

6000 BC

Transformation and Change
in the Near East and Europe



Edited by Peter F. Biehl and Eva Rosenstock

6000 BC



This is the first book to present a comprehensive, up to date overview of archaeological and environmental data from the eastern Mediterranean world around 6000 BC. It brings together the research of an international team of scholars who have excavated at key Neolithic and Chalcolithic sites in Syria, Anatolia, Greece, and the Balkans. Collectively, their essays conceptualize and enable a deeper understanding of times of transition and changes in the archaeological record. Overcoming the terminological and chronological differences between the Near East and Europe, the volume expands from studies of individual societies into regional views and diachronic analyses. It enables researchers to compare archaeological data and analysis from across the region, and offers a new understanding of the importance of this archaeological story to broader, high-impact questions pertinent to climate and culture change.

Peter F. Biehl is Professor of Anthropology and Vice Provost and Dean of Graduate Studies at the University of California Santa Cruz.

Eva Rosenstock is Scientific Coordinator and Lecturer at the Bonn Center for ArchaeoSciences, University of Bonn.



6000 BC

TRANSFORMATION AND CHANGE IN
THE NEAR EAST AND EUROPE

Edited by

PETER F. BIEHL

University of California Santa Cruz

EVA ROSENSTOCK

University of Bonn



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107042957

DOI: [10.1017/9781107337640](https://doi.org/10.1017/9781107337640)

© Cambridge University Press 2022

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2022

Printed in the United Kingdom by TJ Books Limited, Padstow Cornwall

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

NAMES: Biehl, Peter F., editor. | Rosenstock, Eva, editor.

TITLE: 6000 BC : transformation and change in the Near East and Europe / Edited by Peter F. Biehl, University of California Santa Cruz, Eva Rosenstock, University of Bonn.

DESCRIPTION: Cambridge, United Kingdom ; New York, NY : Cambridge University Press, 2022. | Includes bibliographical references and index.

IDENTIFIERS: LCCN 2021044492 (print) | LCCN 2021044493 (ebook) | ISBN 9781107042957 (hardback) | ISBN 9781107617544 (paperback) | ISBN 9781107337640 (epub)

SUBJECTS: LCSH: Neolithic period–Middle East. | Neolithic period–Europe. | Archaeology–Data processing. | Environmental management–Data processing. | BISAC: SOCIAL SCIENCE / Archaeology

CLASSIFICATION: LCC GN776.32.N4 A22 2022 (print) | LCC GN776.32.N4 (ebook) | DDC 939.4/01–dc23/eng/20211022

LC record available at <https://lcn.loc.gov/2021044492>

LC ebook record available at <https://lcn.loc.gov/2021044493>

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

CONTENTS

<i>List of Contributors</i>	page ix
<i>Acknowledgments</i>	xii
INTRODUCTION	1
CHAPTER 1	
<i>6000 BC: Transforming and Changing the Neolithic World in Southwest Asia and Europe</i>	1
~Peter F. Biehl and Eva Rosenstock	
UPPER MESOPOTAMIA AND EASTERN MEDITERRANEAN	15
CHAPTER 2	
<i>The Late Neolithic Site of Shir in Western Syria: The Final Phase of Occupation circa 6000 cal BC</i>	17
~Karin Bartl	
CHAPTER 3	
<i>Containers of Change: Social and Material Innovation in Late Neolithic Upper Mesopotamia</i>	32
~Olivier P. Nieuwenhuyse	

CHAPTER 4	
<i>Mersin-Yumuktepe in the 7th Millennium BC: The Social Dimension of Technological Changes</i>	54
~Isabella Caneva	
CHAPTER 5	
<i>Changing with the Years: Khirokitia (Cyprus) at the Turn of the 7th to the 6th Millennium BC</i>	64
~Alain Le Brun, Odile Daune-Le Brun and Fouad Hourani	
ANATOLIA	81
CHAPTER 6	
<i>A Conspectus on the Status of Tepecik-Çiftlik Excavation (Cappadocia): Intersite and Regional Outcomes and Prospects</i>	83
~Erhan Bıçakçı	
CHAPTER 7	
<i>The Downturn in Tepecik-Çiftlik's Ceramic Production Continuity: An Insight toward the Rapid Emergence of Supra-Regional Homogeneity in Ceramic Style</i>	104
~Martin Godon and Ozan Özbudak	
CHAPTER 8	
<i>Çatalhöyük East and Köşk Höyük: A Grand Connection?</i>	125
~Bleda S. Düring	
CHAPTER 9	
<i>Abandoning Çatalhöyük: Re-shuffling, Re-location and Migration as the Means of Mitigating Social Unease in the Late Neolithic</i>	136
~Lech Czerniak and Arkadiusz Marciniak	
CHAPTER 10	
<i>Çatalhöyük West and the Late Neolithic to Early Chalcolithic Transition in Central Anatolia</i>	158
~Jacob Brady, Jana Anvari, Ingmar Franz, Goce Naumov, David Orton, Sonia Ostaptchouk, Elizabeth Stroud, Patrick T. Willett, Eva Rosenstock and Peter F. Biehl	

