

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

Heartland and Province: Urban and Rural Settlement in the Neo-Assyrian Empire

by

Eleanor Barbanes

**B.A. (New York University, New York) 1982
M. Arch. (State University of New York, Buffalo) 1990
M.A. (University of California, Berkeley) 1995**

A dissertation submitted in partial satisfaction of the

requirements for the degree of

**Doctor of Philosophy
in**

Near Eastern Studies

in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA, BERKELEY

Committee in charge:

**Professor David Stronach, chair
Professor Guitty Azarpay
Professor Crawford Greenewalt**

Spring 1999

UMI Number: 9931179

UMI Microform 9931179
Copyright 1999, by UMI Company. All rights reserved.

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

Heartland and Province: Urban and Rural Settlement in the Neo-Assyrian Empire

Copyright 1999

by

Eleanor Barbanes

The dissertation of Eleanor Barbanes is approved:

David Stroud 5/14/99
Chair

Robert Smith 5/11/1999

Quincy Troup 5/10/99

University of California, Berkeley

Spring 1999

Table of Contents

I. Introduction	1
- thesis and objectives	
- definition of terms	
- methodology	
- framework of discussion	
II. The historical context of Iron Age urbanization: Upper Mesopotamia from the end of the Late Bronze Age through the Iron Age	9
II.1. The Mesopotamian cultural landscape at the end of the Bronze Age	9
II.1.a. The decline of the Bronze Age urban centers and the emergence of the Middle Assyrian empire	9
II.1.b. The Middle Assyrian Empire: the beginnings of Iron Age urbanization (ca. 1400-1050 B.C.)	15
II.1.c. Settlement in the countryside: cultural components of 'the Land of Assur'	18
II.1.d. Neo-Hittite and Aramaean urbanization	26
II.1.e. Neo-Assyrian urbanization	29
III. Early first millennium B.C. settlement patterns: Case studies from regional surveys	35
III.1. The Middle Euphrates and the Khabur River Valley	35
III.1.a. The Middle Euphrates	35
III.1.a.i. "Fortifications"	39
III.1.a.ii. "Temporary Camps"	45
III.1.b. The Lower Khabur	48
III.1.c. The Tell Beydar region of the Upper Khabur	55
III.2. The Iraqi Jazira	62
III.2.a. The North Jazira	62
III.2.b. The Jazira and the Tell 'Afar Plain	66
IV. Cities of the Neo-Assyrian Empire: town planning and the policies of urbanization	72
IV.1. Capital cities: a description of site morphology, architectural and spatial components, and regional situation	72
IV.1.a. Assur	72
IV.1.b. Kar Tukulti-Ninurta	81
IV.1.c. Kalhu (Nimrud)	83
IV.1.d. Dur-Sharrukin (Khorsabad)	87
IV.1.e. Nineveh	92
IV.2. Provincial centers, regional centers and special purpose settlements: selected case studies	97
IV.2.a. Dur-Katlimmu (Tell Sheikh Hamad)	97
IV.2.b. Kar Shalmaneser (Til Barsib, Tell Ahmar)	102
IV.2.c. Megiddo	105

IV.3. Identifying a Neo-Assyrian system of town planning: archetypes of urban form and spatial organization	109
IV.3.a. Problems in the archaeological record	109
IV.3.b. The capital city versus the urban center	113
IV.3.c. Capital cities: the citadel city, palace/temple complex and lower town	116
IV.3.d. Urban centers: principles of planning as derived from the case studies	123
V. Conceptualizing the city through Assyrian texts	128
V.1. The symbolic relationship between 'the city' and the imperial administration	128
V.2. New foundations and renovations	134
V.3. The concept of town-planning in Assyrian sources	139
V.4. Akkadian terminology for settlement types	143
VI. Conclusions	149
Figures	158
Bibliography	177
Appendix A: Early First Millennium Sites on the Middle Euphrates (after Abdul-Amir, 1988)	198
Appendix B: Iron Age Sites in the Region of Tell Beydar	200
Appendix C: Comparison of Middle Assyrian and Late Assyrian Sites in the North Jazira (after Wilkinson and Tucker, 1995)	208

List of Figures

- Fig. 1 - Upper Mesopotamia: Survey areas discussed in the text, adapted from Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 1, p. 74.
- Fig. 2 - Upper Mesopotamia: Sites mentioned in the text, adapted from Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 1, p. 74.
- Fig. 3 - Survey area no. 1, Tell Beydar and its vicinity: Iron Age sites and earlier tells.
- Fig. 4 - Tell Beydar area showing the Lower Town and hollow ways.
- Fig. 5 - Survey area no. 4, North Jazira: Late Assyrian sites and wadis, adapted from Wilkinson and Tucker, *Settlement and Development in the North Jazira, Iraq* (1995), fig. 6, p. 152.
- Fig. 6 - Survey area no. 4, North Jazira: Middle Assyrian and Late Assyrian sites and possible related hollow ways, adapted from Wilkinson and Tucker, *Settlement and Development in the North Jazira, Iraq* (1995), fig. 6, p. 152.
- Fig. 7 - Survey area no. 6, the Jazira: Late Assyrian sites, compiled from Ibrahim, *Pre-Islamic Settlement in the Jazira* (1986), plates 8-16, pp. 257-264.
- Fig. 8 - Survey area no. 6, the Jazira (detail): Late Assyrian sites identified in surveys by Ibrahim (1986), Oates (unpublished) and Wilkinson and Tucker (1995).
- Fig. 9 - Plan of Assur, from E. Ebeling and B. Meissner, "Assur," *Reallexikon d'Assyriologie* 1 (1932), plate 20.
- Fig. 10 - Plan of Kar Tukulti-Ninurta, after T. Eickhoff, "Kar Tukulti-Ninurta," *Reallexikon d'Assyriologie* 5/5-6 (1980), p. 457.
- Fig. 11 - Plan of Kalhu (Nimrud), after J. Reade, *Fifty Years of Mesopotamian Discoveries* (1982), fig. 75, p. 103.
- Fig. 12 - Plan of Dur-Sharrukin (Khorsabad), after S. Lloyd, *The Archaeology of Mesopotamia* (1978), fig. 143, p. 200.
- Fig. 13 - Plan of Nineveh, after D. Stronach, "Notes on the Fall of Nineveh," *Assyria 1995* (1997), fig. 2, p. 312.
- Fig. 14 - Plan of Dur-Katlimmu, after H. Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 8, p. 81.
- Fig. 15 - Plan of Til Barsib (Tell Ahmar), after G. Bunnens, "Til Barsib Under Assyrian Domination," *Assyria 1995* (1997), fig. 1, p. 18.

- Fig. 16 - Plan of Carchemish, after J.D. Hawkins, "Karkamis," *Reallexikon d'Assyriologie* 5/5-6 (1980), p.427.
- Fig. 17 - Plan of Megiddo, after Z. Herzog, *Archaeology of the City* (1997), fig. 5, p. 256.
- Fig. 18 - Plan of Tayinat, after R.C. Haines, *Excavations in the Plain of Antioch, II* (1971), plate 93.
- Fig. 19 - Assyrian capitals and royal cities compared, after H. Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 3, p. 76.

Acknowledgements

I would like to take this opportunity to express my gratitude to my dissertation committee; Professor Guitty Azarpy, Professor Crawford H. Greenwalt, and Professor David Stronach, who have each provided me with unwavering support and encouragement throughout the entire process of the dissertation research and writing, and indeed, throughout my six years in the department of Near Eastern Studies. It was Professor Azarpy's positive and thoughtful critique of my very first research paper at Berkeley (on Sasanian fire temples) that convinced me that there was at least a glimmer of hope that I might actually succeed in this quest for a Ph.D. I thank her for the generosity with which she dependably responded to all of my academic inquiries.

I heartily thank Professor Greenwalt as well who, coming from the standpoint of a classicist, took on the topic of Assyrian urban planning with a robust enthusiasm that confirmed the fact that my seemingly solitary research endeavors had an intrinsic value and significance beyond my computer screen. His insightful, well-informed commentary continuously prompted me to think more analytically and to constantly refine the expression of my knowledge. He is also to be credited with prodding me to wrest the upholstery from my prose, and to salvage the most important points in the discussion from behind an obscuring veil of double-negatives and split infinitives.

My most profound thanks go to Professor David Stronach, the Chair of my committee and my constant advisor here at Berkeley. The great respect that I hold for Professor Stronach actually began two years before I became his student, when he kindly invited me to work on his team at UC Berkeley's excavations at Nineveh in 1990, which he was then directing. At Nineveh, I was consistently impressed with the intense interest that Professor Stronach always showed in the most minute details of the architectural remains, and the attention that he paid to their recording. I am grateful for having been given the privilege of working at Nineveh, where my own interest in the Assyrians was first ignited.

I am indebted to Professor Stronach, most of all, for first suggesting that I pursue a degree at Berkeley, and for the wisdom and assistance he has provided me with throughout my time as his student.

There are several people in particular without whom this project would not have been realized, and to whom I would like to express my deepest gratitude. My mother and father, Eleanor T. and William J. Barbanes tried to instill in me both a sense of humor and a sense of optimism, two of the most useful qualities in life, and perhaps especially in graduate school. I have also been blessed with the steadfast support of my husband, colleague and truest friend, Tony Wilkinson. He has for the past four years graciously endured my peripetetic academic endeavors, and he was wise enough to assume a position of compassionate distance towards my research for this dissertation. His intellectual generosity is limitless, his enthusiasm for archaeology is entirely infectious, and the respect with which he greeted my ideas buoyed me through even roughest waters.

A number of people have read early versions of this dissertation, and their comments and suggestions have all been immensely valuable. In this regard, I would like to particularly thank Mario Liverani and Samuel Paley. Laurie Pearce was kind enough to have furnished crucial but elusive reference material in my hour of need. I am also grateful to Marc Lebeau and Karl Vanlerberghe of the Tell Beydar Project, and especially Peter Akkermans of the Tell Sabi Abyad Project, all of whom allowed me the opportunity of doing regional survey work in Syria, in the areas around their excavations. A considerable part of the research for this project was made possible through the Stahl Endowment. I am especially grateful to the George Franklin Dales Foundation for their generous support, and especially to Mrs. Barbara Dales for her kind attention and for the substantial assistance that was a critical factor in the timely completion of this dissertation.

I. Introduction

The last phase of the Assyrian empire, beginning with the reign of Ashur-Dan II (934-912 B.C.) and lasting until almost 600 B.C., left a unique and indelible mark on urban history. It was during this period that the Assyrian empire emerged as a formidable imperial power and, through enormous territorial expansion and political consolidation, came to dominate most of Mesopotamia and parts of Palestine, Egypt, Media and Anatolia. The Assyrians' control over this rapidly expanding empire was maintained through the establishment of a system of administration based upon principles of political and economic centralization. In expanding the area of lands under their control and reorganizing the administration of the empire, the Assyrian kings radically transformed the cultural, political, and geographical landscape of Upper Mesopotamia. This radical transformation was accomplished by the implementation of the processes of urbanization. According to Wheatley, urbanization "denotes the rate of change in the ratio of city dwellers to total population, which in practice means a change in the number and size of cities" (Wheatley 1972:623). The archaeological record of Upper Mesopotamia reveals that in the early part of the first millennium B.C. there was a significant increase in the number, size, and the types of settlements occupied as compared to the Late Bronze Age. It is reasonable to assume that Neo-Assyrian administrative centralization necessitated a program of urbanization of the countryside in order to ensure the stability and security of the empire, and although there is no concrete evidence of such a program in historical sources, there are sufficient indications to suggest that Assyrian efforts at resettlement were intensified during the second half of the ninth century B.C. (Liverani 1992). Recent archaeological research concerning Neo-Assyrian settlement in the area of study has produced a picture of a settlement system characterized by a multi-tiered hierarchy composed of numerous hamlets, villages, and provincial centers, with the prevailing capital city at the pinnacle of the hierarchical pyramid.

The focus of this dissertation is the archaeological evidence for this settlement system. In this context a 'settlement system' refers to the spectrum of settlements of different size, significance and function, and their relationship to each other and to the landscape. The objective is to identify the components of the Neo-Assyrian settlement system as far as this can be determined from the archaeological evidence to date, from excavation projects at representative Assyrian sites, relevant regional surveys and from concomitant documentation in Assyrian sources. One aspect of the analysis is to identify, in the words of the urban geographer H. Carter, "the spatial characteristics of the city, and the characteristics of the city in space."¹ That is, in order to fully comprehend the urban traditions of the Neo-Assyrian empire, the urban landscape must be considered in its entirety. If one considers the empire as a vast geographical entity governed by a centralized administrative body, then the term 'urban landscape' can alternately be read as 'the built environment', especially since the location of cities and settlements as well as related public works projects throughout the countryside can each be seen to have been factors in the effective maintenance of the empire. The built environment includes, therefore, not only the organization of architectural features inside established settlements, but also the patterns of occupation that can be detected in the countryside as well.

In the attempt to establish a comprehensive description of Neo-Assyrian urbanism, it is critically important to recognize the evidence for the implementation of town planning principles. While any settlement is admittedly the product of specific political, cultural and geographical circumstances, there are certain physical patterns which appear consistently in the descriptive profile of Late Assyrian-period sites of similar rank, size and function. It is this set of physical patterns which can be taken to define a Neo-Assyrian town planning system. The excavated evidence from the capital cities and several large urban centers will provide this discussion with the basis for an analysis of town planning practices, but Assyrian sources present another significant contribution to the investigation. Intensely

¹ H. Carter, *The Study of Urban Geography*, London, 1981:335.

conscious of their own role as city-builders and urban dwellers, the Assyrian kings in their texts consistently convey the care and concern which they devoted to the establishment and maintenance of their capital cities. These cities, in which the strength of the empire and the breadth of its influence was centered, stood throughout the period of the Neo-Assyrian empire as the symbolic and literal manifestation of Assyrian power. The capital cities of Assur, Kar Tukulti-Ninurta, Kalhu (Nimrud), Dur-Sharrukin (Khorsabad), and Nineveh will be therefore be analyzed in terms of their underlying planning principles. Several excavations have recently been conducted at large Neo-Assyrian provincial centers, regional centers and special-purpose sites, shedding much needed light on this second tier of the Assyrian settlement hierarchy. Three excavated sites have been chosen as case studies based upon the amount of information that has been retrieved concerning their interior spatial organization; the sites of Dur-Katlimmu (Tell Sheikh Hamad), Til Barsib (Tell Ahmar), and Megiddo. While Megiddo falls outside the geographical parameters of this study as it lies in Palestine and not Upper Mesopotamia, it is worth looking at in this context because it is one of the rare examples of a coherent overall Neo-Assyrian town plan. The search for consistency in planning has to be undertaken with caution. Few urban sites in Mesopotamia have been excavated more than patchily outside of their core administrative areas. In this circumstance, areas of uncertainty will always remain. The best hope is, I believe, to try to find concordance between three separate but co-dependent bodies of evidence. Such evidence should clearly include the full range of excavated evidence, the testimony of any relevant ancient texts, and a close consideration geographical factors that would seem to have accounted for, at least in part, the character of the given urban entity.

The regional surveys chosen to be included in this study have been conducted over the past twelve years in Iraq and northern Syria. The surveys are intrinsic to the identification and description of the site types and site hierarchy, which, considering the paucity of substantive information from outside of the excavated capitals, remain two of the

murkiest aspects of Neo-Assyrian settlement. Moreover, the surveys are our only means of investigating, archaeologically, the geographical distribution of towns, or the 'settlement patterns'. Although the surveys utilized in this dissertation represent only a selection of a larger number, they have been selected on the base of certain criteria. Of primary importance is the density of Late Assyrian and local Late Iron Age occupation recorded, particularly of single or at least limited period sites. Of equal importance is the degree of detail in their results concerning the architectural, morphological and geographical qualities of such sites, and the usefulness of the related ceramic assemblages. Detailed surveys are therefore given priority, as intensive survey techniques are necessary to identify Late Assyrian and local Late Iron Age sites, which are frequently small in size and can be overlooked in conventional vehicular survey. While the findings of each survey reflect specific regional circumstances, taken as a group, they provide the framework upon which one may construct some hypotheses concerning Neo-Assyrian settlement patterns and characteristics of urban and rural settlement.

The geographical parameters of this study are defined according to the assemblage of excavations and regional surveys included in the discussion. The study area therefore comprises both the Assyrian heartland, in the area of the upper Tigris River, as well as a wide sweep of territory immediately to the west up to and including the Khabur river, plus a portion of the Middle Euphrates. This extensive area can by no means be characterized as culturally, topographically or climatically homogenous, but with the exception of Megiddo, which was probably incorporated later during the late eighth century B.C., all of the excavations and surveys discussed herein are situated within the territories that underwent a rapid re-urbanization during the later ninth and eighth centuries B.C.

The chronological limits of this paper fall within the Late Iron Age, which in these areas of Upper Mesopotamia may be taken as roughly 900 to 600 B.C. It must be acknowledged that archaeological periodization should ideally be based upon the available material record, but in the case of the Iron Age, changes in material culture are frequently

identified with historical events, and since the textual record of the Assyrian empire provides much of the existing knowledge of this time period, the result is that the ethnic term "Assyrian" is sometimes applied with impunity to Late Iron Age settlements even if a firm association with Assyrian occupants has not been established. In this dissertation, the application of the term Late Assyrian indicates the presence of architecture and material culture (ceramics and other small finds) which are recognizable examples of Assyrian construction or production.² The term therefore has certain ethnic connotations, referring not only to the time period in which a given site or area came within the Assyrian cultural and political orbit, but specifically to the evidence of Assyrian occupation.³ Although the Iron Age ceramic sequence is becoming increasingly refined, subdivision of Late Assyrian pottery into historically relevant phases remains as yet tentative. Some recent advancements have been made in developing chronological subdivisions of the Iron Age ceramic sequence, and with the publication of more assemblages from stratified contexts, the definition of both Late Assyrian and local ceramic typologies in the area of study are gradually becoming more secure.⁴

2 T. Matney (1998:13) has suggested that the distinction between the usage of the terms 'Late Assyrian' versus 'Neo-Assyrian' may be drawn as follows: "'Late Assyrian' refers to stylistic conventions of material culture associated with pre-Achaemenid Iron Age sites in northern Iraq, while 'Neo-Assyrian' refers to a political entity known from numerous cuneiform sources which came to an end in 612 B.C." The Neo-Assyrian Empire is considered to have begun in 934 B.C. with the reign of Ashurdan II (934-912 B.C.) following Postgate 1992:248-249, or perhaps from about 910 B.C., with the period of expansion that began under Adad-nirari II (911-891 B.C.) following Liverani 1988:84. The material versus political distinction delineated by Matney concurs with the approach of this study. However, in the discussion of some of the case studies in this paper, "Neo-Assyrian" is the identifying term applied by the authors of the primary source material referring to archaeological evidence dated to the Late Assyrian period.

3 Perhaps the term should also be applied to contexts in which there are indications of Assyrian *influence* as well. Wilkinson (1995:144 and note 18) has emphasized that even type fossils that are generally interpreted as firm evidence of Assyrian occupation, such as "palace ware", may in fact have been locally made versions of imported originals.

4 See J. Curtis and A.R. Green 1989 and 1997 (for excavated material from Khatuniyeh); D. Morandi and S. Kulemann, forthcoming (ceramics from the lower Khabur region); C. Postgate et al 1998 (the Tell al-Rimah area). Of particular significance in Iron Age ceramics in Upper Mesopotamia is the forthcoming, *Studies on Iron Age Pottery in Northern Mesopotamia, North Syria and Southern Anatolia* (A. Hausleiter and A. Reiche, eds.).

True understanding of the trends in Neo-Assyrian settlement is only likely to emerge if we possess some knowledge of the existing historical and cultural circumstances at the time of the Assyrians' re-emergence as a dominating force in the region late in the tenth century B.C. Chapter II of this study examines the context of the urbanization processes beginning in the Middle Assyrian period through the transition into the Late Assyrian period, exploring the significant ways in which the patterns of settlement of the latter period differed from those of the former.⁵ This portion of the discussion includes, as part of an analysis of the the cultural landscape at the end of the Late Bronze Age, a description of the decline of Bronze Age urban centers and the more significant Middle Assyrian cities during that time. Central to this chapter is the identification of the new urban landscape created by the Neo-Assyrian kings during the periods of expansion, and the components of the 'urbanization program' which they may have implemented. Informing this analysis is the issue of inter-regional interaction, that is to say, the adoption or transformation of localized urban traditions within the Assyrian repertoire as the empire continued to grow, and the degree of impact of Assyrian traditions upon established local settlement. Particular attention will be devoted to the Neo-Hittite and Aramaean cultural entities and the potential for the adoption or transformation of these localized traditions within the Assyrian urban repertoire.

Chapter III is concerned with the geographical context of Neo-Assyrian urban settlement. Concentration will be placed on the identification of Neo-Assyrian settlement patterns, as well as the establishment of a typology of settlements and their hierachy. The basis of ~~this portion of the~~ study is the data from six regional survey projects in Upper Mesopotamia, which will serve as case studies. The examination of settlement patterns, both localized and more broad in scope, will allow for a discussion of the potential cultural and socioeconomic relationships between urban centers and rural settlements. This will

⁵ In this paper, I have considered the Middle Assyrian Empire as being from the middle of the fourteenth century B.C., beginning with Ashur-uballit (1365-1330 B.C.) lasting, with periodic gaps in documentation, through the reign of Tiglath-pileser I (1114-1076 B.C.).

include a description of the apparent trends in settlement, in terms of characteristics such as concentration of sites, site size, and functional specialization. Concordance will be made with relevant historical processes recorded in Assyrian texts.

Once a general picture of regional settlement is achieved, a shift will be made in Chapter IV to the more specific characteristics of known significant Neo-Assyrian settlements, using the excavated capitals and the four urban centers mentioned above as case studies. This will include an identification of town planning traditions consistent throughout the various categories of urban settlement. Each settlement will be considered in terms of its regional situation, morphology (size, shape and spatial composition relative to the landscape), spatial organization, and architectural components. With the goal in mind of establishing a set of archetypal urban forms, the settlements will be grouped according to size and cultural significance within the empire. The discussion will address the question of distinguishing between those cities imposed on the landscape by the Assyrian authorities and those which "came into being as a result of the spontaneous readjustment of social, political and economic relationships within the context of a folk society."⁶ In other words, to what degree is it feasible to differentiate, in the archaeological context, between towns constructed by the Assyrians and non-Assyrian towns, and what are the particular urban qualities that might make such a distinction possible? By describing the perceived patterns in Assyrian urbanism, it will then be possible to advance certain theoretical perspectives on the Neo-Assyrian city and the symbolism inherent in its form and construction.

The main focus of Chapter V is the Assyrian concept of 'the city' as revealed in certain textual sources from the period of the Neo-Assyrian empire and earlier. The discussion therefore explores certain concepts relating to urbanism in the literature, and the expression of these concepts in architectural form. Included among these concepts are the

⁶ P. Wheatley, in R. W. Steel and R. Lawton (eds.), *Liverpool Essays in Geography*, London, 1967: 315-45.

relationship between the kingship and 'the city', the contrast of urban versus ex-urban space, and the symbolic role of 'the city' as a propagandistic tool of imperial objectives. Specifically, textual references to town-planning will be investigated, concerning issues such as new foundations, renovations, site morphology, and the location of cities within the landscape. Additionally, a review of the spectrum of settlement will be made, from the available sources concerning Akkadian terminology for settlement types. Finally, some concordance will be made between the texts and the archaeological record during the period of Neo-Assyrian imperial expansion and hegemony in Mesopotamia -- a time of intense urbanization and a period of incontestable advances in the evolution of urban form.

II. The Historical Context of Iron Age Urbanization: Upper Mesopotamia from the End of the Late Bronze Age Through the Iron Age

II.1. The Mesopotamian Cultural Landscape at the End of the Bronze Age

II.1.a. The Decline of the Bronze Age Urban Centers and the Emergence of the Middle Assyrian Empire

The end of the Bronze Age in the Near East has been attributed to an enormous 'catastrophe' occurring around 1200 B.C., in which suddenly mobile migratory peoples wrought havoc throughout the Aegean, Anatolia, the Levant, and Mesopotamia, bringing the centuries-old Bronze Age institutions and cities to an end (Barnett 1975; Drews 1993; Goetze 1975). Alternatively, the theory has been advanced that the Bronze age 'collapse' was not so much the result of invasions as it was the result of a progressive weakening of the existing economic and social systems, which then left a power void which opportunistic outsiders were able to exploit (Knapp 1986). Still others accept the notion of a systems collapse, but prefer to emphasize the internal socio-economic factors over the external factor of migrations (Liverani 1987, Sader 1992), a perspective which has gained considerable acceptance.⁷ The significance of deteriorating environmental conditions in the second millennium B.C. has also been examined extensively, providing a scenario in which long-term dry spells, droughts, plagues, and famines which could have stressed the population of the Near East to the point that economic and political weakness ensued, and the existing systems collapsed⁸. Different theories may continue to be proposed

⁷ See also Mendenhall (1962) and Gottwald (1979) concerning the end of the Late Bronze Age Canaanite cities in Palestine, as related in McClellan (1992), p.164.

⁸ Lemcke and Sturm (1997) have produced data from the Anatolian plateau suggesting that there was an intensification of dry conditions in the second millennium B.C. Neumann and Parpola's data (1987) may correlate with the decline recorded in cuneiform texts as having occurred between ca. 1200 to 1000 B.C. Betancourt (1976) relates the example of Messenia, where the needs of the population may have exceeded the available agriculture. See also Drews (1993) pp. 77-84; Weiss (1982), pp. 172-198; Gorny (1989), pp. 78-94.

concerning the transition from the Bronze Age to the Iron Age, and although the issue lies outside the parameters of this paper, it must nevertheless be invoked at the outset, since it is within this context that there occurred a dramatic change in the systems of settlement in Upper Mesopotamia. In the archaeological record this transition is manifest in a new form of urbanization, and it is this new expression of urbanization which will be examined in this dissertation.

Whatever the causal factors may have been, it can be said that the transition from the Late Bronze to the Iron Age in Upper Mesopotamia was a process in which the highly centralized regional or city-states of the Bronze Age were subsequently replaced during the Iron Age by an amalgam of tribal kingdoms, provincial kingdoms and small states, many of which were ultimately subsumed by the territorial empire of the Neo-Assyrian kings. The socio-political reorganization resulted in a thorough transformation of the cultural and physical landscape, attested in the archaeological record of the built environment. The Bronze Age nucleated settlement system, focused on a single large urban center in each city-state, was superseded in the Iron Age by a hierarchical settlement system comprised of a proliferation of small, predominantly rural and dispersed towns and settlements crowned by a sizable number of capital cities controlling reduced territories.

While no single factor explains the urbanization of the countryside in the Iron Age, the emergence and expansion of the Neo-Assyrian empire, with the necessity of administering vast territories, certainly helped propel the trend. Some recent studies suggest, however, that this revolutionary trend in urbanization was perhaps equally shaped by local political, economic and social conditions and urban traditions. Referring to this new urbanism, Mazzoni has described it as, "not promoted by a sole political or social component but...a process linked to a general new and renewed political and economic setting and its increasing possibilities and fortune in the early first millennium B.C." (Mazzoni 1994: 329). Liverani, as well, has emphasized the significance of the continuation of local settlements throughout the period of Assyrian domination and the need

to understand the nature of their coexistence with Assyrian imposed settlements (Liverani 1992: 125-132). The most recent archaeological findings, especially from surveys which produce more regional information on settlement in ways that excavation does not, are contributing to an increasingly nuanced interpretation of Iron Age settlement and settlement patterns.

The 'collapse' at the end of the Bronze Age frequently implies the end of the palace economies: that is, the abrupt disappearance of large centralized city-states throughout the Near East. However, in Upper Mesopotamia in particular those territories which are the subject of this discussion, the applicability of the term 'palace economy' and the extent to which a true 'collapse' can be identified in the archaeological record have recently come into question. McClellan (1992) has reviewed, for example, the situation in inner Syria with reference to the archaeological evidence for the existence (and destruction) of palace economies. It is his contention that the administrative systems of Carchemish and Assur, the centers of the two states that shared control of inner Syria in the thirteenth and twelfth centuries, cannot be accurately classified as 'palace economies' although they should perhaps be termed 'imperial' (McClellan 1992:165). McClellan asserts that the collapse of the Hittite empire should be described as the "collapse of an empire and its attendant politico-economic system and security apparatus" (ibid.:166). Concerning the Assyrians in inner Syria, he notes the increasing amount of evidence for the continued use of sites from the Middle through Late Assyrian periods and suggests that the notion of collapse is inconsistent with the known facts.⁹

The archaeological record throughout Syria is, as McClellan points out, conspicuously lacking in large-scale palaces from the Late Bronze Age. The relatively small palaces and administrative complexes (and their related artifact assemblages)

⁹ With reference to Assyrian sites, McClellan concurs with Liverani who, in 1988, noted that "the continued use of sites from the Middle to the Neo-Assyrian period is probably very marked" (p.88). Evidence from the archaeological record confirming continued occupation of Upper Mesopotamian sites, Assyrian and Hittite, from the second through first millennium will be discussed herein, Chapter III.

throughout inner Syria from this period are not representative of the type of socio-political organization that existed at, for instance, Ugarit and Alalakh, coastal entities which are part of the body of evidence upon which the model of palace collapse in Syria is based.¹⁰ Moreover, concerning the widespread destruction of Late Bronze urban centers that is commonly acknowledged to have occurred around 1200 B.C., both McClellan and Sader (1992, same volume) cite the paucity of convincing evidence for relevant destruction levels at many of the major inland sites in Syria -- something which only makes the case for continued occupation at such sites all the more compelling. The argument may therefore be made that the Late Bronze-Iron Age transition in Upper Mesopotamia, particularly in the region of northern inland Syria, should be examined in light of the specific cultural and political conditions that distinguish it from all other parts of the Near East. That is to say, both the terms 'palace economy' and 'collapse' are perhaps inaccurate in this case. In this region, the end of the Bronze Age seems to have been more a gradual process than the term 'collapse' implies, and this transitional period should perhaps be viewed as a decline which began much earlier than 1200 B.C. but which was marked in places by a substantial degree of cultural continuity persisting into the Iron Age, when new trends in settlement began to emerge.

The urbanization process promoted during the period of the Neo-Assyrian empire is characterized by certain patterns which can be first detected in the last third of the third millennium B.C., at the time of the emergence of the first territorial empire created by Sargon of Akkad (2334-2279 B.C.). Knowledge of the spatial distribution of settlements during the Akkadian period is limited but it can be said that the centralized government of the Akkadian empire, with its trunk routes maintained by a network of outposts, was the first significant alternative to the regional or city-state system in Mesopotamia (Glassner 1979, Foster 1982). Sargon's unification of southern Mesopotamia with his own central

¹⁰ The model of palace collapse in Syria is also formulated from evidence derived from Palestine in the Amarna letters, Egypt, and fifteenth century archives from Nuzi (McClellan 1992:164-165).

district, combined with his outposts in far-flung territories in a sense foreshadows the Neo-Assyrian kings' extensive control over a vast territorial empire. Sargon's reign was characterized by royal behavior which was in many ways a departure from that of his predecessors and in certain respects, he and subsequent Akkadian kings established patterns of royal behavior which would be emulated by the later Assyrians.¹¹ One such activity which has been identified as having been a significant factor in the urbanization of Upper Mesopotamia,¹² was the founding and enlarging of capital cities and royal residences. Such ambitious urban programs would later be undertaken the Assyrians, but also by the Neo-Hittite and Aramaean kingdoms. The Akkadian empire was originally centered at the city of Kish, for which there is considerable documentation; the later capital, at Agade has never been located. Despite the fact that after the fall of the Akkadian empire it would become a "small rural site remembered only vaguely in legend" (Brinkman 1968:145), Agade in fact "symbolized a change in the political system of Mesopotamia ending, at least for a time, the internecine rivalries and transcending the local political traditions in the city-states to a higher conception of a single Mesopotamian political system" (Yoffee 1991:46).

Shamshi-Adad (c. 1813-1781 B.C.) is the first king of Assyria who was responsible for a building program on a regional scale. Shamshi-Adad conquered Assur and proceeded to reign for thirty-three years (Oates 1968b:38), but by removing his administrative capital to Shubat Enlil at the eastern limit of the Khabur triangle in northern Syria (identified with Tell Leilan, see Weiss 1991), he temporarily shifted the center of the Assyrian kingdom away from Assur, although Ekallatum on the Tigris and Mari on the Euphrates -- where he installed his sons as rulers -- served as important administrative

11 Stronach (1997:310) and Oppenheim (1977:124-5) have remarked on the close parallels between the activities of, for instance, the third millennium Sargon and his namesake, Sargon II (722-705 B.C.) with regard to statecraft, territorial expansion and the foundation of a new imperial capital. Joffe (1998:556-557) notes that Sargon I was, particularly in light of his quest for Mesopotamian political and cultural unity, the "quintessential ruler and hero" in the Mesopotamian Great Tradition.

12 See Kuhne 1994:57.

centers during his reign as well. His control eventually extended west to the Balikh river area, east to Nuzi, and south to the area of Hit on the Euphrates. Nineveh, the last capital city of the Assyrian empire, may have come under control of the kings of Assur for the first time during his reign (Oates 1972:802). Another site which has been associated with Shamshi-Adad through archaeological and textual evidence is Karana (Tell al-Rimah, see Oates 1965, 1968, 1972, 1982 and Postgate et al., 1997). This city has been characterized as a prime example of the efforts of an Assyrian king to gain prestige and perhaps even legitimacy by engaging in the grandiose royal gesture of creating a new town (Oates 1972:803).¹³ Karana, on the western edge of the Assyrian heartland, had been occupied as far back as the fourth millennium, and by about 1800 B.C. there seems to have been a sizable village there. Shamshi-Adad transformed the existing village into an important religious center by constructing an elaborate monumental temple complex within an extensive protective wall. The significant shift in the character and extent of the site, as documented by the archaeological record, clearly reflects the efforts of imperial patronage which ended with the death of Shamshi-Adad. At that point Tell al-Rimah became the capital of a petty principality, and eventually regressed to a small rural town. A regional survey conducted in the area revealed that several similar small towns in the area were, like Tell al-Rimah, occupied until around 1200 B.C., when they were suddenly abandoned, some to be reoccupied in the ninth century B.C. (Oates 1965, 1968). After his death, Shamshi-Adad's empire soon crumbled. It is known that Mari was destroyed by Hammurabi in 1757 B.C., but a virtual "dark age" ensued after the death of Shamshi-Adad's son, Ishme-Dagan (1781-1741 B.C.), a period for which there is little textual evidence.

¹³ Shamshi-Adad's origins are debated, but by all accounts he was a usurper to the Assyrian throne (see D. Oates 1972a:803).

II.1.b. The Middle Assyrian Empire: The Beginnings of Iron Age Urbanization

Textual documentation resumes with the reign of Ashur-uballit (1365-1330 B.C.), at a point that marks a political renaissance within Assyria, and lasts through the reign of Tukulti-Ninurta I (1243-1207 B.C.). At the end of Tukulti-Ninurta's reign another period ensues for which there is little textual evidence and, except for the reign of Tiglath-Pileser I (1114-1076 B.C.), this largely obscure phase lasts until about 910 B.C. (Liverani 1988:84). It is commonly held that the re-emergence of the Middle Assyrian empire in the fourteenth century was largely in response to military threats by the Hittite and Mitannian states in the north, and by the Kassites in the south (Machinist 1982). The territorial state referred to for the first time during the Middle Assyrian period as 'the Land of Assur' (Postgate 1992:251) was largely composed of territories in Upper Mesopotamia previously occupied by the Mitanni. The Hittites referred to this area as 'the land of the Hurrians', but to the Assyrians it was known as Hanigalbat (Roaf 1990:132). By about 1500 B.C. the Hurrian client-state of Mitanni dominated Upper Mesopotamia from its center at the headwaters of the Khabur river, possibly controlling the Assyrian territory in northern Iraq for a time between about 1500 and 1350 B.C. (Kuhrt 1995: 295-296). This relatively short-lived empire or "federation" would eventually fall victim to pressures brought to bear by the Hittites, allowing the Assyrian king, Ashur-uballit (1365-1330 B.C.), to annex all the southeastern stretches of Mitannian territory, including the main cities of the region - Nineveh, Arbela, Kilizi and Kalhu - as well as the important rich agricultural areas surrounding them (Postgate 1992:247). The power of the Assyrian empire then rivaled that of Babylonia, Egypt and the Hittites. Adad-nirari I (1307-1275 B.C.) is credited with moving Assyria's Babylonian frontier southwards, perhaps to the Diyala region (Kuhrt 1995:353). Moreover, he succeeded in overcoming all Mitanni resistance on the east side of the Euphrates, bringing the border of the now formidable Assyrian empire within a stone's throw of the Hittite empire, which had gained control of the western Mitanni provinces. The 'Land of Assur' thus stretched from the Assyrian heartland west, to

encompass the Khabur river area, a large part of the Middle Euphrates region, and the Jazira up to the Euphrates.

Under the succeeding king, Shalmaneser I (1274-1245 B.C.), Assyrian control over Upper Mesopotamia was definitively established. As part of a program of administrative restructuring, Assyrian governors were installed to control a series of districts. Fortified complexes confirming this Assyrian presence in the Syrian Jazira have been uncovered at Tell Sabi Abyad in the upper Balikh valley (Akkermans et al. 1993), at Tell Sheikh Hamad (ancient Dur-Katlimmu, Kuhne 1994) on the lower Khabur, and at Tell Fakheriye on the upper Khabur (McEwan et al. 1958). It has been suggested that the program of administrative restructuring initiated by Shalmaneser I launched the urbanization of Upper Mesopotamia (see Kuhne 1994:56-58). Extensive building activities took place both within the Assyrian heartland and within the provinces throughout his reign, and at different times during the Middle Assyrian period.¹⁴ Knowledge of the pattern of settlement during the Middle Assyrian period has recently been increased by regional surveys, particularly some in the region of the Lower Khabur.¹⁵ In this area, Assyrian occupation is documented which has contributed to the supposition by Kuhne that the Assyrians maintained a territorial empire along the lower Khabur even through the so-called 'dark age' of ca. 1200 through 910 (Kuhne 1995:72 ff.). Most scholars have agreed that evidence to date attests to the fact that this was a period of weakness (except for the reign of Tiglath-Pileser I and perhaps Assur-bel-kala), during which Assyria lost control of much of its territory and was essentially reduced to its original core (for example, Postgate 1992:249, Liverani 1988:84, Kuhrt 1995:362). If Kuhne's interpretation is correct,

¹⁴ Kuhne (1994, pp.58-60) discusses many of the urban centers established during the Middle Assyrian period, as does Postgate (1995, especially fig.2).

¹⁵ Kuhne 1995, 1994; Bernbeck 1993; Ergenzinger 1988; Morandi 1996.

however, and Assur never totally lost control of the lower Khabur, then the traditional picture of a severely contracted Assyrian empire at this time will need to be revised.¹⁶

Although remarkably little may be known of actual conditions in the countryside during the Middle Assyrian period (Postgate 1974:234), it was clearly a period in which the countryside was becoming progressively urbanized. Upper Mesopotamia was not at this time "a land of many cities and its history was not as determined by urban interrelations as was the case in Babylonia" (Yoffee 1991:54). However, many of the Middle Assyrian kings embarked upon extensive building programs, which in some cases included the renovation of older sites such as Nineveh (see Chapter IV). Assyrian urbanization was also characterized by the creation of new royal cities and administrative centers throughout Upper Mesopotamia. Among the towns in the Assyrian heartland that were probably established, or at least inhabited during this period are Apqu (Tell Abu Maryam?), Talmassu, Arbela, Tarbisu and Insana, and in the provinces the sites of Shadikanni (Tell Agaga), Kahat (Tell Barri), Dur-Katlimmu (Tell Sheikh Hamad), Tell Chuera, Tell Sabi Abyad, Tell Brak (Taide?) and Tell al-Hawa were all settlements of varying degrees of size and significance (Kuhne 1994:57-58, Postgate 1974:237).

The town of Kalhu (Nimrud) is first encountered in Assyrian texts in the thirteenth century, and archaeological evidence has been found indicating that it was inhabited during the Middle Assyrian period and even earlier.¹⁷ Only limited areas of the Middle Assyrian occupation levels have been excavated, and there is no firm data on the extent of the settlement during this time (Donbaz and Frame 1983:3, Reade 1982:99). Excavation has produced some material from the eighteenth century B.C. (Postgate and Reade 1978:320 and Kuhrt 1995:362). The attribution of its actual foundation to Shalmaneser I remains

¹⁶ The results of this survey in the lower Khabur, as well as a number of other regional surveys in Upper Mesopotamia, will be discussed in greater detail in Chapter IV of this dissertation.

¹⁷ In addition to an assemblage of well-dated Middle Assyrian pottery (see Oates and Reid 1956:28-29), Mallowan excavated a Middle Assyrian structure containing faience ornaments and a seal impression (*Iraq* 12 [1950]:174-175; *Iraq* 17 [1955]:110).

questionable, and the epigraphic basis for this supposition is found primarily in the subsequent inscriptions of Assurnasirpal II (see chapter IV.1.c. Kalhu/Nimrud below). The building projects of this king are nevertheless numerous, varied, and relatively well documented (see Donbaz and Frame 1983; concerning Shalmaneser's building projects at Assur, see Grayson 1987, sec. A.0.77). Whatever its importance during the Middle Assyrian period may have been, the town of Kalhu was subsequently chosen by the Neo-Assyrian king Assurnasirpal II (883-859 B.C.) as the capital of the Neo-Assyrian empire for a time.

Although Kar-Tukulti-Ninurta, the royal city built by Tukulti-Ninurta I (1243-1207 B.C.), may have been short-lived, the attention and resources devoted to this royal project are evident in the extent of the remains and in associated inscriptions; excavation has shown that the city included palaces, temples and a canal. Commemorative texts uncovered at the site and at Assur indicate a new trend in royal ideology. As reflected in the city's name, the inscriptions reveal the personal involvement on the part of the king in the construction of this city (Eickhoff 1980:456-458). In addition to campaigning extensively in the mountains to the east of Assyria, Tukulti-Ninurta is known to have erected garrisons along the Euphrates to fortify the western border facing the Hittite empire (Liverani 1998:89, Kuhrt 1995:354). After this king's death in 1207 B.C., textual evidence provides little information regarding conditions in the empire, although there are periodic instances of kings establishing administrative centers at strategic locations.¹⁸ In general, however, the wide swath of time from then until about 910 B.C. is only patchily documented.

II.1.c. Settlement in the Countryside: Cultural Components of 'The Land of Assur'

By examining the cultural components of Upper Mesopotamia subsumed within the Assyrian empire, we may obtain some idea of the traditions existing in the territories which

¹⁸ For example, Assur-resh-ishi (1132-1115 B.C.) established a new royal city at Apqu (Tell Abu Maryam?) northwest of Mosul (see D. Oates 1968b:54).

came under Assyrian control, vis-a-vis patterns of settlement and urbanism, thereby perhaps increasing our understanding of the influences operating on the Assyrians and their system of settlement. With reference to cultural as opposed to political affiliations, the landmass of the Assyrian empire was from the beginning characterized to a great extent by the co-existence of both indigenous and imposed patterns of settlement and urban organization. The territory gained by the Assyrian kings in Upper Mesopotamia beginning in the fourteenth and thirteenth centuries had been held by the Mitanni, so the population at that time may therefore be considered to have been predominantly Hurrian-speaking, although a large body of epigraphic material from the second millennium attests to the presence within Upper Mesopotamia of a variety of languages and linguistic groups in the second half of the second millennium B.C., notably Aramaean in southern Syria and Luwian in northern Syria (Hawkins 1974:67-68).¹⁹ As mentioned above, the formal border with the Hittite empire was fixed by garrisons on the east side of the Euphrates, and in the Middle Assyrian period it was only crossed once; at about 1100 B.C. Tiglath-Pileser I pushed west to the Mediterranean (Hawkins 1974:67). Within the boundaries of Assyria, however, it is possible that as Postgate has asserted, 'political unity promoted cultural conformity' (Postgate 1992:256-257, 261). Politically, according to Postgate, pockets of autonomy probably persisted, in areas such as the lower Khabur (see the work by Kuhne and others, mentioned above), and it seems safe to assume that even if these local polities were eventually integrated into the provincial administrative system, the presence of Assyria did not pre-empt the continuation of local traditions. There is considerable evidence, in fact, for the interaction and mutual influence in artistic and architectural traditions between Assyria and Syro-Anatolia (Winter 1982, Bunnens 1995, Postgate 1992). Liverani has described the Middle Assyrian empire in Upper Mesopotamia as "an afflux of Assyrian settlers,...an effort of agricultural colonization,...a network of

¹⁹ The Luwian language employs a script known as Hittite hieroglyphs, but is separate from Hittite (Hawkins 1974:68). Both Mazzone (1994, 1995) and Hawkins (1974) question whether Luwian-speaking peoples may accurately be described as "Luwians."

communications and transportations of goods (trade and tribute), [and]...a setting up of strongpoints both on the borders and in the interior" (Liverani 1988:90). According to this viewpoint, the region of Upper Mesopotamia during the later part of the second millennium was arranged into what might be more accurately described as a "network of palaces and Assyrian cities embedded in a native (Hurrian) world" (ibid).²⁰ While the degree of political control and the nature of the influence wielded by Assyria throughout its territories in the later second millennium may yet be debated, it is clear that with the changes in political geography enacted by the Middle Assyrian kings, the ethnic composition of the territories under Assyrian control led to the creation of a new cultural landscape.

As the boundaries of the emerging Assyrian empire expanded to incorporate indigenous populations, a social reorganization of the empire was undertaken. One component of the administrative restructuring of Shalmaneser I, for example, was the relocation of people from conquered territories into new lands in order to develop the agriculture and bolster the state's economy, an activity which would become an increasingly important factor in imperial expansionist policies during the Late Assyrian period (see Oded 1979: 67-74). In some cases, however, the texts allow for the identification of certain cities as explicitly Assyrian settlements. Citing the Middle Assyrian texts from Tell 'Amuda (on the Khabur), Liverani states that the "13th century Assyrian sites in the Khabur seem to be thoroughly Assyrianized," as the texts seem to indicate, at least at this particular city, "a population wholly Assyrian, without a native presence" (Liverani 1988:88 and see Machinist 1982:1-36). The Assyrian empire, therefore, was composed of a wide spectrum of cultural entities. The Assyrian imposed settlements, that

²⁰ **The discussion of the distinction between a 'network' empire as opposed to a 'territorial empire', which has now permeated the literature concerning the political organization of the Assyrians, was a distinction originally made by Liverani (1988). Postgate takes exception to the term 'network' to describe the nature of the empire, and has argued that the Assyrians strove to create a "homogenous territorial entity" (better represented by the metaphor of an 'oil-stain' rather than a 'net') starting at about 1300 B.C., but that after 745 B.C. as Assyria extended its policy of expansionism into Babylonia, Egypt and Elam, the notion of political and cultural homogeneity no longer applied (Postgate 1992:255-256).**

is, the newly established towns in the countryside, might be predominantly Assyrian or an artificial composition of transferred people, or presumably in some cases a combination of Assyrian colonists and deportees.

It is important to consider the substantial non-sedentary element of the population of the new Assyrian territories, which would become an increasingly troublesome issue for the Assyrians in the 12th century and even into the tenth century. It has been suggested that the collapse of the Mitanni empire and the destruction of its cities by advancing Assyrians may be related to a marked increase in semi-nomadism and pastoralism in the Jazira, the area in which the Aramaeans would emerge, as recorded in eleventh century royal annals (Sader 1992:158-159).²¹ There are different scenarios concerning the origins of the Aramaeans (cf. Schwartz 1989) and whether they were present in the area since the fall of the Mitanni is still debated. It is clear, however, that clashes with semi-nomadic populations seem to have been a source of irritation for the Assyrians and at times perhaps impeded settlement. Kuhne has made the point that nomadic peoples are not politically reliable, and any attempt to establish stability and security in an area such as the Jazira, where nomadism may have been the prevailing way of life, would necessitate the sedentarization of the area (Kuhne 1994:65). Reports of conflict with hostile pastoralists can be found in Assyrian documents as early as the time of Arik-den-ili (1317-1306 B.C.) (Kuhrt 1995: 353). While most of the Assyrian territories were overrun by Aramaean tribes from the middle of the eleventh century through the tenth century, Assyria was also invaded by groups of non-Semitic peoples who periodically swept down from the mountains (Postgate 1974: 234). Periods of weakness in the central government may have left large areas of 'the Land of Assur' without Assyrian authority for stretches of time, for

21 This increase in semi-nomadism is not reflected in the most recent archaeological research in the region of study, which on the whole gives every indication that there was a dramatic increase in sedentarism in the Early Iron Age. See also McClellan 1992, although it should be noted that McClellan's study does not take into account the most recent regional survey in the the Balikh (Wilkinson 1998), or the recently-completed survey of the Khabur, that is discussed in Chapter III of this paper.

instance after the death of Tukulti-Ninurta until the reign of Tiglath-Pileser I, or roughly the years 1207 until 1114 B.C. Co-existence with non-sedentary populations, especially the Aramaeans, would have been a fact of life for the Assyrian kings well into the tenth century B.C.

After the disintegration of the Hittite empire, around 1200 B.C., the political and cultural composition of Upper Mesopotamia was radically altered. At about this time, Assyrian documentation becomes sparse following the death of Tukulti-Ninurta I. Within the region formerly held by the Hittite empire there emerged a number of city-states and small kingdoms that were not politically united. Some of the former Hittite administrative centers survived the downfall of the empire, to be refounded or at least renamed. The principalities developing at these centers after 1200 B.C. are alternatively referred to as Neo-Hittite, Late Hittite or, specifically in north Syria, Syro-Hittite. By the early first millennium B.C., the cultural composition in the area under study was altered yet again, as reflected in the texts. Hittites and Hurrians virtually disappeared from the written records except for the rare appearance of certain Hurrian names, to be superseded by those of Luwians and Aramaeans in inner Syria and south-central Anatolia (and of Phoenicians largely along the Mediterranean coast) (Hawkins 1974:68). Along with the Aramaean kingdoms, which would emerge during the tenth century B.C. and which would eventually come into prominence, these Neo-Hittite political entities came to represent the primary opposition to Assyrian hegemony in Upper Mesopotamia.

It is not possible at this point to associate Neo-Hittite (or Luwian) and Aramaean populations with specific geographic areas of control or settlement patterns, but occupation by these groups at certain sites can be postulated through the presence of certain cultural indicators such as inscriptions (containing dynastic names), architectural traditions and/or urban elements found at those sites. Hawkins' studies have produced the largest body of

information concerning the names and locations of the Neo-Hittite states,²² and excavations at many sites within these regions have further identified capital cities. Luwian sites are identifiable in particular since, having once been part of the earlier Hittite empire, they retained a number of characteristically Hittite features (see Mazzoni 1994:329 and Kuhrt 1995:410). The Assyrians eventually established provincial capitals at most of the known Neo-Hittite cities, many of which had been capitals of an existing principality. Those in the region of Upper Mesopotamia closest to the area of study include Carchemish, the capital city of the Hittite empire and of the Neo-Hittite state of the same name; Kunalua (Tell Tayinat), the capital of the state of Unqi/Pattin(a), now in the Amuq region of Turkey; Masuwari (Til Barsib/Tell Ahmar, Neo-Assyrian Kar Shalmaneser), in Bit-Adini in northern Syria; Sam'al (modern Zincirli), on the eastern flank of the Amanus mountains in Turkey; Marqas (modern Maras), the capital of Gurgum, northwest of Sam'al; Samsat, the capital of Kummuh, northwest of Gurgum; Melid (Arslan Tepe, modern Malatya), the capital of the Melid state north of Kummuh; and Hamath (modern Hama), the capital of the similarly-named state on the Orontes river in Syria.²³ Most of these sites have been excavated,²⁴ some of which document a trend in urban growth reflecting a general process of urbanization. Tell Tayinat, for instance, was a city founded upon an earlier village, inhabited continuously up to the Iron Age, when it underwent a change in function and rank prior to the arrival of the Assyrians (Mazzoni 1994:323). At some sites, such as Zincirli, it is possible to identify the presence of Aramaeans. In virtually every case the Late Assyrian occupation at these sites is characterized by a phase of growth as they were

22 This information is summarized in Hawkins' "The Neo-Hittite States in Syria and Anatolia", in *Cambridge Ancient History* (2) III/1 (1982):372-441.

23 This list is composed from the studies of Hawkins (1982, 1995). Of the sites just mentioned, Hawkins has identified two as probably having had a mixed population (that is, both Luwian and Aramaean), Sam'al and Hamath. Certain states could be identified as largely Neo-Hittite: Carchemish, Gurgum, Kummuh and Unqi.

24 Carchemish: Hogarth, Woolley and Barnett (1914-1952); Tell Tayinat: Haines (1971); Tell Ahmar: Bunnens (1989-98); Zincirli: Orthmann (1971); Arslan Tepe: Delaporte (1940), Orthmann (1971); Hamath: Riis and Buhl (1990). The site of Marqas has not been excavated; Samsat was recently investigated by a Turkish team.

transformed into provincial capitals of the empire. An important point to consider is that all of the major centers of the Neo-Hittite states lay along major routes, controlling important river crossings, mountain passes or, along the coast, seaports (Kuhrt 1995:416). In addition to Carchemish, which appears to have been continuously occupied through the 'dark age' of ca. 1200 to 900 B.C., there are indications that a considerable number of cities and settlements in Upper Mesopotamia survived from Middle Assyrian times into the Late Assyrian period, as will become evident in Chapter III, which deals with the recent regional surveys and the most current data on settlement patterns.

In the annals of Tiglath-Pileser I the many references to the necessity of contending with seemingly constant incursions of the Aramaeans depict them "as marauding bands roving the countryside" (Kuhrt 1995:385). These eleventh-century inscriptions represent the first secure references to the Aramaeans in Assyrian texts (Grayson 1991, sec. A.0.87). The arrival of the Aramaeans as a force in Upper Mesopotamia seems to have resulted in widespread upheaval, with profound political, social and economic ramifications throughout Upper Mesopotamia. Ashur-bel-kala claims to have fought them at the headwaters of the Khabur, on the upper Balikh, and along the Euphrates (Kuhrt 1995: 396), and these references geographically define *Kur Aram*, the homeland of the Aramaeans. The texts indicate that these people made incursions into the Assyrian Tigris-Upper Zab triangle, destroying harvests, disrupting communications and causing village populations to escape to the mountains; even Tiglath-Pileser reportedly moved to the mountains north of Mosul as the Aramaeans advanced upon Nineveh (Tadmor 1958:133-134). They are characterized in the inscriptions as being "extremely mobile...without king or chief, kingdom or fortified cities" (Sader 1992:159). During the course of the tenth century, however, textual references suggest that all the later Aramaean kingdoms began to emerge as major political powers (ibid.), but their initial rise to prominence does not seem to have been characterized by a strategy of conquering pre-existing cities. The Assyrian texts mention only four cities that are described as having been captured by the Aramaeans,

and these were taken during the tenth century, after the Aramaeans had become a well-established presence in the area for at least one hundred years (Sader 1992: 159). After 1200 B.C. the Luwians and Aramaeans gradually became sedentary, as is evident from the earliest documents that attest to the activity of foundation or re-foundation of various regional capitals and fortresses. The earliest example of a foundation proclamation is the Karahoyuk (Elbistan) stele, which has been dated to the twelfth century B.C. This Luwian inscription celebrates the restoration of houses and cities in the area of Elbistan following a period of abandonment (Hawkins 1993:273-277).

