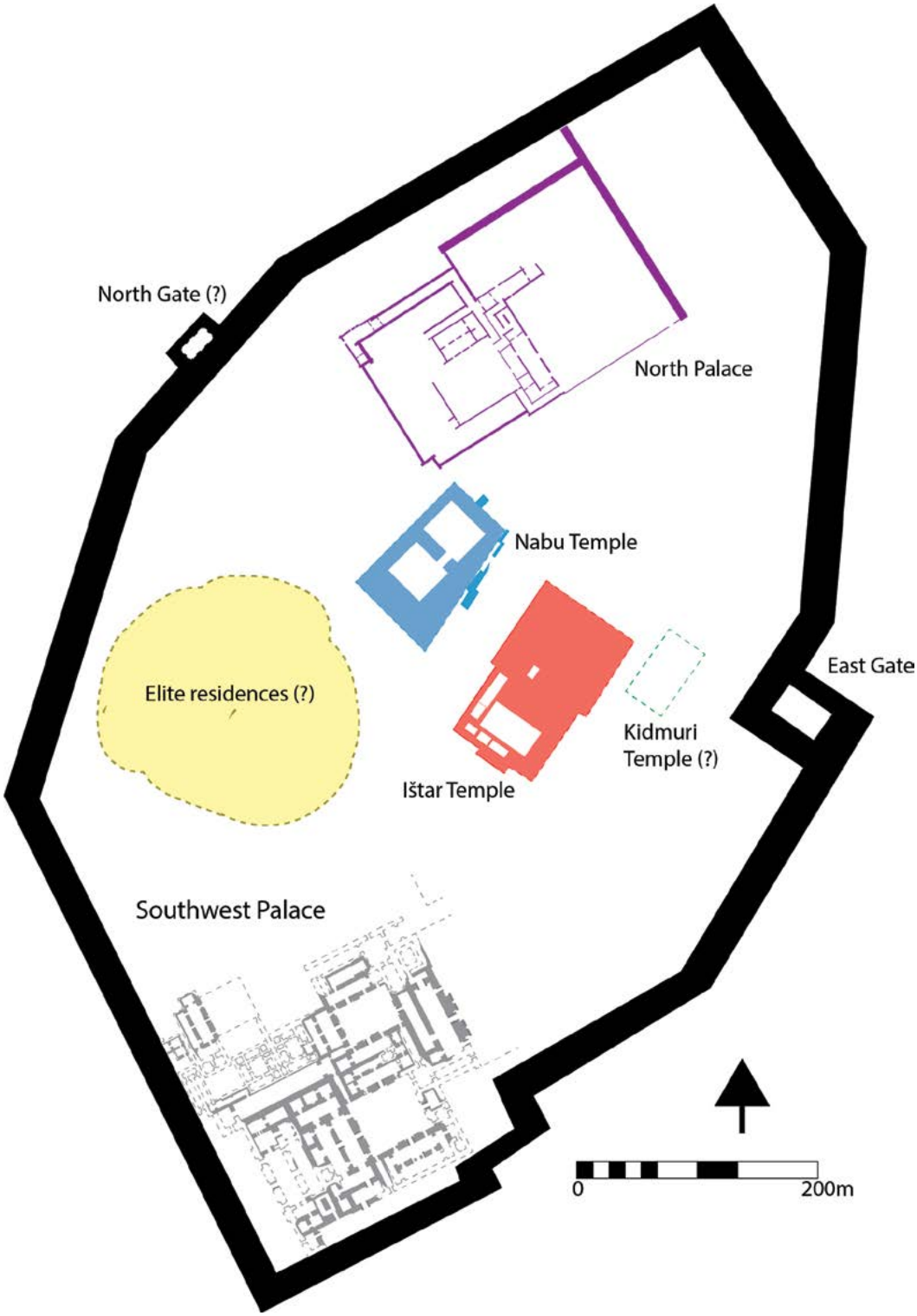

Figure 41: Sketch of Kuyunjik (after Petit and Morandi Bonacossi 2017, produced by the author).

The Kuyunjik terrace was greatly expanded during the reconstruction of Nineveh, as is apparent from the textual evidence. The rationale for this was to accommodate the much larger palace designed by the planners of the city. Sennacherib's palace (S.W. Palace) was located on the southern corner of the mound, and it overlooked the river Khosr. However, the mound itself was much more spacious, a ramp led to it from the city, and there was no need to internally level this area. This is in contrast to Dur-Šarrukēn, where the confined space did not allow for any further constructions or open spaces around the residential buildings; this positioned the palace raised above every other building within the citadel.

The citadel incorporated older and newly built temple structures, but there is archaeological evidence only for a few of these (Figure 41). The most prominent temple, and the one which has been known for the longest time, is the Ištar Temple.[34] The historical importance of the cult of Ištar has already been briefly discussed, and it is clear that the plans of Sennacherib for restructuring the mound included works on this temple.

The Ištar Temple is located at a very central place in the mound and is directly associated with the ziggurat, which was probably located southwest of temple. The archaeological levels associated with the reigns of Sennacherib and Esarhaddon, show only minor restoration works. Textual and archaeological evidence do not reveal significant changes compared to the previous periods (Reade 2005, 380). The level associated with the reign of Assurbanipal, shows the most significant amount of restoration, on the basis of textual evidence and finds bearing the name of the king (Thompson and Hutchinson 1929a; Thompson and Hamilton 1932; Strommenger 1970; Reade 2005, 381). Those works include the decoration of the temple with gold and silver, work on the outer doors of the Ziggurat, and the addition of glazed bricks decorated with military achievements at the *bit akitu*. This is an unidentified building associated with the Ištar Temple, possibly located between the Nabu and Ištar temples.

The Nabu Temple is the only other archaeologically attested temple on the citadel, as the existence of the Kidmuri Temple is conjectural (Thompson and Hutchinson 1929b). The available data for the Nabu Temple shows a roughly oblong courtyard (ca. 26 x 35 m) with a paved doorway on the northeastern side. The excavated area is too small, and the remains too poorly preserved to reconstruct this temple in greater detail. The textual evidence provides a similar pattern as with the Ištar Temple, where some small restoration projects took place under Sennacherib's reign, but the most significant restoration happened under Assurbanipal (Reade 2002b, 410).

The small-scale of the restoration works to temples during Nineveh's initial creation as a capital city shows that they were not the primary concern. More focus was paid to the city wall, urban planning, and the construction of the main palaces on the two mounds. Reade has even suggested that Sennacherib had a "*disdainful attitude to religion as a mere political tool*" (2005, 380), because foundation documents of the temples were generally unfocused, i.e. referring more to general renovation projects rather than the temples themselves. I believe there is not enough data to support this idea. The temples at Nineveh were continuously maintained throughout the history of the Assyrian empire (see section 2.1.2). It is possible that much more work was needed for the walls and palaces of the city, and that there was no need to spend resources on buildings that were in a relatively good architectural state.

While no residential houses have been excavated on the citadel of Kuyunjik, their existence is known through textual evidence. A text dating to 614 BCE mentions four houses near the Kura Temple (Reade 2002b, 418). It can be assumed that during the transformation of the city into a capital, the space of the citadel was expropriated in order to construct the new palatial buildings. However, there was plenty of space in the western part of the mound to accommodate several private residences. The same goes for the empty space on the east side, above the east gate. In that regard, the citadel again resembles the dedicated space for several private residences at Kalḫu, than the minimal number of residential buildings at Dur-Šarrukēn

The construction of the main palace was a much more thorough and monumental project, because of the complete reconstruction of the main palace (Figure 42). A recent study has thoroughly re-evaluated the archaeological evidence of the S.W. Palace, or "Palace Without Rival", of Sennacherib (Russell 1991; 1999, 124-143; Reade 2002b, 411-416; Kertai 2015, 120-147). It is located in the southwestern part of Kuyunjik, possibly on top of the previous palace, and it was one of the first buildings constructed at the

34 For a comprehensive history of the excavations and the various phases of the temple, see Reade 2005.

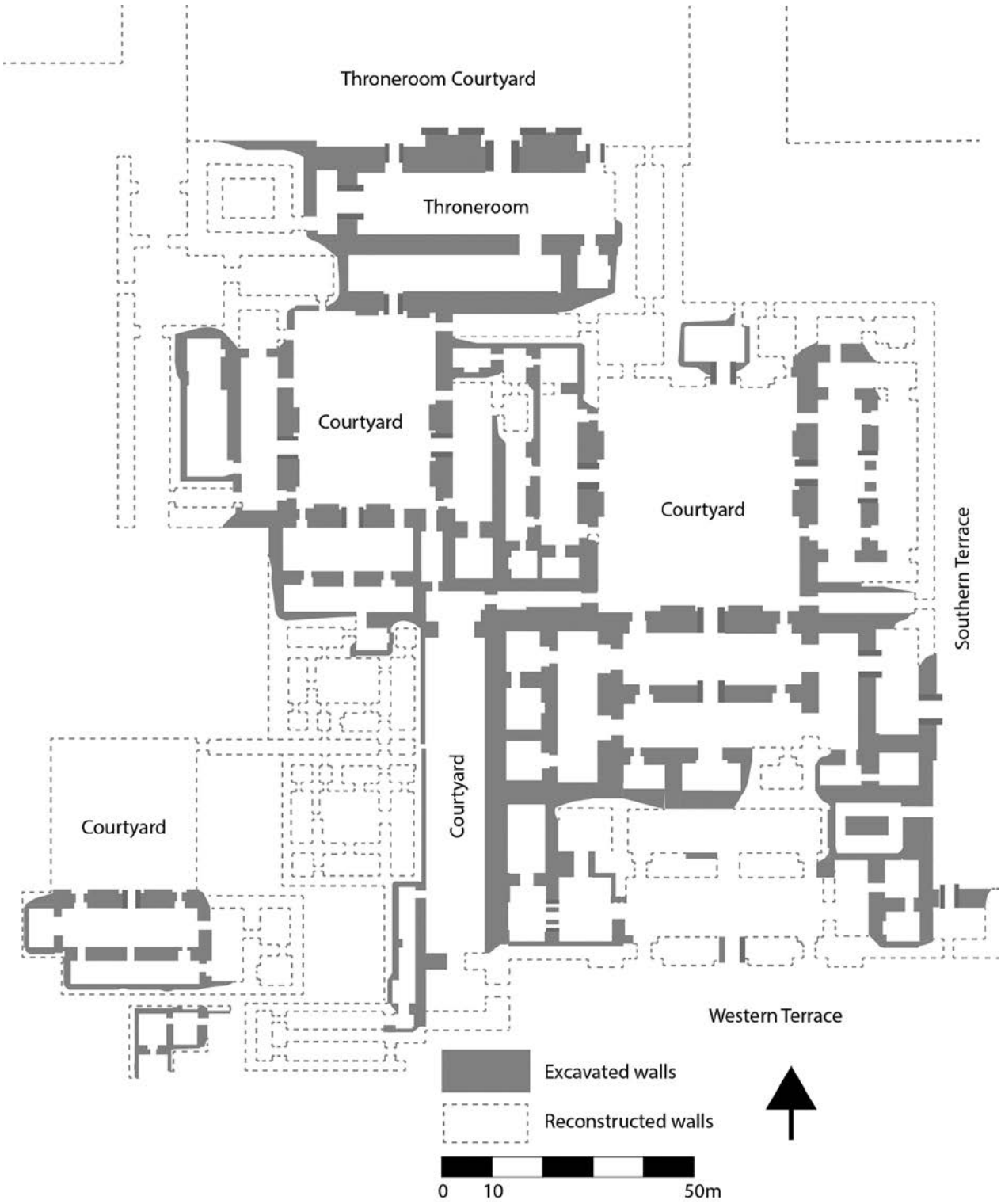

Figure 42: The "Palace Without Rival" (after Kertai 2015, produced by the author).

new capital. For the construction of Sennacherib's palace, the previous building was completely demolished. Perhaps Sennacherib's palace followed a similar orientation to its ancestor. On the basis of textual evidence, the palace's construction can be separated into four phases from 703 to 691 BCE, when the palace was most likely completed (Reade 2002, 411-412).

The palace itself was the largest the empire had seen, measuring some 503 by 242 m, and containing more than 80 rooms. Moving away from the more rigid construction of Sargon's palace, organized in a system of quadrants, the S.W. palace was more linear, organized in interlocking zones radiating from the throneroom courtyard (Kertai 2015, 122). Furthermore, in contrast to its predecessor, the S.W. palace incorporated more internal courtyards, and allowed for the creation of more closely connected by clearly separated zones. Another significant difference is the absence of the characteristic Double-Sided Reception Suite at the far end of the palace, which was present in both main and secondary citadel palaces of Dur-Šarrukēn. To accommodate for a large open space, it is possible that the protruding terrace of Sargon's palace was replaced by the open southern terrace at the S.W. palace (Kertai 2015, 141).

Besides the architectural and organizational differences between Sargon's and Sennacherib's palaces, significant differentiation is also observed in their decorative themes. While Sargon's decorative program focused on military themes in specific rooms together with a wider range of themes, military images almost exclusively decorate the "Palace Without Rival" (Russell 1991, 152-174). In addition, Sennacherib's palace reliefs have several innovative elements both in terms of subject matter (e.g. new apotropaic motifs and figures) as well as composition (e.g., the omission of hunting scenes) (Russell 1991, 179-187). The military reliefs, though innovative in terms of composition (Russell 1991, 191-222), must have been quite hard to decipher due to their complexity and the lack of textual references.

The palace remained largely unchanged until the fall of Nineveh, when it was burned down. Even though some of the wall reliefs were changed, most of the following kings left Sennacherib's decorations intact (Kertai 2015, 146). Most of the later changes happened during the reign of Assurbanipal, who also added his famous library that was located partly in the S.W Palace and partly in the new North Palace (Fincke 2017). It also seems that despite the construction of a new residential palace for the king, the S.W. Palace did not lose its administrative status. Assurbanipal's reign was one of increased building projects. Besides the additions and repairs to the S.W. Palace, he initiated the construction of a new residential palace on the main citadel, the North Palace. The reasons for the building of a new palace remain unclear. According to textual evidence, the king claims to have reconstructed an older building located there, namely the *bit ridúti* (Reade 2002b, 416-417). The North Palace is only partially excavated, and although its complete dimensions are unknown, it was definitely smaller than the S.W. Palace. The most well documented area of the palace is its throneroom suite, which still follows the Late Assyrian plan of a long rectangular room with gates (Kertai 2015, 174).

The role and purpose of this new palace is unclear. Hunting scenes dominate the sculpted reliefs in the corridors, however, the iconographic evidence does not allow for much interpretation of their purpose. The fact that the palace begun late in the king's reign (646 BCE) and was completed within a short time period (643 BCE possibly) has led some scholars to interpret its construction as a triumphant project for the victories over Babylon and Susa (Reade 2002b, 417). In addition, during Assurbanipal's reign, considerable work took place on the wall reliefs and inscriptions of the S.W. Palace indicating that there was interest in preserving its role as a main palace (Russell 1999, 154-209).

The main citadel mound significantly differed from the one in Dur-Šarrukēn. The citadel included more temples, had open spaces allowing for future reconfigurations, and it could accommodate a much larger palace. While Sennacherib and his court respected the religious and historical importance of Nineveh, the project nonetheless involved heavily remodeling of the city.

6.8.2 NEBI YUNUS

The mound of Nebi Yunus is located in the south of the city, 1 km from Kuyunjik (Figure 36). Archaeological work on the tell has been very limited (Scott and MacGinnis 1990, 64-67, fig. 1; 71), and the palace located here is only known from textual evidence. According to Sennacherib's inscriptions a palace (*É.GAL ku-tal-li*) already existed at that location for "*the proper running of the military camp, the care of horses, (and) the overseeing of everything*" (RINAP

3 Online Corpus, Sennacherib 022, vi 31-34). The description of this palace is very short and does not designate any specific king as its creator.

Earlier in this chapter I discussed whether Nebi Yunus was part of the city in earlier times. It seems that Nebi Yunus was outside of Nineveh before its transformation into a capital. However, that does not mean that an earlier palace could not have existed there. As mentioned, there was probably a building dedicated to the administration of the military in Nineveh. It is possible that Sennacherib's inscriptions do not give an adequate description of the role of the previous building. This older building could have acted as the central building around which the Assyrian military gathered in order to start a new campaign.

It is worth noting that the in Nebi Yunus inscription (RINAP 3 Online Corpus, Sennacherib 034), which gives a longer description of the previous *bit/ekal kutali*, the scribe mentions that a terrace did not exist for the older building and that its outer courtyard was too small to fit the large number of horses. It also mentions that the site of the previous palace was abandoned. It is be possible therefore, that the previous *bit kutali* of Nineveh existed at another location altogether.

Whatever the case, Sennacherib's planners decided to expand the mound significantly to accommodate a palace of a similar size to the other secondary citadels in Kalḫu and Dur-Šarrukēn. Construction at Nebi Yunus started after the main palace was completed and decorated (RINAP 3 Online Corpus, Sennacherib 22, vi 30). The main building/palace of the secondary citadel is described as having two distinct sections, one that was a replica of a Hittite palace and built of stone and timber, and another one that was characteristically Assyrian (Reade 2002b, 419). The king says his royal residence was in the latter. According to Turner, a close reading of the text actually indicates two different suites of one building rather than two different palaces (Turner 1970, 73). The description of the decoration in the residential quarters gives the impression of a palace that was equally monumental to the S.W. Palace.

We also read about at least two courtyards: an outer courtyard with similar functions to the one in the old palace, and another courtyard below the Hittite-style wing. Finally, the text mentions the large quantities of treasures stored in the military palace/*ekal māsarti*, although it is unclear if this refers the entire building or a specific section/wing. It should be noted that among all the available Sennacherib inscriptions (RINAP 3 Online Corpus), the Nebi Yunus inscription is the only one that refers to the palatial complex as *ekal māsarti*, which indeed might beg the question on whether it describes the entire complex. The only other mentions of the *ekal māsarti* refer to the accompanying gate mentioned above.

6.9 WHAT – WATERS OF NINEVEH

The last, but certainly not least, aspect of Nineveh's creation I would like to discuss is its water systems. In contrast to Dur-Šarrukēn, the elevation of Nineveh into a capital included heavy remodeling of the surrounding hinterland and heavy intensification of its agricultural production. This resulted in a long and complex system of irrigation canals of unprecedented size, as well as many and impressive gardens within the new capital (Morandi Bonacossi 2018).

The creation of these canal systems is documented in several sources. including royal inscriptions and commemorative reliefs located along these canals (Oates 1968, 49-52; Reade 1978, 61-72 and 157-170; Bagg 2000b, 169-224). The combined distance covered by those canals has been estimated between 150 to 240 km; they were constructed over the span of fifteen years, from 702 to 688 BCE (Bagg 2000a, 316; Morandi Bonacossi 2018a).

Recent archaeological research has revealed significant information about this canal system. Ur's investigation using satellite imagery has provided significant data for the identification of canals around the city, revealing the existence of extensive canal systems and the effective and intensive agricultural planning implemented for the new capital (Ur 2005).

More recently, the Land of Nineveh Archaeological Project (LONAP), conducted by Daniele Morandi Bonacossi, yielded significant results through their identification of settlements and major and minor canal systems in Nineveh's surrounding landscape (Morandi Bonacossi 2016; 2017b; 2018a; 2018b; Morandi Bonacossi and Iamoni 2015).

The results of the LONAP survey demonstrated a widespread occupation of small sites in the region to the north of Nineveh, similar to that observed in the Jazira region (Wilkinson *et al.* 2005). The Neo Assyrian period shows a large spike in regional

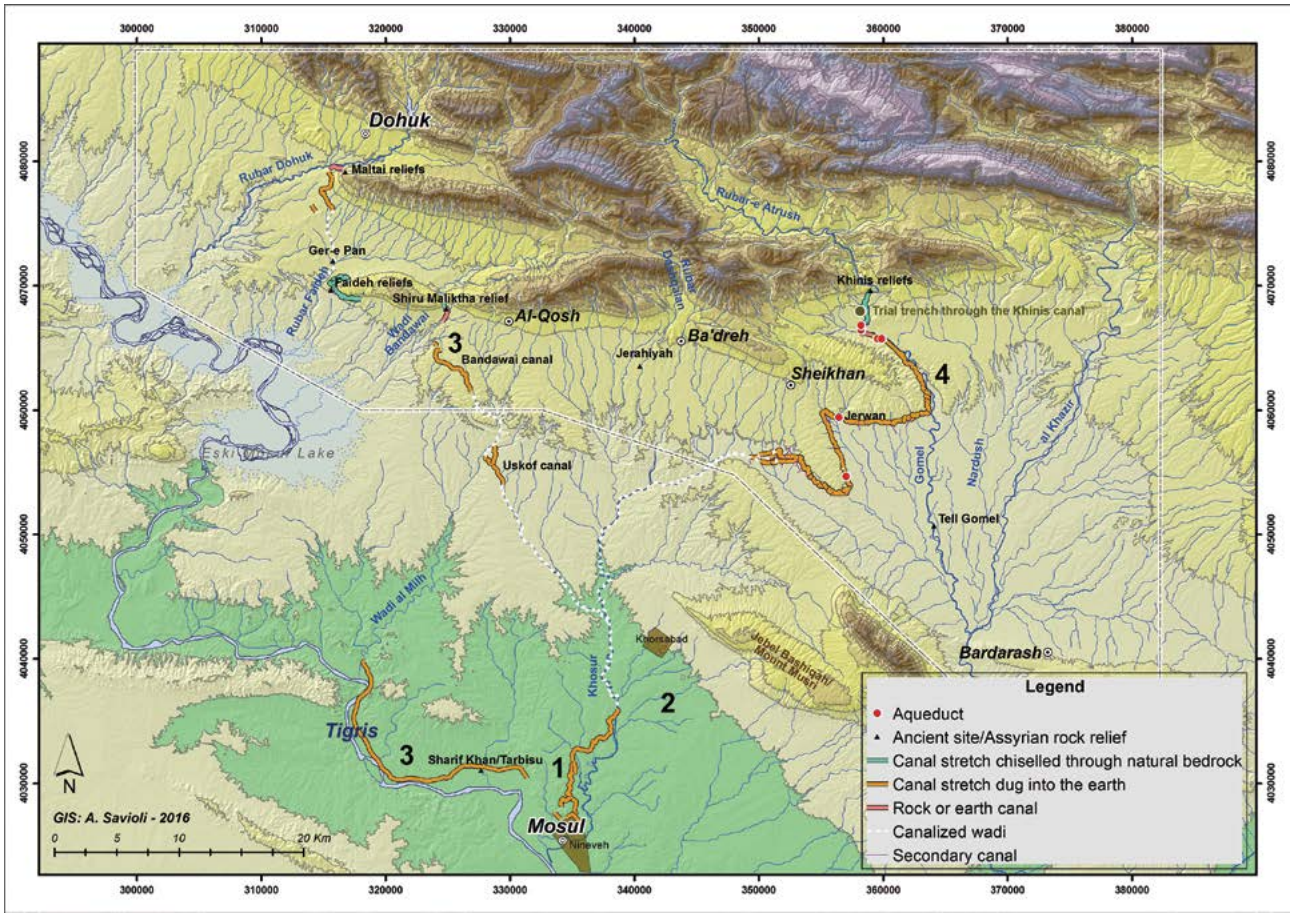

Figure 43: The large canals leading to Nineveh (Land of Nineveh Archaeological Project, University of Udine, published with permission).

occupation with roughly 271 Neo-Assyrian sites and a total settled area of 610 ha (Morandi Bonacossi 2018b, Fig. 8). The most significant aspect of this peak is that, instead of replacing an existing settlement system, it represents an intensification of existing agriculture and a large expansion of irrigation systems during the first millennium. The occupation of the area shows a scattered distribution of small agricultural sites averaging at about 2.25 ha (Wilkinson *et al.* 2005; Morandi Bonacossi 2016, 145; Morandi Bonacossi 2018b, 88).

Sennacherib's irrigation program involved the large-scale restructuring of the landscape and was executed in four stages, together with the construction of the new capital. The first stage saw work at the Kisiri canal, which diverted water from the Khosr river ca. 15-16 km north of Nineveh (phases 1 and 2 in Reade 2002b, 404-405; stage 1 in Morandi Bonacossi 2017a). During the second stage, streams from Mount Musri were directed to the Khosr river. It is possible that this project already started during the construction of Dur-Šarrukēn but remained unfinished (Reade 2002b, 407).

The Bavian inscription (RINAP 3 Online Corpus, Sennacherib 223) informs us about the third stage of the program, also known as the Northern System (Figure 43). Originally it was thought that five different canals stage (Maltai, Faideh, Bandawai, Tarbisu, and Uskof) comprised this (Oates 1968; Reade 1978). Morandi Bonacossi however, showed that it is possible to reconstruct this phase differently, or even that such stage never existed (2017b; 2018b, 94-98). Based on the findings of the LONAP survey and reinterpretation of the

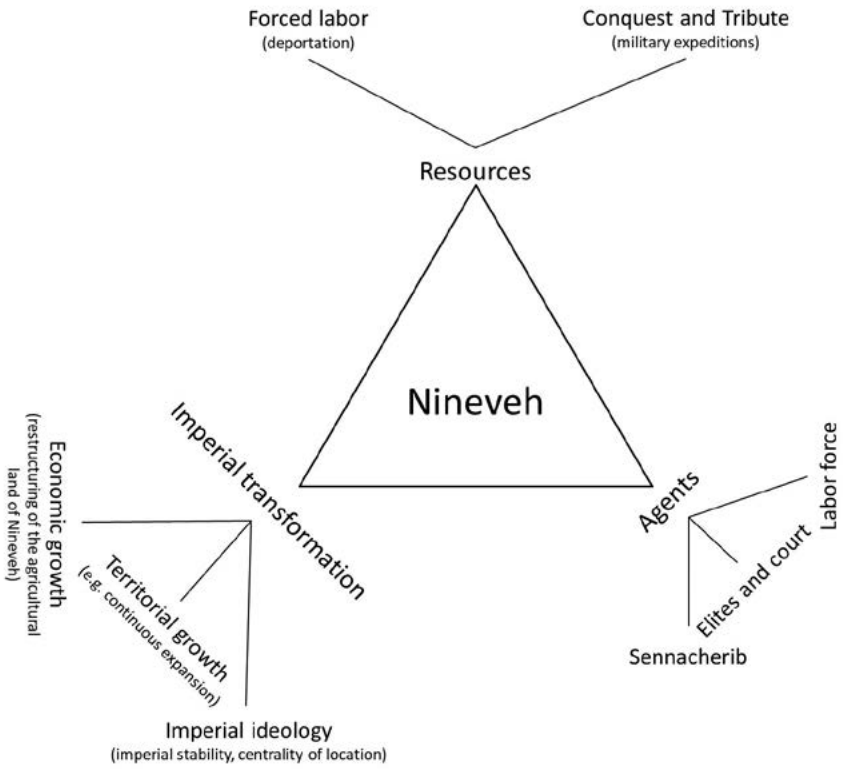

Figure 44: Model for the creation of Nineveh, produced by the author.

Maltai, Faideh and Shiru Maliktha reliefs, these three canals of the assumed Northern System could have been constructed earlier, during the reign of Sargon. This is particularly interesting as Sargon's royal inscriptions do not mention anything about irrigation works. While evidence remains inconclusive, it could be suggested that a plan to restructure the landscape was in place already for Dur-Šarrukēn, and that it was modified to redirect the waters towards Nineveh. The Bandawai and Uskof canals can be securely dated to the reign of Sennacherib.

Finally, the Khinis System, also known as "Sennacherib's Canal", brought water from the Gomel river into a tributary of the Khosr river. This massive restructuring of the land was also followed by its systematic imperial appropriation through the construction of a series of commemorative monuments (Ornan 2007; Winter 2010; Harmanşah 2013, 93-99). While commemorative or construction monuments can be found in other canal systems, the case of the Khinis System is unprecedented. As Morandi Bonaccosi puts it, we have a "g*randiose, extremely sophisticated and self-congratulatory programme*" (2018a, 68).

