

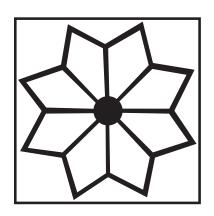
CURRENT RESEARCH AT KÜLTEPE-KANESH

An Interdisciplinary and Integrative Approach to Trade Networks, Internationalism, and Identity

Edited by Levent Atici, Fikri Kulakoğlu, Gojko Barjamovic, and Andrew Fairbairn

THE JOURNAL OF CUNEIFORM STUDIES
SUPPLEMENTAL SERIES
Number 4

CURRENT RESEARCH AT KÜLTEPE-KANESH



Journal of Cuneiform Studies Supplemental Series

Piotr Michalowski Series Editor

Associate Editors

Gary Beckman, *University of Michigan, Ann Arbor*Geoffrey Emberling, *University of Michigan, Ann Arbor*Eckart Frahm, *Yale University*Piotr Steinkeller, *Harvard University*Matthew W. Stolper, *The Oriental Institute of the University of Chicago*Niek Veldhuis, *University of California, Berkeley*

Number 4 CURRENT RESEARCH AT KÜLTEPE-KANESH

CURRENT RESEARCH AT KÜLTEPE-KANESH

An Interdisciplinary and Integrative Approach to Trade Networks, Internationalism, and Identity

edited by

Levent Atici, Fikri Kulakoğlu, Gojko Barjamovic, and Andrew Fairbairn



RECENT RESEARCH AT KÜLTEPE-KANESH

Copyright © 2014 by Lockwood Press

Published by Lockwood Press on behalf of the American Schools of Oriental Research.

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by means of any information storage or retrieval system, except as may be expressly permitted by the 1976 Copyright Act or in writing from the publisher. Requests for permission should be addressed in writing to Lockwood Press, PO Box 133289, Atlanta, GA 30333 USA.

Library of Congress Control Number: 2014931461

ISBN: 978-1-937040-19-2 (hardcover; Lockwood Press); 978-0-897570-09-1 (ASOR)

Printed in the United States of America on acid-free paper.

CONTENTS

Inti	roduction: Integrating Current Research at Kültepe-Kanesh Levent Atici, Fikri Kulakoğlu, Gojko Barjamovic, and Andrew Fairbairn	1		
1:	Kültepe-Kanesh in the Early Bronze Age Sabahattin Ezer	5		
2:	The Lower Town of Kültepe: Urban Layout and Population Thomas Klitgaard Hertel	25		
3:	The Size of Kanesh and the Demography of Early Middle Bronze Age Anatolia <i>Gojko Barjamovic</i>	55		
4:	Considerations on the Assyrian Settlement at Kanesh Cécile Michel	69		
5:	Kanesh after the Assyrian Colony Period: Current Research at Kültepe and the Question of the End of the Bronze Age Settlement Fikri Kulakoğlu	85		
6:	An Archaeological Survey in the Vicinity of Kültepe, Kayseri Province, Turkey Ryoichi Kontani, Hiroshi Sudo, Yuji Yamaguchi, Yuichi S. Hayakawa, and Takahiro Odaka	95		
7:	The Old Assyrian Glyptic Style: An Investigation of a Seal Style, Its Owners, and Place of Production Agnete Wisti Lassen	107		
8:	Behind the Scenes: A Look at Seal Carvers as Artists and Artisans in the Old Assyrian Period <i>Oya Topcuoğlu</i>	123		
9:	Metal Technology, Organization, and the Evolution of Long-Distance Trade at Kültepe <i>Joseph W. Lehner</i>	135		
10:	Human Remains from Kültepe-Kanesh: Preliminary Results of the Old Assyrian Burials from the 2005–2008 Excavations Handan Üstündağ	157		
11:	Preliminary Archaeobotanical Investigations of Plant Production, Consumption, and Trade at Bronze Age Kültepe-Kanesh Andrew Fairbairn	177		
12:	Food and Ethnicity at Kültepe-Kanesh: Preliminary Zooarchaeological Evidence Levent Atici	195		
Coı	ncluding Remarks: Kanesh, the City Norman Yoffee	213		
Sou	Source Index			
Sub	Subject Index			