Despite the references in the texts to an Aramaean penetration into the Assyrian heartland, it is generally agreed that the area was probably never fully wrested from Assyrian control. There is, moreover, increasing evidence from archaeological contexts that many urban centers and smaller settlements within the thirteenth century boundaries of Assyria were continuously occupied through the Late Assyrian period. The results of regional surveys seem to support the existence of continuous occupations from the Late Bronze Age through the Iron Age, particularly in outlying areas of the Assyrian territories; specifically, the Khabur, the Balikh, and the Jazira (within Iraq and Syria).²⁵ Liverani has asserted that evidence concerning the Middle Euphrates suggests that in this region in particular, the Aramaic "invasions" never fully jeopardized Assyrian sovereignty; sites which were Assyrian remained as such and the spread of Aramaic settlement is seen as overlying and complementing Assyrian colonization (Liverani 1988: 91). The scarcity of written documentation surrounding the rise of the Aramaean kingdoms makes it difficult to

²⁵ The results from relevant regional surveys in the lower Khabur have been published by Ergenzinger (1991), Ergenzinger et. al. (1988), Ergenzinger and Kuhne (1991), Morandi (1996), and Bernbeck (1993 - the Wadi Agig); surveys in the Balikh river valley have been undertaken by Akkermans (1984), and Curvers (1991) but the Late Bronze and Iron Age material for this area has yet to be studied in detail; for the Iraqi Jazira, see Ibrahim (1986), Wilkinson (1990), Wilkinson and Tucker (1995); for the Middle Euphrates, see Abdul-Amir (1988). Other surveys in northern Syria and Iraq are summarized in Wilkinson (forthcoming article in *Journal of Archaeological Research*), which is virtually the only overview of archaeological survey in Mesopotamia. Six of these regional surveys form the basis for the discussion in Chapter III of this study.

speculate about the details of their ascent to power. Although the Aramaeans may have been sedentary to some degree before the tenth century (Schwartz 1989:284), the first epigraphic and archaeological evidence of Aramaean settlement is from the tenth century (Mazzoni 1994). By the middle of the ninth century, Aramaean kingdoms were progressively incorporated into Assyria's western provinces and the Aramaeans became a significant component in the population of the empire, not only in terms of their sheer numbers, but also in terms of the high positions that they sometimes occupied (Kuhrt 1995: 398; see also Garelli 1982 and Tadmor 1982).

II.1.d. Neo-Hittite and Aramaean Urbanization

The role of the Aramaeans and Luwians in the urbanization of the countryside during the Iron Age has been explored in some depth by Mazzoni (1994 and 1995), and her investigations effectively complement the larger (though still somewhat limited) body of information which exists on urbanization during the Late Assyrian period. Most importantly, however, her work illuminates the existing urbanization processes which occurred in the territories reconquered by the Neo-Assyrian kings in the region of Upper Mesopotamia. Her analysis emphasizes that by the time of intensive Assyrian involvement in north Syria (as indicated in the ninth-century annals of Ashurnasirpal II), a regional process of urbanization was already well under way, and the evidence cited indicates that this urbanization was a process that had even gone on throughout the so-called 'dark ages' of Mesopotamian history. Basing her discussion on Luwian and Aramaean textual evidence and the results of numerous archaeological excavations and regional surveys throughout Upper Mesopotamia, Mazzoni concludes that far from being a disruptive force in the region, the Aramaean and Luwian settlement was part of an "ongoing continuity in settlement occupation and even an increase in stability in the local Iron Age IA-C period, from the twelfth down to the ninth century" (Mazzoni 1994a: 183).

Mazzoni considers the new Iron Age urbanization to be divisible into two phases. The first phase lasted from the twelfth century until the mid-ninth century B.C. (Iron I), a period for which archaeological documentation is admittedly scarce, but a good deal of information can be drawn from Luwian and Aramaean foundation proclamations, other inscriptions, and celebrative sculptural decoration from certain cities. It was during this stage that the Luwian and Aramaean kingdoms flourished, both of which were characterized by the reorganization of older urban centers and the foundation of new ones. The second stage, from the mid-ninth into the seventh century B.C. (Iron II-III in this context) was one in which the processes of Aramaean urbanization were markedly accelerated, documented again by foundation proclamations, and by the archaeological evidence of the expansion of the main capital cities and the proliferation of settlements of a more limited size. During Assyria's rule over the region in the seventh century the local kingdoms lost their autonomy. While the main sites continued to be occupied, there was a significant decline in the processes of this local urbanization, with no new foundations or replanning documented. Mazzoni identifies separate Luwian and Aramaean components as part of the same urbanization process, characterizing the Luwian component (in line with its inheritance of local Syrian and Hittite traditions) as more strongly centralized than was the case with Aramaean settlement. For our purposes, we will consider both under the rubric of North Syrian urbanism, which has many striking parallels with Assyrian urbanism both in terms of its settlement patterns and urban planning traditions.

By far the most outstanding feature of Luwian and Aramaean urbanization was the foundation of new settlements. New foundations were a part of the larger trend in urbanization that included the proliferation and the functional specialization of settlements throughout the period. The practice of proclaiming the foundation of royal cities, regional capitals and defensive citadels is well-documented in Luwian texts dating back to at least the tenth century or a bit earlier, and the Aramaean usage of this theme probably follows the

Luwian celebrative models.²⁶ This propagandistic practice was established in Hittite inscriptions and later emulated by the Aramaeans in both function and style (Hawkins 1982:379). Texts from the tenth to eighth centuries B.C. document the functional specialization of settlements. The local settlement system can be articulated through a combination of epigraphic data and archaeological evidence, which in many cases can be correlated. Mazzoni has grouped the archaeologically-documented new foundations into four categories, which are summarized in her 1994 study. These four categories are as follows: new foundations paralleled by a proclamation of foundation or construction; new foundations documented only by archaeological evidence; refounded pre-existing urban centers (in other words, older sites which seem to show a cultural transition for which there is not yet associated epigraphic data); and, earlier villages which have been refounded and transformed into cities (in other words, smaller sites which show an increase in size and perhaps character). According to Mazzoni, by the beginning of the ninth century B.C., the overall planning of most of the known local cities had been achieved, though numerous small towns and fortresses were constructed into the eighth century (Mazzoni 1994). It is of course possible that the increase in the number of fortresses constitutes a direct reflection of the military assertions of the Assyrians during the second major period of expansion.

The fullest description of the local settlement system in Assyrian sources is to be found in the annals of Ashurnasirpal II (see Liverani 1992:125; Ikeda 1979:75-87). Three classes of urban centers are identified in the annals, and these site types are well-attested in the archaeological record of Upper Mesopotamia. They include "royal cities" (*al sarruti*), "fortified towns" (*alani dannuti*), and "towns in the neighborhood" (*alani sa limeti*) (Liverani 1992:125). These three terms would seem to indicate a local settlement hierarchy of at least three levels, but during the period of Assyrian provincial administration, the settlement hierarchy must actually have consisted of five levels; the Assyrian capital and the Assyrian royal city constituting the fourth and fifth levels of the new regional system.

²⁶ See Mazzoni 1994:321.

Distinguishing "royal cities" from among other fortified cities is a phenomenon attested in Assyrian sources for the first time under Assurnasirpal II (883-859 B.C.), and references to the former occur most frequently in the inscriptions of Shalmaneser III (858-824 B.C.) (Ikeda 1979 p.77 and see Table II). In general, the Assyrians ascribed only one royal city to each local ruler (Ikeda 1979:79). The nature of the adaptation of these existing entities within the new Assyrian administration has been explored by Liverani (1992:131-132). At the same time, the most useful modern tool in developing a picture of local settlement hierarchies and patterns is regional survey, and several projects with a bearing on this topic will be discussed in Chapter III of this paper.

II.1.e. Neo-Assyrian Urbanization

A second Assyrian revival began under Ashur-dan II (934-912 B.C.), as Assyria embarked upon a campaign to reclaim its territories in Upper Mesopotamia. From about this time until about 745 B.C., texts show that the main preoccupation of the Assyrian kings seems to have been overcoming the Aramaean states. From the beginning of the Assyrian re-emergence, therefore, these states were a significant component in the Assyrian empire. While contending with the Aramaean tribes in the territories to the west of Assyria, the Assyrian kings from the twelfth through the early tenth centuries had the additional problem of subjugating and controlling mountain tribes north of the Tigris valley. Despite the lack of substantial textual evidence from the tenth century Assyrian kings until the time of Adad-nirari II (911-891 B.C.), it seems clear that even as the local Aramaean dynasties were emerging and becoming increasingly powerful, Assyria's control over much of Upper Mesopotamia was growing stronger and moving gradually westward as well as eastward. The newly-established local dynasties existed in a relationship with the Assyrians that remains somewhat ambiguous, due to a lack of textual information from this period. Starting with the royal annals of Tiglath-Pileser I, the annals from the time of Ashur-dan II onwards consistently contain references to the regaining of Assyria's previous territories,

which at this time involved the resettling of "exhausted Assyrians" who had presumably abandoned their villages seeking refuge from the previous unrest and famine caused by the Aramaeans (Weidner 1926:151-161 and see Ikeda 1979: 75; Postgate 1974:237). As one Aramaean state after another fell to Assyrian arms through repeated military efforts, an increasing number of Aramaeans came to be transferred to the core regions of the empire.²⁷ Liverani contends that by the ninth century Assyria's campaigns, which were conducted within the boundaries of the empire, the goal was not so much conquest as the strengthening of internal control. It was during the eighth century that the processes of Assyrian urbanization became firmly implemented. In the eighth and seventh centuries, the expansion and consolidation of the empire was accomplished by conquests both inside and outside the borders of Assyria. Generally, local kingdoms were overcome through occasional raids, then subjugation to tributary status, and they were ultimately annexed as provinces (Liverani 1988:91-92).

Until recently it was widely held that Assyria's system of provincial government underwent major reform under Tiglath-Pileser III (745-727 B.C.) (Forrer 1920). New interpretations of the available sources now suggest, however, that this reform probably occurred earlier than previously suspected, during the time of Adad-nirari III (810-783 B.C.) (Postgate 1995). Relevant texts show a sudden increase in the number of provinces at this time, which Postgate ascribes to the breaking up of the ninth-century provinces into smaller units.²⁸ This administrative restructuring, according to Postgate, may have had a profound affect on the region's traditional urban centers, as the economic activity of each province was redirected away from those prior centers that did not become Assyrian provincial capitals. Archaeological evidence seems to corroborate Postgate's hypothesis.

²⁷ Oded 1979:71. Concerning the resettlement of Resappa see D.Oates 1968:130; Postgate 1974:238-239; Page 1968:147; Dalley 1984:193.

²⁸ Postgate's 1979 discussion of the Late Assyrian provincial reorganization placed it within the reign of Tiglath-Pileser, but in 1995 he suggested the earlier date. I am assuming that Postgate would agree that the basic characteristics of the reorganization still apply, despite the fact that they may have occurred some sixty years earlier.

Several regional surveys have produced data indicating that the Late Bronze Age urban centers that did survive into the Iron Age had significantly declined in size by the Neo-Assyrian period. This decline stands in opposition to the most distinctive trend in Neo-Assyrian urbanization, which was the rise of the truly massive capital city. As successive kings established royal capitals at Kalhu, Dur-Sharrukin and finally Nineveh, they concurrently established a network of numerous towns, villages and hamlets to exploit the agricultural resources of their territories and supply the various capital cities (see Wilkinson 1995:157-158). Although it may be difficult to show from archaeological evidence that the dispersed, rural settlement pattern of the Neo-Assyrian empire was the result of a deliberate *policy* of colonization, such a policy may be detectable in the record.

At the same time, this latter claim is by no means secure. The textual record is highly selective in that it only provides information for those periods where written sources are available. The texts can be highly selective in other ways as well. In campaign accounts, for example, which are otherwise extremely helpful in identifying Assyrian toponyms, local settlements are customarily mentioned when they are destroyed, and Assyrian settlements are normally only mentioned when they are either newly-founded or renovated -- a circumstance which leaves a large part of Assyrian settlement system without mention at all. However, scattered snippets of information gleaned from texts, examined in conjunction with data from archaeological excavations and surveys, may shed at least some light on the Neo-Assyrian settlement policies.

The references made by Ashur-dan and his successors concerning the resettling of Assyrians reflect, in the words of Postgate, "a deliberate policy of first winning back and defending deserted lands from their Aramaean invaders, and then cultivating them so as to permit the growth of population and improve agricultural prosperity" (Postgate 1974: 237). These same inscriptions also document the apparently deserted condition of large areas of the landscape in the first stages of the Neo-Assyrian revival, in as much as a resettlement program would clearly require large areas of open land. It is reasonable to assume that

parts of Assyria's former western territories stood abandoned at the beginning of the first millennium B.C. in the wake of Aramaean aggression. Probably the most comprehensive evidence, both archaeological and textual, for the processes of abandonment and resettlement in the early first millennium B.C. comes from the region of the Jazira.

From the time of Ashur-dan II (934-912 B.C.) onwards, various texts point to active resettlement in the Jazira, including the riverine regions of the Balikh and the Khabur (Oded 1979:71). From these sources one might be tempted to infer that certain areas of these localities had been abandoned by the Assyrians by the late tenth century B.C. Thus Adad-nirari II (911-891 B.C.) recounts traversing the region from Nasibina to Guzana and on to the lower Khabur, but he includes no reference to plundering or receiving tribute *en route*. Similarly, Tukulti-Ninurta II (890-884 B.C.) and Ashurnasirpal II (883-859 B.C.) both relate marches through the district of the Khabur without mention of small towns or villages (Postgate 1974: 237 and Liverani 1988:86-87).²⁹ Little is known of the annexation of the area of the Syrian Jazira by the Assyrians, but from the campaign accounts of Shalmaneser III (858-824 B.C.), it is generally assumed that the regions of the Balikh and the Khabur were regained around the time of his conquest of the Aramaean city-state of Bit Adini in 856 B.C. (Kuhne 1994: 59; Postgate 1974: 239), at which time occupation of these areas may have been increased with an influx of resettlement. It was Sargon II (721-705 B.C.) who transformed the southern Anatolian and north Syrian city-states into Assyrian provinces in the late eighth century (Kuhne 1994: 59).

The documentation of the resettlement of deserted areas of the countryside by the Neo-Assyrian kings may be contained in another source from about 800 B.C. The stele of Adad-nirari III, found at Tell al-Rimah, describes the foundation or refoundation of ten towns and over three hundred villages in the province of Resappa by Adad-nirari's

²⁹ Liverani, however, notes that the "fixed tribute" was normally collected through channels other than those recounted in these campaigns, and is therefore not to be looked for in the celebrative inscriptions (1988:87).

governor, Nergal-eresh.³⁰ It is assumed that at the time of this inscription, Resappa was composed of the region between the Middle Tigris and the Lower Khabur, or the area from Apqu (just north of Mosul) west to the Khabur and south to the Euphrates (Postgate 1974: 238). While this inscription does not necessarily attest to a specific program of urbanization, it is a clear indication of the intentional resettlement of deserted but agriculturally viable lands. In this case, the population transferred to these lands are specifically referred to as "subject peoples" (Dalley 1984:199). The possibility of extensive resettlement is supported by archaeological surveys in the region and by excavation at the site of Tell al-Rimah (Karana), which was known as Zamahu in the Neo-Assyrian period. Work at this site has revealed Late Assyrian levels following a long period of desertion (Oates 1965). Within this part of the Jazira, in the plain surrounding Tell 'Afar, a regional survey conducted by Wilkinson and Tucker (1995) has produced data which strongly suggests a massive increase in settlement in the Late Assyrian period, which the investigators believe may also be the result of the resettlement program of the Neo-Assyrian kings, perhaps in connection with the program enacted by Nergal-eresh.

The potential for many small sites functioning as the foci for agricultural production in this and other regions cannot be overlooked (see Chapter III). As Liverani has stated, "One must keep in mind...that the network of Neo-Assyrian sites was, apart from being a network of communication and transport, a system of agricultural colonization and settlement" (Liverani 1988: 88). The contention that many of the settlement patterns detected in the landscape through survey are the result of an agricultural program is perhaps supported by the fact that many are small in size, as in the 'Afar plain survey where the average site size was in the range of only one to two hectares, suggestive of farmsteads, small villages or manor houses (Wilkinson and Tucker 1995:145). Most of these sites

³⁰ Nergal-eresh, also known as Palil-eresh, was the governor for at least thirty years, holding the office of eponym in 803 and 775 B.C. (Dalley 1984:193 and notes 28 and 29).

were apparently unfortified, as is the case with sites found in the Tell al-Rimah area survey (Oates 1968:130), as well.

With respect to the settlement pattern of the the Late Assyrian period, it is important to remember that the many Iron Age sites which have been discovered in regional surveys, such as those around Tell al-Rimah and in the adjacent 'Afar plain, may very well be attributable to spontaneous Aramaean settlement. If there is no firm archaeological or epigraphic data ascribing a site to the either the Aramaeans or the Neo-Assyrian empire, its cultural identity cannot be fixed with any certainty. The presence of a Late Assyrian ceramic assemblage at a site may assist in determining when the site became incorporated within the cultural sphere of the Assyrian empire. As advances are made towards a well-defined Iron Age ceramic sequence for Upper Mesopotamia, and the characteristics of Iron Age urban settlements become better identified and understood, many of the sites which have thus far floated within a general "Iron Age" time-frame will come to be more firmly placed within a cultural and historical context.

III. Early First Millennium B.C. Settlement Patterns: Case Studies from Regional Surveys

III.1. The Middle Euphrates and the Khabur River Valley

III.1.a. The Middle Euphrates

In 1976, the Directorate General of Antiquities in Iraq initiated an intensive archaeological salvage project within the area of the proposed Al-Qadisiya (or Haditha) Dam project in Iraq. During the preceding year, a preliminary survey was undertaken by S.J. Abdul-Amir, and for the next ten years the archaeological record of an area along the Middle Euphrates river, roughly 100 by 60 km., was documented through both survey and excavation (Abdul-Amir 1988). The cumulative results of this project represent one of the most important records of early first millennium B.C. occupation in Mesopotamia, particularly as the study area includes the ancient land of Suhu, a land having been distinguished by both a long history and an important kingdom, at the critical geographical junction of Assyrian and Babylonian authority (see Liverani 1992:67, note 310 for a summary list of the literature concerning the region of Suhu). The Haditha Dam project is especially worthy of note for the sheer magnitude of Iron Age settlement that was identified and described during the course of the project (survey area 3, see fig. 1). The dramatic change in the type of sites that emerged in the early first millennium in this area, and the sudden increase in their number relative to the preceding centuries, would seem to indicate a transition in the political dynamic of the region during a period in which the Assyrians became an increasingly dominant presence. Almost half of the total number of sites recorded in the survey (forty out of eighty-two) showed some degree of occupation during the early first millennium B.C. (see Appendix A and Abdul-Amir 1988, figs.10, p. 127; fig. 11, p.129; fig. 12, p.130). A large number of these appear to have been founded during this time, and many produced cultural evidence that has been incontestably linked with the Assyrians.

In his 1988 dissertation, in which he synthesized the results of the ten-year project (including many reports which were never published), Abdul-Amir identified four possible site types comprising the early first millennium settlement system in the study area. These include: four "urban settlements", eleven "fortifications", twenty-eight "temporary camps", and various forms of "cemeteries". The validity of this classification scheme may be in some respects debatable, as Abdul-Amir's interpretation of the archaeological record in this region is centered squarely on the premise that the early first millennium B.C. settlement pattern here is a direct result of the impact of Assyrian military intervention as part of the defense of this western portion of the empire. He therefore tends to perceive the function of most sites in the area of study as military. It is nevertheless crucial to incorporate Abdul-Amir's conclusions within this study because the dense and diverse settlement system he describes, supported by the findings of the Haditha Dam project, is a significant body of data on Iron Age settlement. The scale of occupation, and especially the local range of site types which may be associated with the Neo-Assyrian empire, have not been documented to the same degree by any other survey in Mesopotamia.

The Haditha Dam project was actually conducted in four phases. Beginning in 1975, twenty-nine sites were recorded, and then from 1978 to 1980 the number of known sites increased to forty-four. Between 1980 and 1985 several foreign expeditions collaborated with the Iraqis in a final phase of survey, bringing the total number of sites to eighty-two. Additionally, a number of sites were excavated during this time. For the purposes of this discussion, an examination will be made of the different types of sites identified, the specific features which contributed to their functional interpretation, and the geographical location of the sites relative to each other within the local settlement pattern. The classes of sites labeled "fortifications" and "temporary camps" are particularly worth looking at in some detail, as these are site types which are on the whole under-represented in the survey record for the Iron Age in Mesopotamia. It is often difficult to identify temporary camps as such with any confidence due to the nature of the evidence.

Concerning fortifications, there are numerous references to forts in Assyrian documents, particularly in correspondence, but the physical appearance, construction, and administration of these entities remain obscure (Parker 1997b:77-79).³¹ The eleven forts described in the Haditha Dam survey are therefore of extreme interest for the purposes of this study. Concerning urban settlements in this area, it should be noted that the Middle Euphrates region has natural limitations which constrict the development of large-scale sites and populations, with the result that, "cities in the sense of a sizable population located in single, conglomerate settlements, are impossible in the Middle Euphrates" (Abdul-Amir 1988:112). As a case in point, Adams' survey of southern Mesopotamia described the site category of "urban settlement" as being between 40.1 to 100 hectares in size (Adams 1981). The same size category in the Middle Euphrates region would include only one site of over 40 hectares; all other sites identified in the survey were less than 40 hectares. Nevertheless, "urban settlements" *did* exist in the Middle Euphrates, but they were of smaller scale than their contemporaneous parallels in southern Mesopotamia. Of the four sites identified by Abdul-Amir as being early first millennium "urban settlements", one is of indeterminate size, one is 17.86 hectares, and two are smaller even than the 10 hectares which Adams used as the minimum for the classification of "village". This comparison of classificatory terms is intended to emphasize that the settlement systems documented by the Haditha Dam survey, and indeed all such settlement systems identified in regional surveys, must be considered in light of the particular historical and geographical circumstances within which they emerged.

In addition to being located at the ancient political intersection of Assyria and Babylonia, the area of the Middle Euphrates straddles two of the four topographic districts which comprise the Iraqi Desert Plateau Region, which in Arabic is referred to as the *Hamada* (Abdul-Amir 1988:9; Buday 1980:345-347; Guest 1966:142). Although it is

³¹ Parker's investigation of the construction and maintenance of forts on the Assyrian frontier, based largely upon the information contained in Nimrud Letter 67, is perhaps the only analysis of the potential physical and administrative aspects of Assyrian forts to date.

composed of two districts, the Lower Jazira and the Western Desert District, the area of study, and similarly the entire Desert Plateau Region, can be characterized as gently undulating, relatively uninterrupted desert plains. The Euphrates river has traditionally been the focus of settlement, specifically the arable land along its banks, and in fact all of the sites of the historical periods located in the survey were to be found either within this restricted area or in very close range. It has been suggested that until the Old Babylonian period, the settlements along this part of the river were mainly trade stations (Abdul-Amir 1988:327), and it must be acknowledged that the significance of the Euphrates as a conduit for commercial and other types of traffic cannot be overlooked in explaining the establishment of settlement patterns.

The settlement pattern in the Haditha Dam project area during the early first millennium B.C was in certain ways a continuation of the pattern set down during the second millennium B.C., but it was during the later period that the nature of settlement along the river was dramatically altered. The preponderance of settlement throughout the historical periods occurred on the east side of the Euphrates, that is, the Jazira side. In addition to the sites distributed along both sides of the river, there were occupations on three islands, Telbis (Site 10A), 'Ana (Site 22) and Bijan (Site 26). Throughout the second millennium B.C., sites generally concentrated in a limited section of the river valley, between the site of 'Ana and the oxbow to the east. This pattern characterized the early first millennium as well, during which time there were fortified urban settlements on the three islands, while nine sites were located on the west side of the Euphrates and twenty-eight on the Jazira side.

According to the findings of the Haditha Dam project, the early first millennium B.C. marked the largest occupation in the history of the Middle Euphrates region (Abdul-Amir 1988:114, 131). Along with a general increase in the number of sites, the number of fortifications increased, as did the size of those sites occupied. Both survey and excavation have revealed that early first millennium B.C. occupations consisted of both new

foundations and continuously occupied older sites. As mentioned above, Abdul-Amir identified four types of sites which existed during the early first millennium B.C.: urban settlements, fortifications, temporary camps, and cemeteries (Abdul-Amir 1988:16). It is useful to summarize here the characteristics defining each site type.

In order to be classified as an urban settlement, the site needed to fit certain criteria; namely, a well-organized plan within an encircling wall, and substantial architecture that specifically included some of religious function. As indicators of urbanism, the cultural material required of a site included such artifacts as glazed bricks, works of art, including *lamassu*, reliefs and/or inscriptions, as well as indications of long-distance trade such as imported pottery wares (Abdul-Amir 1988:162). There were four early first millennium B.C. sites that were categorized as urban settlements; the three islands mentioned above (Sites 10-A, 22 and 26), and the site of Al-Zawiya (Site 17). All four have been excavated, and three produced considerable cultural material indicating an Assyrian presence. Since the results of excavations at these sites have been published elsewhere, it is perhaps preferable to focus attention on the other types of settlements of early first millennium date which have fewer parallels elsewhere in the archaeological record of Mesopotamia, the "fortifications" and "temporary camps".

III.1.a i. "Fortifications"

The eleven "fortifications" identified in the survey, some of which were excavated, have been interpreted as Late Assyrian constructions. In addition to ceramics, some of the artifacts associated with these forts included remnants of elaborate architectural decoration, indicating that there were structures of some significance. It is the architectural planning, however, that most firmly supports a military interpretation of these sites. Every site with an identifiable outline to its ramparts was either square or rectangular, and two were oriented with their corners on the cardinal axes (Glai'a, Site 8 and Sur Jar'a, Site 16). Generally, the fortifications in the area of study shared characteristics with those in Assyria

proper (Abdullah 1977:163-167), although they in some cases incorporated new architectural features (Abdul-Amir 1988:131-132, 136). Several fortified complexes contained what appear to have been barracks, albeit on a smaller scale than the massive palatial and military constructions in the Assyrian capital cities. Parker suggests that the soldiers' barracks, the *bet-naptarte*, one of two main dwelling units in Assyrian forts, may typically have had associated open yards, perhaps for livestock (Parker 1997:83). At the site of Glai'a, which stood eight meters above the surrounding plain on a natural rocky hill, a rectangular enclosure contained over one hundred rooms arranged around a courtyard, and these have been interpreted as dwelling units within the fortified area. This extensive complex was protected by a double wall system, open on the side facing the river. Abdul-Amir suggests that the expanse of space between the inner and outer walls at this site was given over to horses and chariots, and in fact although many fortifications had more than one wall, at no site were there structures in the spaces between them.³²

Quite a different arrangement characterized the plan of the fortified site of Sur Telbis (Site 10-B, see Appendix A). Here, a large rectangular fortification wall enclosed a number of substantial buildings within, some of which were built directly against the outer fortification wall. As at Glai'a, the building plans were characterized by numerous rooms arrayed around a central courtyard, but here the arrangement and size of the rooms was much more regularized. Ceramics known from other ninth to seventh century B.C. contexts provide the date for the fort, and the complex comprised other areas including artifacts dated to the same period such as kilns, as do contemporary jar burials with associated pottery and jewelry. The excavators contend that this site may be identified with ancient Suru, the seat of the governors of Suhu.³³

32 Abdul-Amir 1988:141. Most commonly (in seven out of eleven cases), these fortifications were protected by only one wall (at Khirbet Al-Diniya, Al-'Usiya, the island of 'Ana, the island of Telbis, Sur Telbis, Sur Muhra and Al-Zawiya). Three sites, Glai'a, the island of Bijan, and Tell Yamniya had two walls; only one site, Sur Jar'a, was enclosed by three walls.

33 See Liverani 1992:67, note 2 for a comprehensive list of the literature relevant to this identification.

In six of the eight fortifications on land, the wall system was three-sided with the river providing protection on the fourth side. In each of these cases the fort was presumably intended to control the immediate area of the river bank, and ramparts on the river side were deemed unnecessary. Three sites revealed archaeological evidence for quays and harbors; the island of Bijan (Site 26), Khirbet Al-Diniya (Site 12), and Sur Muhra (Site 30). From a military standpoint, such constructions would have been useful for facilitating the transport of troops across the river, and it may be the case that these forts functioned as crossing points in the regional land route system, as well as being stations for riverine traffic (Abdul-Amir 1988:144). Two of the fortified sites had traces of mudbrick corner towers (Sur Telbis, Site 10-B and Sur Muhra, Site 30), and two (Sur Jar'a, Site 16 and Tell Yamniya, Site 49) had vestiges of defensive gates on their eastern sides. While the gate at Sur Jar'a was a mudbrick structure that pierced the line of the outer wall, the gate at Tell Yamniya, constructed of stone, was flanked by a small bastion on either side, and was located on the inner wall. Similarities in architectural features could be detected at a number of sites, specifically Sur Muhra, Glai'a, Al-'Usiya, and Sur Jar'a. Secure dating of these complexes does not seem to have been consistently possible, although it was in a few fortunate cases; the entire site of Tell Yamniya, for instance, has been dated to the ninth century B.C. (Young 1983:8). In constructing these fortified sites, the builders took advantage of the highest points available along this part of the Euphrates. At least four of the forts were constructed on high sites where the elevation afforded visibility contributing to their effectiveness as stations for military intelligence, whereby signals might be relayed from one station to another (Abdul-Amir 1988:143-144 and see Young 1983:8). The overall lack of palatial or religious structures at these sites, combined with their evident strategically-based topographic positioning, lend credence to their interpretation as sites of a primarily military nature. It will perhaps be useful to summarize the specific features at each of the eleven sites in question which Abdul-Amir ascribes to the Iron Age and which he associates, more specifically, with a Late Assyrian occupation.

No. 8 Glai'a**Features dating to the Late Assyrian period:**

- "Fort" on a natural rocky hill: Double wall system encloses the fort on all sides except the NW side, facing the river. Both walls made of rubble, 2 m. high. Outer: 200 x 173 m.; inner: 125 x 138 m. Also, a 1 m. wide ditch extends ca. 3 km. S, cut into cliff.
- Terracotta lamassu, found in kiln.
- Fragments of marble statues, reliefs and architectural elements identified as "Assyrian" reused in building material for structures dated to the late 1st millennium B.C.
- Pottery, other small finds.

Location: 30.5 km. SE of 'Ana, 24.5 km. NW of Haditha. Overlooks W side of river.

Excavated: Begun 1978 (Directorate General of Antiquities in Iraq, henceforth D.G.A.)

Published: Killick and Roaf 1983:203.

No. 9 Al 'Usiya**Features dated to the Late Assyrian period:**

- Enclosure wall: rubble; 220 x 110 x 1-2 m. SE side destroyed by cultivation. No evidence of wall on NE side, where enclosure possibly opened onto the river.
- Fragment of "Assyrian" lamassu figure, similar to one at Glai'a.
- Pottery, other small finds.

Location: 32 km. NW of Haditha, 22 km. SE of 'Ana, on W side of river. Site and surroundings are low, undulating hills.

Excavated: Begun 1979 (D.G.A.); 1982- (Japanese Archaeological Expedition to Iraq)

Published: Killick and Black 1985:226; Killick and Roaf 1983:223.

No. 10-A The Island of Telbis**Features dated to the Late Assyrian period:***

- Bastion built of large, tightly set stones, on western point of island.
- Stone wall at N and S sides of upper part of bastion's upper part.
- Mound, 160 x 40 m., about 71 m. from western end of island, about 7.5 m. above waterline.

*While Abdul-Amir's summary mentions that evidence from the 1st millennium B.C. was represented in a sequence of four major occupation levels at this site, he does not date the specific features. It is noted that the site also revealed evidence from other periods as diverse as the late 2nd millennium B.C., late 1st millennium B.C., early 1st millennium A.D., and Islamic from the 2nd through 8th centuries A.H./8th through 14th centuries A.D. It is not clear, therefore, whether the architectural features represent Iron Age construction.

Location: An EW island, 508 x 87 m.. About 9 km. downstream from the Island of 'Ana.

Excavated: Begun 1981 (D.G.A.)

Published: Roaf and Postgate 1981; Killick and Roaf 1983.

No. 10-B Sur Telbis**Features dated to the Late Assyrian period:**

- "Fortification": Rectangular, 450 x 300 m. ("x 26 m. high"). S side open to river. A defensive ditch surrounds the fort on all sides except S. N part of site comprised of a natural hill. E and W walls each have 2 centrally located openings. Large courtyard in lower area with evidence of structures; large stone blocks and red brick fragments dispersed on surface.
- Substantial building, mudbrick on stone foundations, 50 x 40 m. (or 47 x 45 m.; see Jassim 1986). Consists of: central courtyard ca. 25 x 15 m. around

which a series of rooms of various sizes are arrayed, with a long room or corridor on the W side.

- Other substantial buildings in lower area of site, inside enclosure wall.
- 16 kilns; rectangular, oval and round in plan, containing pottery dated to the 1st millennium B.C. Located near the river plain.
- Jar burials (single and double jars), with associated pottery and jewelry.
- Pottery: including, from surface of rectangular fort area, "common ware" types dated to the early 1st millennium B.C.

Location: Downstream from the Island of Telbis, about 14 km. downriver from the Island of 'Ana and 70 m. E of the river.

Excavated: 1980-82 (D.G.A.)

Published: Killick and Roaf 1983:222; Rawi 1982a:1-3; Rawi and Shalabi 1982:2-3; Jasim 1986:17-18

Comments: It is suggested that this site may be identified with ancient Suru, the seat of the governors of Suhu.

No. 12 Khirbet Al-Diniya (Haradum, Harada)

Features dated to the Late Assyrian period:

- "Fortress": Square, 150 x 150 m. at W end of planned reservoir, originally constructed in the Old Babylonian period but reoccupied during the Middle and Neo-Assyrian empire.
- 2 kilns
- Double-jar burials at or under town wall on E side.

Location: About 32 km. NW of 'Ana town, 70 km. SE of ancient Mari. About 200 m. from W side of river.

Excavated: 1981-1984 (French Archaeological Expedition to Iraq)

Published: Kepinski and Lecomte 1985:55; Kepinski 1982:2; Kepinski 1984a:2; 1984b:1-2; Killick and Black 1985:219; Killick and Roaf 1983:209-10; Johannes 1985:57-58; Lecomte 1983:4; Olivier and Kepinski 1984:1.

Comments: Haradum was a town established as a merchant colony during the second half of the Old Babylonian period. Following a break in occupation at about 1630 B.C., the site was reoccupied from the end of the Middle Assyrian period to the end of the 8th century B.C. During the Neo-Assyrian period it served as a military outpost (Harada).

No. 16 Sur Jar'a

Features dated to the Late Assyrian period:

- "Fortress": the largest in the area of study: Ramparts consist of a 3-walled system on 3 sides, open to the river on the 4th side. A moat was located between the middle and outermost wall. Middle wall: 300 x 300 x 2.8m., 13 m. thick, openings in NE and SW sides (neither identified as site entrance).
- Pottery, other small finds
- Clay tablets belonging to Ninurta-kudurri-usur, governor of Suhu in the 8th century B.C.

Location: 25.5 km. NW of Haditha, 2 m. above level of plain. On opposite bank from contemporaneous Glai'a.

Excavated: 1979 (D.G.A.); 1982 (British Archaeological Expedition to Iraq, henceforth B.A.E.I.)

Published: Roaf and Postgate 1981; Killick and Roaf 1983.

No. 17 Al-Zawiya

Features dated to the Late Assyrian period:

- Fortification wall (massive) with associated dwellings;
- Double-jar burials located at cliff;
- Pottery

-Glazed brick fragments identified as "Neo-Assyrian" (unprovenenced)
Location: 26 km. NW of Haditha on cliff overlooking E side of river, mostly underlying modern village of Al-Zawiya.
Excavated: 1978, 1985 (D.G.A.)
Published: Roaf and Postgate 1981; Killick and Roaf 1983.

No. 22 The Island of 'Ana

Features dated to the Late Assyrian period:

- Occupation levels
- Pottery, including some identified as "Neo-Assyrian"
- Glazed brick fragments identified as "Neo-Assyrian"

Location: A NW-SE island, 940 x 190 m., max. height 10.5 m. above river level; about 335 km. NW of Baghdad, opposite S part of 'Ana town, on W side of river.

Excavated: 1979-1985 (D.G.A.); 1981-82 (B.A.E.I.)

Published: Jalal and Badawi 1982:1; 1983:3; Killick and Roaf 1983:202, 204; Roaf and Postgate 1981:192, 194.

No. 26 The Island of Bijan

Features dated to the Late Assyrian period:

- "Fort"
- Pottery including some identified as "Neo-Assyrian"

Location: A N-S island, 350 x 75 m., 23 km. SE of the Island of 'Ana, 11.2 km. downstream from the Island of Telbis.

Excavated: 1979-1983 (Polish Archaeological Expedition to Iraq)

Published: Roaf and Postgate 1981; Killick and Roaf 1983.

Comments: It is suggested that the Neo-Assyrian fortress developed from a Middle Assyrian one.

No. 30 Sur Muhra

Features dated to the Late Assyrian period:

- "Fortification": Rectangular, 260 x 200 m., max. height 1.36 m. above plain. S side open to river.
- 3 buildings: 2 inside fortification wall, 1 outside.
- Pottery

Location: Inside modern village of Muhra, 25.5 km. NW of Haditha, about 300 m. E of river.

Excavated: 1980 (D.G.A.)

Published: Roaf and Postgate 1981; Killick and Roaf 1983.

Comments: The excavators suggests the entire site may be dated to the Middle and Neo-Assyrian periods, the latter being the major occupation period (Abdul-Amir 1988:405). Building materials utilized included untrimmed limestone blocks, mudbrick, and gypsum plaster (although it is not clear that these were used in the architecture from the early 1st millennium B.C.).

No. 49 Tell Yamniya

Features dated to the Late Assyrian period:

- "Fort": stone-built, on top of Yamniya hill, ca. 40 m. above plain. Covers entire hilltop.
- Complex comprises 2 rectangular walls with following interior units:
- open space (A) "inner parade ground;
- foundations of a large tower (room C);
- Room F: suggested to be either military headquarters or religious space;
- Room G: has interior benches, possibly subsidiary of Room F.

- Outer wall: along E and NE sides of hill; walling not located on other sides, where steep incline may have provided adequate defense.
- Inner wall: at W end of hilltop, ca. 34 x 40 m. N and E sides are casemate; gate (room B) flanked by bastions on both sides.
- Pottery (dated to 9th c. B.C.), glazed brick fragment.

Location: 23 km. downstream from Island of 'Ana, 1 km. E of river.

Excavated: 1982 (Canadian Expedition to Iraq)

Published: Killick and Roaf 1983:224; Young 1982:1; 1983:8-9 and plan 2.

Comments: No traces of domestic habitation at the site. It is suggested that the site served as a principle station within a larger system of military defence established in the early 1st millennium B.C. It affords a commanding view of the surroundings. It is believed to have been razed by its occupants before being abandoned (Killick and Roaf 1983:224; Young 1982).

III.1.a.ii. "Temporary Camps"

The "temporary camp" classification is an intriguing, albeit somewhat problematic one, since the defining characteristic of this kind of site type seems to have been simply a lack of visible architecture. It is noted by Abdul-Amir that round camps were favored in the Late Assyrian period, and that they did not generally exceed 500 m. in diameter (Abdullah 1977:171-175 in Abdul-Amir 1998:145-146). Limited size, then, was clearly one deciding factor in designating these sites as camps (Abdul-Amir 1988:145). These small sites were dated to the early first millennium B.C. by pottery collected from surface surveys, sometimes through wares associated with the Neo-Assyrian empire. Because of the lack of structural remains on the surface, it is assumed that any occupation at these sites would have been transitory, such as in tents, and that the tents housed military troops and possibly families who, in peacetime, may have lived in nearby villages. While Abdul-Amir recalls the many representations of Assyrian temporary camps on reliefs, and mentions the many references to them in the Assyrian annals, he acknowledges that there was no firm evidence at any of these sites that might provide a concordance with the epigraphic record, which not surprising given the temporary nature of sites concerned. Many of the sites in this category lack size estimates, although the largest, Mashad (Site 11), measures 500 m. in diameter.

One important defining feature of a "temporary camp" appears to have been its geographic relationship to other sites. It is Abdul-Amir's contention that such temporary camps served as a primary line of defense for larger fortifications, and that they were optimally located to contribute to the defense of the forts on either side of the river (Abdul-Amir 1988:128, 136). The greatest distance between two such fortifications is less than 9 km. between the island of 'Ana and the fortifications at Telbis, but this distance was secured by seven temporary camps, three on the west side of the river and four on the east. Twenty-three out of twenty-eight camps were located on the east side of the Euphrates (see Abdul-Amir 1988, fig. 12, p. 130). They appear in an obvious linear distribution along the bank of the river, in many cases virtually side by side, but they do not surround the "forts". On the contrary, several "forts" have no "camps" in their direct vicinity (for example, sites 8, 12, 16, 17 and 30). If indeed these sites may be interpreted as temporary camps, then the primary function of most of them appears to have been to secure the defense of the east side of the Euphrates, thus the Assyrian heartland further to the east.

In reference to the archaeological artifact of the "temporary camp", then, Abdul-Amir's interpretation may be summarized as follows: all are less than 500 m. in diameter, showing early first millennium B.C. ceramics but no structural remains on the surface. This description, however, can be seen to apply to dozens if not hundreds of Iron Age sites throughout Mesopotamia which, as will be demonstrated, often comprise extensive areas of low amorphous mounds. The interpretation of these particular sites as "temporary camps" is nonetheless in keeping with the military priorities that are assumed to have often guided settlement processes in this particular region during the early first millennium B.C. At the same time, however, it should be stressed that this interpretation may not necessarily apply to sites with similar characteristics in other regions where the primary impetus for settlement may have been other than a military one.

An emphasis on Assyrian military strategy in the interpretation of the settlement patterns may indeed be perfectly reasonable. As we already saw in Chapter II, the

establishment of military bases in occupied territories was a major characteristic of Assyrian imperial expansion, and from the time of Assyria's very first attempts to win control of Babylonia under Tukulti-Ninurta I (1243-1207 B.C.), successive Assyrian kings were repeatedly engaged in securing control of the region of the Middle Euphrates. Tukulti-Ninurta claimed to have conquered Mari, Hama, Rapiqum, and the hills of Ahlamu (Luckenbill 1927:57), and Tiglath-pileser I (1114-1076 B.C.) also battled against the Ahlamu Aramaeans and campaigned in Suhu (Grayson 1991, sec. A.0.87), and purportedly erected a fortress at Haradum (Khirbet Al-Diniya, Site 12, see Appendix A) to prevent the advance east of Aramaean tribes (Kepinski and Lecomte 1985:52). During the early first millennium B.C., Suhu was controlled by independent rulers referred to in texts as *saknu* (Russell 1985:71).³⁴ This same period, however, seems to have been equated with a maximum Assyrian military presence, reflected in the presence of Iron Age ceramic material, dominated by wares of ninth to seventh century date (Abdul-Amir 1988:95). In their endeavor to solidify Assyrian hegemony in the region Tukulti-Ninurta II (890-884 B.C.) and Assurnasirpal II (883-859 B.C.) both marched on Suhu, collecting tribute (see Grayson 1991, sec. A.0.100.5 for Tukulti-Ninurta; sec. A.0.101.23, for Assurnasirpal II; see also Russell 1985:60,62-3). It is likely that after Assurnasirpal's ninth campaign, the land of Suhu was restored as an Assyrian province along with Hindanu, another major political unit that lay directly north of Suhu -- again, on the line of the Euphrates (Russell 1985:73).

The archaeological evidence produced by the Haditha Dam project strongly argues in favor of assigning the construction of many fortified settlements in the area to Assyrian forces occupying this segment of the Euphrates during the early first millennium B.C. Abdul-Amir has remarked that "even if some or all of the fortifications were established and administered by the governors of Suhu [and not by Assyrians], the Middle Euphrates was a

³⁴ This information is confirmed by inscriptions found at the site of Anat; see Roaf and Postgate (1981):192-194; Killick and Roaf (1983): 203-204.

key area to the Assyrians" (Abdul-Amir 1988:132). The ceramic assemblage provides, in fact, the same composite picture at virtually all the local early first millennium sites (except for Sur Jar'a, where the entire assemblage was apparently composed of only Late Assyrian wares), with wares that are characteristic of the Neo-Assyrian empire recovered in association with locally-produced wares. The ceramic record, therefore, seems to combine with the textual record to support the picture of an Assyrian occupying force within the land of Suhu. The largest urban settlements may have been protected by smaller yet strategically positioned fortifications, which were in turn supported by the proliferation of temporary camps at key points along the river. Certain indications also suggest that central Assyrian authority in the region may have been exercised from the site of 'Ana (Site 22, Appendix A), while the military command may have been centered on Al-Zawiya (Site 17, Appendix A). Each of these sites would have answered to the imperial authorities in the prevailing capital. This pattern of settlement, therefore, must be seen as regionally specific; that is, the settlements established and occupied by the Assyrians in this area were a direct response to the empire's relationship with Babylonia, the need to secure the region in the face of invasions and uprisings by Aramaean tribes, and a need to facilitate any movement of Assyrian forces to the west, as well as to secure the vital links of communication along the Euphrates, which of course linked Assyria with newly-acquired territories to the northwest from the ninth century B.C. onwards.

III.1.b. The Lower Khabur

The record of early first millennium settlement documented in the Haditha Dam project described above was extremely unusual in the sense that it included a relative wealth of architectural evidence. Even limited structural remains from this period are only rarely represented in other regional surveys, notwithstanding the overall increase in the number of

sites seems occurred at the onset of the Iron Age in Upper Mesopotamia.³⁵ Typically, regional surveys have produced less information on systems of planned settlement and more information on settlement patterns in a given study area. In many cases an interpretation of the settlement system is determined in part by an examination of the settlement hierarchy, which is constructed from estimations of site size and population. In this way, although the material culture documented by the survey may be for the most part limited to ceramics, the picture of settlement may nevertheless be fairly well-drawn. This is indeed true of one survey in particular: that undertaken by the Tubinger Atlas des Vorderen Orients from 1975 to 1977 which focused on the region of the lower Khabur river³⁶ (see fig. 1, survey area 2). The results of this project are especially useful to consider in the present context, as the model of settlement development resulting from the survey may be evidence of a unique, planned, imposed system of settlement implemented by the Assyrians as part of a program of colonization within the semi-arid steppe of the south-central Jazira. The basis of the discussion of the Neo-Assyrian settlement model presented here must be largely attributed to Morandi (see citations), whose dissertation and subsequent 1996 monograph concentrated on just this time period.

The sophisticated and extensive regional canalization scheme identified and recorded in the lower Khabur survey consisted of both primary and secondary canal systems, the construction of which have been tentatively dated to the second half of the eighth century B.C. (Morandi 1996:100-101).³⁷ If indeed the settlement system was a direct result of Assyrian intervention in the region, then this area of the river valley could have potentially been an intentionally-organized "granary district" that would have held

³⁵ The sudden increase in the number of settlements in the Iron Age is a trend in settlement documented in many of the regional surveys which have been conducted throughout Upper Mesopotamia, and the topic is most recently treated by Wilkinson in his forthcoming article in the *Journal of Archaeological Research* (see bibliography).

³⁶ See Kuhne (1974-77, 78-79); Ergenzinger et al. (1988); Ergenzinger and Kuhne (1991); Rollig and Kuhne 1980, 1983; Morandi 1996. This section on the lower Khabur is based on the cumulative results drawn from these surveys.

³⁷ Ergenzinger and Kuhne, however, contend that the canal system in question probably originally dates from the Middle Assyrian period (Ergenzinger and Kuhne 1991:163).

considerable significance in the agricultural economy of the empire . In conjunction with the hydraulic works, the survey identified and recorded a number of sites showing structural remains from the early first millennium, including some large walled settlements, possible military garrisons opposite the major centers, and some small sites which may have been fortresses or road stations deployed along the *hul sarri* (or, in Babylonian dialect, *harran sarri*) or other routes which traversed the area (see Kessler 1997). For these combined reasons the survey warrants inclusion in this study.

The Khabur river is the largest tributary of the Euphrates. From north to south, between the Turkish-Syrian border and its confluence with the Euphrates, it extends for about 350 km. The upper and lower Khabur areas are differentiated topographically by a change in landscape, whereby the flat, fertile plain of the upper Khabur gives way to the Jazira plateau, the steppe-like area in which crops are grown with irrigation supplied by the river cutting through it. In terms of archaeology, the river valley is also generally subdivided into two zones; the upper Khabur region comprises the triangular region in which are located the important tell sites of Fekheriyeh, Halaf, Mozan, Leilan, Chagar Bazar, Beydar, and Brak, among others (see fig. 2). In addition to the excavations at these sites, a number of surveys have also provided a record of occupation in this area.³⁸ The lower Khabur is generally understood to include the area roughly from modern Hasseka south to Bsera, where it meets the Euphrates. These latter limits defined the Tubinger Atlas survey area. The results of this survey have contributed immensely to the existing knowledge of the early first millennium B.C. settlement in this region, perhaps more so than the surveys in the upper Khabur, in which material from this period has been on the whole less in evidence.³⁹

38 See note 42, below.

39 Meijer's survey in the eastern area of the upper Khabur revealed a rather low incidence of Iron age sites, but this may have been the result of inadequate recognition of the relevant pottery types (Meijer 1986).

The fifty-one sites in the lower Khabur showing occupation dating to the Late Assyrian period were categorized according to common characteristics of size, structural features and cultural material. Concomitantly, the spatial and functional relationships between the sites were analyzed according to statistical methods,⁴⁰ and a site hierarchy was developed, consisting of six classes of settlement. The Late Assyrian sites identified in the survey are listed in Appendix B. The six site classes, from smallest to largest, may be summarized as follows (see Morandi 1996:116):

	Class	Number of Sites
1	hamlets	29
2	villages	14
3	large villages	11
4	sub-centers	3
5	centers	2
6	large centers	1

Two main phases of Iron Age occupation have been identified in the lower Khabur survey, each associated with specific historical circumstances documented in the Assyrian textual record. The first of these pivotal phases in the program of the empire began in the later tenth century B.C., when the Assyrians resettled various territories they had previously abandoned in the wake of Aramaean advances. The second, most dramatically demonstrated phase of resettlement began at the beginning of the ninth century B.C. According to Morandi, the shift in settlement that occurred at this time was not so much a process of "urbanization" as it was a process of "ruralization" (see Morandi 1996:176-177). That is to say, during this time, a dense network of rural communities arose in the lower Khabur, utilizing areas that had not been previously settled due to lack of hydraulic resources. Most of the estimated thirty thousand people occupying the sites within this survey area would have lived in small, rural communities (Morandi 1996:169-170). The survey data reveal that during the Middle Assyrian period in this area, thirty-eight percent of the sites were classifiable as rural villages, whereas sixty-three percent were urban

40 The two statistical methods employed by Morandi were *nearest neighbor* analysis and the *rank-size* model (See Morandi 1996:111-116 and fig.24).

centers. During the Late Assyrian period, however, the difference in this proportion was much more stark; only ten percent of the sites securely placed within the period of Late Assyrian occupation may be characterized as urban, while ninety percent were classified as small, rural villages (Morandi 1996, table 10, p.177 and fig. 31).

The considerable evidence from the lower Khabur survey indicates that, similar to the findings of the Haditha Dam project discussed above, some continuity existed in the pattern of settlement in the study area, whereby certain tendencies in site distribution persisted from at least the third millennium B.C. into the early first millennium. The Middle Assyrian centers largely remained in use (Kuhne 1994:63). The linear dispersal of sites along the river remained constant, as did a tendency for a denser pattern of settlement within the 200-300 mm. rainfall zone, beginning some fifty or so km. north of Tell Sheikh Hamad (Dur-Katlimmu, Site 16). Gaps in the settlement area continued as well, with some of the same areas continuing to exhibit an absence of occupation. Some sites were located at the junction point of a wadi and a canal, thereby potentially linking the agricultural system with the site, and perhaps even implying that the site was somehow involved in the administration of the hydraulic system. A number of sites were located at what appear to have been crossing points on the Khabur, whereby two sites were located directly opposite each other on opposed banks of the river. There also seem to have been military garrisons opposite the major centers. The sites were distributed with marked regularity along the river, especially the higher-ranked settlements, almost all of which were located on the east bank of the Khabur (See Morandi 1996, plate 2). Interestingly, more than half of the lesser settlements were located on the opposite bank of the river. It has been suggested that this dual-faceted pattern emerged as a result of two separate factors; in the case of the former, larger centers would have needed to communicate easily with the Late Assyrian centers in their political/administrative hinterland. In the case of the latter, the large number of lesser settlements on the western side of the river may be associated with the initiation of

increased settlement in western Syria, occurring in the lower Khabur region in the eighth and seventh centuries (Morandi 1996:120-122).

The height of settlement in the area of study apparently occurred during the second half of the eighth century B.C., when the population of the lower Khabur seems to have achieved the maximum density for all periods analyzed. During this period, the habitation of the river terraces achieved a degree of settlement previously unparalleled in the area. By the seventh century B.C., dense settlement had spread to the semi-arid steppe east of the Khabur, in the Wadi Agig, where a three-tiered hierarchy of settlement developed (Bembeck 1993:139-140; 144-145). While the survey data revealed a gradual increase in population during the course of the Late Bronze Age, this change would have been slight in comparison to the drastic increase in the overall population which probably occurred between the eighth and seventh centuries B.C. The surveyors suggest that the massive influx of occupants to the area may have been made up in large part by deportees, transferred to the lower Khabur as prisoners of war, subsequently engaged in the construction of the canal system and in working the irrigated fields (Morandi 1996:181-182).

The body of data compiled during the course of the lower Khabur survey presents a compelling argument for attributing the rise in settlement during the Iron Age in this region to a major Assyrian political program of repopulating formerly held territories, in this case, the south-central Jazira. Whereas the Haditha Dam survey project produced evidence of a settlement system seemingly based upon the militaristic goal of maintaining an iron grip over that portion of the Middle Euphrates, the settlement system in the lower Khabur seems to have been centered upon the effective exploitation of a previously untapped region in extending the area of cultivation of the empire. The degree of fortification at sites within this region, even at the dominant center of Dur-Katlimmu, which may have derived much of its strategic importance from its function as a military base, cannot be said to have been built to resist a strong enemy (Kuhne 1994:67). While the economic goals of such a

colonization program may have been numerous, it may have effectively served certain political aims as well. As summarized by Morandi, the probable aims of the colonization scheme may have included pacifying and settling the semi-nomadic Aramaean and Arab tribes in the region, settling deportees from military campaigns, creating reliable road stations (with a supply of water and for crossing the steppe to the western territories), and allowing the utilization of salt pans in the steppe (Morandi 1996:155-165; see also Kuhne 1994).