The imperial narrative presented in these commemorative monuments and the royal inscriptions in relation to the large-scale irrigation programs is indeed heavily focused on the king, even more so than the construction of the city. Its effects, however, were empire-wide. The realization of such a project required the work and investment of several imperial and local officials, the management of deportees, and the exploitation of resources (Morandi Bonacossi, 2018a). The new, massive irrigation system did not only provide sustainable amounts of food sources for the new capital (Morandi Bonacossi 2018b, 107), but also shaped the imperial landscape as a whole, consolidating the impact of the relocation of the capital.

6.10 WHAT – CONCLUSIONS

I have argued that assessing Nineveh as an "expected outcome" of capital creation in Assyria is misleading. There is no evidence to suggest that Nineveh was ever considered as a previous candidate for the capital. In addition, the significant changes in Nineveh show that the city itself required extensive transformation to become capital of Assyria. Furthermore, the argument that Sennacherib took the decision to relocate the capital because of Sargon's unfortunate death seems to be inadequate. The *damnatio memoriae* of Sargon was a response only to his death in battle, and not to his capital (Liverani 2017, 176). Assyria had already invested heavily in the construction of Dur-Šarrukēn and repeating such a project required sound political objectives which the Assyrian officials would be ready to accept.

This reasoning, however, is not reflected in the royal or building inscriptions, which proclaim the same regal-centric narrative expected from any large-scale Assyrian project which involved the king and his court. In addition, the same inscriptions contain no convincing argument for the rationale behind choosing Nineveh as the new capital.

Giving an answer as to why Nineveh was turned into a capital is not possible based on current evidence. It is possible to speculate political motives, and assess the advantages of Nineveh over Dur-Šarrukēn, but we cannot have a conclusive argument as to why Nineveh was chosen.

Nevertheless, I argue that we should assess Nineveh within the historical context of growth and expansion that also led to the creation of Dur-Šarrukēn. In that regard, we should consider the two capitals as product of the same historical processes. While Nineveh was not a new foundation, the unclear reasons behind its elevation to a capital as well as its extensive transformation demonstrate that this was not simply an inevitable outcome. Rather, this was a well-consolidated and well-executed plan, which aimed to affect the entire imperial system and not only to bolster the image of Sennacherib. As such, Nineveh also fits the model used in this study, which combines resources, agents, and imperial transformation (Figure 44).

Chapter 7: Creating Capitals – Comparative Analysis and Conclusions

7.1 INTRODUCTION

In the previous chapters I analyzed the creation of Assyrian capitals using historical, textual, and archaeological datasets. Each case study presented its own difficulties and particularities, which require a contextual investigation. A comparative study is needed, however, in order to understand and explain the wider phenomenon of capital creation. The comparison will correspond to the three main questions put forward at the beginning of this study: the why, how, and what of capital creation.

These three questions allow me to explore: the past of each capital, the historical conditions that led to capital creation, the actual construction of a capital, and the function and use of each capital. Some aspects are related to more than one of these questions and repetition might, therefore, occur. For example, the geographical location of a city, can be related to the why, e.g. using a more favorable location as an imperial center, to the construction process, e.g. access to key building resources, but might also influence the function of the city.

7.2 WHY – THE REASONS BEHIND CAPITAL CREATION IN ASSYRIA

7.2.1 EXPLORING ASPECTS OF CAPITAL CREATION

Assyrian capital creation always happens in periods of protracted transformation and expansion. This can be observed if we put the relative size of the Assyrian empire in a graph (Figure 45). Through investigating royal inscriptions (Grayson 1987; 1991; 1992) it is possible to identify and estimate periods of expansion and recession. This graph is informed by the comparative study of maps, textual evidence, and historical studies on Assyria (Taagepera 1978; Liverani 1988; 2017; Roaf 1990). Kār-Tukultī-Ninurta was constructed after roughly a century of major expansions that occurred during the reigns of three kings: Adad-nirari I (ca. 1295-1264 BCE), Shalmaneser I (ca. 1263-1234 BCE), and Tukultī-Ninurta I (ca. 1233-1197 BCE). This was followed by the decline of the Middle Assyrian empire during the so-called dark ages, with a brief territorial expansion during the rule of Tiglath-Pileser I (1114-1076 BCE) acting as a brief exception. Kalḫu, similarly, was constructed after roughly 50 years of *reconquista* with four consecutive kings carrying out the major territorial expansion of Assyria (Aššur-dan II, 934-912 BCE; Adad-nirari II, 911-891 BCE; Tukultī-Ninurta II, 890-884 BCE; and Aššurnaṣirpal II, 883-859 BCE). The reign of Shalmaneser III (858-824 BCE) saw even more building projects in the city, which can be considered a continuation of the original plan. The creation of Kalḫu was followed by another period of decline in the size of the empire and internal conflicts.

Finally, Dur-Šarrukēn and Nineveh were both constructed after the Assyrian empire entered another phase of territorial expansion (Tiglath-Pileser III, 744-727 BCE; Shalmaneser V, 782-773 BCE; and Sargon II, 721-705 BCE). During the reign of Tiglath-Pileser III, extensive transformations in the administrative system took place, with a special focus on the structure of the provinces (see section 5.2 and 5.3). The period following the elevation of Nineveh to a capital was one of large growth (due to the incorporation of Egypt), but soon after the Assyrian empire witnessed a final phase of decline until its fall in 612 BCE. As can be seen from the long history of imperial expansions and contractions in Assyria, capitals were always constructed after periods of sustained growth that spanned several kings. I suggest that this trend of constructing capitals after periods of continuous and, more importantly, steady and consolidated, growth is not

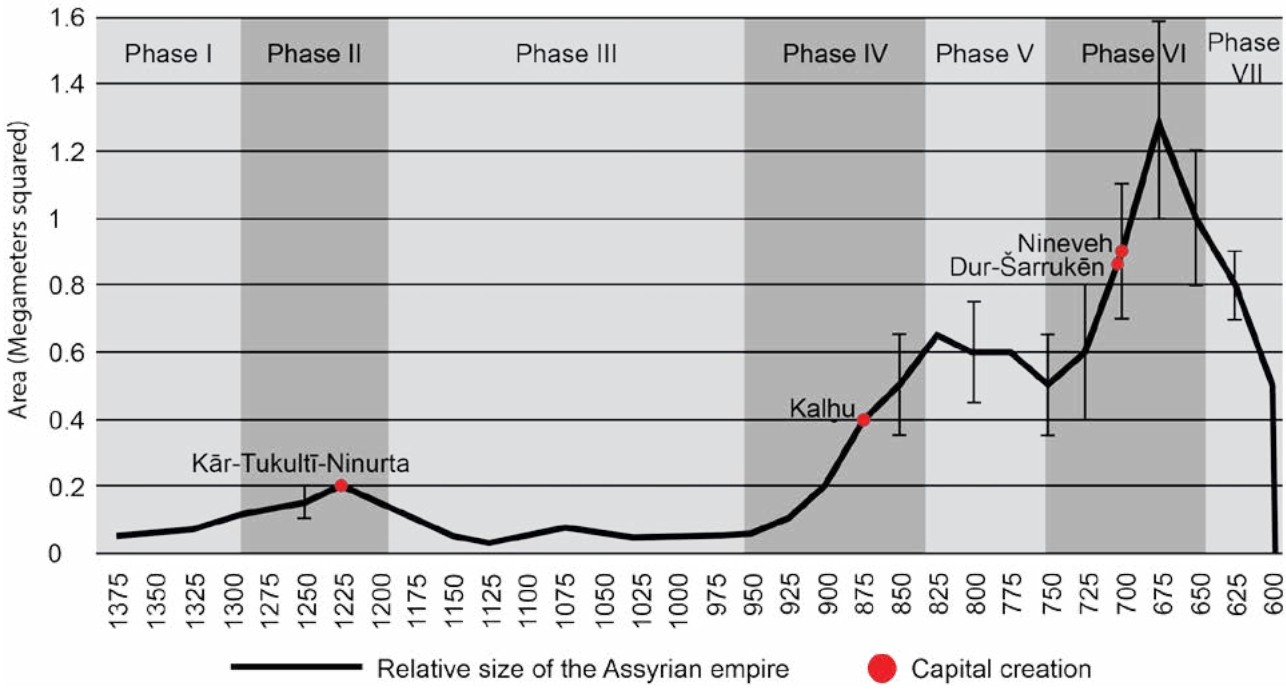

Figure 45: Estimated size of the Assyrian Empire from 1375 to 615 BCE with indications of every instance of capital creation (vertical axis in Mm^2). Data are based on Taagepera 1978; Liverani 1988; 2001; 2017; Roaf 1990; Frahm 2017a; 2017b; 2017c with adjustments and added error margins, produced by the author. For the phases see Table 2 section 2.1.1.

coincidental. From investigating each individual case separately, but also by comparing them, there is a clear correlation between significant changes in the nature of the empire (i.e. from state to empire, or a new level of territorial growth) and capital creation. The question that follows then is: why facilitate such changes with a new capital? What does a new capital have to offer to be considered necessary?

7.2.2 GEOGRAPHICAL LOCATION

One of the first things that comes to mind when relocating a capital is whether the new location is more beneficial in terms of its geographical location than the previous one. In addition, is the location of the new capital related to the shift of the territorial center of the empire?

It is interesting to note here that no Assyrian king ever stated a reason for abandoning the previous capital. The narrative presented in royal inscriptions for the building of new capitals always focused on the potential, of the new location for the capital. It is often mentioned that the new location was laying in ruins, had gone to waste, or had unrealized potential. There is no clear statement of any inadequacies of the previous location or positive advantages of the new location. Therefore, any discussion regarding the advantages of one location over another should be done with caution in order to avoid reasons based on our current, *post hoc*, knowledge.

In terms of the distance between them, the Assyrian capitals never 'travelled' very far (Table 5). The most significant change happened in the Neo Assyrian period and consisted of the move from Aššur to Kalḫu. In fact, all of the capitals were located within the general region of the so-called Land of Aššur (Figure 4; Postgate 1992), the region perceived by the Assyrians as their core area. The southern capitals (Aššur and Kār-Tukultī-Ninurta) are located outside the zone of rainfed agricultural, while the northern

Capital city	Approximate size	Approximate distance from the previous capital
Aššur	62 ha	-
Kār-Tukultī-Ninurta	240-500 ha	3-4 km N of Aššur
Kalḫu	360 ha	70 km N of Aššur
Dur-Šarrukēn	300 ha	45 km N of Kalḫu
Nineveh	750 ha	18 km S of Dur-Šarrukēn

Table 5: Size of Assyrian capitals and distance between them.

capitals (Kalḫu, Dur-Šarrukēn and Nineveh) are located within. Regardless, extensive irrigation programs were executed for every capital. Most of the newly created capitals were located on the east bank of Tigris; only Aššur was located on the west bank of the Tigris. Dur-Šarrukēn was located close, if not next to, the east bank of river Khosr, a tributary of the Tigris.

Even if the capitals moved, especially in the Neo Assyrian period, it is not possible to consider the relocation of the capital as a change away from imperial heartland. Looking closer, it is possible to argue for a shifting focus within, however, the confines of the Assyrian core from the Middle to the Neo Assyrian period.

In the case of Kār-Tukultī-Ninurta, there is no real distancing from the previous capital. The new city was constructed so close to Aššur that it has been argued that it could simply be seen as an extension (Gilibert 2008). In chapter 3 I argued that despite this proximity, Kār-Tukultī-Ninurta was an instance of capital creation. The large number of new administrative buildings in Kār-Tukultī-Ninurta clearly indicate the creation of a new administrative center of Assyria.

Moving from Aššur to Kalḫu it is possible to argue that a shift of territorial focus from the south to the north was one of the driving factors for the choice of the new capital. At this time, the northern part of the land of Aššur had developed into the most important region of the empire. Most military expeditions already started from the north, and more specifically, from Nineveh. Kalḫu was also closer to areas important for the acquisition of resources, as well as in a more strategic location for military expeditions to the west (Parker 2001).

Kalḫu is located on the Tigris, and as such it was well connected with other cities and it could easily be embedded in existing trade networks (Radner 2011). It is also possible to create extensive irrigation systems to exploit and intensify the production of the surrounding landscape (Ur and Reade 2015). These features are, to some degree, shared with every other Assyrian capital. Each capital is located on a river (specifically on the Tigris or Khosr), with extensive surrounding hinterland, at a central location of the empire, and with natural defenses (Table 6). It is not possible to point out any particular location-related advantages of one place over another. Only in the case of Dur-Šarrukēn can it be argued that its location was somewhat *less* favorable (chapter 5). Nevertheless, it still had access to the Tigris through the Khosr river, it could exploit part of the agricultural production of the Nineveh province, and the mountains to the north and east created a natural defense.

Comparing all of the capitals, none of them seem to have had a decisive geographical advantage. This is in contrast to what was discussed in the introduction (1.3), for post-colonial capitals, where the shift of location often signified a shift in the focus of these states: from capitals located close to colonial trade routes to inland locations, more favorable for the administration of the new nation states.

In Assyria the geographical advantages of a new location, or the disadvantages of the old one, did not provide a sufficient reason for moving the capital. The only capital with some clear benefits in terms of its location was Nineveh, because it was already centrally located and connected to major trade routes. Therefore, in exploring why Assyria moved its capital to different locations, the physical location of the new or previous capital was not a main driving factor but only a supplementary one.

7.2.3 HISTORICAL IMPORTANCE OF LOCATION

Another aspect related to the new location of the capital is whether there was any previous historical or ideological significance at the site. In terms of Assyrian cities, Aššur was, and remained for

Capital city	On the Tigris	Extensive available surrounding hinterland	Natural defenses	Possible citadel mounds
Kār-Tukultī-Ninurta	Yes	Yes	Limited	1
Kalḫu	Yes	Yes	Yes	2
Dur-Šarrukēn	No	Limited	Yes	2
Nineveh	Yes	Yes	Limited	2

Table 6: Geographical characteristics of Assyrian capitals.

the entire life of the empire, the most important historical, cultural and ideological center (Cancik-Kirschbaum 2011, 74; Pedde 2012, 853-855; Maul 2017, 337). The identity and ideology of Assyria was tied to its historic capital and no king or capital city ever challenged that fact. Reconstructions and repairs continued to take place for its most important buildings, the coronation of kings took place in the city, and several Neo Assyrian kings were buried there (Miglus 1989; Pedde and Lundström 2008, 28-30; Parker 2011).

In discussing the historical importance and the past of a city/location, it is necessary to clarify and define what can be defined as a 'new location' for Assyria. In the introduction I defined capital creation as the process of constructing capital cities at a new location (*ex novo*) or through transforming a pre-existing settlement. As a new location, I define a location where there was no settlement before, or that the settlement was not significant enough to influence the construction and urban design of the new capital.

Kār-Tukultī-Ninurta was constructed at a location where little prior occupation is attested. It is unlikely that there were absolutely no settlements or villages in the area (see also Mühl 2015), based on its proximity to the river and its agricultural potential. The extent of landscape reconfiguration and urban construction was such that it probably erased any traces of previous occupation.

In the case of Kalḫu, both archaeological and textual evidence exist that there was a Middle Assyrian settlement located in the area. However, the existence of this settlement (or settlements) again did not significantly impact on the general plan of the new capital. The construction of this capital redeveloped the entire landscape to accommodate its needs.

Dur-Šarrukēn is the clearest example of a completely new location, with only a small village mentioned as a pre-existing settlement in the area. The lack of archaeological surveys and test trenches inside the city does not allow for any further assessment on the history of the site.

Nineveh was the only capital whose plan was largely defined by the pre-existing city and the surrounding landscape. The notion, however, that Nineveh was 'destined' to become the capital of Assyria is very deterministic and without any real basis (see section 6.1).

Returning to the issue of the historical importance of the location of the new capital, it seems like, with the exception of Nineveh, this was not a concern. On the contrary, the creation of a new capital was always associated with the extensive development or re-development of an area. The narrative of the royal inscriptions always highlights the 'new'. Even the narrative for Nineveh revolves around Sennacherib's foresight to understand the unrealized future potential of the city and make it the capital of the empire.

Regarding Nineveh, there is another fact that highlights that historical importance was not of utmost significance. The Temple of Ištar at Nineveh was always of central importance for the kings of Assyria, yet its reconstructions were not particularly extensive (Reade 2005, 280). When compared with other restoration works done in previous centuries to the temple (see Russell 2017, 435-446), there is no significant difference between previous works and work during the reign of Sennacherib.

Capital city	Pre-existing settlement	First settlement at the area	Previous use of the area	Extent of transformation of the area
Kār-Tukultī-Ninurta	No	Middle Assyrian	Possibly agriculture	New foundation
Kalḫu	Yes	Early Bronze Age	City or provincial capital	Complete transformation
Dur-Šarrukēn	No	Neo Assyrian	-	New foundation
Nineveh	Yes	Early Bronze Age	Regional center	Extensive transformation

Table 7: Historical aspects of the locations of Assyrian capitals.

The common denominator here is the aspect of the new but, still with an acknowledgement of the past (Table 7). In the absence of other evidence regarding the choice of location for the construction of a new capital, the royal inscriptions are the only written evidence that give us details on the historical significance of the new location. Considering that such texts look for any opportunity to praise a king and his actions, if historical importance was a determining factor, one would expect it to be mentioned. Therefore, the potential of the new capitals to be configured anew seems to have been central.

7.2.4 "DISEMBEDDEDNESS", THE UNDERMINING OF ELITES, AND CAPITALS AS MONUMENTS

The most common argument for the creation of new capitals is that a king is trying to distance himself from existing elites and power centers of the established capitals and, thus, to create a new center where only the loyal elites can follow. A version of this concept is that of "disembedded capitals", in which urban sites are founded *de novo*, in order to supplant existing patterns of authority and administration (Joffe 1998, 549; chapter 1.3.1).

Radner, likewise, argued that the creation of Kalḫu was a way for the Assyrian king to undermine the power of the northern cities such as Nineveh and Arbela and create a new mega-center loyal and controlled by the king (Radner 2011, 324). She describes the creation of Kalḫu as an intentional strategy to strengthen the position of the king at the expense of the old urban elites (2016, 44).

However, none of the surrounding centers lost its status or significance. If anything, both Arbela and Nineveh continued to grow during the centuries that followed (see for example Stronach 1994, 97-8; Frahm 2017, 164-70). Radner also suggested that the construction of Kalḫu allowed the king to create new structures of authority and effectively change the power structures of Assyria to develop a more favorable condition for himself. While it is true that the creation of Kalḫu was accompanied with changes in the administration, there are no indications that Aššurnaṣirpal's claim to the throne was ever contested, especially not to the extent that would force him to create a new center.

On the contrary, there is clear continuity from the rule of the previous kings (Adad-nirari II and Tukultī-Ninurta II) to the reign of Aššurnaṣirpal (see for example Oates and Oates 2001, 15-16; Bagg 2011, 192-194; Fales 2011; Frahm 2017b, 169-170). The creation of Kalḫu seems to consolidate, rather than break away from the changes that were happening in Assyria throughout the first expansion phase of the Neo Assyrian period (934-824 BCE).

One of the major aspects of disembedded capitals as proposed by Joffe is the idea that the created capitals are part of material innovations which aim to undercut competing factions. These include "*sudden shifts in the evidence for political legitimation, such as new iconographic techniques, a new symbolic vocabulary, or the distinctive combination of new and old elements*" (Joffe, 551). This proposed discontinuity is not attested in any of the new capitals of Assyria. Every new capital does see new elements in its palatial architecture (e.g. developments at Dur-Šarrukēn in Kertai 2015, 83-120), the iconography of palatial

buildings (e.g. the iconography of Sennacherib's palace in Russell 1991, 152-187), and the vocabulary of royal inscriptions (e.g. Liverani 2017, 165-178 on the developments of royal inscriptions related to capital creation). Yet, these never go so far as to explicitly focus on undermining previously ruling factions. On the contrary, if one looks at the way these capitals are structured there seems to be a distinct continuity. The changes that occur in the palatial aspects of each capital or on royal inscriptions can mostly be seen as developments within the already existing Assyrian traditions, rather than breaks in the cultural continuity (Nóvak 2004, 184; Liverani 2017, 175-177).

Along the same lines, the creation of new capitals in Assyria is never clearly connected to usurpations or revolts against a king, although these did occur in Assyria (see in particular Radner 2016). Kings or potential kings dealt with such issues in various manners. Examples of such cases are Tiglath-Pileser III and his usurpation (Zawadzki 1994) or Sargon's actions when he ascended to the throne (Grayson 1992a). Competition for the throne or between elites is, in general, not uncommon in regal systems and the Assyrian empire was no exception to this. In relation to capital creation however, it begs the question: was capital creation used as a strategy to gain an edge over the competition between elites in Assyria? If so, what were the benefits of such an act?

As demonstrated in this study, the construction of a new capital requires the mobilization of the entire imperial apparatus and the cooperation of several elites. This also would take place when the Assyrian army was campaigning all over the empire. The realization of such a large-scale project requires a degree of state stability and security, as is clear from the construction texts from Dur-Šarrukēn.

In Assyria, however, there was no instance of capital creation occuring directly after a usurpation. The only case that can be made for such an example is the creation of Dur-Šarrukēn. However, just because the conditions under which Sargon ascended to the throne are unclear, this does not necessarily have to be described as a usurpation (unlike the case of Tiglath-Pileser III). In addition, the creation of Dur-Šarrukēn began after Sargon had established himself securely on the throne.

Therefore, the massive investment in resources and labor required to construct a new capital is in contrast with a scenario of intense competition between elites. As has been already stated, most of the structural changes in the empire seem to be consolidated by the new capitals rather than enforced by them.

7.2.5 OVERARCHING THEMES IN ASSYRIAN CAPITAL CREATION

I will now discuss an idea that has been expressed several times when dealing with the capitals of Assyria (section 2.1.2): the idea that Assyrian capitals are just another example of architectural activities that took place during a king's reign. An example of this comes from Russell (2017) who, in his evaluation of Assyrian architecture, places capital creation alongside every other standard building activity of Assyrian kings.

At the same time, the creation of capitals has been associated with the exceptional personality of aspiring kings and elite competition. This argument claims that it was standard practice for every king to engage in architectural building activities (through reconstructions, or new palaces/temples), and the most formidable kings did not settle for constructing new buildings but constructed complete cities. This argument diminishes the phenomenon of capital creation by treating capitals as projects of individual agents, rather than a manifestation of imperial-wide phenomena.

By contrast, I argue that creating capitals was an *exceptional* and not a regular event in Assyria. That is not to say that there were no models or standardized factors in the construction of those cities. However, the creation of a new city requires the development of a new urban space, or the complete reworking of an existing urban space, in a way that is meaningful both for the elite buildings of the citadels, and to the urbanism of the lower cities for the broader population. Furthermore, the creation of a capital also requires the development of the surrounding countryside.

As such, the uniqueness of capital creation, in comparison to other building projects, is based on incorporation of a very wide set of elements related to imperial activity: administration (administrative buildings, layout of palaces); ideology (palaces, temples, decoration); religion (choice of temples, location and layout of temples); social organization (development of urban space); military organization (palaces and secondary citadels); and agricultural development (redevelopment of surrounding hinterland).

These developments can be seen in different aspects of capitals. Kertai (2015), for example, assessed the palatial buildings of the Neo Assyrian empire, studying their development both architecturally, but also ideologically. By investigating the transformation of palatial spaces, it was possible for him to identify changes in the administrative system of the empire. The inclusion of temples of various deities in each new capital also allows us to observe the evolution of religious ideology in Assyria. These are some examples of how capitals incorporate and manifest wide developments and changes in Assyria. Assessing the time intervals between capitals, as well as their respective longevity, makes it clear that this act does not occur with any sort of regularity. However, as mentioned earlier, it is possible to identify similarities in the historical conditions during which capitals were created.

7.2.6 WHY THEN? WHY THERE?

Why were capitals created, why at a particular time, and why at a particular location? A framework that allows for such a comparative explanation should incorporate: i) the historical conditions under which a capital was created, ii) the type of resources exploited, and iii) the agents who acted for the creation of a capital. Such a framework was suggested in the introduction of this thesis, and it is through these parameters that I will comparatively investigate the capitals of Assyria below as well.

I specified above that capital creation is often directly linked to historical conditions related to transformative processes of states and empires (section 1.3). When dealing specifically with ancient states, capital creation occurs almost exclusively in imperial states, and is, therefore, connected with transformations in empires. Focusing on Assyria, I have created a model that analyzes each individual case study and then compares the results to identify overarching patterns behind Assyrian capital creation.

7.2.7 HISTORICAL CONDITIONS – FROM STATE TO EMPIRE

During its long history, Assyria became an empire at two distinct points in time: in the Middle Assyrian period, after its independence from the Mitanni Empire; and after the Late Bronze collapse, with the emergence of the Neo Assyrian empire. Both of these events of imperial transformation include the creation of new capitals: Kār-Tukultī-Ninurta for the Middle Assyrian period; and Kalḫu for the Neo Assyrian period. I argue here that the comparative study of these two events reveals even more about the rationale behind capital creation, especially in relation to Assyria's transformation.

Starting with the investigation of the historical conditions, both capitals were constructed during periods of continuous expansions for Assyria. Kār-Tukultī-Ninurta was built at the peak of the Assyrian expansion during the Middle Assyrian period. It was during the reign of Tukultī-Ninurta I, however, where Assyria reached its maximum extent, from the *dunnu* of Tell Sabi Abyad at the Baliḫ river on the west (Akkermans 2006), to Babylon on the southeast (Jakob 2017, 205).

Similarly, Kalḫu is constructed after a period of resurgence in Assyria's power. Following a period of recession starting with the reign of Aššur-dan II (934-912 BCE), Assyria enters another phase of massive territorial growth (Parker 2001, 44). However, it is precisely during the reign of Aššurnaṣirpal II (883-859 BCE) that this growth spikes significantly and allows for the establishment of the Neo Assyrian empire (as seen in Figure 45; Frahm 2017b, 169).

Both of these processes of territorial growth, which are amplified immediately before and during the instances of capital creation, are accompanied by administrative changes (see e.g. Kühne 2015; Pongratz-Leisten 2015) and the development of an imperial ideology (Postgate 1992; Pongratz-Leisten 2011; Caramelo 2012). For the case of Kār-Tukultī-Ninurta, administrative changes are signified by broader regional transformations in conquered territories, such as the creation of new peripheral centers (Szuchman 2007; Tenu 2009; 2015), changes in regional systems and intensification of agricultural production (Wiggerman 2000; Parker 2001; 2003; Kühne 2013; 2015), and the creation of a number of fortified settlements (e.g. Tenu 2015, 80-82). Accompanying these changes is the development of a "culture of empire" (Düring 2015, 302).

Similar developments take place in the period before and during the creation of Kalḫu. Aššurnaṣirpal's reign signifies both the spike in territorial growth, but also a series of administrative changes (Oates and Oates 2001, 15-16; Bagg 2011, 192-194; Fales 2011; Frahm 2017b, 169-170) as well as in architectural projects (see Russell 2017). In regard to imperial ideology, the concept of the Assyrian *Reconquista*

(Postgate 1992, 250) takes its full shape during the reign of Aššurnaṣirpal. This has been described as "*the second phase of the Reconquista period*" during which Assyria becomes the most powerful state in Western Asia (Frahm 2017b, 169).

Based on the comparative investigation of these two cases, it becomes clear that both Kār-Tukultī-Ninurta and Kalḫu occurred at very specific historical moments of Assyrian history. While this process, however, creates the preconditions for the creation of a capital, it does not in itself explain capital creation. The reigns of Tukultī-Ninurta and Aššurnaṣirpal present peaks in the transformational process of Assyria. These are the tipping points, a kind of imperial leap that Assyria takes which allows it to create a new capital.