ABBREVIATIONS

AA Archäologischer Anzeiger

AASOR Annual of the American Schools of Oriental Research

ACP Assyrian Colony period

AfO Archiv für Orientforschung

AJA American Journal of Archaeology

AKT Ankara Kültepe tabletleri

AnSt Anatolian Studies
A/O Affected/Observed

AOAT Alter Orient und Altes Testament AoF Altorientalische Forschungen

APSD Automatic Panorama Shooting Device

ARMT Archives royales de Mari AS Assyriological Studies

AuOr Aula Orientalis

ASOR American Schools of Oriental Research

AST Arkeometri Sonuçları Toplantısı

ATHE B. Kienast, Die altassyrischen Texte des Orientalischen Seminars in Heidelberg und der

Sammlung Erlenmeyer (= UAVA 1, 1960)

AuOr Aula Orientalis

BASOR Bulletin of the American Schools of Oriental Research

BBVO Berliner Beiträge zum Vorderen Orient

BIN Babylonian inscriptions in the Collection of J. B. Nies BMECCJ Bulletin of the Middle Eastern Culture Center in Japan

BW bone weight

CCAC Central Anatolian Crystalline Complex

CAD The Assyrian Dictionary of the University of Chicago

CCT Cuneiform Texts from Cappadocian Tablets in the British Museum

CDOG Colloquien der Deutschen Orient-Gesellschaft

cm centimeter CO cribra orbitalia

CS H. Frankfort, Cylinder Seals (London, 1939, repr. 1965)

D dominance index

DBH Dresdner Beiträge zur Hethitologie

EBA Early Bronze Age
eMBA early Middle Bronze Age

ENES B. Buchanan, Early Near Eastern Seals in the Yale Babylonian Collection (New Haven,

1981)

Ep. Epistle

FAOS Beihefte Freiburger Altorientalische Studien Beihefte: Altassyrische Texte und Untersuchungen

GNSS Global Navigation Satellite System

Gol. W. Golenischeff, Vingt-quatre tablettes cappadociennes (St. Petersburg, 1891)

GPR ground penetrating radar
GPS global positioning system
H Shannon diversity index

HANE/M History of the Ancient Near East (/M = Monographs)

HO Handbuch der Orientalistik

HSAO Heidelberger Studien zum alten Orient

IA Iron Age

ICK Inscriptions cunéiformes du Kultépé, I: B. Hrozný; II: L. Matouš (Prague, 1952/1962)

JAOS Journal of the American Oriental Society

JCS Journal of Cuneiform Studies

JEOL Jaarbericht van het Voor-Aziatisch-Egyptisch-Gezelschap Ex Oriente Lux

JESHO Journal of the Economic and Social History of the Orient

JFA Journal of Field Archaeology JNES Journal of Near Eastern Studies

JSOTSup Journal for the Study of the Old Testament Supplement Series Ka tablet in the Istanbul Archaeological Museums (Turkey)

KAYAP Kayseri Arkeolojik Yüzey Araştırması Projesi

KEL Kültepe Eponym List

KIM Kültepe International Meeting
Kt inventory numbers of Kültepe texts

LBA Late Bronze Age

LEH linear enamel hypoplasia LRF Laser Range Finder MBA Middle Bronze Age

mm millimeter

MNE minimum number of elements
MNI minimum number of individuals

n number

NF number of fragments

NISP number of identified specimens
OBO Orbis Biblicus et Orientalis

OA Old Assyrian
OA osteoarthritis

OIC Oriental Institute Communications

OIP The University of Chicago Oriental Institute Publications

PH porotic hyperostosis

PIHANS Publications de l'Institut historique-archéologique néerlandais de Stamboul

PRAK H. de Genouillac, Premières recherches archéologiques à Kich. Mission d'Henri de Ge-

nouillac 1911-1912, I/II (Paris, 1924/1925)