The apex of resettlement in the lower Khabur may be linked with the political and administrative reorganization of the Neo-Assyrian empire which began at the end of the ninth century B.C. (see Kuhne 1995). At that time, the lower Khabur fell within the administration of Nergal-eresh, Adad-nirari III's governor of the province of Resappa (see chapter II.1.e., note 30). The stele of Adad-nirari, mentioned earlier, dates to about 800 B.C. and describes the foundation of three hundred and thirty-one new settlements, probably in the province of Resappa (see Dalley 1984:197-199). As stated previously, this inscription does not necessarily attest to a specific program of urbanization, but it may be viewed instead as an indication of intentional resettlement especially in deserted but agriculturally viable lands, some of which may have been located the lower Khabur area. From the late eighth century until the end of the seventh century B.C., the region was firmly embedded within the political organization of the Assyrian system, following the "reforms" ascribed to either Tiglath-pileser III (Forrer 1920) or Adad-nirari III (Postgate 1995), with the seat of the provincial governor located at Shadikanni (Kessler 1991:128). In sum, the extensive canalization system identified in the survey area, and the seemingly parallel associated proliferation of numerous small, dispersed sites within a six-tiered hierarchy headed by the large center at Dur-Katlimmu, seem to stand as evidence for the type of resettlement initiative recorded in the stele of Adad-nirari.

III.1.c. The Tell Beydar Region of the Upper Khabur

Given the proliferation of significant archaeological sites in the upper Khabur region, it is not surprising that this area has been the focus of systematic survey for some time (see fig. 2). More than a dozen different regional survey and mapping projects have thus far traversed this archaeologically rich area.⁴¹ The site of Tell Beydar, located on the Wadi Aouejj, one of the major north-south wadis flowing into the Khabur, has recently been the staging point for an intensive survey project which has helped to provide a record of the cultural remains in the Tell Beydar neighborhood, creating an archaeological and geomorphological context for the site.⁴² The results of this survey are critical to the understanding not only of Tell Beydar and its immediate vicinity, but they also help to provide an overview of the historical sequence in the upper Khabur region, especially since the epigraphic evidence relevant to the region is relatively episodic in character. It is particularly unfortunate, in fact, that the Iron Age is one time period for which historical references are not abundant. This lacuna in the record of settlement in the area makes the results of the Tell Beydar area survey all the more critical. One of the most valuable aspects of the survey has been the documentation in this region of the transition from the nucleated tell-based settlement that characterized the Bronze Age, to a pattern of occupation based upon small-scale settlement dispersed throughout the the landscape during the Iron Age.

41 Surveys that have taken place in the region of the upper Khabur include: van Liere and Lauffray 1954; Poidebard 1927, 1930; Mallowan 1936, 1937; Lyonnet 1996a and b; Davidson and McKerrel 1976; Bembeck 1993; the Tell Leilan area: Stein and Wattenmaker 1990; Weiss 1983, 1986; the Tell Brak area: Eidem and Warburton 1996; the area of Jebel Abd al Aziz: Hole 1997, 1998; Kouchoukos 1998; Northeast Syria: Meijer 1986; the Middle Euphrates: Montchambert 1983.

42 The Tell Beydar regional survey was directed by T.J. Wilkinson of the Oriental Institute at the University of Chicago. Joining Wilkinson were myself and other team members drawn from the Oriental Institute in Chicago and the Katholieke Universiteit, Leuven. P. VanDorpe has summarized the 1997 season in a Master's thesis entitled *Archeologische prospectie en kartering van de Beydar-regio in 1997: Een eertse interpretatie* (Leuven, 1997-98). Wilkinson's complete summary of the 1997-98 findings will be published in the forthcoming issue of *Subartu*, upon which much of this discussion has been based.

The first large-scale survey of the upper Khabur basin was conducted in 1990 by Lyonnet, and although it provided a sound overview of the area, the investigation was centered upon the large tell sites, five of which were located within the study area of the Tell Beydar survey. The Tell Beydar regional survey, completed during the autumn seasons of 1997 and 1998, therefore directed attention to the largely unrecorded components in the record of settlement, particularly the smaller sites, as well as off-site features such as potential irrigation and transportation systems, quarries, kilns, rock art, and "field scatters". These off-site features were not ascribed site numbers, and therefore are not included in the tabulation of sites (see Appendix B). A total of eighty-two sites have been identified through survey, and a high proportion showed Iron Age occupation. In fact, there were more sites showing Iron Age occupation than any other period; material culture dating from the first four centuries of the first millennium B.C. was recovered at sixty-two sites. The sites were classified according to the nature of the archaeological remains present, both artifactual and architectural, and the topographic features characterizing each site, such as size in total area, height, and location relative to surrounding topographic features (survey area number 1, fig. 1; see also detailed map of survey area, fig. 3).

All of the Iron Age sites fell into one of four classes. There were a considerable number of cases in which the Iron Age site were found to be in close proximity to one or more sites which showed no Iron Age settlement whatsoever. The Iron Age sites have been classified as follows:

Class	Number of Sites
1 Small, dispersed, rural sedentary settlements	31
2 Tells	0
3 Lower towns	26 ⁴³

43 This number reflects the fact that in most instances, the earlier tell sites were surrounded by extensive areas of lower mounding which may have been subdivided by the survey during the recording process. Although these topographic subdivisions (as, for instance, Site 29a, b, c, and so forth) are counted within this total, they may actually have been separate, but contemporaneous, areas of a larger lower town settlement. Conversely, the separate subdivisions may represent a series of subsequent occupations. There are twelve

4 Marginal settlements of semi-nomadic pastoral or mobile populations	3
Indeterminate	2

The landscape of the Tell Beydar region is, like the rest of the upper Khabur, dominated by high, multi-period mounds, many over 5 m. in height. Interestingly, although the highest density of settlement in this area appears to have occurred during the Iron Age, evidence from this period was found on only one of the many large tell sites recorded in the survey, indicating a clear break from the pattern of Bronze Age settlement which had centered on large high tell sites.⁴⁴ This apparent anomaly in the archaeological record is explained by the fact that the predominant percentage of Iron Age settlement located by this survey was recovered from sites which could be classified as either lower towns or as small, rural and dispersed sites. Since Iron Age material was overwhelmingly represented at these types of sites, it may be said that they are the most characteristic site types of the Iron Age in this region, and therefore potentially of Late Assyrian settlement as well. In terms of size, the parameters for this site class of small rural sites were a maximum of 3 ha. in area and 5 m. in height, but most were about 1 ha. in area, and between 1 and 1.5 m. high.

All lower town sites revealed a major Iron Age component in the artifactual assemblage recovered from them. Almost half of the Iron Age lower towns, sixteen out of the twenty-six recorded, showed occupation during the Late Bronze Age as well as the Iron Age, thereby indicating perhaps that the trend in settlement away from high mounds down to lower towns that seems to have characterized much of Upper Mesopotamia, actually had its beginnings in the Late Bronze Age. Of the sixty-two sites having an Iron Age component, there were thirty at which the earliest material culture dated from the Iron Age,

large tell sites with Iron Age lower towns: Site 1 (Beydar), Site 4 (Rajab), Site 29 (Rashid), Site 37 (Ghazal), Site 39 (Sekar Foqani), Site 40 (Sekar Wastani), Site 41 (Sekar Tahtani), Site 43 (Hasek), Site 50 (Ghazal Foqani), Site 55 (Effendi), Site 63 (Ghazal), and Site 63 (Jamilo). The twenty-six lower town sites listed, therefore, represent the lower towns that were in proximity to these eleven tells. The locations of these sites are shown on Fig. 14. The Site 53 (Sawadich), shown on the map, is the only case where Iron Age material was found on the tell and not in the lower town.

⁴⁴ Only three or four Iron Age sherds were found on Tell Sawadich, Site 53.

meaning almost half of the total number of Iron Age sites were new foundations. Of these thirty, twenty-six could be classed as lower towns. Boundaries of lower towns were frequently difficult to determine, as the density of artifact scatter tended to diffuse gradually away from a more densely-strewn center, and on the whole the imprint of the artifact scatter collected took no identifiable abstract shape in the landscape; no overtly geometrically-configured sites were recognized. Virtually no evidence for a fortified perimeter could be detected at any of these lower town sites. The lower town of Tell Beydar is a prime example of its class, by far the largest in the study area, measuring 30 to 40 ha. in total area. Whether or not it can be concluded that the Iron Age occupants of the Tell Beydar region were Assyrian occupiers enforcing an imperially-imposed restriction against settlement on high mounds, or newly sedentarized nomadic populations and indigenous inhabitants exploiting the low-lying agricultural lands, the Beydar survey evidence from the Late Bronze and Iron Age periods makes clear the fact that by the end of the second millennium B.C., the inhabitants of this area had begun to avoid occupying the summits of the existing tells dominating the landscape. We may therefore suggest that while it may have been the tendency of the Neo-Assyrian empire to establish small, low-lying settlements in their quest to re-occupy formerly-held and newly-gained territories, it was in fact a tendency that had already begun to take hold in at least parts of the empire, specifically in this zone of the upper Khabur.

In order to appreciate fully the profound transformation of the settlement pattern that occurred in the survey area beginning in the Late Bronze Age and culminated in the Iron Age, it is perhaps necessary to at least briefly summarize the evidence of Bronze Age settlement documented by the survey. The most distinctive characteristic of the settlement of this period is the concentration of occupation on large tells, with a corresponding absence of occupation elsewhere.⁴⁵ The predominance of Bronze Age material was

⁴⁵ Of the smaller sites, only Site 61 showed occupation potentially dating to the third millennium B.C.

recovered from high mounded sites ranging from 1.75 ha. in area and 15 m. in height (Tell Kaferu, Site 10) to 26 ha. in area and 27 m. in height (Tell Beydar, Site 1). In the third and second millennia B.C. Tell Beydar would have dominated the region, and while the large lower town of Beydar may equally have served as the central place for the region during the Iron Age, the *kranzhugel* was by then no longer occupied.⁴⁶ Additional evidence of the shift of occupational focus from the *kranzhugel* to the lower town at Beydar may be supported by the vestiges of "hollow way" routes that were identified in the surrounding landscape.⁴⁷ At least three of the more definite routes appear to converge upon the lower town, bypassing the *kranzhugel* (see fig. 4, note routes A, E and F). The larger Bronze Age tell sites were distributed in relatively direct north-south alignment with Tell Beydar (Site 1), along the Wadi Aoueij (note Sites 60, 59, 4 and 1, fig. 3). A number of contemporaneous smaller tells also dotted the same wadi, including Sites 32, 35, 37, continuing up to at least Tell Hanou, beyond the limits of the survey area. There was also a linear distribution of large tells to the north of Tell Beydar (note Sites 41, 40 and 39). The valley to the east of Tell Beydar held a similarly-aligned north-south progression of medium and smaller-sized tells.

While settlement was centered upon a few large tells at the end of the third millennium B.C., by the early second millennium, settlement in the region had apparently

46 M. von Oppenheim, excavator of Tell Halaf and explorer of the western Khabur region, originally coined the term *kranzhugel*, which may be translated as "wreath-shaped tell". It particularly applies to the many Bronze Age tells in the upper Khabur which are circular and surrounded by large earthworks (see E.M. Meyers (ed.), *Oxford Encyclopedia of Near Eastern Archaeology* [5 vols.], 1997:286

47 "Hollow ways", or "linear hollows" are interpreted as the visible remnants of ancient roads and paths by Oates and Oates (1990), Tsoar and Yekutieli (1993), van Liere and Lauffray (1954), and Wilkinson (1993). Others contend that such features represent either canals (McClellan 1995) or more recent tracks Weiss (1997). When recognized on aerial photographs or satellite images, however, as the examples in the vicinity of Tell Beydar were, hollow ways are clearly distinguishable from canals since they clearly lack the associated parallel ridges of upcast soil resulting from a canal's excavation. The Tell Beydar hollow ways also appear to have no relationship to the more modern towns and villages in the region. The dating of these features is admittedly problematic; in the absence of datable deposits or associated material culture, the features are most often dated by association to the archaeological sites which they radiate from or appear to connect.

dwindled to a few seemingly isolated strongholds. Two sites in particular seem to have housed the remains of a greatly diminished populace, Site 39 (Sekar Foqani) and Tell Hanou, beyond the limits of the survey area. Unfortunately, the record of the Late Bronze period in the Beydar region is somewhat less than well understood. Although Middle Assyrian pottery is generally well-understood in other regions of upper Mesopotamia (see Akkermans, Limpens and Spoor 1991), and was identified with some certainty at a few of the sites in the Tell Beydar survey area, most forms have been classified less specifically by reference to the Late Bronze Age occupations at Tell Brak (Oates, Oates and MacDonald 1997). Few firm conclusions may at this point be suggested concerning the settlement pattern in this period. Significantly, however, it was during this period that settlement began to disperse, and although many of the tells would be concurrently occupied, a new trend of establishing lower towns and smaller sites is evident from this time onwards.

Based on the record of the Tell Beydar survey project, it is now possible to assert that sometime early in the first millennium B.C. the Tell Beydar area experienced a massive influx of population. New trends of occupation distinguish the settlement pattern of this period from those of preceding periods. Iron Age settlement appears as a dense scattering of small sites dispersed across the countryside, usually with a distribution of approximately one site per 5 square km. Previously, the large tells, in which the population had been centered, were consistently situated along the wadis, the main water source. While it is true that the wadis continued to be the main focus of settlement during the Iron Age, new settlements additionally took root on the rolling steppe away from the wadis. Moreover, for the first time the basalt plateau seems to have become utilized for sedentary occupation.⁴⁸

⁴⁸ The survey recovered evidence for settlement on the basalt plateau at only one site, Site 23 which, significantly, was dated to the Iron Age. This site, located on a north-facing slope of the basalt scarp, overlooks a lower basalt plain and is situated along the main north-south watershed. Wilkinson has suggested that the site may have functioned as a seasonal occupation (probably summer, given its northern aspect) for people grazing their flocks or cultivating the adjacent plain below.

In the absence of more detailed information from other sources, such as the excavation of more Iron Age sites or additional contemporary textual documentation, it is at this stage only possible to produce a generalized reconstruction of the site hierarchy of the area during this period. The settlement system can be characterized as consisting of two fundamental levels. The lower town site of Tell Beydar, being a magnitude larger than every other contemporary site in the study area, may have held the dominant position in terms of cultural, administrative, and perhaps, economic function. Limited excavations in the lower town of Tell Beydar (Area J), sprawling to the west of the *kranzhugel*, uncovered a large building complex of a function not yet not entirely understood, but nevertheless datable to the Late Assyrian period according to associated artifacts and methods of construction. Assyrian palace ware was included in the artifact assemblage from this area, probably the most persuasive evidence for the attribution of the construction of the complex, and perhaps the of entire lower town settlement, to Assyrian imperial authorities. The excavators postulate that the building complex may have been part of a governor's residence, or some other significant imperial installation (Bretschneider 1997). The presence of Late Assyrian "palace ware" at a number of Iron Age sites throughout the survey area identify these sites as potential Assyrian habitations, perhaps even in specific cases, foundations (see Appendix B). General historical considerations would indicate that they fell within the Assyrian cultural sphere. The presence of Assyrian-related wares supports the notion that these sites were occupied in the Late Assyrian period and were, perhaps, established or at least administered by a centralized Assyrian imperial authority whose representation was centered at Tell Beydar.

III.2. The Iraqi Jazira

III.2.a. The North Jazira

Travelling east from the upper Khabur, the North Jazira plain in Iraq merges imperceptibly with the plains of northern Syria, forming a shallow basin open to the west, bordered to the north and east by the Tigris river and to the south by the Jebel Sinjar. The British Archaeological Expedition to Iraq undertook an intensive archaeological survey and a series of excavations in the North Jazira plain between 1986 and 1990 (Wilkinson and Tucker 1995). In conjunction with previous excavation work done in the area of the Saddam Dam, directly to the east of the survey area, the combined data provides a fairly comprehensive record of settlement and land use for the Iron Age (survey area 4, fig. 1).

The massive increase in settlement during the early centuries of the first millennium B.C. that is archaeologically documented in the Middle Euphrates and the lower Khabur areas is once again replicated in the region of the North Jazira. Assuming Assyrian imperial goals were a guiding force in the dramatic, new trend in settlement in these regions, it is interesting to examine the different strategies that were apparently employed to reclaim them for sedentary occupation. In the Middle Euphrates study area, the primary function of the many newly-established sites on the river seems to have been to serve as a militarily-controlled zone of dominance along a critical stretch of the Assyrian frontier. In the lower Khabur, however, where many of the sites were located south of the dry-farming zone, an extensive canalization scheme was required to sustain the huge influx of settlement that occurred from the ninth century B.C. onwards. The fertile rolling hills of the North Jazira basin, situated well within the rainfall zone, required no such hydrological intervention. Moreover, the roughly contemporaneous settlement pattern identified in the North Jazira survey reveals that the location of settlement therein was not dictated by water from wadis alone (Wilkinson and Tucker 1995:29). Although thirty-five percent of all sites recorded were located along wadis, where the availability of perennial water might be

expected, a higher proportion of sites seem to have relied upon tapping ground water or reserving overland water flow (see fig. 5).

In the Late Assyrian period, the Jazira was a major corridor of communication (Oded 1979:71), and a number of transportation routes have been identified in this region, several of which appear to be linked with long-distance route systems in effect since the Bronze Age (Wilkinson and Tucker 1995:24-28; Wilkinson 1993). The most credible evidence of these routes are several "hollow ways" running WNW-ESE, seemingly connecting the upper Tigris area - Assyria proper - with the upper Khabur and beyond, to the north and west (see fig. 5). Although these and other "hollow ways" cannot be conclusively related to sites dated to the Late Assyrian period, a number of sites can be seen to align along them, as well as along other routes that were perhaps newly established during that period (Wilkinson and Tucker 1995:62).⁴⁹

On the whole, however, the dispersed rural settlement pattern in the study area does not appear to have been primarily organized around either canals or transportation routes. Nevertheless, the obvious regularity in the territorial spacing of the pattern implies a high degree of intentionality, even when it is acknowledged that all sites may not have been occupied at the same time.⁵⁰

Within the North Jazira survey area, which comprised 475 sq. km., a total of one hundred and eighty-four sites were recorded. Of this total, seventy-eight showed occupation during the Late Assyrian period and, on the basis of size, sixty of these were categorized as "significant" and eighteen as "minor" (see Appendix C). Late Assyrian

⁴⁹ For example, note on fig. 16 that Sites 135, 99, 138 and 163 (and perhaps 182) seem to be aligned along an E-W route that appears to have connected only two sites of Middle Assyrian date, 99 and 138, thereby suggesting the possibility that the longer route came into use in the later period. Sites 145, 143, 140, 108 and 96 seem to align as well, although the evidence for a route between them was intermittent. These routes, along with the major routes, may have been part of the Late Assyrian communications system (Wilkinson and Tucker 1995:62)

⁵⁰ Wilkinson and Tucker (1995:60) note that, "although these seventy-eight sites should not all be considered to be contemporaneous, the relatively brief interval involved, some four hundred years [ca. 1000-612 B.C.], implies that *most* sites were probably occupied at the same time."

pottery was found more often than pottery from any other period, and most Late Assyrian assemblages were recognized by significant diagnostics, including ridged-rim bowls and "palace wares".⁵¹ The survey identified five basic classes of sites based upon a combination of topographic and morphological features. Most of the sites having Late Assyrian occupation fell within the classification of "small, simple mounds", which were typically 0.5 to 2.0 ha. in area, and less than 2 m. in height. The surveyors suggest that, given the fact that the average size of the Late Assyrian sites varies from only 1 to 2.5 ha., but less commonly up to 5 ha. in area, many may be interpreted as farmsteads, small villages, or occasionally as villas or manor houses (see Wilkinson and Tucker 1996:184, fig. 42). Walled, enclosed sites were virtually absent from the entire survey record, although there were a few with vestiges of wall systems (Wilkinson and Tucker 1996:15-16).

The recognition of these small, low, rural sites - which potentially document a large but dispersed population - required careful, intensive survey techniques. A tripartite system of archaeological reconnaissance included, in addition to field survey, the recording of off-site features between the mounded sites, as well as excavation at five key sites within the area. Off-site features included smaller sites, and traces of ancient land use and communications; primarily, these features consisted of canals, roads, and agglomerations of pottery referred to as "field scatters" (Wilkinson and Tucker 1995:19-22). In addition to the excavation of Tell al-Hawa, located roughly in the center of the survey area,⁵² four key sites were excavated during the four seasons of the project: Khanijdal (Site 66), Tell Hilwa (Site 86), Tulul al-Biyadir (Site 106) and Khirbet 'Aloki (Site 113) (see fig. 6). Of these, only ~~Khirbet 'Aloki~~ showed evidence of Iron Age occupation, some of which could be identified as Late Assyrian with certainty. Along with the excavations at these sites,

51 See Wilkinson and Tucker 1995:60 and Type Series Pottery Catalog, p.116: ribbed rim bowls: Type 57; "palace ware": Type 60.

52 See Ball, Tucker and Wilkinson 1989; Ball 1991.

numerous smaller tests were introduced in other contexts, notably in canal sections, in pits and at other noteworthy points in the landscape.

The North Jazira survey has revealed that fundamental changes occurred in the nature of settlement in this area between the Middle and Late Assyrian periods of occupation (fig. 6 and Appendix C). The sweeping changes between the two periods can be expressed through a simple tally of sites dating to each of these two periods. The number of Middle Assyrian sites identified in the survey was twenty-eight, while Late Assyrian occupation was represented at seventy-seven sites throughout the study area, some of which were associated with new additions to the route system. A large proportion, sixty-three percent, of all Late Assyrian-period sites were new foundations. The most significant aspect of the Late Assyrian settlement pattern is that while the number of settlements increased considerably, they were dispersed with remarkably consistent regularity over the entire survey area, averaging one site per 2.5 sq. km. This obvious consistency of location, according to the surveyors, indicates an intentional pattern of introducing of settlement along former Late Bronze Age (i.e., Middle Assyrian) territorial boundaries or on marginal land. Thirty-two new sites were established during this time period in just such locations (Wilkinson and Tucker 1995:60-62).

Former Middle Assyrian centers continued to be inhabited, but on a much more limited scale. Excavations at some of the larger centers confirms that these sites probably continued to be the focus of administrative and religious functions. At Tell al-Hawa, for instance, which had already begun to decline but was still important during the Middle Assyrian period (Ball 1990a:86), the Temple of Adad was renovated during the reign of Shalmaneser III (858-824 B.C.) (George 1990:42). As the populations of these centers dwindled, however, the settlements shrank in both size and significance; indeed many became as small as the new rural settlements that were scattered throughout the plain. Tell al-Hawa, for example, went from a probable Middle Assyrian settlement of fifteen hectares to a settlement of no greater than seven hectares during the Late Assyrian period (Ball,

Tucker and Wilkinson 1989:37; 1990b:20). Another larger center, Kharaba Tibn, was reduced from about four hectares to only about two hectares (Wilkinson and Tucker 1995:60-61). Clearly, within the wider context of the Assyrian empire, sites such as these could not be classified as major centers. The surveyors contend that this decline of the older centers corresponded with a movement of population either to the many of the newly-established settlements in the area, or perhaps to the major prevailing capital (i.e., to Kalhu, Dur-Sharrukin or Nineveh). The "urban center of gravity" seems to have been transferred at this time either to the imperial capital or to a more local provincial center, perhaps Tille or Apqu (Wilkinson and Tucker 1995:61). Consequently, the settlement hierarchy during the Late Assyrian period in the study area of the North Jazira survey was composed of only two tiers, with the numerous and mostly new, small rural settlements dominated by the larger but by then considerably diminished center of Tell al-Hawa.

III.2.b. The Iraqi Jazira and the Tell 'Afar Plain

Two additional surveys conducted in the region of the Iraqi Jazira have produced results which appear to provide additional evidence of the Assyrians' concerted efforts to resettle the fertile lands west of the Tigris during the ninth, eighth, and seventh centuries B.C. One of these surveys, undertaken by D. Oates in the Tell 'Afar plain during 1967, remains unpublished.⁵³ The survey had been one component in the exploration of the vicinity of the site of Tell al-Rimah, which his team was excavating at the time.⁵⁴ In 1986, however, J.K. Ibrahim⁵⁵ published the results of his extensive archaeological survey incorporating a large expanse of the Iraqi Jazira (survey area 6, fig. 1, fig. 7 and especially fig. 8). The study area of this project overlapped not only with the Tell 'Afar region

⁵³ But the results are briefly discussed in D.Oates, "The Excavations at Tell al-Rimah, 1967", *Iraq* 30 (1968):115-138.

⁵⁴ For the excavations at Tell al-Rimah see especially Oates 1965, 1968a, 1982; Postgate, Oates and Oates 1997.

⁵⁵ J.K. Ibrahim, *Pre-Islamic Settlement in Jazirah*, Ministry of Culture and Information, State Organization of Antiquities and Heritage, Baghdad.

previously surveyed by the Oates team, but also with the Middle Euphrates Haditha Dam project area discussed earlier in this paper, as well as with the area of the North Jazira survey discussed above.(areas 3 and 4 respectively, fig. 1 and see fig. 8).⁵⁶ Ibrahim was able to examine Oates' unpublished survey data, resurveyed some of the same sites, and included some of them in his discussion; thus his work is doubly useful.⁵⁷ However, as his primary objective was the investigation of Parthian and Sasanian periods of occupation in the Jazira, Ibrahim's treatment of the Iron Age settlement in the region is understandably limited. This view is perhaps not as detailed as one might hope, as it is essentially limited to information on the geographic location of Late Assyrian sites without much elucidation on their intrinsic characteristics beyond a brief description of site morphology and a report of the presence of relevant material culture. Nevertheless, by bringing in both the D. Oates' Tell 'Afar plain data and Ibrahim's Jazira data into this discussion, the result is an enlightening view of the Neo-Assyrian settlement pattern across a wide swath of Upper Mesopotamia between the Euphrates and Tigris rivers and occasionally on each side of the course of the Tigris (produced on the composite maps, figs. 7 and 8). However, given the fact that these surveys include one of the more critical areas of the Assyrian heartland in which almost no previous survey work has taken place, it is clearly vital to consider the fundamental information from these two surveys, despite the relatively small amount of relevant information that may be distilled from them.

The Tell 'Afar plain is topographically similar to the North Jazira plain in that it is transected by numerous north-south wadis, some converging into the 300 km. long Wadi Tharthar, which ~~continues running south parallel to the Tigris river, on its east.~~⁵⁸ Like the

⁵⁶ Ibrahim subdivided the survey area into eight sub-areas. His "Area 4" overlapped with the area covered by the Oates survey in the Tell 'Afar plain, and his "Area 6" overlapped with the Haditha Dam survey area.

⁵⁷ A total of twenty-two sites identified by Oates' survey were subsequently examined by Ibrahim. Four sites in the Haditha Dam area on the Middle Euphrates were discussed by both Ibrahim and Abdul-Amir. Two sites were examined by both Ibrahim and the North Jazira team of Wilkinson and Tucker.

⁵⁸ A document from the ninth century B.C. mentions this wadi as having been a source of sweet water for the Assyrian army during the campaign from Assur to Babylonia in 885

North Jazira plain, this area is situated within the limit of reliable rainfall, and springs are scattered throughout the plain, but it is slightly drier and closer to the limit of rain-fed cultivation. It can be assumed, therefore, that similar to the North Jazira plain, the need for irrigation need not have determined the situation of settlement in this area, and it will become evident that the settlement pattern in these two survey areas in fact share various similarities.

The limited published information from the Tell 'Afar survey consists of two sources; Oates' brief reference to the survey in his 1968 article in Iraq, and the map provided by Ibrahim in his 1986 publication, which shows the location of twenty-two sites recognized by Oates' team as being Late Assyrian in date (See fig. 8 herein, and Ibrahim plates 9-14, pp.257-262). Oates relates, "Our survey of sites in the plain around Tell al-Rimah [in the Tell 'Afar plain] has shown a remarkable intensity of Late Assyrian settlement, including a number of large, though apparently unfortified sites" (Oates 1968a:130). Unfortunately, Ibrahim mentions the dimensions of only two of the Neo-Assyrian sites surveyed by Oates and himself, and they seem relatively small in size; Site 35 is listed as only 60 m. in diameter and 5 m. in height, while Site 185 consisted of a rectangular mound 150 by 80 m., and 4 m. high. Moreover, other than the intriguing fact that the many sites discovered by Oates' team were "large" and apparently had no form of fortification, virtually nothing else has been published concerning the individual features of any of these Neo-Assyrian sites identified by the Oates survey, other than those sites subsequently surveyed by Ibrahim. Clearly, however, if one assumes that all or at least many of the settlements in the 'Afar plain were founded by the Assyrian authorities, their unfortified nature bespeaks a high degree of security, and their large number may be indicative of a high level of prosperity at the time of their foundation.

B.C. under Tukulti-Ninurta II (Grayson 1991, sec. A.0.100.5). Though no doubt referring to a point along the wadi much further south, it is this wadi which runs through the survey area under discussion.

Out of two hundred sixty-eight sites recorded by Ibrahim's survey, there were one hundred thirty-two at which evidence for Late Assyrian occupation was considered certain; at three additional sites the Late Assyrian evidence was possible but less secure. Ibrahim includes, in some of his site descriptions, a few valuable sketches of the morphology and the rare architectural features at some of the Neo-Assyrian sites (Ibrahim 1986:43-83). Most sites were multi-period mounds, and Ibrahim does not attempt to assign dates to specific features at each site, where they are mentioned, except in the case of the three included Assyrian capitals - Assur (Site 78), Nimrud (Kalhu, Site 94a), and Nineveh (Site 94) - for which the data from previous excavations are summarized (Dur-Sharrukin, to the north-east of Nineveh, is situated outside of the survey limits). Vestiges of fortification systems were found at only two of the Neo-Assyrian sites other than the capitals; the semi-circular Site 122, and the rectangular Site 190. The traces of walls found at these two sites are not described in detail, and as the Late Assyrian material culture was only one component in the entire assemblage, these features cannot be assumed to be Late Assyrian. In terms of morphology, Ibrahim distinguishes each site in terms of its overall shape, sometimes noting the presence of multiple or subsidiary mounding. Sites at which Late Assyrian evidence was found were most commonly semi-circular in shape (twenty-eight sites). A total of eighteen sites were rectangular, seventeen were circular, nine were oval, and there were two instances in which a square mound appeared in conjunction with other land forms: at Site 62, a square base 130 by 130 m. by 2 m. high formed the base for a rectangular mound about 90 m. in length; at Site 40 a square mound 80 by 80 m. occupied the central position between two other mounds of irregular shape. Perhaps little meaning can be derived from the search for patterns in the morphology of these sites, considering the uncertain relationship that it has to the Late Assyrian occupation of the sites in question. It can be argued, however, that in light of the paucity of data concerning these sites, every aspect of available information, however inconsequential it might seem in other contexts, in this case warrants careful scrutiny.

The distribution of sites in Ibrahim's survey indicates a concentration of settlement in the northern sector of the Jazira (see Figs. 18 and 19), which encompasses the lands between the Assyrian triangle and the Wadi Tharthar, and includes the Tall 'Afar plain. The fact that far fewer sites were located in the lower Jazira may reflect the limitations of climate and geography; these areas are within or just near the limit of reliable rainfall, though as we have seen, settlement in the Middle Euphrates region appears to have been largely shaped by historical factors unique to the region. In general, it seems fair to say that the potential for dry-farming in the upper Jazira accounted for the density of settlement there relative to that of the south. As in the North Jazira survey, here too were found clusters of settlement that seem unrelated to the wadi system. It might seem logical to assume that the main determinant for the location of sites would be proximity to the wadis, the perennial water source, and indeed the majority of sites were thus situated. Clearly, however, significantly large numbers of sites were grouped in scattered agglomerations away from the wadis. Such agglomerations can be seen, for instance, directly south of Hatra, west of the Wadi Tharthar and in the extensive sector between the Tigris and the Tharthar. Additionally, individual sites or groupings of two to four sites can be found in isolated occurrences in seemingly outlying areas throughout the study area. It can be assumed the fertile, well-watered lands of these upland territories scattered with springs, afforded a high degree of freedom in the location of settlement. There does not appear to have been the same amount of territorial regularity that so characterized the Neo-Assyrian settlement pattern in the North Jazira survey area, which in that area may reflect a pre-conceived, unified settlement scheme. Given the fact that Ibrahim's survey comprised a very extensive territory, within which settlement proceeded gradually, in different stages, over a long period of time, comparisons with much more limited study areas such as the North Jazira must be approached with caution, as the circumstances of settlement were, temporally, no doubt quite different.

The most dense concentration of Neo-Assyrian settlement in the entire survey area appears to have been in the vicinity of Tell al-Rimah. Significantly, according to Oates, excavation at this town has revealed evidence of a Neo-Assyrian re-occupation after a long period of desertion (Oates 1968:130). Most recently, it has been suggested that the Assyrian re-settlement of Tell al-Rimah probably began in the late ninth century B.C., at which time the settlement was known as Zamahu (Postgate et al. 1997:41). Subsequently, the excavators contend, the surrounding plain was re-populated early in the eighth century B.C. in an imperial program of resettlement, possibly with people transferred from Syria.⁵⁹ It is just such a program that Adad-nirari's governor, Nergal-eresh, claims to have been responsible for on the stele found at the site.

Following the pattern indicated in every other survey area discussed in this study, the period of Late Assyrian occupation represents the peak of settlement in Ibrahim's documentation of occupation. The region seems to have collectively flourished up to the end of Assyrian dominance, at which point "almost every Late Assyrian-period site, both large and small, seems to have been abandoned" (Ibrahim 1986:87). This information concurs with the findings of the excavations at Tell al-Rimah, which revealed that occupation of the site ended some time around the late seventh century B.C. (Oates 1982:98; Postgate et al. 1997:41). It is possible that, as it has been suggested, with the removal of the central Assyrian government to Harran after the fall of Nineveh, large numbers of the population of this part of the Jazira were concurrently transferred to the Harran region (Ibrahim *ibid.*, Saggs 1969:137).

⁵⁹ The evidence for a Syrian population in the plain is represented by a stele found at one of the sites during Oates' survey in 1964, which depicts a worshipper before a diety that is said to be Syrian rather than Assyrian in style and execution. See Oates 1968:125-130 and Page's treatment of the stele itself in the same volume, pp.139-153.

IV. Cities of the Neo-Assyrian Empire: Town Planning and the Policies of Urbanization

IV.1. Capital Cities: A Description of Their Regional Situation, Site Morphology, Architectural and Spatial Components

The "great metropolis" which has long been identified as the "single most obvious feature in the settlement pattern of the Neo-Assyrian empire" (Oates 1968b:42), most accurately describes the extensive capital cities which have traditionally represented the largest part of the body of knowledge on Assyrian urbanism. In terms of their inception, the Neo-Assyrian capitals fall into three categories. Assur, the earliest, was an ancient settlement which remained pre-eminent as the tribal and religious center of the empire, but was later eclipsed as an administrative capital during the Late Assyrian period. Kalhu and Nineveh were refounded, that is to say they were redesigned from previously existing settlements as capital cities of considerably increased size and stature. Kar Tukulti-Ninurta and Dur-Sharrukin were, however, newly-founded at uninhabited sites, an aspect to which great significance is ascribed in the royal inscriptions. It is widely acknowledged that the pattern of transferring or founding new capitals was initiated in Mesopotamia by Sargon I who, around 2300 B.C. created a large, centralized bureaucracy and extended his empire beyond a single site or sub-region, thereby revolutionizing the prevailing Mesopotamian socio-political city-state organization (Yoffee 1988:48; Joffe 1998:557). In his transference of the imperial capital from Kish to Agade, Sargon may have been the first Mesopotamian leader to create the urban entity which has been termed the "disembedded capital".

The concept of the "disembedded capital", a new capital established by elites specifically to supercede existing political and administrative patterns, was originally discussed by Richard Blanton with reference to the site of Monte Alban in the Valley of Oaxaca (Blanton 1976, 1978). Blanton's work has recently been adapted and applied to the historical context of ancient Mesopotamia by Joffe (1998). Joffe's analysis of the Assyrian capital cities demonstrates that while each capital may have been created within

different imperial circumstances, all can be described by a consistent set of archaeological and theoretical determinations.⁶⁰ It is perhaps worthwhile to reiterate here the archaeological expectations suggesting the presence of a disembedded capital as outlined by Joffe, as it will become evident, through the discussion of the capitals herein, that these archaeological expectations are fulfilled at each one of the Neo-Assyrian capitals, albeit through varying degrees of evidence. According to Joffe (1998:551), the following characteristics indicate the presence of a disembedded capital:

1. The site being newly founded or greatly expanded in a particular period or phase.
2. Changes in material culture, architecture, subsistence or administrative practices signifying the foundation or expansion by a new sociopolitical or ethnic group.
3. A significant shift in regional settlement patterns (see Chapter III herein).
4. Centralized administrative activities as evidenced by writing, sealing, storage, or redistribution.
5. The sudden appearance of, or increased flow of, specialized materials to the site.
6. The presence of military equipment or personnel within the new site.
7. The use of new iconographic techniques, a new symbolic vocabulary, or a combination of old and new elements for the purposes of gaining or consolidating political legitimacy.
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.

While the above characteristics may serve as evidence of this type of urban entity, they only hint at the motives behind the exertion of immense effort and resources required by such new foundations. The location and spatial organization of the capitals would ultimately have been determined by the concomitant factors of internal changes in the

⁶⁰ As Joffe notes, "the very term disembedded capital is a misnomer, for the key to understanding new sites is instead the degree of their embeddedness in existing matrices of politics and economics" (1998:552). Moreover, while the Neo-Assyrian capitals may have been founded as alternatives to the existing power centers, they were not likely to have been intended to completely replace existing cultural and urban traditions, as the issue of continuity was frequently employed to support the legitimacy of the new imperial administration. This continuity is present to a great degree in the traditions of urbanism throughout the Neo-Assyrian Empire.

administrative and political organization, and external changes in the boundaries of the both the Babylonian and Assyrian empires. One of the features of the disembedded capital would have been that it provided distance between the existing institutions - bureaucratic, religious or military, as well as the associated elites - allowing a new institutional organization to define itself and exist, at least theoretically, unchallenged. The important relationship between kingship and the capital city has a long history in Mesopotamia, as is evident in cuneiform documents such as the Sumerian King List and the subsequent Babylonian Chronicles (see Buccellati 1964), and it seems reasonable to assume that to the Assyrians, a king's identity was also inextricably linked with his chosen capital. For a newly-enthroned king, the desire to achieve some distance from undesirable connections to a predecessor may have sometimes required the monumental gesture of removing oneself to a new foundation. In the case of Sennacherib's transference of the capital from Dur-Sharrukin to Nineveh in 705 B.C., it is very likely that the dominant reason for the move was the ignoble death of his father, Sargon. Concurring with Machinist's contention that the religious elites of Assur resented being displaced by the newer capitals (Machinist 1984/5:360), Kuhne suggests that one of the motivations behind the foundation of new capitals was the presence of a certain degree of rivalry between the political and religious establishments (Kuhne 1994:61).

Joffe makes the point that "sufficient spatial distance was required to disrupt existing patterns of sociopolitical organization, but not so much as to make the new capital inaccessible" (Joffe 1998:568). Indeed, when viewed from a chronological perspective of the early ninth century through the late seventh century, that is, from Assurnasirpal's capital at Kalhu through the fall of Nineveh, and a regional perspective of the maximum territory obtained during the later eighth century, it is clear that the Neo-Assyrian capitals were consistently concentrated in the Assyrian heartland within easy access of the previous capital. This pattern can in fact be seen to have begun in the Middle Assyrian period. Although Tukulti-Ninurta may have been seeking to avoid negative repercussions from

conservative elements in his court after his attack of Babylon, he nevertheless chose to found his new capital, Kar Tukulti-Ninurta, only about three kilometers northeast of the ancient city Assur, but on the opposite side of the river. The fact that the city was founded at a virgin site was clearly significant (as is evident in the king's inscriptions, see Huot 1990:207), as was the geometric outline of the new foundation's circuit wall, the earliest example to date of the Assyrian quadrangular capital city form, prototypical for Neo-Assyrian capitals and certain of the known royal cities.⁶¹

Geographically, the selection of the regional location for each newly-founded or transferred Neo-Assyrian capital was no doubt based upon variable criteria in each particular case, but by examining the situation of each city, it would appear that certain commonalities in location emerge, both from a practical and an ideological standpoint. On the practical side, favorable geography was clearly a primary issue influencing the location of Assyrian capitals. The need for dry-farming land may have been one of the motives driving successive Assyrian kings to establish subsequent capitals north of Assur, well within the limit of reliable rainfall, where the well-watered cultivable land could better support large populations. In her studies on the development of ancient cities in Mesopotamia, Stone (1995) has emphasized that not only was the geography of Upper Mesopotamia well-suited to supporting large urban entities, but the topography itself suited the social organization of the Assyrian imperial system. In effect, Stone contends, geography preconditioned the evolution of two distinctly different urban forms representing at least two distinct urban traditions in Mesopotamia, a southern versus a northern tradition, visible in the morphology (topographical shape) and spatial organization of the cities in the respective regions.

⁶¹ The originality of the morphological arrangement of the Neo-Assyrian quadrangular capital cities has been commented on by many scholars including Oppenheim 1977:129, 132-135, Battini 1994:49-50, Bunnens 1995:117-118 (and note 8), and Stronach 1997:322 (note 4). The ideological basis of the Assyrian quadrangular city form will be discussed in the section of this chapter dealing with the capital city of Dur-Sharrukin and in Chapter V herein.

The need for arable land in proximity to the city may help explain the transference of the capital in certain instances; for example, the movement of the capital by Assurnasirpal II from Assur to Kalhu in the ninth century,⁶² or the choice of the well-positioned city of Nineveh by Sennacherib (Stronach 1997:307-308 and 311; *ibid.* 1994:86), but there were clearly other factors determining the geographical location of the newly-founded capitals. The location of the city relative to the larger regional transportation network was very likely a critical issue, particularly in light of the fact that a substantial part of the income of the capital cities may have been obtained through trade (Oates 1968b:52). Defensibility was also no doubt a concern in the design of these cities although, as will become evident, it was not necessarily an overriding one. A further consideration in the location of a new or transferred capital may have been the site's location relative to administered territories. The extensive areas over which Assyrian control was gradually exerted necessitated an easily accessible center of imperial power and a visible manifestation of the authority and prestige of the kingship in a strategic position within the landscape. Finally, the establishment of a new capital may simply have been motivated in at least some cases by the need for more space, as the growing imperial bureaucracy and administration gradually developed (Kuhne 1994:61; see also Oates 1968b:44-49 with respect to Kalhu, and Stronach 1997:309 with respect to Assur).

IV.1.a. Assur

The ancient city of Assur (fig. 9) had a long history of occupation going back to at least second half of the third millennium B.C. (Andrae 1938). The city became known by the name of Assur from at least the Akkadian period, during which time it served as a commercial and perhaps military outpost of the southern civilization (D. Oates 1972:800-801). Assur gained considerable stature during the third dynasty of Ur at the end of the

⁶² See the discussion by Oates 1968b, pp.45-49 concerning the population estimates for the city of Kalhu with regard to site catchment.

third millennium (2113-2006 B.C.), when the worship of the god Assur is first attested in theophoric personal names (D. Oates 1972:801). Once the Assyrians gained independence after the fall of Ur, Assur took a major role in the Assyrian-Anatolian trade network. Following the collapse of the Mitanni, Ashur-uballit regained control of the city, making it the capital of the re-emerging empire, and expanded the limits of the city to the south. While remaining the dominant religious center as the home of the national shrine and burial place of Assyrian royalty, it was temporarily supplanted by the subsequent administrative capitals as mentioned in Chapter II, first by Shubat-Enlil, then later by Kar Tukulti-Ninurta. Its function as an Assyrian administrative capital was definitively ended in the ninth century when Assurnasirpal II transferred the capital to Kalhu. Retaining its religious pre-eminence throughout the span of the empire, its temples and fortifications would be maintained by every subsequent Assyrian king.

One obvious factor leading to the urbanization of the site of Assur is its regional location relative to the most direct route between southern and northern Mesopotamia, along the Tigris, and it stands as well at the nexus of other routes leading to regions further north and to the west. While Assur's location guaranteed the city a strategic military and commercial significance, at the same time it limited its effectiveness as an imperial capital. As it was close to but just south of the limit of reliable rainfall, its agriculture was necessarily dependent upon irrigation. Moreover, the amount of surrounding irrigable land was spatially restricted as well. It therefore lacked the consistent resources to maintain a sizable population. In terms of its defensibility, Assur was advantageously situated high over the Tigris on a spur of Jebel Khanuqa, protected by riverine steep cliffs and river to the north and east. To the west, however, the city would have been open to the steppe and thus vulnerable to the incursions of nomadic tribes, a situation that was compensated for by the heavy fortifications on this side of the city, consisting of a system of double ramparts and a moat. It is perhaps significant in this regard that Assur is the only Assyrian capital located on the west side of the Tigris.

In terms of size and spatial organization, Assur is fundamentally different from each of the later Assyrian capitals. Most notably, Assur is only about seventy hectares in extent, less than a quarter of the size of the next largest capital, Dur-Sharrukin. Yet despite these differences, it bears comparison with the other capitals primarily because it can be seen to have clearly arisen in the Babylonian tradition of city planning, yet is also characterized by certain qualities of organization which seem to prefigure the Neo-Assyrian "citadel towns,"⁶³ the capitals and other settlement types which become a characteristic component of Neo-Assyrian urbanization. Its interior organization and its outline in the landscape are the result of agglomerative growth rather than unified planning, and reflect the transition of the site from its origin as a religious center and perhaps a seasonal tribal residence (Oates 1968b:28) to a permanent imperial capital. Archaeological work indicates that the city probably grew around the Temple of Assur, and additional temples, palaces and residences were gradually constructed nearby. In this respect it follows the pattern of the southern Mesopotamian centers of Nippur, Ur, Uruk, Eshnunna, Isin and Larsa, all of which take an equally irregular shape in the landscape mostly determined by topographic opportunism, although in this case the planners were able to exploit the natural high elevation in the northeast corner. Assur, however, differs from these examples in the fact that the palaces and temples are not arranged in what Stone has described as the typical southern Mesopotamian "pattern of opposition" (Stone 1991:238) whereby the two main institutions are located at some distance from each other. Bunnens and others contend that the siting of both temples and palaces in a single well-defined sector of a settlement seems to have been alien to the Mesopotamian urban tradition until the Late Assyrian period, when this unit became the dominant morphological and organizational feature in Neo-Assyrian

63 A.L. Oppenheim has contended that Assur could not be classified as a "citadel town" because the "citadel", having grown over time, was in fact the city itself (1977:130). It might be acknowledged, however, that the inner city of Assur was predominantly comprised of an architectural arrangement which may have resulted in the administrative/religious area functioning as an effectively distinct unit, despite the fact that it may not have been delineated as a discrete element within the city's overall layout.

imperial capitals, some provincial capitals, and royal cities (Bunnens 1995:120). The important architectural component of the palace/temple unit will be discussed further, in section IV.3.c. herein.

At Assur, the citadel-like mound of the inner city is the oldest section, created by the progressive accumulation of occupation on this naturally elevated area which would have towered above the the river coursing below. In this high northeast corner of the city, the major Assyrian administrative and religious buildings were sequentially constructed and renovated, following the usual tendency to continually locate such structures on the traditional site. The Temple of Assur, built by Shamshi-Adad, was accorded pride of place, commanding the highest point at the site while other palaces and temples were deployed, more or less organically, predominantly across the north half of the mound. The ziggurat, as at Ur and Uruk, stood within its own enclosure, here between the Temple of Assur and the center of administration, the site of the main palaces. To the west of these palaces was a public square, around which was arrayed the double temple of Anu and Adad with its two ziggurats, the double temple of Sin and Shamash, the Temples of Nabu and Ishtar and lastly, an area of houses and a bit further north, the Palace of Tukulti-Ninurta I.

These building complexes represent successive periods of occupation and construction (Dittman 1990). Seen as an assemblage, the structures form a useful compilation of several architectural traditions and shed light on the emergence of a specifically Assyrian architectural tradition. Most buildings survive only in foundation, and virtually nothing is known of building facades.⁶⁴ There is, however, ample evidence to concede that, as Frankfort has asserted, "it is clear that many experiments in combinations of architecture were made" and "it is likely that the differences between Assyrian and Babylonian architecture are due to intentional innovations on the part of the Assyrians" (Frankfort 1970:140). For example, all of the temples mentioned above are

⁶⁴ The only information to date concerning the exterior appearance of any of the buildings at Assur is to be found on seals showing temple facades with recesses and crenellated parapets on walls and towers (Frankfort 1970:140).

characterized by a plan composed of a court, a wide antecella, and a broad, shallow room around which smaller rooms are arranged. This plan is unique among older or contemporary temple types, but it appears later in other Assyrian contexts, for instance, in the Temple of Nabu at Dur-Sharrukin (Loud 1936). Its appearance in the Sin-Shamash Temple at Assur (probably erected by Ashur-nirari I [1516-1491]) may represent the first example of a specifically Assyrian type of temple (Moortgat 1969:105-106). Some of the palatial architecture also exhibits qualities which distinguish it as uniquely Assyrian. For instance, the palace of Adad-nirari I (from the beginning of the thirteenth century) differed in groundplan from the older palaces at the site. Its basic arrangement of rooms around a series of courtyards is contained within an irregular perimeter wall, rather than the coherently geometric shape taken by the earlier Akkadian "Old Palace" (Moortgat 1969:107). Its interior arrangement, too, it is closer in plan to the first millennium palaces at Nimrud and Dur-Sharrukin (Turner 1970). Moreover, when compared with the Mitannian governor's palace at Assur, it displays similarities in its general plan, suggesting the possibility that Mitannian royal palace building had at least some influence upon Assyrian architects (Moortgat 1969:107).

Andrae's excavations concentrated on the monumental architecture, but areas of domestic structures have been located within the inner city enclosure, indicative of the nature of urbanization at Assur and its gradual transition into an imperial capital in which the different functional zones in the city may never have been clearly delineated. However, it should be noted that it is possible that, as the population of the town increased, the tendency to continually locate palaces and temples in the same location may have furthered and solidified the separation between the administrative/religious sector and the public sector. Shalmaneser III (858-824 B.C.) reconstructed the city's moat, and added another wall running parallel to it but diverting it southwards, enclosing an area which seems to have been largely residential in nature. Although both earlier and later residences have also

been uncovered within the inner city close to the western city wall, the major public buildings continued to be grouped in the northern, inner "citadel" area.

IV.1.b. Kar Tukulti-Ninurta

The imperial capital Kar Tukulti-Ninurta, rapidly constructed by Tukulti-Ninurta I after his destruction of Babylon, seems to conform to many of the conditions required for its identification as a disembedded capital (fig. 10). Inscriptions seemingly indicating that the king was assassinated by a faction of conservatives from within his own court⁶⁵ led to speculation that Tukulti-Ninurta's new foundation may indeed have represented his ultimately unsuccessful attempt to escape a hostile power-structure entrenched at Assur. The foundation, however, suggests that the king at least had the considerable support necessary to procure the resources and labor required to realize such a monumental project. In addition, the transference of the capital may have been motivated by a lack of space (Stronach 1997:309), a suggestion which may be considered reasonable particularly in light of the immense increase in size of the new capital, which was triple the size of Assur. As of 1992, the excavators had mapped 240 hectares of the city, not including outlying areas of occupation to the north and east (Dittman 1992:310), which may double the present extent (Kuhne 1994:57). After the death of Tukulti-Ninurta, the Assyrian empire entered a period for which the textual evidence is scanty, but the available evidence points to a period of decline and weakness (see chapter II). When the Assyrians re-emerged in the first millennium, Assur was once again the center of power. It is clear, however, that Kar Tukulti-Ninurta was not entirely abandoned after the king's death, as certain excavated areas in the city attest to occupation until the Late Assyrian period (Dittman 1992:310).

It has been noted that the plan of Kar Tukulti-Ninurta is similar to that of certain other new foundations in Mesopotamia in the sense that its outline was quadrangular (Huot 1990:212-216; Bunnens 1995:118), another characteristic of the Neo-Assyrian capitals.

⁶⁵ Grayson 1972, p. 134, passages 873-874.

The Old Babylonian period cities of Shaduppum (modern Tell Harmal) and Haradum (Khirbet al-Diniya, see chapter III) both have circuit walls which are geometric in outline, but of the two, Kar Tukulti-Ninurta is closer in concept to Haradum in that it was conceived and built as an ensemble. At Shaduppum, the city's existence preceded its ramparts, and the geometric shape arbitrarily enclosed the streetplan. At Haradum, also a new foundation, the plan and the ramparts clearly interrelate, based on an underlying orthogonal groundplan. The imposed geometric form is made possible by the site's relatively flat topography stretched along the Tigris. It is impossible to draw any firm conclusions about the interior street plan at Kar Tukulti-Ninurta beyond Andrae's overall plan (1935, fig.52) which partially illustrates the situation of the "official district" (which the excavators estimate to be 120 ha. in extent) containing the palaces, a Temple of Assur and a ziggurat arranged in a walled enclosure placed along the banks of the Tigris (see plan in Dittman 1992:310, fig.10). The most recent excavations have revealed that this "official district" was flanked by two residential quarters on its northeastern and to the southwestern sides, areas in which the large numbers deportees were settled, according to the king's inscriptions (Eickoff 1980:456-458).

The inscriptions commemorating the royal foundation provide an account of the attention lavished on the construction of this capital, while at the same time emphasizing repeatedly the king's personal role in its construction according to divine decree, and the virgin character of the site (Grayson 1987, sec. A.0.78.22-25 and 35-37).⁶⁶ Especially noteworthy is the description of the construction of the royal dwelling, "Egalmesharra", "House of the Universe", which is an early attestation of the Assyrian tendency to place palaces upon artificial platforms (Grayson 1987, sec. A.0.78.22).

⁶⁶ The formula employed consistently in the inscriptions concerning this new foundation also mentions a canal, the "Pattu-meshari" or "Canal of Justice", apparently used for irrigation. The route of this canal has not been identified archaeologically.

IV.1.c. Kalhu (Nimrud)

When Assurnasirpal II chose to move his the urban center of his empire sixty-five kilometers upriver from Assur to the city of Kalhu (fig. 11),⁶⁷ he was probably well aware that the region in which Kalhu stood had long been the domain of his Assyrian ancestors. As Mallowan once remarked, "the location of many ancient mounds of (Middle Assyrian date) between the upper and lower Zab (Rivers) is sufficient proof of the agricultural importance of those two rich river valleys at that time" (Mallowan 1950:155-156). In choosing Kalhu as his imperial center, therefore, Assurnasirpal could benefit from the advantages of the disembedded capital enumerated above, while at the same time evoking the vestiges of former Assyrian glories to legitimize and glorify his own kingship. Situated directly on the Tigris during Assyrian times, the city would have commanded the rich agricultural region between this river, which would have run beneath the western ramparts, and the upper Zab, which was about eight kilometers away. In order to supplement the needs of his expanded capital, Assurnasirpal constructed a canal which diverted the waters of the upper Zab, bringing its waters along the city's boundary to the south.⁶⁸ The ramparts, roughly square in outline, enclose an area of about three hundred and sixty hectares.

It has been suggested that the planning of Kalhu was the result of Assyrian contacts with the North Syrian states during the time of Tukulti-Ninurta II (890-884 B.C.) and Assurnasirpal II (Winter 1982:357). While parallels between cities of two cultures are perhaps most overt in the areas of monumental sculpture and architectural elements (see Barnett 1976; Winter 1982, 1983), it may be argued that the example set by North Syria, in terms of the organization of towns and the manipulation of the landscape, may have

⁶⁷ The many phases of excavations at Nimrud have been summarized by, among others, Postgate (1977b:109), but see especially Mallowan's reports in *Iraq* 12-21 (1950-1959), and his 1966 final report, *Nimrud and Its Remains*, as well as D. Oates, *Iraq* 23-25 (1961-1963).