This argument is further corroborated by a number of other shared similarities between the two cases, which are related to the broader scope of Assyrian capital creation. Firstly, both projects are concerned with the redevelopment of the Assyrian core area and its increased agricultural production. Both projects were accompanied by massive restructuring of the land surrounding the new capitals and large irrigation projects (see for Kār-Tukultī-Ninurta Bagg 2000a; Miglus 2011; Reculaeau 2013; Mühl 2013, 157-175; 2015a, 48-51; and for Kalḫu Morandi Bonacossi 2014; Reade and Anderson 2013, 47; Ur and Reade 2015). Furthermore, the resources that fueled the building of the new capitals were a result of the extensive military campaigns discussed above. Forced population deportation and prisoners of war provided the large labor force required for such building projects (Harrak 1987, 219-229; Freydank 1974; 1975; 1976; 1980; 2001; Harmanşah 2013, 115-119), and conquest and taxation through tribute provided the abundance of resources for the construction of the new capitals (see for example Szuchman 2007; Tenu 2009; 2015; Radner 2017a). Finally, rulers capable of initiating and undertaking such projects, given these favorable historical contexts, are also important for the realization each new capital. While it is impossible to show who was the main figure, if there was a single person, behind the decision of making a new capital, these specific Assyrian kings must have played a crucial role.

A key difference, however, between the two capitals needs to be noted: their longevity. While Kalḫu lasted for some 175 years, Kār-Tukultī-Ninurta acted as a capital only during the reign of its eponymous king and may not have even been completed (see section 3.4). This difference is not directly related to the functions of these capitals as such but is determined by the different trajectories the empire took after their creation. Kār-Tukultī-Ninurta was created right before the recession of the empire in the Late Bronze Age, and it is possible that Assyria could no longer economically maintain its construction process. After the creation of Kalḫu, Assyria managed to maintain its imperial status and, despite entering a brief period of decline, it retained most of its territorial growth and economic power, which allowed for the further development of the city (Oates and Oates 2001, 69-70, 144-198; Kertai 2011, 71-72; 2015, 47, 77-79).

By comparing Kār-Tukultī-Ninurta and Kalḫu, I argue for a direct relation between the process of Assyria's imperial transformation and the creation of new capitals. This interpretation acknowledges the role of the king in mobilizing resources and ideological support but sees the contemporary political landscape as a determining factor in creating opportunities for capital creation. This did not happen at random points of the imperial development, but rather at the tipping points of Assyria's territorial, economic, and imperial growth.

7.2.8 HISTORICAL CONDITIONS – IMPERIAL TRANSFORMATION

The comparative study of the last two capital relocations, Dur-Šarrukēn and Nineveh, is trickier, the main reason being the fact that there was little time between the creation of Dur-Šarrukēn and the capital's relocation to Nineveh. Dur-Šarrukēn acted as a capital only for 1-2 years and was immediately replaced. As such, I argue that the creation of these two cities should be seen as part of the same episode of capital creation. With this in mind, the exploration of the *causa movens* should be directed in identifying both the similar historical conditions that allowed for the creation of two consecutive capitals, as well as the key differences that dictated the immediate replacement of Dur-Šarrukēn.

Looking at the broader historical process, the creation of these two capitals follow a similar trajectory as the one of Kār-Tukultī-Ninurta and Kalḫu. During the so-called "interval" (823-745 BCE), the Assyrian empire had entered a period of territorial decline and continuous internal turbulences and succession conflicts (Appendix 1; Grayson 1992a, 76; Frahm 2017b, 173-176). This period ended with the reign of Tiglath-Pileser III (744-727 BCE), who pursued

a policy of continuous military activity (Grayson 1992a, 75-77), and sets the track for the last imperial phase of Assyria. A number of administrative changes took place during his reign which paved the way for the so-called Sargonid empire (Garelli 1991). These include: the transformation of the military into a professional army (Dubovský 2004-5); the incorporation of foreign soldiers into the new army (Radner 2010); the reconfiguration of provinces; and the appointment of anonymous eunuchs in key positions (Garelli 1991, 46; Lumsden 2001, 34; May 2015, 107).

It is during the reign of Sargon (722-705 BCE) that Assyria re-establishes itself as the sole imperial power of the Near East, what Frahm describes as the "*genesis of an empire*" (Frahm 2017b, 176). This happens both through the continuously successful territorial growth (Grayson 1992a, 85-102; Fuchs 1994; 2009; Melville 2016), as well as through the consolidation of the administrative changes that had started with the reign of Tiglath-Pileser III (Lanfranchi 1997; May 2015). Once again in Assyrian history, when a transformational process reaches a critical point it coincides with the creation of a new capital city. While in this case Assyria is already at the level of an empire, we can observe the same broader trajectory that leads to the creation of a new capital: after a period of decline comes one of continuous expansion, which is marked by the creation a new capital.

It has been argued by scholars that the creation of Dur-Šarrukēn was an attempt by Sargon to secure his claim to the throne (see for example Radner 2011, 325-327). While it is possible to argue that during the first years of Sargon's reign there was resistance to his claim by other elites (Frahm 2017b, 180), this changed quite soon. By 717 BCE, when the construction of Dur-Šarrukēn began, Sargon had a series of successful military campaigns both in the western (Frahm 2013) and the eastern front (Frahm 2017b, 181), with relative internal stability. Examining the historical overview, however, also revealed that the broader policies implemented during Sargon's reign were in line with the imperial transformation that had begun with Tiglath-Pileser III. Sargon might have wanted to consolidate himself in power, but there was also no real political divergence from the previous reigns. On the contrary, during the reign of Sargon, the previous administrative changes and expansionist policies seem to be consolidated even further (see Grayson 1992, 101).

This begs the question as to why then Dur-Šarrukēn was abandoned in favor of Nineveh, especially in such a short time. For that, only hypotheses can be made, as there are no real historical or archaeological evidence to prove any of them. It is plausible to think that the geographic location of Nineveh could have played a role. Dur-Šarrukēn's connection to the road network depended on its proximity to Nineveh, since it provided the easiest way to get to other centers like Erbil and Kalḫu. It also provided the fastest access to the Tigris. Much of Dur-Šarrukēn's construction was in fact managed from both Kalḫu and Nineveh, and most of the materials used for the construction of the city had to go through Nineveh first.

It can also be hypothesized that the reasons could had been political. Elites competing with Sargon could have seized the opportunity of his sudden death to pressure the new king Sennacherib into relocating the capital. None of the above reasons, however, justify the immense transformation of Nineveh, nor why wouldn't the capital simply return to Kalḫu.

While it is not possible to pinpoint the exact reasons for the abandonment of Dur-Šarrukēn and the creation of Nineveh, it needs to be noted here that the broader historical conditions had not changed since the creation of Dur-Šarrukēn. Assyria kept riding the wave of military success, expanding its borders all the way to Egypt, and continuing with similar administrative policies as seen in the years of Sargon. Consequently, I suggested that these two instances of capital creation should be treated as one episode.

In these two cases then, it is apparent that the latter capitals of Assyria were constructed in an attempt to create stability after a period of internal political conflicts, and to consolidate the large territorial and economic growth of the empire. In short, the creation of these capitals is related to another phase of imperial transformation for Assyria.

7.2.9 CONCLUSIONS

Imperial capitals in Assyria should not be described, or discussed, as only the cities of their kings. They were, rather, the cities of the empire, reflecting and representing the acquired status of Assyria at a given time, encapsulating the continuous growth and changes in the nature of Assyria.

Capital creation in Assyria then, was a strategy and a process of imperial creation and consolidation, similar to how it acted as a strategy for nation

building later on in time. The fact that capital construction happened only four times in the 710 years of the Assyrian empire makes it clear that it was not a standard practice, nor an activity considered by every court. The overview of the history of Assyria in this chapter (Figure 45) showed that capital creation happened only at points of economic and territorial growth of Assyria. To answer why Assyria moved its capitals, the reasons should not be reduced only to great kings who attempted to elevate themselves above others.

Rather, capital creation in Assyria is a phenomenon directly connected to the interplay between imperial transformation and the multiple actors taking part in the process of creating a capital. From becoming an empire, to taking a decisive turn in its imperial history, all capitals are created after periods of continuous expansions that span across several kings. Taking a comparative approach also explains the similarities in several elements of Assyrian capitals like the choice of location and features. The location for an Assyrian capital required a number of characteristics to exist, but the exact location of a city was an important factor but was never the primary *causa movens* for Assyrian capitals.

Finally, there seems to be a degree of continuity and regularity in the process of capital creation both in terms of the constructed elements, as well as the regal narrative promoted in the royal inscriptions (see for example Novák 2004; Liverani 2017, 176-178). This standardized process can be described as a blueprint for capital creation in Assyria and is constituted by a mixture of geographical elements, the standardized regal narrative of innovation, the organization of large work projects, and the standardized layouts of the new cities.

7.3 HOW – THE CONSTRUCTION PROCESS OF ASSYRIAN CAPITALS

The second part of this chapter compares the construction process of the imperial capitals of Assyria. In terms of datasets, this element of capital creation is difficult to explore. Assyrian reliefs were rarely concerned with building or construction processes. In addition, the royal inscription, besides some (possibly) arbitrary numbers of people who were brought in to work at the capitals, pay no attention to how the city was constructed. The only textual dataset, remarkable nonetheless, which deals extensively with the construction of a capital is the one discussed in the chapter on Dur-Šarrukēn (Parpola 1995). As such, the only reliable, albeit incomplete, dataset which can tell us something about the construction of each capital are the archaeological remains of the capitals as finished products.

A point of complication for the comparative study of the construction process is the definition of what exactly comprises a construction process. In Assyria, the "official" opening of a capital is its ceremonious opening festival, when a new city starts to function as a capital (see above section 4.4.1). The construction of a capital city, however, doesn't end at the moment of its opening. On the contrary, the cities continued to grow and transform, both from the top, with new additions to the citadels and palaces, as well as from the bottom, with the social interactions and urban populations giving shape to the urban structure. The best example of such a capital in Assyria is Kalḫu, which changed significantly during the reign of Shalmaneser III, and kept evolving even after it was abandoned as the administrative center of the empire. On the other hand, Dur-Šarrukēn, and to a certain extent Kār-Tukultī-Ninurta had no time to evolve significantly as urban centers. They functioned as capitals only for a very brief period of time and they were abandoned either partially (Kār-Tukultī-Ninurta) or completely (Dur-Šarrukēn) after the death of their eponymous king. As a result, for the study of construction, I suggest that the point where the initial construction of each capital was completed differs for each city and is based on the type of data being compared. I define the initial phase of construction, as the creation of the outline and major living spaces of a city, which comprises the planning and construction of city walls and the creation of the main citadels. However, there are variations on that definition, as demonstrated in the more detailed comparison below.

The key topic that will be discussed here is labor investment and management, which pertains to the labor force and materials required to construct various aspects of the city. Further, I will discuss the differences or similarities in the construction process of the various capitals. Issues that will be assessed include the size of the city, the speed of construction, and the size of the walls. The textual evidence available for the construction of Dur-Šarrukēn is particularly important, as its figures are applied to different case studies.

Capital city	Approximate size	Approximate size of Citadels
Kār-Tukultī-Ninurta	240(-500) ha	(32-)65 ha (very unclear)
Kalḫu	360 ha	Main Citadel 20 ha Secondary Citadel 5 ha
Dur-Šarrukēn	300 ha	Main Citadel 25 ha Secondary Citadel 6 ha
Nineveh	750 ha	Main Citadel 32 ha Secondary Citadel 12 ha

Table 8: Size of Assyrian capitals.

Section	Constructed elements
City Wall	• Wall • Gates • Towers
Lower City	• Houses • Administrative buildings • Production facilities
Citadel	• Terrace • Buildings • Walls and gates
Surrounding hinterland	• Irrigation works

Table 9: Main constructed elements of Assyrian capitals for the assessment of labor investment.

7.3.1 A COMPARATIVE FRAMEWORK FOR THE ASSESSMENT OF LABOR INVESTMENT IN ASSYRIAN CAPITALS

The newly constructed capitals of Assyria were the largest cities of the empire (Table 8). The size of each capital was probably predetermined as part of the planning. This can be observed by the angular shape shape of each city with long linear walls. In addition, the textual evidence discussed above for Dur-Šarrukēn (Parpola 1995) revealed that each official or contractor had a specific, predetermined, plan to manage number of workers and specialists under his supervision.

There are no textual data referring to the exact number of the people involved in the construction of each city. Royal inscriptions mention the number of deportees brought to work in the construction of the capitals (e.g. Harrak 1987, 220-221 for the Kassites working at Kār-Tukultī-Ninurta). However, these figures cannot be trusted as a valid source, as they are part of state propagandaj (Grayson 1987, 183-184). Deportees would have worked as a labor force in the construction of the city, in the newly created fields surrounding the city, on the irrigation channels, and any other task related to the construction process.

The overall assessment of labor investment for the creation of Assyrian capitals requires a detailed discussion, which we currently lack the data for. Based purely on the size of each city, one could argue that a city would require more or less labor investment than another. For example, Nineveh, being ca. 750 ha would require a larger work force and more primary materials than Kalḫu, which is ca. 360 ha However, this abstract assessment disregards the complex nature of constructing capitals. The construction of each capital required the restructuring of the surrounding hinterland, with extensive irrigation projects, and labor investment based on the specific geographical and agricultural situation of each site.

As such, to assess the labor required for the construction process of an Assyrian capital city, I propose using a multilayered analysis that addresses different datasets and brings them together. These datasets comprise the different sections of an Assyrian capital. I propose four different sections (Table 9):

As many of these datasets are incomplete or completely absent for the purpose of this study I will limit myself to the comparative exploration only of the constructed elements for which we have a significant amount of archaeological data. However, the aforementioned framework is a useful start for a technical study on each individual case.

The table below (Table 10) allows us to compare the differences or similarities between the constructed elements of Assyrian capitals. Before assessing some of these more in depth, there is another parameter that needs to be explored comparatively: time. The speed and intensity of construction dramatically influences the amount of labor required to realize each project. I define the construction time frame from when a city's construction begun and to the end of the initial phase of construction (Table 11).

Section	Constructed elements	Kār-Tukultī-Ninurta	Kalḫu	Dur-Šarrukēn	Nineveh
City Wall	Wall	Unknown	ca. 8 km	7 km	12 km
	Gates	Unknown	ca. 4	7	14(-18 by 690 BCE)
	Towers	Unknown	Possibly at standard intervals	At standard intervals	At standard intervals
Lower City	Area	ca. 210(-440) ha	ca. 343 ha	ca. 269 ha	ca. 706 ha
	% of built area	Unknown	ca. 54% (Ur 2013)	Unknown but probably less than 50%	Unknown
Citadel	Main Citadel Area	(32-)65 ha	21 ha	25 ha	32 ha
	Secondary Citadel Area	-	7 ha	6 ha	12 ha
	Main Citadel – Gates	Possibly 2	1 (potentially 2)	2	Possibly 2 or 3
	Main Citadel – No. of buildings	5 identified	At least 7 (excavated and dated to the reign of Aššurnaṣirpal)	7 excavated, possibly 8	4 identified, definitely more
	Secondary citadel – No. of buildings	-	1	1	Possibly 2 or 3

Table 10: Details of constructed elements in Assyrian capitals.

Capital city	Construction time
Kār-Tukultī-Ninurta	Unknown – Possibly 10-15 years
Kalḫu	Unclear – 5 years (883-879 BCE opening festival)[1] – 40 years (844/3 BCE the completion of Fort Shalmaneser)
Dur-Šarrukēn	10-11 years (717-707/6 BCE)
Nineveh	12 years (702-690 BCE)

(Footnotes)
1 Aššurnaṣirpal claims to have built the entire circuit of the wall during those 4 years.

Table 11: Duration of construction of Assyrian capitals.

Nineveh is the only exception to this, as it was already a functioning city, and Sennacherib and his court could move into the city already from the beginning. Therefore, as a time frame for this first phase of construction of Nineveh, I will use the time the city wall took to complete, 702-690 BCE (Reade 2002b, 399).

7.3.2 BUILDING CITY WALLS

Using city walls as an investigative case study for labor investment in Assyrian capitals brings a number of advantages not found in other datasets. Firstly, it is one of the most complete available datasets from all capitals (with the exception of Kār-Tukultī-Ninurta). Secondly, there is no question in terms of different functions between each capital, the city wall always has the same purpose, to enclose the city and, at least in theory, provide a line of defense. Finally, the materials (mudbricks and stone) are consistently used in the same way at all capital cities, and the methods of construction were consistent during that period.
While the city walls had stone foundations, their largest and core part was made of mudbrick. This comparison begins by assessing the volume

City	Wall Length	Volume	Mudbricks	Volume (including mortar)
Kalḫu	8 km	1,904,000 m^3	116,672,312	2,240,000 m^3
Dur-Šarrukēn	7 km	1,176,000 m^3	71,892,200	1,470,000 m^3
Nineveh	12 km	3,888,000 m^3	233,510,400	4,320,000 m^3

Table 12: Volume and estimated number of mudbricks for the mudbrick city wall of each Assyrian capital.

of the city walls in terms of mudbricks to. For comparison's sake, I will be assuming the same mudbrick dimensions for each capital, 37 x 37 x 12 cm (0.016428 m^3; ca. 61 bricks/m^3), as this was the most common size of mudbrick for the Neo Assyrian period. I will exclude Kār-Tukultī-Ninurta from the actual quantification of the walls, since we lack both excavation data as well the complete perimeter of the wall.

For these calculations, I will treat the walls as if they had a set width and height. Of course, both the width and the height of the wall might have varied based on the topography. Since the available height is an estimate, and since an exact width is known only in certain parts of the walls, working with conservative and consistent numbers serves to decrease the assumptions made for this comparison rather than increase them. The results of this analysis can be seen in the following table (Table 12; see also Appendix 2 for the calculations).

This model assesses the volume of the walls only in terms of the number of mudbricks used, without taking into account the gates and protruding turrets or towers which existed in every Assyrian city wall. Including those, the numbers should be significantly higher. However, the purpose of this exercise is to highlight the magnitude of the undertaking of the construction of a capital and to add some data to the yet unexplored field of constructing imperial capitals. Using the stated module of mudbrick, Mallowan proposed that a man could lay about 100 bricks per day, which would create 1.6428 m^3 per day (Mallowan 1966, 82; Oates 1990).

Of course, such an assessment is incomplete, since it takes into account only the actual brick laying per day, without calculating the operational chain that go into such a project. These factors include the digging for and preparation of the clay, the transportation of water, mixing of the clay with straw, as well as the molding, drying, storing, and transportation of bricks. Some studies have assessed the production of and construction with mudbrick (e.g. Burke 2008, 146-148). In a recently published paper, Richardson (2015) assessed the labor invested in the construction of the wall of Larsa. With Mallowan's building ratio, he calculated that the wall would take 465,672 labor days for the construction of the mudbrick wall. He then conducted a taskwork analysis, based on Heimpel's (2009) textual analysis of the GARšana documents. The GARšana texts is a rare volume of texts that record the administration of a series of constructions at the site of GARšana. Among other things, the construction of the city wall is elaborated and Heimpel analyzed the processes and steps inherent in mudbrick preparation and wall construction. Richardson, using a similar method, ended up with 1,312,295 labor days for the fortification wall of Larsa and 1,957,095 with the inclusion of the rampart (Richardson 2015, 278).

This estimation is significantly higher than the calculations of Mallowan (1966) and Oates (1990), but are probably much closer to the actual number, since it incorporates the multilayered process of mudbrick construction. I will conduct a modified taskwork analysis for Assyrian capital city walls based on the information provided by Richardson (2015, Table 1 and Appendix 2; here Table 13).[35] It needs to be clarified that for the purposes of this study, which is to highlight the magnitude of the labor investment in Assyrian capital city construction, I am using absolute numbers. However, a future study dedicated exclusively on mudbrick construction, should additionally calculate minimum and maximum number of labor days.

The above analysis of course is only indicative of the work required to construct an Assyrian capital

35 All numbers of labor days are rounded up to the decimal.

Mudbrick wall - Task	Known and analog day -rates	Kalḫu – Labor days	Dur-Šarrukēn – Labor days	Nineveh – Labor days
Site clearing[1]	1050 m^2	107	94	172
Straw carried[2]	18 m^3	12,694	7,840	25,920
Dirt work (excavation)[3]	3 m^3	558507	344,960	1,140,480
Carrying earth	3 m^3	558,507	344,960	1,140,480
Mixing earth	1.725 m^3	1,103,768	681,740	2,253,913
Molding bricks[4]	240	486,134	299,550	972,960
Carrying bricks[5]	1.7 m^3	1,120,000	691,764	2,287,059
Building (including mortar laying)[6]	1.6428 m^3	1,363,526	894,813	2,629,657
Delivering reeds	26 m^2	38770	22,615	83,077
Laying reeds[7]	6 m^2	168,000	98,000	360,000
Trimming reed[8]	400 m^2	800	525	1440
Total		**5,410,813**	**3,386,861**	**10,895,158**

(Footnotes)

1 Richardson calculated 350 m^2/day for site clearing. Heimpel calculated about 1575 m^2/day for agricultural work. Richardson's estimation includes the clearing of more difficult terrain and other mudbrick constructions. Still, the estimation seems very conservative and the terrain was probably not as difficult. I will assume 1050 m^2/day.

2 I am not including straw harvesting, as the production rates of the Assyrian empire must have been much higher than Richardson's estimation for Larsa. I assume that straw production would not affect the time spent on the construction of the wall since the material already existed in abundance. It is also assumed that 12% of the volume of each mudbrick was straw.

3 This calculates the volume of the earth required for the mudbricks. Pouring water is excluded from my calculations because of the proximity of the construction sites to water.

4 Richardson calculates that 10% of the total wall consisted of baked mudbrick. Since we do not have any indications for the amount of baked bricks in the Assyrian capital city walls, I will assume 0 baked bricks.

5 We do not have an exact knowledge of where and when the mudbricks were made, but it is safe to assume that a large percentage of the bricks were not made on-site but rather brought there (see for example Parpola 1995, 65). The estimation of 1.125 m3 in Richardson's example is too low. The aforementioned text mentions a delivery of 40,000 bricks, which was probably not made by only 6-8 people. As such, I will assume at least 1.7 m^3, which still might be conservative.

6 I use Mallowan's estimation for brick laying. However, this estimation is probably on the low side.

7 Richardson estimates the very labor-intensive process of 1 reed-mat for every 5 courses of bricks. Loud and Altman (1938, 18) suggest 1 reed-mat per 9 courses of brick, based on Place's observation of the citadel wall. However, while possible, it is not certain that the citadel wall would exactly mirror the fortification wall. Heimpel (2009) suggest 1 reed-mat for every 16-18 courses of bricks. For the sake of comparison here, I will use a similar estimate of 1 reed every 15 courses, since there are differences in the height of each wall.

8 Richardson assumes 288 m2/labor day/person, admitting that it is the a very slow rate (Richardson 2014, 311). Considering that the infrastructure for the construction of the wall was already in place, I will assume a much higher rate of 400 m2/labor day.

Table 13: Tasks and analysis for the construction of mudbrick city walls in Assyrian capitals.

city wall. My estimations for the required labor are, in general, relatively conservative, and do not calculate the travel time required for bricks commissioned from other locations. The reason for these conservative estimations is because I do not account for all of the other elements embedded in each construction process.[36] The table indicates the construction of the mudbrick parts of each wall, both inner and outer facades, without accounting for other parts such as: the stone foundations, towers and crenellations, plastering of the wall (inside and outside), and the gates.

This analysis makes the workload going into the construction of capitals more tangible. The kings are often the only topic of discussion in terms of constructing magnificent cities, but little previous research has addressed how these cities were built, or how much work, effort, and resources had to be put into them.

Factoring in the amount of time each project took offers a better picture of the magnitude of the project. If we assume, for example, that the city wall of Nineveh took roughly 12 years to be completed (702-690 BCE), then the 10,895,158 works days would require 2488 people working every day, with no days off, exclusively on the mudbrick section of the city wall. If we account for the people supervising the construction, the work groups, or those transporting the actual materials, then the number could easily reach 3000.

Dur-Šarrukēn is the only city for which we have certain dates for its construction (717-706 BCE). As such, I will take this 11-year span as the timeframe in which the walls were built. My estimation for the mudbrick wall is 3,386,861 labor days. This would mean an estimated 844 people working every day, with no days off, exclusively on the city wall. This number is probably very low in comparison to the actual labor force. If we give each person one day off per week, then the total number of people working on the wall would increase to 984, for the sake of simplicity, 1000.

Kalḫu presents the most difficult case to quantify. According to the king's royal inscriptions, the city wall was finished when the opening festival took place, meaning that the wall should had been completed within five years. Many scholars find this implausible, arguing that the city wall was finished by the king's son, after the construction of Fort Shalmaneser, given its size (Oates and Oates 2001, 28; Russell 2017).

Calculating the labor force required for the first estimation, 5,410,813 labor days in 5 years would translate to almost 3000 people (2965). As we have seen in the case of Nineveh this is not an unrealistic labor force to assume in Assyria. Of course, everything would need to happen much faster, and the building process would have been much more intense than in the other two capitals. At the same time, however, there was less construction taking place, as there was no secondary citadel during the time of the construction of the wall, meaning that there was a larger labor force available for the wall itself. As such, in terms of feasibility, Assyria could certainly muster the required workforce for the completion of the wall within the first years of the construction of Kalḫu.

Finally, the only city that was not considered in this analysis is Kār-Tukultī-Ninurta. The lack of knowledge for the city's outline, as well as for the specifics of its wall does not allow for such an assessment. Furthermore, as I argued earlier, the currently available evidence suggest that the perimeter wall of the city was never completed.

This analysis shows the industrial-scale production required for the construction of Assyrian capitals. If we consider that, at any given time, about 3000 people were working to construct the city wall of Nineveh, who all need to be fed and housed somewhere, the numbers increase exponentially. Adding to this, at the same time there are constructions at the gates, palaces, temples, citadels, bridges and of course the residential buildings in the city. In the hinterland, there are several monumental canals being constructed (Morandi Bonacossi 2016). As such, we are probably looking at tens of thousands of people working at the same time to create all the different parts of a new capital.

This scale reveals that constructing a capital is a project that can only be realized within a context of imperial growth. As demonstrated in the previous

36 I treat the labor force as unified and consistent. The reality is that these numbers would fluctuate. Not every group of workers has the same composition or production output. The table does not account for shortages of material (e.g. failed delivery of straw, Parpola 1995, 65) or laborers. Furthermore, the analysis does not take into account the agricultural production required to feed and support the people working on the construction of the walls. It also does not consider any days off, or longer periods of time where work would not take place (e.g. religious festivals).

section, Assyrian capitals were only constructed at peaks of expansion, and this is substantiated by the assessment of the construction process. New capitals could only be constructed when Assyria crossed a threshold in its territorial and economic growth and had access to sufficient resources and work force.
The textual dataset from Dur-Šarrukēn (section 5.5) also supports this argument in terms of material that do not leave traces in the archaeological record. The royal correspondence for the construction of Dur-Šarrukēn underlines the vast quantities of materials needed and the organization surrounding their management. Combining all the different tasks necessary to create a new capital, it becomes apparent that there needs to be a strong administrative system in place to realize such a project.

7.3.3 CONCLUSIONS - WHO BUILDS THESE CITIES?

A recurring theme in capital creation is the degree to which a king influences the creation of a city. I have argued that, while the agency of a king is important, the reasons behind capital creations are much more related to the wider process a state or empire underwent. Kings constitute only part of the phenomenon of capital creation.
Exploring the construction process of a city reveals even more about who is actually building the Assyrian capitals. We often forget that constructing a city is much more than individual commands and decisions made by a king. The king and his court did make executive decisions, but the provincial governors collected and sent local materials, and planners, architects, and artists envisioned and directed the creation of the most impressive features. Continuing down the chain of command were the taskmasters, and the thousands of workers at the bottom working under harsh conditions. This analysis of the city wall complicates and contextualizes the process of capital creation beyond the persona of a specific king.

