The Geography of Trade

Landscapes of competition and long-distance contacts in Mesopotamia and Anatolia in the Old Assyrian Colony Period

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Cover: Picture of Kültepe's main mound taken by the author. Animal shaped rhyton (Vorderasiatisches Museum, Berlin) and Itur-ili's business letter (Walters Art Museum, Baltimore) from Kültepe.

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To my parents

'It is better to be roughly right than precisely wrong'
(John Maynard Keynes)

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Chapter 1

Introduction

1.1 Overview

This study focuses on central Anatolia and Upper Mesopotamia during the Old Assyrian Colony Period (*c.* 1970-1700 BC). It re-assesses Old Assyrian political and commercial landscapes via both the archaeological evidence itself and a further range of computational and spatial approaches. This period was characterised by a rapid increase in the social complexity of local groups and the further development of long-distance trade contacts, as witnessed by the spread of a wide range of objects and raw materials (e.g. stone, wood, and metals). In Anatolia and Mesopotamia in the early second millennium several different commercial systems co-existed with one another, but in fluid circuits cross-cut by the movement of merchants and envoys belonging to other trade networks and political entities (see Barjamovic 2011a: 8-9; Larsen 1987: 53). The political and economic landscapes of this period are thus patchy, and animated by different rival interests playing out at both local and inter-regional scales. This period also sees central Anatolia and Upper Mesopotamia tied more closely into the wider political world of Near Eastern Middle Bronze Age complex societies.

Despite the large number of archaeological surveys and excavations carried out across Upper Mesopotamia and central Anatolia, the wealth of archaeological finds, and the numerous parallels in material culture to be found between those two regions, a proper cross-cultural and regional study has rarely if ever been attempted in any detail. Furthermore, philological studies of early second millennium texts of Assyrian language from Kültepe, Alişar Höyük and Bogazköy, and the rigorous work of Larsen (1976) and Veenhof (1972) since the 1970s have exerted a decisive influence on Middle Bronze Age research in Anatolia. As a consequence, our understanding of this phenomenon has been largely text-based and, therefore, of limited analytical scope, both spatially and contextually. The general lack of analytic and synthetic studies of archaeological data aiming to detect interregional patterns across Anatolia and Mesopotamia could find several explanations. Until recently, one reason has been the limited interest of most Near Eastern archaeologists in creating broad explanatory models of archaeological processes. In fact, the work carried out by most scholars in this region has mainly focused on description, classification and comparison of finds, with particular attention to stylistic details, but typically short of clear analytical methods and/or new theoretical frameworks.

The situation has rapidly changed in the last ten years, and some attempts have been made to record and arrange relevant archaeological data into more appropriate theoretical frameworks. Particular categories of material culture such as Syrian bottles, Khabur ware, balance pan weights and seals have received growing attention with the suspicion that they might be useful tracers of the dynamics of long-distance contact (see Ascalone and Peyronel 2006b; Emre 1999; Oguchi 1997a, 1997b, and 1998; Otto 2000). This study seeks to go further and will combine this evidence via a joint material, computational and spatial approach in order to highlight some past misconceptions about the Old Assyrian trade network and explore its wider economic and political geography.

1.2 Chronological and geographical setting

This book frames the Old Assyrian trade network within a well-defined chronological and geographical setting. In particular, the Old Assyrian period is a chronological label used to define the earliest phase of textual evidence (and to a lesser extent material culture) associated with ancient Aššur and Assyria during the first centuries of the second millennium BC (Veenhof and Eidem 2008: 19). A more detailed discussion of chronology will follow in a subsequent chapter, but if we follow the so-called 'Middle Chronology', this is a period stretching from Erišum I's first year of reign in *c.* 1972 BC (Barjamovic *et al.* 2012: 26-28) and continuing down to *c.* 1700 BC. Nevertheless, Kültepe's lower town levels III and IV, although not much known or excavated, show that at the end of the third millennium perhaps a commercial quarter already existed (Aubet 2013: 309; Emre 1989; Kulakoğlu 2011a: 1020).