⁶⁸ Referred to in the inscriptions of Assurnasirpal as the "Patti-hegalli" or "Canal of Abundance" (Grayson 1991, for example, sec. A.0.101.30 and 33.).

provided an equally compelling source of inspiration for the Neo-Assyrian kings. This topic will be addressed more fully in chapter IV.3. Three main components defined the urban organization of Kalhu: a large, enclosed geometrically-shaped lower town, a main walled citadel containing royal and administrative functions, and a secondary walled citadel devoted to other significant royal and military buildings and activities.

To build his citadel, located in the southwestern corner of the city, Assurnasirpal took advantage of the existence of a high escarpment overlooking the Tigris. This citadel upon which he and successive kings built royal residences, administrative buildings, temples, a ziggurat and houses,⁶⁹ was separated from the extensive lower town by a massive mudbrick wall, and by elevation. The citadel was accessed by a ramp comparable to a similar one at Dur-Sharrukin, leading from the lower town up to a monumental gateway on the mound's southwestern flank. Additionally, access may have been gained via a second gate from the lower town as well as by one piercing the walls on the river side of the citadel, allowing direct access to the Tigris. The excavators noted that the highest point on the citadel mound was the summit of the ziggurat, standing on a ground level just over thirty-four meters above the level of the plain directly to the west, where the Tigris once flowed (Mallowan 1950:157). In addition to the main citadel, a secondary citadel was built by Assurnasirpal's son Shalmaneser III, at the southeast corner of the city. This second elevated architectural complex comprised a number of structures relating to the military; an arsenal, royal apartments, and storerooms.

The inscriptions of Assurnasirpal offer reasonably detailed information concerning the construction of this capital city, clearly describing it as a refoundation of a city built by Shalmaneser. It is commonly held that Shalmaneser I founded the original, moderately-

⁶⁹ Of the private houses excavated on the citadel, some were located against the inner face of the wall at the northeast corner of the citadel and, as the excavators suggest, may have been occupied by the city guards (Mallowan 1950:158). Others contained evidence that the occupants were involved in birdraising and money-lending (Mallowan 1954:141). In the NW Palace, archives of local commercial and bureaucratic activities indicate that by the 7th century B.C., this area of the palace, at least, had relinquished its official functions (Mallowan 1954:176).

sized Assyrian city at Kalhu in the thirteenth century (See for instance, Oates 1968b:42, Postgate and Reade 1980:320). In fact, Shalmaneser's inscriptions make no mention of Kalhu (Albenda 1986:35), and the epigraphic basis for this contention is to be found instead in the inscriptions of Assurnasirpal II which mention that his royal city was a renovation and enlargement of the earlier town (see Grayson 1991, sec. A.0.101.23, 26, 34, 35). The so-called Standard Inscription, engraved on hundreds of reliefs lining the walls of the Northwest Palace relates: "The ancient city Calah which Shalmaneser, king of Assyria, a prince who preceded me, had built -- this city had become dilapidated; it lay dormant. I rebuilt this city" (Grayson 1991, sec. A.0.101.23, lines 14b-22). As mentioned earlier, the inscriptions are not explicit in stating that Shalmaneser was the first to found a city there. There is evidence for an older occupation dating back to well before Shalmaneser I. Excavation has uncovered some material apparently dating to the eighteenth century and there was some occupation at the site as far back as the early third millennium.⁷⁰ It is known with certainty, moreover, that Kalhu remained the imperial capital until the year 706 B.C., when Sargon II inaugurated a new capital at Dur-Sharrukin, after which the city continued to be inhabited until 614-612 B.C., when it was probably destroyed along with the other major capitals of Assyria, as is indicated by the destruction levels in various excavated areas (D. Oates 1961:9).

The selection of the location of Kalhu seems to have been determined less by its relationship to trade routes than by its position adjacent to the fertile, undulating agricultural lands of the Tigris-upper Zab floodplain (see Oates 1968b:52; Mallowan 1950:155-156). The availability of arable land allowed for the subsistence of a huge population. As the empire's prosperity increased during the eighth century, the home populations would have

⁷⁰ Postgate and Reade (1980:320) report that in addition to Mallowan's recovery of Ninevite 5 pottery from the early third millennium B.C. in the southeast corner of the citadel, Loftus uncovered a grave beneath the platform of the Nabu Temple dating to 1750 B.C., both discussed in *Nimrud* I:74. Moreover, Middle Assyrian occupation is indicated by some finds including well-dated pottery (*Iraq* 18:28-9), as well as a few Middle Assyrian texts which imply that the site had a certain significance in that period (See Postgate and Reade 1980:320 section 34).

been enlarged, and their numbers were increased by huge groups of deportees and craftspeople brought in to the area to construct and settle within the capital, and by an expanded army which maintained the security of the extensive empire. Virtually all the land surrounding Kalhu is cultivable, and it has been suggested that the territory of the city may have included some alluvial land on the opposite bank of the Tigris (D. Oates 1968b:44). The geographical situation, therefore, in terms of both space and agricultural potential, afforded an appropriate base for the imperial metropolis of a rapidly expanding empire.

Several aspects of the remains of Kalhu indicate that the military was accorded a significant role in the urban organization.⁷¹ In addition to the epigraphic and artistic remains found at the site which celebrate and perpetuate the king's conquests of subject lands, the architecture of the city reveals the same preoccupation with warfare. The arsenal mound, "Fort Shalmaneser", is the very embodiment of the militaristic concerns of the Neo-Assyrian empire, having enough space to house troops, equipment, and the spoils of war. The five separate areas that were excavated in the lower town provide little insight as to the urban layout, but Mallowan contended that the results, which included a "great fortress and parade ground" within the rectilinear circuit wall, attest to the notable military character of the city (Mallowan 1950:156; 1957:4).⁷² He suggests that large open spaces in the lower town may have functioned as training grounds. As imperial capital, Kalhu would have been the starting point for campaigns, and given the fact that the Assyrians made notable territorial gains in the eighth century the largely military character of the city, as the center of an empire created largely through military exploits, is perhaps only to be expected.

71 The nature of the propagandistic function of the great Assyrian capital cities will be dealt with in greater detail in section IV.4 herein.

72 The "great fortress" was later interpreted as one of three mansions or administrative buildings found in the lower town (see D. Oates 1968b:49), but it remains possible that they housed military personnel.

IV.1.d. Dur-Sharrukin (Khorsabad)

The city of Dur-Sharrukin, modern Khorsabad, is in many ways an exemplary Neo-Assyrian capital city (fig. 12).⁷³ The documentation for the site, both epigraphic and archaeological, represents a large part of what is currently known concerning the underlying principles of Neo-Assyrian planning, architecture, and the nature of the relationship between the king and his chosen capital city, at least as interpreted by Sargon II (722-705 B.C.). We are fortunate in that not only is Dur-Sharrukin evidence of a unified planning scheme (in other words, it was built in one continuous sequence), which is a rare occurrence in the archaeological record of the ancient Near East, but a comprehensive record of the planning and construction processes is recorded in a wealth of epigraphic material associated with Sargon. Inscriptions and reliefs from within the palace and elsewhere at the site record the achievements of Sargon in building his great city, memorializing the effort and resources expended in realizing the enormous project, and extolling the magnificence of the city's attributes, including the sumptuous palaces, religious structures (see Albenda 1983, 1986; Russell 1996) and an enormous park 'at the side' of the city (Luckenbill 1927: paragraphs 73-4, 83-5, 97, 100, 105, 110). The inscriptions reveal that the king was closely involved in every aspect of the project, from its original conception by Sargon (but sanctioned by Shaushka, the goddess of Nineveh, the "Master Builder of the Land") (Luckenbill 1927: paragraphs 72, 83, 98, 102, 105, 108, 120) to arbitrating labor disputes, and choosing trees for the huge park.

Correspondence from the Royal Archive, most recently examined in depth by Parpola (1995 and 1987), comprises one hundred and thirteen letters referring either directly or indirectly to the city. Within these letters can be found a detailed account of the practical aspects of the planning and building processes, including problems arising in

⁷³ Reports produced by the excavators of the site include: Botta and Flandin 1849-50; Place 1867-70; Loud et al. 1936, 1938.

the construction and organization of labor.⁷⁴ In addition to the correspondence, considerable information concerning this imperial enterprise can be found in a smaller group of administrative texts (Fales and Postgate 1995). It is clear, from both the correspondence and the administrative texts that each provincial governor was responsible for the construction of, and in some cases the supply of materials for, a specific portion of the circuit wall (Fales and Postgate 1995:xvi, 15-22). The geographical range of the governors listed corresponds with the extent of the empire at the time, attesting to the fact that the entire empire was involved in the realization of this imperial achievement.

Sargon laid the foundations for Dur-Sharrukin in the fifth year of his reign, in 717 B.C., and after a construction period of about eleven years, the city was inaugurated with an elaborate feast in 706 B.C. For his new capital, Sargon chose an uninhabited site in the vicinity of a village called Magannubba, about twenty kilometers northeast of Nineveh, whose citizens were compensated for the loss of their fields with silver, copper, and other fields nearby, and to finance the immense undertaking Sargon borrowed funds from private lenders (Parpola 1995:53-54).

The geographical location of Dur-Sharrukin seems to have had no natural features to recommend it as particularly defensible, unlike Assur, Kalhu and Nineveh which each benefitted from having high elevations on riverine locations. Even taking into account the possibility for the existence of the vestiges of a small earlier settlement mound which might have provided an elevated area which Sargon's planners could reshape into a suitable citadel (Stone 1995:245; Seton Lloyd 1984:197), Botta's discovery of a fifteen-meter high retaining wall makes clear the fact that the citadel was, at least in part, artificially constructed (Botta and Flandin 1849-50:42). From Sargon's inscriptions it is known that Dur-Sharrukin was furnished with a canal (Luckenbill 1927:paragraph 120), but the main

74 Parpola (1995:64 and note 100) acknowledges that "relatively few letters deal with the construction process of the city and its parts." Letters referring to specific parts are as follow: (City wall): SAA I: 64, 143, 165; SAA 5: 56,291,292; (Canal): SAA I: 65, 143; (Palaces): Parpola 1979: 53, 363; (Temples): SAA I: 54, 128, 129.

water supply for the city may have been the Khoser River which, according to Loud and Altman, "then flowed almost at the very wall of the city" (Loud and Altman 1938 II:33).⁷⁵ If this was indeed the case, then the city's situation may be compared to that of the other Assyrian capital cities: Assur, Kar Tukulti-Ninurta, Kalhu and Nineveh, all similarly poised on the bank of a river.

If, however, the city was intentionally located away from a major river, then its geographic position is unique among the Assyrian capitals. The decision of where to locate the city may have been based upon either one or a combination of factors including the maintenance of administrative control over this more northerly region of fertile agricultural land, or perhaps in order to establish a formidable imperial presence in this northern flank of the Assyrian heartland as it reckoned with an increasingly threatening Urartian presence to the north. In any event, the well-watered aspect of the landscape, along with the relative proximity of the Khoser, and the considerable significance of the proximity of Nineveh, only twenty kilometers downstream, must have presented favorable criteria for the location of this particular capital.

In its urban elements and their spatial arrangement within the urban scheme, Sargon's city plan can be seen to replicate the basic organization and morphology of Assurnasirpal's Kalhu. The many analogies between these two capitals have been enumerated most comprehensively by Matthiae, who acknowledges that the earlier city provided the template for not only the overall urban form, but for the interior structure and arrangement of the palaces and temples as well (Matthiae 1994:29-45). Given the knowledge that Sargon resided at Kalhu during the construction of Dur-Sharrukin, and the fact that Sargon's capital was an originally-conceived, newly founded city, it seems highly likely that Sargon's direct borrowing from the earlier city was entirely intentional (see Matthiae 1994; Bunnens 1995:116 and Stronach 1997:309). The major difference between

⁷⁵ Loud and Altman's suggestion that the city may have been located directly on an ancient course of the Khoser has not to my knowledge been corroborated by any archaeological or textual evidence.

these two cities is the fact that the builders at Kalhu recrafted the existing topography advantageously to arrive at the resulting urban entity, whereas the builders of Dur-Sharrukin, not constrained by existing topography, deliberately applied the same overall morphological and organizational principles. The natural topographical features that made the site of Kalhu so easily defensible were, however, unavailable at Dur-Sharrukin.

The site is virtually square in shape, encompassing almost one square mile⁷⁶ with its corners oriented towards the cardinal points. The three main urban organizational components seen at Kalhu are once again present here; the geometrically-shaped lower town, the main citadel given over to administrative and religious structures, and the smaller arsenal citadel. In an innovative departure, the two citadels not only lie against the city's ramparts but sit astride them, forming projecting palatial terrace areas.⁷⁷ The town was surrounded by towered walls pierced by seven gateways (although Sargon's inscriptions mention eight [Luckenbill 1927: paragraphs 8 and 121]).⁷⁸ The main citadel was actually composed of two separate areas, a lower area comprising state residences, and an upper terrace separated from the lower area by another wall and by height.⁷⁹ The upper citadel was occupied by temples and the royal palace. A ramp connected the lower enclosure to the upper terrace, potentially giving access to chariots which could have sped to defend the citadel in times of war, or perhaps conveying the king to the very door of his palace. At the bottom of this ramp was an open square, which probably served as a staging point for military expeditions, and would presumably allow the townspeople a place of refuge while under attack. At the top of the ramp, directly ahead lay the palace of Sargon, with a large

76 More precisely, 0.8 mi. as reported by Stone 1995:245.

77 Stronach (1997:310) has remarked that this feature, along with the hierarchical significance achieved through changes in height, perhaps served as a basis for the utilization of similar features in Achaemenid Persepolis.

78 A discrepancy between the number of gates referred to in Assyrian textual sources versus the number documented in the archaeological record is also found in the case of Nineveh, leading Stronach to suggest that the number mentioned in the texts may include an internal gate (D. Stronach, pers. comm.)

79 Loud and Altman were able to record the height of the upper terrace at two separate points, which they relate as being 8.38 and 7.44 above ground level (1938:20).

square court of about three hundred feet square. To the right were offices and servants' quarters, and to the left a temple complex with three small and three large temples, with an associated ziggurat. Characterizing the palace plan is the 'Standard Reception Suite', a format found in every palatial building excavated at the site and which is in fact an archetypal Assyrian architectural feature (see Turner 1970 and Loud 1936).

The Temple of Nabu sat on its own platform, raised twenty feet above the rest of the terrace, as was the royal palace. It is characterized by an outer, then an inner gateway, and could be accessed two ways; either by a ramp from the main square, or via a bridge from the palace platform over a street below. The palace and the temple were therefore closely linked, both spacially and visually as well as figuratively.

The arrangement of the buildings within the citadel is a primary factor distinguishing the plan of Dur-Sharrukin from the plan at Kalhu (see fig. 12, detail). Frankfort has commented that the planners were clearly aiming for a regular plan with an underlying abstract symmetry (Frankfort 1970:143-148), but there are notable divergences from the scheme of regularity. The Temple of Nabu, for instance, is out of alignment with every other structure on the citadel, a situation which Frankfort suggests may be related in some way to planetary configurations (*ibid.*, p. 146). The building west of the Nabu Temple has two severely irregular exterior sides, though its interior is more or less conventionally arranged. Other seemingly intentional irregularities in planning include the oblique angle of the citadel wall on its south side where it meets the fortification wall. The approach to the palace/temple terrace is distinctly off-center, and the gate in the outer wall of the citadel is not axially aligned with the ramp to the upper terrace.

A similar departure from symmetry is found in the placement of the gates in the circuit wall. These seven gates were obviously not symmetrically coordinated, but seem to be arbitrarily located at uneven intervals along the ramparts. Equally, they seem to lack any substantive relationship to the major traffic routes surrounding the city (see Frankfort 1970:145). It is possible, of course, that the gates were placed relative to some inner

physical articulation within the city walls. Their placement may also be the result of an associative relationship between the town's interior layout to the division of fields in the countryside. Beyond such speculation, however, the lack of relevant information means that the rationale behind the placement of the seven gates must remain unexplained. Very little, in fact, may be said about the plan of the lower town. Place's excavations did uncover some houses in several limited soundings (Place 1867), and the Oriental Institute excavated a residence in the lower town as well (Loud and Altman 1938 II), but virtually nothing is known about the overall street system. Inscriptions relate that it was densely populated (Loud and Altman 1938 II:75; Parpola 1995:50), and despite the restorations offered by the Oriental Institute team, they assert that it was probably "solidly built up, with few, if any, open spaces or broad, straight streets (Loud and Altman 1938 II:90). Probably the best, albeit still limited, evidence for the spatial and functional articulation of a Neo-Assyrian lower town is to be found in the excavations at Nineveh.

IV.1.e. Nineveh

It seems likely that Sennacherib's relocation of the imperial capital to the existing town of Nineveh⁸⁰ was propelled in large part by a desire to distance himself and his kingship from his father's ignominious death. Besides affording the new king the opportunity for a more auspicious beginning to his reign, the long and eminent history of the town may have been an important factor influencing his choice of capitals, as is evident from the king's inscriptions praising the city as "the everlasting substructure, the eternal foundation, whose plan had been designed of old."⁸¹ Nineveh had indeed been an ancient settlement, home of the Temple of Ishtar, one of Assyria's more hallowed sanctuaries from

80 D. Stronach, the last excavator of Nineveh, has published a number of articles on the site, and is currently producing a synthetic volume, *Nineveh I*. See his citations in the bibliography. See also Russell 1994:153-154 for an overview of the history of excavation at the site, from A.H. Layard's first systematic explorations in 1847 through the latest work in 1990 undertaken by a team from the University of California at Berkeley, lead by Stronach, which included this writer as a member.

81 Luckenbill 1924:94,1.64, see Stronach 1994:96.

at least the Ninevite 5 period (early third millennium).⁸² The ancient mound of Kuyunjik has, in fact, yielded materials dating back to the Hassuna period, or to the second half of the seventh millennium B.C. (Stronach 1994:85).⁸³ By choosing to transform this important provincial town into a spectacular capital city immortalizing his reign, Sennacherib was taking advantage of an opportunity to demonstrate and emphasize the undeniable fitness of the Sargonid line to retain kingship of the land (Stronach 1994:10).

It is possible that by the early third millennium B.C. urban settlement at Nineveh had achieved a differentiated morphology, composed of occupied areas both on the high mound and in the surrounding lower terrain, each of about forty hectares (Stronach 1994:92).⁸⁴ It is known that in the Akkadian period the town occupied a significant position in the empire's control over Upper Mesopotamia, during which time the entire surface of the high mound was occupied and enclosed within a perimeter wall having a sizable stone foundation. Little is known of the occupation in the lower town from the Ninevite 5 period until the Middle or Late Assyrian period.

The city had first come under the control of Assur during the time of Shamshi-Adad (as mentioned above, section II.1.a), and it is clear from relevant inscriptions that the Middle Assyrian kings favored Nineveh as a home for their royal residences and actively renovated the city's temples. The city had been wrested from the Mitanni by Ashur-uballit in the mid-fourteenth century, and this important grain-growing region thereafter remained under firm Assyrian control. It is during the Middle Assyrian period that the upper mound may have become too crowded to accommodate the spatial requirements of successive royal building projects, thereby bringing about the delineation of a distinctly defined lower

⁸² Campbell Thompson and Hamilton, who uncovered the possible remains of a Ninevite 5 temple, emphasized the possibility that an earlier temple could have occupied the same location (Thompson and Hamilton 1932:58-62 and see Stronach 1994:95 and note 71).

⁸³ See also Russell 1996.

⁸⁴ This speculation is based upon the evidence of an assemblage of Ninevite 5 sherds found about thirty years ago in a mounded area near the later Mashki Gate, north of Kuyunjik, as well as the identification of other elevated areas in the same vicinity that would seem to be a result of successive, early occupations.

town.⁸⁵ In this context, the excavations at the Mashki Gate led to the discovery of an inscription of Assurnasirpal I (1049-1031 B.C.) and this, combined with other evidence, contributes to the supposition that this distinctly elevated topographic unit to the north of Kuyunjik was by far the longest occupied area below the mound.⁸⁶

Sennacherib was not the first of the Neo-Assyrian kings to have engaged in building programs at Nineveh, though he appears to have been the first to proclaim it as his imperial capital, enlarging it enormously (fig. 13 represents the extent of Sennacherib's city). For many previous kings, however, it had been an important royal city.

Assurnasirpal II rebuilt the Temple of Ishtar and also chose to build a palace on Kuyunjik, as did his three successors (see Russell 1996:159-162). Sargon II also constructed a palace, and built one new temple while restoring two others (Stronach 1994:97).

In addition to its long and important position in the history of the Assyrian empire, Nineveh was characterized by certain other factors which recommended it as an appropriate location for the capital city of an increasingly expanded and prosperous empire, most notably its geographical location at the heart of the regional network of the empire. Oates and Stronach have each summarized the many advantages of the city's location, which were essentially three-fold. First, it was located at the natural center of the well-favored eastern part of the (north Mesopotamian) rainfall zone. Second, it commanded one of the best and most frequented crossings of the Tigris River. Last but not least, it was situated at a natural road junction where a broad belt of fertile and well-watered country stretched away to the north and east; and even the more arid steppe zone to the southwest could have helped to insulate the city from attack (Oates 1968:21 and Stronach 1994:7).

85 Apropos the identification of a Middle Assyrian presence in the Lower Town, Stronach (1994:96, note 81) concurs with Wilkinson's assertion that Middle Assyrian ceramics are not always easily recognized, especially when found in proximity of Late Assyrian assemblages (Wilkinson 1990:57), a situation which unfortunately still holds true in some areas today.

86 See the reports of Estes, concerning the epigraphic evidence, and Lumsden, concerning the excavations in the vicinity of the Mashki Gate, in the forthcoming *Nineveh I*.

Sennacherib enlarged the existing town, enclosing an area of seven-hundred and fifty hectares within an immense circuit-wall twelve kilometers in circumference pierced by at least fifteen gates.⁸⁷ This new enclosure comprised Kuyunjik and the lower area immediately to the north, and incorporated additional land directly east and further south, including the mound of Nebi Yunus which came to serve as the city's arsenal. The north-south axis of the city plan, therefore, took advantage of the protection of the Tigris river on the western side and, roughly parallel to the river, the presence of a long, raised ridge to the east of the city.⁸⁸ The oblong city was bisected from east to west by the Khosr River, which ran along the south flank of Kuyunjik, where remnants of a stone river wall were traced. Stone has remarked that although it is as yet unclear whether the Khosr served to divide the city into different functional zones, given the dominant position of Nebi Yunus with its stores for tribute and armorers' workshops, as well the evidence of certain finds recovered from the southern half of the city, it can be suggested that this southern half may have been largely given over to the needs of the military (Stone 1995:247).

Sennacherib memorialized his monumental efforts at urban planning in numerous inscriptions (Luckenbill 1924). The king's texts reveal that considerable amounts of open space within the walls were devoted to plazas, gardens, fields and a zoological park, and as Stone contends, the large areas may, at least in part, be the result of their function as military camps (ibid. 247), as was perhaps the case at Kalhu and Dur-Sharrukin. It is also noticeable that the high ground inside the northeast angle of the city wall reveals very little indication of settlement (Lumsden 1991; Stronach and Lumsden 1992). The agricultural needs of this ambitious urban scheme were augmented by Sennacherib's extensive system of canals and aqueducts (see Reade 1978).

⁸⁷ Russell notes that in Sennacherib's texts, the number of gates reported differs from earlier to later texts, increasing from 14 to 15, then 18 (Russell 1996:162).

⁸⁸ The ridges in the northeast were surveyed in 1989 and 1990 and revealed only traces of settlement (Lumsden 1991; Stronach and Lumsden 1992).

The overall functional organization of the city seems to follow that of the other Assyrian capitals. That is to say that the principle secular and religious institutions - the Southwest and Northwest Palaces and the Temples of Ishtar and Nabu - stood on the main citadel, while the lower town was mainly occupied by the domestic structures of the rest of the populace, a component of which was likely to have been the imperial army. Nebi Yunus no doubt substituted for "Fort Shalmaneser" at Kalhu and for "Palace F" at Dur-Sharrukin, both in function and in location, as an intrinsic part of the city's ramparts. In the case of Nineveh, however, there is more information concerning the nature of the settlement in the lower town, whereby at least two distinctly different residential quarters were identified, one with smaller rather humble private houses, and the other with spacious houses of more standardized construction. In addition to the houses, related streets have been located as well. It should be noted, however, that the most significant information has been obtained from excavations in the northern half of the city, that is, to the north of the Khosr.

Near the Mashki Gate, on the western side of the city, two large streets were revealed, one of which seems to be axially coordinated with the gate. Another street appears to run perpendicular to the first, directly parallel to the fortification wall. The nature of the structures in two separate areas of the excavation and the artifactual assemblages associated with them have lead the excavators to propose an urban fabric composed of at least two distinct neighborhoods (Stronach 1994:102). In the first case, perhaps a densely-populated artisans' quarter composed of flimsy buildings, was found evidence of ceramic and other industrial production. And in the second instance the work revealed, in the vicinity of the Mashki Gate, a series of large well-constructed houses of a type comparable in plan to examples found at Assur. Unfortunately, the unfinished excavations in each of these "quarters" has not produced any evidence of a unified planning scheme. It is significant, however, that these separate areas reveal the presence of

separated zones wherein habitation was seemingly based upon social stratification and occupation.

IV.2. Provincial capitals and regional centers: selected case studies

IV.2.a. Dur-Katlimmu (Tell Sheikh Hamad)

The city of Dur-Katlimmu (fig. 14) is but one of a number of urban centers which are known to have been created by the Middle Assyrian kings in the process of re-establishing control over formerly-held territories. It is, however, one of the most extensively excavated and well-documented examples of a Neo-Assyrian regional center, and it is located in an area of the provinces which had considerable strategic importance throughout the Assyrian empire. The archaeological record of the site of Tell Sheikh Hamad documents the site's long history of settlement, during which it was transformed from what was probably a small village in the late fourth millennium B.C. to a sprawling provincial capital and perhaps a royal residence in the Late Assyrian period, known by Middle Assyrian times by the name of Dur-Katlimmu.⁸⁹ Situated on the east bank of the lower Khabur river, it is just south of the 200 mm. rainfall zone in an area of the Jazira which can be considered to have been the natural hinterland of the Assyrian capital at Assur (Kuhne 1995:69), to which it was linked in the Middle Assyrian period by a direct road via Tell Umm 'Agrébe (Pfalzner in Bembeck 1993:92-94). Moreover, it is known that the city was situated on a branch of the *hul sarri* (royal road) (Kessler 1980:227-229). By the Late Assyrian period, therefore, the period of the city's greatest extent, not only was it well-placed within the network of traffic routes across the steppe, but it benefitted from being located on the major east-west route of the Assyrian empire.

⁸⁹ The name of the settlement in the Late Assyrian period remains unknown (Kuhne 1998, especially 286). The development of settlement at Dur-Katlimmu has been summarized by Kuhne (1998; 1991:29 ff.). Reports are to be found in the series *Berichte der Ausgrabung Tall Seh Hamad/Dur-Katlimmu* (see especially vol. IV (1996) for bibliography).

The earliest mention of Dur-Katlimmu in Assyrian texts is contained in military itineraries ascribed to Tukulti-Ninurta, which were the basis for the identification of the site as the city of Dur-Katlimmu (Rollig 1983:279-284). Archaeological surveys in the region as well as a number of relevant epigraphic discoveries collectively attest to the continued Assyrian control of the lower Khabur region through the so-called "dark age" from 1207 to 910 B.C. (summarized in Kuhne 1995, see particularly p.72 ff.). The epigraphic evidence which supports the contention of continued Assyrian control of the region is currently comprised of a collection of tablets recovered from the site (Rollig 1978; Kuhne 1974/77; idem 1978/79) as well as three other inscriptions of considerable significance.⁹⁰ Together with supporting archaeological evidence from Dur-Katlimmu and from other sites in the region, they provide virtually continuous testimony for the existence of both Assyrian occupation and for the existence of local dynasties, clearly loyal to Assur, in the lower Khabur valley from the time after the death of Tukulti-Ninurta I (1254-1207 B.C.) until the re-establishment of centralized Assyrian power during the time of Adad-Nirari II (911-891 B.C.) (Kuhne 1995:74-75). As mentioned earlier in section II.1.b., Kuhne contends that the data relating to Dur-Katlimmu represents evidence of two crucial factors in the interpretation of the history of Middle Assyrian imperial administration. First, Assur never totally lost control over the lower Khabur region from the Middle to Late Assyrian periods. Second, the nature of the Middle Assyrian administration in this area can be characterized as a "territorial empire" (in the terminology of Liverani [1988]) as opposed to a "network empire" which may have still existed in the more westerly part of the empire, as is perhaps represented by the Middle Assyrian levels at the sites Sabi Abyad and Tell Chuera (Kuhne 1995).⁹¹

The city itself may have remained inhabited throughout the "dark age".

Archaeological evidence from a palace documents its reuse in the twelfth century.

⁹⁰ These inscriptions are to be found in the following publications: Pfalzner 1989-90:212-221; Maul 1992; Lampert in Cogan and Eph'al 1991:314-319.

⁹¹ See Akkermans et al.1993:1-52; Bartl 1990:10-32.

Although no archaeological evidence has been recovered to indicate that the city was inhabited in the eleventh and tenth centuries its existence, at least in the eleventh century, is confirmed by the "Broken Obelisk", dated to the time of the Middle Assyrian king Assur-bel-kala (1073-1055 B.C.). While this inscription seems to imply that this king fought against Aramaeans at Dur-Katlimmu, it has not yet been determined with certainty whether the city was under Assyrian control at this time or whether it was, in fact, the Aramaeans who actually held control (see Kuhne 1998:280-284). It is clear that in the Middle Assyrian period, Dur-Katlimmu held a certain degree of significance to the central Assyrian government. The city stood at a crucial position guarding the southwestern imperial frontier near the Middle Euphrates, and it could have secured the stretch of the Jazira between the Tigris and the Khabur rivers. Moreover it was, at least temporarily, the residence of a *bel pahete*, a governor whose control extended over much of the western territories of the Assyrian empire (Kuhne 1998:292). The site seems to have functioned as a provincial center at the apex of the hierarchically-organized settlement system, greater in size and rank than other centers and subcenters. All of the settlements in this three-level system were probably controlled by the capital at Assur (see Ergenzinger and Kuhne 1991:184-187 and chapter III of this paper).

The Assyrian foundation of Dur-Katlimmu has been attributed, like that of the capital Kalhu, to Shalmaneser I (Kuhne 1991:29ff.) who, it will be remembered, actively engaged in building programs throughout a wide range of territories (see chapter II.1.b.), although it appears from the archaeological record that this "foundation" was probably, in reality, a change in function and status. Following the pattern established during the preceding Mitannian and Old Babylonian periods, the settlement area continued to be comprised of a citadel with an associated lower town covering an area to the east of the citadel, both comprising about fifteen hectares. This arrangement would remain during throughout the Late Bronze Age into the Iron Age, and it was not until the Late Assyrian period, during the eighth century, that the town was enlarged considerably. In the late

tenth and early ninth century B.C., the Neo-Assyrian kings, most notably Adad-nirari II, Tukulti-Ninurta II and Assurnasirpal II, successfully re-established a political claim to the region of the lower Khabur but this period is not documented at the site.

The settlement at Dur-Katlimmu underwent a complete transformation during the eighth century. Sometime around 750 B.C., the city was restructured and extended considerably. A new lower town was founded to the northeast of the citadel and these two urban components, comprising fifty-five hectares, were both enclosed within a circuit wall. In addition to this intramural area, new extramural settlement was built surrounding the town to the north and east. The overall extent of settlement appears, therefore, to have been in the region of approximately one hundred and ten hectares; less than half the size of the Neo-Assyrian capital Dur Sharrukin, for instance, but a good deal larger than other Neo-Assyrian urban centers such as Balawat, at sixty-four hectares (Curtis 1982:118), Tell al-Rimah, at about thirty hectares (Postgate et al. 1997), Tell Billa, at about fifteen hectares (Speiser 1932:250), or Tell al-Hawa, which probably did not exceed fifteen hectares during the Late Assyrian period (Wilkinson 1995:146). Kuhne asserts that in size alone, Late Assyrian Dur-Katlimmu presents a city "too large to have been a secondary town" (Kuhne 1995:81), and therefore must have served as an important regional center, perhaps having a specifically military function (Kuhne 1995). The interpretation of the function of a site is, of course, based on more than its size, and other factors support the identification of Dur-Katlimmu as a Neo-Assyrian regional center, its relative size being only the most obvious factor.

Excavations at the site have concentrated in two areas of the lower town, and the results of over twenty years of excavations seem to suggest that the entire lower town was given over to bureaucratic functions. In this regard, the excavations have already revealed an organizational formula not produced at any other Assyrian site. Unfortunately, contemporary levels have not been excavated on the citadel, but it is suggested that its

elevated confines might have been occupied by a palace for a high official [perhaps the governor], and some temples (Kuhne 1994:65).

The excavations in the central area of the lower town uncovered at least four residences of officials, one of which was decorated with wall paintings. This area was bounded on its northern side by a street running northeast-southwest. The northeast corner of the lower town is where the aforementioned palace was located, as well as two official buildings and two private houses, all within an area further articulated by two streets and open areas. One of the houses contained workshops and artifacts of industry (Kuhne 1987-88:142). In a sense, as Kuhne has acknowledged, this palace area is like "Fort Shalmaneser" at Kalhu, incorporated into the northeast corner of the city's ramparts (Kuhne 1994:64), but it forms a more cohesive unit. The architecture in this section is especially noteworthy because it combines elements of both the traditional Assyrian palace scheme and elements of the Aramaic *bit hilani*, a situation which seems to document the co-existence of both Assyrian and Aramaic traditions, at least in the seventh century B.C. (Kuhne 1987-88:144). It is assumed that the extramural settlement areas represent the location of the domestic quarters for a considerable proportion of the remainder of the inhabitants.

In the case of Dur-Katlimmu, the associated epigraphic evidence helps to define the historical sequence of the site and supports the Late Assyrian identification of these structures. The city also happens to follow the pattern of Assyrian capitals, in that it takes a quadrangular shape in plan. Perhaps the most significant information produced from the excavations at Dur-Katlimmu, at least within the context of this study, is that the urban spatial and functional organization of a regional capital does not necessarily conform to the urban pattern of the Assyrian capital cities, and the morphology of citadel/lower configuration town does not necessarily imply a citadel occupied by administration and a lower town devoted to the populace. Nor, for that matter, is the functional separation between the citadel and the lower town necessarily complete. At this regional center,

official residences were interspersed with smaller houses and workshops. The relatively light fortifications surrounding the town, consisting of walls that were three meters thick, led the excavators to suggest that the walls were not intended to withstand formidable attack, but rather to delineate urban territory within the agricultural area, and to perhaps limit access to the inner city by the inhabitants of the surrounding region, many of whom would presumably have been resettled deportees of varying backgrounds (Kuhne 1994:67).

IV.2.b. Kar Shalmaneser (Til Barsib, Tell Ahmar)

The site of Til Barsib was situated at an important crossing-point on the Euphrates and on one of the main routes of communication between Assyria and its western territories. In 856 B.C., Shalmaneser III captured Til Barsib and re-named it Kar Shalmaneser (Luckenbill 1927: paragraph 599 and see Tasyurek 1979:47-54). It was, at the time, a royal city and probably the capital of the formidable Aramaean city-state Bit-Adini. The existing high tell overlooking the Euphrates became the location for Shalmaneser's palace, and the city was enlarged by the addition of an extensive, walled lower town (fig. 15). During the reign of Tiglath-pileser III, Til Barsib became the flagship center of Assyrian rule in the west, and it continued in this role throughout the balance of the Neo-Assyrian empire (Postgate 1992:259). Notwithstanding its western location, firmly embedded in the Neo-Hittite and Aramaean cultural sphere, its official architecture and architectural decoration stand out as quintessentially Assyrian (Bunnens 1997:28), even if its material remains tend to be referred to as "provincial Assyrian" (*ibid.*, and see Postgate 1992:259).

The significance of the city within the Assyrian empire, attested to in the epigraphic record, was probably to a large degree predetermined by its regional location. The use of *karu(m)* in the new name indicates the importance of the city's commercial role (Winter 1983:191; Tadmor 1975:38). Winter has discussed the commercial importance of the

control of the city of Til Barsib within the context of Assyrian expansion (Winter 1983:190 ff.), and indeed others have emphasized this commercial as well as territorial aspect of the Assyrians' interest in the west.⁹² The history of the Assyrian involvement in the region of Kar Shalmaneser has been closely linked with Sargon's definitive conquest of Carchemish (Winter 1983:192-193), and a number of organizational and architectural similarities between the two cities have been discussed elsewhere (see Mazzone 1995:190; Winter 1983:181ff). Although they are on opposite sides of the Euphrates, these two city mounds are separated by only about thirteen miles, so they would have been within site of each other as they are today. The city-state of Carchemish, the last major North Syrian state to hold out against Assyrian territorial expansion, was only brought to submission after the Assyrians had managed to obtain control of its access to crucial trade routes and effectively isolated it from its neighboring allies (Winter 1983). By occupying Til Barsib, which commanded the important river crossing, the Assyrians were initially able to avoid confrontation with the powerful city-state, while continuing to take advantage of and eventually control the route west and north to important sources of raw materials and tribute, as well as traffic along the Euphrates, until such time that Carchemish was eventually worn down, at which point Til Barsib (Now Kar Shalmaneser) achieved pre-eminence in the region as capital of the newly absorbed province. Kar Shalmaneser joined the other significant sites of Guzana (Tell Halaf), Harran, and Arslan-Tash on the main route of communication between Assyria and the western territories.

The city appears to have reached its maximum extent during the Assyrian occupation, but the extent of earlier Luwian and Aramaean settlement is not known. Texts written in Luwian attest to its importance during a Luwian occupation (Hawkins 1983) and a subsequent Aramaean presence is documented in part by Aramaean inscriptions that were also found at the site. The site, however, had a still longer occupation. The earliest

⁹² Notably, Levine's 1976 treatment of East-West trade in the Late Iron Age and see Tadmor 1975.

ceramics recovered have been from the Ubaid period. The excavated Iron Age levels at the site thus far are representative only of the last phase of Assyrian occupation and possibly the period immediately subsequent to the fall of the Assyrian empire (Bunnens 1997:18-20).

The city's fortification wall today forms a great semi-circle enclosing about sixty hectares, the "diameter" of which is the Euphrates river. The limits of the city may have extended to the opposite banks of the river, therefore, and the actual shape taken by the fortification walls may have taken the form of a complete circle. This circular plan seems closer in spirit to the North Syrian cities of Arslan Tash and Zincirli, rather than the traditionally Assyrian quadrangular plan, and like Carchemish (fig. 16), the city had a tripartite division. A walled acropolis, originally about twenty-five meters above the surrounding plain, commanded a central position overlooking the river. Extending over three hundred and fifty meters west of the acropolis was a "middle city", advantageously constructed on a natural plateau, ten to fifteen meters higher than the lower city, which comprised the surrounding area to the north and east. The circuit wall was pierced by at least three gates, one of which was excavated by Thureau-Dangin (1936 and see Roobaert in Bunnens 1990:126-135). This latter gateway, the "Lions' Gate", has been dated to the time of Shalmaneser or soon thereafter (Roobaert:132-133). Traces of a road have been detected in the lower town, indicating a possible thoroughfare linking this gateway with the citadel (Bunnens 1997:20), where the first phase of Assyrian palace construction also dates to the reign of Shalmaneser.

Assyrian occupation from the seventh century has been uncovered at several points in the lower town, revealing a diverse range of building types and construction techniques, all dated by the excavators to the seventh century. Near the "Lions' Gate" were found "poor structures" of apparently domestic function, and domestic structures were also found in two other areas, though of more substantial construction. In one area, a large architectural complex indicated several periods of occupation, during which one of the

buildings underwent a change in function, from the house of a wealthy resident to an industrial area used for weaving and dyeing (Bunnens 1992:1-13). A second, adjoining building was characterized by an entirely different construction technique and at least two features which mark it as a typically Neo-Assyrian house form: the particular type of reception room (on the plan, Room VI, and see Castel 1992:91-93), and the *liwan* in the west corner of the courtyard (number VIII on the plan).⁹³ The excavators suggest that this second building was therefore the residence added on to the first building once it had been turned over to industrial use. One might suggest as well, that such a transition from purely domestic to increasingly commercial use is analogous to the transformation of the city itself throughout the Assyrian occupation. From its original function as a western base of Assyrian political power, the city prospered as an important provincial capital at a strategic point on the western trade network. Beyond noting the interspersed functional organization of this sector of the lower town, with residential and industrial units in close proximity, it is as yet impossible to detect any other spatial or functional differentiation within the city, except for the fact that the palace was of course built on the heights of the existing tell overlooking the river.

IV.2.c. Megiddo

Megiddo's long record of occupation attests to its long-held strategic importance in the history of Israel but the city was, along with Hazor, among the first of the northern kingdoms to succumb to Assyria's power. The massive defensive wall and the palace complex of Stratum IV, which was ultimately destroyed by the Assyrians, must have served as a "very suitable base" for the launching of "two thousand charriots and ten

⁹³ In his 1997 article on Til Barsib (p.22 note 14), Bunnens summarized the many existing parallels for this feature. They include examples from Assur (the "Large House" and "Red House" in C. Preusser, *Die Wohnhauser in Assur*, Leipzig 1954, pl. 17 and 11a respectively), Dur-Katlimmu (H. Kuhne, "Tall Seh Hamad/Dur-Katlimmu 1988-1990," *Archiv fur Orientforschung*, 40-41 [1993-1994], fig. 90), and Arslan-Tash (the palace and "Batiment aux ivoires", F. Thureau-Dangin et al., *Arslan-Tash*, Paris, 1931).

thousand soldiers" that the combined forces of Syria and Palestine mustered against the Assyrians at the battle of Qarqar in 853 B.C. (Kenyon 1971:104-5). By 733 B.C., Tiglath-Pileser III annexed the coastal, northern, and Transjordanian regions of Palestine to Assyria and converted them into provinces. It is generally assumed that Megiddo was taken by Tiglath-Pileser during the course of his campaigns in northern Israel, in either 734 or 733 B.C. Although the city is not mentioned by name in the texts of this king, it appears in later province lists, and is considered to have been the administrative center of the province. Following the usual Assyrian policy, the population of Megiddo was deported and displaced by other groups forcibly transferred from elsewhere in the Assyrian empire.

It may be said that, on the whole, the methods of Assyrian control in these territories did not generally include the construction of new urban centers, and even at sites where an Assyrian presence is detectable in the archaeological record, Assyrian occupation is generally not extensively documented, and architectural features which can be assigned to this period with some certainty are not numerous. The architectural remains which have been ascribed to an Assyrian imperial occupation are characterized by distinctive architectural conventions, including uniform groundplans, building materials and elements, but in some cases a related artifactual assemblage supports the interpretation, as for example at Tell Jemmeh, where Assyrian "palace ware" was found in association with architecture of possibly Assyrian influence if not construction (see van Van Beek 1984). The cumulative evidence for Assyrian imperial building within Palestine has been summarized by Reich, derived from the sites of Hazor, Gezer, Buseireh and Tell Jemma, in addition to Megiddo (Reich 1992:214-222). At Samaria, the capital of the northern kingdom of Israel ~~which was conquered~~ by Sargon II in 722 B.C., there is a notable absence of Assyrian remains (Crowfoot et al. 1942; Reisner et al. 1924). It has been suggested that the Assyrians may have re-used the existing palaces, or that they established their military and civil center away from the main mound, in the plain to the north,

following the example at Hazor (Reich 1992:219), and this situation may have prevailed at other cities throughout the region in question.

Megiddo, however, is an exceptional example of an Assyrian provincial center because the architectural remains dating from the Late Assyrian period unearthed at this site are not only extensive but unique, being the only existing example of a complete Assyrian town plan constructed according to a unified scheme (fig. 17). We have already discussed the unified planning scheme applied at the Assyrian capital Dur-Sharrukin, but nothing is known of the town plan at that city apart from the excavated citadel areas. At Megiddo the Neo-Assyrian city differs drastically from the preceding Iron Age city and can be seen as a cohesive, imposed settlement based on organizational principles having no parallel at any contemporaneous site in Palestine. Although the Assyrians destroyed the existing city, they incorporated certain elements of its fortifications within their newly-planned foundation, specifically the fortification wall and the main water supply. The existing citadel upon which the Assyrian city was established is quite limited in extent compared to the other provincial centers discussed in this study, covering only slightly more than five hectares in area (Herzog 1997:212).

The excavations at Megiddo provide a very clear record of the change in the city's function, although the exact dating of the Iron Age levels have not been fully clarified.⁹⁴ Evidence from Stratum III represents a new foundation attributed to the Assyrians which was built above destruction levels of the existing town (Lamon and Shipton 1948). Prior to its destruction, the citadel was mostly given over to large administrative, non-residential structures including palaces and storehouses within a solidly-built inset and outset wall having one monumental gateway and perhaps a secondary entrance on the opposite side of

⁹⁴ The interpretation of the historical and functional aspects of the development of Megiddo continue to be a source of debate arising, perhaps, from changes in the terminology for the strata applied by successive excavation directors and publishers (See *Megiddo I*, [Lamon and Shipton, 1939] and *Megiddo II* [Loud et al., 1948]). In addition to the excavation reports, among the sources consulted herein are Herzog 1992 and 1997; Kenyon 1971; Kempinski 1989; Reich 1992.

the enclosure. Limited residential structures were located on the north side of the city near the main gate, but it is estimated that at this time, administrative structures accounted for 82% of the total built area within the citadel. Compared with the Assyrian imposed city, in which probably only about 30% of the built area was accorded to administrative functions (Herzog 1997:229), the dramatic change in the nature of this city under the Assyrians becomes readily apparent.

With the Assyrian refoundation, the summit of the citadel was no longer reserved for official buildings, though the Assyrians did construct four administrative buildings within the citadel walls. However, the remaining area was covered by private houses laid out in a series of rectangular *insulae* according to a grid-plan. The plan, while not rigorously geometric, is based upon standard modules of measurement. The *insulae*, consistently twenty to twenty-three meters wide, are arranged into parallel bands divided by straight streets that are two and a half to three meters wide. These streets run roughly north-south but have no particular focus other than to divide the housing blocks; they culminate at the circuit wall, and the space between the circuit wall and the housing blocks is not wide enough to allow for the presence of a full perimeter road, since it is barely passable in some places. All of the houses were accessible from at least one of the north-south streets, though a number of east-west streets interrupted the *insulae* at seemingly arbitrary intervals. The longest east-west street leads to the town's main water supply. The private houses, of varying size and arrangement, show no Assyrian influence in their form. It may therefore be concluded that, after establishing the overall plan of the street network, the Assyrian authorities left the building of the individual houses to the local population (Herzog 1997:255). Since this region was resettled with populations of deportees, it is likely that the population within the city was comprised of groups imported to replace the former population. The changes in the population were not, however,

absolute. The material culture at Megiddo reportedly does not contain a great deal of material definitively attributed to Assyrian origin or influence.⁹⁵

The public buildings, massed along the northern ramparts, share characteristics that, as Reich has noted, are unquestionably Assyrian (1992:216-218). The Assyrian levels apparently comprised two successive construction phases, according to evidence obtained in at least two of these buildings (Herzog 1997:255). In plan, three of the four large buildings consist of a large central courtyard surrounded by rooms, with one side arranged in a double-row reception suite. In addition to such features as door sockets, niches in the reception rooms, and bathrooms, all of which are details characteristic of Assyrian palace construction, each of these structures was placed on a two-meter high platform. This feature, which was probably intended to enhance the monumental quality of these administrative structures and which was a feature common to many Neo-Assyrian palaces, perhaps took on a role of more than usual importance at Megiddo, where the structures housing the authorities shared the same planar and visual space as the structures housing the subjugated population; therefore, the separation between the those in control and those being controlled was not distinct.

IV.3. Identifying a Neo-Assyrian System of Town Planning: Archetypes of Urban Form and Spatial Organization

IV.3.a. Problems in the Archaeological Record

There are several major challenges in seeking to identify a system of urban planning that can be ascribed to the Neo-Assyrian empire. The definition of the term 'town

⁹⁵ Concerning the relative lack of specifically Assyrian material culture on the citadel, Kempinski contends that, as Reich suggested for the situation at Samaria, Assyrian occupation may be more evident to the north of the mound, where large "Residency Buildings" have been located but not excavated (Kempinski 1989:103). Bourke, however, takes exception to this suggestion and posits the view that the large buildings to the north may equally be ascribed to Neo-Babylonian or Persian occupation (Bourke 1996:61, note 13).

planning' as it applies to this discussion has been dealt with in the introductory chapter of this paper. Let us now address the limitations inherent in the archaeological record. As mentioned earlier, traditional archaeological excavation is spatially limited, usually providing only a partial views of a settlement's layout and organization often from many different periods, making it difficult to distinguish the qualities defining the degree of cohesiveness, or lack thereof, in the urban plan. Certain technical advances have made it possible to forego extensive excavation while still obtaining a considerable amount of insight into the architectural arrangement of a town, and several projects have in recent years produced valuable information based upon various alternative site survey strategies.⁹⁶

In addition to being spatially limited, the archaeological record of Assyrian settlements is also limited by what Liverani has termed the "problem of visibility" endemic to the archaeological recovery of all Mesopotamian cities (Liverani 1997:88-89), a consequence of both excavation techniques and the nature of ancient architecture.⁹⁷ Since the walls of residential structures were often constructed of mudbrick alone (and were therefore more prone to deterioration than the walls of larger and more substantial public buildings), they may also be under-represented in excavations. The lack of such evidence from the first systematic excavations in Mesopotamia in the early nineteenth century, at Nineveh and Dur-Sharrukin for example, contributed to initial collective interpretations that these cities were "the seat of despotic palaces, military arrangements, ceremonial buildings, but not the seat of a community of citizens" (Liverani 1997:89-90). Given the fact that most of the available archaeological data concerning the Assyrian empire has for the most part been derived from urban contexts, it may seem odd that in historical and philosophical

⁹⁶ See especially the reports on the site of Kerkenes Dag (Summers - Summers 1995, 1996), and work at the site of Mashkan-shapir (Stone - Zimansky 1992).

⁹⁷ The tactic employed in these early excavations primarily consisted of following lines of stone orthostats rather than recovering actual walls and building plans, as is evident in Layard's recording not of exposed surfaces, but rather the *miles* of relief work exposed (Layard 1853, in Liverani 1997:89, note 14).

discussions of the ancient city Assyrian, or more generally "Oriental", sites were for a long time not considered "cities" in the proper sense, but indeed this perception persisted throughout the nineteenth and early twentieth centuries (see Liverani 1997).⁹⁸

For the most part, evidence relating to the arrangement of streets and quarters at excavated sites is so patchy as to be virtually useless in determining underlying organizational principles. At the capitals of Kalhu and Dur-Sharrukin, only fragments of streets provide glimpses of spatial articulation, and although excavation and survey at Nineveh has produced some valuable clues regarding interior streets and roads, the evidence provides little more than a hint or two at a coherent street scheme. The most substantive information concerning interior organization of Assyrian cities is represented by evidence suggesting social stratification and functional differentiation, and the best evidence of this nature from a capital is to be found at Nineveh, with its separate quarters of elite residences and artisans workshops (see section IV.1.e. above). The regional center of Dur-Katlimmu also seems to be deliberately organized according to social and functional differentiation, but as at other sites, the streets that have been uncovered only delineate structures within the space without actually presenting a discernable street pattern.

The difficulty in identifying consistent patterns of urbanism is further hampered by the lack of a large, coherent body of data from which to draw parallels. Ideally, the identification of internal urban patterns of spatial organization, architecture, infrastructure, and most certainly the underlying ideological principles shaping those patterns, necessitates the review of a broad a base of urban settlements that are at least roughly contemporaneous and preferably geographically related. The chronological and geographical limits of the

⁹⁸ Just after the exhibit of Assyrian reliefs in the British Museum in the mid-19th century, Karl Marx wrote about Oriental cities, implying a similarity to enlarged royal camps (Marx-Engels 1963:250-254). Writing in 1870, Burckhardt, who was not only familiar with Layard's discoveries but saw them as irrelevant, wrote of the "rude royal fortresses of Nineveh" and "their miserable architectural sculpture" (Burckhardt 1905:65). The urban theorist Weber, writing from 1890-1920, considered the Oriental city to be an organizational entity based on the institution of the royal residence, not necessarily a community based on the concept of citizenship (Weber 1921:621-772). These interpretations of ancient Near Eastern cities are discussed by Liverani (1997), pp.85-93.

Neo-Assyrian empire may be extensive, but the number of settlements that have produced substantive archaeological information concerning urban planning traditions is relatively limited. Oates has remarked, "we must remember that when only a minute proportion of sites has been excavated, we cannot begin to define the 'typical' town or city" (Oates 1972:804).

Before any attempt is made to define planning patterns in urban settlements, it seems necessary to define the parameters of the discussion, that is, to begin by identifying and classifying the types of settlements being examined. The endeavor to define 'the city' has for some time occupied many scholars from a wide range of disciplines, and will therefore not receive further treatment here. A succinct yet comprehensive survey of contemporary literature dealing with the topic of the ancient city has been conveniently provided by Van de Mierop (1997:19-22; 98-100). It will suffice to say that although in this study 'city' has been used interchangeably with 'town' in some instances, an important distinction is to be made according to a settlement's function and relative status. Assyrian urban settlements which are designated as capitals in contemporaneous texts can clearly be classified as cities, and towns with royal residences may be referred to as cities as well. Since it is virtually impossible from textual and archaeological information available to distinguish between other 'towns' and smaller cities, these will be classified herein as 'urban centers', a second type of urban entity the definition for which has been provided by Kuhne (see below). A further distinction may be made, mostly in terms of relative size but also in terms of function, between urban centers and villages. Van de Mierop defines a village as: "a rural settlement of limited size, whose inhabitants are primarily involved in agricultural production or in a specialized aspect of industry, for their own needs and for the needs of the inhabitants of a neighboring city" (1997:12). While the interdependency implicit in this definition between the village and the *neighboring city* may not necessarily be applicable in the context of Neo-Assyrian cities, this definition of 'village' seems otherwise appropriate to our purposes. While it may be futile, as Oates has argued, to

attempt to define the "typical" Neo-Assyrian city or town, it is perhaps reasonable at this stage to begin to consider some of the recurrent patterns of urban form and organization that have emerged in the context of excavations and regional surveys in areas inhabited by the Assyrians in the early first millennium B.C., as represented by the evidence from the urban centers discussed in this chapter.

IV.3.b. The Capital City Versus the Urban Center

The very few attempts that have been made in recent years to define the general characteristics of Neo-Assyrian cities have consistently been based upon evidence from the great capitals.⁹⁹ Although this information represents a significant portion of our knowledge of Neo-Assyrian urban traditions, it is nevertheless only part of the total picture of Neo-Assyrian urbanism. Indeed, since the capitals represent a specific class of settlement, each developing within a unique set of historical circumstances, it is conceivable that they should be considered separately from all other types of settlements within the empire. And, correspondingly, it is also worth suggesting that some classification of the urban centers outside of the Assyrian capitals can be achieved, based upon site function as determined by historical circumstances supported by corroborating textual sources and archaeological evidence.