7.4 WHAT - A CONCEPTUAL CHALLENGE

The last part of the discussion revolves around the function of the capitals. I believe that one of the fundamental issues of research in Assyrian capitals is the fact that they are seen exclusively as administrative centers and not as residential urban spaces. Each capital was the residence of the king, housed the largest part of the court, and was the place where the most important decisions about the empire were taken. However, I suggest that we should study the Assyrian capitals also as residential spaces for a larger population of elites and commoners, which reconfigured its space.
There have been some research projects investigating daily life in an Assyrian capital, from a visual perspective (Lumsden 1991; 2004). They remain, however, very generic or are based exclusively on textual sources (e.g. biblical sources, royal inscriptions) or phenomenological approaches. The absence of archaeological material produced by surveys and excavations on the lower cities produces a very incomplete picture of life in those cities. This fragmentary picture has led to some partial assessments on the function and lived experience of Assyrian capitals, such as viewing the cities exclusively as arenas for the competition of elites. The following section addresses this elite-driven view of the cities by examining: the dichotomy between public and private/royal space; the social spaces of Assyrian capitals; the city walls as symbols; and finally Assyrian capitals as empty cities.

7.4.1 WHAT IS PUBLIC AND WHAT IS PRIVATE?

I will start by bringing up an issue of perception that stems, in my opinion, from our distorted view of Assyrian capitals: the jusxtaposition between public and private spaces. In discussing the citadel of Kalḫu, I briefly mentioned two terms: *babānu* and *bītānu* (Oates and Oates 2001, 36-38). Although a clear definition for these terms is still lacking, the general consensus in research is that they refer to two distinct features of late Assyrian palaces: open spaces/courtyards (*babānu*),[37] and internal/private rooms, usually the quarters of the king (*bītānu*) (Postgate 2005, 222). While the latter is quite well understood (Margueron 2005), the purpose of *babānu* is much more unclear.
The place defined as *babānu* is, possibly the intermediate open space between the *bītānu* and the entrance of the palace. It has been suggested that it refers to the entrance courtyards of palaces (Oates and Oates 2001, 36). While it is generally agreed that *babānu* and *bītānu* are strictly palatial spaces, some researchers have described *babānu* as a public

37 Also translated as "outside", deriving from *bābu*-gate (Kertai 2013c, 195)

space (Harmanşah 2013, 123). This, I suggest, is one of the problems associated with our strict view of elite spaces. Kertai also argued that the duality of these terms is a modern construct, since there is no textual evidence in support of such clear distinctions between private and public in Assyrian palaces (Kertai 2013c, 199).

Describing the *babānu* space as public is rather misguided. Access to the main palace was limited, and palaces could be described as places of increasingly more restricted zones. A person had to enter the city, go through a citadel gate, go through the entrance of the palace and eventually end up at the entrance courtyard of a palace (if we accept that this is what *babānu* is). Who would have been allowed within the citadel, even more so, within the palace? Very likely, these were spaces which only a limited portion of the population of the city got to experience. Thus, they were not public spaces in the modern sense of the word.

Defining private and public in contemporary cities, while seemingly simple, comes with its own challenges. Residential houses, for instance, are private space, while a city park or a square are public spaces. However, even contemporary cities have spaces where this distinction is rather vague. For example, a parliament is a public building, but it is not always publicly accessible. As such, defining private and public in the capitals of Assyria, where we have a limited knowledge of its urban space is, conceptually, much more difficult.

In reality, as it will be discussed later on (section 7.4.4), we know close to nothing about public spaces in Assyrian capitals. We do not have the data about a square in Nineveh, or an open garden in Kalḫu. It is unclear what large market streets would look or where an open festival would take place. It is, therefore, important to define this lack of knowledge, and not attempt to compensate for it by defining something else as public (i.e. *babānu*). Understanding the function of cities is not possible without understanding the function of the spaces within them.

7.4.2 THE SOCIAL WEB OF ASSYRIAN CAPITALS AND THEIR URBAN EVOLUTION

Following up on a similar topic, another aspect of Assyrian capitals we lack knowledge of is their social web and their urban evolution. For example, the survey at Kār-Tukultī-Ninurta showed that perhaps people resided in neighborhoods based on their ethnicity (Dittmann 2011, 168-169). This could be possible in other capital cities as well, since in every case deportees were settled and used as a work force.

The population of urban spaces re-appropriates its living body, re-imagining or re-purposing it in ways city planners did not intend or predict (Lefebvre 1991). Over longer periods, the populations of large cities tend to also develop a metropolitan identity connected to the city they reside in. Such an example in ancient empires is the population of Babylon, where the population of Babylon had a very well-defined view of what it meant to be a Babylonian (Kuhrt 2014). This could possibly be the case in some Assyrian capitals as well.

The development of such metropolitan identities is unlikely to happen in a very short period of time; they are processes which require living in and experiencing the space people occupy. Assyrian capitals varied considerably in their duration as functional capitals. Kār-Tukultī-Ninurta lasted only for the reign of Tukultī-Ninurta, and was subsequently abandoned as an urban center. On the contrary, Kalḫu was the capital for roughly 170 years, and the city remained functional as an urban space until the fall of the Assyrian empire, giving it a lifespan of more than 250 years.

Dur-Šarrukēn presents an interesting case of studying an urban environment, since it did not have time to develop. It was used for only two years and was mostly abandoned afterwards, not giving it time to evolve an urban identity. In that sense, Dur-Šarrukēn is a snapshot of how Assyrian planners thought a city should be, but not how Assyrian cities developed over time. Finally, Nineveh is the only city with a history, long before Assyria, as integral part of the Assyrian core and finally as a capital. As such, it probably had a strong urban identity and its urban space was redeveloped several times, either as a provincial center or as a capital.

7.4.3 DEFENSIVE ASPECTS OF ASSYRIAN CAPITALS AND WALLS AS SYMBOLS

An issue discussed in the previous chapters is the defensive capabilities of Assyrian capitals. The assessment was made on the basis of the city walls, moats and the number and construction of city gates. In any walled city, the gates are probably the most vulnerable sections of the wall. I concluded that in most cases, and especially in the cases of Dur-Šarrukēn and Nineveh, despite the impressive defensive

installations and the large amount of labor required for their construction, the defensive capabilities of the cities were quite minimal.

My argument is that the function of the city walls and gates as visual monuments was more important than their defensive value. It seems that, as the capitals of Assyria evolved, the number of gates increased. We saw that the gates of Neo Assyrian capitals went from ca. 4 at Kalḫu, to 7 at Dur-Šarrukēn (for a wall with smaller circuit), and finally to 18 at Nineveh. While the latter had a wall that was 12 km long, the number of gates was proportionally bigger than in the previous two capitals. In addition, the river Khosr going through Nineveh created a very vulnerable location along the wall.

As such, the vulnerability of the city walls gradually increased in Assyrian capitals. To add to this, the gates of Nineveh, as observed in the corresponding chapter, had very large entrances. The difficulty in defending those gates became visible in the consequent sieges of the city (614 and 612 BCE).

To compensate for this vulnerability, the wall at Nineveh increased in size and height, to create an imposing visual effect. The last capital of Assyria was the only one with a double wall, with the mudbrick wall rising up to 24 m. The view of the wall must have been breathtaking, and the visual factor was probably a priority for the Assyrians. The royal inscriptions inform us that the wall was named "*Wall Whose Brilliance Overwhelms Enemies*" (RINAP 3 Online Corpus, Sennacherib 8, 11'). From the name it can be assumed that, indeed, the visual aspect was the one that would "*overwhelm*" the enemies and discourage them from ever attacking such a massive structure.

This approach to walls as symbols has already been explored in a broader research regarding city walls (Tracy 2000a; 2000b). Walls can have multiple functions, defensive, symbolic or even ritualistic. In some cases, for example, walls can be used as defense not against siege, but rather to control internal conflicts. In those cases, walls create a more easily controlled space for the suppression of revolts. Walls also have the ability to create clearly configured spaces for social investment (Smith 2003b). Finally, walls can be a symbol of strength, signaling the power and status of a city or an elite.

The city walls of Nineveh had the largest investment in terms of work days and had with the largest, most impressive wall of any other capital. At the same time, the wall of Nineveh was probably the most inefficient and hardest to defend of all capitals. A large number of gates spread so far away from each other, with large openings would probably spread the Assyrian army too thin, as was the case eventually with the fall of the city (Stronach 1997). The model of increasingly impressive but costly defenses also fits well with my suggestion as to why the Assyrian empire founded new capitals at specific points in its history. As the empire grew and changed, its power needed to be visually conveyed in an ever more impressive fashion. Walls played an important role in this, since they were the first thing one would see upon approaching or entering a city and could inspire a sense of invincibility of the Assyrian empire. As such, it can be argued that, when it comes to the walls of Assyrian capitals, and more prominently in the case of Nineveh, symbolism is as important as functionalism.

7.4.4 ASSYRIAN CAPITAL CITIES AS EMPTY SPACES

Finally, I would like to address what I view as one of the most serious issues in the study of Assyrian capitals, the fact that they are often seen in scholarship as empty spaces. This, in essence, is a theoretical and methodological issue. Our knowledge of the urban spaces of Assyrian capitals is almost non-existent, and most studies have focused on the palaces (e.g. Russell 1999; Kertai 2015), temples (e.g. Reade 2002a; 2005), hinterland (e.g. Gilibert 2008; Ur and Reade 2015; Morandi Bonacossi 2018), the role and importance of capitals, and the association of the king with the capital (e.g. Radner 2011). The lower city was rarely, if ever, mentioned as a living space (Ur 2013; Osborne 2015, 15).

This has become apparent throughout this study, since in most cases archaeological evidence from the lower cities is virtually non-existent. This is the traditional perspective of Assyrian capitals: cities with (one or two) citadels and a large empty space, the lower city. Previous studies on Assyrian capitals have perpetuated this concept mostly by ignoring the existence of lower cities, or focusing heavily on the citadel areas, and the function of the elite spaces (see for example Novák 1999; 2004; Cancik-Kirschbaum 2011; Radner 2011; Reade 2011; Carlson 2017; Liverani 2017, 172).

Even more recent studies, which claim to take more bottom-up approaches to life in Assyrian capital cities, often fall into the same pattern of focusing

exclusively on palatial spaces. An example of such an approach comes from Harmanşah (2013, 119-130), where, although he proposed to discuss the relation between official narratives and the citizens of the city at Kalḫu, he focuses almost exclusively on the elite citadel spaces. Similarly, Thomason (2016) discussed the sense-scape and bodily experience in Assyrian capitals, and the way Assyrian royal authority attempted to control its citizens through sensorial means. However, again, he focuses exclusively on the imagery found in palatial buildings or spaces of recreation (e.g. gardens, game parks) that were accessible mostly to the higher classes. He concludes with some general ideas about the experience of individuals in Assyrian capitals, without discussing the day-to-day aspects of life, or the living conditions outside of the citadels. Such interpretations have fostered an elite-centered approach to capitals, in which Assyrian cities are just a collection of elite spaces and experiences.

However, to understand the function of any urban settlement, it is necessary to investigate its full extent, and not just specific locations. This is even more necessary if the selected locations are not representative of the whole. Earlier in this chapter I showed the space occupied by citadels in each city in comparison to the rest of their space. We have a relatively good picture of 6-13% of each Assyrian capital (Table 8), and have essentially ignored the remaining 87-94%. Additionally, those elite spaces are by no means representative of what the rest of each city would look like. As such, our sampling is both limited and skewed towards the elite.

In today's cities terms such as "good neighborhoods" or "bad neighborhoods" are common in our everyday life. If one lives in a capital, the person would know where the most expensive streets are, or which places would be cheaper to rent a house. The multiplicity of modern metropolitan areas is a topic thoroughly studied by several other disciplines (e.g. Lefebvre 1991; Florida 2008; Farías and Bender 2012; Tonkiss 2013; Gleeson 2014).

Why then do we accept the assessment of Assyrian capitals solely on their elite spaces? One answer is that these are the only data that we have. The available data come largely from the excavations of the 19th and early 20th century in those cities. These were times when impressive finds, palaces, statues and libraries were the main focus of European researchers and museums. A city was considered well-investigated once its palaces and temples were excavated (e.g. Khorsabad, Loud and Altman 1938).

It is recalled that the concept of city taxonomy was discussed in the introduction of this thesis. The concept of diversity of cities in Mesopotamia was explored based on the arguments by Stone (2008), who suggested that cities can by classified along a series of axes: cities that house all elements within society or elite enclaves; institutional centers that are clustered or scattered; and residential neighborhoods where rich and poor lived apart (Stone 2008, 163).

Furthermore, I introduced the concepts of urban taxonomy on the basis of urban anthropology, and specifically the propositions of Fox (1977). By combining the two approaches, I suggested the use of three primary types to identify the urban nature of ancient Assyrian cities. These primary types are: elite enclaves, administrative centers, and production centers. On the basis of these three primary types, I will consider how Assyrian capitals should be classified.

There are, of course, objective difficulties in the classifying the urban area of Assyrian capitals. Every city is located in areas heavily exploited by modern agriculture or urbanization. In recent times research in those areas has been halted due to conflicts. Some researchers have been finding methods to work around those difficulties. An example is the research by Jason Ur (2013) who assessed the percentage of built space in Kalḫu on the basis of satellite imagery or survey studies (Dittmann 1989; Fiorina 2011).

At the same time, other Assyrian cities can provide valuable comparative data to understand the built space of an Assyrian capital. The work in the lower town of Aššur, for instance, can provide blueprints for some smaller, yet wealthy houses (Miglus 2000; 2002). The case of Dūr-Katlimmu (Kühne 2011; 2015; here section 4.5.2) can be used to illustrate elite neighborhoods, with larger residence for Assyrian officials. Ziyaret Tepe, a provincial imperial center of Assyria, located in the area of Upper Tigris, has yielded significant results of urban architecture and city planning (Matney *et al.,* 2015).

The city of Aššur has a very long history of urban development, comparable to that of Nineveh. Its general structure is different than any other capital of Assyria, as it does not follow a regular plan, nor is its citadel separated from the city by a wall. Due to its long history as a city, it is expected that a large variety of activities took place in its lower town over the centuries, like woolen textile production, and private storage of trade goods (Veenhof 2010,

48-53). Aššur was definitely not an "empty" city, and this has been demonstrated archaeologically for both the Middle as well as the Neo Assyrian period (Andrae 1977; Miglus 1996; 2000; 2002; Hausleiter 2011).

To give an example of the several Neo Assyrian buildings located in the lower city, one of the characteristic Neo Assyrian residential buildings measured a residential space of about 300 m^2 (Miglus 2002, 18). The house had a 95 m^2 brick paved courtyard surrounded by several residential rooms, bathrooms etc. In terms of size, while it can definitely be described as a large building, it doesn't even remotely compare to the large residential building of the citadel of Dur-Šarrukēn, the smallest of which measures 4,000 m^2, or the large residential buildings of the lower city of Dūr-Katlimmu, which average about 4,600 m^2. Regardless, based on the finds (Miglus 2002, 19-20), it seems like the Aššur house was the residence of a wealthy family. Similar buildings probably exist in the northern part of the lower city of Nineveh (Lumsden 1991; 2004; Stronach and Lumsden 1992, 227-229). While moderately sized wealthy houses have been documented here, they have not been identified yet in the lower towns of the other Assyrian capital cities. However, it is plausible to assume their existence, especially in the case of Kalḫu, which also had a long occupation; it seems likely that this type of houses, for lower ranking officials or wealthy individuals, remains to be discovered.

In Dūr-Katlimmu the lower city is very different from that at Aššur and can be described as both an administrative center and an elite enclave. Its residential buildings are very large and can be compared with those on the citadel at Dur-Šarrukēn. At the same time, the lower city of Dūr-Katlimmu measures 60 ha, which is the same size as the full extent of Aššur. Therefore, there are two rather different models of urban settlement: one that mostly comprises an elite space (Dūr-Katlimmu), and one that has both an elite and a diverse urban residential space (Aššur).

Another important, but also different, type of urban center in Assyria was Ziyaret Tepe, the ancient city of Tušhan, located in Upper Tigris (Matney *et al*. 2017). Although the city was occupied and abandoned in previous periods, the city was reconstructed during the Neo Assyrian period and became a major urban center of the northern frontier of Assyria. Extensive survey, excavations and magnetometry survey (Matney 1998; Matney and Bauer 2000) have revealed the complexity of Tušhan. The city contained a large palatial building, the so-called "Bronze Palace" (Wicke *et al*. 2013), temples, fortifications and several residential buildings which housed soldiers, officials and bureaucrats of Assyria, as well the general population of the city.

The "Bronze Palace", located on the citadel of Tušhan, has been identified as an elite residence which also acted as the main administrative building. Centered around a 330 m^2 courtyard (Matney *et al*. 2009, 41-44), to date more than 1,000 m^2 of the building has been uncovered, but its full extent remains unknown due to erosion and the existence of a modern cemetery (Greenfield, wicke and Matney 2013, 52). This puts it at least on par with the elite residences at the citadel of Kalḫu (Mallowan 1966, 137; see section 4.5.2). Inside the palace areas for public hearing (e.g. a throneroom) and areas for private life (e.g. residential or kitchen areas) have been identified (Greenfield, Wicke and Matney 2013, 53-56).

A series of other buildings have been excavated in the lower city, including a city gate (Operation Q) and a smaller residential building (Operation K) (Matney *et al*. 2009, 61-62; Greenfield 2015). The residential building has been excavated to an extent of about 86 m^2 and it seems that it was a house of a lower status family (Greenfield 2015, 5-8). Based on Greenfield's research of zooarchaeological remains, combined with the variety of buildings found at the site, it appears that Tušhan, as a provincial capital, housed a very wide range of social classes in its walls. Also, there is evidence for a wide variety of activities taking place here, ranging from administrative activities, to the primary and secondary processing of animal products (Greenfield 2015, 3), and from accounting and storage (MacGinnis *et al*. 2014) to crop processing.

Tušhan then presents yet another different type of central city in Assyria, a city that was developed to become a provincial center, with elite spaces that could even house the king during his visits. At the same time, it had a broader urban space that housed soldiers and the residents of the city. The population of Tušhan consisted of bureaucratic officials, military and administrative officers, soldiers, craftsmen, soldiers, and local people working in farming and/or pastoral activities (Matney 2010)

Assyrian urban spaces, it appears, were not one-dimensional or straightforward. On the contrary,

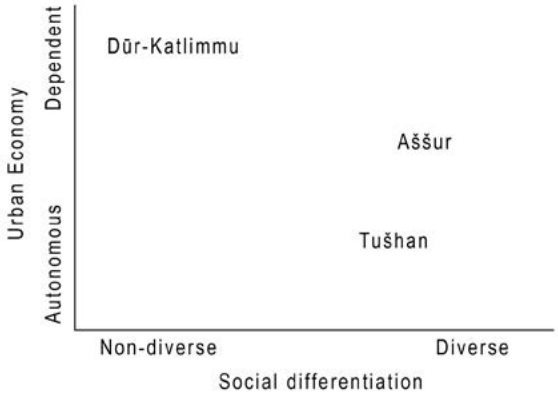

Figure 46: Assyrian cities placed in the urban spectrum developed by this study, produced by the author.

we have diverse urban spaces and even diversity in the function of cities**:** administrative and storages activities; different kind of productions; military related activities and/or housing of soldiers; and agricultural production. Aššur can be described initially as a residential center in the Old Assyrian period (Veenhof 2010), then it became a residential imperial capital in the Middle Assyrian period (Cancik-Kirschbaum 2011), and eventually became a more religious center in the Neo Assyrian period, which at the same time housed an urban population, probably of wealthier families. Dūr-Katlimmu's lower city can be described as a space dedicated to elite families, with provincial administrative functions. Finally, Tušhan can be described as a provincial center which contained all elements within society, administrative functions, and production facilities. These three examples create a taxonomy of central cities in Assyria, of which each city has a different urban profile in relation to the typology (Figure 46).

In regard to Assyrian capitals, Nineveh is currently the best-known case of a capital city with a very diverse urban space. Its northwestern section we see both an artisan's quarter, with tightly packed houses, workshops, kilns, and other industrial infrastructure (Lumsden 1991, 3).

At the same time, there is a neighborhood with larger residential buildings and large open spaces. Nineveh also contained extensive regal and elite spaces, as well as several temples in its massive citadel mounds. Therefore, in Nineveh, we have aspects of an elite enclave as well as an administrative center. Nineveh's sheer size allowed for the creation of a true metropolitan city, with great diversity of urban spaces.

Is Nineveh unique in this respect among the Assyrian capitals? It most definitely has unique aspects that were not reproduced in any other cases. Nineveh's long history meant that its urban development happened over the course of several centuries. Dur-Šarrukēn and Kār-Tukultī-Ninurta had no time to develop a fully-fledged urban space. For Dur-Šarrukēn, the only known building of the lower city is a very large official residence. There are no indications for workshops or different type of neighborhoods. While we should not necessarily be taking the absence of evidence as evidence of absence, the brief existence of Dur-Šarrukēn would not have allowed for the development of an urban space in the lower city.

Kalḫu, on the other hand, was the most long-lived new capital and had significant time for the development of its urban space, as well as the inclusion of several different functions. Even though data for the type of activities that took place in its lower city are lacking, it is possible to assert some of them based on the comparative data of the aforementioned examples. Fort Shalmaneser already included some production and maintenance facilities related to the Assyrian army (Oates 1962; Oates and Oates 2001, 162; Kertai 2011, 71-72). In addition, based on Ur's satellite imagery analysis, there were some parts of the city that were tightly built up (Ur 2013, Fig. 5), possibly resembling the so-called artisan's quarter of Nineveh. At the same time, we are informed about possible administrative activities related to the lower city itself from the so-called "town-wall palace" (Mallowan 1957, pl. 11). It is, therefore, perhaps possible to assume that the type of activities taking place at Kalḫu would resemble these of Nineveh or Tušhan, such as: industrial type production (densely built areas); military maintenance (Fort-Shalmaneser); administration and storage (administrative builds both in the lower city and in the citadels); and crop processing (based on the extensive surrounding agricultural hinterland). At the same time, it is possible to suggest that the city included an elite population, and commoners, workers, bureaucratic officials, and soldiers.

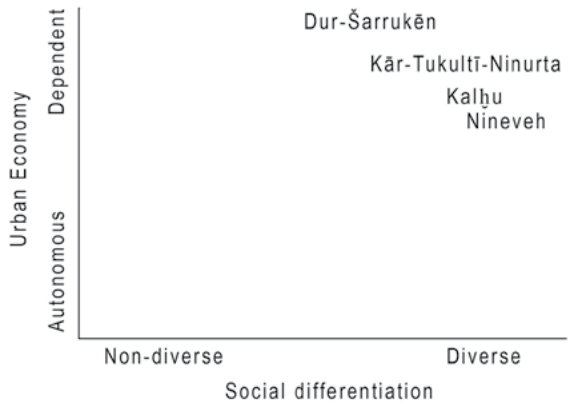

Figure 47: Assyrian capital cities classification based on this study, produced by the author.

On the basis of the evidence presented in this study in relation to the lower cities of Assyrian capitals, I would argue that Assyrian capitals contained very diverse urban spaces, creating cities that incorporated all aspects of Assyrian central cities. Due to their size and the different activities that took place in the cities, I would argue that Assyrian capitals should be placed on the top right of the suggested taxonomy of central cities discussed above (Figure 47). They all had very diverse populations, while being economically dependent on their hinterland and external food and economic resources. At the same time, just like every other city, Assyrian capitals were not identical to each other. Some might have been more elite focused (e.g. Dur-Šarrukēn), others might have had more urban features (e.g. Nineveh and Kalḫu), while others might have had a larger focus on agricultural production and they housed large numbers of deportee workers (e.g. Kār-Tukultī-Ninurta).

Concluding, Assyrian capitals were not empty cities and should not be reconstructed as such. The archaeological focus on elite spaces has distorted our view of these capitals and our perception has focused on the large palaces and temples. However, these cities were occupied by people. What kind of people it is hard to say, they might have been priests, soldiers, rich individuals, poor deportees, workmen, traders etc. Some of them might existed in one capital and not in another. Whatever was the case, Assyrian capitals were probably full of life.

7.4.5 CONCLUSIONS – FUNCTION OF ASSYRIAN CAPITALS

There is no question about the function of Assyrian capitals as the headquarters of the empire. Even though the Assyrians themselves did not have a word for capital cities (Cancik-Kirschbaum 2011, 73), their capitals fit all the criteria of a capital city: the seat of the government (king), and the location from which the administration and supervision of the empire was conducted.

It is important to stress, however, that Assyrian capitals should not be confined to the strict definition of "the residence of the king". They were fully fledged urban spaces, with complex social interactions. In the conceptual examples I investigated above, I suggested a more bottom-up approach for the study of the capitals of Assyria. Concluding, we still lack significant knowledge on the functions of Assyrian capitals.

Moving forward, an investigation of the lower cities will be a crucial factor that is bound to change the view we have of Assyrian capitals. The extent of the lower cities is such that it makes it almost impossible to excavate them in their entirety.

However, geophysical surveys (e.g. ground penetrating radar, magnetics, or resistivity) combined with archaeological surveys, such as the one conducted by Fiorina (2011) can help us map the lower cities and give a more cohesive picture of their urban spaces. Targeted excavations will then be able to provide glimpses of how these cities would had looked and the types of activities that took place in them. Such studies will allow us to rethink and redefine the basic premises of the current top-down approaches to Assyrian capitals. This will also allow for a wider, multifaceted re-interpretation of Assyria as an empire.

Chapter 8: Conclusions

8.1 A MODEL FOR ASSYRIAN CAPITAL CREATION

Based on the comparative investigation of archaeological and historical evidence, this study proposed a new model for the study of newly created Assyrian capitals: Kār-Tukultī-Ninurta, Kalḫu, Dur-Šarrukēn, and Nineveh. Throughout this study, I argued that attempting to pinpoint a single reason for the creation of each Assyrian capital is pointless. As demonstrated by the case studies, capital creation is a complex, multifaceted phenomenon that affects, and is affected by, multiple parameters. This has been shown most clearly by deconstructing the dominant regal-centric approach on capital creation, in which the king is the sole agent responsible for the creation of a new capital.

I proposed two main frameworks for the synthetic investigation of capital creation that move away from one-dimensional explanations. The first one forms the backbone of this research and is comprised by the three research questions of the why (rationale), how (construction), and what (function) of each new capital. The second is a triangular framework that combines multiple parameters related to capital creation: first, the historical conditions under which a capital was created, second, the type of resources exploited, and third, the agents who acted towards the creation of a capital. I will now bring the two models together, and show how they link to each other, as well as the value of such a new approach in the study of capital creation.

For the rationale behind capital creation, the why question, it is central to first investigate the historical conditions. I argued earlier that all capitals are created during periods of *imperial transformation* for Assyria. This is comprised by three main elements: i) territorial growth; ii) economic growth; and iii) developments in the imperial administration and ideology. Every capital creation in Assyria coincides with the period when the Assyrian empire reached its maximum territorial extent (see also Figure 45).

Associated with this territorial growth was an economic growth. This can be seen in the agricultural intensification of the conquered regions (Parker 2001; Kühne 2013; 2015), the extensive redevelopments in the Assyrian core and the hinterland of the new capitals (Morandi Bonacossi 2017a; 2018), and the increased taxation in the form of tribute from conquered states (Oates and Oates 2001, 90-104, 226-256). Adding to this is the fact that capital creation is an economically intensive strategy. The need for available resources for the undertaking of such a project is high, as was illustrated in the discussion regarding the construction of city walls.