This study will place the inter-regional trade systems set up by the Assyrians within their wider political context in central Anatolia and Upper Mesopotamia during the Old Assyrian colony period. Such a perspective offers a better understanding of the social and political dynamics affecting the long-distance contacts between the early-complex societies present in my study area. In the early second millennium BC, the plains of northern Mesopotamia and the intermountain valleys of central Anatolia saw the emergence of a political landscape shifting from a peer-polity system of smaller city-states in its early stage (*c.* 2000 – 1800 BC) to a few larger territorial states in its later stage (*c.* 1800 – 1600 BC, e.g. Šamši-Adad I's kingdom in Upper Mesopotamia and Anitta's kingdom in central Anatolia). In the present book, I will refer to central Anatolia as the

area confined between the Pontic Mountains to the north and the Taurus mountains to the south, while Upper Mesopotamia is the land between the Tigris and Euphrates Rivers above where these rivers enter the southern Iraqi alluvial basin. Today those two regions fall in parts of three nations: northern Syria, northern Iraq, and central/south-eastern Turkey.

1.3 Research Questions

Via a combination of archaeological, textual and computational approaches, this work will be able to offer a more complete and clear understanding of the Old Assyrian trade network in Upper Mesopotamia and Central Anatolia in the early 2nd millennium BC. The chapters that follow will therefore deploy a broad range of tools and evidence to discern the scale, modality and diachronic development of the political and economic systems in the northern Mesopotamian and east-central Anatolian region and, more precisely, to answer the following research questions:

- What political, economic and/or social factors favoured the spread of specific examples of material culture during this period, such as Khabur ware, so-called Syrian bottles, pan balance weights and seals?
- To what extent and by what textual and non-textual means can we clarify the political geography of central Anatolia and Upper Mesopotamia in the Middle Bronze Age particularly with regard to the hierarchical organisation of city-states?
- What were the likely trade routes used by the donkey caravans starting from Aššur and heading towards the commercial settlements in Upper Mesopotamia and Anatolia? How well can we trace them archaeologically and what do they tell us about trading logistics and/or the political situation at the time?

1.4 Aims and Objectives

The first of the above research questions will be approached through the study and analysis of four specific examples of material culture that have often been invoked as tracers of long-distance exchange and/or political structures in the region: Syrian bottles, Khabur ware pottery, balance pan weights and seals with a view to understand the possible political and economic dynamics that caused their spread in Upper Mesopotamia and Central Anatolia. In particular, by using published and unpublished data and adopting a quantitative, spatial approach, I will assess (a) the diachronic distribution of those types of material culture in Upper Mesopotamia and central Anatolia during the early 2nd millennium, (b) the relationship between specific typologies and different archaeological contexts and (c) how the spatial distribution of those objects is related to the Old Assyrian and other trade systems.

A second approach will focus on the spatial analysis of settlements distributed across two well-defined study areas: central Anatolia and the Khabur Triangle. This focus will be based on a range of spatial statistics techniques that formalise the description of the settlement size distribution and offer a quantitative measure for distinguishing more nucleated versus more dispersed settlement patterns. Then, I propose to apply a novel method to understand past settlement hierarchies and to predict which sites and areas would have become prominent in the Old Assyrian Period by using known archaeological sites as point data and historical information for calibration purposes.

A third and final approach will thereafter reconsider ancient routes from the Assyrian capital, Aššur, to the Anatolian city-states by analysing Old Assyrian texts and modelling possible paths or corridors of movement in order to detect which factors (e.g. environmental and/or socio-political) affected these long-distance interactions, and to explore their relationship to wider political geography. Below, I outline some of the technical methods by which I will provide computational models of such long distance interaction, but in addition, the material and textual evidence can be integrated in order to trace the network of private businesses of Assyrian merchants involved in the trade.

1.5 Choice of Data and Methodology

My research aims are to re-assess the Old-Assyrian trade network in Anatolia and Upper Mesopotamia during the early Middle Bronze Age by reconsidering the archaeology of the region and by using a variety of computational and spatial approaches (including GIS, remote sensing and spatial statistics). I will carefully blend material, textual and computational approaches to consider three specific sub-topics implied by the above research questions.