The first step in classifying Neo-Assyrian settlements outside of the capitals is an examination of the term 'urban center', as each of the provincial and regional centers in this chapter fall into this category. From regional surveys it has been established that the common trend in the Neo-Assyrian settlement pattern throughout different regions of Upper Mesopotamia consisted of a numerous settlements of different size and function

⁹⁹ Two noteworthy additions to the study of ancient (including Assyrian) cities are L. Battini's "Opposition entre acropole et ville basse comme critere de definition de la ville mesopotamienne," *Akkadica* 108 (May-Aug.1998): 5-29, and M. Van De Mierop, *The Ancient Mesopotamian City*, Clarendon, Oxford (1997). Both of these works take into account settlement types other than those represented by the capitals.

within a hierarchical relationship presided over by the imperial capital (see chapter III).¹⁰⁰ While the application of the term 'urban center' is generally based upon criteria of size and population, and can therefore have variable meaning, in the context of this study it is used to describe those sites which are further characterized by other specific criteria, most recently summarized by Kuhne with reference to the urbanization of the Assyrian provinces (Kuhne 1994:55-56, following Kolb 1984 and Hofmeister 1980). According to Kuhne, to be classified as an urban center, a settlement:

- forms a topographical unit surrounded by a city wall,
- shows signs of being densely occupied,
- indicates, in its architecture, social differentiation and administration,
- provides clear signs of specialization, economic accumulation and distribution,
- functions as a central place.¹⁰¹

It will be noted that these criteria are met by each Neo-Assyrian capital city, but they define a great number of other settlement types as well. The most obvious physical distinction between the capitals and other urban centers is a great difference in size. The largest urban center discussed herein is Dur-Katlimmu, at one hundred ten to one hundred twenty hectares, which surpasses the size of the capital Assur, but the city of Assur as we have seen, remained primarily a religious center in the Late Assyrian period and should perhaps be considered in a class by itself. Kuhne sets a minimum extent for urban centers at ten hectares, and this seems a reasonable figure, even taking into consideration the regional variation in the Neo-Assyrian settlement pattern, which reveals a broad spectrum of settlement sizes and types. In this discussion therefore, sites below ten hectares in extent will be considered as villages, and as there is a paucity of archaeological information concerning these smaller settlements beyond a general identification from regional surveys,

¹⁰⁰ Battini has produced a classification of seventy sites dating to the Neo-Assyrian period, of which she is able to identify seventeen as "fortified sites", one as a "royal center" (Balawat), two as "provincial centers" (Tell al-Hawa and 'Ana Island, and the four capitals. While her work is no doubt useful, at the moment it is difficult to fully assess, since no clear indication is provided as to the specific evidence determining such classifications, and the origins of her data base are not obvious (see Battini 1998:13 especially).

¹⁰¹ 'Central place' is itself a heavily weighted classificatory term, the definition of which can be obtained in the works of, among others, Cristaller 1966.

there is as yet little opportunity to make any substantive statements concerning their interior spatial organization, although one might speculate on their function depending on the availability and applicability of related historical information concerning these sites. The discussion of the underlying planning principles of settlements dated to the Late Assyrian period will therefore be based upon the two main, distinct subsets of capital cities and urban centers, and although they represent two very different types of urban entities, consistencies in planning principles can be drawn from an examination of the characteristics of examples from within both categories, bearing in mind the different historical and regional circumstances of each city.

In the process of identifying a set of characteristics typical to Neo-Assyrian capitals and to urban centers, perhaps the most effective approach is, first, to distinguish between the description of those features having a direct bearing on the overall urban organization, and the description of those individual architectural features which must be perceived of as discrete elements within the larger whole. These architectural features can be seen to include palaces, temples, domestic structures, and gates. With respect to urban planning principles, the importance of these particular features lies in their location, their associative relationship with each other, and the nature of their integration within the urban space. In this regard they will figure in the discussion, but the individual characteristics of the architectural elements, such as details of construction or decoration, will be treated here only insofar as they may impact on the urban plan. However, patterns in the overall urban organization of Neo-Assyrian cities will become evident through an examination of the issues of site morphology, interior urban layout, and functional differentiation, as determined by the urban components which include the citadel with its temple/palace unit, the lower town, the "arsenal" mound, the fortifications, and lastly, the shape of the city within the landscape.

IV.3.c. Capital Cities: Kirhum and Adassum (Citadels and Lower Towns)

If one considers the Neo-Assyrian capital cities in terms of commonalities of urban form, internal spatial organization and structural articulation, it may be reasonable to put forward a model which can be seen as representative of the ideal Neo-Assyrian capital city.¹⁰² This model, or image, of the imperial capital can be described as an immense city characterized by a walled citadel, within which the central administrative and religious activities were enacted, dominating a surrounding lower town enclosed within geometrically-shaped walls, with a second citadel within given over to an arsenal. Each capital may not at all times have strictly adhered to the parameters of this admittedly rather generalized model, but it nevertheless serves the purpose of identifying those elements and innovations in planning which distinguish Neo-Assyrian capitals within the context of Iron Age urbanism in Upper Mesopotamia. It should be noted at the outset that some scholars prefer the term 'upper' or 'inner' city to the term 'citadel', particularly with regard to the original meaning found in relevant ancient texts (see Dossin 1972:112 and others in Battini 1998:6, note 16). When necessary, the appropriate distinction (upper, inner, or both) will be made in the case of each site discussed here. The Assyrian capitals are compared diagrammatically in figure 19.

The urban form comprising a citadel and lower town has a long history in Upper Mesopotamia, where it is represented by certain sites dating from the end of the third and beginning of the second millennium B.C., and it has even been suggested that its earliest manifestations can be located with relative precision to the region of the Khabur river in

¹⁰² It may seem facile or even impossible to formulate such a model at this stage in our knowledge of Late Assyrian urban traditions, given the limitations of the archaeological record and certain organizational differences that exist between each of the three main capitals (for instance, the coexistence of both administrative and domestic structures in both the upper and lower towns at Kalhu during certain periods). However, in the context of Neo-Assyrian urban traditions, the basic model proposed here is, in a sense, a distillation of the fundamental principles of Neo-Assyrian urban form as it is represented at the capital cities. The intent of such a model is to further the understanding of the ideological issues that may have contributed to the shaping of urban space.

Syria.¹⁰³ The appearance of this urban form in the landscape more or less coincides with the earliest appearance in Akkadian texts of the terms *kirhu* (or *kirhum*), referring to an upper city, and *adassum*, referring to a lower town in Akkadian texts from the early second millennium B.C. (see Dossin 1972).¹⁰⁴ Certainly the Assyrians were not the first city-builders to establish citadel cities; it can be seen as one of the predominant patterns for urban settlement for both intentionally-constructed settlements as well as those that were the result of gradual growth over time, and the use of this arrangement would increase significantly during the early first millennium B.C. (see Mazzoni 1995 and Bunnens 1995).

It was perhaps in application of this urban arrangement that the cities of northern Mesopotamia most clearly diverged from the prevailing pattern established at the earliest cities in the southern alluvium, in which the central focus of the city was the temple. The differences between the southern and northern Mesopotamian urban traditions have been discussed at length by Oppenheim 1964:129-134, Stone 1991:237-238, Battini 1998 and Van de Mieroop 1997:84 ff. The earlier temples and ziggurats of southern Mesopotamian cities were fairly consistently (although not exclusively) located asymmetrically within the city's plan, given visual emphasis by increased height.¹⁰⁵ Palaces, where they can be

103 Battini contends that this urban pattern is found in the remains of the late third millennium-early second millennium B.C. sites: Tell Leilan (Shubat Enlil), Tell Beydar (see chapter III of this dissertation), Tell Bati, Tell Hamidi, Tell Aswad Foqani and Tell Effendi (both recorded in the Tell Beydar area survey, see chapter III), Tell Khamira, Tell Barri, Tell Ahmadi, and Tell Mu'ezzar, all of which lie in northern Syria (Battini 1998:17). It should be noted, however, that a "lower town" may comprise, at different times, both a walled area as well as a surrounding unwalled settlement. This arrangement, found at for instance Shamshi-Adad's second millennium Shubat Enlil (Tell Leilan) is not necessarily found at each of the sites Battini lists here. While the important point may be the bifurcation into separate spatial and functional spheres, clearly there are different variations on the citadel/lower town arrangement, and the different aspects in each case should be taken into consideration in the investigation of the emergence of this city form in northern Mesopotamia.

104 Oppenheim has asserted that the term *kirhu*, appearing in texts from Mari, Chagar Bazar and Nuzi, is neither Akkadian nor Babylonian, indicating that it represents an alien feature (Oppenheim 1964:131).

105 See Battini 1998:16 for tables comparing the relative locations of temples, palaces, and citadels in Upper Mesopotamian from the late fourth through the early first millennium B.C.

clearly identified within the archaeological record may have been, according to Stone, located at some distance from the cultic area, a spacial relationship that perhaps reflects the opposing functions of the two institutions (Stone 1991:237-238).

The emergence of the *kirhu/adassu* city type has been attributed to the southern, specifically Uruk, colonization of Upper Mesopotamia. According to Battini, while the southern Mesopotamian city was focused around the primary institution of the temple, the installation of Uruk colonies in Syria and southeast Anatolia necessitated the creation of a dominant political elite responsible for controlling the acquisition and redistribution of raw materials for the central state. This new administrative entity required a new urban form, namely, the citadel with the closely-linked temple/palace unit, separated from the rest of the town by height and/or walls (Battini 1998:17). By uniting the temple and palace into one coherent architectural unit, a symbiotic relationship was established between the imperial administrative and religious institutions, while at the same time isolating them from the urban populace. Most commonly, these citadel towns were located along rivers and frequently the citadel unit was located laterally, along the city wall overlooking the river.¹⁰⁶ The lateral location commanding the river would have afforded the elites control of the riverine traffic. At some cities during the early second millennium B.C., the buildings within the *kirhum* were solely religious in character, while the palaces and administrative buildings were relegated to the lower town, as attested by excavations at, for example, Tell Leilan (Shubat-Enlil) and Qattara . The palace and administration, however, was still separated by a wall from the rest of the populace (Van De Mieroop 1997:85). Battini contends, though, that the unification of the two major urban institutions, the palace and the temple, within a citadel must be traced to at least the beginning of the second millennium B.C. in Upper Mesopotamia (Battini 1998:17).

¹⁰⁶ The Late Assyrian sites of Tell al-Rimah and Tell Balawat, which have centrally-located citadels, and the capital Dur-Sharrukin, which has a citadel that does not overlook a river, attest to the fact that these patterns were not universally applied in this period.

The location of the main citadel in Neo-Assyrian capitals was invariable; in each case it was situated against the city's ramparts. At Dur-Sharrukin and Nineveh, its projection beyond the line of the circuit wall seems to have been the result of an intentional emphasis on the function of the urban unit in the defense of the city, while at the same time according the institutions within it obvious visual, and therefore ideological, pre-eminence. Under the Assyrians the temple became subsumed into a larger administrative - religious complex, with the palace given equal or even increased space, and therefore increased significance. The cultic structures, however, still dominated the city by virtue of their height. The ziggurat would no doubt have exceeded any other building on the citadel. At Dur-Sharrukin, for instance, it is estimated that the top of the ziggurat reached a height of fifty meters (Place 1867-70/II:79), while the temples and palaces sharing the upper platform were, according to Sargon, eighteen meters high (Luckenbill 1927, paragraph 110; Loud and Altman 1938 II:20). Although a new practice was begun of placing the royal palaces on platforms, in all likelihood the temples remained the tallest buildings. It may indeed be the case that kings were prohibited from constructing any building with a height surpassing that of the temples. A late inscription referring to Assurbanipal relates that the king refrained from increasing the height of the walls of the palace of the crown prince for fear that they would rival those of the temple (Streck 1916:86).

A significant aspect of the Assyrian capitals is that the citadel is accessed *through* the lower town, a situation significantly different from that at, for instance, the Hittite citadel cities where secondary entrances to the upper mounds are consistently found. It should be noted, however, that the absence of evidence for secondary entrances to the Assyrian citadels may simply be the result of the vicissitudes of excavation. At both Kalhu and Nineveh, where the citadels were partially bounded by a river, a direct means of access to the bank would seem to have been logical. The separation, then, between the imperial administrative and religious realm and the rest of the city is sharply drawn, by walls as well as by height, but the separate functional zones are not entirely independent. In fact, from a

purely practical standpoint, perhaps the main benefit of locating the administrative and religious structures within a fortified citadel, typically placed against the town's ramparts, may have been the increased protection it would have afforded the city.

At Kalhu, as mentioned previously, there is evidence suggesting that limited areas of residential structures also shared space on the upper mound, and while some of these contained business documents implying the occupants were merchants, others may have housed imperial guards, military and state officials, and nobility, who had reason to be associated with the imperial activities taking place within citadel (Mallowan 1949:161-163; 1951:4; 1953:129-152). State apartments were a component of the citadel at Dur-Sharrukin, though separated from the inner sanctum of the palace/temple platform. At Nineveh, however, the citadel seems to have been restricted to imperial and cultic structures, even if certain lesser temples and royal buildings also stood in the lower town. Contemporary descriptions of both Kalhu and Nineveh and their surroundings reveal that extensive space within these citadels was given over to gardens, orchards and zoological parks (Stone 1995:245). The ancient mound of Kuyunjik, at Nineveh, is by far the largest of the capital citadels, at about forty hectares, while those at Kalhu and Dur-Sharrukin are each about twenty hectares.

The inner walls surrounding the citadels vary in size and construction from city to city, but it can be said that they are generally less substantial than the outer town walls, which might be expected given the fact that they were only a secondary line of defense. Inscriptions concerning Nineveh imply that Kuyunjik was enclosed within an encircling wall before Sennacherib's extension of the city (Russell 1996:160), and traces of a substantial stone wall have been uncovered in the most recent excavations at Kuyunjik, representing what appears to be the earliest of such walls around the high mound, dating to the Akkadian period (Stronach 1994:93). Inscriptions also relate that a protective river wall was built by Sennacherib to contain the flow of the Khosr, and a portion of a stone retaining wall has been located at the base of Kuyunjik, although this has not been linked

with certainty to the time of Sennacherib (Stronach 1997:319-320). Assurnasirpal II describes in his annals the construction of an enormous defensive wall around the high mound at Kalhu, and a portion of this wall was excavated by Mallowan's team (Mallowan 1950:158, 1953:38). The enormous dimensions of this mudbrick wall, faced with stone at the base, would have provided a formidable defense; it is estimated that it stood at least fifteen meters in height, having a width of thirty-seven meters wide where it was excavated. At Dur-Sharrukin, the inner city walls were constructed of mudbrick and were battered and plastered on their exterior faces. The estimated dimensions of these wall are twelve meters high, and they were considerably thick, measuring six to seven and a half meters in width (Loud and Altman 1938 II:18, 90). Apart from the case of Dur-Sharrukin, it would seem that from the preceding review of the fortification walls enclosing the citadels at the Assyrian capital cities, these walls were not so much constructed with the purpose of withstanding attack from a formidable outside force, but rather with the primary purpose of demarcating the separation between the official and sacred realm, and the common areas of the rest of the city. Secondly, perhaps, their protection may have provided a last refuge for the citizens under attack. The fact must not be ignored, however, that the walled citadel conveniently served the additional function of protecting the elites within from potential aggression by the townspeople outside and below.

A.L. Oppenheim has suggested that the kings of Assyria may have considered the urban unit of the citadel, containing the closely associated palace and temples, as a distinctive expression of their concept of kingship (Oppenheim 1964:133). Considering the fact that the citadel was the necessary dominant feature of every imperial capital, to the point that one was artificially created at Dur-Sharrukin, it seems safe to assume that as an organizational device it was particularly well-suited to the ideological attitudes and objectives of the empire, specifically involving the role of the king as high priest in the national religion. It may in fact be the case that the citadel with its palace/temple complex was so imbued with ideological potency that its usage as a planning principle was, at least

at certain times during the Assyrian administration of the provinces, reserved for specific administrative circumstances, such as a provincial capital. The archaeological record may contain evidence that the administrative arm of the empire was deployed over high mounds only at select sites having, presumably, considerable political or administrative significance within the regions under imperial control. Archaeological survey in the regions of the Balikh and the Khabur indicate that the predominant pattern of settlement in these outlying provinces in the Iron Age was the occupation of areas *below* existing tells and dispersed throughout the countryside. Evidence of Iron Age occupation *on top* of high mounds from the period of Assyrian involvement in the region, is attested at only a small percentage of the total number of sites surveyed, and these cases are mostly forts (see Chapter III). This pattern is not necessarily consistent throughout the Assyrian territorial regions, but may have been the result of administrative policies applied within a limited number of areas. The enactment of an Assyrian policy restricting high mound settlement to the imperial administrative sector, either formally applied or achieved *de facto*, is only hinted at by one known inscription. In a letter to Sargon from a high official, it is clear from the text that Sargon had issued an order requiring people who were living on existing mounds to remove themselves and build at the bottom.¹⁰⁷ Although the exact ramifications of this inscription are not certain, and it certainly does not constitute sufficient evidence for a settlement policy *per se*, it nevertheless represents an intriguing bit of information concerning the intentionality of Assyrian regional planning whereby settlement was monitored with an eye on the strategic, and perhaps ideological significance inherent in the spatial entity of the citadel.

107 The inscription is published by Parpola (1987, p.138, paragraph 34), who translates it as follows: "As to what the king my lord ordered: 'The people living on the mounds should come down and build *the fort*,' they have come down; should these ten fortified towns in the desert come down as well?..." Fales prefers: "The people living on tells should come down and build at the bottom" (1990:111).

IV.3.d. Urban Centers: Assyrian Principles of Planning Derived from the Case Studies

A review of the archaeological record of Assyrian occupation in the conquered territories of Upper Mesopotamia attests to the existence of many different modes of urbanism -- modes which varied widely according to the differing regional or political circumstances that had to be considered. There is, in fact, no one urban model for an Assyrian provincial capital or regional center, in the way that the citadel/lower town model can be said to represent a model for an Assyrian capital city. The case studies described above reflect three very different approaches to urban settlement which show few planning consistencies, but rather appear to have been specific responses to the administrative needs and existing geographical and cultural conditions within the areas in which they were situated. Dur-Katlimmu had existed as an Assyrian town in the Middle Assyrian period and continued into the Late Assyrian period, when the town was "stepped up", or urbanized, becoming a significant regional center. Kar Shalmaneser (Til Barsib) had been the royal city of an Aramaean kingdom which was conquered by the Assyrians in the ninth century B.C.), and under Assyrian rule it was transformed into an important provincial capital. Megiddo represents the one known example of a town plan that was introduced after the destruction of the pre-existing town, serving as a provincial capital of great significance in the Assyrian military conquests, control and administration within the western territories. Clearly, the transition from local center to Assyrian center, as was the case at Til Barsib and Megiddo, and from Assyrian small town to Assyrian regional center, as at Dur-Katlimmu, was achieved in each case through considerably differing methods. The question remains as to the degree of consistency that may have existed in the planning methods employed by the Neo-Assyrian kings. Perhaps the best approach to understanding of the planning principles inherent in Assyrian provincial urban centers is to identify the specific elements that made up the different strategies that the Assyrians employed in order to rule their far-flung domains.

The Neo-Assyrian city of Megiddo is characterized by certain qualities which distinguish it from the other centers discussed here. Indeed, it is distinct from other urban centers in Iron Age Upper Mesopotamia, and it clearly represents an isolated case of Assyrian urban planning. While it seems to have served essentially the same function as the Assyrian provincial capital at Samaria, the building program here is documented by dramatically different evidence. As mentioned earlier, the Assyrian orthogonal plan, supplanting the previous level that was predominantly composed of large public buildings, seems to have been laid out by the Assyrian authorities, while an indigenous or imported population built their individual houses within a newly-imposed grid. A grid is perhaps the most efficient organizational pattern, particularly for the planning of a new settlement being built in one continuous sequence, such as this was. Its simple logic lends itself to rapid construction, and issues such as ease of transport, communications, and control afforded by such a scheme may have been equally important (Kostoff 1991:103 ff.; Stanislawski 1946:106). Herzog notes that it is a generally preferred solution at settlements having social, political, or military importance (1992:247), and it is safe to say that Megiddo was one such settlement. It is, at present, the only Neo-Assyrian site showing evidence of the Assyrian use of a grid as a planning scheme, and although examples from other Assyrian sites indicating the orientation of streets and buildings in roughly orthogonal relationships may be scarce, Megiddo provides the most compelling proof that the Assyrian builders were well aware of the principles of grid-planning and were ready to employ them when administrative and topographic circumstances necessitated their employment.

In terms of Neo-Assyrian building programs in provincial urban centers in Upper Mesopotamia, Til Barsib may be compared to Megiddo only in the sense that it also documents a situation in which an existing city was transformed by the Assyrian kings into a provincial capital. The Assyrian occupation here shares certain characteristics with that of

the sites of Khadatu (Arslan Tash) and Tell Tayinat (fig. 18),¹⁰⁸ each of which was built up during the Late Assyrian period. The archaeological record shows that the Assyrians generally followed a consistent pattern in the processes of occupying these cities, which included taking control of the citadel as a focus for their administrative and religious buildings, constructing a lower town, entered through monumental gateways with carved reliefs in an Assyrian provincial style. It would seem that this particular pattern of urban occupation resulted in a model for provincial capitals that was not too different from the model of the imperial capital, at least in urban form, spatial organization and fundamental architectural components. Winter, who has dealt in detail with the Assyrian assimilation of outside influences in material culture and urbanism remarks, however, that "major political centers do not only 'influence', they also 'absorb'" (Winter 1982:367), and these sites in particular represent the Assyrian tendency to take on board local urban traditions within their own settlements. It is clear, for instance, as Mazzoni has indicated, that the increase in the construction of monumental buildings, and the growth of lower towns were two components of a process of urbanization that was already underway in this region by the time the Assyrians began actively incorporating the Luwian and Aramaean kingdoms into their provincial system beginning in the second half of the ninth century B.C. (Mazzoni 1995). The tradition of decorating gateways with carved reliefs has a long history in Syro-Anatolia tradition,¹⁰⁹ as do certain architectural features adopted by the Assyrians at these sites and elsewhere, such as the *bit hilani*. Moreover, the circular or partly circular plans of the three sites just mentioned can be said to show connections with the circular plan of Zincirli, which dates back to the late second millennium B.C. (Mazzoni 1995:191). The Assyrian towns at Til Barsib (Kar Shalmaneser), Arslan Tash (Khadatu) and Tell al-Rimah

108 Khadatu was probably an Assyrian foundation (Naumann 1971:230-231; Heinrich 1984:133-143; Kuhne 1994:60). The roughly circular lower town at Tayinat is dated no earlier than the end of the ninth century B.C. (Haines 1971; Mazzoni 1995:188). As mentioned earlier, the lower town at Til Barsib dates at least in part to the seventh century B.C. (Bunnens 1997).

109 Mazzoni notes that locally, the practice of decorating gates with carved reliefwork existed from at least the tenth century B.C. (Mazzoni 1995:191).

(Zamahu) all attest to the fact that in constructing their provincial centers the Assyrians could adopt the tradition of the circular town plan, and did not slavishly follow the pattern established in their capitals of laying out a quadrangular shape.¹¹⁰ It may be true, however, that the Assyrian tendency for building quadrangularly-shaped cities, as in the case of not only three successive capitals but also the regional centers of Dur-Katlimmu, may have provided the stimulus for the urban layout of a number of local urban centers, such as Guzana (Tell Halaf), the capital of the city-state of Bit Bakhiani, which has a walled rectangular outline and is dated to the early ninth century (Mazzoni 1995:186). As Bunnens has noted, "it cannot be entirely excluded" that such a layout is to be attributed to an Assyrian intervention (Bunnens 1995:120, 128). Just as the contact by Tukulti-Ninurta II and Assurnasirpal II from 890 through 859 B.C. may have inspired the building program at Nimrud, so perhaps were the Neo-Hittite and Aramaean kingdoms similarly inspired by Assyrian traditions in the construction of their urban centers.

It would seem that the Assyrians consciously adopted certain local urban traditions of spatial organization and visual representation in their urban centers when they were particularly suited to their purposes. The "non-literal borrowing" (as Winter has termed it, 1982:357) between Syro-Anatolian and Assyrian architectural and artistic traditions extended to the larger issues of urban form and spatial organization, not just in the capital cities of Assyria but in the provincial centers as well. Given the location of the cities just discussed within the cultural context of North Syria, and their function as the political and administrative focus for control by the central government, the Assyrians may have had even more reason to achieve a means of imperial representation that would have meaning to the local population. This means of representation, that is the methods of organizing and equipping cities, then became one of the defining factors of Assyrian traditions of

¹¹⁰ This contradicts the view of Naumann (1971:231-232), who contends that it is a quadrangular outline which most often serves to distinguish Assyrian foundations from other local urban centers. It should be noted that of the three towns mentioned here, Til Barsib's outline is overtly circular, whereas the outlines of the other two towns cannot accurately be termed true circles in the geometric sense.

urbanism. Winter contends, "developing centers may well incorporate external elements as they move to forge an appropriate visual vocabulary; but they will ultimately assimilate the stimuli and make of them their own" (Winter 1983:196 and note 99). The examples of Assyrian urban centers located in North Syria discussed here may also be representative of the nature of Assyrian patterns imposed on provincial settlements elsewhere in the empire, where the results may have again led to not mere replications of Assyrian imperial capitals, but to cities that were true amalgams of both Assyrian and indigenous urban traditions.

V. Conceptualizing 'The City' Through Assyrian Texts

V.1. The Symbolic Relationship Between 'The City' and the Assyrian Administration

The city functioned as both the political and the religious center of the Assyrian empire, and it does not seem an exaggeration to say that in Mesopotamian literature, cities were equated with civilization. According to P. Machinist, "the city - or sometimes more inclusively, the city and its rural environs it is understood to dominate" is presented in ancient texts "as the only viable setting for the cultivation of human behavior and achievement" (Machinist 1985:187-188). 'The city' seems to have been perceived as the creation of the gods, created for themselves as their earthly abode. A tablet found at Dur-Sharrukin, from about 700 B.C., well illustrates this concept:

When mankind was created
 When cities were planned in the country,
 At that time law was allotted to mankind.
 The gods Anu, Enlil, and Ea
 Determined a good fate,
 For the king, the provider of the country, for the shepherd who causes the country
 to be prosperous,
 They determined a divine destiny,
 For the cities they determined a divine destiny.¹¹¹

The texts can be quite specific when it came to attributing the actual construction of the cities to the gods, who do not only provide inspiration but are seen as actively engaged in the building process. An earlier text reveals the role of the deities as well as the concept of the city as the center of the universe:

Enlil, on the sacred place where you marked off your settlement,
 you built Nippur as your very own city.
 The Kiur, the mountain, your pure place, whose water is sweet,
 in the center of the four corners (of the universe), in Duranki, you
 founded.¹¹²

111 From "Tablet about everything needed for laying the cornerstone of a temple", translated by W. Farber in *Rituale und Beschwörungen I* (1987), pp. 241-244.

112 Hymn to Enlil, ll. 65-68, in A. Falkenstein, *Sumerische Gotterlieder 1*, Heidelberg, p.14. See Van den Mierop 1997, p.47.

The idea of the city being the home of a god or goddess seems to have had prehistoric origins in Mesopotamia. In the third millennium B.C., every city was closely associated with a patron deity; for example, Nippur with Enlil, Ur with Nanna, Girsu with Ningursu (Van De Mieroop 1997:46). This tradition persisted into the period of Assyrian domination in Mesopotamia, as specific deities were associated with specific cities; Assur, at the head of the national pantheon, associated with his namesake city, Ishtar with Nineveh and Arbela, Ninurta with Kalhu. Smaller settlements may have enjoyed the patronage of deities of lesser rank (Van De Mieroop 1997:48). The close relationship between divine personages and cities, especially with regard to the conception of cities might, at least in some measure, explain the apparent reticence of the Assyrian kings toward claiming responsibility for founding cities in their inscriptions; it would have been basically flouting tradition.

While the relationship between a specific city and its patron deity may have been established early in the Mesopotamian literary tradition, an equally important relationship existed in this literary tradition between the *kingship* and the city. Just as the city was perceived as originating from the divine realm, the origin of the institution of kingship was ascribed to the divine realm as well, and both the city and kingship were intrinsically linked. The Sumerian King List, for example, relates: "When the kingship was lowered from heaven, the kingship was in Eridu" (Jacobsen 1939:71, i 1-4). As a history of a succession of kings during the period from 2100 to 1700 B.C., the Sumerian King List expresses the ideology that not only were the cities the work of the gods, but the system of rule located within those cities was divinely determined and that, moreover, the institution of kingship was located in one city at a time. A particular formula, occurring twenty-four times in the King List, documents the beginning of each new dynasty by relating that the kingship had been transferred to a new city. The formula says, essentially, "*In such and such a city a person became king*" (Buccellati 1964:54, and note 4). The relationship between the kingship and the city is also evident in the Babylonian Chronicles, in which an

identical formula is repeated in several variations, to the effect that a certain king "sat himself on the throne" in Babylon (*ibid.*, note 5).

It is clear that within the Mesopotamian tradition, therefore, political and religious power were perceived of as contained within the city and, significantly, not so much within a state or a region. It should be remembered that this concept dates back to the period of city-state organization, when each state constituted a separate power. Although the texts such as the King List imply that kingship could exist in only one city at a time, this was in fact not the case in reality, as several city-states actually existed simultaneously. The King List may have provided convenient justification for the territorial control held by one city (Van De Mierop 1997:49). In some cases, Babylonian rulers continued to define themselves with reference to a specific city, such as "King of Kish", "Lord of Uruk", "King of the City of Babylon", even after the city had expanded beyond its original parameters into a territorial state (Machinist 1985:187; Van De Mierop 1997:49).

The Assyrian kings never referred to themselves as "King of the city of Assur" (Machinist 1985:187), although they did to a large extent continue to apply the idea of associating the kingship with that city. The city dynasty of Assur was in fact an ideological construct. The Assyrian King List, covering kings from the third millennium B.C. through Shalmaneser V (726-722 B.C.), does not reveal the fact that several kings did not consider the city of Assur to be their political capital (Van De Mierop 1997:49). For instance, Shamshi-Adad ruled from Shubat-Enlil and from the ninth century B.C. onwards, once Kalhu was chosen as the imperial capital by Ashurnasirpal II, Assur never regained real political importance, an issue that is reflected in certain texts. With Sargon's establishment of Dur-Sharrukin the association of the Assyrian kingship with the city of Assur essentially ended. With reference to the Assyrian kings, the Babylonian Chronicles regularly mention Assur as the name of the country, not necessarily the city.¹¹³ In the annals of the

¹¹³ *ina Assur ina kussi ittasab*, i 2, 27-28, 31; iii 38, as mentioned by Buccellati 1964, p. 54, note 9 in his discussion of the Babylonian Chronicles.

Assyrian kings, mention of enthronement is common, but there are few direct references to the city where enthronement may have taken place. Esarhaddon's annals state that the king 'joyfully entered Nineveh and sat on the throne', seemingly a fairly clear indication of the actual site of enthronement (Buccellati 1964:56). Similarly, but in a different textual context, it is related that Assur-uballit "sat on the throne in Harran to reign over Assyria", attesting to the fact that that once Nineveh had fallen the Assyrian kingship was relocated to Harran (from *Chronicles of the Chaldean Kings*, *ibid.*, p. 55).

The Assyrian propensity to perceive and depict cities as the center of both religious and political power, and indeed of civilization itself, extended beyond the borders of Assyria, whereby their city-centric view colored their descriptions - both textual and visual - of foreign powers. The application of this Assyrian ideology is well documented in the royal annals (see Luckenbill 1924; Van De Mieroop 1997:50-51), where it is clear that the city represented the sole repository of political power, and the Assyrians applied this ideology even in their descriptions of regions where cities were not the predominant form of settlement, and where the processes of urbanization had not necessarily taken hold. One of the most clearest examples of such a case in the annals is the account of the destruction of numerous cities in the marshes of the Persian Gulf by Sennacherib. In the account of his fourth campaign, Sennacherib makes the claim that in this region he 'destroyed', 'devastated', and 'turned into ruins' the cities of Bit-Jakin (in Babylonia) (Luckenbill 1924:35; Van De Mieroop 1997:50).¹¹⁴

We have seen that references to foreign cities appear in the Assyrian royal annals only on the occasion of their destruction, as a propagandistic device. Equally, the annalistic portrayal of the landscape of the enemy contributed to the propagandistic intent of these inscriptions, by describing the topography in perjorative terms. In a certain sense this

¹¹⁴ Sargon II and Sennacherib both waged wars against Bit-Jakin. Although it may seem unlikely that the population of this area in Babylonia was settled into cities, Sargon II claims to have deported 90,580 people from the city of Dur-Jakin and from adjacent areas (Oded 1979:64, and see note 168).

tactic can be seen in close association with the Mesopotamian tradition of perceiving 'the city' as 'civilization' as discussed above. As Fales has noted, however, in their description of enemy landscape, the Assyrian annals take this concept one step further, and by examining descriptions of the local, pre-Assyrianized landscape in the annals, it becomes clear that the Assyrians sought to portray themselves as not only a conquering force in enemy lands, but a civilizing one as well. Fales has identified this aspect particular to the Neo-Assyrian royal annals and his characterization is best conveyed in his own words:

"it is largely a landscape of connoted features, formed by the projection of the royal ideology onto a geographical-topographical reality...the enemy ekes out his not fully human existence in the wildest of human habitats and climes, be it mountain, desert, or marshland; while the Assyrians dominate an ordered and well-functioning countryside which reflects the fully intrinsic positivity of their actions and beliefs" (Fales 1990:91).

It has been already established that some of the inscriptions concerning Sargon's Dur-Sharrukin emphasized the wild, uncivilized condition of the region in which the capital city was located, while the city itself was accorded the requisite memorializing in building inscriptions (see Albenda 1986). Although in this case the depiction of the surrounding landscape as inherently uncivilized may have been intended to lend Sargon's grand gesture of building the new foundation a certain nobility, Sargon's emphasis on the uncivilized state of the rural landscape was by no means limited to the region of Dur-Sharrukin. In another inscription by the same king, a description is given of a route into Babylon:

"The country had been deserted from time immemorial. (In) the inaccessible tracts, thorns, thistles, and forests predominated over them; dogs and jackals gathered inside of them...In that desert country, Aramaean-Sutu, tent-dwellers, fugitives, treacherous ones, a race of plunderers, had pitched their dwellings, and stopped passage across it..." (See Machinist 1985:189)

The Neo-Assyrian kings therefore continued in their annals the long-standing Mesopotamian tradition of conceptualizing the city as the manifestation of civilization by juxtaposing the description of civilized urban space against descriptions of the wild, uncultivated rural landscape. Machinist has noted that, "Mesopotamian texts speak frequently of treacherous mountain passes, rivers in flood, expansive deserts, or murky forests which lay in wait and required heroic efforts to navigate" (Machinist 1985:188).

The city can sometimes appear as a metaphor for the civilizing achievements of the king and even at times, as mentioned above, as a symbol for the kingship itself. An example of just such a case is the "Psalms to Assur for Tukulti-Ninurta I" (Foster 1993:230-235). The text describes the struggle of the king against those who oppose him, and in the course of this struggle, the king's cities -- specifically, Assur -- stand as a bastion of strength and security against the constant threat of the forces of evil. The conflict between Tukulti-Ninurta and his enemies is presented as the clash of the civilized urban world created by the king against the barbaric hostile forces lurking in the countryside. The text relates:

The lands of one accord have surrounded your city Assur with a noose of evil,...
 All the onrushings of a flood are mustered against it,
 Your enemies and foes are glowering at [your standing place?],
 The lands crave day and night for the destruction of your wondrous sights,
 Everywhere they seek to overthrow your cities,...
 None of the lands has regard for your city.¹¹⁵

The negative depiction of non-urban life was frequently enhanced by the stereotyping of nomadic or mountain people in the texts, as is evident in the passage from Sargon's inscription quoted above. In fact, this perjorative depiction of the nomad seems to have been traditionally linked with the conception of the city as civilization very early in the Mesopotamian literary tradition, and can be traced back in texts to the third and second millennia B.C. (see Van De Mieroop 1997:42-46; Machinist 1985:187-191). It persisted as a literary theme into the first millennium B.C., and in Neo-Assyrian texts, nomads are frequently referred to by ethnic labels seemingly left over from earlier days, in terms that can be seen more as "literary heirlooms" (Machinist 1985:189) than accurate ethnic characterizations. The Neo-Assyrian kings, by categorizing nomads by the names of peoples who had in fact long since disappeared, such as "Gutians", they effectively portrayed them as backward, ungodly barbarians existing outside the benefits of urban life. In depicting rural, especially enemy, landscape as wild and hostile, and in portraying its

¹¹⁵ I am very grateful to Mario Liverani for mentioning this text as an example of the juxtaposition of the city versus the uncivilized world in Assyrian sources.

inhabitants as regressive and uncivilized, the Neo-Assyrian annalistic texts created a dramatic foil for their conception of the Assyrian city as the embodiment of imperial ideology and achievement, and this conceptualization contributed to the justification of their territorial ambitions.

V.2. *New Foundations*

Within this study thus far, it has been contended that one of the primary characteristics of urbanization in the Assyrian empire was the pattern of founding new cities. The examples of new foundations cited in this discussion seem to effectively support this contention, from Old Assyrian Shubat-Enlil, through the Middle Assyrian city of Kar Tukulti-Ninurta and the subsequent Neo-Assyrian capital city of Dur-Sharrukin, as well as numerous urban centers documented in the archaeological record. The foundation of new cities during the Iron Age is a topic which has received considerable scholarly attention of late (for Assyrian cities, see especially Liverani 1994 and for Luwian and Aramaean cities, Mazzoni 1994). At least one scholar, however, challenges the notion that founding new cities was a characteristic specific to Assyrian urbanism. J.-L. Huot asserts that the Assyrian city plans most frequently pointed to as new foundations do not accurately attest to a pattern of '*ex nihilo*' settlement since, on the whole, these cities did not tend to survive with the same form, function and status after the death of their founders. In other words, most city plans that are viewed as Neo-Assyrian are the result of cumulative phases of building and rebuilding, obscuring or obliterating the originally founded town plan. At the same time, Huot contends, the Neo-Assyrian cities were actually settlements imposed on pre-existing towns and cities and therefore would not qualify as *foundations* but were, more accurately, *refoundations* (Huot 1990:215-216 and see Van De Mieroop 1997:62). Huot's argument has merit when applied to certain specific cases, especially the capital cities.

The Assyrian kings clearly engaged in the *transference* of capitals and royal cities, as was discussed earlier in this dissertation, in the context of "disembedded capitals." Of the capitals and royal cities, however, only Kar Tukulti-Ninurta and Dur-Sharrukin were in fact proclaimed in inscriptions as new foundations at virgin sites. However, in the archaeological record of the Neo-Assyrian empire there would appear to be a sufficient number of instances of smaller Assyrian urban settlements, other than capital cities, which qualify as true and enduring new foundations, many of which have been mentioned in Chapter I herein. Moreover, much of Upper Mesopotamia was subjected to resettlement programs enacted by the Assyrian kings during the ninth century B.C. and later - programs which were accomplished through the creation of a whole range of new settlements - from urban centers to smaller towns, hamlets and farmsteads. While not capital cities or royal centers, these lesser settlements nevertheless qualify as new foundations, and constitute an important part of the Assyrian urbanization of Upper Mesopotamia.

The most widely known instance in Assyrian texts in which the foundation of towns attributed to someone other than a king or deity is the stele of Adad-nirari III from Tell al-Rimah, mentioned earlier in this paper (see section II.1.e), which describes a large-scale program of resettlement undertaken by the provincial governor, Nergal-eresh, at the request of the king. Significantly, the section of text containing this description, reconstructed from vestiges of the script, was erased in antiquity. The proclamation of his role as the founder of hundreds of settlements, including one bearing his name, may have been too explicit an indication of the degree of power attained by this ambitious governor, even in the province of Resappa, which had been relatively uninhabited until the Neo-Assyrian recolonization (Dalley 1984:193 and 200). By holding power over large numbers of people in his role as governor of the provincial army, Nergal-eresh may have ultimately represented a threat to the king, and as Dalley has pointed out, by naming a town after

himself Nergal-eresh trespassed into the territory normally reserved for kings and deities (Dalley 1984:200).¹¹⁶

As there seem to be only two firm instances of Assyrian kings claiming credit for the foundation of capitals or royal cities (i.e., those described by Tukulti-Ninurta and Sargon II), it is reasonable to conclude that the attitude of those in power towards the act of founding a city can be characterized as having been one of ambivalence (Van De Mieroop 1997:53). There are numerous instances of settlements being named after Assyrian rulers, but while this does imply close association between the ruler and the city, it does not necessarily imply responsibility for the city's foundation. Additionally, there is a long tradition of royal projects attested to in Assyrian texts of renovating or enlarging existing structures and existing cities, and these projects are often described in considerable detail. The restoration of individual components within Assyrian cities, and in particular the restoration of temples is an activity claimed consistently by successive kings. It is considered to have been an act undertaken by the king symbolizing the assumption of royal functions in the city concerned, emphasizing political prestige (Oates 1972:802). There is also a tendency in the inscriptions to commemorate the construction or rebuilding of city walls, palaces, gates, and roads, but the formula almost always includes attribution of the original feature to a preceding ruler -- a circumstance which essentially defines the construction in question as an 'improvement' or 'embellishment'.

Inscriptions related to the rebuilding of an entire city are considerably rarer.

Assurnasirpal II established his capital at Kalhu, but repeatedly stressed in his inscriptions

¹¹⁶ Evidently, whatever threat this ambitious governor may have posed to the throne, the close relationship between Nergal-eresh and the family of Adad-nirari helped to ensure his political stability, as he continued to hold important offices throughout the reign of both Adad-nirari and his successor, Shalmaneser IV. However, Dalley cites one cuneiform text which may indicate that an attempt was made to curtail his power even during Adad-nirari's reign (see N. Postgate, "Neo-Assyrian Royal Grants and Decrees", *Studia Pohl*, Series Maior 1 1969, pp. 115-117 as noted by Dalley 1984:200, and note 40). While the idea is compelling that the erasure of the stele text was intended to obliterate any mention of a mere mortal founding a city, it has been suggested that the record of Nergal-eresh's achievements on the stele may instead have been removed in light of his leading role in the revolt in Kalhu in 745 B.C. (Postgate et al. 1997:41 and see Oates 1968a:128 ff.).

that it was an ancient town built by Shalmaneser, 'an Assyrian prince' who preceded him (Grayson 1991, sec. A.0.101, especially numbers 23 and 26). Even in the case of Sennacherib, who chose to be closely associated with every aspect of his massive building project at Nineveh, his inscriptions emphasize two crucial points. First, following an established Mesopotamian tradition, Sennacherib states that the city itself was the result of divine inception. He describes Nineveh as a city "whose plan had been designed from old, and whose structure had been made beautiful along with the firmament of heaven" (Luckenbill 1924: 94 ff). Although Sennacherib clearly sought to depict his construction projects as heroic in scope and scale, he absolved himself of actual responsibility for their conception, invoking the names of the deities who also conveniently legitimize his kingship: "...Assur and Ishtar, who love my priesthood, and have called me by name, showed me how to bring out the mighty cedar logs..." (Luckenbill 1924:107).

The effort and resources required for such a momentous endeavor as the foundation of a new city must have been immense, and it would seem logical that, given the penchant of Assyrian kings to boast of their own accomplishments, instances of such royal undertakings would always receive prominence in the texts of the Assyrian kings. In reality, however, the textual documentation specifically mentioning newly-founded cities is relatively limited, with the result that on this subject, at least, the Assyrian kings seem to have been uncharacteristically circumspect.

Concerning the new foundations of Kar Tukulti-Ninurta and Dur-Sharrukin, we have noted that in relevant texts ascribed to their founders, emphasis was given to the fact that these two cities were newly-founded on virgin sites. For example, Tukulti-Ninurta's inscriptions relate that his new city was built, "opposite my city Assur, on the bank of the Tigris, in the wastes of the flooded fields, where neither house nor dwelling existed, (where) neither rubbish nor earth had been poured, and (where) bricks had not been laid" (Luckenbill 1927:58). While extolling his accomplishment on one hand, however, Tukulti-Ninurta's inscriptions also emphasized that that the new city was intended to complement,

not replace Assur, as its close proximity to Assur, and its role as a religious center, was repeatedly stressed. Sargon's texts similarly emphasized the uninhabited nature of the region in which Dur-Sharrukin was to be located: "None of the three hundred and fifty ancient princes who before me exercised dominion over Assyria and ruled the subjects of Enlil, had thought of this site, nor did they know how to settle it, nor did they think of digging its canal or setting out its orchards" (Weissbach 1918:180). In emphasizing the wild, untouched character of the city's location, Sargon may have been attempting to portray himself as a ruler successfully expanding the cultivated area of Assyria, and the role of his new foundation as a cornerstone for his program of civilizing the area (Van De Mieroop 1997:60). In describing the construction of his city, he even goes so far as to compare himself to Adapa, one of the seven primordial sages who "gave mankind all that constitutes civilized life," which included introducing the building of cities (P. Schnabel 1923: 253-254; Van De Mieroop 1997:61). Perhaps by couching his foundation of Dur-Sharrukin in the terms of a program of civilizing new territories, and by depicting himself in the guise of the great civilizer, Sargon was attempting to present his act of foundation in the most acceptable light possible.

De Mieroop suggests that in the Mesopotamian tradition within which the Assyrian kings emerged, it is likely that the foundation of a city was considered an act of *hubris*. While there may be many instances of inscriptions relating to the commemoration of *components* within cities in the Assyrian empire (such as temples or palaces), the issue here is the lack of textual documentation referring to the foundation of the city *in its entirety*. When examining the circumstances surrounding the few cases of proclaimed large-scale foundations, it does seem as though ~~the~~ textual record reflects a certain lack of auspiciousness. Sargon of Akkade may have initiated the pattern of founding and proclaiming new cities in the third millennium B.C., as mentioned earlier, Van De Mieroop maintains that this act came to be viewed as having profoundly negative ramifications. As related in the *Chronicle of Early Kings*, "He (Sargon) dug up the clay pits of Babylon and

built a replica of Babylon next to Akkad. Because of the wrong he committed, the great lord Marduk became angry and wiped out his people by a famine, and he was afflicted with insomnia" (*Chronicle of Early Kings A*, ll. 18-23, translation in Glassner, *Chroniques mesopotamiennes*, 219. See Van De Mieroop 1997:59).

Following Sargon's Agade, the second well-attested new foundation is that of Kar Tukulti-Ninurta. It has been suggested that Tukulti-Ninurta's rapid construction of the new city opposite Assur may have been at least in part motivated by the need to escape the wrath he incited by attacking the city of Babylon (see Joffe 1998:557). His subsequent assassination brought an end to the significance of his new city. In the case of Tukulti-Ninurta, like Sargon, his sacriligious treatment of Babylon, the long-exalted city that was at times perceived as the center of the universe in Mesopotamian tradition,¹¹⁷ may in fact have been the critical act of *hubris*. As a final example of the inauspiciousness associated with the founding of cities, the Neo-Assyrian period provides one obvious example. Sargon's death in battle about one year after the inauguration of Dur-Sharrukin very likely led to the subsequent transference of the capital to Nineveh, a city with a long and eminent history, and hence a suitable stage for the continued evocation of the divinely sanctioned royal rule.

V.3. The Concept of Town-Planning in Assyrian Sources

The search for motivation in the planning practices of the Neo-Assyrian kings is a difficult endeavor. While descriptions of their building programs and projects exist, often in quite detailed form, there is a paucity of information relevant to the explanation of the planning principles that were involved. In this regard, it is perhaps useful to remember the statement once made by A.L. Oppenheim, with reference to self-consciousness in Mesopotamia in general. Oppenheim asserted that, "The first shortcoming in texts from

¹¹⁷ The only surviving world map from Mesopotamia dates from the first millennium B.C. and depicts Babylon at the very center (Van De Mieroop 1997:43).

Mesopotamia is the consistent absence of any expression of that civilization's uniqueness in the face of an alien background" (Oppenheim, in Machinist 1985:184 see note 3).

Although this comment specifically concerns the issue of self-consciousness in Mesopotamia, it is equally applicable to the case of Neo-Assyrian royal building projects. As we have seen, those inscriptions which deal with or refer directly to newly-founded cities and settlements in the Neo-Assyrian empire largely omit any mention of overall planning concepts, except to ascribe ultimate responsibility to the gods. As mentioned previously, the underlying motives for this omission in the textual sources may be rooted in the concept of cities as being divine creations, which may have consequently resulted in a reticence towards claiming responsibility for the foundation of a city. In addition to the tendency to credit divine inspiration, the formula of pointing to the dilapidated state of the existing city was regularly employed at the outset of a royal building program. Concomitantly, it has been illustrated (in chapter IV herein) that it is possible to identify certain patterns of planning, in terms of architectural components and layout, that were seemingly applied with consistency in the capital cities and urban centers of the empire. It is unfortunate but true, however, that for the most part these patterns exist, at least in the present state of our knowledge, in something of a vacuum due to the silence on the part of the Assyrians in explaining their application. The result of this apparent silence is that we are left to speculate on the motivations behind the most momentous, and perhaps most fundamental, aspects of imperial city planning.

Geographical location is certainly a primary characteristic of an urban settlement, but typically the **Neo-Assyrian** kings provide scant clues as to their intentions in this regard. While it is clear ~~that~~ the location of a city obviously depended upon numerous factors, both environmental and political, even in the case of new foundations, where the situation of the settlement was clearly intentional and not spontaneous, the Assyrian texts seem to display no overt preferences or requirements. It has been noted that although texts indicate that divination held an important place in Mesopotamian society, there is a marked

lack of omen readings determining the propitiousness of the location of a new city (Van De Mieroop 197:57). De Mieroop refers to one omen series which seems to provide rare insight into the location of cities, the *summa alum*. Although only a few entries concern the location and layout of buildings, it significantly begins with the warning, 'if a city is located on a height, the inhabitants of that city will not prosper'.¹¹⁸ The admonition against settlements in high places may not have been taken to include settlement on top of previously existing tells, as this was common throughout successive periods in Upper Mesopotamia, but this text calls to mind order by Sargon preserved in a letter from one of his regional administrators (discussed above, in chapter IV and see note 107), whereby the people living on tells were instructed to move to the bottom of the mound to build.

Whether there is any connection between the omen series and the king's injunction cannot be established. It is nevertheless a possibility that the location of new foundations on high places would have been perceived of as competing with the older, established citadel towns, specifically the capital cities. It is perhaps significant that the one true example of a Neo-Assyrian newly-founded capital, Dur-Sharrukin, was constructed on a relatively flat point of the upland plains having no topographic prominence. The earlier city of Kar Tukulti-Ninurta was similarly located on a gently undulating stretch of land, across the river from the older, and higher, city of Assur. In any event, the *summa alum* represents at least one instance of regulating the location of cities in Mesopotamia.

Perhaps the most obvious characteristic of Assyrian royal cities and capitals is the explicitly quadrangular shape that the overall layout takes in the landscape. The origins of this pattern have been traced to a variety of different sources, but the Assyrians themselves provide no rationale. Neither the inscriptions of Sargon recounting the difficulties in constructing Dur-Sharrukin, nor those of Tukulti-Ninurta, which refer in some detail to the construction of the component parts of the new city, show any awareness of the fact that

¹¹⁸ See A. Guinan, "The Perils of High Living: Divinatory Rhetoric in Summa Alu" in H. Behrens and M. Roth (eds.), *DUMU-E -DUB-BA: Studies in Honor of Ake W. Sjöberg*. Philadelphia, 1989, as referred to in Van De Mieroop 1997:57, note 22.

their city walls were laid out as discrete geometric shapes. Most recently, Parpola has stressed the connection between the Assyrian usage of square groundplans for their major urban centers and the Mesopotamian tradition of representing the universe as a square (Parpola 1995). The Neo-Assyrian royal city of Balawat formed a virtually perfect square (see Oates 1974 and Tucker 1994). Rectangular town plans were employed at the cities of Dur-Katlimmu and at the possibly Assyrian-influenced town of Guzana (Tell Halaf), as well as in rough form at Nineveh, where the existing topography clearly restricted the imposed quadrangular shape of the city form (Stronach 1997:311).

Given the cosmological foundations of the conception of 'the city' as they are presented in Mesopotamian sources, there would seem to be a strong likelihood that the quadrangular city form was chosen specifically for its symbolic import, and that its prevalence should not be explained as being simply the most expedient usage of mudbrick as the primary building material. A significant aspect of the quadrangular arrangement of circuit walls in Assyrian cities is that although it implies an adherence to geometric principles of planning, the result is not one of rigid symmetry. Although it is virtually impossible to define the relationship between the circumvallation and the interior arrangement of these cities due to the lack of archaeological data (except in the case of Megiddo and in patchy areas throughout the other capitals and urban centers discussed in chapter IV), it seems safe to say that the outline was not necessarily a determining factor in the internal organization of these cities. In other words, the city form was not so much a means to an end (such as efficient control, transportation, or communication), but was more likely an end in itself, having some symbolic meaning which remains elusive. It is, however, puzzling that such a unique¹¹⁹ and fundamentally important planning principle, applied with such consistency

¹¹⁹ The square shape was not unique in the history of Mesopotamia; older examples in existence were the Old Babylonian city Shaduppum (modern Tell Harmal) in the Diyala region, and Harhadum (Khirbet ed-Diniye), on the Euphrates from roughly the same period. See T. Baqir, *Tell Harmal*, Baghdad, 1959; C. Kepinski-Lecompte, *Haradum I, Une ville nouvelle sur le Moyen-Euphrate (XVIIIe-XVIIe siècles av. J.C.)*, Paris, 1992.

by the Assyrians, and certainly not achieved without advanced planning, should receive no particular acknowledgement in the textual records of the empire.

A.L. Oppenheim suggested that the quadrangular city form arose from the Assyrian tradition of constructing military camps (Oppenheim 1977:134).¹²⁰ Indeed, Assyrian military camps could take the form of a square enclosure, but other layout options were employed for camps as well, including oval or barrel shapes, circles or rectangles, as is illustrated by the many representations of such camps on the Balawat Gates (see especially Tucker 1994:112-116). The contention that the Assyrians adapted the plan of military camps for their cities leaves unanswered the question of why the square or rectangular plan was preferred over the other options. It would seem strange, considering the importance accorded urban life in Assyria, and the compelling literary evidence attesting to the fact that cities were considered the divine abode, that in seeking inspiration for such exalted entities, the Assyrians would turn to a prototype that was temporary in nature and military in function. It seems more likely that Mumford's characterization of the Mesopotamian city may be applied to the Assyrian city: "The city..is a model...of the real world, the significant world, the world representing a wider cosmic order" (Mumford in Kraeling and Adams [eds.] 1960:237). To the Assyrians, perhaps, with its cosmological associations, the quadrangular city form was the most effective visual expression of the imperial ideology and identity.