Crucially, none of the new Assyrian capitals seems to break the continuity of the Assyrian empire. While each capital is associated with administrative, ideological, and economic changes, these changes were never associated with an overhaul of what could be considered as traditionally Assyrian (Liverani 2017). This goes against the view of Joffe (1998), who suggested that newly built capitals are associated with the emergence of new elites, sudden shifts in the iconography and the symbolic vocabulary, and new forms of political legitimization.

In the end, there cannot be, and should not be, a single answer to why Assyrian capitals were created. The why question should be answered only contextually, and by synthesizing multiple factors. As such, I argue that the creation of new capitals is an intentional and standardized strategy of the Assyrian empire, effectively used to signify the growth and accommodate the administrative developments of the empire. Capital creation is driven by, and occurs only after periods imperial transformation. This transformation brought the sufficient influx of resources and allowed key agents to initiate these projects.

Moving on to the construction process of Assyrian capitals, the *how* question, I argue that the proposed triangular model can help us to understand further how capitals were created. While the rationale of capital creation is driven by processes of imperial transformation, the construction process is driven by those agents who act within their contemporary historical conditions and resource availability. Central to the process of construction is the *availability* and *exploitation* of resources by these agents (Figure 49). The people engaged with the process of capital creation constitute three main groups: i) the kings; ii) the elites; iii) the labor force/people. The role of kings and elites has already been discussed in relation to the rationale behind capital creation. The role of all three groups in the construction process, however, is revealed in the available textual documentation, and mainly the textual corpus related to the construction of Dur-Šarrukēn (Parpola 1995).

In that corpus Sargon is shown as the one having the final word over every decision regarding issues of construction. He claims, in fact, that it was him who "*planned and thought day and night in order to make this city habitable, and to erect its shrines as abodes for the great gods, and a complex of palaces as my royal residence*" (Lyon 1883, 14).[38] To what extent this is true, however, is unclear. Parpola suggests that such a statement is not "empty words", as from the documentation it seems likely that Sargon was seriously engaged in the process (Parpola 1995, 52). While part of the documentation for Dur-Šarrukēn seems to stem from Sargon himself (six letters), most of the documents (fourteen letters) are actually signed by the treasurer Tab-šar-Aššur, one by Sennacherib, and the rest come from various officials (ministers and provincial governors) involved in the project (Parpola 1995, 51). Such a corpus shows the complications of capital creation on an organizational level. Even in the case of Dur-Šarrukēn, which seems to be the capital where the king has the most central role, the construction process depended on the cooperation and competence of several other actors.

The picture becomes even more complicated when the labor force is considered. The role of the labor force, I believe, should not be understated in any construction process. Much like the execution of the commands coming from the king is dependent

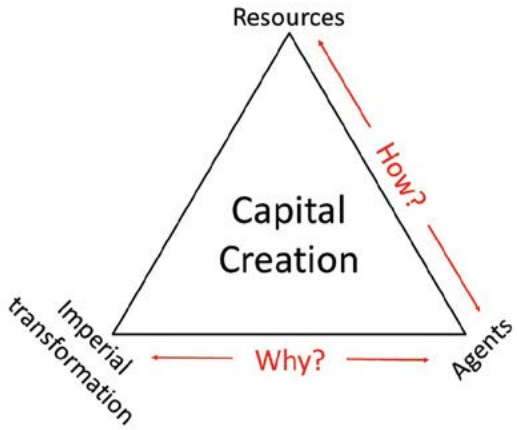

Figure 48: Model for the rationale and construction of Assyrian capitals, produced by the author, produced by the author.

on the interplay between the king and those who execute these orders, similarly, I suggest, the execution of the physical construction is dependent on the interplay between the officials in charge of construction and the construction workers themselves. This is illustrated by the correspondence for the construction of Dur-Šarrukēn and, through the labor force analysis conducted above.

I suggest that the construction process needs to be studied from two perspectives. The first is the technical perspective, which involves the actual practice of construction, the type of required material, and the amount of labor required. This technical perspective, like the task-force analysis performed in this study, reveals the "hardware", or material, aspect of construction. However, this hardware aspect also needs to be studied in relation to the "software" practices, namely the interplay between the king, the elites, and the labor force for the construction of a new capital. Finally, the combination of the corpus studied by Parpola, the discussion conducted for each case study, as well as the task-force analysis, suggest that the process of construction was similar in every Assyrian capital. This further supports an overall idea of continuity in the strategy of capital creation.

The production of this model of interaction for the creation of new capitals goes back to Sewell's theory discussed in the introduction of this study (see section 1.3.2). It is recalled that Sewell argued

38 A similar case could perhaps be true for Nineveh and Sennacherib as well, but the data are significantly more limited.

for a dynamic interaction and interdependency between human agency and historical processes. It has been shown, through investigating the reasons and process of construction of Assyrian capitals that it is this constant interplay between active agents and historical conditions that form the phenomenon of capital creation.

Reviewing the reasons behind capital creation in Assyria, it can be concluded that there are no deterministic factors that definitely lead to capital creation. The similarities, however, between the historical conditions during which Assyrian capitals were created are striking. As such it is possible to identify broader patterns that are present in most cases of new capitals, but there is also variability of outcomes (i.e. the abandonment of Kār-Tukultī-Ninurta, the long lasting Kalḫu, the never-used Dur-Šarrukēn, and the transformation of Nineveh). This variability shows that Assyrian kings and elites might have acted with certain intentions for creating new capitals but their imperfect knowledge and actions had resulted in unintended consequences (see also Joyce 2004).

At the same time, the creation of new capitals is shaped both by the visions of their planners, but also by the actions of the labor force and agency of the people living in these spaces (Lefebvre 1991). This informed the last question set out in this study related to the *function* of every new capital. This proved to be both a relatively easy question to answer in regard to the administrative functions of a new Assyrian capital, but was a particularly difficult one in regard to the urban functions of these capitals.

When it comes to the administrative function of Assyrian capitals, we do not see any significant variation from one city to the other. The overview of the citadels of all the capitals examined in this study shows that the elite spaces were comprised of the same types of buildings (i.e. palaces, elite residences, temples) that served the same functions. The citadels of new capitals were always walled, and in three out of four cases (i.e. the three Neo Assyrian capitals) physically elevated above the rest of the city, creating a clear division between the elite space and the residential/urban space.

Central to the role of every Assyrian capital is the fact that it hosted the primary palace, which acted as both the main residence of the king, and the main administrative institution of the Assyrian empire. It is the case in both the new capitals, as well as the primary palaces, that we see a continuity in their development and evolution, rather than a departure from tradition (Kertai 2015).

Finally, every citadel hosted a number of residential buildings for members of the royal family and high officials. These buildings would act as residential spaces but also would serve as administrative institutions related to the function of the official living there. Only two capitals offer sufficient archaeological evidence for these buildings (Kalḫu and Dur-Šarrukēn), but their existence can be deduced comparatively from the open spaces in the other Assyrian capitals.

Therefore, in regard to the administrative function of Assyrian capitals, it can be argued that we have significant overlap and continuity. All the capitals shared the same functions: the primary residence of the king, the main administrative center of the empire, hosting high ranking officials, and an important religious center. No Assyrian capital can be described as an exclusively economic center, or exclusively a religious center/ceremonial center.

At the same time, it was shown that Assyrian capitals also constituted extended residential spaces. If we want to comprehend the full extent of the functions of Assyrian capitals, we need to study the residential spaces, what is termed as the lower city. However, data are extremely limited. Besides comparative data from other Assyrian cities, and a small amount of studies in lower cities of Assyrian capitals, there are no real excavation or survey data to work with. What can be said is that Assyrian capitals were diverse spaces, hosting a wide range of individuals from around the empire, and of different social classes.

The main goal of this research was to show how we can explain the creation of capitals in Assyria. It has been demonstrated that we can speak of a general model of Assyrian capital creation. This model, I have argued, shows that Assyrian capital creation was not a "quirk" of exceptional kings who decided to move their palace to a new city either out of arrogance or out of fear of existing power structures. Rather, Assyrian capital creation can be explained as a multifaceted imperial strategy that was implemented as Assyria transitioned into an imperial state, and facilitated its growing administrative, economic, and ideological needs.

8.2 APPLICABILITY OF THE MODEL THROUGH HISTORY

In addition to the study of Assyrian capital creation, I suggest that the analytical framework for capital creation used in this study can be applicable in other, ancient or modern, instances of the phenomenon. This has already been briefly discussed in the introduction of this study, in the introduction of this model. The question then arises, whether its use in the case of Assyria has shown potential for its use in other case studies.

A key result of this study is that Assyrian capitals are a product of and related to both continuity and transformation of the Assyrian empire. This is contrary to the idea suggested by Joffe (1998), that new capitals present breaks in the continuity of their states. I suggest that the concepts of continuity and transformation should be central in the study of every newly created capital. This could possibly be further illustrated by contemporary parallels to Assyrian capitals, such as the new capitals created during the Late Bronze Age in the Near East (i.e. Tarhuntašša, Amarna, Dūr-Kurigalzu, Dur-Untaš), a period of territorial and economic growth for multiple empires. In particular, during that period we have seen the growth of the Hittite empire, the rise of the New Kingdom in Egypt, the ruling of the Kassite dynasty in Babylonia, and the growth of the state of Elam.

In light of the results of this study, I suggest that re-visiting capital creations in Late Bronze Age empires, using the theoretical framework proposed here, would significantly reframe how we view these capitals, as well as how we perceive these empires. The capital cities of these empires, much like the ones of Assyria, have often been tied to specific rulers as their creators: Tarhuntašša with Muwatalli II (1295-1272 BCE); Amarna with Akhenaten (ca. 1353-1336 BCE); Dūr-Kurigalzu with Kurigalzu I (died in 1375 BCE); and Dur-Untaš with Untaš-Napiriša (possibly ca. 1340-1300 BCE). Little consideration has been given to the reasons for the creation of these capitals, their construction, or their urban life.

Furthermore, as discussed earlier, new capitals often have been associated with the transformation of modern nation states, like was the case with the post-colonial capitals of Africa (Hall 1993) or the post-imperial capitals of Europe (Makaš and Conley 2010). However, these could be assessed using the same model. This is not to say that every case of capital creation presents the same characteristics of transformation. Assyria showed a transformation in its imperial system and administration, while post-colonial capitals of Africa can be linked with the change from colonial rule to sovereign national states. In terms of continuity, Assyria was transforming but not deviating from its imperial system and growth. Continuity in post-colonial national states can be seen in the re-growth of their indigenous population, the re-emergence of suppressed customs and ethics, and the re-establishment of their inland areas as focal regions of growth (Hall 1993).

I suggest that the model used in this study allows for a holistic assessment of aspects related to capital creation because it can accommodate exactly this variability of the phenomenon. The three main questions of "why, how, and what" are fundamental and widely applicable, while the triangular model can be adjusted and re-evaluated for each case study. Through the comparative investigation of evidence, the triangular model provides a framework to identify crucial patterns of transformations and continuity by relating the different questions and the different datasets with each other. This ability for modification of the proposed framework can be seen, for example, in the case of modern states where territorial expansion as a means of state transformation and resource acquisition is less relevant than they were for the Assyrian empire. We saw that in the case of European capitals of the 20th century, the fundamental role in the relocation of capitals was the fall of European empires (Makaš and Conley 2010). My model can be a useful tool for the assessment of both. It provides a solid framework for the study of capital creation, both individually, as well as comparatively, from the ancient to the more recent past, and even to future capitals.

8.3 RECOMMENDATIONS

In the wake of this study, the opportunities for future research have only increased. For those who wish to work with Assyrian capitals, the lower cities are, I believe, the most exciting place to conduct future research. Despite the limited available data, studying lower cities will have the most profound impact on our knowledge of Assyrian capitals, and Assyrian cities in general. At the same time, there is a lot more work required regarding the process of construction of cities. Modeling construction processes, either

through quantification (i.e. taskwork analysis) or through simulation (i.e. agent-based modeling) is a suggested way forward.

For those wishing to work with capital creation in antiquity, I am hopeful that the framework used in this study will be a useful tool. Several ancient empires have instances of capital creation which await to be studied comparatively. Particularly notable are the Persian capital cities – Susa, Pasargadae, Persepolis, Babylon, and Ecbatana – and their creation, their administrative role within the empire, and their co-existence.

Finally, I believe that the opportunity exists for a collaborative, comparative study between ancient and modern capital creation as phenomena. Identifying the key similarities and differences and working towards a more comprehensive understanding of the phenomenon is necessary. Crucial in such a study will be the collaboration between historians, archaeologists, political scientists, and urban sociologists.

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Bibliography

Abbott, C., 1990. Dimensions of Regional Change in Washington D.C. *American Historical Review* 95(5), 1367-1393.

Abbott, C., 1999. *Political Terrain. Washington, D.C., from tidewater town to global metropolis*. Chapel Hill: University of North Carolina Press.

Abbott, C., 2005. Washington and Berlin. National capitals in a networked world. In A.W. Daum and C. Mauch (eds.), *Berlin – Washington, 1800-2000. Capital cities, cultural representation, and national identities*. Cambridge: Cambridge University Press, 101-125.

Adams, R.McC., 1981. *Heartland of Cities. Surveys of ancient settlement and land use on the central floodplain of the Euphrates*. Chicago: Chicago University Press.

Albenda, P., 1983. A Mediterranean Seascape from Khorsabad. *Assur* 3(3), 1-17.

Albenda, P., 2003. Dur-Sharrukin, the Royal City of Sargon II, King of Assyria. *Bulletin of the Canadian Society for Mesopotamian Studies* 38, 5-13.

Akkermans, P.M.M.G., 2006. The Fortress of Ili-pada. Middle Assyrian architecture at Tell Sabi Abyad, Syria. In P. Butterlin, M. Lebeau, J. Monchambert, J.L. Montero and B. Mullers (eds.), *Les Espaces Syro-Mésopotamiens. Dimensions de l'expérience humaine au Proche-Orient ancien. Volume d'hommage offert à Jean-Claude Margueron*. Turnhout: Brepols, 201-212.

Akkermans, P.M.M.G. and F.A.M. Wiggermann, 2015. West of Aššur. The life and times of the Middle Assyrian dunnu at Tell Sabi Abyad. In B. S. Düring (ed.), *Understanding Hegemonic Practices of the Early Assyrian Empire. Essays dedicated to Frans Wiggermann*. Leiden: Nederlands Instituut voor het Nabije Oosten, 89-124.

Alofsin, A., 2006. *When Buildings Speak. Architecture as language in the Habsburg empire and its aftermath, 1867-1933*. Chicago: University of Chicago Press.

Altaweel, M., 2008. *The Imperial Landscape of Ashur. Settlement and land use in the Assyrian heartland*. Heidelberg: Heidelberger Orientverl.

Andrae, W., 1925. *Coloured Ceramics from Ashur, and Earlier Ancient Assyrian Wall-Paintings*. London: Trench, Trubner & Company.

Andrae, W., 1977. *Das Wiedererstandene Assur*. München: Beck.

Arnold, S., 2004. *Aufbau einer multisensoralen un multitemporalen Satellitenbilddatenbank zur Detektion archäologischer un landschaftsökologischer Muster im Nordirak*. Heidelberg (unpublished Ph.D. thesis Universität Heidelberg).

Averbeck, R.E., 2002. Sumer, the Bible and Comparative Method. Historiography and temple building. In M.W. Chavalas and K.L. Younger (eds.), *Mesopotamia and the Bible. Comparative explorations*. London: Sheffield Academic Press, 88-125.

Bachmann, W., 2016. *Die Grabungen der Deutschen Orient-Gesellschaft in Kar-Tukulti-Ninurta 1913-14 unter W. Bachmann, Dargestellt von R. Dittmann nach Unterlagen von W. Bachmann*. [https://www.academia.edu/260663665/KAR-TUKULTI-NINURTA_with_Bachmanns_report accessed 06-08-2016].

Bagg, A.M., 2000a. Irrigation in Northern Mesopotamia. Water for the Assyrian capitals (12th-7th centuries BC). *Irrigation and Drainage Systems* 14, 301-324.

Bagg, A.M., 2000b. *Assyrische Wasserbauten. Landwirtschaftliche Wasserbauten im Kernland Assyriens zwischen der 2. Hälfte des 2. Und der 1. Hälfte des 1. Jahrtausends v. Chr.* Mainz am Rhein: Phlipp von Zabern.

Bagg, A.M., 2011. *Die Assyrer und das Westland: Studien zur historischen Geographie und Herrschaftspraxis in der Levante im 1. Jt. v.u.Z.* Leuven: Peeters.

Baker, H.D., 2008. Salmanassar V. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 11(7-8). Berlin: Walter de Gruyter, 585-587.

Ball, W., 2016. *Rome in the East. Transformation of an empire*. London and New York: Routledge.

Bär, J., 2003. *Die älteren Ischtar-Tempel in Assur. Stratigraphie, Architektur und Funde eines altorientalischen Heiligtums von der zweiten Hälfte des 3. Jahrtausends bis zur Mitte des 2. Jahrtausends v. Chr*. Saarbrücken: Saarbrücker Druckerei und Verlag.

Barbanes, E., 1999. *Heartland and Province. Urban and rural settlement in the Neo-Assyrian empire*. California (unpublished Ph.D thesis University of California.

Barjamovic, G., 2013. Mesopotamian Empires. In P.F. Bang and W. Scheidel (eds.), *The State in the Ancient Near East and Mediterranean*. Oxford: Oxford University Press, 120-160.

Barrow, C.W., 1993. *Critical Theories of the State. Marxist, neomarxist, postmarxist*. Wisconsin: University of Wisconsin Press.

Bartelmus, A., 2010. Restoring the Past. A historical analysis of the royal temple building inscriptions from the Kassite period. *Kaskal* 7, 143-171.

Baster, K. and R. Dittmann, 1995. Anmerkung zu einigen Schmuckelementen eines mittelassyrischen Tempels in Kar-Tukulti-Ninurta (Iraq). *Altorientalische Forschungen* 22(1), 8-29.

Battini, L., 1998. Les Portes Urbaines de la Capitale de Sargon II. Étude sur la propaganda royale á travers les données archéologiques et textuelles. In J. Prosecky (ed.), *Intellectual Life of the Ancient Near East. Papers presented at the 43rd rencontre assyriologique internationale, Prague, July 1-5, 1996*. Prague: Academy of Sciences of the Czech Republic, Oriental Institute, 41-55.

Battini, L., 2000. Des Rapports Géometriques en Architecture. Le cas de Dūr-Šarrukīn. *Revue d'Assyriologie et d'archéologie orientale* 94(1), 33-56.

Bedford, P.R., 2009. The Neo-Assyrian Empire. In I. Morris, and S. Walter (eds.), *The Dynamics of Ancient Empires. State power from Assyria to Byzantium*. Oxford: Oxford University Press, 30-65.

Bernbeck, R., 2010. Imperialist Networks. Ancient Assyria and the United States. *Present Pasts* 2(1).

Beuger, C., 2011. Notes on the Neo-Assyrian Re-Settlement in Kar-Tukulti-Ninurta. In P.A. Miglus and S. Mühl (eds.), *Between the Cultures. The central Tigris region in Mesopotamia from the 3rd to the 1st millennium BC*. Heidelberger: Heidelberger Orientverlag, 179-189.

Blanton, R.E., 1976a. The Origins of Monte Alban. In C. Cleland (ed.), *Cultural Change and Continuity*. New York: Academic, 223-232

Blanton, R.E., 1976b. Anthropological Studies of Cities. *Annual Review of Anthropology* 5, 249-264.

Blanton, R.E., 1978. *Monte Albán. Settlement patterns at the ancient Zapotec Capital*. New York: Percheron Press.

Botta, P.E. and E. Flandin, 1849. *Monument de Ninive II*. Osnabrück: Biblio Verlag.

Botta, P.E. and E. Flandin, 1850. *Monument de Ninive V.* Paris : Impr. Nationale.

Brill, R.J., 1978. Some Minature Glass Plaques from Fort Shalmaneser, Nimrud. *Iraq* 40, 23-39.

Brisch, N. (ed.), 2008. *Religion and Power. Divine kingship in the ancient world and beyond*. Chicago: Oriental Institute.

Bryce, T., 2007. The Secession of Tarhuntašša. In D. Groddek and M. Zorman (eds.), *Tabularia Hethaeorum – Hethitologische Beiträge Silvin Košak zum 65*. Geburtstag: Wiesbaden, 119-129.

Bunnens, G., 1996. Syro-Anatolia Influence on Neo-Assyrian Town Planning. In G. Bunnens (ed.), C*ultural Interaction in the Ancient Near East*. Louvain: Peeters, 113-128.

Burbank, J. and F. Cooper, 2010. *Empires in World History. Power and the politics of difference*. Princeton and Oxford: Princeton University Press.

Burke, A. A., 2008. *"Walled Up to Heaven". The evolution of middle bronze age fortification strategies in the Levant*. Winona Lake : Eisenbrauns.

Caramelo, F., 2012. L'expansion Médio-assyrienne au Moyen Euphrate Syrien. Le contexte international, l'affirmation de l'Assyrie et la problématique de la frontier. In J-L.M. Fenollós (ed.), *Du Village Néolithique á la Ville Syro-Mésopotamiene*. Ferrol: Universidade da Corunã y el Concello, 133-141.

Carlson, E., 2017. *Capital Cities in the Late Bronze Age Greater Mesopotamia*. California (unpublished PhD thesis University of California).

Cancik-Kirschbaum, E., 2003. *Die Assyrer*. Munich: C. H. Beck.

Cancik-Kirschbaum, E., 2011. Ashur. The making of an imperial capital in the 15th and 14th century BC. *Mesopotamia: Rivista di archeologia, epigrafia e storia orientale antica* 46, 71-78.

Cifola, B., 2004. The Titles of Tukulti-Ninurta I after the Babylonian Campaign. A re-evaluation. In A.K. Grayson, G. Frame and L.S. Wilding (eds.), *From the Upper Sea to the Lower Sea. Studies on the history of Assyria and Babylonia in honour of AK Grayson*. Leiden: Nederlands Instituut voor het Nabije Oosten, 7-15.

Clayden, T., 1996. Kurigalzu and the Restoration of Babylonia. *Iraq* 58, 109-121.

Cotterell, A., 2008. *The Imperial Capitals of China. An inside view of the celestial empire*. Woodstock: Overlook Press.

Cudworth, E., T. Hall and J. McGovern, 2007. *The Modern State. Theories and ideologies*. Edinburgh: Edinburgh University Press.

Cultaro, M., F. Gabellone and G. Scardozzi, 2007. Integrated Methodologies and Technologies for the Recosntructive Study of Dur-Sharrukin (Iraq). In A. Georgopoulos (ed.), *AntiCIPAting the Future of the Cultural Past. Proceedings of the XXI international symposium CIPA*. Athenai: CIPA, 253-258.

Cummings, M.C. and M. Price, 1993. The Creation of Washington, DC. Political symbolism and practical problem solving in the establishment of the capital city in the United States of America. In J. Taylor, J.G. Lengellé and C. Andrew (eds.), *Capitals Cities. Les Capitales*. Ottawa: Carlton University Press, 213-249.

Curtis, J., 2017. The British Museum Excavations at Nineveh. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 69-73.

Cuyler Young, T., 1988. The Consolidation of the Empire and its Limits of Growth under Darius and Xerxes. In J. Boardman, N.G.L. Hammond, D.M. Lewis and M. Ostwald (eds.), *The Cambridge Ancient History Volume IV. Persia, Greece and the western Mediterranean c. 525 to 479 B.C.* Cambridge: Cambridge University Press, 53-111.

d'Alfonso, L., 2014. The Kingdom of Tarhuntassa. A reassessment of its timeline and political significance. In P. Taracha (ed.), *Proceedings of the Eighth International Congress of Hittitology (Warsaw, 5–9 September 2011)*. Warsaw: Wydawnictwo Agade, 216-235.

Dabbs, G.R., and Zabecki, M., 2014. Abandoned Memories. A cemetery of forgotten souls? In B.W. Porter and A.T. Boutin (eds.), *Remembering the Dead in the Ancient Near East*. Boulder: University Press of Colorado, 217-250.

Dalley, S., 2013. *The Mystery of the Hanging Garden of Babylon. An elusive world wonder traced.* Oxford: Oxford University Press.

Danti, M., 2016. *Nimrud and the Islamic State Deliberate Destructions. An update*. [http://www.asor-syrianheritage.org/special-report-nimrud-and-the-islamic-state-deliberate-destructions-an-update/ accessed 09-04-2018].

Daum, A.W. and C. Mauch (eds.), 2005. *Berlin – Washington, 1800-2000. Capital cities, cultural representation, and national identities*. Cambridge: Cambridge University Press.

Deller, K., A. Fadhil and K.M. Ahmad, 1994. Two New Royal Inscriptions Dealing with Construction Work in Kar-Tukulti-Ninurta. *Baghdader Mitteilungen* 25, 459-472.

Dickson, K., 2009. The Wall of Uruk. Iconicities in Gilgamesh. *Journal of Ancient Near Eastern Religions* 9(1), 25-50.

Dietrich, M., 2004. Salmanassar I. von Assyrien, Ibirānu (VI.) von Ugarit und Tutḫalija IV. Von Ḫatti. *Ugarit-Forschungen* 35, 103–39.

Dittmann, R., 1990. Ausgrabungen der Freien Universität Berlin in Assur and Kār-Tukultī-Ninurta in den Jahren 1986-89. *Mitteilungen der Deutschen Orient-Gesellschaft* 122, 157-171.

Dittmann, R., 1997a. Die inneren und äusseren Grenzen der mittelassyrischen Residenzstadt Kar-Tukulti-Ninurta/Nord-Iraq. In M. Jansen and P. Johanek (eds.) *Grenzen und Stadt, Veröffentlichungen der Interdisziplinären Arbeitsgruppe Stadtkulturforschung vol.2*. Münster: Aachen, 101-115.

Dittmann, R., 1997b. Kar-Tukulti-Ninurta.In E.M. Meyers (ed.) *Oxford Encyclopedia of Archaeology in the Near East*. New York and Oxford: Oxford University Press, 269-271.

Dittmann, R., 2011. Kar-tukulti-Ninurta Through the Ages. A short note. In P.A. Miglus and S. Mühl (eds.), *Between the Cultures. The central Tigris region in Mesopotamia from the 3rd to the 1st millennium BC*. Heidelberger: Heidelberger Orientverlag, 167-178.

Dittmann, R., forthcoming. *Ausgrabungen in Kar-Tukulti-Ninurta, Nord-Irak. Ergebnisse der Grabungen von W. Bachmann 1913-14 und der FU-Berlin 1986 und 1989 – Mit einer biographischen Skizze von H. Nadler/ Dresden. Zusammen mit K. Bastert, A. Gilibert und C. Schmid, in Vorbereitung*.

Dittmann, R., T. Eickhoff, R. Schmitt, R. Stengele, and S. Thürwächter, 1988. Untersuchungen in Kār-Tukultī-Ninurta (Tulūl al-'Aqar) 1986. *Mitteilungen der Deutschen Orient-Gesellschaft* 120, 97-138.

Dolce, R., 1997. The City of Kar-Tukulti-Ninurta. Cosmic characteristics and topographical aspects. In H. Waetzoldt (ed.), *Assyrien im Wandel der Zeiten. XXXIXe Rencontre Assyriologique Internationale Heidelberg 6.-10. Juli 1992*. Heidelberg: Heidelberger Studien zum Alten Orient, 251-258.

Doyle, M.W., 1986. *Empires*. New York: Cornell University Press.

Dubovský, P., 2004-5. Neo-Assyrian Warfare. Logistics and weaponry during the campaigns of Tiglath-Pileser III. *Anodos: Studies of the Ancient World* 4-5, 61-67.

Düring, B.S., 2015. The Hegemonic Practices of the Middle Assyrian Empire in Context. In B. S. Düring (ed.), *Understanding Hegemonic Practices of the Early Assyrian Empire. Essays dedicated to Frans Wiggermann*. Leiden: Nederlands Instituut voor het Nabije Oosten, 299-314.