CHAPTER 11	
<i>The Potter's Riddle at Çatalhöyük: An Attempt to Connect the Late Neolithic and the Early Chalcolithic Pottery Assemblages from Çatalhöyük/Turkey</i>	178
~Ingmar Franz and Joanna Pyzel	
CHAPTER 12	
<i>Pots for a New Millennium: Ceramics and Culture Change in Anatolia around 6000 cal BC</i>	196
~Jonathan Last	
AEGEAN AND MARMARA	211
CHAPTER 13	
<i>Aegean Turkey from the Mid-7th to Early 6th Millennium cal BC: A Tale of Change within Continuity</i>	213
~Çiler Çilingiroğlu	
CHAPTER 14	
<i>The Beginning and the Development of Farming-Based Village Life in Northwestern Anatolia</i>	231
~Necmi Karul	
CHAPTER 15	
<i>Regional Styles and Supra-regional Networks in the Aegean: Before and Around 6000 cal BC</i>	247
~Agathe Reingruber	
CHAPTER 16	
<i>The Turn of the 7th Millennium in Greece: A Quiet Transition</i>	261
~Catherine Perlès	
SOUTHEAST EUROPE	279
CHAPTER 17	
<i>Continuity and Discontinuity in Eastern Thrace during the Neolithic Period</i>	281
~Eylem Özdoğan	

CHAPTER 18	
<i>Changes through Time in the Early Neolithic Settlement of Kovačevo, Southwest Bulgaria</i>	301
~Marion Lichardus-Itten	
CHAPTER 19	
<i>A Hybrid Cultural World: The Turn of the 7th to the 6th Millennium BC in the Central Balkans</i>	319
~Dušan Borić and Emanuela Cristiani	
MODELING THE CHANGE	343
CHAPTER 20	
<i>The Neolithic Colonization of Balkanic Europe: Chronology and Process</i>	345
~Jean-Paul Demoule and Laurence Manolakakis	
CHAPTER 21	
<i>Modes and Models of Neolithization in Europe: Comments to an Ongoing Debate</i>	372
~Wolfram Schier	
COMMENTARIES	393
CHAPTER 22	
<i>Explaining Neolithic Change in Central Anatolia and Beyond</i>	395
~Ian Hodder	
CHAPTER 23	
<i>An Annotation of Afterthoughts on the Times of Change</i>	405
~Mehmet Özdoğan	
<i>Index</i>	417

CONTRIBUTORS

JANA ANVARI

Institut für Ur- und Frühgeschichte Universität zu Köln

KARIN BARTL

German Archaeological Institute/Orient Department

ERHAN BIÇAKÇI

İstanbul Üniversitesi

Edebiyat Fakültesi, Arkeoloji Bölümü, Prehistorya Anabilim Dalı

PETER F. BIEHL

University of California Santa Cruz

Department of Anthropology

DUŠAN BORIĆ

The Italian Academy for Advanced Studies in America

Columbia University

JACOB H. BRADY

State University of New York at Buffalo

Department of Anthropology

ISABELLA CANEVA
Università del Salento
Dipartimento di Beni Culturali, Preistoria e
Protostoria del Vicino Oriente

ÇİLER ÇİLİNGİROĞLU
Ege Üniversitesi
Edebiyat Fakültesi, Protohistorya ve Önasya
Arkeolojisi ABD

EMANUELA CRISTIANI
Università degli Studi di Roma La Sapienza
Facoltà di Lettere e Filosofia

LECH CZERNIAK
Uniwersytet Gdański
Instytut Archeologii i Etnologii

ODILE DAUNE-LE BRUN
Maison de l'archéologie et de l'ethnologie,
préhistoire et technologie
UMR 7041 ArScAn

JEAN-PAUL DEMOULE
Institut Universitaire de France et Université de
Paris I,
Institut d'Art et Archéologie

BLEDA DÜRING
Leiden University
Faculty of Archaeology

INGMAR FRANZ
Universität Kiel
Institut für Ur- und Frühgeschichte

MARTIN GODON
Attaché de coopération scientifique et universitaire
IFEA
Service de coopération et d'action culturelle

IAN HODDER
Stanford University
Department of Anthropology
Emeritus
Professor Koç University

FOUAD HOURANI
The University of Jordan
Faculty of Archaeology and Tourism

JONATHAN LAST
Historic England

ALAN LE BRUN
Maison de l'archéologie et de l'ethnologie,
préhistoire et technologie
UMR 7041 ArScAn

MARION LICHARDUS-ITTEN
Université Paris 1
Panthéon-Sorbonne,
Institut d'Art et d'Archéologie