V.4. Akkadian Terminology Concerning Settlement Types

In order to fully comprehend the scope and scale of the urbanization of the countryside of Upper Mesopotamia under the Neo-Assyrian kings, some attempt must be made to identify the terminology used by the Assyrians in describing the different types of settlements which they encountered, occupied and established during the course of their

¹²⁰ Liverani argues that the earliest interpretation of Assyrian capitals as military encampments had its roots in Western prejudices, and these prejudices persisted into at least the period in which Oppenheim made this assessment (see Liverani 1997:86-87).

imperial expansion. It would be ideal to be able to then correlate these terms of urbanism with the archaeological evidence of settlements, to arrive at some concordance between the terms used in the Assyrian sources and the sites documented in the archaeological record. At this stage, however, it may be only possible to attempt to produce a kind of catalogue of settlements based upon the direct application of certain descriptive terms in Assyrian epigraphic evidence. As the settlement pattern in Upper Mesopotamia during the Late Assyrian period has become better understood, and the number and type of sites of identifiably Late Assyrian date has steadily increased over recent years, the correspondences between Assyrian settlement and Assyrian texts are becoming more firmly drawn. It is therefore useful to consider some of the most prevalent terms used to describe settlements in the Neo-Assyrian texts, according to their definition from contextual associations.¹²¹

Cities and Towns

Beginning with the largest urban entity, the city, the most commonly used term by far also happens to be one of the most vague in its application. *Alu* can mean "city or town", but can equally be used to refer to smaller settlements, or even parts of settlements. Fales observes that in a tablet from Carchemish, *alu* refers to a village of only sixteen families (Fales 1995:100), and in the Harran census a settlement with as few as seven families represented such a unit. It is a word applied to the entire city of Nineveh, as well as sections within it (Van De Mieroop 1997:10). Oppenheim contends that it applies to "every permanent settlement consisting of houses made of sun-dried mud bricks and sometimes even to agglomerations of huts and other forms of shelter constituting an administrative unit" (Oppenheim 1964:115). Fales argues that since the term *alu* is used in such a wide range of contexts, its meaning must be analyzed carefully in each case, as to

¹²¹ This discussion is based largely on the work of M. Fales (1995), M. Liverani (1992) and A.L. Oppenheim (1964).

whether it connotes city, town, village, hamlet or farmstead (1995:101). There are, however, specific terms that are used to define each of these particular settlements as well, which will be discussed presently.

Royal Cities, Fortified Cities, and Fortresses

There are many different designations for cities or towns. The Assyrian settlement system was characterized by one prevailing capital, but any number of "royal cities" could exist at one time. The term used, *al sarruti*, seems to have been applied to towns at which a royal residence (*bet sarri*) was established and it was used by the Assyrians with reference to cities within the local settlement system in Upper Mesopotamia, although normally only one was ascribed to each local kingdom. In addition to the royal residence, Liverani has suggested that in general these cities would have shared certain other common components; the standard urban composition would have been walled, containing a palace, a treasury, and a harem, and was "therefore coincident with a bureaucratic and redistributive organ" (Liverani 1992:125). In the case of the local settlement system, the royal city served as the capital of the state as well. Ikeda has noted that distinguishing a city by its administrative importance as the capital of a local state (as opposed to other fortified cities) was a phenomenon not occurring in the Assyrian texts before Assurnasirpal II (Ikeda 1979:77), during the early ninth century B.C. Assyrian royal cities could be as large as Kar Tukulti-Ninurta (at least 240 ha.), and as small as Balawat (64 ha.).

While royal cities were fortified, other fortified cities were identified by a separate designation, *al dannuti*. In the Assyrian annals, these cities are usually associated with specific leaders or groups. Often they would be linked with the name of a ruler, referred to as "his fortified city", but in some situations where the local organization may have been more tribal, the chosen term might be "their fortified city". The use of this term appears in Assyrian inscriptions from the reign of Tiglath-Pileser I onwards (1114-1076 B.C.) (Ikeda 1979:76). Assyrian texts often describe complex fortifications systems protecting each

city. Assurnasirpal II seems to have been particularly impressed with the fortified cities in the region of Nairi, for instance; his inscriptions relate that some cities had multiple walling systems, possibly as many as four city walls (Liverani 1992:125, note 492). These strongly fortified local cities stood as the main resistance against Neo-Assyrian expansion and, perhaps not surprisingly, in the Assyrian annals emphasis is frequently given to the difficulties in conquering them. Kaprabi, in Bit-Adini, for example, "hovered like a cloud in the sky", while the citadel at Pitura, on the Tigris, was like "a mountain peak" (op.cit., Ikeda). Not all sites falling under this rubric were necessarily large; *al dannuti* seems to have been used to describe installations that were essentially more fortified spots outposts than settlements, including small castles or mountain fortresses. The consistency in usage appears to have been the element of fortification, and when a place name is recorded without this designation, it is implied the place was not walled (op.cit., Liverani).

The term *birtu* was another designation for "fortified city", although in certain contexts its meaning seems to have been closer to that of "fortress". In some royal inscriptions it is used with reference to Assyrian military bases in distant lands (op.cit., Ikeda, p.77 and note 17). The construction of one such military base is documented in a Neo-Assyrian letter, in which the author describes constructing a royal palace with an image of the king placed therein, and the settling of two hundred people (Fales op.cit., p. 90, but see note 42 in Fales for a differing translation). Very few smaller fortresses of Late Assyrian date have been identified and excavated in Mesopotamia, although they do exist in the archaeological record. Therefore, it is at this point impossible to identify the typical features of a Neo-Assyrian fort with any certainty, or to determine whether this type of settlement could be even be characterized by any consistent dimensions or set of features. The eleven forts recorded and discussed in Abdul-Amir's survey in the Haditha Dam region of northwest Iraq, which is discussed in chapter III, document the many variations of this particular Neo-Assyrian settlement type. It is to be hoped that these examples represent the beginnings of a more refined understanding of the archaeological characteristics of this type

of site, which has thus far received little attention, and will lead to an increased awareness of their presence in future survey and excavation work in Mesopotamia.

Cities associated With Larger Cities

In addition to royal cities and fortified cities, the Assyrians used a more general term for the many lesser urban and rural centers in the region of larger cities, and they described them by the term, *alani sa limeti*, "cities in the neighborhood", or "cities in the environs of (a place)". As the term expresses a relationship between a smaller subsidiary settlement and a larger city of greater rank, it seems generally indicative of rural settlements, and in fact Liverani has suggested that its usage implies *only* agricultural villages (op.cit., Liverani). Fales contends that it defines a relationship that is not only topographic but also administrative; i.e., the smaller rural site must be perceived of as specifically under the authority of the named, larger settlement (op.cit., Fales, p. 93).

Villages, Hamlets, and Farmsteads

One of the smaller settlements identified in Assyrian texts is the *kapru*, which is generally taken to mean "village" or "hamlet". Fales notes that the term, appearing only sporadically in Assyrian royal inscriptions, especially those dating from the early first millennium B.C., may indicate settlements devoted to agricultural production. As in the case of forts, it is at this stage difficult to assess the consistent features of the site class *kapru*, in terms of size, structures, or specialized production. It is known that a *kapru* could comprise as few as one or two families, and therefore may represent a single rural holding (op.cit., Fales, pp. 102-105). Given the above information, it seems reasonable to take the term to mean "farmstead".

The Neo-Assyrian settlement hierarchy, therefore, could be described as having had as many as six different levels of settlements (if one includes local royal cities, at a lower rank than Assyrian royal cities) grouped according to size and rank, in which the power of

the empire was concentrated and through which the culture of the empire was disseminated. The imperial administration was maintained in the prevailing capital, the *alu*, which was equipped with the most elaborate fortifications and fixtures. The second-level cities were the Assyrian royal cities, *alani sarruti*, which served to implement the administrative, commercial, military, and propagandistic aims of the capital.¹²² Of lesser rank and size were the fortified regional and provincial centers, the *alani dannuti*, which functioned as the focus for political and economic control by the central administration in outlying districts. Following these in rank and size were smaller towns and villages associated with larger towns, the *alani sa limeti*. Finally, smaller farmsteads and hamlets, referred to as *kapru*, proliferated throughout the territories in order to exploit the agricultural resources in specific areas, and these same humble units may also have contributed to the maintenance of an Assyrian presence in newly conquered regions. This settlement system, understood through the documentation of Assyrian texts, is only recently becoming better understood through archaeological investigation, but the situation is gradually improving as an increasing number of sites dating from the Iron Age are being identified and examined from within a regional perspective.

¹²² Liverani observes that the local royal cities were at the apex of the local settlement system hierarchy but were, at least during the time of Assurnasirpal II, dependent upon the Assyrian royal cities, which functioned as the "'terminals' of the Assyrian central capital for the administrative, military, and commercial activities" (Liverani 1992:132).

VI. Conclusions

The intent of this dissertation has been to determine the extent to which the expansion and consolidation of the Assyrian Empire was responsible for the sweeping changes that distinguish Iron Age settlement from that of the Bronze Age in Upper Mesopotamia, and specifically the mechanisms by which the Assyrian authorities recrafted the urban and rural landscape in answer to the needs of an increasingly powerful and regionally diverse imperial entity. The focus of this study has been the physical imprint of Assyrian occupation on the landscape of Upper Mesopotamia, within the Assyrian heartland and as well as within the more widely scattered agglomeration of provincial territories that eventually came to comprise the Neo-Assyrian Empire. It has therefore been the concern of this study to examine the archaeological evidence for the Neo-Assyrian system of planning, that is, the archetypal forms, spaces and strategies which consistently appear in the record of Assyrian settlement dating from the late tenth through late seventh centuries B.C. The evidence presented herein has illustrated that Assyrian planning was not confined to *urban* spaces, but was moreover *regional* in scope and scale. The attempt to define Neo-Assyrian settlement planning has focused upon these two concomitant aspects of settlement; the urban unit and the regional framework within which the unit functioned. The fundamental underlying principles of urban form and space comprise the components of an Assyrian urban tradition, which has been described in this paper through the review of the imperial capitals and a selected number of representative regional centers and other smaller settlements established by the Assyrians at the time when they had begun to re-establish themselves as the dominant power in the region while incrementally expanding their sphere of influence. By viewing the remains of these urban and rural settlements within the different regional contexts in which they were constructed, it has become clear that Assyrian objectives of expansion and control had the profound affect of reshaping the organization of the countryside.

In the course of expanding the territorial limits of the empire, the lands coming under Assyrian control were gradually transformed into Assyrian provinces, and through contemporary textual evidence it is known that periodic phases of administrative restructuring accompanied and may have facilitated Assyrian expansion. The Assyrian approach to the formation of a provincial landscape seems to have been characterized by certain traits which may be seen as having parallels in other periods of imperial expansion throughout history. In the context of Roman imperial approaches to the creation of provincial territories, for instance, Alcock has remarked,

"Within peripheries of imperial territories, restructuring frequently, if not invariably, accompanies expansion. A more efficient provincial infrastructure is often developed, either through the *addition* of certain elements (e.g. compulsory urbanization, politico-administrative foundations, or population relocation) or through their *subtraction* (e.g. a simplification or streamlining of the existing settlement hierarchy)... A spectrum of strategies, ranging from the dramatic to the subtle, has thus been employed by different empires, the basic goal of the new ruling authority being always to ensure the presence of an administrative framework receptive to their needs." (Alcock 1993:129)

The incorporation of new territories within the Assyrian provincial administrative system was indeed characterized by the specific features enumerated by Alcock, namely, compulsory urbanization, politico-administrative foundations, and the relocation of populations. While the Middle and Neo-Assyrian periods have been defined by episodes of imperial expansion initiated by Ashur-uballit in the fourteenth century B.C. and Adad-nirari II beginning at the end of the tenth century, within these two main phases of Assyrian imperial expansion there are two documented episodes of administrative restructuring especially worth considering in the context of this study, as each phase of restructuring resulted in dramatic changes in the nature of provincial settlement attested to in the archaeological record and discussed in this paper. One major phase of administrative restructuring was initiated during the period of Assyrian expansion under Shalmaneser I (1274-1245 B.C.), and another significant phase of restructuring occurred most probably under Adad-nirari III (810-783 B.C.).

As mentioned earlier, Kuhne contends it may have been the program of administrative restructuring initiated by Shalmaneser I which launched the urbanization of Upper Mesopotamia. Under this king, fortified manors were established in the different districts into which the controlled territories were divided; we have made reference to examples of such Middle Assyrian fortifications at Tell Sabi Abyad, Tell Fekheriye and Dur-Katlimmu, at which local governors were installed, which served as the foci for regional economic control, as military bases, and as the central place from which the Assyrian culture was disseminated. Concurrently, an extensive program of imperial building activities began, a royal prerogative in which many Neo-Assyrian kings would subsequently engage. It has been well-documented in Assyrian texts that many, if not most, of these royal projects throughout the empire were realized at least in part through the services of conquered populations, frequently uprooted from their home regions and put to work on imperial building projects in newly-gained territories or in the prevailing capital.

The pattern of founding new cities and settlements can be seen to have characterized the Assyrian Empire virtually since its inception. The Neo-Assyrian foundation and refoundation of major capital cities and royal residences from the time of Assurnasirpal II (at Kalhu/Nimrud in the early ninth century B.C.) into the reign of Sennacherib (Nineveh in the late eighth century and early seventh centuries B.C.) was prefigured by earlier Assyrian foundations such as those by Shamshi-Adad I at Shubat-Enlil (Tell Leilan) and Karana (Tell al-Rimah) in the early second millennium B.C. We have discussed these Assyrian foundations in the context of "disembedded capitals", and we have seen that the momentous royal gesture of creating new towns (and re-establishing older ones) furthered the aims of the Assyrian Empire in securing legitimacy for the prevailing government and establishing a fresh venue for the symbolic representation of the empire's claims to power, wealth and prestige. All of the imperial capitals (and to a lesser extent, royal cities) share certain common features which are not present at other Assyrian settlements of lesser rank.

Although it is true that each of the imperial capitals was distinguished by

architectural and topographic features unique to itself, the many consistencies in planning cannot be over-emphasized, and suggest a collective Neo-Assyrian imperial vocabulary of urban form and space which in many ways transcended time and region. Perhaps the most obvious characteristic of the Neo-Assyrian capitals is the massive size these cities attained under kings to whom the enterprise of constructing or reconstructing imperial capitals was an intrinsically personal endeavor. In comparison with preceding capitals in the southern alluvium, these capitals rivalled or even superceded their southern counterparts in size, and earlier and contemporary capitals in the north were dwarfed by comparison. The massive scale of the Assyrian capitals reflects, no doubt, an increasingly complex central administration and concentration of population, but is probably also the result of the incorporation of large areas of open space which became a regular feature of capital city-planning. In the settlement system crafted by the Neo-Assyrian kings, it was the imperial capital which received the wealth of resources, the heaviest fortifications, and was the repository for the most lavish symbolic imagery. The close spacial association of the palace and temple in the Neo-Assyrian capital city is a manifestation of the change which took place in the function of these two key urban institutions and the new relationship between them. The economic foundation of the empire was the collection of tribute and war booty which was not redistributed, but which was centralized in the capital city. The urban centers in the provinces were not so much centers of commerce and trade, but centers for the collection of taxes and surplus goods to be funneled back to the capital. The prevailing capital stood at the pinnacle of a complex, dispersed, and otherwise rural settlement system.

As the imperial capital cities burgeoned, some urban centers outside of the heartland became urbanized; that is to say, certain towns increased in size, population, and significance. At the same time, the occupation of some pre-existing regional centers dwindled, as the urban center of gravity was shifted either to another regional center or to the prevailing capital. Throughout the countryside, smaller rural settlements proliferated,

many seemingly established in order to exploit the agricultural potential of lands which had been previously under-used. There appears to have been a tendency to settle into small, low-lying villages, and perhaps even an avoidance of settling on the high mounds of formerly important Bronze Age centers. The tendency to settle on high mounds, which had persisted throughout the Bronze Age, began to wane in the Late Bronze Age, when new settlements began to spring up around the bases of the existing tells. By the Iron Age, occupation of tells in each of the survey areas had virtually ceased, and the largest settlements were lower towns, established in the vicinity of the old high mounds.¹²³ While it cannot be certain that this avoidance of high sites for occupation was an imperially-enforced injunction, it seems at least plausible that the use of height as a construction device was reserved for settlements of relatively high rank, and therefore of major symbolic significance within the empire. Accordingly, provincial capitals such as Kar Shalmaneser (Til Barsib), regional centers such as Zamahu (Tell al-Rimah), militarily critical sites such as Dur-Katlimmu (Tell Sheikh Hamad), or forts such as those on the Middle Euphrates would each make use of available high ground. In at least one region, the Middle Euphrates, fortified sites dominate the settlement pattern, but in every other region under study in this dissertation, the smaller Neo-Assyrian settlements were predominantly unfortified, both in the heartland and in the provinces. The security guaranteed by the Assyrian government within the territories under its control meant, perhaps, that heavy fortifications to protect these small rural settlements were unnecessary. It may as well have been the case that this same security, combined with a certain guaranteed affluence, encouraged the spontaneous settlement of Aramaean and other nomadic groups.

The foundation of new politico-administrative urban entities was certainly a pattern characterizing virtually the entire Late Assyrian period, most obviously represented by the founding of new capital cities, but including the foundation of a multiplicity of settlements throughout the lands within the Assyrian grasp, as documented by the six regional surveys

¹²³ A pattern especially attested by the findings of the Tell Beydar survey.

presented in this study. The founding of new settlements occurred with increasing frequency as the Assyrian empire reached its zenith in the eighth century B.C. The record of archaeological excavation and survey represented by the case studies examined in this paper illustrates that Assyrian hegemony was achieved through the establishment of a sometimes complex and regionally-specific strategy of settlement that could include multiple levels of settlements of different size, significance, and function. None of these settlements, however, would begin to approach the scale, degree of fortification, or lavishness of construction and resources devoted to the capital city.

The six regional surveys included in this paper were chosen because the evidence of Late Assyrian occupation documented by each project could arguably represent an imposed, intentional settlement strategy enacted to further Assyrian imperial aims. The Haditha Dam project, in the Middle Euphrates, documents a situation in which the Assyrian settlement of the region appears to have been primarily oriented towards the military control over the strategically sensitive territory of Suhu. As a major route from southern Assyria and Babylon to north Syria and southeastern Anatolia, the importance of the control over the Euphrates goes without question. Moreover, if one considers that this particular region may have been the front line against Aramaean incursions (perhaps more problematic in this particular region than anywhere else in the empire's territories, as the land of Suhu had been the home of the Aramaeans since the twelfth century), the need for frequent military intervention and constant vigilance may have resulted in the significantly high number of Assyrian fortified sites in this survey area. The notably dense assemblage of Assyrian fortified sites here would seem to attest more to an Assyrian militaristic response to external factors rather than to internal imperial objectives.

The remaining five regional surveys, however, appear to collectively document a major Assyrian program to repopulate formerly held territories and to extend the agricultural area of the empire, although the data from each project reveals that the goal of repopulating these somewhat marginal yet agriculturally viable areas may have been

accomplished through different strategies in the different regions.¹²⁴ The stele found at Tell al-Rimah, which has been mentioned at several points throughout this discussion, represents evidence for the potential of such a resettlement program. As it is known that Nergal-eresh was a powerful and prominent governor of the province of Resappa, it is more than likely that the three hundred and thirty one new settlements founded by Nergal-eresh were established within the region that comprised the province of Resappa at around 800 B.C. This supposition, although not yet supported archaeologically remains, on the whole, unquestioned as the inscription is quite specific in its description of the districts in which the settlements were founded. Although the topographic area of Resappa at this time may have been enormous, large areas were only sparsely populated and its older cities were largely neglected or abandoned by the time the Assyrians began to recolonize it at the end of the ninth century B.C.¹²⁵ The survey areas in the Lower Khabur and some parts of the Jazira may therefore have been included within this program of urbanization, and the North Jazira and Tell Beydar areas may have been repopulated under similarly oriented settlement schemes undertaken by the one of the Neo-Assyrian kings.

The cumulative evidence from the regional surveys allows certain conclusions to be drawn concerning the nature of settlement in the regions that were brought within the Neo-Assyrian imperial realm. In each region, the density of settlement during the period of Assyrian influence in the area was the highest of every other period documented, reflecting an unparalleled surge in settlement in these areas, with massive increases in population.

While some sites reveal that there existed a certain degree of continuity of occupation from

124 As mentioned previously, the absence of a refined Late Assyrian pottery chronology makes it difficult to place Assyrian sites in time with any real certainty. A Late Assyrian presence at a site discovered in survey, based solely upon Assyrian type wares, may therefore date anytime within a four hundred year sequence.

125 Dalley has noted that by the Neo-Assyrian period, the names of many older cities in Resappa were either forgotten, or the pronunciation of them had changed: For example, Terqa became Sirqu, Qattuna may have been known as Qatni, and Saggaramum changed to Sangarite. The Late Assyrian center at Zamahu (Tell al-Rimah) replaced the long-forgotten town of Karana, which over the course of two hundred and fifty years had virtually disappeared along with its name (Dalley 1984:193).

the Middle through the Late Assyrian periods,¹²⁶ the settlement pattern exhibits a marked transformation whereby the nucleated tell system was superseded by a pattern of small-scale dispersed settlement. In at least one survey area, in the North Jazira, there appears to have been a conscious effort to situate settlements in an evenly-distributed pattern along the territorial boundaries of former Bronze Age centers and on marginal land, implying that an awareness of earlier settlement patterns persisted even during a time when the former centers had dwindled or stood abandoned. The rationale for respecting pre-existing settlement territories remains elusive, but the arrangement of Late Assyrian-period sites in the North Jazira survey area seems too regular to be purely coincidental. A unified, or at least centrally-organized plan initiated by the central Assyrian authority is therefore not outside the realm of possibility.

The potential economic significance of cultivating these formerly marginal territories represented by the survey areas cannot be ignored. It is significant that in seeking to repopulate these regions, the Assyrians seem to have established small sites which may be interpreted as farmsteads, manor houses, or small hamlets, and in the case of the Lower Jazira area, created a sophisticated canalization scheme to support the local settlement. Given the fact that all of the survey areas were characterized by predominantly small sites that were either completely unfortified or otherwise had only perfunctory level of fortification (with the possible exception of Tell Sheikh Hamad on the Lower Khabur, which may have grown in proportion to its military importance), it would seem perhaps that at least some of these areas of settlement could be interpreted as "granary districts", important to the agricultural economy of the empire, and placed (both temporally and spatially) well within the core areas of Assyrian control. In any case, it is clear that in each area of survey, the focus of settlement was located at the larger regional centers, which

¹²⁶ This is particularly well-documented in the North Jazira survey at Tell al-Hawa, and in the vicinity of the lower Khabur site of Dur-Katlimmu.

were themselves answerable to the prevailing capital city: Kalhu, Dur-Sharrukin, or Nineveh.

It is not possible at this point to conclude, for any of the territories under review, whether Neo-Assyrian resettlement of deserted or previously only lightly-settled regions occurred gradually or in one swiftly-implemented program. Nevertheless, it may at least be acknowledged that the Assyrian strategy for reclaiming formerly held territories, expanding the limits of the empire, and maintaining its pre-eminence in those territories was not monolithic. During the course of four centuries, from the end of the tenth through the close of the seventh centuries B.C., the empire subsumed a vast swath of Upper Mesopotamia. In the progressive absorption of such new territories the Assyrian imperial authorities developed a variety of responses to the different political, cultural, and geographic challenges that they encountered -- and the excavated sites and regional surveys chosen for discussion in this paper are a representative sampling of the diverse approaches to settlement that obtained during the long life of the Neo-Assyrian empire. We have seen that although Assyrian urban traditions *within cities* in the heart of the empire may have been consistently employed to the point that they may be considered recurring patterns, the methods of implementing a new provincial infrastructure necessarily varied widely, depending on local circumstances that were often significantly different.

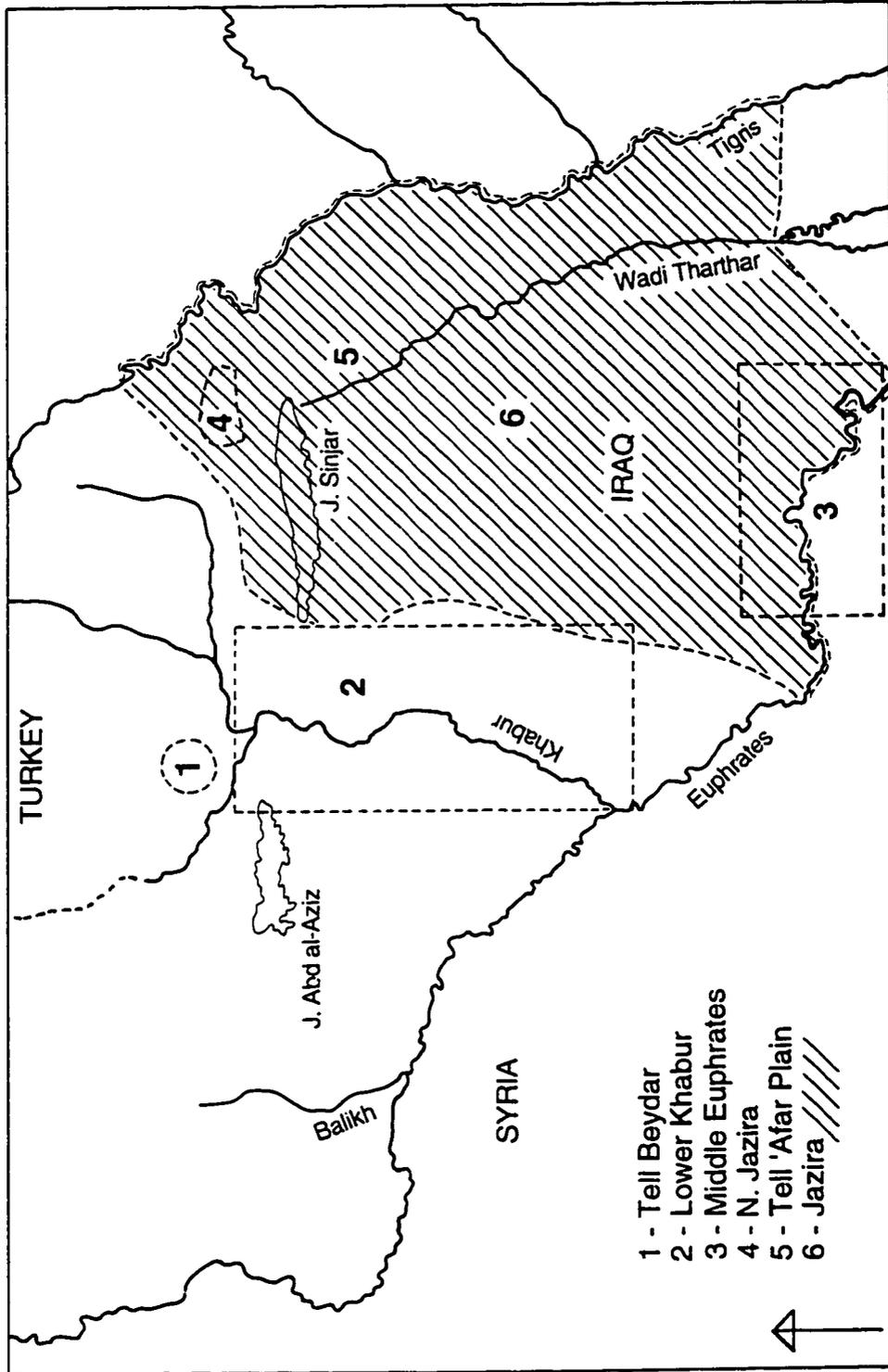


Fig. 1 - Upper Mesopotamia: Survey areas discussed in the text, adapted from Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 1, p. 74.

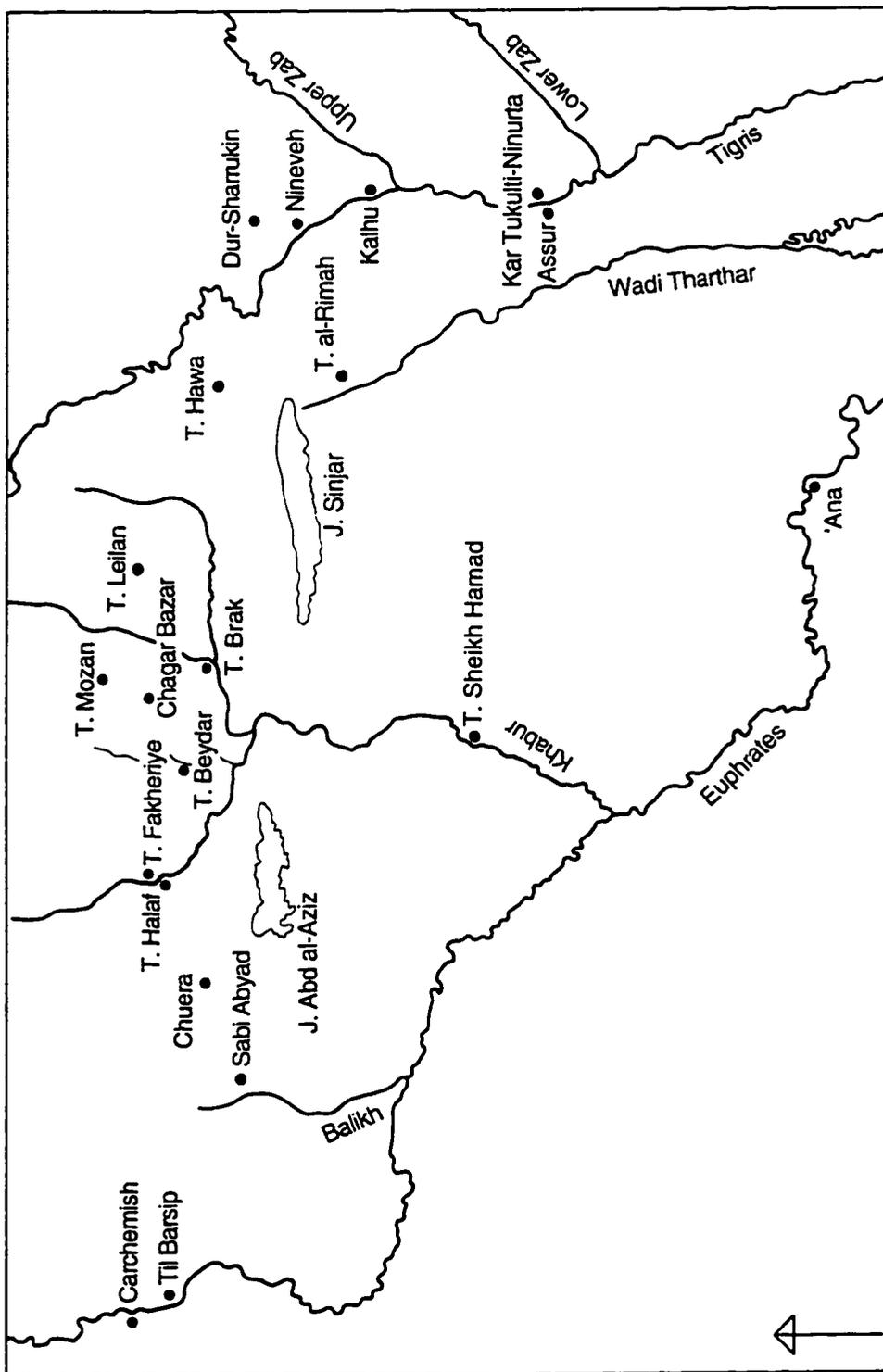
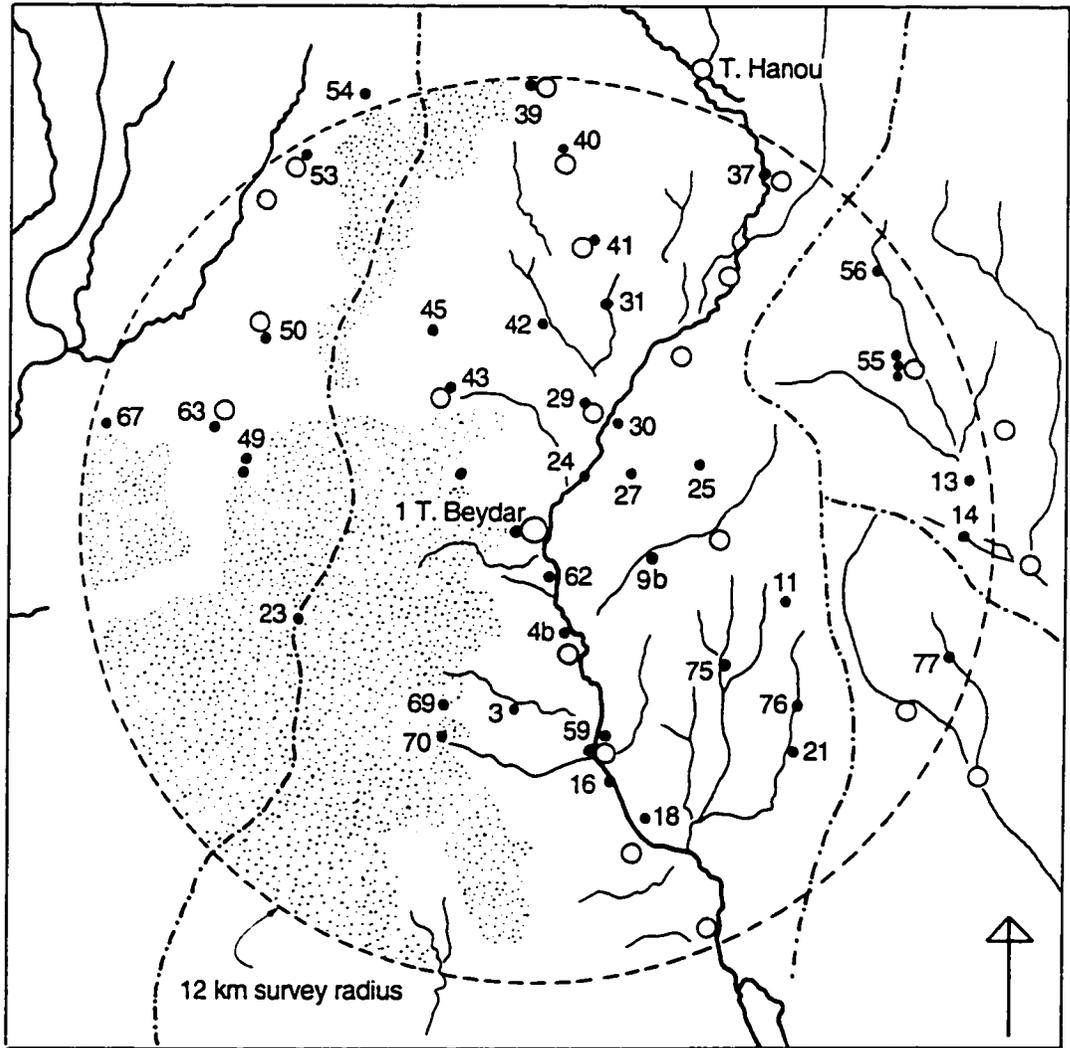


Fig. 2 - Upper Mesopotamia: Sites mentioned in the text, adapted from Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 1, p. 74.



- I.A. site
- tell
- basalt plateau
- wadi
- - - watershed

5 km.

Fig. 3 - Survey area no. 1, Tell Beydar and its vicinity: Iron Age sites and earlier tells.

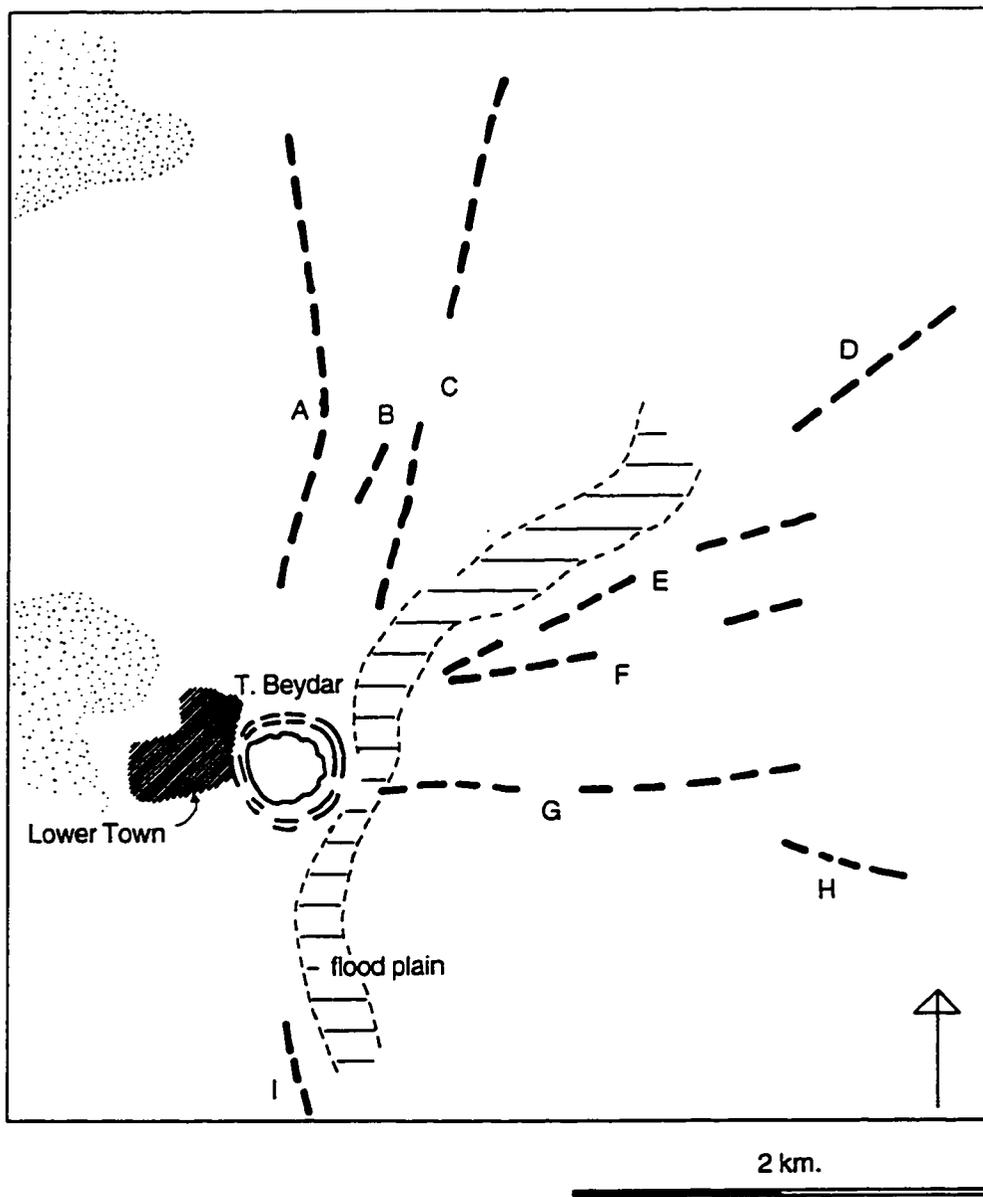


Fig. 4 - Tell Beydar area showing the Lower Town and hollow ways.

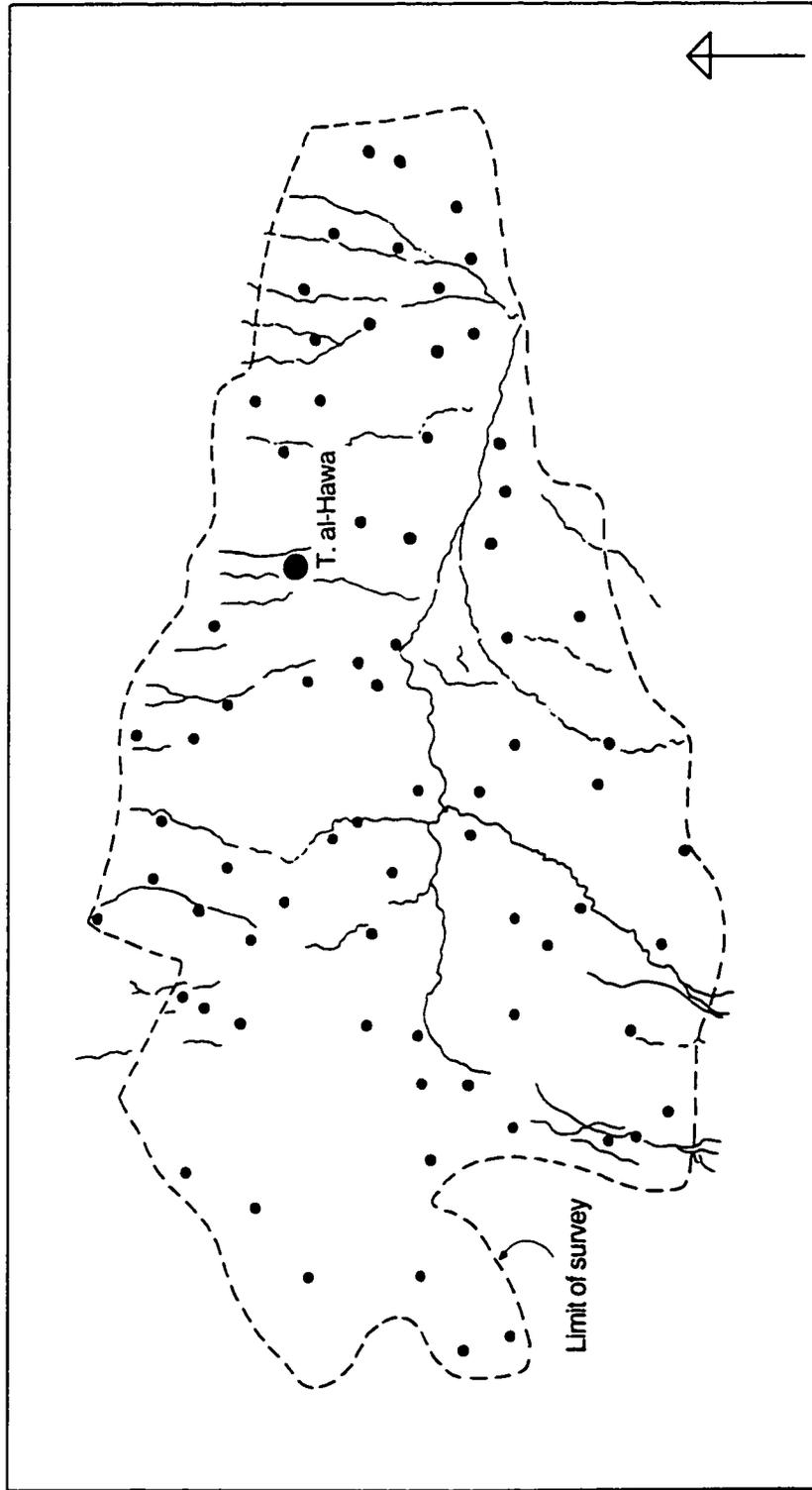


Fig. 5 - Survey area no. 4, North Jazira: Late Assyrian sites and wadis, adapted from Wilkinson and Tucker, *Settlement and Development in the North Jazira, Iraq* (1995), fig. 6, p. 152.

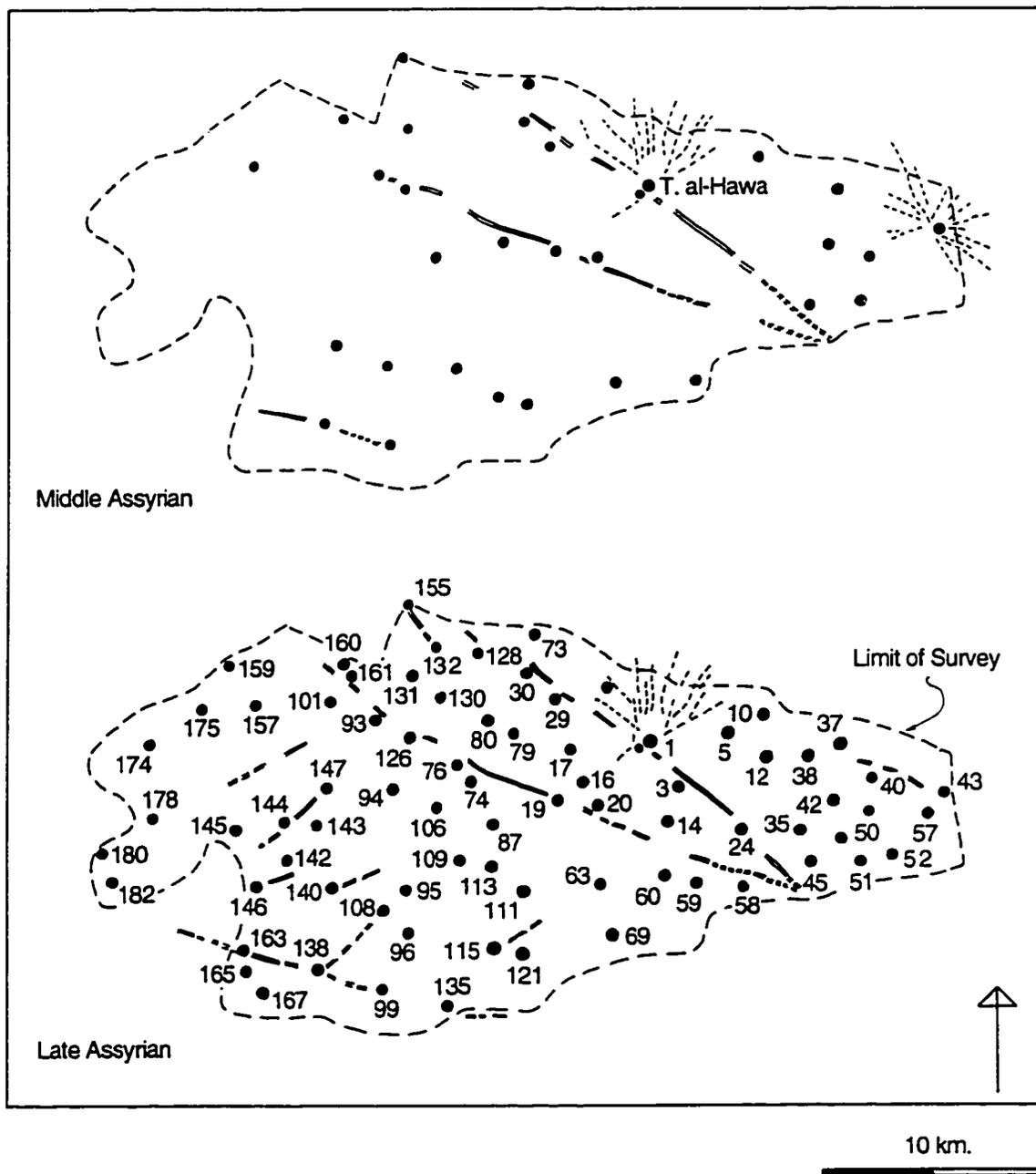


Fig. 6 - Survey area no. 4, North Jazira: Middle Assyrian and Late Assyrian sites and possible related hollow ways, adapted from Wilkinson and Tucker, *Settlement and Development in the North Jazira, Iraq* (1995), fig. 6, p. 152.

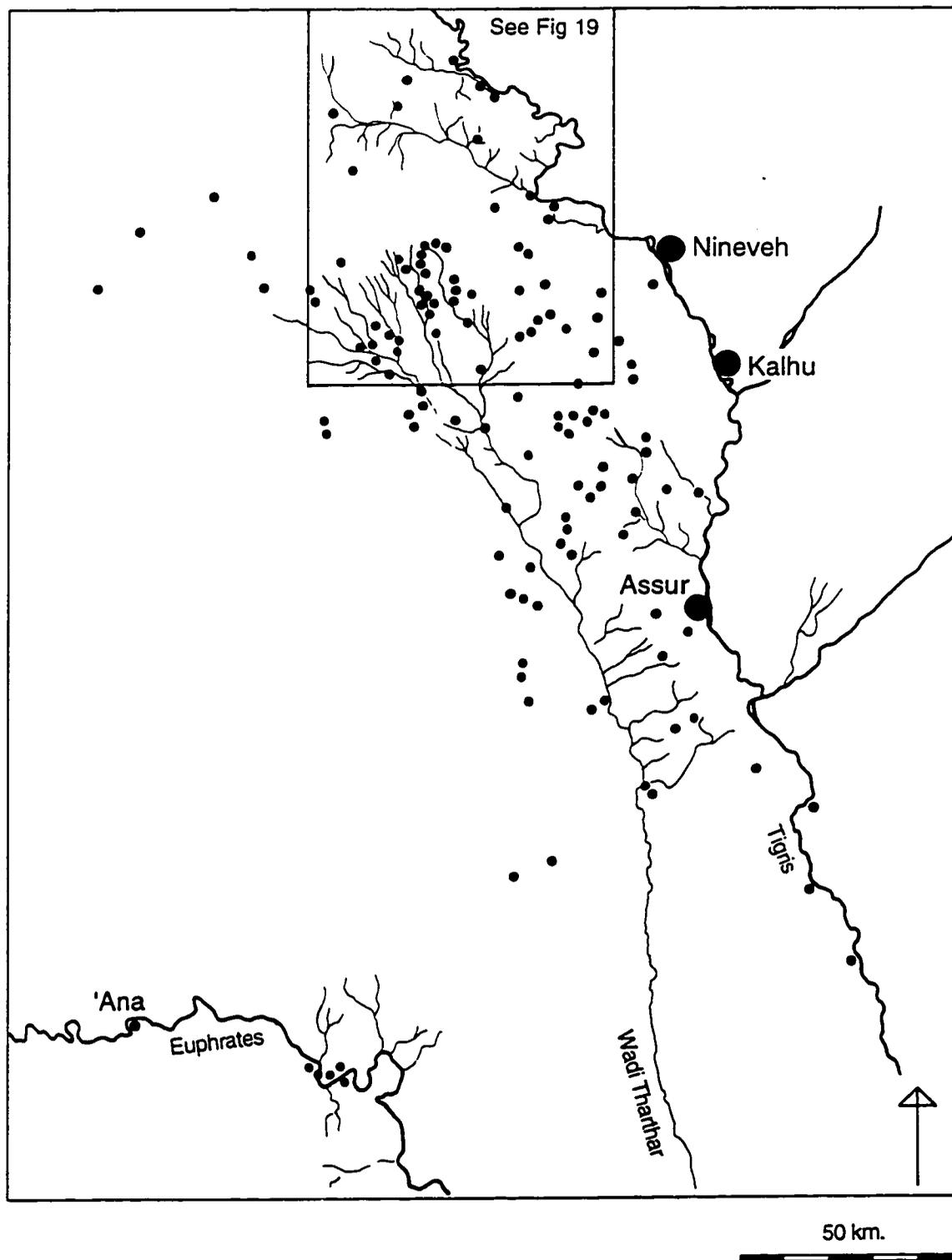


Fig. 7 - Survey area no. 6, the Jazira: Late Assyrian sites, compiled from Ibrahim, *Pre-Islamic Settlement in the Jazira* (1986), plates 8-16, pp. 257-264.

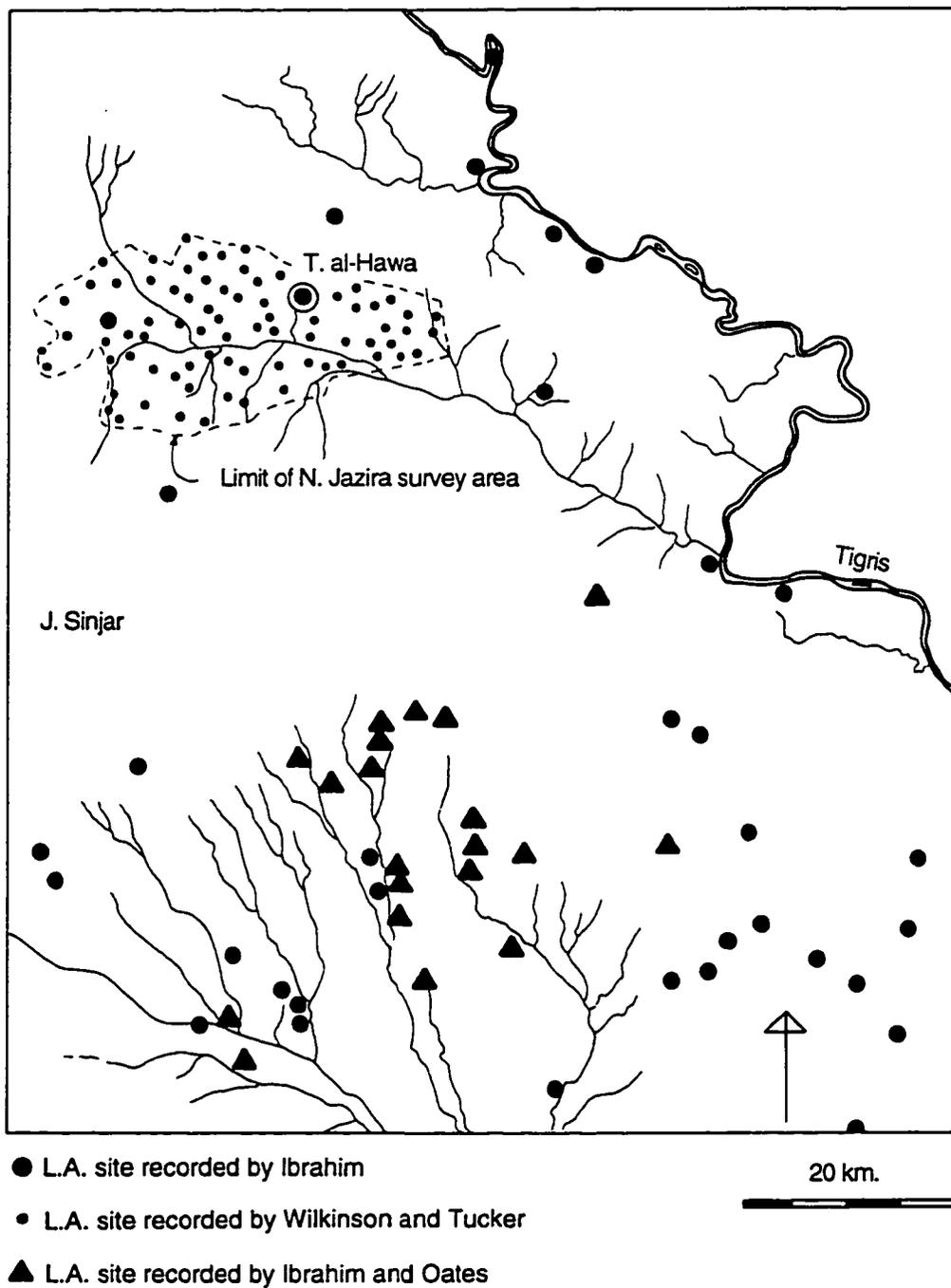


Fig. 8 - Survey area no. 6, the Jazira (detail): Late Assyrian sites identified in surveys by Ibrahim (1986), Oates (unpublished) and Wilkinson and Tucker (1995).