Düring, B.S., 2018. Engineering Empire. A provincial perspective on the Middle Assyrian empire. In B.S. Düring and T. Stek (eds.), *The Comparative Archaeology of Imperial Countrysides. Investigating the transformations of rural and peripheral landscapes and docieties in ancient old wrold empires*. Cambridge: Cambridge University Press, 21-47.

Düring, B.S., 2020. *The Imperialisation of Assyria. An archaeological approach*. Cambridge: Cambridge University Press.

Eickhoff, T., 1985. *Kar-Tukulti-Ninurta. Eine mittelassyrische Kult-und Residenzstadt*. Berlin: Mann.

Fales, F.M., 2010. *Guerre et paix en Assyrie. Religion et impérialisme*. Paris: du Cerf.

Fales, F.M., 2011. Die Expansion Assyriens: Aramäer als Teil der assyrischen Gesellschaft. In J. Renger (ed.) *Assur: Gott, Stadt und Land*. Wiesbaden: Harrassowitz, 211–37.

Fales, F.M., 2017. Austen Henry Layard. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 74-77.

Farías, I. and T. Bender, 2012. *Urban Assemblages. How actor-network theory changes urban studies*. New York: Routledge

Fincke, J.C., 2017. The Library of Ashurbanipal. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 208-211.

Fiorina, P., 1998. Un Braciere da Forte Salmanassar, Nimrud. *Mesopotamia* 33, 167-181.

Fiorina, P., 2008. Italian Escavations at Nimrud-Kalhu. Chronological and stratigraphical problems. In J.E. Curtis, H. McCall, D. Collon and L. al-Gailani Werr (eds.), *New Light on Nimrud. Proccedings of the Nimrud conference 11th-13th March 2002*. London, British Intitute for the Study of Iraq: The British Musuem, 53-56.

Fiorina, P., 2011. La Città Bassa di Nimrud. Testimonianze topografiche e cronologiche. *Mesopotamia* 46, 127-136.

Florida, R., 2008. *Who's Your City? How the creative economy is making where to live the most important decision of our life*. New York: Basic Books.

Foster, B.R., 1996. *Before the Muses. An anthology of Akkadian literature 1st edition*. Maryland: CDL Press.

Foster, K.P., 2004. The Hanging Gardens of Nineveh. *Iraq* 66, 207-220.

Foster, K.P., 2005. *Before the Muses. An anthology of Akkadian literature 3rd edition*. Bethesda: CDL Press.

Fox., R.G., 1977. *Urban Anthropology. Cities in their cultural settings*. New Jersey: Prentice-Hall.

Frahm, E., 2009. *Historische und historisch-literarische Texte, Keilschrifttexte aus Assur literarischen Inhalts 3*. Wiesbaden: Harrassowitz.

Frahm, E., 2010. Hochverrat in Assur. In. S.M. Maul and N.P. Heeßel (eds.) *Assur Forschungen: Arbeiten aus der Forschungsstelle "Edition literarischer Keilschrifttexte aus Assur" der Heidelberger Akademie der Wissenschaften*. Wiesbaden: Harrassowitz, 89-139.

Frahm, E., 2013. Sculpted Slab with an Inscription of Sargon II Mentioning the Rebellion of Yaubi'di of Hamath. *Altorientalische Forschungen* 40, 42–54.

Frahm E., 2017a. Introduction. In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwell, 1-12.

Frahm E., 2017b. The Neo-Assyrian Period (ca. 1000-609). In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwell, 161-208.

Frahm E., 2017c. List of Assyrian Kings. In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwell, 613-616.

Freydank, H., 1974. Zwei Verpflegungstexte aus Kar-Tukulti-Ninurta. *Altorientalische Forschungen* 1, 55-90.

Freydank, H., 1976, *Mittelassyrische Rechtsurkunden und Verwaltungstexte*. Berlin: Akademie-Verlag.

Freydank, H., 1991. *Beiträge zur mittelassyrischen Chronologie und Geschichte*. Berlin: Akademie Verlag.

Freydank, H., 2005. Zu den Eponymenfolgen des 13. Jahrhunderts v. Chr. in Dūr-Katlimmu. *Altorientalische Forschungen* 32, 45-56.

Freydank, H., 2009. Kār-Tukultī-Ninurta als Agrarprovinz. *Altoriental. Forsch.* 36(1), 16–84.

Fuchs, A., 1994. *Die Inschriften Sargon II. aus Khorsabad*. Gottingen: Cuvillier.

Fuchs, A., 2009. Sargon II. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 12(1-2). Berlin: Walter de Gruyter, 51-61.

Fuchs, A., 2010. Gyges, Assurbanipal und Dugdammē/Lygdamis: Absurde Kontakte zwischen Anatolian und Ninive. In R. Rollinger (ed.), *Interkulturalität in der Alten Welt. Vorderasien, Hellas, Ägypten und die vielfältigen Ebenen des Kontakts*. Wiesbaden: Harrassowitz, 409–27.

Fuchs, A., 2011. Das Osttigrisgebiet von Agum II. bis zu Darius I. (ca. 1500 bis 500 v. Chr.). In P.A. Miglus and S. Mühl (eds.), *Between the Cultures. The central Tigris region in Mesopotamia from the 3rd to the 1st millennium BC*. Heidelberger: Heidelberger Orientverlag, 229–464.

Fuchs, A., 2017. Assyria and the North: Anatolia. In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwell, 249-258.

Gadd, C.J., 1936. *The stones of Assyria*. London: Chatto and Windus.

Galter, H.D., 1996. Gott, König, Vaterland. Orthographisches zu Aššur in altassyrischer Zeit. *Wiener Zeitschrift für die Kunde des Morgenlandes* 86, 127–41.

Gángó, G., 2001. 1848-1849 in Hungary. *Hungarian Studies* 15(1), 39-47.

Garelli, P., 1991. The Achievement of Tiglath-Pileser III. Novelty or continuity. In M. Cogan and I. Eph'al (eds.), *Ah, Assyria… Studies in Assyrian history and ancent Near Eastern historyography presented to Hayim Tadmor*. Jerusalem: The University of Chicago Press, 46-51.

Garrioch, D. and M. Peel, 2006. Introduction. The social history of urban neighborhoods. *Journal ofUrban History* 32, 663-676.

Garthwaite, G.R., 2005. *The Persians*. Oxford: Blackwell.

Georgacas, D.J., 1947. The Names of Constantinople. *Transactions and Proceedings of the American Philological Association* 78, 347–67.

Gilibert, A., 2008. On Kār Tukultî Ninurta. Chronology and politics of a Middle Assyrian ville neuve. In D. Bonatz, R.M. Czichon and F. Janoscha Kreppner (eds.), *Gesammelte Schriften zur Archaeologie und Geschichte Altvorderasiens ad honorem Hartmu Kühne*. Wiesbaden: Harrassowitz, 177- 188.

Glassner, J.J. 2005. *Mesopotamian Chronicles*. Atlanta: Society of Biblical Literature.

Gleeson, B., 2014. *The Urban Condition*. New York: Routledge.

Glick Schiller, N. and A. Çaglar (eds.), 2011. *Locating Migration. Rescaling cities and migrants*. London, Ithaca, New York, Cornell University Press.

Goossens, R., A. De Wulf, J. Bourgeois, W. Gheyle and T. Willems, 2006. Satellite imagery and archaeology. The example of CORONA in the Altai Mountains. *Journal of Archaeological Science* 33(6), 745-755.

Gordon, D.L.A. (ed.), 2006. *Planning Twentieth Century Capital Cities*. New York: Routledge.

Grayson, A.K., 1975. *Assyrian and Babylonian Chronicles*. Locust Valley: NY, Augustin.

Grayson, A.K., 1982. Assyria. Ashur-Dan II to Ashur-Nirari V (954–745 B.C.). In J. Boardman, I.E.S. Edwards, E. Sollberger and N.G.L. Hammond (eds.), *The Cambridge Ancient History Volume 3, Part 1, The Prehistory of the Balkans, the Middle East and the Aegean World, Tenth to Eighth Centuries BC, 2nd edition*. Cambridge: Cambridge University Press, 238-281.

Grayson, A.K., 1987. *Assyrian Rulers of the Third and Second Millennium BC (To 1115) (RIMA 1)*. Toronto: University of Toronto Press.

Grayson, A.K., 1991. *Assyrian Rulers of the Early First Millennium BC I (1114-859 BC) (RIMA 2)*. Toronto: University of Toronto Press.

Grayson, A.K., 1992a. Assyria. Tiglath-Pileser III to Sargon II (744-705 B.C.). In J. Boardman, I.E.S. Edwards, E. Sollberger and N.G.L. Hammond (eds.), *The Cambridge Ancient History Volume 3, Part 2, The Assyrian and Babylonian Empires and Other States of the Near East, from the Eighth to the Sixth Centuries BC, 2nd edition*. Cambridge: Cambridge University Press, 71-102.

Grayson, A.K., 1992b. Assyria. Sennacherib and Esarhaddon. In J. Boardman, I.E.S. Edwards, E. Sollberger and N.G.L. Hammond (eds.), *The Cambridge Ancient History Volume 3, Part 2, The Assyrian and Babylonian Empires and Other States of the Near East, from the Eighth to the Sixth Centuries BC, 2nd edition*. Cambridge: Cambridge University Press, 103-141.

Grayson, A.K., 1992c. Assyria. The Reign of Ashurbanipal. In J. Boardman, I. E. S. Edwards, E. Sollberger and N.G.L. Hammond (eds.) *The Cambridge Ancient History Volume 3, Part 2, The Assyrian and Babylonian Empires and Other States of the Near East, from the Eighth to the Sixth Centuries BC, 2nd edition*. Cambridge: Cambridge University Press, 142-162.

Grayson, A.K., 1996. *Assyrian Rulers of the Early First Millennium BC II (858-745 BC) (RIMA 3)*. Toronto: University of Toronto Press.

Greenfield, T.L., 2015. The Palace Versus the Home. Social status and zooarchaeology at Tušḫan (Ziyaret Tepe), a Neo-Assyrian administrative provincial capital in Southeastern Turkey. *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 3(1), 1-26.

Greenfield, T.L., D. Wicke, and T. Matney, 2013. Integration and Interpretation of Architectural and Faunal Evidence from Assyrian Tušhan Turkey. *Bioarchaeology of the Near East* 7, 47-75.

Hall, P., 1993. The Changing Role of Capital Cities. In J. Taylor, J.G. Lengelle and C. Andrew (eds.), *Capital Cities/Les Capitales. Perspectives internationales/International perspectives*. Ottawa: Carleton University Press, 69-84.

Hall, P., 2006. Seven Types of Capital City. In D.L.A. Gordon (ed.), *Planning Twentieth Century Capital Cities*. New York: Routledge, 8-14

Hall, T., 1997. *Planning Europe's Capital Cities. Aspects of nineteenth century urban development*. London and New York: Taylor and Francis.

Hansen, M.H., 2000. *A Comparative Study of Thirty City-state Cultures. An investigation conducted by the Copenhagen Polis Centre*. Copenhagen: Det Kongelige Danske Videnskabernes Selskab.

Harmanşah, Ö., 2012. Beyond Aŝŝur. New cities and the Assyrian politics of landscape. *Bulletin of the American Society of Oriental Research* 365, 53-77.

Harmanşah, Ö., 2013. *Cities and the Shaping of Memory in the Ancient Near East*. Cambridge: Cambridge University Press.

Harrak, A., 1987. *Assyria and Hanigalbat. A historical reconstruction of bilateral relations from the middle of the fourteenth to the end of the twelfth centuries BC*. Hildescheim, Zürich, New York: G. Olms.

Harris, J., 2007. *Constantinople. Capital of Byzantium*. New York: Continuum USA

Hausleiter, A., 2011. Ashur in the 2nd and 1st Millennium BC. Archaeological challenges. *Mesopotamia* 46, 59-70.

Heimpel, W., 2009. *Workers and Construction work at Garšana*. Bethesda: CDL Press.

Herrmann, G., 1986. *Ivories from Room 37 Fort Shalmaneser*. London: British School of Archaeology in Iraq.

Herrmann, G., 1989. The Nimrud Ivories, 1. The flame and frond school. *Iraq* 51, 85-109.

Herrmann, G., 1992. *The Small Collections from Fort Shalmaneser*. London: British School of Archaeology in Iraq.

Hockmann, D., 2010. *Gräber und Grüfte in Assur, I. Von der zweiten Hälfte des 3. bis zur Mitte des 2. Jahrtausends v.Chr*. Wiesbaden: Harrassowitz.

Hrouda, B. 1991. Vorläufiger Bericht über die neuen Ausgrabungen in Assur Frühjahr 1990. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 123, 95-109.

Hussein, M.M., 2002. Excavations of the Department of Antiquities and Heritage in Nimrud, 1988-1993. In A.G. Werr, J. Curtis, H. Martin, and A. McMahon (eds.), *Of Pots and Plans. Papers on the archaeology and history of Mesopotamia and Syria presented to David Oates in honour of his 75th birthday*. London: NABU, 143-157.

Hussein, M.M., D. Kertai and M. Altaweel 2013. Nimrud and its Remains in Light of Iraqi excavations from 1989-2002. In D. Kertai and P.A. Miglus (eds.), *New Research on Late Assyrian Palaces. Conference at Heidelberg January 22nd, 2011*. Heidelberg: Heidelberger Orientverlag, 91-108.

Iamoni, M., 2017. The Prehistoric Roots of Nineveh. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 109-112.

Jakob, S., 2003. Diplomaten in Assur. Alltag oder Anzeichen für eine internationale Krise? In J.M. Córdoba & P.A. Miglus (eds.), *Assur und sein Umland. Im Andenken an die ersten Augräber von Assur*. Barcelona: Centro Sup. de Estudios de Asiriología y Egiptología, 103-117.

Jakob, S., 2011. Dat Osttigrisgebiet im strategischen Konzept mittelassyrischer Könige. In P.A. Migus & S. Mühl (eds.), *Between the Cultures. The central Tigris region from the 3rd to 1st millennium BC*. Heidelberg: Heidelberger Orientberlag, 191-208.

Jakob, S., 2015. Daily Life in the Wild West of Assyria. In B.S. Düring (ed.), *Understanding Hegemonic Practices of the Early Assyrian Empire. Essays dedicated to Frans Wiggermann*. Leiden, Nederlands Instituut voor het Nabije Oosten, 177-187.

Jakob, S., 2017. The Middle Assyrian Period (14th to 11th Century BCE). In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwell, 117-142.

Joffe, A.H., 1998. Disembedded Capitals in Western Asian Perspective. *Comparative Studies in Society and History* 40, 549-580.

Joyce, R.A., 2004. Unintended Consequences? Monumentality as a novel experience in formative Mesoamerica. *Journal of Archaeological Method and Theory* 11, 4-29.

Kapelrud, A.S., 1963. Temple Building, a Task for Gods and Kings. *Orientalia* 32(1), 56-62.

Keith, K., 2003. The Spatial Patterns of Everyday Life in Old Babylonian Neighborhoods. In M.L. Smith (ed.), *The Social Construction of Ancient Cities*. Washington and London: Smithsonian Books, 56-80.

Kemp, B., 2006. *Ancient Egypt. Anatomy of a Civilization*. London: Routledge.

Kemp, B., 2012. *The City of Akhenaten and Nefertiti. Amarna and its people*. London: Thames and Hudson.

Kertai, D., 2013a. The Multiplicity of Royal Palaces. How many palaces did an Assyrian king need? In D. Kertai and P.A. Miglus (eds.), *New Research on Late Assyrian Palaces. Conference at Heidelberg January 22nd, 2011*. Heidelberg: Heidelberger Orientverlag, 11-22.

Kertai, D., 2013b. The Art of Building Late Assyrian Palaces. In B. Brown and M.H. Feldman (eds.), *Critical Approaches to Ancient Near Eastern Art*. Berlin: DeGruyter, 689-712.

Kertai, D., 2013c. From Bābānu to Bētānu, Looking for Spaces in Neo-Assyrian Palaces. In N.N. May and U. Steinert (eds.), *Aspects of Urbanism, Urban topography and Society in Mesopotamia, Greece and Rome*. Leiden: Boston, Brill, 189-201.

Kertai, D., 2014. The Architecture of Connectivity. Ashurnasirpal II's Late Assyrian palace in Kalḫu. In D. Kurapkat, P.I. Schneider and U. Wulf-Rheidt (eds.), *Die Architektur des Weges. Gestaltete Bewegung im gebauten Raum*. Regensburg: Schnell and Steiner, 337-347.

Kertai, D., 2015. *The Architecture of Late Assyrian Palaces*. Oxford: Oxford University Press.

Kirk, T., 2014. Image, Itinerary, and Identity in the "Third" Rome. In M. Minkenberg (ed.), Power *and Architecture. The construction of capitals and the politics of space*. New York, Oxford, Berghahn Books, 152-177.

Korolija Fontana-Giusti, G. 2012. The Urban Language of Early Constantinople. The changing roles of the arts and architecture in the formation of the new capital and the new consciousness. In S.L. Hathaway and D.W. Kim (eds.), *Intercultural Transmission in the Medieval Mediterranean*. London: Continuum, 164–202.

Kramer, C., 1980. Estimating Prehistoric Populations. An ethnoarchaeological approach. In M.-T. Barrelet (ed.), *L'Archéologie de l'Iraq. Perspectives et limites de l'interprétation anthropologique des documents*. Paris : C.N.R.S., 315-334.

Krase, J., 2012. *Seeing Cities Change. Local culture and class*. Farnham: Ashgate.

Krieken, P.J. van and D. McKay (eds.), 2005. *The Hague. Legal capital of the world*. The Hague: T.M.C. Asser Press.

Kryszat, G., 2008. 'Assur ist König'. Das mittelassyrische Krönungsritual im Lichte assyrischer Identitätsfindung. In D. Prechel (ed.), *Fest und Eid. Instrumente der Herrschaftssicherung im Alten Orient*. Würzburg: Ergon, 109-119.

Kühne, H.,1995. The Assyrians on the Middle Euphrates and the Hābūr. In M. Liverani (ed.), *Quaderni di Geografia Storica 5*. Roma: Università di Roma, 69-85.

Kühne, H., 2006-8. 'Šaiḫ Ḥamad, Tall. B. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 11. Berlin: Walter de Gruyter, 543-51.

Kühne, H., 2011. Urbanism in the Assyrian Homeland. In B. S. Düring, A. Wossink and P.M.M.G. Akkermans (eds.), *Correlates of Complexity. Essays in archaeology and assyriology dedicated to Diederik J.W. Meijer in honour of his 65th Birthday*. Leiden: Nederlands Instituut voor het Nabije Oosten, 143-152.

Kühne, H., 2013. Tell Sheikh Hamad – The Assyrian-Aramean centre of Dūr-Katlimmu/Magdalu. In D. Bonatz and L. Martin (eds.), *100 Jahre archaäologische Feldforschungen in Nordost-Syrien – eine Bilzan*. Berlin: Wiesbaden, 235-258.

Kühne, H., 2015. Core and Periphery in the Assyrian State. The view from Dūr-Katlimmu. In B.S. Düring (ed.), *Understanding Hegemonic Practices of the Early Assyrian Empire. Essays dedicated to Frans Wiggermann*. Leiden: Nederlands Instituut voor het Nabije Oosten, 59-74.

Kuhrt, A., 1995. *The Ancient Near East c. 3000-330 BC*. London/New York: Psychology Press.

Kuhrt, A., 2014. Even a Dog in Babylon is Free. In T. Cornell and O. Murray (eds.), *The Legacy of Momigliano*. London and Turin: The Warburg Institute and Nino Aragno Editore, 77-88.

Lambert, W.G., 1983. The God Aššur. *Iraq* 45, 82-86.

Lambert, W.G., 2004. The Enigma of Tukulti-Ninurta I. In A.K. Grayson, G. Frame and L.S. Wilding (eds.), *From the Upper Sea to the Lower Sea. Studies on the history of Assyria and Babylonia in honour of A. K. Grayson*. Leiden: Nederlands Instituut voor het Nabije Oosten, 197-202.

Lanfranchi, G.B., 1997. Consensus to Empire. Some aspects of Sargon II's foreign policy. In H. Waetzoldt and H. Hauptmann (eds.), *Assyrien im Wandel der Zeiten. XXXIX^e Rencontre Assyriologique Internationale Heidelberg 6.-10. Juli 1992*. Heidelberg: Heidelberger Orientverlag, 81-87.

Lanfranchi, G.B. and S. Parpola, 1990. *The Correspondence of Sargon II, Part II: Letters from the northern and northeastern provinces*. Helsinki: State Archives of Assyria.

Lanjouw, forthcoming. *Architecture on the Edge of Empire. Building and the built environment of an Assyria dunnu*. Leiden (unpublished PhD thesis Leiden University).

Layard, A.H., 1849. *Nineveh and its Remains*. London: John Murray.

Layard, A.H., 1853. *Discoveries in the Ruins of Nineveh and Babylon*. London: John Murray.

Lefebvre, H., 1991. *The Production of Space*. Oxford: Blackwell.

Leichty, E., 2011. *The Royal Inscriptions of Esarhaddon, King of Assyria (680-669 BC)*. Winoa Lake: Eisenbrauns.

Lippolis, C., 2017. Sennacherib. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 179-183.

Liverani, M., 1988. The Growth of the Assyrian Empire in the Habur/Middle Euphrates Area. A new paradigm. *State Archives of Assyria Bulletin* 2(2), 81-98.

Liverani, M. (ed.), 1993. *Akkad, the First World Empire. Structure, ideology, traditions.* Padova: Sargon.

Liverani, M., 1995. The Deeds of Ancient Mesopotamian Kings. In J.M. Sasson (ed.), *Civilizations of the Ancient Nears East Pt. 4. Society*. New York: Charles Scribner's Sons, 2353-2366.

Liverani, M., 2001. The Fall of the Assyrian Empire. Ancient and modern interpretations. In S.E. Alcock, T.N. D'Altroy, K.D. Morrison and C.M. Sinopoli (eds.), *Empires*. Cambridge: Cambridge University Press, 374-391.

Liverani, M., 2011. From City State to Empire. The case of Assyria. In J. Arnason and K.A. Raaflaub (eds.), *The Roman Empire in Context. Historical and comparative perspectives*. Chichester: Wiley-Blackwell, 251-269.

Liverani, M., 2017. *Assyria. The imperial mission*. Winona Lake: Eisenbrauns

Llop, J., 2003. Ein Fragment einer Königsinschrift Tukultı-Ninurtas I. zu seinen Babylonienfeldzügen (K 2667). *Zeitschrift für Assyriologie* 93, 82–7.

Llop-Raduà, J., 2011. The Boundary Between Assyria and Babylonia in the East Tigris Region During the Reign of Tukultī-Ninurta I (1233-1197 BC). In P.A. Migus & S. Mühl (eds.), *Between the Cultures. The central Tigris region from the 3rd to 1st millennium BC*. Heidelberg: Heidelberger Orientberlag, 209-15.

Llop, J. and George, A., 2001-02.Die babylonisch-assyrischen Beziehungen und die innere Lage Assyriens in der Zeit der Auseinandersetzung zwischen Ninurta-tukulti-Aššur und Mutakkil-Nusku nach neuen keilschriftlichen Quellen, *Archiv für Orientforschung* 48/9, 1-23.

Loud, G., C.B. Altman and T. Jacobsen, 1936. *Khorsabad Part I. Excavations in the Palace and at a City Gate*. Chicago: The University of Chicago Press.

Loud, G., and C.B. Altman, 1938. *Khorsabad Part II. The citadel and the town*. Chicago-Illinois, The University of Chicago Press.

Low, S.M., 1999. *Theorizing the City. The new urban anthropology reader*. New Brunswick: Rutgers University Press.

Lumsden, S., 1991. Urban Nineveh. Investigations within the Lower Town of the Last Assyrian Capital. *Mar Šipri* 4(1), 1-3.

Lumsden, S., 2000. On Sennacherib's Nineveh. In P. Matthiae and A. Enea (eds.), *Proceedings of the First International Congress of the Archaeology of the Ancient Near East*. Rome: Universita degli studi di Roma "La Sapienza", 815-824.

Lumsden, S., 2001. Power and Identity in the Neo-Assyrian World. In I. Neilsen (ed.), *The Royal Palace Institution in the First Millennium B.C. Regional development and cultural interchange between East and West*. Athens and Århus: Aarhus University Press, 33-51.

Lumsden, S., 2004. The Production of Space at Nineveh. *Iraq* 66(1), 187-197.

Lundström, S., 2012. Concerning the Dead–How to Bury an Assyrian King? Possibilities and limits of the archaeological and written Evidence in the second and First Millenium BC. In P. Pfalzner, H. Niehr, E. Pernicka and A. Wissing (eds.), (*Re-) Constructing Funerary Rituals in the Ancient Near East. Proceedings of the first international symposium of the Tubingen post-graduate school "Symbols of the Dead" in May 2009*. Harrasowitz Verlag: Wiesbaden, 271-279.

Lundström, S., 2013. Revising the Building History of the Old Palace in the City of Ashur. In D. Kertai and P.A. Miglus (eds.), *New Research on Late Assyrian Palaces. Conference at Heidelberg, January 22nd, 2011*. Heidelberg: Heidelberger Orientverlag, 23-29.

Lyon, D., 1883. *Keilschrifttexte Sargon's königs von Assyrien (722-705 v. Chr.). Nach den originalen neu hrsg, umschrieben, übers. und erklärt*. Hamburg: JC Hinrichs.

MacGinnis, J., 2017a. Iraqi Excavations at Nineveh. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 91-93.

MacGinnis, J., 2017b. Ištar of Nineveh. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 217-218.

Machinist, P., 1976. Literature as Politics. Tukulti-Ninurta epic and the Bible. *Catholic Biblical Quarterly* 38(4), 455-482.

Machinist, P., 1978. *The Epic of Tukulti-Ninurta I. A study in the Middle Asyrian literature*. Yale (Unpublished PhD thesis Yale University).

Machinist, P., 2011. Kingship and Divinity in Imperial Assyria. In In J. Renger (ed.), *Assur. Gott, Stadt und Land*. Wiesbaden: Harrassowitz, 405-430.

Madhloum, T.A., 1967. Excavations at Nineveh. A preliminary report (1965-1967). *Sumer* 23, 76-79.

Madhloum, T.A., 1968. The 1967-1968 Campaign. *Sumer* 24, 44-49.

Madhloum, T.A., 1969. Nineveh. The 1968-1969 Campaign. *Sumer* 25, 43-58.

Madhloum, T.A. and Mahdi, A., 1976. *Nineveh. Historical Monuments in Iraq* 1. Baghdad: Directorate General of Antiquities.

Makaš, E.G., and T.D. Conley (eds.), 2010. *Capital Cities in the Aftermath of Empires. Planning in central and southeastern Europe*. London and New York: Routledge.

Mallowan, M.E.L., 1950. The Excavations at Nimrud (Kalhu), 1949-1950. *Iraq* 12, 147-183.

Mallowan, M.E.L., 1952. The Excavations at Nimrud (Kalhu), 1951. *Iraq* 14, 1-23.

Mallowan, M.E.L., 1954. The Excavations at Nimrud (Kalhu), 1953. *Iraq* 16, 59-114.

Mallowan, M.E.L., 1957. The Excavations at Nimrud (Kalhu), 1956. *Iraq* 19, 1-25.

Mallowan, M.E.L., 1966. *Nimrud and its Remains*. London: Collins.

Marcus, J. and Sabloff, J. A., 2008. Introduction. In J. Marcus and J.A. Sabloff (eds.), *The Ancient City. New perspectives on urbanism in the old and new world*. Santa Fe: School for Advanced Research Press, 3-26.

Margueron, J.-C., 2005. Notes d'Archéologie et d'Architecture Orientales. Du Bitanu, De L'étage Et Des Salles Hypostyles Dans Les Palais Néo-Assyriens. *Syria* 82, 93–138.