The use of written sources represents a particularly privileged tool for several reasons: the texts provide direct albeit not unproblematic information about political geography, the logistics of trade such as the distribution of way-stations *en route* and the presence of physical infrastructure for crossing the Anatolian rivers such as bridges, ferries and fords (Barjamovic 2011a: 19-37). The written sources come mainly from Kültepe's lower town, where level II has yielded *c.* 23,000 clay tablets and level Ib some 500 clay tablets.[1]

[1] The two levels of Kültepe are dated according to the following chronology:
• Level II (*c.* 1970 – 1835 BC);

Smaller groups of texts have also been discovered at other sites located in Central Anatolia such as Boğazköy (72 texts), Acemhöyük, Kaman Kale-Höyük (1 tablet) and Alişar Höyük (63 tablets). Other written sources, contemporary with the archaeological layer IB of Kültepe, have further been found at the sites of Mari and Tell Leilan (500 texts).

The archaeological data come from sites that have been investigated over the past few decades by archaeological excavations and extensive surveys. For the purpose of this work, two different well-defined sub-regions within my research area have been chosen: the Khabur Triangle and central Anatolia. The choice of the two areas has been influenced by the limited number of regions where a sufficiently high intensity of archaeological excavations and surveys has been conducted, and by the need to provide a coherent framework for analysing settlement systems, given the various gaps in the survey record across Upper Mesopotamia and central Anatolia in the Middle Bronze Age (*c.* 2000-1600 BC). The two areas, however, should not be viewed as fully isolated from each other as testified by the long-distance commercial system set up by the Assyrians in the early second millennium, if not before. Via the study and the analysis of published archaeological surveys reports, I have also created a spatial database composed of 439 sites in the Khabur Triangle and 440 sites in central Anatolia during the Middle Bronze Age.[2]

A database of all published and some unpublished items has also been created for the Syrian bottles (n =103), Khabur Ware (n = 2574), balance pan weights (n = 376), and seals (n = 2515). The published data for these object classes comes from all archaeological sites excavated in Upper Mesopotamia and central Anatolia with a known occupation during the Old Assyrian colony Period, while the only unpublished data used here relate to Khabur Ware stored in the British Museum and in the UCL Institute of Archaeology's collection (see Palmisano 2012). Wherever possible, each item of all four types of material culture (Khabur Ware, Syrian Bottles, balance pan weights and seals) has been recorded with respect to local stratigraphy, context (domestic/public buildings, palaces, temples, cultural areas, graves, etc.) and attributes (e.g. shapes, decoration motifs, styles, sizes, weight, etc.).

1.6 Book Outline

Chapter 2 will offer background on the political and economic structure of early complex societies in Western Asia and will introduce the landscape perspective on social, economic and political trajectories that is used thereafter. It will discuss a variety of theoretical frameworks about how archaeology, integrated with the study of written sources, can contribute to our understanding of the multifaceted landscapes and complex polities. Chapter 3 will then provide further necessary background information about my study area, and will also briefly discuss the chronology adopted in this book. My three main research questions are then addressed in three successive chapters dealing with the following themes: settlement size hierarchy, connectivity and material culture. In Chapter 4, I will revisit several classes of material culture that already have been proposed as markers of political structure and long-distance exchange in the region: Syrian Bottles, Khabur Ware pottery, balance pan weights, and seals. These will be assessed quantitatively where possible in order to detect specific spatial and functional patterns on local and regional scale and to tackle possible misunderstandings derived from applying traditional interpretative approaches to these classes of materials. Chapter 5 introduces methods for describing particular settlements patterns and addressing the extent to which geography, transportation, external contacts, and socio-economic factors make locations attractive for trade and settlement and why some archaeological sites become major urban centers in the Old Assyrian period in Upper Mesopotamia and Central Anatolia, while others do not. Chapter 6 offers an overview of the methodology used for reconstructing long-distance patterns of social, political and economic connectivity, as well as specific routes, via written sources, archaeological data and computational modeling.

Chapter 7 will discuss the results of the spatial analysis presented in Chapter 5, this time in relation to the Assyrian merchant trade routes in Chapter 6 and within the long-distance scenarios proposed from the results of the analysis of the material culture (Chapter 4). It will thereby look to answer in a more comprehensive way all the three research questions, offering at the same time grounds for a discussion of the wider implications of this book. Finally, chapter 8 will summarise the main outputs of the work, highlight some of its limitations and consider a range of possible future perspectives.

• Level Ib (*c.* 1835 – 1700 BC).

[2] For a complete list of published archaeological surveys carried out in Syria and Turkey see Wilkinson (2000: 223-224), and Glatz (2006: 539-541).