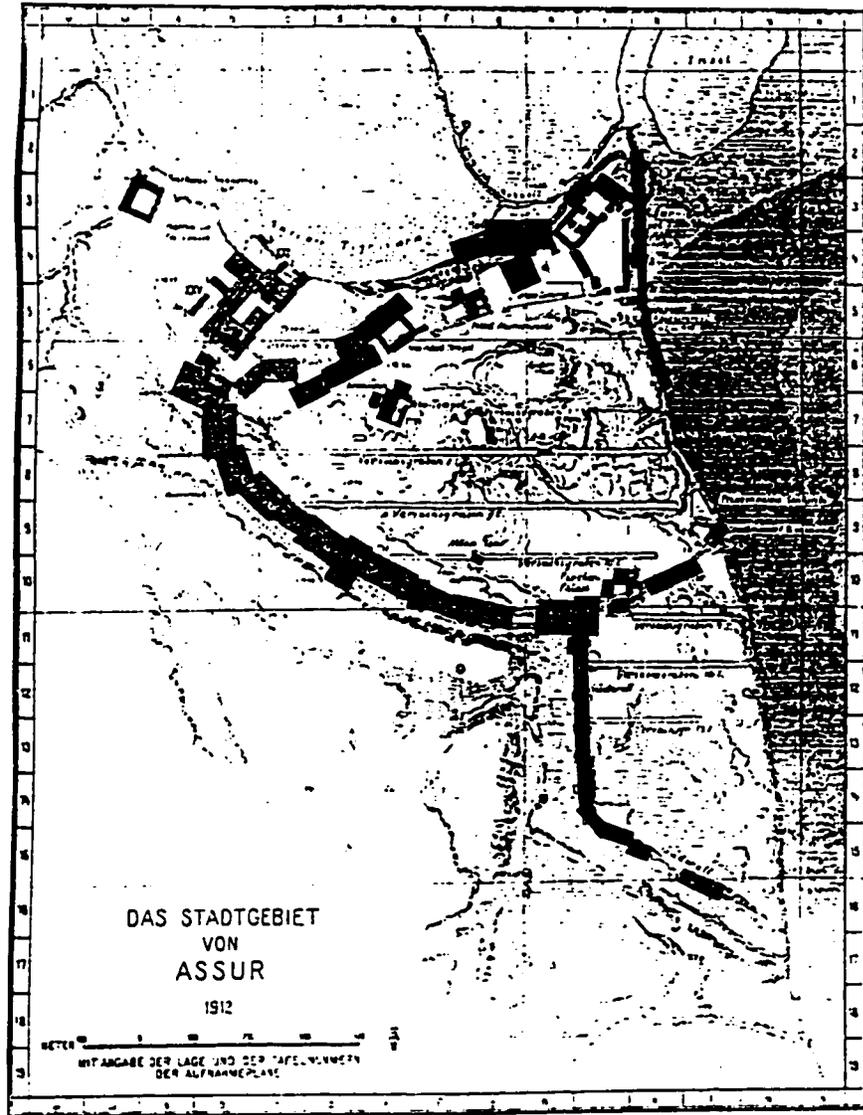


Fig. 9 - Plan of Assur, from E. Ebeling and B. Meissner, "Assur," *Reallexikon d'Assyriologie* 1 (1932), plate 20.

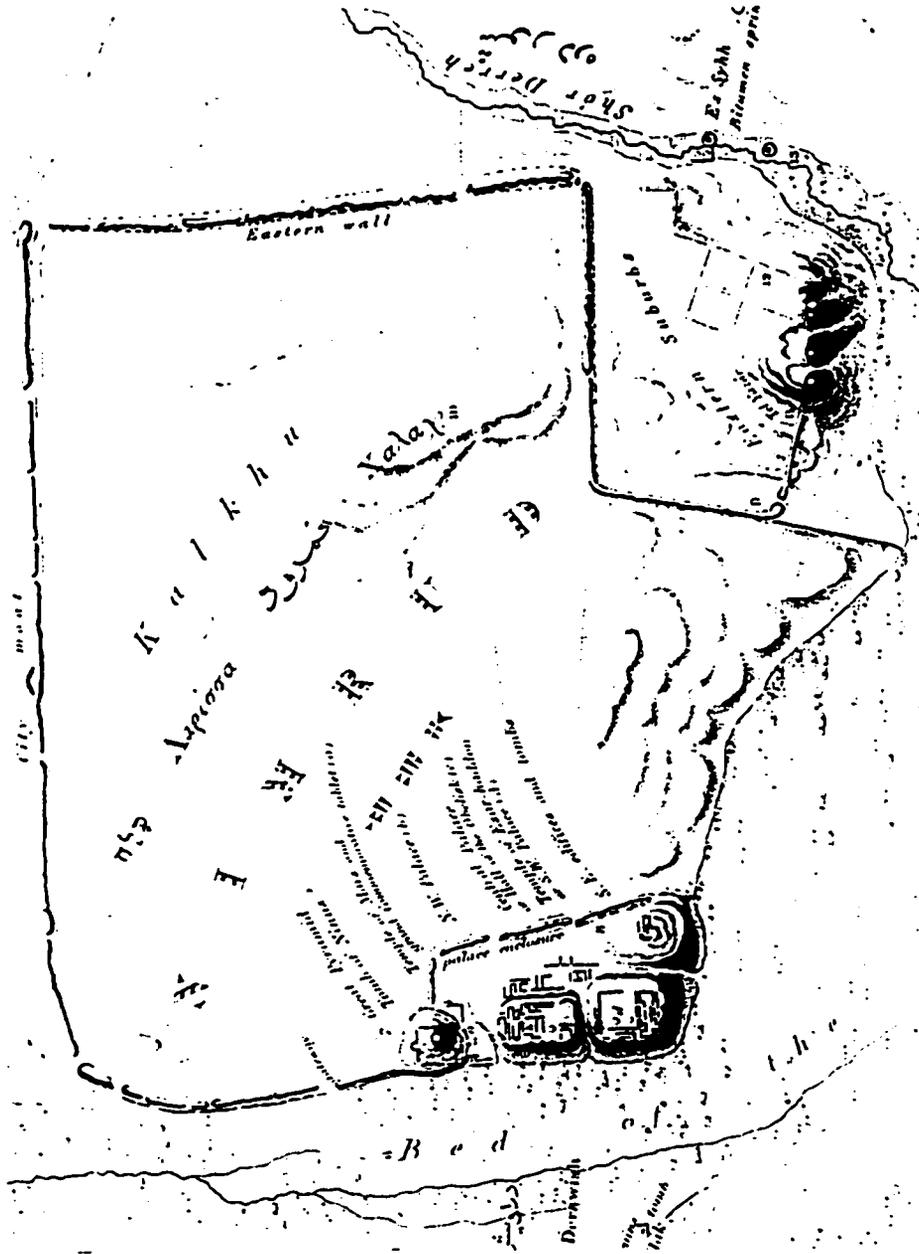


Fig. 11 - Plan of Kalhu (Nimrud), after J. Reade, *Fifty Years of Mesopotamian Discoveries* (1982), fig. 75, p. 103.

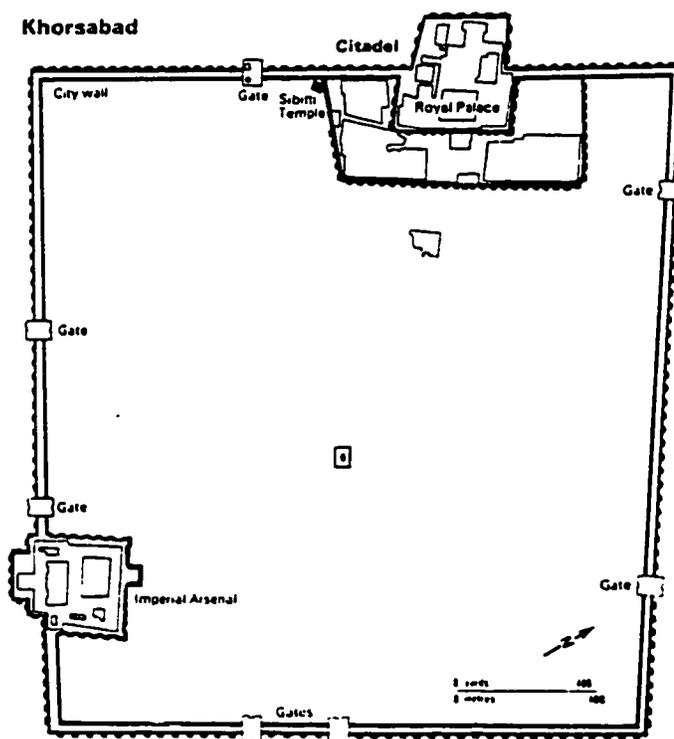
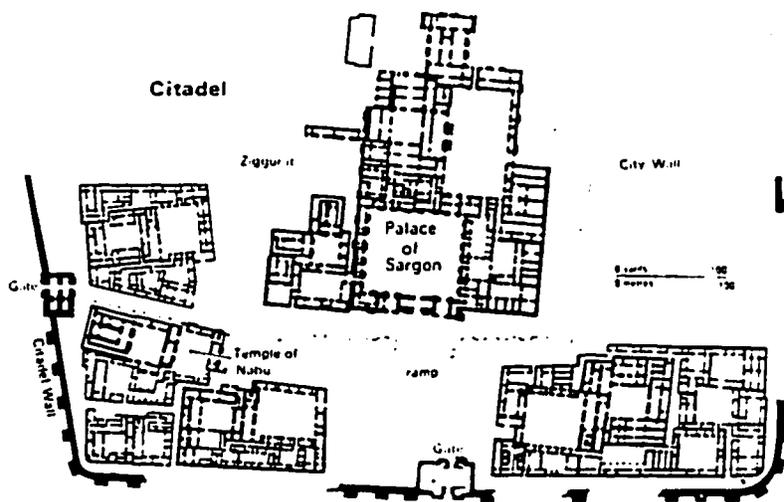


Fig. 12 - Plan of Dur-Sharrukin (Khorsabad), after S. Lloyd, *The Archaeology of Mesopotamia* (1978), fig. 143, p. 200.

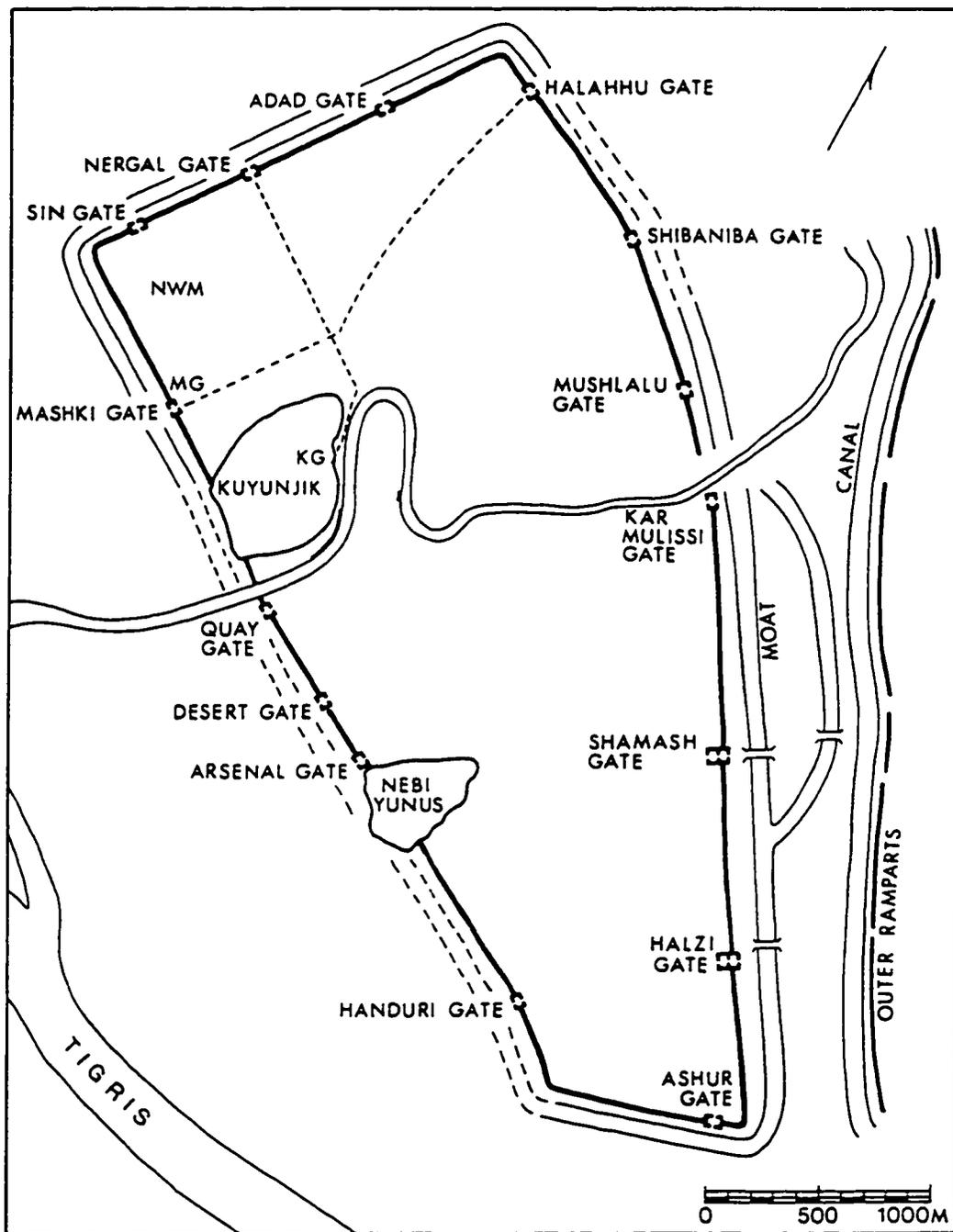


Fig. 13 - Plan of Nineveh, after D. Stronach, "Notes on the Fall of Nineveh," *Assyria* 1995 (1997), fig. 2, p. 312.

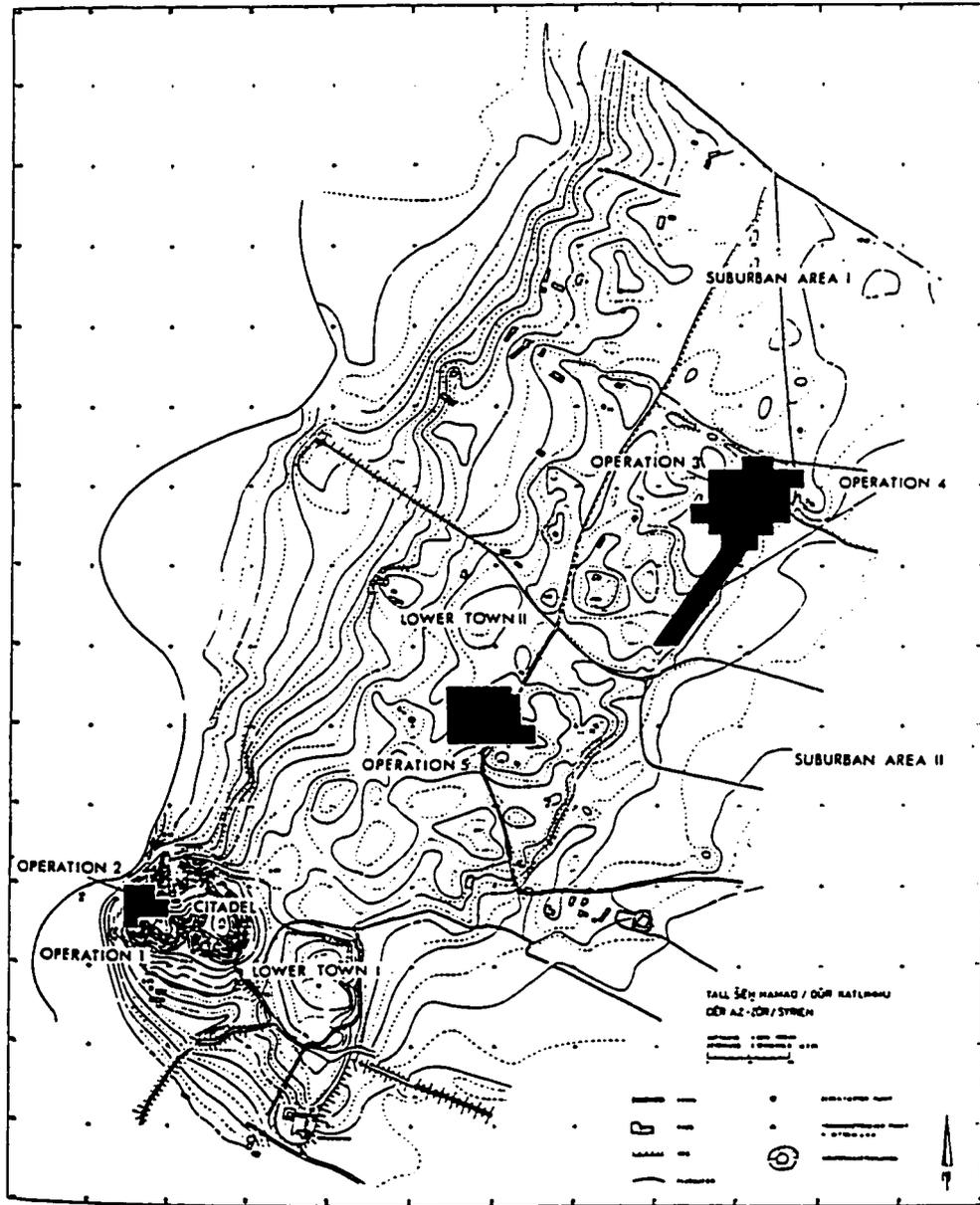


Fig. 14 - Plan of Dur-Katlimmu, after H. Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 8, p. 81.

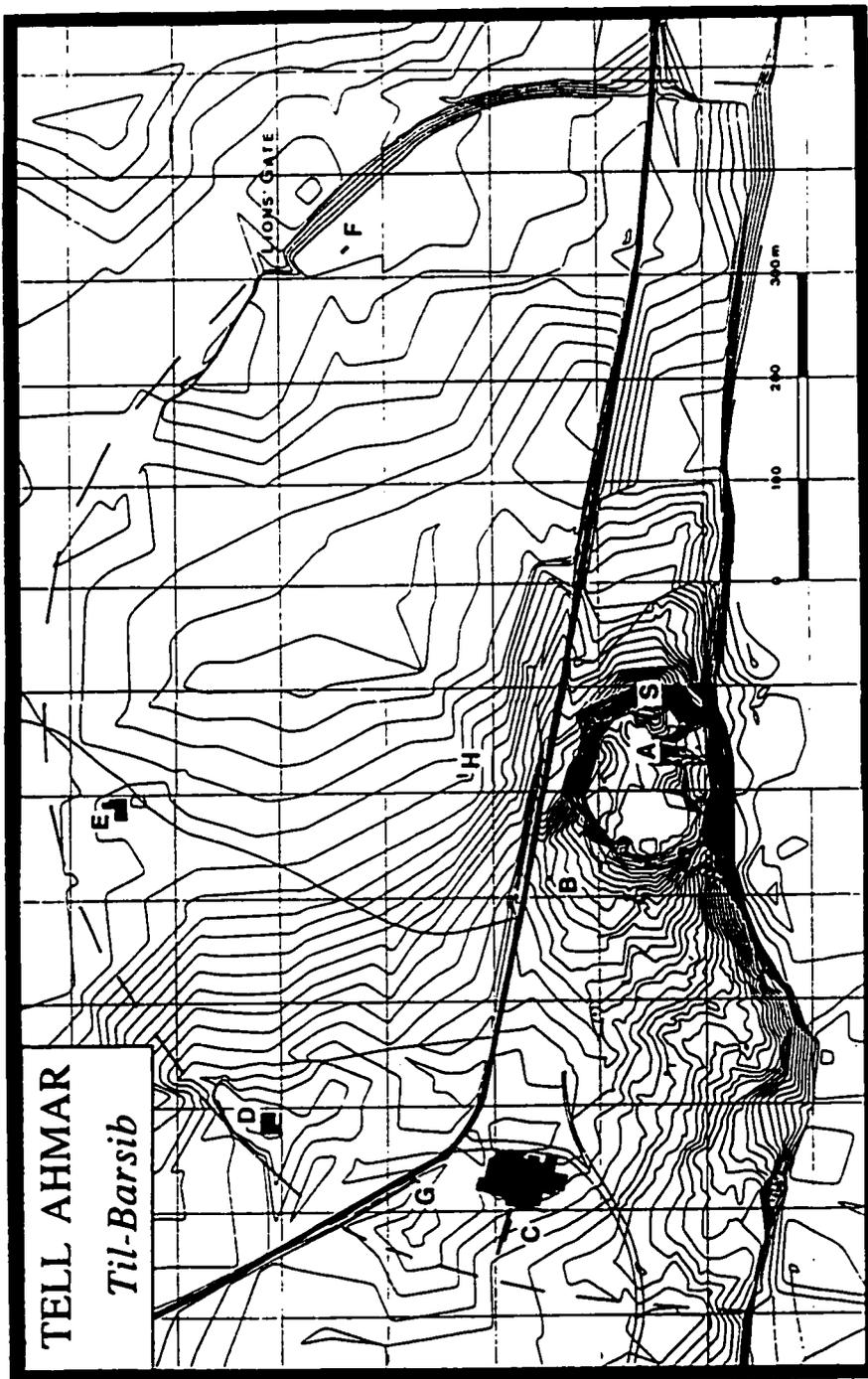


Fig. 15 - Plan of Til Barsib (Tell Ahmar), after G. Bunnens, "Til Barsib Under Assyrian Domination," *Assyria 1995* (1997), fig. 1, p. 18.

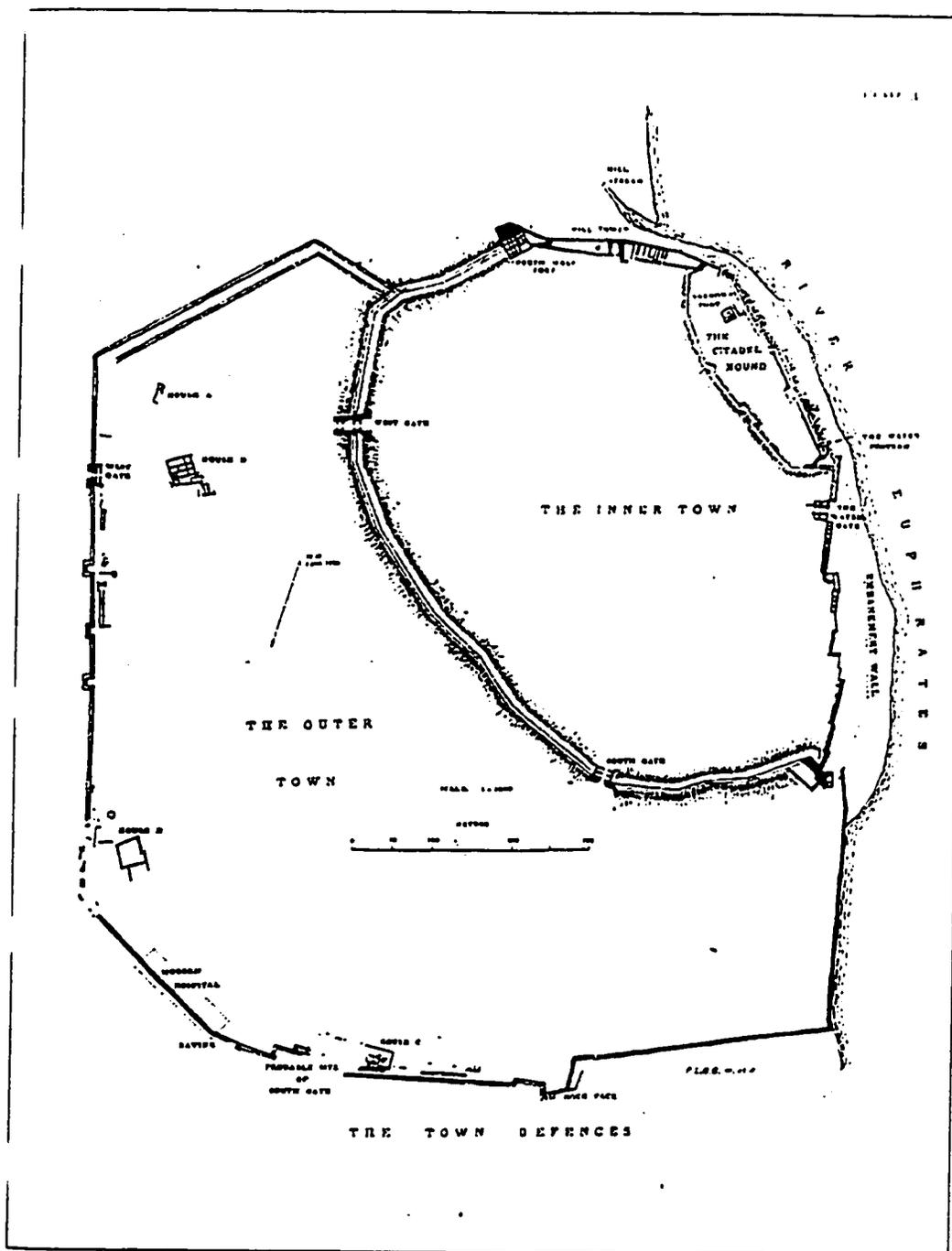


Fig. 16 - Plan of Carchemish, after J.D. Hawkins, "Karkamis," *Reallexikon d'Assyriologie* 5/5-6 (1980), p.427.

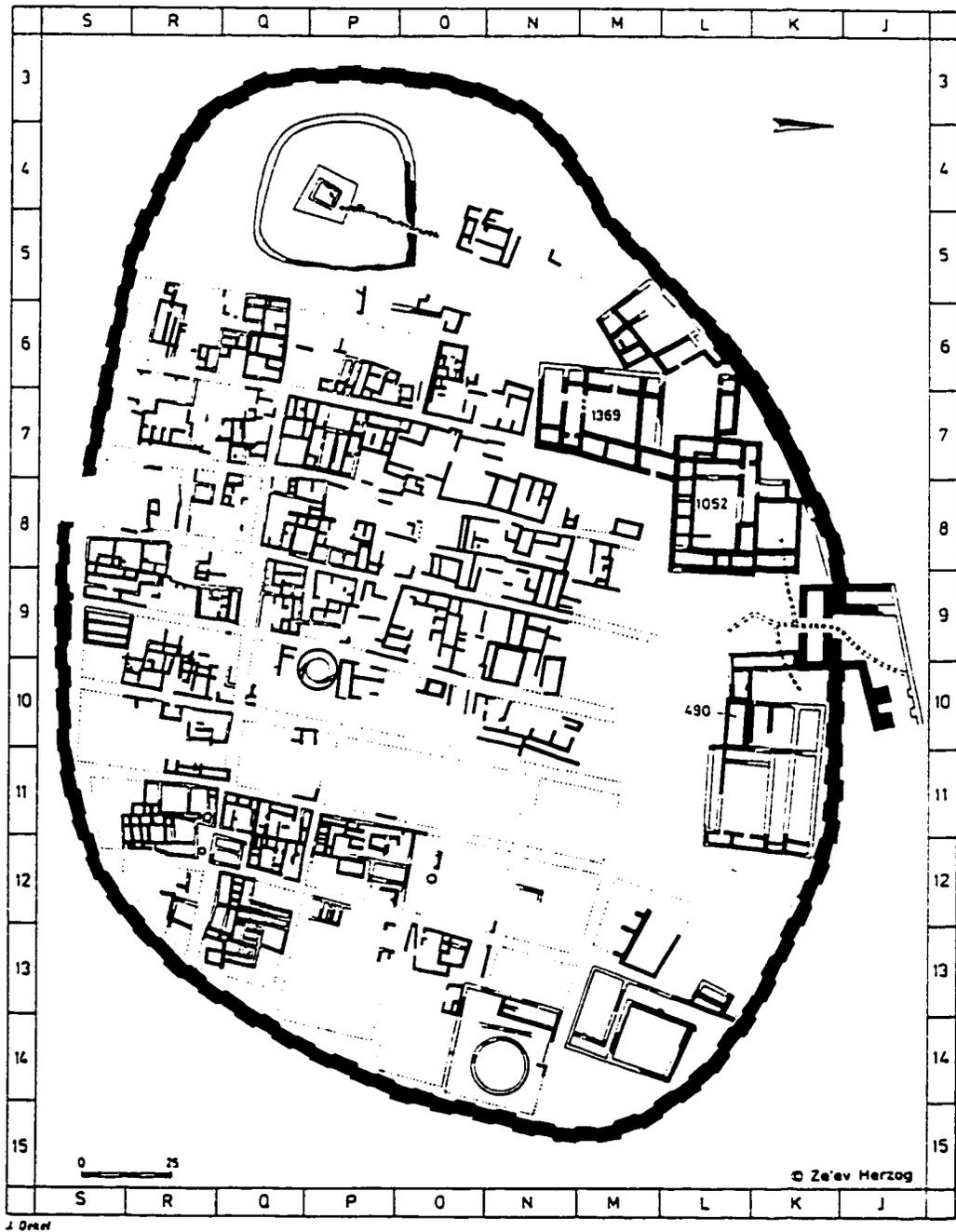


Fig. 17 - Plan of Megiddo, after Z. Herzog, *Archaeology of the City* (1997), fig. 5, p. 256.

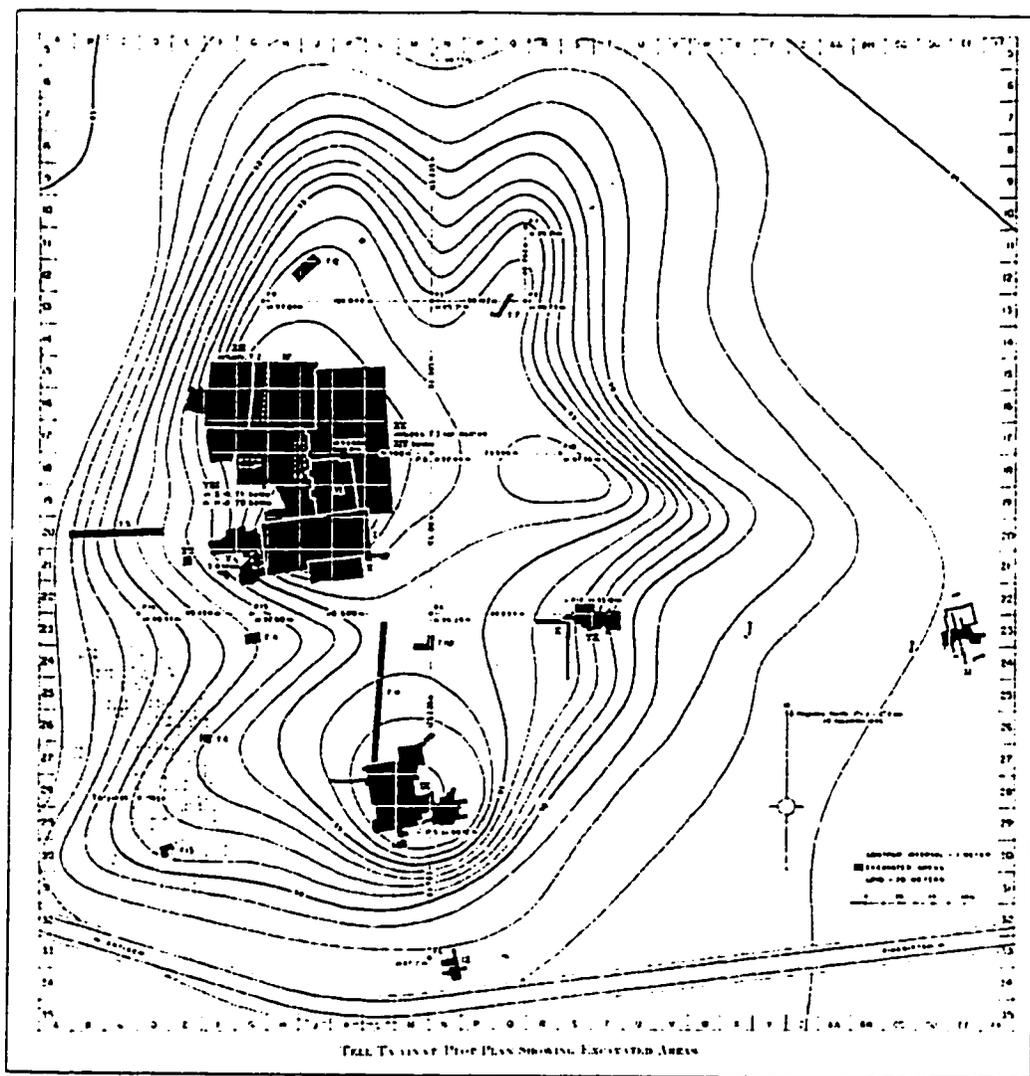


Fig. 18 - Plan of Tayinat, after R.C. Haines, *Excavations in the Plain of Antioch, II* (1971), plate 93.

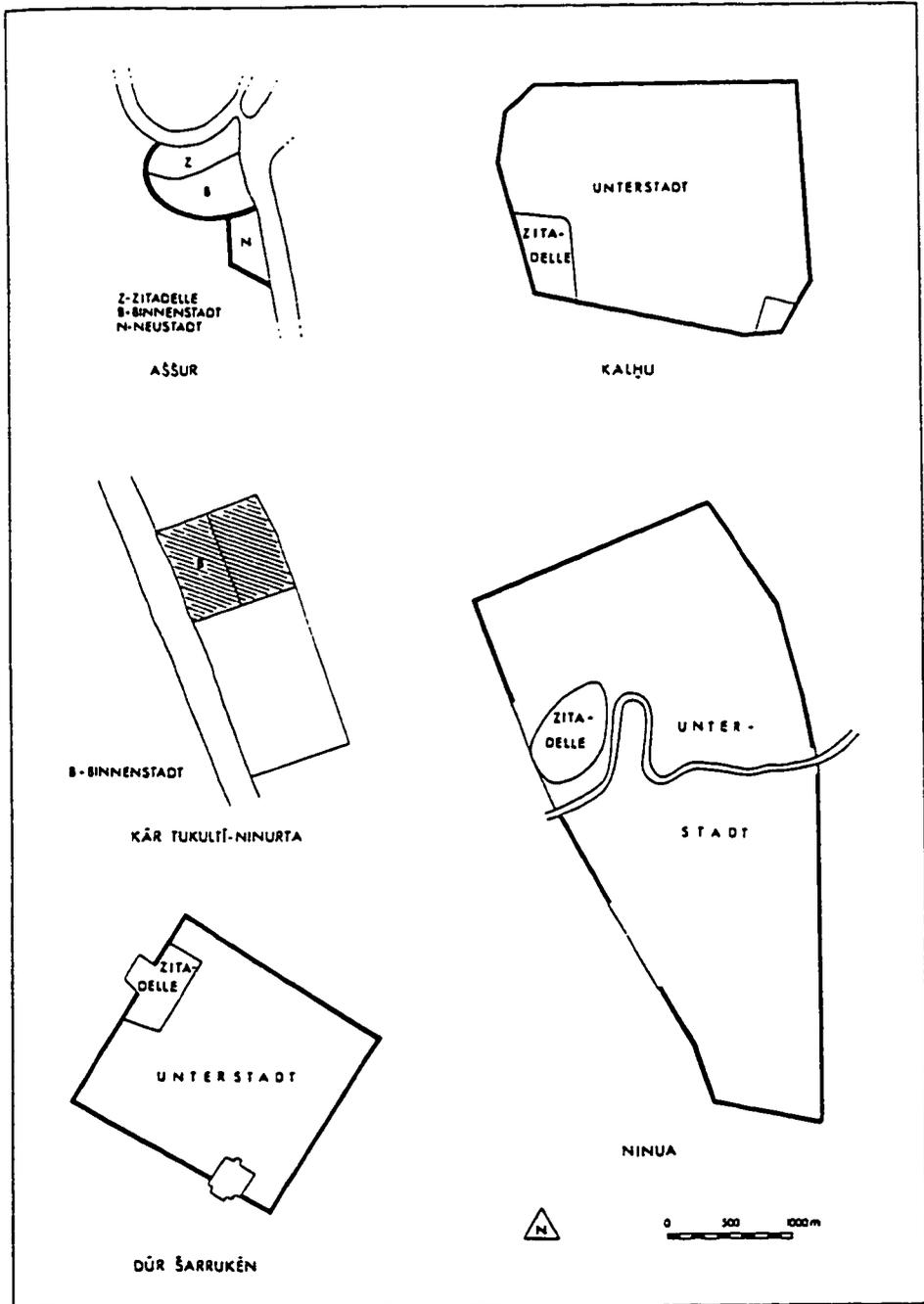


Fig. 19 - Assyrian capitals and royal cities compared, after H. Kuhne, "The Urbanization of the Assyrian Provinces," *Neo-Assyrian Geography* (1994), fig. 3, p. 76.

Bibliography

- Abdul-Amir, S.-J.
 1988 *Archaeological Survey of Ancient Settlements and Irrigation Systems in the Middle Euphrates Region of Mesopotamia*. University of Chicago Dissertation.
- Adams, R. McC.
 1981 *Heartland of Cities*, University of Chicago Press, Chicago.
 1966 *The Evolution of Urban Society*. New York.
- Akkermans, P.M.M.G.
 1984 "Archaologische Geländebegehung im Balih-Tal," *Archiv für Orientforschung* 31: 188-190.
- Akkermans, P.M.M.G., J. Limpens and R.H. Spoor
 1993 "On the frontier of Assyria: Excavations at Tell Sabi Abyad 1991," *Akkadica* 84-85: 1-52.
- Akkermans, P.M.M.G. - I. Rossmeis
 1990 "Excavations at Tell Sabi Abyad, Northern Syria: A Regional Center on the Assyrian Frontier," *Akkadica* 66: 13-60.
- Albenda, P.
 1986 *The Palace of Sargon, King of Assyria*. E.R.C., Paris.
- Alcock, S.E.
 1993 *Graecia Capta: The Landscapes of Roman Greece*. Cambridge University Press.
- Andrae, W.
 1938 *Das weidererstandene Assur*, J.C. Hinrichs Verlag, Leipzig.
- Ball, W.
 1990a "The Tell al-Hawa Project. The second and third seasons of excavations at Tell al-Hawa, 1987-88", *Mediterranean Archaeology* 3:75-92.
 1990b "Tell al-Hawa and the development of urbanization in the Jazira", *al-Rafidan* 11:1-28.
- Ball, W., D. Tucker and T.J. Wilkinson
 1989 "The Tell al-Hawa Project, Archaeological investigations in the north Jazira 1986-1987, *Iraq* 51:1-66.
- Barnett, R.D.
 1976 *Sculptures from the North Palace of Assurbanipal at Nineveh (668-627 B.C.)*. London.
 1975 "The Sea Peoples," *Cambridge Ancient History* II: 359-378.
- Bartl, K.
 1990 "Soundings at Khirbet esh-Shenef, a Late Bronze Age Settlement in the Balikh Valley, Northern Syria," *Akkadica* 67: 10-32.

- Battini, L.
 1998 "Opposition entre acropole et ville basse comme critere de definition de la ville mesopotamienne," *Akkadica* 108 (May-Aug.):5-29.
 1994 "La citta quadrata: un modello urbano nella Mesopotamia del II e I millennio c.C.?", *Orient Express* 2:49-50.
- Bernbeck, R.
 1993 *Steppe als Kulturlandschaft. Das 'Agig-Gebiet vom Neolithikum bis zur islamische Zeit (Berliner Beitrage zum Vorderen Orient - Ausgrabungen, Band 1)*, Berlin.
- Betancourt, P.
 1976 "The End of the Greek Bronze Age", *Antiquity* 50: 40-47.
- Blanton, R.E.
 1978 *Monte Alban, Settlement Patterns in the Ancient Zapotec Capital*. Academic Press, New York.
 1976a "Anthropological Studies of Cities," *Annual Review of Anthropology* 5:249-264.
 1976b "The Origins of Monte Alban," in C.E. Cleland (ed.), *Cultural Change and Continuity: Essays in Honor of James Barnett Griffin*, Academic Press, New York.
- Bourke, S.
 1996 "Megiddo, City-State and Center: Review Article," *Palestine Exploration Quarterly* 128:57-61.
- Botta, P.-É. and E. Flandin
 1849-50 *Monuments de Ninive*, 5 vols., Imprimerie nationale, Paris.
- Bretschneider, J.
 1997 "Die Unterstadt (Feld J)" in M. Lebeau and A.Suleiman (eds.), *Tell Beydar, Three Seasons of Excavations (1992-1994), A Preliminary Report. Subartu* 2: 209-243. Brepols. Brussels.
- Brinkman, J.A.
 1995 "Reflections on the Geography of Babylonia (1000-6000 B.C.)" in M. Liverani (ed.), *Neo-Assyrian Geography*, Universita di Roma, Quaderni di Geografia Storica, 5:19-20. Rome.
 1968 *A Political History of Post-Kassite Babylonia*. Rome.
- Buccellati, G.
 1964 "The Enthronement of the King and the Capital City in Texts from Ancient Mesopotamia and Syria," *Studies Presented to A. Leo Oppenheim*, pp. 54-61, Chicago.
- Buday, T.
 1980 *The Regional Geology of Iraq, Stratigraphy and Paleogeology*, vol. 1. I.I.M. Kassab - S.Z. Jassim (eds.). Baghdad.

- Bunnens, G.
 1998 "Tell Ahmar/Til Barsib, the ninth and tenth seasons (1996/1997)." *Orient Express* 2:27-30.
 1997 "Til Barsib Under Assyrian Domination: A Brief Account of the Melbourne University Excavations at Tell Ahmar," in S. Parpola and R.M. Whiting (eds.), *Assyria 1995*, pp.17-28, Helsinki.
 1995 "Syro-Anatolian Influence on Neo-Assyrian Town-Planning." *Abr-Nahrain Supplement* 5: 113-128.
 1992 "Melbourne University Excavations at Tell Ahmar on the Euphrates: Short Report on the 1989-1992 Seasons", *Akkadica* 79/80:5-7.
 1990 "Tell Ahmar after fifty years" in G.Bunnens (ed.), *Tell Ahmar, 1988 Season*, pp.2-3, Leuven.
- Burkhardt, J.
 1929 "Weltgeschichtliche Betrachtungen (1905)" in *Gesamtausgabe* VII, Berlin-Leipzig.
- Campbell Thompson, R. - R.W. Hamilton
 1932 The British Museum Excavations on the Temple of Ishtar at Nineveh, 1930-31," *University of Liverpool Annals of Archaeology and Anthropology* 19:55-116.
- Castel, C.
 1992 *Habitat urbain neo-assyrien et neo-babylonien: de l'espace bati a l'espace vecu*, vol.2, Paris.
- Caubet, A. (ed.)
 1995 *Khorsabad, le palais de Sargon II, roi d'Assyrie*, Actes du colloque organisé au musée du Louvre par le service culturel les 21 et 22 janvier 1994, la documentation Française, Paris.
- Ciafardini, P.
 1992 "Pre-Aramaic and Aramaic sites in the area of Idlib," in S. Mazzoni (ed.) *Tell Afis e L'eta del Ferro*, pp.37-74, Pisa.
- Cogan, M - I. Eph'al (eds.)
 1991 *Ah, Assyria...Studies in Assyrian History and Ancient Near Eastern Historiography presented to Hayim Tadmor*, Jerusalem.
- Cristaller, W.
 1966 *Central Places in Southern Germany*, Englewood Cliffs, New Jersey.
- Crowfoot, J.W., K. Kenyon and E.L. Sukenik
 1942 *Samaria-Sebaste I: The Buildings at Samaria*. London.
- Curtis, J.
 1989 *Excavations at Qasrij Cliff and Khirbet Qasrij*. British Museum, Western Asiatic Excavations 1, London.
 1982 "Balawat" in J. Curtis (ed.), *Fifty Years of Mesopotamian Discovery*, pp.113-119, London.

- Curtis, J. - A.R. Green
 1987 "Preliminary Report on Excavations at Khirbet Khatuniyeh, 1985" in M.S. Damerji (ed.), *Researches on the Antiquities of Saddam Dam Basin Salvage and Other Researches*, Baghdad: 73-77.
 1997 *Excavations at Khirbet Khatuniyeh*, Saddam Dam Report 11. British Museum, London.
- Curvers, H.H.
 1991 *The Balikh Drainage in the Bronze Age*. University of Amsterdam, Ph.D. dissertation.
- Dalley, S.
 1994 "Nineveh, Babylon, and the Hanging Gardens: Cuneiform and Classical Sources Reconciled," *Iraq* 41: 45-58.
 1984 *Mari and Karana, Two Old Babylonian Cities*. Longman Group Limited, Essex.
- Delaporte, L.
 1940 *Malatya-Arslantepe*. Paris.
- Dittman, R.
 1992 "Assur and Kar Tukulti-Ninurta" in K. Nashef, "Archaeology in Iraq," *American Journal of Archaeology* 96:307-312.
 1990 "Ausgrabungen der Freien Universität Berlin in Assur und Kar Tukulti-Ninurta in den Jahren 1986-1989." *Mitteilungen der Deutschen Orient Gesellschaft* 122:157-171.
- Donbaz, V - G. Frame
 1983 "The Building Activities of Shalmaneser I in Northern Mesopotamia," *Annual Review of the Royal Inscriptions of Mesopotamia Project* 1:1-5.
- Dossin, G.
 1972 "Adassum et kirhum dans les textes de Mari," *Revue d'assyriologie et d'archéologie orientale* 66: 112-117.
- Drews, R.
 1993 *The End of the Bronze Age: Changes in Warfare and the Catastrophe ca. 1200 B.C.*, Princeton University Press.
- Eickhoff, T.
 1985 *Kar Tukulti-Ninurta, eine mittelassyrische Kult- und Residenzstadt*. Abhandlungen der Deutschen Orient-Gesellschaft 21, Berlin.
 1980 "Kar Tukulti-Ninurta," *Reallexikon der Assyriologie und vorderasiatischen Archäologie* 5/5-6:456-458, Berlin.
- Eidem, J. - D. Warburton
 1996 "In the Land of Nagar: A Survey Around Tell Brak," *Iraq* 48:51-64.
- Ergenzinger, P.J.
 1991 "Geomorphologische Untersuchungen im Unterlauf des Habur," in H. Kuhne (ed.), *Die rezente Umwelt von Tall Seh Hamad und Daten zur*

Umweltrekonstruktion der assyrischen Stadt Dur-Katlimmu. Berichte der Ausgrabung Tall Seh Hamad. Berlin, pp. 35-50.

Ergenzinger, P.J. - H. Kuhne

- 1991 "Ein regionales Bewässerungssystem am Habur," in H.Kuhne (ed.), *Die rezente Umwelt von Tall Seh Hamad und Daten zur Umweltrekonstruktion der assyrischen Stadt Dur-Katlimmu. Berichte der Ausgrabung Tall Seh Hamad. Berlin, pp. 163-190.*

Ergenzinger, P.J., W. Frey, H. Kuhne and H. Kurschner

- 1988 "The Reconstruction of Environment, Irrigation and Development of Settlement on the Habur in Northeast Syria," in J.L. Bintliff et al. (eds.) *Conceptual Issues in Environmental Archaeology. Edinburgh University Press, Edinburgh, pp.108-128.*

Fales, M.

- 1990 "The Rural Landscape of the Neo-Assyrian Empire: A Survey," *State Archives of Assyria Bulletin IV/2: 81-142.*

Fales, M. - J.N. Postgate (eds.)

- 1995 *Imperial and Administrative Records Part II, State Archives of Assyria 11. Helsinki.*

Fontan, E. - N. Chevalier

- 1994 *De Khorsabad à Paris, la decouverte des Assyriens, Notes et documents des musees de France 29, RMN, Paris.*

Forrer, E.

- 1920 *Die Provinzeiteilung des assyrischen Reiches. Leipzig*

Foster, B.R.

- 1993 *Before the Muses: An Anthology of Akkadian Literature, vol I: Archaic, Classical, Mature. CDL Press, Bethesda, Maryland.*
 1982 *Umma in the Sargonic Period. Memoirs of the Connecticut Academy of Sciences, Hamden, Connecticut.*

Frankfort, H.

- 1970 *The Art and Architecture of the Ancient Orient. Penguin Books, New York.*
 1950 "Town Planning in Ancient Mesopotamia," *Town Planning Review 21: 99-115.*

Gadd, C.J.

- 1936 *The Stones of Assyria. London.*

Garelli, P.

- 1982 "Importance et role des Arameens dans l'administration de l'empire assyrien" in H. Nissen and L. Renger (eds.), *Mesopotamien und seine Nachbarn (2 vols.), pp. 437-447, Berlin, .*

George, A.

- 1990 "Inscriptions from Tell al-Hawa, 1987-88", *Iraq 52:41-46.*

- Glassner, J.-J.
 1993 *Chronicle of Early Kings*. Les Belles Lettres, Paris.
 1979 *La chute de l'empire d'Akkade* (Thesis). Ecole Pratique des Hautes Etudes. Paris.
- Goetze, A.
 1975 "The Struggle for Domination in Syria (1400 - 1300 B.C.)," *Cambridge Ancient History* 2: 1-20.
- Gorny, R.
 1989 "Environment, Archaeology and History in Hittite Anatolia," *Biblical Archaeologist*: 78-94.
- Gottwald, N.K.
 1979 *The Tribes of Yahweh*. Orbis. Maryknoll, New York.
- Grayson, A.
 1996 *The Royal Inscriptions of Mesopotamia, Assyrian Periods*, vol. 3. *Assyrian Rulers of the Early First Millennium B.C., II (858-745 B.C.)*, University of Toronto Press, Toronto.
 1991 *The Royal Inscriptions of Mesopotamia, Assyrian Periods*, vol. 2. *Assyrian Rulers of the Early First Millennium B.C., I (1114-859 B.C.)*, University of Toronto Press, Toronto.
 1987 *The Royal Inscriptions of Mesopotamia, Assyrian Periods*, vol. 1. *Assyrian Rulers of the Third and Second Millennium B.C. (1114-859 B.C.)*, University of Toronto Press, Toronto.
 1972 *Assyrian Royal Inscriptions*, vol. 1 and 2. Harrassowitz, Wiesbaden.
- Guest, E.
 1966 *Flora of Iraq. Vol. 1, Introduction to the Flora, an Account of the Geology, Soils, Climate and Ecology of Iraq with Gazeteer, Glossary and Bibliography*. Baghdad.
- Haines, R.C.
 1971 *Excavations on the Plain of Antioch, II: The Structural Remains of the Later Phases: Chatal Huyuk, Tell al-Judaiah, and Tell Ta'yinat*. *Oriental Institute Publications* 95, University of Chicago.
- Hallo, W.W.
 1968 "The Rise and Fall of Kalhu," *Journal of the American Oriental Society* 88:772-775.
- Hausleiter, A - A. Reiche
 n.d. *Studies on Iron Age Pottery in Northern Mesopotamia, North Syria and Southern Anatolia*. *Altertumskunde des Vorderen Orients*, Munster.
- Hawkins, J.D.
 1995 "The Political Geography of North Syria and South-East Anatolia" in Liverani, M. (ed.), *Neo-Assyrian Geography*, Universita di Roma, *Quaderni di Geografia Storica* 5, pp.87-102, Rome.

- 1983 "The Hittite name of Til Barsip: evidence from a new hieroglyphic fragment from Tell Ahmar," *Anatolian Studies* 33: 131-136.
- 1982 "The Neo-Hittite States in Syria and Anatolia," *Cambridge Ancient History* III/I, 2nd ed.: 372-441.
- 1974 "Assyrians and Hittites," *Iraq* 36: 67-83.
- Heinrich, E.
1984 *Die Palaste im alten Mesopotamien*. Berlin.
- Herzog, Z.
1997 *Archaeology of the City: Urban Planning in Ancient Israel and Its Social Implications*. Emery and Claire Yass Archaeological Press, Insitute of Archaeology, Tell Aviv.
1992 "Administrative Structures in the Iron Age" in A. Kempinski and R. Reich (eds.), *The Architecture of Ancient Israel: From the Prehistoric to the Persian Periods*, pp. 231-274, Jerusalem.
- Hogarth, D.G.
1909 "Carchemish and its Neighborhood," *Liverpool Annals of Archaeology and Anthropology* 2:165-184.
- Hogarth, D.G. - C.L. Woolley - R.D. Barnett
1914-52 *Carchemish* (3 vols.). London
- Hole, F.
1998 "Paleoenvironment and human society in the Jezireh of northern Mesopotamia, 20,000-6,000 B.P.," *Paleorient* 23 (2):39-49.
- Huot, J.-L. (ed.)
1988 *La ville neuve, une idée de l'antiquite*. Paris.
- Huot, J.-L., J.P. Thalmann and D. Valbelle
1990 *Naissance des Cités*. Nathan. Paris.
- Ibrahim, J.K.
1986 *Pre-Islamic Settlement in the Jazira, Republic of Iraq*, State Organization of Antiquities and Heritage, Baghdad.
- Ikeda, Y.
1979 "Royal Cities and Fortified Cities," *Iraq* 41: 75-87.
- Jacoby, R.
1991 "The Representation and Identification of Cities on Assyrian Reliefs," *Israel Exploration Journal* 41:112-31.
- Jalal, M.M. - M.A.I. Badawi
1983 'Ana. Unpublished Field Report. March-June. (Arabic).
1982 'Ana. Unpublished Field Report. March. (Arabic).
- Jasim, R.R.
1986 "Walls of Some Sites in the Al-Qadisiya Dam Basin", *Sumer* 42:15-19 (Arabic).

- Joffe, A.H.
1998 "Disembedded Capitals in Western Asian Perspective" in *Comparative Studies in Society and History*, pp. 549-580, Ann Arbor.
- Johannes, F.
1985 "Haradum et le Pays de Suhum, D'Après la Documentation Cuneiform à l'Epoque Babylonienne Ancienne", *Archéologia* 205:56-59.:57-58;
- Johns, C.H.W.
1901 *An Assyrian Doomsday Book*. Leipzig.
- Kantor, H.J.
1958 "The Pottery", in C.L. McEwan - L.S. Braidwood et al. (eds.), *Soundings at Tell Fakhariyah, Oriental Institute Publications* 79, University of Chicago.
- Kempinski, A.
1989 *Megiddo: A City-State and Royal Centre in North Israel*. AVA - Materialien, 40, C.H. Beck Verlag, Munich.
- Kempinski, A. - R. Reich (eds.)
1992 *The Architecture of Ancient Israel: From the Prehistoric to the Persian Periods*. Jerusalem.
- Kenyon, K.K.
1971 *Royal Cities of the Old Testament*. London.
- Kepinski, C.
1984a *Khirbet al-Diniya* (5th season). Unpublished Field Report. Spring.
1984b *Khirbet al-Diniya* (5th season). Unpublished Field Report. February-June.
1982 *Khirbet al-Diniya* (3rd season). Unpublished Field Report. Autumn.
- Kepinski, C. - O. Lecomte
1985 "Haradum/Harada, Aux Frontiers de Babylone et Assur, Une Fortress Sur L'Euphrate", *Archeologia* 205:46-55.
- Kessler, K.
1997 "'Royal Roads' and Other Questions of the Neo-Assyrian Communication System" in S. Parpola - R.M. Whiting (eds.), *Assyria 1995*, Helsinki.
1991 "Die Assyrer" in B. Hrouda (ed.), *Der Alte Orient*, Munich, 112-150.
1980 *Untersuchungen zur historischen Topographie Nordmesopotamiens nach keilschriftlichen Quellen des 1. Jahrtausends v. Chr.* (Beihefte zum Tubinger Atlas des Vorderen Orients Band 26), Wiesbaden.
- Killick, R. - J. Black
1985 "Excavations in Iraq, 1983-84", *Iraq* 47: 215-239.
- Killick, R. - M. Roaf
1983 "Excavations at Tell Madhur", *Sumer* 35: 534-542 (English); 530-533 (Arabic).