PRST periosteal reactions

PSD Pennsylvania Sumerian Dictionary

RA Revue d'assyriologie et d'archéologie orientale

REL Revised Eponym List
RHA Revue hittite et asianique

SCCNH Studies on the Civilization and Culture of Nuzi and the Hurrians

sd standard deviation

SMEA Studi Micenei ed Egeo-Anatolici

sp. species, indicating that the genus is known but the species cannot be determined

TC Tablettes cappadociennes du Louvre (Paris)

TPAK C. Michel and P. Garelli, Tablettes paléo-assyriennes de Kültepe, Vol. 1 (Kt 90/k) (Paris,

1997)

TTKY Türk Tarih Kurumu Yayınları

VS Vorderasiatische Schriftdenkmäler der (Königlichen) Museen zu Berlin

WO Die Welt des Orients

ZA Zeitschrift für Assyriologie und vorderasiatische Archäologie

INTRODUCTION: INTEGRATING CURRENT RESEARCH AT KÜLTEPE-KANESH

Levent Atici, Fikri Kulakoğlu, Gojko Barjamovic, and Andrew Fairbairn

Setting

The centuries of the Early and Middle Bronze Ages (ca. 3100–1500 BCE) saw the emergence and development of centralized state power with or without large urban centers in Western Asia outside the core regions of Egypt and Mesopotamia. A number of large-scale excavation projects have led to central Anatolia now being considered a key part of this geographical and social domain, where the process of secondary state formation and urbanization (*sensu* Price 1978) took place. That process of urbanization and political centralization reached its zenith in central Anatolia during the Middle Bronze Age (ca. 2000–1500 BCE). During this period, Anatolia saw the operation of well-documented trade networks connecting its independent polities with those in Upper Mesopotamia. This trade system resulted in the cross-fertilization and amalgamation of local and regional cultures, influencing the course of history in the region so profoundly that the years from 2000 to 1700 BCE are also known as Old Assyrian Colony period. This resulted in the amalgamation of local and regional culture and influenced profoundly the course of history in the region.

Evidence recovered from the archaeological site of Kültepe—the ancient city of Kanesh near the modern-day provincial capital of Kayseri—provides the best documentation for this sophisticated international trade network, its influence reaching well beyond the boundaries of both the ancient settlement and the disciplines of archaeology and ancient history. It is important to emphasize from the outset that central Anatolia has an archaeologically documented track record of exchange and interaction dating back to the Terminal Pleistocene (ca. 20,000–13,500 years BCE; e.g., Balkan-Atlı, Binder, and Cauvin, 2002; Carter et al., 2011). The region's key geographical location and access to diverse and strategic resources—including the plants and animals that could support increasing and expanding populations, as well as the better-known metal sources—has led to central Anatolia in general and the Kayseri region in particular, to function more or less continually as a node and transit area of long-distance trade from that period until the present day. As the papers in this volume show, Kültepe provides the perfect case study to investigate this unique contribution to the development of the world's early complex societies.

Evidence

The site of Kültepe saw intermittent excavation between 1893 and 1948 before being the subject of annual archaeological campaigns by the Turkish Historical Society under the direction of Tahsin Özgüç of Ankara

University (Özgüç 2003). New scientific and interdisciplinary excavations have been undertaken since 2006 under the directorship of Fikri Kulakoğlu (2011). The new approach to the site has already led to an amassing of voluminous data that provide us with a unique opportunity to generate new perspectives and challenge previous models and assumptions concerning questions of trade, colonialism, ethnic identity, art, religious ideas, technology, and patterns of social, political, and economic organization in the Near East during the Middle Bronze Age.

The sixty-six seasons of controlled excavation undertaken at the site so far have unearthed the remarkable remains of a densely settled urban center destroyed in a conflagration. Kanesh in the Middle Bronze Age housed an Assyrian merchant community engaged in an extensive overland trade in raw metals (mainly tin and copper with silver as currency), wool, and textiles. Our main body of evidence for this trade is an exceptional corpus of some 23,500 records written on clay tablets inscribed in the cuneiform script that have come out of the private archives of the Assyrian traders settled at the site. The settlement at Kültepe was the main hub for some three dozen other trading posts spread across central and southern Anatolia. Home to these merchants was the oligarchic city-state of Assur, located on the Tigris River, about six hundred miles to the south in modern-day Iraq.