Margueron, J.-C., 2013. *Cités invisibles. La naissance de l'urbanisme au Proche-Orient ancien: approche archéologique*. Paris: Librairie Orientaliste Paul Geuthner

Mario Fales, F., 2017. Austin Henry Layar. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 74-77.

Massai, J., 1996. Competing Ideas in Hungarian Architecture. In W. Leśnikowski (ed.), *Eastern European Modernism*. New York: Rizzoli, 113-123.

Matney, T., 1998. The First Season of Work at Ziyaret Tepe in Diyarbakir Province. Prelimiary report. *Anatolica* 24, 7-30.

Matney, T., 2010. Material Culture and Identity. Assyrians, Aramaeans, and the indigenous peoples of Iron Age Southeastern Anatolia. In S.R. Steadman and J.C. Ross (eds.), *Agency and Identity in the Ancient Near East. New paths forward*. London: Equinox, 129-147.

Matney, T., and A. Bauer 2000. The Third Season of Archaeological Survey at Ziyaret Tepe, Diyarbakir Province, Turkey 1999. *Anatolica* 26, 119-128.

Matney, T., M. Roaf, J. MacGinnis and H. McDonald 2002. Archaeological Excavations at Ziyaret Tepe, Diyarbakir Province 2000. In N. Tuna and J. Velibeyoğlou (eds.), *Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs Activities in 2000*. Ankara: Tarihsel Cevre Araştirma ve Değerlendirme Merkesi, 535-547.

Matney, T., T. Greenfield, B. Hartenberger, A. Keskin, K. Köroğlu, J. MacGinnis, W. Monroe, L. Rainville, M. Shepperson, T. Vorderstrasse and D. Wicke, 2009. Excavations at Ziyaret Tepe 2007-2008. *Anatolica* 35, 37-84.

Matney, T., J. MacGinnis, D. Wicke and K. Köroğlu 2017. *Ziyaret Tepe. Exploring the anatolian frontier of the Assyrian empir*e. Hawick: Cornucopia Books.

Matilla, R., 2000. *The King's Magnates. A study of the highest officials of the Neo-Assyrian empire*. Helsinki: The Neo-Assyrian Text Corpus Project.

Matthews, R., 2003. *The Archaeology of Mesopotamia. Theories and approaches*. London and New York: Routledge.

Maul, S.M., 2017. Assyrian Religion. In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwell, 336-358.

May, N.N., 2015. Administrative and Other Reforms of Sargon II and TIglath Pileser III. In N.N. May and S. Svärd (eds.), *Change in Neo-Assyrian Imperial Administration. Evolution and revolution*. Padova: S.A.R.G.O.N. Editrice e Libreria, 79-115.

McCall, H., 2008. Max Mallowan and Nimrud. In J.E. Curtis, H. McCall, D. Collon and L. al-Gailani Werr (eds.), *New Light on Nimrud. Proccedings of the Nimrud conference 11th-13th March 2002*. London, British Intitute for the Study of Iraq: The British Musuem, 65-72.

Menze, B.H., S. Mühl, and A.G. Sherratt, 2007. Virtual Survey on North Mesopotamian Tell Sites by Means of Satellite Remote Sensing. In B. Ooghe & G. Verhoeven (eds.) *Broadening Horizons. Multidisciplinary approaches to landscape study*. Cambridge: Cambridge Scholars Publishing, 5-29.

Micale, M.G., 2006. The Middle-Assyrian City of Ashur and its State Architecture in the 14th and 13th cebturies B.C. In J. Maran (ed.), *Constructing Power. Architecture, ideology and social practice*. Berlin: LIT Verlag, 153-167.

Mieroop, van de, M., 2007. *A History of the Ancient Near East, ca. 3000-323 BC*. Oxford, Blackwell Publishing.

Miglus, P.A., 1985. Another Look at the "Stelenreihen" in Assur. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 74(1), 133-140.

Miglus, P.A., 1985. Zur großen Ziqqurrat in Assur. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 117, 21–45.

Miglus, P.A., 1989. Untersuchungen zum Alten Palast in Assur. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 121, 93–133.

Miglus, P.A., 1993. Architektur der Festhäuser in Assur und Uruk sowie des Aššur-tempels in Kār-Tukultī-Ninurta. *Baghdader Mitteilungen* 24, 195-215.

Miglus, P.A., 1996. *Das Wohngebiet von Assur*. Berlin: Mann.

Miglus, P.A., 2000. Assur - Frühjahrskampagne 2000. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 132, 13-54.

Miglus, P.A., 2002. Assur - Herbstkampagne 2001. *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 134, 7-40.

Miglus, P.A., 2010. Festungswerke von Assur im 2. Jahrtausend v. Chr. In S.M. Maul and N. P. Heeßel (eds.), *Assur-Forschungen. Arbeiten aus der Forschungsstelle „Edition literarischer Keilschrifttexte aus Assur" der Heidelberger Akademie der Wissenschaften*. Berlin: Wiesbaden, 229-243.

Miglus, P.A., 2011. Middle Assyrian Settlement in the South. In P.A. Miglus and S. Mühl (eds.), *Between the Cultures. The central Tigris region in Mesopotamia from the 3rd to the 1st millennium BC*. Heidelberger: Heidelberger Orientverlag, 217-225.

Melville, S. C., 2016. *The Campaigns of Sargon II, King of Assyria, 721–705 BC*. Oklahoma: University of Oklahoma Press.

Meuszyński, J., 1971-1978. Works published in *Études et Travaux. Travaux du Centre d'Archéologie Méditerranéenne de l'Académie Polonaise des Science.* Warsaw: EtTrav.

Meuszyński, J., 1976. Neo-Assyrian Reliefs from the Central Area of Nimrud Citadel. *Iraq* 38, 37-43.

Meuszyński, J., 1981. *Die Rekonstruktion der Reliefdarstellungen und ihrer Anordnung im Nordwestpalast von Kalhu (Nimrud)*. Mainz: Von Zabern.

Minkenberg, M. (ed.), 2014a. *Power and Architecture. The construction of capitals and the politics of space*. New York and Oxford: Berghahn Books.

Minkenberg, M., 2014b. A City of the People, by the People, for the People? Democracy and capital-building in Washington, DC, Ottawa, Canberra and Brasília. In M. Minkenberg (ed.), *Power and Architecture. The construction of capitals and the politics of space*. New York and Oxford: Berghahn Books, 53-105.

Minkenberg, M., 2014c. Power and Architecture. The construction of capitals, the politics of space, and the space of politics. In M. Minkenberg (ed.), *Power and Architecture. The construction of capitals and the politics of space*. New York and Oxford: Berghahn Books, 1-30.

Mofidi-Nasrabadi, B., 2007. *Archäologische Ausgrabungen und Untersuchungen in Čoġā Zanbil*. Münster: Agenda Verlag.

Monge, F., 2010. Baltimore, or Boston, in Barcelona. Engaging Mediterranean port cities and the new urban waterfront. In I. Pardo and G.B. Prato (eds.), *Citizenship and Legitimacy of Governance Anthropology in the Mediterranean Region*. Farnham: Ashgate, 109-126.

Moranid Bonacossi, D., 2014. River Navigation and Transport in Northern Assyria. The stone quay-walls of the rivers Gomel and al-Khazir in the Navkur Plain, Iraqi Kurdistan. In S. Gaspa, A. Greco, D. Morandi Bonacossi, S. Ponchia and R. Rollinger (eds.), *From Source to History. Studies on Ancient Near Eastern worlds and beyond dedicated to Giovanni Battista Lanfranchi on the occasion*

of his 65th Birthday on June 23, 2014. Muenster: AOAT Band 412, 441-453.

Morandi Bonacossi, D., 2016. The Land of Nineveh Archaeological Project. Assyrian settlement in the Nineveh hinterland. A view from the centre. In J. MacGinnis, D. Wicke, and T. Greenfield (eds.), *The Provincial Archaeology of the Assyrian Empire*. Cambridge: McDonald Institute Monographs, 141-150.

Morandi Bonacossi, D., 2017a. Water of Assyria. Irrigation and water management in the Assyrian empire. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 132-136.

Morandi Bonacossi, D., 2017b. The Rural Landscape of Nineveh. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden, Sidestone Press, 137-141.

Morandi Bonacossi, D., 2018a. The Creation of the Assyrian Heartland. New data from the 'Land behind Nineveh'. In B.S. Düring and T. Stek (eds.), *The Comparative Archaeology of Imperial Countrysides. Investigating the transformations of rural and peripheral landscapes and societies in ancient Old Wrold Empires*. Cambridge: Cambridge University Press, 48-85.

Morandi Bonacossi, D., 2018b. Water for Nineveh. The Nineveh Irrigation System in the regional context of the 'Assyrian Triangle': A first geoarchaeological assessment. In H. Kühne (ed.), *Water forAssyria*. Wiesbaden: Harrassowitz, 77-115.

Morandi Bonacossi, D. and M. Iamoni, 2015. Landscape and Settlement in the Eastern Upper Iraqi Tigris and Navkur Plains (Northern Kurdistan Region, Iraq). The Land of Nineveh Archaeological Project, seasons 2012-2013. *Iraq* 77, 9-39.

Moravánszky, Á., 1998. *Competing Visions. Aesthetic invention and social imagination in Central European architecture, 1867-1918*. Cambridge: MIT Press.

Mühl, S., 2013. *Siedlungsgeschichte im mittleren Osttigrisgebiet vom Neolithikum bis in die neuassyrische Zeit*. Berlin: Wiesbaden.

Mühl, S., 2015a. Middle Assyrian Territorial Practices in the Region of Ashur. In B.S. Düring (ed.), *Understanding Hegemonic Practices of the Early Assyrian Empire. Essays dedicated to Frans Wiggermann*. Leiden: Nederlands Instituut voor het Nabije Oosten,45-58.

Mühl, S., 2015b. *Nimrud Under Attack. A short analysis of recent destructions at Nimrud*. [https://www.academia.edu/11953088/Nimrud_under_attack._A_short_analysis_of_recent_destructions_at_Nimrud accessed 09-04-2018]

Mühl, S. and B. S. Sulaiman, 2011. The Makhul Dam Project. In P.A. Miglus and S. Mühl (eds.), *Between the Cultures. The central Tigris region in Mesopotamia from the 3rd to the 1st millennium BC*. Heidelberger: Heidelberger Orientverlag, 371-384.

Müller, K.F., 1937. *Das assyrische Ritual, I. Texte zum assyrischen Königsritual*. Leipzig: Hinrischs.

Mumford, L., 1961. *The City in History. Its origins, its transformations, and its prospects*. San Diego: Harcourt Inc.

Mustafa, M.A., 1954. The Discovery of a Statue of Hermes at Nineveh. *Sumer* 10, 280-283.

Nadali, D., 2017. Nineveh in the Assyrian Reliefs. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 167-169.

Nemes, R., 2005. *The Once and Future Budapest*. DeKalb: Northern Illinois University Press.

Nemes, R., 2010. Budapest. In E.G. Makaš and T.D. Conley (eds.), *Capital Cities in the Aftermath of Empires. Planning in Central and Southeastern Europe*. London and New York: Routledge, 141-156.

Nichols, D.L. and T.H. Charlton (eds.), 1997. *The Archaeology of City-states. Cross-cultural approaches*. Washington: Smithsonian Institution Press.

Novák, M., 1999. *Herrschaftsform und Stadtbaukunst: Programmatik im mesopotamischen Residenzstadtbau von Agade bis Surra-man-ra'ā*. Saarbrücken: Saarbrücker Druckerei und Verlag.

Novák, M., 2002. The Artificial Paradise. Programme and ideology of royal gardens. In S. Parpola and R.M. Whiting (eds.), *Sex and Gender in the Ancient Near East. Proceedings of the 47th Rencontre Assyriolgique Internationale, Helsinki, July 2-6, 2001*. Helsinki: The Neo Assyrian Text Corpus Project, 443-460.

Novák, M., 2004. From Ashur to Nineveh. The Assyria town-planning programme. *Iraq* 66, 177-185.

Oates, D., 1959. Fort Shalmaneser. An interim report. *Iraq* 21. 98-129.

Oates, D., 1961. The Excavations at Nimrud (Kalhu), 1960. *Iraq* 23, 1-14.

Oates, D., 1962. The Excavations at Nimrud (Kalhu), 1961. *Iraq* 24, 1-25.

Oates, D., 1963. The Excavations at Nimrud (Kalhu), 1962. *Iraq* 25, 6-37.

Oates. D., 1968. *Studies in the Ancient History of Northern Iraq*. London, Oxford University Press.

Oates, D., 1990. Innovations in Mud-Brick. Decorative and structural techniques in Ancient Mesopotamia. *World Archaeology* 21(3), 388-406.

Oates, J. and D. Oates, 2001. *Nimrud. An Assyrian imperial city revealed*. London: British School of Archaeology in Iraq.

Oates, D. and J.H Reid, 1956. The Burnt Palace and the Nabu Temple. Nimrud excavations, 1955. *Iraq* 18, 22-38.

Oded, B., 1992. *War, Peace and Empire. Justification for war in Assyrian royal inscriptions.* Wiesbaden: Ludwig Reichert.

Opello, W.C. and S.J. Rosow, 1999. *The Nation-State and Global Order. A historical introduction to contemporary politics*. Boulder, Colo: Lynne Rienner.

Ornan, T., 2007. The Godlike Semblance of a King. The case of Sennacherib's rock reliefs. In J. Cheng and M.H. Feldman (eds.), *Ancient Near Eastern Art in Context. Studies in honor of Irene J. Winter by her students*. Leiden: Brill.

Osborne, J.F., 2015. Ancient Cities and Power. The archaeology of urbanism in the Iron Age capitals of Mesopotamia. *International Journal of Urban Sciences* 19(1), 7-19.

Paley, S. and R. Sobolewski, 1987. *The Reconstruction of the Relief Representations and Their positions in the Northwest-Palace at Kalhu (Nimrud) II*. Mainz am Rhein: Von Zabern.

Pardo, I. and G.B. Prato (eds.), 2012a. *Anthropology in the City. Methodology and Theory*. Farnham: Routledge Ltd.

Pardo, I. and G.B. Prato, 2012b. Introduction. The Contemporary Significance of Anthropology in the City. In I. Pardo and G.B. Prato (eds.), *Anthropology in the City. Methodology and Theory*. Farnham: Routledge Ltd, 1-28.

Parker, B.J., 2001. *The Mechanics of Empire. The northern frontier of Assyria as a case study in imperial dynamics*. Helsinki: Neo-Assyrian Text Corpus Project.

Parker, B.J., 2003. Archaeological Manifestations of Empire. Assyria's imprint on southeastern Anatolia. *American Journal of Achaeology* 107, 525-527.

Parker, B.J., 2009. Ašipâ Again. A microhistory of an Assyrian provincial administrator. *Studia Orientalia Electronica* 106, 179-192.

Parker, B.J., 2011. The Construction and Performance of Kingship in the Neo-Assyrian Empire. *Journal of Anthropological Research* 67(3), 357-386.

Parker, B.J., 2015. Power, Hegemony, and the Use of Force in the Neo-Assyrian Empire. In B.S. Düring (ed.), *Understanding Hegemonic Practices of the Early Assyrian Empire. Essays dedicated to Frans Wiggermann*. Leiden: Nederlands Instituut voor het Nabije Oosten, 287-298.

Parker, B.J., 2017. The Neo-Assyrian Kings in Nineveh. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press, 142-146.

Parpola, S., 1980. The Murder of Sennacherib. In B. Alster (ed.), *Death in Mesopotamia. XXVIe Rencontre Assyriologique International*. Copenhagen: Akademisk Forlag, 171-182.

Parpola, S., 1983. *Letters from Assyrian Scholars to the Kings Esarhaddon and Assurbanipal, Part II*. Kevelaer and Neukirchen-Vluyn: Butzon und Bercker, Neukirchener Verlag.

Parpola, S., 1995. The Construction of Dur-Šarrukin in Assyrian Royal Correspondence. In A. Caubet (ed.), *Khorsabad, le Palais de Sargon II, Roi d'Assyrie*. Paris : Documentation française, 47-77.

Pedde, F., 2008. The Assur-Project. An old excavation newly analysed. In J.M. Córdoba, M. Molist, M. Carmen Pérez, I. rubio and S. Martínez (eds.), *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East*. Madrid: UAM Ediciones, 743-752.

Pedde, F., 2010. The Assur Project. The Middle and Neo-Assyrian graves and tombs. In R. Matthews, J. Curtis and M. Seymour (eds.), *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East: 12 April–16 April 2010, the British Museum and UCL, London*. Wiesbaden: Harrassowitz, 93-108.

Pedde, F., 2012. The Assyrian Heartland. In D. Potts (ed.) *A Companion to the Archaeology of Ancient Near East vol. 2*. Oxford: Wiley-Blackwell, 581-866.

Pedde, F., and S. Lundström, 2008. *Der Alte Palast in Assur. Architektur und Baugeschichte*. Berlin: Wiesbaden.

Perrot, J., 2013. *The Palace of Darius at Susa. The great royal residence of Achaemenid Persia*. London: I.B. Tauris.

Petit, L.P., and D. Morandi Bonacossi (eds.), 2017. *Nineveh the Great City. Symbol of beauty and power*. Leiden: Sidestone Press.

Pickworth, D., 2005. Excavations at Nineveh. The Halzi gate. *Iraq* 67(1), 295-316.

Place, V., 1867. *Ninive et l'Assyrie, 3 vols*. Paris: Imprimerie Imperiale.

Pongratz-Leisten, B., 2011. Assyrian Royal Discourse between Local and Imperial Traditions at the Habur. *Revue d'Assyriologie et d'Archéologie Orientale* 105, 109– 28.

Porter, B.N., 1993. *Images, Power, and Politics. Figurative aspects of Esarhaddon's Babylonian policy*. Philadelphia: American Philosophical Society.

Postgate, J.N., 1974. *Taxation and Conscription in the Assyrian Empire*. Rome: Biblical Institute Press.

Postgate, J.N., 1985. Review of Khaled Nashef 1982 Die Orts-und Gewässernamen der mittelbabylonischen und mittelassyrischen Zeit. XXVIII. *Archiv für Orientforschung* 32, 96-101.

Postgate, J.N., 1992. The Land of Assur and the Yoke of Assur. *World Archaeology* 23, 247-263.

Postgate, J.N., 1994. How May Sumerians per Hectare? Probing the anatomy of an early city. *Cambridge Archaeological Journal* 4(1), 47-65.

Postgate, J.N., 2002. Business and Government in Middle Assyrian Rimah. In D. Oates and L. G. Werr (eds.), *Of Pots and Plans. Papers on the archaeology and history of Mesopotamia and Syria presented to David Oates in honour of his 75th birthday*. London: Nabu Publications, 297-208.

Postgate, J.N., 2005. Palast AV. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 10. Berlin: Walter de Gruyter, 212-226.

Postgate, J.N., 2011. Die Stadt und das Land Assur. In J. Renger (ed.), *Assur. Gott, Stadt und Land*. Wiesbaden: Harrassowitz, 87-94.

Postgate, J.N., and J.E. Reade, 1980. Kalhu. *Reallexikon der Assyriologie und vorderasiatischen Archäologie* 5. Berling: Walter de Gruyter, 303-323.

Potts, D., 1985. Capital relocation in Africa. The case of Lilongwe in Malawi. *Geographical Journal* 151(2), 182-196.

Potts, D., 2006. Elamites and Kassites in the Persian Gulf. *Journal of Near Eastern Studies* 65, 111-119.

Potts, D., 2016. *The Archaeology of Elam. Formation and transformation of an ancient Iranian state*. Cambridge: Cambridge.

Radner, K., 2002. *Die Neuassyrrischen Text aus Tall Šeh Ḫamad.* Berlin: Reimer.

Radner, K., 2010. Shalmaneser V, king of Assyria (726-722 BC). *Assyrian Empire Builders*. [http://www.ucl.ac.uk/sargon/essentials/kings/tiglatpileseriii/ accessed 29-3-2017].

Radner, K., 2011. The Assur-Nineveh-Arbela Triangle. Central Assyria in the Neo-Assyrian period. In P.A. Miglus and S. Mühl (eds.), *Between the Cultures. The central Tigris region in Mesopotamia from the 3rd to the 1st millennium BC*. Heidelberger: Heidelberger Orientverlag, 321-329.

Radner, K., 2012. Dur-Šarruken, the „Fortress of Sargon"'. *Assyrian Empire Builders*. [http://www.ucl.ac.uk/sargon/essentials/cities/durarruken/ accessed 29-3-2017].

Radner, K., 2016. Revolts in the Neo-Assyrian Empire. Succession wars, rebellions against a false king and independence movements. In J.J. Colling and J.G. Manning (eds.), *Revolt and Resistance in the Ancient Classical World and the Near East*. Leiden: Boston, Brill, 41-54.

Radner, K., 2017a. Economy, Society, and Daily Life in the Neo-Assyrian Period. In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwel, 209-228.

Radner, K., 2017b. Esarhaddon, king of Assyria (681-669). *Knowledge and Power*, Higher Education Academy. [http://oracc.museum.upenn.edu/saao/knpp/essentials/esarhaddon/ accessed 09-06-2017].

Radner, K., 2017c. Assurbanipal, king of Assyria (669-c.630). *Knowledge and Power*, Higher Education Academy. [http://oracc.museum.upenn.edu/saao/knpp/essentials/Assurbanipal/ accessed 09-06-2017].

Rassam, H. and R.W. Rogers, 1897. *Asshur and the Land of Nimrod*. Cincinnati: Curts & Jennings.

Reade, J.E., 1968. The Palace of Tiglath-Pileser III. *Iraq* 24, 38-47.

Reade, J.E., 1970. *The Design and Decoration of Neo-Assyrian Public Buildings*. Cambridge (unpublished PhD thesis University of Cambridge).

Reade, J.E., 1978. Studies in the Assyrian Geography. Part 1 and part 2: Sennacherib and the waters of Nineveh. *Revue d'Assyriologie* 72, 47-72; 157-180.

Reade, J.E., 2002a. The Ziggurat and Temples of Nimrud. *Iraq* 64, 135-216.

Reade, J.E., 2002b. Ninive (Nineveh). *Reallexikon der Assyriologie Vorderasiatischen Archäologie* 9(5-6). Berlin, Walter de Gruyter, 388-433.

Reade, J.E., 2004. The Historical Status of the Assur Stelas. In J.G. Dercksen (ed.) *Assyria and Beyond. Studies presented to Mogens Trolle Larsen*. Leiden: Nederlands Instituut voor het Nabije Oosten, 455-474.

Reade, J.E., 2005. The Ishtar Temple at Nineveh. *Iraq* 67(1), 347-390.

Reade, J.E., 2008. Real and Imagined "Hittite Palaces" at Khorsabad and Elsewhere. *Iraq* 70, 13-40.

Reade, J.E., 2011. The Evolution of Assyrian Imperia Architecture. Political implications and uncertainties. *Mesopotamia. Revista Di Archaeologia, Epigrafia E Storia Orientale Antica* 46, 109-125.

Reade, J.E., 2019. Assyrian Palaces Reconsidered. Practical arrangements at Til-Barsib, and the Garden-Gate and canal at Khorsabad. *State Archives of Assyria Bulletin* 25, 73-97.

Reade, J.E. and J.R. Anderson, 2013. Gunduk, Khanes, Gaugamela, Gali Zardak. Notes on Navkur and nearby rock-cut sculptures in Kurdistan. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 103, 69-123.

Reculeau, H., 2011. *Climate, Environment and Agriculture in Assyria*. Wiesbade: Harrassowitz Verlag.

Redford, D., 1984. *Akhenaten. The Heretic King*. Princeton: Princeton University Press.

Richardson, S., 2015. Building Larsa. Labor-value, scale and scope-of-economy in Ancient Mesopotamia. In P. Steinkeller and M. Hudson (eds.), *Labor in the Pre-Classical Old World*. Dresden: ISLET, 237-328.

Ricks, S.D., and M.A. Carter, 1994. Temple-Building Motifs. Mesopotamia, Ancient Israel, Ugarit, and Kirtland. In D.W. Parry (ed.), *Temples of the Ancient World*. Salt Lake City: Deseret Book, 152-176.

Roaf, M. 1990. *Cultural Atlas of Mesopotamia and the Ancient Near East.* Oxfordshire: Andromeda Books.

Röllig, W., 2004. Eponymen in den mittelassyrischen Dokumenten aus Tall Šēḥ Ḫmad/Dūr-Katlimmu. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 94, 18-51.

Röllig, W., 2008. *Land- und Viehwirtschaft am Unteren Ḫābūr in mittelassyrischer Zeit*. Berling: Wiesbaden.

Rozenblat, C. and D. Pumain, 2018. A New World Typology of Cities and Systems of Cities. In C. Rozenblat, D. Pumain and E. Velasquez (eds.), *International and Transnational Perspectives on Urbanism*. Singapore: Springer, 51-65.

RINAP (Royal Inscriptions of the Neo-Assyrian Period) 3 Online Corpus. *Sennacherib*. [http://oracc.museum.upenn.edu/rinap/corpus/ accessed 7-2-2018]

Russell, J.M., 1991. *Sennacherib's Palace Without Rival at Nineveh*. Chicago and London: The University of Chicago Press.

Russell, J.M., 1999. *The Writing on the Wall. Studies in the architectural context of Late Assyrian palace inscriptions*. Winona Lake: Eisenbrauns.

Russell, J.M., 2008. Thoughts on Room Function in the North-West Palace. In J.E. Curtis, H. McCall, D. Collon and L. al-Gailani Werr (eds.), *New Light on Nimrud. Proccedings of the Nimrud conference 11th-13th March 2002*. London, British Intitute for the Study of Iraq: The British Musuem,

Russell, J.M., 2017. Assyrian Cities and Architecture. In E. Frahm (ed.), *A Companion to Assyria*. Hoboken: Wiley Blackwell, 423-452.

Santley, R. S., 1980. Disembedded Capitals Reconsidered. *American Antiquity* 45(1), 132-145.

Sarre, F.P.T., E.E. Herzfeld, M. van Berchem and S. Guyer, 1911. *Archäologische reise im Euphrat- und Tigris-begiet*. Berlin: D. Reimer.

Safar, F., 1957. The Temple of Sibitti at Khorsabad. *Sumer* 13, 219-221.

Scardozzi, G., 2011. Multitemporal Satellite Images for Knowledge of the Assyrian Capital Cities and for Monitoring Landscape Transformations in the Upper Course of Tigris River. *International Journal of Geophysics* 2011, 1-17.

Schatz, E., 2004. What Capital Cities Say about State and Nation Building. *Nationalism and Ethnic Politics* 9(4), 111-140.

Schmidt, C., 1999. Die Keramik der Areale AF in Kar-Tukulti-Ninurta. In Hausleiter, A. and A. Reiche (eds), *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia. Papers presented at the meetings of the international "table ronde" at Heidelberg (1995) and Nieborów (1997) and other contributions.*, Münster: Ugarit-Verl, 61-90.

Schmitt, A.W., 2012. *Die Jüngeren Ischtar-Tempel und der Nabû-Tempel in Assur: Architektur, Stratigraphie und Funde*. Berlin: Wiesbaden.

Schmitt, A.W., in press. Verfallen und vergessen. Überlegungen zum Umgang mit dem Andenken Tukultī-Ninurtas I. anhand der Bauwerke des Herrschers in Aššur und Kār-Tukultī-Ninurta. In S. Maul (ed.), *Assur-Forschungen*.

Scott, A.J., 2014. Urban Development in the 21st Century. In S. Yussuf (ed.), *The Buzz in Cities. New economic thinking*. Washington DC: The Growth Dialogue, 105-115.

Scott, J.C., 1998. *Seeing Like a State. How certain schemes to improve the human condition have failed*. New Haven and London: Yale University Press.

Scott, M. and J. MacGinnis, 1990. Notes on Nineveh. *Iraq* 52, 63-73.