- King, L.W.
1915 *Bronze Reliefs from the Gates of Shalmaneser III, King of Assyria B.C. 860-825.* London.
- Knapp, A.B.
1986 *Copper Production and Divine Protection: Archaeology, Ideology and Social Complexity on Bronze Age Cyprus.* Goteborg, Astrom.
- Kohl, P.
1987 "The Use and Abuses of the World Systems Theory: The Case of the Pristine West Asian State." *Advances in Archaeological Method and Theory* 11, pp.1-35, Academic Press, San Diego, .
- Kostof, S.
1991 *The City Shaped Urban Patterns and Meanings Through History.* Thames and Hudson. London.
- Kouchoukos, N.
1998 *Landscape and Social Change in Late Prehistoric Mesopotamia,* Yale University Ph.D. dissertation.
- Kraeling, C.H. - R. McC. Adams (eds.)
1060 *City Invincible: A Symposium on Urbanization and Cultural Development in the Ancient Near East.* University of Chicago Press.
- Kubba, S.
1987 *Mesopotamian Architecture and Town Planning.* B.A.R. Series 367. Oxford.
- Kuhne, H.
1998 "Tall Seh Hamad - The Assyrian City of Dur-Katlimmu: A Historical-Geographic Approach" in H.I.H. Prince Takahito Mikasa (ed.), *Essays on Ancient Anatolia in the Second Millennium B.C.*, pp.279-307, Harrassowitz, Weisbaden.
1995 "The Assyrians on the Middle Euphrates and the Habur," in M. Liverani (ed.), *Neo-Assyrian Geography.* Universita di Roma, Quaderni di Geografia Storica 5: 69-85, Rome.
1994 "The Urbanization of the Assyrian Provinces," in S. Mazzoni (ed.) *Nuove Fondazioni nel Vicino Oriente Antico: Realta e Ideologia*, pp.55-84, Pisa.
1991 *Die rezente Umwelt von Tall Seh Hamad und Daten zur Umweltrekonstruktion der assyrischen Stadt Dur-Katlimmu.* Berichte der Ausgrabung Tall Seh Hamad/Dur-Katlimmu, vol.1. Berlin.
1990b "The Effects of Irrigation Agriculture: Bronze and Iron Age Habitation along the Khabour, Eastern Syria," in S. Bottema et al. (eds.), *Man's Role in the Shaping of the Eastern Mediterranean Landscape*, pp. 15-30. Rotterdam.
1987-8 "Report on the Excavation of Tall Seh Hamad 1988." *Les Annales Archeologiques Arabes Syriennes* 37/38: 142-157. Damascus
1986-7 "Preliminary Report on the Excavation of Tall Seh Hamad 1986." *Les Annales Archeologiques Arabes Syriennes* 36/37: 221-267. Damascus.

- 1984a "Tall Seh Hamad/Dur-Katlimmu, the Assurian provincial capital in the Mohafazat Der az-Zor," *Les Annales Archeologiques Arabes Syriennes* 34: 160-182, Damascus.
- 1984 "Tall Seh Hamad/Dur-Katlimmu 1981-1983," *Archiv fur Orientforschung* 31:166-178, Graz.
- 1981-2 "Tall Seh Hamad/Dur-Katlimmu 1980," *Archiv fur Orientforschung* 28:233-235, Graz.
- 1978-9 "Tall Seh Hamad/Dur-Katlimmu 1978," *Archiv fur Orientforschung* 26:166-168, Graz.
- 1974-7 "Zur historischen Geographie am Unteren Habur" (2), *Archiv fur Orientforschung* 25: 249-255.
- Kuhrt, A.
1995 *The Ancient Near East c. 3000-330 B.C.* (2 vols.). Routledge. London and New York.
- Lapidis, I.M.
1969 "Mesopotamia - Land of Many Cities" in I.M. Lapidis (ed.), *Middle Eastern Cities*. Berkeley, pp. 3-18.
- Lamon, R.S. - Shipton, G.M.
1939 *Megiddo I: Seasons of 1925-34, Strata I - V*. Oriental Institute Publications 42, Chicago.
- Lambert, W.G.
1991 "An Unknown King in an Unknown City" in M. Cogan and I. Eph'al (eds.), *Ah, Assyria...Studies in Assyrian History and Ancient Near Eastern Historiography presented to Hayim Tadmor*, pp. 314-319, Jerusalem.
- Lampl, P.
1968 *Cities and Planning in the Ancient Near East*. London.
- Lanfranchi, G.B. - S. Parpola
1990 *The Correspondence of Sargon II, Part II, Letters From the Northern and Northeastern Provinces, State Archives of Assyria, 5*, Helsinki.
- Layard, A. H.
1853 *Discoveries in the Ruins of Nineveh and Babylon*, London.
1849 *Nineveh and its Remains*, 2 vols. London.
- Lebeau, M.
1983 *La Ceramique de l' Age du Fer II-III à Tell Abu Danne et ses rapports avec la ceramique contemporaine en Syrie*. Paris.
- Lebeau, M. - A.Suleiman (eds.)
1997 *Tell Beydar, Three Seasons of Excavations (1992-1994), A Preliminary Report (Subartu 2)*. Brepols. Brussels.
- Lemcke, G. - Sturm, M.
1997 "Delta 18 O and trace element measurements as proxy for the reconstruction of climatic changes at Lake Van (Turkey): Preliminary results," in H.N.

Dalfes, G. Kukla, and H. Weiss (eds.), *Third Millennium BC Climate Change and Old World Collapse. NATO ASI Series on Global Environmental Change* 49, pp. 653-678, Springer, Berlin.

Levine, L.D.

1976 "East-West Trade in the Late Iron Age: A view from the Zagros" in *Le plateau iranien et l'Asie centrale des origines a la conquete islamique* (Colloques internationaux du Centre National de la Recherche Scientifique, No. 567), pp. 171-186, Paris.

Lie, A.G.

1929 *The Inscriptions of Sargon II, King of Assyria, Part I, The Annals*, Paris.

Liverani, M.

1997 "Ancient Near Eastern Cities and Modern Ideologies," *Die Orientalische Stadt: Kontinuitat, Wandel, Bruch*. Saarbrucker Druckerei und Verlag, pp.85-107.

1994 "Ideologia Della Nuove Fondazioni Urbane in Eta' Neo-Assira" in S. Mazzoni (ed.), *Nuove fondazioni nel Vicino Oriente antico: realta e ideologia*, pp. 375-383, Pisa.

1992 *Studies on the Annals of Ashurnasirpal II: 2: Topographical Analysis*. Rome.

1988 "The Growth of the Assyrian Empire in the Habur/Middle Euphrates Area: A New Paradigm." *State Archives of Assyria Bulletin* II/2: 81-98.

Loud, G.

1948 *Megiddo II. Oriental Institute Publications* 62, Chicago.

1936 "An Architectural Formula for Assyrian Planning Based on Results of Excavations at Khorsabad," *Revue d'Assyriologie* 33: 153-160.

Loud, G., H. Frankfort, T. Jacobsen

1936 *Khorsabad, Part I: Excavations in the Palace and at a City Gate, Oriental Institute Publications* 38, Chicago.

Loud, G. - C.B. Altman

1938 *Khorsabad, Part II: the Citadel and the Town, Oriental Institute Publications* 40, Chicago.

Luckenbill, D.D.

1927 *Ancient Records of Assyria and Babylonia* II. Greenwood Press. New York.

1924 *The Annals of Sennacherib. Oriental Institute Publications* 2, University of Chicago Press.

Lumsden, S.

1991 "Urban Nineveh: Investigations Within the Lower Town of the Last Assyrian Capital," *Mar Sipri* 4:

Lyon, D.

1883 *Keilschrifttexte Sargons, Konigs von Assyrien*, Leipzig.

- Lyonnet, B.
 1996a "La prospection archéologique de la partie occidentale du Haut-Khabur (Syrie du Nord-est): Methodes, résultats et questions autour de l'occupation aux IIIe et IIe millénaires av.N.E.", *Amurru* 1:363-376.
 1996b "Settlement pattern in the Upper Khabur (N.E. Syria) from the Achaemenids to the Abbasid period: Methods and preliminary results from a survey" in K. Bartl - S. Hauser (eds.), *Continuity and Change in Northern Mesopotamia From the Hellenistic to the Early Islamic Period*, pp. 349-362. Berliner Beitrage zum Vorderen Orient, Band 17. Berlin.
- Machinist, P.
 1985 "On Self-Consciousness in Mesopotamia" in S.N. Eisenstadt (ed.), *The Origins and Diversity of Axial Age Civilizations*, pp. 183-202, State University of New York Press, Albany.
 1982 "Provincial Governance in Middle Assyria and Some New Texts From Yale." *Assur* 3/2: 1-36.
- Madhloom, T.A.
 1970 *The Chronology of Neo-Assyrian Art*. London.
- Mallowan, M.E.L.
 1996 *Nineveh and its Remains I*, London.
 1950-9 "Excavations at Nimrud," *Iraq* 12-21.
 1937 "The excavations at Tell Chagar Bazar and an archaeological survey of the Habur region: second campaign 1936," *Iraq* 4: 91-154.
 1936 "The excavations at Tell Chagar Bazar and an archaeological survey of the Habur region: second campaign 1936," *Iraq* 3: 1-86.
- Marcus, M.I.
 1995 "Geography as Visual Ideology: Landscape, Knowledge, and Power in Assyrian Art" in M. Liverani (ed.), *Neo-Assyrian Geography*, *Quaderni di Geografica Storica*, pp. 193-202, Rome.
 1987 "Geography as an Organizing Principle in the Imperial Art of Shalmaneser III," *Iraq* 49: 77-90.
- Margueron, J.-C.
 1995 "Le palais de Sargon: réflexions préliminaires à une étude architecturale" in A. Caubet (ed.), *Khorsabad, le palais de Sargon II, roi d'Assyrie*, Actes du colloque organisé au musée du Louvre par le service culturel les 21 et 22 janvier 1994, la documentation Française, pp. 181-212, Paris.
- Matney, T.
 1998 "The First Season of Work at Ziyaret Tepe in the Diyarbakir Province: Preliminary Report." *Anatolica* 24:7-30.
- Matthiae, P.
 1994 "Da Nimrud à Khorsabad: storia di un modello tra progetto e realizzazione, in S. Mazzoni (ed.), *Nuove fondazioni nel Vicino Oriente antico: realta e ideologia*, pp.29-45, Pisa.

- Maul, S.M.
1992 *Die Inschriften von Tall Bderi*, Berlin.
- Maxwell-Hyslop, K.R.
1974 "Assyrian Sources of Iron: A Preliminary Survey of the Historical and Geographical Evidence." *Iraq* 36:139-154.
- Mazzoni, S.
1995 "Settlement Pattern and New Urbanism in Syria at the Time of the Assyrian Conquest" in M. Liverani (ed.), *Neo-Assyrian Geography*. Universita di Roma, Quaderni di Geografia Storica, 5, pp.181-191, Rome.
1994 "Aramaeans and Luwian New Foundations" in S. Mazzoni (ed.), *Nuove fondazioni nel Vicino Oriente antico: realta e ideologia*, pp. 319-339, Pisa.
1992 *Tel Afis e L'eta del Ferro, Seminari di Orientalistica*. Pisa.
1990 "Tell Afis and the chronology of the Iron Age in Syria," *Les Annales Archeologiques Arabes Syriennes* XL: 76-92.
- McClellan, T.
1992 "Twelfth Century B.C. Syria: Comments on H. Sader's Paper" in W.A. Ward and M.S. Joukowsky (eds.), *The Crisis Years: The 12th Century B.C. From Beyond the Danube to the Tigris*. Dubuque, Iowa, pp.164-173.
- McClellan, T. - A. Porter
1997 "Khabur", in E.M. Meyers (ed.), *The Oxford Encyclopedia of Archaeology in the Ancient Near East* (vol. 3), pp. 286-288. Oxford University Press.
1995 "Jawa and North Syria." *Studies in the Archaeology and History of Jordan* 5, pp. 49-65, Aman.
- McEwan, C.W. - L.S. Braidwood et al. (eds.)
1958 *Soundings at Tell Fakhariyah*. *Oriental Institute Publications* 79. University of Chicago.
- Meijer, D.
1989 "Ground Plans and Archaeologists: On Similarities and Comparisons," in O.M.C. Haex and P.M.M.G. Akkermans (eds.), *To the Euphrates and Beyond. Archaeological Studies in Honor of M. van Loon*, pp. 221-236, A.A. Balkema. Rotterdam.
1986 *A Survey in Northeastern Syria*. Nederlands Historisch-Archaeologisch Instituut te Istanbul. Istanbul.
- Mendenhall, G.E.
1962 "The Hebrew Conquest of Palestine," *Biblical Archaeologist* 25:66-87.
- Meyers, E.M. (ed.)
1997 *The Oxford Encyclopedia of Archaeology in the Ancient Near East* (5 vols.). Oxford University Press.
- Mohl, J.
1845 *Lettres de M. Botta sur les decouvertes à Khorsabad*, Paris.

- Moortgat, A.
1969 *The Art of Ancient Mesopotamia*, Phaidon, London and New York.
- Morandi, D.
1996 *Tra il fiume e la steppa: insediamento e uso del territorio nella bassa valle del fiume Habur in epoca neo-assira*. History of the Ancient Near East Monographs I. Padova.
- Morandi, D. - S. Kulemann
n.d. "Die Eisenzeitliche Keramik", in *Die archaologische Geländebegehung am Unteren, Teil I: Der nordliche Abschnitt bis zum Wadi Raml, Beihefte des Tubinger Atlas des Vorderen Orients 67*, Weisbaden.
- Naumann, R.
1971 *Architektur Kleinasiens* (2 vols.). Tübingen.
- Neumann, J. - S. Parpola
1987 "Climatic Change and the Eleventh-Tenth Century Eclipse of Assyria and Babylonia." *Journal of Near Eastern Studies* 6:161-182.
- Oates, D.
1974 "Balawat (Imur-Enlil): The Site and Its Buildings," *Iraq* 36: 173-178.
1972a "The development of Assyrian towns and cities," in P.J. Ucko, R. Tringham and G.W. Dimbleby (eds.), *Man, Settlement and Urbanism*, pp.799-804, University of Arizona, Tucson.
1972b "The Excavations at Tell Al-Rimah," *Iraq* 34:77-86.
1970 "The Excavations at Tell Al-Rimah," *Iraq* 32:1-26.
1968a "The Excavations at Tell Al-Rimah, 1967," *Iraq* 30: 115-138.
1968b *Studies in the Ancient History of Northern Iraq*. London.
1967 "The Excavations at Tell Al-Rimah, 1966," *Iraq* 29:70-96.
1966 "The Excavations at Tell Al-Rimah, 1965," *Iraq* 28:122-139.
1965 "The Excavations at Tell Al-Rimah, 1964," *Iraq* 27 (2): 62-67; 79-80.
1961-3 "Excavations at Nimrud," *Iraq* 23-25.
- Oates, D. and J. Oates
1990 "Early Irrigation in Mesopotamia", in G. de Sieveking, I.H. Longworth and K.E. Wilson (eds.), *Problems in Social and Economic Archaeology*, Duckworth, London, pp. 109-135.
1958 "Nimrud 1957: The Hellenistic Settlement." *Iraq* 20:114-157.
- Oates, D, J. Oates and H. MacDonald
1997 *Excavations at Tell Brak, vol I: The Mitanni and Old Babylonian Periods*. British School of Archaeology in Iraq and McDonald Institute Monographs. Cambridge.
- Oates, D. - J.H. Reid
1956 "The Burnt Palace and the Nabu Temple, Nimrud, 1955," *Iraq* 18 (1):22-38.

- Oates (Lines), J.
1959 "Late Assyrian pottery from Fort Shalmaneser." *Iraq* 21: 130-46.
- Oded, B.
1979 *Mass Deportations and Deportees in the Neo-Assyrian Empire*, Wiesbaden.
- Oppenheim, A.L.
1964 *Ancient Mesopotamia: Portrait of a Dead Civilization*. Chicago and London.
- Orthmann, W.
1971 *Untersuchungen zur spathethitischen Kunst* (Saarbrücker Beiträge zur Altertumskunde 8), Bonn.
- Page, S.
1968 "The Stela of Adad-Nirari III and Nergal-Eres from Tell al-Rimah," *Iraq* 30:139-153.
- Parker, B.
1997a "The Northern Frontier of Assyria: An Archaeological Perspective", in S. Parpola - R.M. Whiting (eds.), *Assyria 1995*, pp.217-244, Helsinki.
1997b "Garrisoning the Empire: Aspects of the Construction and Maintenance of Forts on the Assyrian Frontier," *Iraq* 59:77-87.
- Parpola, S.
1995 "The Construction of Dur-Sharrukin in the Assyrian Royal Correspondence" in A. Caubet (ed.), *Khorsabad, le palais de Sargon II, roi d'Assyrie*, Actes du colloque organise au musee du Louvre par le service culturel les 21 et 22 janvier 1994, la documentation Francaise, pp. 47-77, Paris.
1987 *The Correspondence of Sargon II, Part I: Letters From Assyria and the West*, State Archives of Assyria 1, Helsinki.
1979 *Cuneiform Texts from Babylonian Tablets in the British Museum*, vol. 53. British Museum, London.
- Parpola, S. - R.M. Whiting (eds.)
1997 *Assyria 1995*. Helsinki.
- Pfalzner, P.
1989/90 "Tall Bderi 1985-1987," *Archiv für Orientforschung* 36/37: 212-221.
- Pinnock, F.
1994 "Elements of Urbanization in Inner Syria in the Late Bronze Age" in S. Mazzoni (ed.), *Nuove fondazioni nel Vicino Oriente antico: realta e ideologia*, pp. 187-213, Pisa.
- Place, V.
1867-70 *Ninive et l'Assyrie, avec des essais de restauration par Felix Thomas*, 3 vols, Paris.

- Postgate, N.
 1995 "Assyria: The Home Provinces," in *Neo-Assyrian Geography*. Universita di Roma, Quaderni di Geografia Storica, 5, pp. 1-17, Rome.
 1992 "The Land of Assur and the Yoke of Assur." *World Archaeology* 23/3: 247-262.
 1979 "The economic structure of the Assyrian Empire", in M.T. Larsen (ed.) *Power and Propaganda*. Akademisk Forlag. Copenhagen: 193-218.
 1977 *The First Empires*, Oxford.
 1974 "Some Remarks on the Conditions in the Assyrian Countryside," *Journal of the Economic and Social History of the Orient* 17/3: 232-240.
- Postgate, N. - J. Reade
 1978 "Kalhu", *Reallexikon der Assyriologie und vorderasiatischen Archaologie* 5:303-323.
- Rawi, N.A. al-
 1982 *Sur Telbis*. Unpublished Field Report. February. (Arabic).
- Rawi, N.A.al- and I.A. Shalabi
 1982 *Sur Telbis*. Unpublished Field Report. May. (Arabic).
- Reade, J.
 1979 "Narrative Composition in Assyrian Sculpture," *Baghdader Mitteilungen* 10: 64-72.
 1978 "Studies in Assyrian Geography, Part I: Sennacherib and the Waters of Nineveh." *Revue d'Assyriologie* 72:47-72.
- Reich, R.
 1992 "Palaces and Residences in the Iron Age" in A. Kempinski and R. Reich (eds.), *The Architecture of Ancient Israel: From the Prehistoric to the Persian Periods*, pp. 202-222, Jerusalem.
- Reisner, G.A., C.S. Fischer and D.G. Lyon
 1924 *Harvard Excavations at Samaria 1908-1910, Vol. II: Plans and Plates*. Cambridge, Mass.
- Riis, P.J. - M.L. Buhl
 1990 *Hama 2/II: les objets de la periode dite syro-hittite (age du fer)*. (Nationalmuseets Skrifter, Stowe Beretninger 12), Copenhagen.
- Roaf, M.
 1995 "Palaces and Temples in Ancient Mesopotamia" in J. Baines, G. Beckman, K. Rubinson (eds.), *Civilizations of the Ancient Near East I Part 4:423-442*, Scribners/Simon and Schuster, New York.
- Roaf, M. - J.N. Postgate
 1981 "Excavations in Iraq", *Iraq* 43:167-198.
- Rollig, W.
 1983 "Eine Itinerar aus Dur-Katlimmu," *Damaszener Mitteilungen* 1: 279-284 (Damascus).
 1978 "Dur-Katlimmu," in *Orientalia* 47: 419-430.

- Rollig, W. - H. Kuhne
 1980 "The Lower Habur. A Preliminary Report on a Survey Conducted by the Tubinger Atlas des Vorderen Orients in 1975," *Les Annales Archeologiques Arabes Syriennes* 27: 28:115-140, Damascus.
 1983 "The Lower Habur. Second Preliminary Report on a Survey in 1977," *Les Annales Archeologiques Arabes Syriennes* 33: 187-199.
- Roobaert, A.
 1990 "The City Gate Lions" in G. Bunnens (ed.), *Tell Ahmar, 1988 Season, Abr-Nahrain Supplement Series*, vol.2, pp. 126-136, Leuven.
- Russell, H.F.
 1985 "The Historical Geography of the Euphrates and Habur According to the Middle and Neo-Assyrian Sources," *Iraq* 47:57-74.
- Russell, J.M.
 1996 "Nineveh," in J.G. Westenholz (ed.), *Royal Cities of the Biblical World*, pp.153-236, Bible Lands Museum, Jerusalem.
 1991 *Sennacherib's Palace Without Rival at Nineveh*. Chicago.
- Rykwert, J.
 1988 *The Idea of a Town: The Anthropology of Urban Form in Rome, Italy and the Ancient World*. Cambridge, MA and London.
- Sader, H.
 1992 "The 12th Century B.C. in Syria: The Problem of the Rise of the Aramaeans" in W.A Ward - M.S. Joukowsky (eds.), *The Crisis Years: The 12th Century B.C. From Beyond the Danube to the Tigris*. Dubuque, Iowa: 164-173.
- Schnabel, P.
 1923 *Berosos und die babylonisch-hellenistische Literatur*. Berlin.
- Schwartz, G.
 1989 "The Origins of the Aramaeans in Syria and Northern Mesopotamia: Research Problems and Potential Strategies" in O.M.C. Haex and P.M.M.G. Akkermans (eds.), *To the Euphrates and Beyond. Archaeological Studies in Honor of M. van Loon*, pp. 275-291, A.A. Balkema, Rotterdam.
- Scott, M.L. - Macginnis, J.
 1990 "Notes on Nineveh," *Iraq* 52: 63-73.
- Speiser, E.A.
 1932 "The Pottery of Tell Billa," *The Museum Journal XXIII*: 249-283.
- Stanislawski, D.
 1946 "The Origin and Spread of the Grid-Patterned Town," *The Geographical Review* 36:105-120.

- Stein, G. - P. Wattenmaker
 1990 "The 1987 Tell Leilan regional survey: Preliminary report." *MASCA Research Papers in Science and Archaeology*, Supplement to vol. 7:5-18.
- Stone, E.C.
 1995 "The Development of Cities in Mesopotamia" in J. Baines, G. Beckman, K. Rubinson (eds.), *Civilizations of the Ancient Near East I*: 235-248, Scribners/Simon & Schuster, New York.
 1991 "The Spatial Organization of Mesopotamian Cities," *Aula Orientalis* 9: 235-242.
- Stone, E. - P. Zimansky
 1992 "Mashkan-shapir and the Anatomy of an Old Babylonian City," *Biblical Archaeologist* 55:212-218,
- Streck, M.
 1916 *Assurbanipal und die Letzen Assyrischen Koenige bis zum Untergange Ninivehs. Vorderasiatische Bibliothek* 7. Leipzig.
- Stronach, D.
 1997 "Notes on the Fall of Nineveh" in S. Parpola and R.M. Whiting (eds.), *Assyria 1995*, pp.307-324, Helsinki.
 1995 "Notes on the Topography of Nineveh" in M. Liverani (ed.), *Neo-Assyrian Geography*, Universita di Roma, Quaderni di Geografia Storica, 5, 161-170, Rome.
 1994 "Village to Metropolis: Nineveh and the Beginnings of Urbanism in Northern Mesopotamia" in S. Mazzone (ed.) *Nuove Fondazioni nel Vicino Oriente Antico: Realtà e Ideologia*, Pisa:85-114.
 1989 "When Assyria Fell: New Light on the Last Days of Nineveh," *Mar Sipi* 2 (2):1-2.
- Stronach, D. - S. Lumsden
 1992 "U.C. Berkeley's Excavations at Nineveh," *Biblical Archaeologist* 55, no. 4:227-233.
- Summers, G.D. - M.E.F. Summers
 1996 "The Kerkenes Dag Survey: An Interim Report," *Anatolian Studies* 46:201-234.
 1995 "The Regional Survey at Kergenes Dag: An Interim Report on the Seasons of 1993 and 1994," *Anatolian Studies* 45: 43-68.
- Tasyurek, O.A.
 1979 "A Rock Relief of Shalmaneser III on the Euphrates," *Iraq* 41:47-54.
- Tadmor, H.
 1982 "The Aramaization of Assyria: aspects of western impacts" in H. Nissen and L. Renger (eds.), *Mesopotamien und seine Nachbarn* (2 vols.). Berlin: 449-470.
 1975 "Assyria and the West: The ninth century and its aftermath" in H. Goedicke - J.J.M. Roberts (eds.), *Unity and Diversity*, Baltimore and London.

- 1958 "The Campaigns of Sargon II of Assyria", *Journal of Cuneiform Studies* 12: 22-40; 77-100.
- Thureau-Dangin, F.
1929 "Tell Ahmar," *Syria* 10: 185-205.
- Thureau-Dangin, F. - M. Dunand
1936 *Til Barsib*. Paris.
- Thureau-Dangin, F., A. Barrois, G. Dossin and M. Dunand
1931 *Arslan-Tash*. Paris.
1912 *Une relation de la huitieme campagne de Sargon*. Paris.
- Tsoar, H. - Y. Tekutieli
1993 "Geomorphological identification of roads and paths on the loess of the northern Negev, Israel", *Journal of Earth Sciences* 41:209-216.
- Tucker, D.J.
1994 "Representations of Imur-Enlil on the Balawat Gates," *Iraq* 56: 107-116.
- Turner, G.
1970 "The State Apartments of Late Assyrian Palaces," *Iraq* 32: 177-213.
- Van Beek, G.W.
1984 "Archaeological Investigations at Tell Jemmeh, Israel." *National Geographic Society Research Reports* 16: 675-696.
- Van De Mierop, M.
1997 *The Ancient Mesopotamian City*. Clarendon Press, Oxford.
- Van Liere, W.J. - J. Lauffray
1954 "Nouvelle prospection archeologique dans la Haute Jezireh Syrienne", *Les Annales Archeologiques de Syrie* 4-5:129-148.
- van Loon, M.N.
1967 *The Tabqa Reservoir Survey 1964*. Directorate General of Antiquities, Damascus, Syria.
- Ward, W.A. and M.S. Joukowsky (eds.)
1992 *The Crisis Years: The 12th Century B.C. From Beyond the Danube to the Tigris*. Dubuque, Iowa.
- Weber, M.
1921 "Die Stadt", in *Archiv fur Sozialwissenschaft* 47: 621-772.
- Weidner, E.
1926 "Die grosse Konigsliste aus Assur." *Archiv fur Orientforschung* 3: 66 ff.

- Weisbach, F.H.
1918 "Zu den Inschriften der Sale im Palaste Sargon's II. von Assyrien," *Zeitschrift der Deutschen Morgenlandischen Gesellschaft* 72:180 ff.
- Weiss, H.
1997 "Leilan", in H. Weiss (ed.), "Archaeology in Syria", *American Journal of Archaeology* 101:126-129.
1986 "The origins of Tell Leilan and the conquest of space in 3rd millennium Mesopotamia" in H. Weiss (ed.), *The Origins of Cities in Dry-farming Syria*, pp. 71-108. Four Corners Press, Guilford, Connecticut.
1983 "Excavations at Tell Leilan and the origin of north Mesopotamian cities in the third millennium B.C." *Paleorient* 9 (2):39-52.
1982 "The Decline of Late Bronze Civilization as a Possible Response to Climatic Change," *Climatic Change* 4: 172-198.
- Wheatley, P.
1972 "The Concept of Urbanism," in P. Ucko, R. Tringham, G.W. Dimbleby (eds.), *Man, Settlement and Urbanism*, pp. 601-637, Schenkman Publishing, Massachusetts.
- Wilkinson, T.J.
n.d. "Regional Approaches to Mesopotamian Archaeology: The Contribution of Archaeological Surveys", (forthcoming, *Journal of Archaeological Research*).
n.d. "Archaeological survey of the Tell Beydar Region, Syria, 1997: A Preliminary Report", in *Subartu* VI, K. Vanlerberghe (ed.), Ghent.
1998 "Water and Human Settlement in the Balikh Valley, Syria: Investigations from 1992-1995." *Journal of Field Archaeology* 25:63-87.
1995 "Late Assyrian Settlement Geography in Upper Mesopotamia" in M. Liverani (ed.), *Neo-Assyrian Geography*. Universita di Roma, Quaderni di Geografia Storica, 5: 139-160.
1993 "Linear Hollows in the Jazira, Upper Mesopotamia," *Antiquity* 67:548-562.
1990a *Town and Country in Southeastern Anatolia, Vol.1 Settlement and Land Use at Kurban Hoyuk and Other Sites in the Lower Karababa Basin, Oriental Institute Publications* 109.
1990b "The development of settlement in the north Jazira between the 7th and 1st millennia BC." *Iraq* 52:49-62.
- Wilkinson, T.J. - D.J. Tucker
1995 *Settlement Development in the North Jazira, Iraq: A Study of the Archaeological Landscape*. Aris and Phillips Ltd., Warminster.
- Wilson, K.L.
1994 "Les fouilles de l'Oriental Institute de Chicago a Khorsabad (1929-1935)" in E. Fontan - N. Chevalier 1994, pp. 60-65.
- Winkler, H.
1889 *Die Keilschrifttexte Sargons*, Leipzig.
- Winter, I.J.
1983 "Carchemish sa Kisad Puratti," *Anatolian Studies* 33: 177-197.

- 1982 "Art as evidence for interaction: relations between the Assyrian Empire and North Syria" in H.J. Nissen and J. Renger (eds.), *Mesopotamien und seine Nachbarn*, pp. 355-381, D. Reimer. Berlin.
- 1977 "Carved Ivory Furniture Panels From Nimrud: A Coherent Sub-group of the North Syrian Style," *Metropolitan Museum Journal* 11:24-54.

Wiseman, D.J.

- 1983 "Mesopotamian Gardens," *Anatolian Studies* 33: 137-144.

Yener, A.

- 1982 "A Review of Interregional Exchange in Southwest Asia." *Anatolica* 8: 33-76.

Yoffee, N.

- 1991 "The Collapse of Ancient Mesopotamian States and Civilization" in N. Yoffee and G. Cowgill (eds.), *The Collapse of Ancient States and Civilizations*, pp.44-68, University of Arizona Press, Tucson.

Appendix A: Early 1st Millennium Sites in the Middle Euphrates (cf. Abdul-Amir*)

No.	Name	Site Type	Size	I.A.Pottery : Survey	I.A.Pottery : Excavation
3	Shama	C		Yes	No
8	Glai'a	F	3.46 ha.	Yes	Yes (NA?)
9	Al-'Usiya	F	2.42 ha.	Yes	Yes
10A	Island of Telbis	F	4.42 ha.	Yes	Yes
10B	Sur Telbis	F	13.50 ha.	No	Yes
10C	Jidida	TC/C	?	Yes	Yes
11	Mashad	TC	500 m. diam.	Yes	Yes
12	Khirbet Al-Diniya	F	2.25 ha.	Yes	Yes
13	Mejannat 'Ali Biz Zahran	C	100 m. diam.	Yes	Yes (NA)
15	Ta's Al-Kuffar	TC	100 x 90 m.	Yes	Yes (NA)
16	Sur Jar'a	F	33.75 ha.	Yes	Yes (NA-All)
17	Al-Zawiya	F	?	Yes	Yes (NA)
19	Al-Jannadiya	TC	?	Yes	No
20A	Kiffrin	TC/C	?	No	Yes
20B	Necropolis	C	?	No	No
21A	Al-Khaliliya +	TC	50 x 100 m.	Yes	No
21B	Al-Khabuliya SE	TC	see above	Yes	No
22	Island of 'Ana	F	17.86 ha.	Yes	Yes (NA)
26	Island of Bijan	F	2.63 ha.	Yes	Yes (NA)
28	Al-Masna	TC	?	Yes (NA?)	Yes (NA)
29	Muhra	TC/C	?	Yes	Yes (NA)
30	Sur Muhra	F	5.20 ha.	Yes	Yes (NA)
31	Al-Rayyash	TC	100 m. diam.	Yes	No
32	Wadi Mjidda	TC	?	Yes	No
33	Maqam 'Ali	TC	?	Yes	No
34	Al-Wladiya	TC	?	Yes	Yes
35	Al-'Amriya	TC	220 x 120 m.	Yes	Yes
36	Al-Murdadiya	TC	?	Yes	No
37	Al-Sehliya	TC	40 x 40 m.	Yes	No
38	Al-Diniya	TC/C	100x40;195x 75 m.	Yes	Yes
39	Tell Abu Thor	TC	?	Yes	Yes
40	Mousa	TC	?	Yes	No
41	Al-Qasr ++	TC	?	No	Yes
42	Al-Mjaddida	TC	200 m. long	No	Yes
43	Al-Juwa'na	TC/C	?	Yes	Yes
44	Al-Nufeili	TC	?	Yes	Yes
45	Al-Dawali	TC	?	No	Yes
48	Al-Bechariya	TC/C	100 x 90 m.	Yes	Yes

* Compiled from information in Abdul-Amir (1988) Table 2, p.139 and Appendix A: Site Register, pp.336-444. C=Cemetery; F="Fortification"; US="Urban Settlement"; TC="Temporary Camp". NA="Neo-Assyrian". +Kharab Al-Khabuliya.++Qasr and Quseiriya.

49	Tell Yamniya	F	.10 ha. (wall)	No	Yes
50	Al-Shuweimiya	TC	?	No	Yes
51	Al-Mawrid	TC/ C	?	No	Yes
52	Al-Dulab	TC	?	No	Yes

* Compiled from information in Abdul-Amir (1988) Table 2, p.139 and Appendix A: Site Register, pp.336-444. C=Cemetery; F="Fortification"; US="Urban Settlement"; TC="Temporary Camp". NA="Neo-Assyrian". +Kharaib Al-Khabuliya.++Qasr and Quseiriya.

Appendix B
Iron Age Sites in the Region of Tell Beydar

*Late Chalc=Late Chalcolithic; EB=Early Bronze Age; LB=Late Bronze Age; IA=Iron Age; LA=Late Assyrian; Sas=Sasanian; EI=Early Islamic; Hel=Hellenistic; Byz=Byzantine.

No.	Name	Site Type	Size of I.A. Occupation	Description/Dating
1B	Beydar	Lower Town	max. 40 ha.	Lower Town of Tell Beydar
3	Manefa/Khirbet'Uql a	Small rural	150 m . diam. x 3 m. high	Ca. 2 km WSW of Tell Rajab (TBS 4). Within village of Manefa. Area of low mounding up to 3 m high within and mainly covered by village. Pottery predominantly IA.
4B	Rajab	Lower Town	?	Lower site to N of Tell Rajab. (TBS 4) Not collected. IA
6C	--	Small rural	120 x 100.x 1.5 m.	Group of 4 mounds ca. 1 km. SE of Tell Rajab (TBS 4). 2 south mounds (A, B)=EI; 2 north mounds (C,D)=IA.
6D	--	Small rural	50 m. diam. x 1.5 m. high.	North mound (see above)
9B	--	Small rural	150 m. diam. approx. x 2.5 m. high	2 mounds, moderately low, on fringes of modern al-Madyna. A=to SE of village: Chalc, some MA. B=NW of village: mainly IA, some Sas/EI, covered by modern houses.
11	Khazna	Small rural	200 x ? x 4 m. high	Complex of mounds, 1 of moderate size, on N side of modern Khazna, partly obscured by town. Within rolling steppe. Lower mounds to NE & NW predominantly LB & IA (few sherds).
13	Khirbet Sh'ib	Small rural	150 m. diam. approx. x 2 m. high	Within broad, shallow valley draining towards Tell Bati. Low, rounded mound, sparse sherds. Date indeterminate.

14	Qariyat Sewad	Small rural	100 m. diam. approx. x 2 m. high	Within broad, shallow valley to NW of Tell Bati. Low, rounded mound near village. Graves on top; sparse sherds. Date: 2nd/1st millennium B.C.
16A	--	Small rural	80 x 50 x 1 m. high	2 small, low mounds on W bank of floodplain of Wadi Auoeij between Tells Jamilo (TBS 59D) and 'Aloni (TBS 60). Occasional basalt stones on surface, pottery kiln on N mound A. Common IA sherds.
16B	--	Small rural	60 x 59 x 1 m. high	To south of mound A (see above)
18	--	Small rural	140 x 70 x 1.5 m. high	Low, elongate mound on gentle valley-side slopes ca. 1 km. N of Tell 'Aloni (TBS 60). Occasional basalt stones; common IA sherds.
21	--	Small rural	150 m. diam. approx. x 2.5 m. high	Low mound within village of Umm al-Jarun. Within broad valley in rolling plateau to NE of Tell 'Aloni (TBS 60). Site within village; pottery sparse; mainly IA, possible prehistoric.
23	--	Marginal	75 x 60 x .75 m. high	Small multi-mounded site on basalt plateau ca. 6 km. WSW of Tell Beydar (TBS 1). Group of 3-4 building mounds on N-facing scarp overlooking basin in plateau. Pottery moderately common. IA.
24A	--	Small rural	80 x 70 x 2 m. high (combined A&B)	Small, moderately prominent mound on N side of Qamishli road, ca. 1.5 km NE of T. Beydar. Wadi Auoeij has eroded N side of mound. 2 site subdivisions; pottery: Late Chalc. (With some Late Ubaid), IA.
24B	--	Small rural	"	"
25	--	Small rural	160 x 150 x 1.5 m. high	Double crescent-shaped site around enclosed depression ca. 2.3 km N of T. Kaferu. On rolling upland E of Wadi Auoeij. Pottery: Late Chalc(?), IA, Sas., EI

27	--	Small rural	100 x 80 x .50 m. high	Very low, small site ca. 3 km NE of T. Beydar, N of Qamishli road, and 1 km E of TBS 24. Virtually flat, ca. 0.5 m high; occasional large stones on surface, occasional pottery: IA, Parth-Sas., EI.
29B	Rashid	Lower Town	100 x 70 x 2 m. high	Lower Town to S and E of Tell Rashid (TBS 29). IA, Seleucid-Parthian.
30	--	Small rural	150 m. diam. x 3 m. high	Small rounded site ca. 3 m high within broad, flat floodplain of Wadi Aouejj, to SE of Tell Rashid (TBS 29). IA, Seleucid, Parthian, 1-2 Late Chalc (?).
31A	Nasriyah	Small rural	50 m. diam. x 1 m. high	ca. 6 km N of T. Beydar, E of main road. A: small low mound with Christian shrine and grave on NE end. Village adjacent & to W, mainly abandoned. Overlooks enclosed depression to NW. B: very small low mound to E of ruined village. A: IA, minor Sas/Byz; B: uncertain but Hell/Parthian(?)
39A	Sekar Foqani	Lower Town	40 m. diam. x 3 m. high	Lower Town of Tell Sekar Foqani, a large prominent tell to E of main road leading N from T. Beydar. To E of main basalt escarpment. Areas A,B,C to W of tell, collected: mainly LB, IA & later.
39B	"	Lower Town	70 x 50 x 1 m. high	"
40A	Sekar Wastani	Lower Town	80 x 100 x 1 m. high	Lower Town of Tell Sekar Wastani, includes low mounding to N with modern cemetery. A & B to S; C,D&E to N. Hasuna on D. Otherwise LB, IA & some later material.
40B	"	Lower Town	50 x 80 x 0.75 m. high	"
40E	"	Lower Town	130 x 100 x ? high	"

41A	Sekar Tahtani	Lower Town	80 m. diam approx. x 2.5 m. high	Lower Town mounds of Tell Sekar Tahtani. A,B,C,E to S; D to E; F,G, to N. Ubaid on G. Otherwise LB, IA & some later material.
41B	"	Lower Town	120 x 80 x 3 m. high	"
41C	"	Lower Town	90 m. diam. x 2 m. high	"
42A	--	Small rural	100 x 100 x 1 m. approx.	Elongate coalescing complex of small mounds, 2 km N of village of Khashma and 5.5 km N of T. Beydar. On W side of shallow indeterminate wadi. Common pottery on surface, combined; consistent IA, Hell., Parthian.
43A	Hasek	Lower Town	150 x 175 m. approx.	Lower Town of Tell Hasek extending over ca. 700 m N-S by 600 m E-W, though not all this is site. Village located at NE corner of Lower Town. 2 small areas: A & B on Lower Town, in NW=mainly IA, some Byz & EI. Outer sites collected in 1998 as J,K to E; L to N; N,M,P,Q to NW. Other areas sketched but not collected. Significant LB, extensive IA, also Hell-EI.
43B	"	Lower Town	100 x 100 m. approx.	"
43J	"	Lower Town	125 x 75 m. approx.	"
43M	"	Lower Town	100 x 100 m. approx.	"
43N	"	Lower Town	75 x 50 m. approx.	"
43P	"	Lower Town	75 x 35 m. approx.	"
43Q	"	Lower Town	35 x 135 m. approx.	"
45	--	Small rural	100 m. diam. approx.	Small low site within village of Samada. Pottery occurs as fragments, most of site obscured by village. Pottery diagnosis weak: (?) 1st millennium B.C. - 1st millennium A.D.

47	--	Small rural	170 x 150 x 4 m. high	Moderate-sized site in NW sector of area ca. 1 km SW of modern Mishraq. Within broad fertile plain to W of basalt plateau. 2 main mounded areas; subsidiary small mound to SW. Main mound A has cemetery on summit. Pottery not consistent in type, appears mainly IA, Hell, Parthian, 2 (?) Khabur sherds.
49A	--	Small rural	50 m. diam. x <1 m. high	Extensive series of low mounds immediately E of village of Shuniya. Located below edge of basalt within an embayment on the plateau. Cemetery on summit (Not collected; sherds noted IA & later). Collected in 1998: A=small mound to S (IA); B=long crescent-shaped mound with cemetery (IA, Hell, Parthian); C=small mound to N (Parthian).
49B	--	Small rural	70 x 150 x 2-3 m. high	long crescent-shaped mound with cemetery.
50B	Ghazal Foqani	Lower Town	110 m. x 90 x 4 m. high	Lower Town of Tell Ghazal Foqani. Covered by village. Late Chalc chaff-tempered wares, miscellaneous 2nd or 1st millennium B.C. sherds, good Hellenistic.
53A	Sawadich	Tell	140 m. diam. x 10.5 m. high	Tell Sawadich, ca. 1 km NNE of Tell Farfarah. Within broad fertile valley to W of basalt plateau and fringing scarp. Consists of small, prominent tell (A) with Ubaid, Late Chalc, and sparse EB, possibly 3-4 IA sherds.

54A	--	Small rural	100 m. diam. x 3 m. high	Group of 3 small mounds in NW sector of area, ca. 4.5 km W of Sekar Foqani. Within moderately narrow valley N of basalt plateau. A=moderately rounded mound (IA, Hell, rare Sas/Byz handles). B=partly bulldozed (Hell, Parthian). C=prominent mound to N (indeterminate; 1-2 Hell sherds, some simple hand-made forms).
55H	Effendi	Lower Town	70 m. diam. x 1 m. high	Lower Towns to W and E of Tell Effendi. H, I, J=small mounds to NW of tell (all common IA sherds); K=larger, more extensive mound to W of tell. IA, Roman/Partian, Sas/Byz. Entire Lower Town appears predominantly IA, but some LB.
55I, J	"	Lower Town	100 m. diam. x 1 m. high	small mound to NW of tell.
55K	"	Lower Town	120 x 230 x 2 m. high	larger, more extensive mound to W of tell
56	--	Small rural	80 m. diam. x 1-1.5 m. high	Pair of small sites ca. 2 km N of Tell Effendi (TBS 55). Located within rolling steppe on E side of shallow wadi. Both sides were ploughed; artifact visibility low; sparse pottery (IA & few later).
59D	Jamilo	Lower Town	130 m. diam. x 3 m. high approx.	Lower Towns of Tell Jamilo: E=to SE; D, F=to N (little LB, more IA, Hell, Parthian. E=large Early Halaf site.
59F	"	Lower Town		N of Tell Jamilo
62A	--	Small rural	110 m. diam. x 2 m. high	Small mound within floodplain of Wadi Aoueij. Numerous large stones, apparently from ploughed-out wall foundations visible on surface. Pottery moderately common, predominantly Parthian, also possible IA or Hellenistic.

63B	Ghazal	Lower Town	110 m. x 80 x 5 m. high	Lower Town of Tell Ghazal. In NW of area, to NW of Shuniya. A=small conical tell 15 m high (Late Chalc, EB). B=lower mound to NE. C=small mound to S. Site within area of modern village; most of site still visible.
63C	"	Lower Town	155 x 120 x 3 m. high	small mound to S of tell.
64	Khirbet Madyana	Small rural	120 x 80 x 1.5 m. high	ca. 1 km S of village of Ba'ajiya. On edge of basalt plateau, just below it. Low undulating mound with localized mudbrick and stone footings of later-phase buildings. To SE depression of ancient well. Pottery occasional to common (Late Chalc chaff-tempered wares, Achaemenid, Late IA).
66A	Khirbet Khazna al-Gharbi	Small rural	200 x 175 m.	ca. 800 m SW of Khazna. Extensive low site. A=occasional surface stones with common pottery. Good IA.
66B	"	Small rural	50 x 40 m.	see above; B=low rounded mound cut in half by N-S drain. Good IA (LA)
67	'Asi	Small rural (Tell)	75 m. diam.	Located in NW part of area immediately N of edge of basalt plateau. Low mound ca. 5 m high. No subdivisions. Pottery: IA, Hell, Parthian.
69	--	Marginal	80 x 80 x ?m. high	Small scatter of site materials to SW of modern Hisham (SW of T. Beydar). On SW lower slopes of basalt escarpment at W end of series of relict terraced & other fields. Irregular scatter of stone concentrations & possible stone walls. Few coherent building plans visible; 1-2 recent tent clearance features suggest site still used by Bedu. Pottery rare to occasional. Minor IA sherds; Early Byz/Mid-EI.

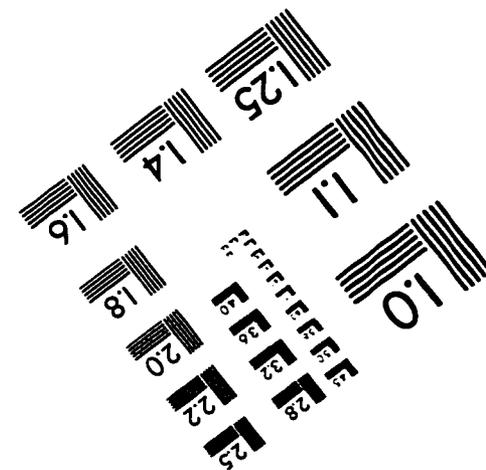
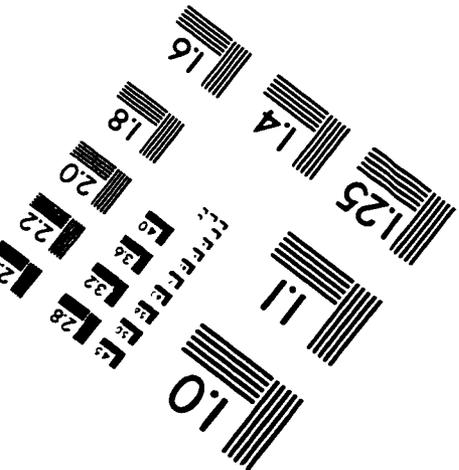
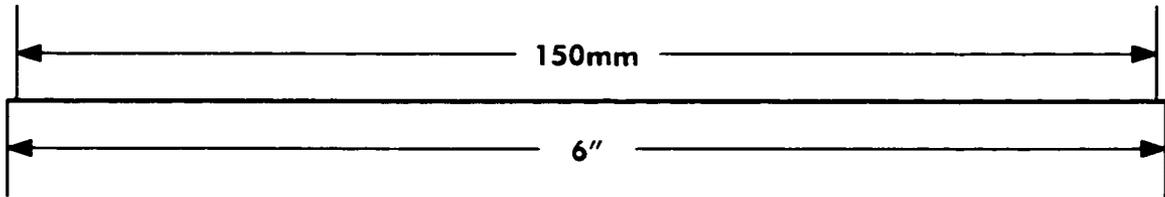
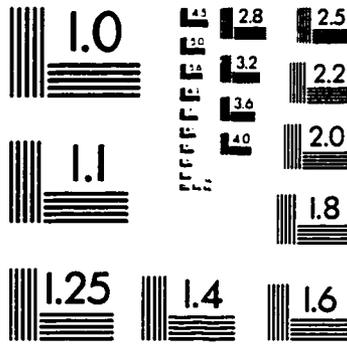
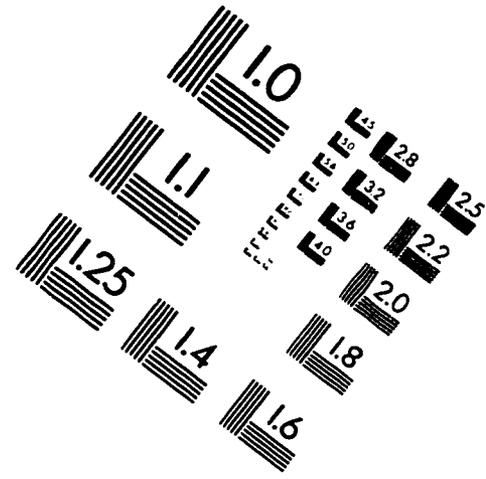
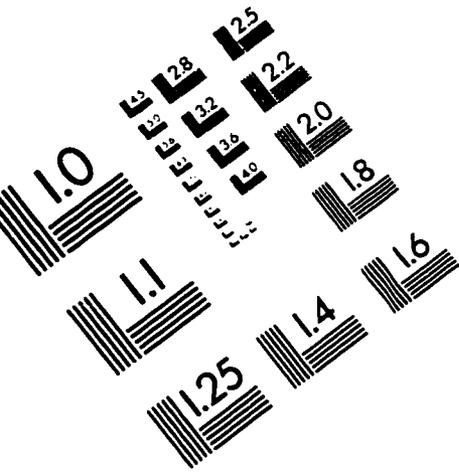
70B	Khirbet Dhab'an	Marginal	90 x 75 m approx.	ca. 800 m W of village of Dhab'an. 2 very low sites on opposite sides of wadi within the basalt plateau to SW of T. Beydar. A: D-shaped area of weathered basalt stones forming weak wall plans. Oval enclosure ca. 50 m to W. Rare pottery. B: Larger area, common low building plans & occasional weathered wall foundations. Pottery occasional to common. Mid. Islamic, some earlier.
75	Serha	Small rural	50 m. diam. x .50 m. high	To S of Kaferu and Khazna within rolling steppe to E of Wadi Aouiej. Within shallow marginal valley that flows towards TBS 19. Very small low mound immediately N of small village of Serha. 1-2 quern stones; pottery occasional to common. Good IA (LA) wares.
76AB	--	Small rural	170 x 100 m. x 1.5 m. high	N of village Umm al-Jarun (TBS 21). Low extensive mound 170m x 100m x 1.5 m high. On SE side of shallow wadi which leads down to village. Within rolling steppe to E of Wadi Aouiej. Elongate mound; A to NE; B to SW. Also very low mounding <1m high is on N side of wadi. Significant Late Chalc; Hell/Parth.
77	Jabriyah	Small rural	120 x 50 x 1 m. high	At E edge of survey area to NE of TBS 22. On W side of shallow valley leading towards TBS 22 and Tell Aswad Foqani. Small low mound on top of rising ground at edge of wadi. Small cemetery on highest part of mound. Pottery occasional. LB, IA.

**Appendix C: Comparison of Late Assyrian and Middle Assyrian Sites
in the North Jazira (cf. Wilkinson and Tucker)**

No.	Name	Size of MA Occupation	Size of LA Occupation
1	Tell al-Hawa	c. 15 ha.	7- 15 ha.
2	--	--	1 ha.
3	--	--	6.8 ha. (combined)
5	--	--	0.4 ha.
10	--	--	2.2. ha.
12	--	trace	1.4 ha.
14	--	trace	0.3 ha.
17	Al-Khubaza	--	3.0 ha.
19	Tell Qarayah al-Botha	1.2 ha. (combined)	1.0 ha. (combined)
20	Qabi al-Biyadir	0.4 ha.	3.5 ha. (combined)
24	--	--	1.7 ha. (combined)
29	--	2.2 ha.	2.7 ha.
30	--	0.6 ha.	1.1 ha.
35	--	--	1.8 ha. x 1.5 m. high
37	--	2.0 ha.	0.4 ha.
38	--	--	1 ha.
40	--	--	0.5 ha.
42	--	0.8 ha.	2.9 ha.
43	Kharababa Tibn	4 ha.	0.2 ha.
45	--	0.5 ha.	0.5 ha.
48	Tell Gar Sur	1.7 ha.	2.7 ha.
50	--	--	0.8 ha.
51	--	2.9 ha.	1.0 ha.
52	--	--	0.6 ha.
57	--	trace	0.2 ha.
58	Tell Warada/Tell Hilawat	--	2.5 ha.
59	--	--	0.5 ha.
60	--	--	0.7 ha.
63	--	--	1.2 ha.
69	--	0.8 ha.	0.8 ha.
73	--	1.6 ha.	2.4 ha.
74	--	--	1.0 ha.
76	--	--	1.0 ha.
79	--	--	2.3 ha.
80	--	--	0.6 ha.
87	--	--	0.6 ha.
93	Tell es-Samir	--	2.5 ha.
94	--	--	2.9 ha.
95	--	--	1.4 ha.
96	Tell Ghubain	--	1.5 ha.
99	--	3.8 ha.	3.8 ha.
101	Mithlai	--	2.2 ha.

108	--	3.3 ha.	3.3 ha.
109	--	--	0.6 ha.
111	Al-Morra	--	2.0 ha.
113	Khirbet 'Aloki	--	1.0 ha.
115	--	2.0 ha.	2.0 ha.
121	--	1.6 ha.	1.6 ha.
126	--	0.5 ha.	0.5 ha.
128	--	--	1.8 ha.
130	--	--	2.0 ha.
131	--	0.5	0.9 ha.
132	--	--	1.1 ha.
135	--	--	2.3 ha.
138	--	4.2 ha.	4.2 ha.
140	Tell Mana'a	3.5 ha.	3.0 ha.
142	--	--	1.3 ha.
143	--	--	1.5 ha.
144	--	--	0.7 ha.
145	--	--	2.0 ha.
146	--	--	1.3 ha.
147	--	--	1.6 ha.
155	Tell Hayal	2.0 ha.	1.0 ha.
157	--	1.2 ha.	2.4 ha.
159	--	--	1.4 ha.
160	--	1.6 ha.	0.4 ha.
161	--	--	0.5 ha.
163	--	--	2.6 ha.
165	--	--	1.3 ha.
167	--	--	0.4 ha.
174	--	--	2.7 ha.
175	--	--	1.0 ha.
178	--	--	2.5 ha.
180	--	--	1.5 ha.
182	--	--	1.3 ha.

IMAGE EVALUATION TEST TARGET (QA-3)



APPLIED IMAGE, Inc
 1653 East Main Street
 Rochester, NY 14609 USA
 Phone: 716/482-0300
 Fax: 716/288-5989

© 1993, Applied Image, Inc., All Rights Reserved