In terms of scale alone, the data provided by the texts from Kültepe are by far the most extensive available for the study of long-distance trade anywhere in the ancient world. The closest structural parallels are found in the medieval archives of the northern Italian city-states, Flanders, and the Cairo Genizah. They draw a picture of an enterprise based on private initiative, risk-based and profit-seeking behavior and free-floating capital (Larsen 1976), and allow us to reconstruct a far-flung chain of interlocking commercial networks that ultimately connected polities from the Chinese frontier to Egypt and the Balkans. The material also provides detailed evidence for economic and cultural interaction between the cities of Assur, northern Syria, and central Anatolia during the early Middle Bronze Age, and alongside the exceptionally well-preserved physical remains found at the site, the evidence portrays an apparent amalgamation of local and regional cultures. Coming from private contexts—the personal archives of family entrepreneurs—the texts from Kültepe give detailed data on social and legal structure, daily life, organization of public domain, and various policies dealing with many commercial interests of the Assyrian merchants (Veenhof 2008).

Objectives

In November 2012, eleven papers evaluating the current research at Kültepe were presented in a session held at the annual meeting of the American Schools of Oriental Research (ASOR) in Chicago, Illinois. Expanded versions of those eleven papers, as well as two additional papers presented in different sessions at the same meeting, together illustrate the current research at Kültepe as a thematic, special volume in the *Journal of Cuneiform Studies* Supplemental Series.

A primary goal of this group of papers is to integrate the work of scholars engaged in archaeology and its subfields (e.g., archaeobotany, archaeometry, geoarchaeology, physical anthropology, and zooarchaeology) with the historians and linguists of the site as a first step towards developing a new synthetic research paradigm that can address issues of trade, colonialism, ethnicity, art, identity, and urbanization in the ancient Near East. The thirteen papers encapsulate a diversity of theoretical agendas and methodological approaches, and add substantial amounts of new data to the field in a unified fashion. As such, this volume represents a first step toward compiling the scattered, disarticulated, and fragmented data on Kültepe that is available today. The new approach to the site has led to an amassing of a voluminous body of evidence and created a unique type of "virtual laboratory" that has permitted and encouraged our authors to integrate multiple strands of data and think in terms of crossing traditional disciplinary boundaries to generate new perspectives and challenge previous models and assumptions. This cross-disciplinary and integrative approach has been the essential idea behind the session and its subsequent publication.

Outcome and Impact

The individual articles present new and exciting results on their own—often the first of their kind at Kültepe—from such archaeological subdisciplines as physical anthropology, archaeobotany, archaeometallurgy, and zooarchaeology that have not been well-represented in Bronze Age studies of central Anatolia. The rapidly amassing data add new dimensions and frames of reference to the large extant corpus of scholarship on Kültepe. In addition, they offer a first attempt to correct the bias against nonhistorical and nonconventional archaeological lines of inquiry.

Authors explore a series of themes, which link and cut across individual contributions and bring significant new insights to understanding the context, history, and detail of Kültepe's settlement. These include both more "traditional" interests of Anatolian Bronze Age studies, and some that break new ground. Chapters by Barjamovic, Hertel, and Üstündağ provide new data concerning the population of Kültepe, including the size, demography, diet, and health of the settlement, and show the presence of both a large population and significant health problems. Those chapters also explore, with others by Atici, Fairbairn, Kontani et al., and Kulakoğlu, an understanding of the broader physical landscape and environment of ancient Kültepe, including the effects of landscape change on long-term settlement viability, as well as the location and organization of Kültepe's resource acquisition networks.