Seeher, J., 2007. *A Mudbrick City Wall at Hattuša. Diary of a reconstruction*. Istanbul, Yainlari.

Sewell, W.H., 2005. *Logics of History. Social theory and social transformation*. Chicago: University of Chicago Press.

Singer, I., 2006. The Failed Reforms of Akhenaten and Muwatalli. *British Museum Studies in Ancient Egypt and Sudan* 6, 37-58.

Smith, A.D., 1991. *National Identity*. Reno: University of Nevada Press.

Smith, G., 1875. *Assyrian Discoveries; an Account of Explorations and Discoveries on the site of Nineveh, during 1873 and 1874*. New York: Scribner, Armstrong and Co.

Smith, M.L., 2003a. Introduction. The social construction of ancient cities. In M. L. Smith (ed.), *The Social Construction of Ancient Cities*. Washngton and London, Smithsonian Books, 1-36.

Smith, M.L., 2003b. Early Walled Cities of the Indian Subcontinent as "Small Worlds. In M.L. Smith (ed.), *The Social Construction of Ancient Cities*. Washington and London, Smithsonian Books, 269-289.

Smith, M.E., 2007. Form and Meaning in the Earliest Cities: A new approach to ancient urban planning. *Journal of Planning History* 6(1), 3–47.

Smith, M.E., 2010. The Archaeological Study of Neighborhoods and Districts in Ancient Cities. *Journal of Anthropological Archaeology* 29, 137-154.

Smith, M.E., and L.M. Montiel, 2001. The Archaeological Study of Empires and Imperialism in Prehispanic Central Mexico. *Journal of Anthropological Archaeology* 20, 245-284.

Sonne, W., 2003. *Representing the State. Capital city planning in the early twentieth century.* Munich, London, and New York, Prestel.

Spate, O.H.K., 1942. Factors in the Development of Capital Cities. *Geographical Review* 32(4), 622-631.

Spence, M., 1973. Job Market Signaling. *The Quarterly Journal of Economics* 93(3), 355-374.

Steinkeller, P., 2004. A History of Mashkan-shapir and its Role in the Kingdom of Larsa. In E.C. Stone and P. Zimansky (eds.), *The Anatomy of a Mesopotamian City. Survey and soundings at Mashkan-shapir*. Winoa Lake, Eisenbraums, 26-42.

Stone, E.C., 1997. City States and Their Centers. In D.L. Nichols and T.H. Charlotn (eds.), *The Archaeology of city States. Cross-cultural approaches*. Washington DC, Smithsonian Institution Press, 15-26.

Stone, E.C., 1999. The Constraints on State and Urban Form in Ancient Mesopotamia. In M. Hudson and B. Levine (eds.), *Urbanism and Economy in the Ancient Near East*. Cambridge MA, Peabody Museum of Archaeology and Ethnology, Harvard University, 203-227.

Stone, E.C., 2007. The Mesopotamian Urban Experience. In E.C. Stone (ed.), *Settlement and Society. Essays dedicated to Robert McCormick Adams*. California and Chicago, Cotsen Institute of Archaeology University of California and The Oriental Institute of the University of Chicago, 213-234.

Stone, E. C., 2008. A Tale of Two Cities. Lowland Mesopotamia and highland Anatolia. In J. Marcus and J.A. Sabloff (eds.), *The Ancient City. New perspectives on urbanism in the old and new world*. Santa Fe, New Mexico, School for Advanced Research Press, 141-164.

Strommenger, E., 1970. *Die Neuassyrische Rundskulptur*. Berlin, Mann.

Stronach, D., 1994. Village to Metropolis. Nineveh and the beginning of urbanism in Northern Mesopotamia. In S. Mazzonni (ed.), *Nuove Fondazioni nel Vicino Oriente Antico. Realta e ideologia*. Pisa, Giardini, 85-114.

Stronach, D., 1995. Notes on the Topography of Nineveh. *Neo-Assyrian Geography* 5, 161-170.

Stronach, D., 1997. Notes on the Fall of Nineveh. In S. Parpola and R.M. Whiting (eds.), *Assyria. Proceedings of the 10th Anniversary Symposium of the Neo-Assyrian Text Corpus Project*. Helsinki, The Neo-Assyrian Text Corpus Project, 307-324.

Stronach, D., 2017. Max Mallowan and Agathe Christie Mallowan in Nineveh. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden, Sidestone Press, 84-86.

Stronach, D. and S. Lumsden, 1991. UC Berkeley's Excavations at Nineveh. *The Biblical Archaeologist* 55(4), 227-233.

Sulaiman, B.S., 2010. Irakische Ausgrabungen im Makhūl-Staudammgebiet. *Heidelberger Studien zum Alten Orient*.

Szuchman, J.J. (2007). *Prelude to Empire. Middle Assyrian Hanigalbat and the rise of the Aramaeans*. Los Angeles, Ph. D. Thesis, University of California.

Tadmor, H., 1994. *The Inscriptions of Tiglath-pileser III, King of Assyria*. Jerusalem, The Israel Academy of Sciences and Humanities.

Tadmor, H. and S. Yamada, 2011. *The Royal Inscriptions of Tiglath-pileser III (744-727 BC) and Shalmaneser V (726-722 BC), Kings of Assyria (RINAP 1)*. Winona Lake, Eisenbrauns.

Taagepera, R., 1978. Size and Duration of Empires Growth-Decline Curves, 3000 to 600 BC. *Social Science Research* 7(2), 180-196.

Taagepera, R., 1997. Expansion and Contraction Patterns of Large Polities. Context for Russia. *International Studies Quarterly* 41(3), 475-504.

Tenu, A., 2004. Ninive et Aššur à l'Époque Médio-Assyrienne. *Iraq* 66, 27-33.

Tenu, A., 2009. *L'Expansion Médio-Assyrienne. Approach Archaéologie*. Oxford, John and Erica Hedges.

Tenu, A., 2015. Building the Empire. Setllement patterns in the Middle Assyrian Empire. In B.S. Düring (ed.), *Understanding Hegemonic Practices of the Early Assyrian Empire. Essays dedicated to Frans Wiggermann*. Leiden, Nederlands Instituut voor het Nabije Oosten, 75-87.

Tenu, A., 2017. Nineveh in the Second Millennium BC. The birth of an Assyrian city. In L.P. Petit and D. Morandi Bonacossi (eds.), *Nineveh the Great City. Symbol of beauty and power*. Leiden, Sidestone Press, 118-121.

Thomason, A.K., 2016. The Sense-Scapes of Neo-Assyrian Capital Cities. Royal authority and bodily experience. *Cambridge Archaeological Journal* 26(2), 243-264).

Thompson, R.C. and R.W. Hamilton, 1932. The British Museum Excavations on the Temple of Ishtar at Nineveh, 1930-31. *Annals of Archaeology and Anthropoly* 19, 55-116.

Thompson, R.C. and R.W. Hutchinson, 1929a. *A Century of Exploration at Nineveh*. London, Luzac, & Co.

Thompson, R.C. and R.W. Hutchinson, 1929b. The excavations on the Temple of Nabu at Nineveh. *Archaeologia* 79, 103-48.

Tonkiss, F., 2013. *Cities by Design*. Cambridge, Polity Press.

Tracy, J.D. (ed.), 2000a. *City Walls. The urban enceinte in Global Perspective*. Cambridge, Cambridge University Press.

Tracy, J.D., 2000b. Introduction. In J. D. Tracy (ed.), *City Walls. The urban enceinte in Global Perspective*. Cambridge, Cambridge University Press, 1-18.

Trucker, D., 1992. A Middle Assyrian Hoard from Khirbet Karhasan, Iraq. *Iraq* 54, 157-182.

Turner, G., 1970. Tel Nebi Yūnūs. The ekal māsarti of Nineveh. *Iraq* 32 (1), 68-85.

Ur, J.A., 2005. Sennacherib's Northern Assyrian Canals. New insights from satellite imagery and aerial photography. *Iraq* 67, 317-345.

Ur, J.A., 2013. The Morphology of Neo-Assyrian Cities. *Subartu* 6-7, 11-22.

Ur, J.A., L. de Jong, J. Giraud, J. F. Osborne, and J. MacGinnis, 2013. Ancient Cities and Landscapes in the Kurdistan Region of Iraq. The Erbil Plain Archaeological Survey 2012 season. *Iraq* 75, 89-118.

Ur, J.A. and J.F. Osborne, 2016. The Rural Landscape of the Assyrian Heartland. Recent results from Arbail and Kilzu Provinces. In J. MacGinnis and D. Wicke (eds.), *The Provincial Archaeology of the Assyrian Empire*. Cambridge: Cambridge University Press, 163–173.

Ur, J.A. and J. E. Reade, 2015. The Hydraulic Landscape of Nimrud. *Mesopotamia* L, 25-51.

Vakulchuk. R. and I. Overland, 2018. Kazakhstan. Civil society and natural resource policy in Kazakhstan. In I. Overland (ed.), *Public Brainpower. Civil society and natural resource management*. Cham, Palgrave, 143-162.

Vale, L.J., 2006. The Urban Design of Twentieth Century Capitals. In D.L.A. Gordon (ed.), *Planning Twentieth Century Capital Cities*. New York, Routledge, 15-37.

Vale, L.J., 2008. *Architecture, Power, and National Identity*. 2nd ed. New York, Routledge.

Vale, L.J., 2014. Capital Architecture and National Identity. In M. Minkenberg (ed.), Power *and Architecture. The construction of capitals and the politics of space*. New York, Oxford, Berghahn Books, 31-52.

Valk, J., 2018. *Assyrian Collective Identity in the Second Millenium BCE. A social categories approach*. New York (unpublished Ph.D. thesis New York university).

van Driel, G., 1969. *The Cult of Aššur*. Assen, Van Gorcum

van Leeuwen, R.C., 2007. Cosmos, Temple, House. Building and wisdom in Mesopotamia and Israel. In R.J. Clifford (ed.), *Wisdom literature in Mesopotamia and Israel*. Atlanta, Society of Biblical Literature, 67-90.

Veenhof, K.R., 2010. Assur. The city, its traders and its commercial network. *Journal for the Economic and Social History of the Orient* 53(1/2), 39-82.

Wäfler, M., 1990. Tall-Ḥamīdīya. Vorbericht 1985-1987. In S. Eichler, M. Wäfler & D. Warburton (eds.), *Tall al-Ḥamīdīya 2. Symposium Recent Excavations in the Upper Khabur Region, Berne, December 9-11, 1986.* Fribourg, Academic Press; Göttingen, Vandenhoeck Ruprecht, 233-317

Wäfler, M., 2003. *Tall al-Ḥamīdīya 4. Vorbericht 1988-2001*. Fribourg, Academic Press; Göttingen, Vandenhoeck Ruprecht.

Wainwright, O., 2017. *'Norman Said the President Wants a Pyramid'. How starchitects built Astana*. [https://www.theguardian.com/cities/2017/oct/17/norman-foster-president-pyramid-architects-built-astana accessed 30-1-2018].

Werner, P., 2009. *Der Sîn-Šamaš-Tempel in Assur*. Berlin, Wiesbaden.

Westbrook, N., 2011. The Account of the Nika Riots as Evidence for Sixth-Century Constantinopolitan Topography. *Journal of the Australian Early medieval Association* 7, 33-54.

Wicke, D., T.L. Greenfield, D. Kertai and P.A. Miglus, 2013. The 'Bronze Palace' at Ziyaret Tepe. Preliminary remarks on the architecture and faunal analysis. In D. Kertai and P. A. Miglus (eds.), *New Research on Late Assyrian Palaces. Conference at Heidelberg January 22nd, 2011*. Heidelberg, Heidelberger Orientverlag, 63-82.

Wiggerman, F.A.M., 2000. Agriculture in the Northern Balikh Valley. The case of Middle Assyrian Tell Sabi Abyad. In R.M. Jas (ed.), *Rainfall Agriculture in Northern Mesopotamia. Proceedings of the Third MOS Symposium (Leiden 1999)*. Istanbul, Nedelands Historisch-Archaeologisch Instituut / Leiden, Nedelands Instituut voor het Nabije Oosten, 171-231.

Wilber, D.N., 1989. *Persepolis. The archaeology of Parsa, seat of the Persian kings*. London, Darwin Press.

Wilkinson, T.J., E. Wilkinson Barbanes, J. Ur and M. Altaweel, 2005. Landscape and Settlement in the Neo-Assyrian Empire. *BASOR* 349, 23-56.

Willey, G.R., 1979. The Concept of the "Disembedded Capital" in Comparative Perspective. *Journal of Anthropological Research* 35, 123-137.

Winter, I.J., 2010. Ornament and the 'Rhetoric of Abundance' in Assyria. In I.J. Winter (ed.), *On Art in the Ancient Near East. Volume 1. Of the Frist Millennium BCE*. Leiden, Brill.

Wolfel, R.L., 2002. North of Astana. Nationalistic motives for the movement of the Kazakh(stani) capital. *Nationalities Papers* 30(3), 485-506.

Wynn, L.L., 2008. Shape Shifting Lizard People, Israelite Slaves, and Other Theories of Pyramid Building. Notes on labor, nationalism, and archaeology in Egypt. *Journal of Social Archaeology* 8(2), 272-295.

Yamada, S., 2003. Tukulti-Ninurta I's Rule Over Babylonia and its Aftermath. A historical reconstruction. *Orient* 38, 153-177.

Yamada, S., 2011. The Second Military Conflict Between 'Assyria' and 'Ḫatti' in the Reign of Tukulti-Ninurta I. *Revue d'Assyriologie* CV, 199-220.

Yoffee, N., 2005. *Myths of the Archaic State. Evolution of the earliest cities, states, and civilizations*. Cambridge, Cambridge University Press.

Zawadzki, S. 1994. The revolt of 746 BC and the coming of Tiglath-pileser III to the throne., *State Archives of Assyria Bulletin* 8, 53-54.

Zettler, R.L., 1987. Enlil's City, Nippur, and the end of the Third Millennium BC. *The Society for Mesopotamian Studies Bulleting* 14, 7-19.

Ziegler, N., 2002. Le Royaume d'Ekallâtum et son Horizon Géopolitique. In D. Charpin and J.M. Durand (eds.), *Recueil d'Études à la Mémoire d'André Parrot*. Paris, Ed. SEPOA, 211-274.

Ziegler, N., 2004. The Conquest of the Holy City of Nineveh and the Kingdom of Nurrugûm by Samsî-Addu. In D. Collon and A.R. George (eds.), *Nineveh. Papers of the XLIXe Rencontre Assyriologique Internationale, London, 7–11 July 2003*. London, British School of Archaeology in Iraq, 19-26.

Zimmer-Vorhaus, C., 2011. Hittite Temples. Palaces of the gods. In H. Genz & D.P. Mielke (eds.), *Insights into Hittite History and Archaeology*. Leuven, Paris, Walpole MA, Peeters, 195-218.

List of Figures

List of Tables

List of Tables

Appendix 1

The following table provides the chronology of the Assyrian empire, its different phases used in this study, and a list of Assyrian kings. The table uses information from: Bedford 2009; Frahm 2017b, 162-165; 2017c; Jakob 2017; Liverani 1988 and additions by the author. Dates from Tiglath-Pileser I onwards are determined with certainty (Frahm 2017c, 614). The ending of Assurbanipal's reign is unclear, but probably lies between 631 and 625 BCE.

Phase	Dates	Assyrian Kings
Middle Assyrian Period		
Independence	1353-1296 BCE	Aššur-Uballit (ca. 1353-1318) Enlil-Nirari (ca. 1317-1308) Adik-dēn-ili (ca. 1307-1296)
From state to empire	1295-1197 BCE	Adad-nirari I (ca. 1295-1264) Shalmaneser I (ca. 1263-1234) Tukultī-Ninurta I (ca. 1233-1197)
Recession and brief expansion	1197-935 BCE	Aššur-nādin-apli I (ca. 1196–1193) Aššur-nirari III (ca. 1192–1187) Enlil-kudurri-uṣur (ca. 1186–1182) Ninurta-apil-Ekur (ca. 1181–1169) Aššur-dan I (ca. 1168–1133) Ninurta-Tukultī-Aššur (ca. 1133?) Mutakkil-Nusku (ca. 1133?) Aššur-rēsa-isi I (ca. 1132-1115) Tiglath-Pileser I (1114-1076) Ašared-apil-Ekur (1075–1074) Aššur-bēl-kala (1073-1056) Eriba-Adad II (1055–1054) Šamši-Adad IV (1053–1050) Aššurnaṣirpal I (1049–1031) Shalmaneser II (1030–1019) Aššur-nirari IV (1018–1013) Aššur-rabi II (1012–972) Aššur-reša-iši II (971–967) Tiglath-Pileser II (966–935)
Neo Assyrian Period		
From territorial state to empire	934-824 BCE	Aššur-dan II (934–912) Adad-nirari II (911–891) Tukultī-Ninurta II (890–884) Aššurnaṣirpal II (883–859) Shalmaneser III (858–824)
Internal problems and brief territorial recession	823-745 BCE	Šamši-Adad V (823–811) Adad-nirari III (810–783) Shalmaneser IV (782–773) Aššur-dan III (772–755) Aššur-nirari V (754–745)
Imperial expansion and consolidation	744-630 BCE	Tiglath-Pileser III (744–727) Shalmaneser V (726–722) Sargon II (721–705) Sennacherib (704–681) Esarhaddon (680–669) Assurbanipal (668–631)
Fall of Assyria	630-609 BCE	Aššur-etel-ilani (630–627) (uncertain) Sîn–šumu-lišir (627) (uncertain) Sîn-šarru-iškun (626–612) Aššur-Uballit II (611–609)

Appendix 2

The estimations for the wall heights referred in section 7.3.2 are calculated in the following way:
Kalḫu's wall was ca. 8 km long and its height is unknown. Mallowan (1966, 76) estimated it was higher than 17 m, while Oates and Oates suggest a height of 15 m (Oates and Oates 2001, 149). As there is no textual evidence referring to the number of brick layers, and given that Mallowan's estimation was done on the basis of a comparison between city-wall finds and citadel wall finds, I assume a height of 17 m excluding mortar and ca. 20 m including mortar. This is higher than both suggestions but fits better with the height of the citadel mound. In terms of width, the wall was ca. 14 m wide (Mallowan 1966, 76).
In order to achieve a 14 m thickness with the aforementioned mudbrick dimensions, one would need a total of ca. 38 bricks in a row (14/0.37=37.83). Regarding height, 17 m would require a total of ca. 142 bricks (17/0.12=141.6). In a single line, to cover 8 km of wall, one would need ca. 21,622 bricks. As such, in its total length the wall would require ca. 116,672,312 bricks (21622 x 38 x 142). The total volume of the wall, excluding mortar, can be calculated at 1,904,000 m^3 (8000 x 17 x 14). That fits the approximate calculation of 61 bricks/m^3 with a small margin of error due to rounding the number of bricks per line/row up.
The wall of Dur-Šarrukēn was slightly smaller (7 km long) than the one in Kalḫu but we know relatively more about its height and width (see section 4.5.1). With a similar width (14 m=ca. 38 bricks in a row) it had a height of 12 m, translating into 100 bricks (12/0.12=100). The latter figure assumes that the entire height of the wall was made of mudbricks. The wall had a foundation of stones measuring roughly 1.5 m wide and height. In addition, the calculation of a height of 12 m probably should include mortar. Given that the wall probably had the same foundation width as at Kalḫu, a height of 12 m, which includes the stone foundation and the mortar, is probably a conservative estimation. As such, I will assume a height of 12 m in mudbrick only, excluding mortar.
For the total extent of the wall, there should be ca. 18,919 bricks in a single line (7000/0.37=18918,9189…). In total, the wall comprised of 71,892,200 bricks, with a total volume of 1,176,000 m^3, excluding mortar. The same margin of error applies as in the preceding calculation.
For Nineveh things are much simpler, since the royal inscriptions give us the exact number of bricks per row for the solid mudbrick wall: 40 bricks wide (ca. 15 m) and 180 bricks high (ca. 21.6 m). Again, these numbers exclude mortar. Thus, 12 km of wall would have ca. 32,432 bricks in a single line (12000/0.37=32432,432…) and a total number of 233,510,400 bricks, which is double the number used for the wall at Kalḫu. The total volume of the wall can be calculated at 3,888,000 m^3, excluding mortar.

Summary

This thesis investigates the phenomenon of capital creation in antiquity, focusing on the imperial capitals of Assyria from the 14th century BCE until the fall of this empire in 612 BCE. Capital creation is defined as the construction of a monumental capital either in a new location or through a profound transformation of a pre-existing settlement. As a historical phenomenon, capital creation can be linked with empire and nation building processes. One of the first states to repeatedly engage with capital creation was the Assyrian empire. As such, it offers unique potential for the study of capital creation.

The Assyrian Empire relocated its capital four times and created new urban centers at: Kār-Tukultī-Ninurta, Kalḫu, Dur-Šarrukēn, and Nineveh. While these capitals have been the investigated in some detail, they have not yet been studied from a comparative perspective concerned with the rationale behind capital creation in Assyria. This thesis presents a systematic re-evaluation of the archaeological evidence of these capitals.

The comparative framework that forms the backbone of this study consists of three questions: *why* was a capital created; *how* was a capital constructed; and *what* was the function of the capital (Chapter 1). These questions are contextualized in a triangular model that maps out: the historical conditions under which a new capital was created; who the key agents were; and what resources were required for their construction. The combination of the three key questions and the triangular model is applied to the four Assyrian capitals.

Chapter 2 discusses the broader historical context of Assyria and provides an overview of the traditional capital of the empire, Aššur. Aššur can be regarded as the benchmark for Assyrian capitals, and serves to clarify the differences between a historical city versus a planned capital.

Chapters 3-6 are dedicated to the study of the four capitals. These chapters place each urban center within their historical frameworks, exploring key events and agents that initiated or influenced the creation of each city. The construction processes are analyzed on the basis of available textual, geographical, and archaeological evidence. Finally, the functions of these cities are investigated, including the rarely explored lower cities.

The results of the analysis are then combined in chapter 7. This chapter demonstrates that capital creation is a complex, multifaceted phenomenon that affects, and is affected by numerous parameters. It deconstructs the dominant narrative that imperial capitals are mainly the projects of exceptional leaders and produces a synthetic and contextual answer to the rationale, construction, and functioning of these Assyrian capitals. Finally, Chapter 8 presents the conclusions of the dissertation and draws out the broader relevance of the model used in this study for both ancient and more recent instances of capital creation.

Nederlandse Samenvatting

Dit proefschrift onderzoekt het fenomeen van hoofdstadcreatie in de oudheid, met de nadruk op de keizerlijke hoofdsteden van Assyrië vanaf de 14e eeuw v.Chr. tot de val van dit rijk in 612 v.Chr. Hoofdstadcreatie wordt gedefinieerd als de bouw van een monumentale hoofdstad, hetzij op een nieuwe locatie, hetzij door een grondige transformatie van een reeds bestaande nederzetting. Als historisch fenomeen kan hoofdstadcreatie in verband worden gebracht met processen gerelateerd aan imperium- en natievorming. Als zodanig biedt het een uniek potentieel voor de studie van hoofdstadcreatie.

Het Assyrische Rijk verplaatste zijn hoofdstad vier keer en creëerde nieuwe stedelijke centra in Kār-Tukultī-Ninurta, Kalḫu, Dur-Šarrukēn en Nineveh. Hoewel deze hoofdsteden tot in detail zijn onderzocht, zijn ze nog niet eerder bestudeerd vanuit een vergelijkend perspectief dat betrekking heeft tot de grondgedachte achter hoofdstadcreatie in Assyrië. Dit proefschrift presenteert een systematische her-evaluatie van het archeologisch materiaal afkomstig van deze hoofdsteden.

Het vergelijkend kader dat de ruggengraat van deze studie vormt, bestaat uit drie vragen: *waarom* werd een hoofdstad gecreëerd; *hoe* werd een hoofdstad opgebouwd; en *wat* was de functie van de hoofdstad (Hoofdstuk 1). Deze vragen worden gecontextualiseerd in een driehoekig model dat de belangrijkste actoren in kaart brengt, alsmede de historische omstandigheden waarin een nieuwe hoofdstad wordt opgericht, en welke middelen er nodig waren voor constructie. De combinatie van het model en de drie kernvragen wordt toegepast op de vier Assyrische hoofdsteden.

Hoofdstuk 2 bespreekt de bredere historische context van Assyrië en geeft een overzicht van de traditionele hoofdstad van het rijk, Aššur. Aššur kan worden beschouwd als de maatstaf voor Assyrische hoofdsteden en dient als voorbeeld om de verschillen tussen een historische stad en een geplande hoofdstad te verduidelijken.

De Hoofdstukken 3-6 zijn gewijd aan een bredere studie van de vier hoofdsteden. Deze hoofdstukken plaatsen elk stedelijk centrum binnen hun historische kaders en onderzoeken belangrijke gebeurtenissen en actoren die de oprichting van elke stad hebben geïnitieerd of beïnvloed. De constructieprocessen worden geanalyseerd op basis van beschikbaar tekstueel, geografisch en archeologisch bewijs. Ten slotte worden de functies van deze steden onderzocht, inclusief de zelden onderzochte benedensteden.

De resultaten van de analyse worden gecombineerd in Hoofdstuk 7. Dit hoofdstuk laat zien dat hoofdstadcreatie een complex fenomeen is dat invloed heeft op -en wordt beïnvloed door- talrijke parameters. Het deconstrueert het dominante verhaal dat keizerlijke hoofdsteden voornamelijk projecten zijn van uitzonderlijke leiders, en levert een synthetisch en contextueel antwoord op de kerngedachte, de constructie en het functioneren van Assyrische hoofdsteden. Ten slotte presenteert Hoofdstuk 8 de conclusies van het proefschrift en toont het hoe de bredere relevantie van het model gebruikt kan worden voor de studie van zowel oude als recentere voorbeelden van hoofdstadcreatie.

Curriculum Vitae

Aris Politopoulos (Athens, 1989) grew up in Glyfada, Athens, and went to High School in the 2nd Public High School of Glyfada. In 2007 he began his BA studies at the Department of History and Archaeology of the National and Kapodistrian University of Athens. There he specialized in archaeology, with a particular focus on the Late Bronze Age Eastern Mediterranean and the Mycenaean World. He participated in a number of excavation projects of the University of Athens and the University of Crete.

In February 2012 he moved to the Netherlands to study Near Eastern archaeology as a master student at the Faculty of Archaeology of Leiden University. For his MA research he explored the transition from the Mitanni to the Middle Assyrian empire which resulted in his thesis: *From Mitanni to Middle Assyrians: Changes in Settlement Patterns and Agriculture in the Land of Hanigalbat*.

In 2013 Aris began his PhD trajectory under the supervision of Prof.dr. Peter Akkermans and Dr. Bleda Düring. His dissertation focuses on phenomenon of capital creation in antiquity through a systematic investigation of the imperial capitals of Assyria. He presented his results at several international conferences.

During his PhD studies, Aris co-founded the VALUE Foundation, which explores the intersection of video games and archaeology. As a member of VALUE, he has published several edited volumes, articles, reviews, and blogs on archaeology and video games. He has also organized two international conferences on video games and archaeology, several sessions and roundtables in large international conferences, and a series of public outreach events reconstructing the Dutch Limes in the popular video game *Minecraft*.

In 2019, together with Prof.dr. Sybille Lammes and Dr. Angus Mol, he was awarded the first Snouck-Hurgronje grant, offered by the Leiden University Funds, for the project *The Past-at-Play Lab* (2020-2021). The project is hosted at the Leiden University Centre for Arts in Society. As a post-doctoral researcher, Aris is investigating play in antiquity through the study of ancient board games of the Near East.

Aris is also employed as a lecturer at the Faculty of Archaeology, Leiden University, where he teaches archaeology of the ancient Near East. He was nominated by for the Leiden Remote Teaching Prize of 2020, where he was one of the top three candidates out of more than 200 nominees.