Food provisioning is a key focus for study, including the first primary plant and animal data from the site by Atici and Fairbairn, with studies by Ezer, Lassen, Lehner, and Topçuoğlu providing clear insight into the range of short- and long-distance connections supplying resources and knowledge, which were the lifeblood of the sett-lement. Beyond simple provisioning, trade also produced Kültepe's prodigious wealth and lay at the heart of its success. The social and political basis of that success is explored by Barjamovic, Hertel, and Michel. Studies also delve below the structures and large-scale connections evident at Kültepe to investigate issues of agency and identity, through the artistic styles deployed by seal carvers (Lassen, Topçuoğlu), metal technologies applied by Kültepe's artisans (Lehner), and even its patterns of plant and animal exploitation (Atici and Fairbairn). Historical change is also a key theme explored throughout the studies, with significant papers by Barjamovic, Ezer, Kontani and Kulakoğlu providing definitive statements on the periods pre- and postdating Kültepe's Middle Bronze Age apotheosis and allowing new insights into both its genesis and ending.

The growing emphasis on the study of material culture and the textual record within an integrative explanatory framework offers a much-needed comprehensive and fine-resolution picture of the dynamic relationships between various aspects of Bronze Age societies. We emphasize the tightly interdependent nature of archaeological and historical records, not mutually exclusive constructions or binary oppositions. Kültepe provides an exceptional opportunity to join text and artifact to generate new paradigms and formulate more-complex research questions. The attempts to do so presented in this volume have already produced results above and beyond our expectations. The unprecedented synergy achieved by simply bringing together specialists who all work on material from the site, ended up not only making the ASOR workshop in November 2012 a worthwhile exercise, but it also paved the way for the First Kültepe International Meeting, which was held at Kültepe itself in September 2013. The continuation of the scholarly agenda of communication and integration set out by the ASOR workshop has now been instituted in the form of biennial symposia (Kültepe International Meetings—KIM), with papers set to be published in a series of edited volumes.

Future research agendas at Kültepe will be set by the direct and indirect outcomes of the integrative approach presented here. There will be numerous cross-fertilizations between methodological and theoretical agendas embodied by the students of the archaeological subdisciplines, historians, scientists, and philologists. This is an exciting time to work at Kültepe, which is a key project with an international scope, yet soundly anchored in Turkish academia, and now largely funded by the local administration of the Kayseri Metropolitan Municipality. Four thousand years later, researchers at Kültepe are repeating history by amalgamating the local and international.

References

Balkan-Atlı, N.; Binder, D.; and Cauvin, M. C.

1999 Obsidian: Sources, Workshops and Trade in Central Anatolia. Pp. 133–45 in *Neolithic of Turkey: The Cradle of Civilization. New Discoveries*, ed. M. Özdogan and N. Basgelen. Istanbul: Arkeoloji ve Sanat Yayinlari.

Carter, T.; Le Bourdonnec, F.-X.; Kartal, M.; Poupeau, G.; Calligaro, T.; and Moretto, P.

2011 Marginal Perspectives: Sourcing Epi-Palaeolithic to Chalcolithic Obsidian from the Ökuzini Cave (SW Turkey). Paléorient 37: 123–49.

Kulakoğlu, F.

2011 Kültepe-Kaneš: A Second Millennium B.C.E. Trading Center on the Central Plateau. Pp. 1012–30 in *The Oxford Handbook of Ancient Anatolia*, ed. S. Steadman, S. and G. McMahon. Oxford: Oxford University Press.

Larsen, M. T.

1976 The Old Assyrian City-State and Its Colonies. Mesopotamia 4. Copenhagen: Akademisk Forlag.

Özgüç, T.

2003 Kültepe-Kaniš/Neša: The Earliest International Trade Center and the Oldest Capital City of the Hittites. Tokyo: Middle Eastern Culture Center in Japan.

Price, B.

1978 Secondary State Formation: An Exploratory Model. Pp. 161–224 in *Origins of the State: The Anthropology of Political Evolution*, ed. R. Cohen. Philadelphia: Institute for the Study of Human Issues.

Veenhof, K. R.

2008 The Old Assyrian Period. Pp. 13–263 in *Mesopotamia: The Old Assyrian Period*, ed. K. R. Veenhof and J. Eidem. OBO 160/5. Fribourg: Academic Press; Göttingen: Vandenhoeck & Ruprecht.