LAURENCE MANOLAKAKIS
CNRS
UMR 8215-Trajectoires. De la Sédentarisation
à l'Etat.
CNRS-Université Paris 1-Panthéon-Sorbonne

ARKADIUSZ MARCINIAK
Adam Mickiewicz University Poznań
Institute of Prehistory

GOCE NAUMOV
University Goce Delcev
Institute of History and Archaeology

OLIVIER NIEUWENHUYSE

DAVID ORTON
University of York
Department of Archaeology

SONIA OSTAPTCHOUK
No affiliation

OZAN ÖZBUDAK
Hitit Üniversitesi
Fen Edebiyat Fakültesi İkbalkent Kampüsü Çorum

EYLEM ÖZDOĞAN
İstanbul Üniversitesi
Edebiyat Fakültesi, Prehistorya Anabilim Dalı

MEHMET ÖZDOĞAN
İstanbul Üniversitesi
Edebiyat Fakültesi, Arkeoloji Bölümü,
Prehistorya Anabilim Dalı

CATHERINE PERLÈS
Université Paris Nanterre
Maison de l'archéologie et de l'ethnologie,
Technologie et Ethnologie des mondes
préhistoriques,
UMR 8068 TEMPS

JOANNA PYZEL
Uniwersytet Gdański
Instytut Archeologii i Etnologii

AGATHE REINGRUBER
Freie Universität Berlin
Institut für Prähistorische Archäologie

EVA ROSENSTOCK
Bonn Center for ArchaeoSciences
University of Bonn

WOLFRAM SCHIER
Freie Universität Berlin
Institut für Prähistorische Archäologie

ELIZABETH STROUD
Institute of Archaeology
University of Oxford

PATRICK W. WILLETT
State University of New York at Buffalo
Department of Anthropology

ACKNOWLEDGMENTS

THE EDITORS WOULD LIKE to thank all contributors (Figure 0.1) to the conference (<http://iema.buffalo.edu/research/catalhoyuk-west-mound/>; see also Biehl and Rosenstock 2011), and the ones who submitted their chapters to this book, and apologize for the delay in its publication. Chapters have been updated recently and represent the current research of the contributors.

We would like to thank the Alexander von Humboldt Foundation TransCoop Program which partly supported four years of excavation campaigns and fully funded the Berlin conference. We also are indebted for the support of the University at Buffalo, SUNY and the Freie Universität Berlin for our project. We also thank the Cluster of Excellence TOPOI for making space for the conference and the Einstein Center Chronoi for providing time for its publication. We are also thankful to Eva-Maria Mihan for her assistance during the conference, and to Jana Anvari (née Rogasch) (both from FU Berlin) as conference administrator and for her comments on earlier versions of the book manuscript. We thank Jacob Brady, Caitlin Curtis, Heather Rosch, and Thomas Harper (all from the University at Buffalo) for the copy editing and technical layout of the chapters. Most importantly, our deepest thanks go to Beatrice Rehl, our patient and encouraging editor at Cambridge University Press. Without her support, this book would not have been published. We are also grateful for the editorial staff at Cambridge University Press for making the production process so seamless.



Figure 0.1 Participants of the conference. (photographed by Emre Talu Tüntaş)

From right to left standing: Peter F. Biehl, Ian Hodder, Catherine Perlès, Arkadiusz Marciniak, Dušan Borić, Erhan Bıçakçı, Emanuela Cristiani, Joanna Pyzel, Vassil Nikolov, Wolfram Schier, Eylem Özdoğan, Agathe Reingruber, Marion Lichardus-Ippen, Karin Bartl, Bleda S. Düring, Çiler Çilingiroğlu, Lech Czerniak, Ulf-Dietrich Schoop, Eva Rosenstock, Jean-Paul Demoule, Martin Godon, Ingmar Franz, David Orton, Eva-Maria Mihán, guest, Sonia Ostaptchouk.

Front row right to left kneeling: Laure Salanova, Isabella Caneva, Odile Daune-Le Brun, Ozan Özbudak, Jana Rogasch, Olivier Nieuwenhuys (not on the photo: Reinhard Bernbeck, Jonathan Last, Susan Pollock)

And finally, we would like to dedicate this book to the memory of our contributor, dear colleague and friend *Olivier Nieuwenhuys*, who left us far too soon.

REFERENCE

- Biehl, P. F., and E. Rosenstock. 2011. Times of Change: A Short Report on the International Conference at the Free University Berlin, TOPOI-Building, November 24–26, 2011. *Neo-Lithics* 2/11:30–32.

INTRODUCTION

Chapter 1

6000 BC

Transforming and Changing the Neolithic World in Southwest Asia and Europe

Peter F. Biehl and Eva Rosenstock

THIS BOOK

THIS BOOK IS ABOUT transformation and change – both rapid and long term – in Southwest Asia and Europe. Although the title *6000 BC* is only a random year in our western calendar, it symbolizes the divide between the so-called Late Neolithic and Early Chalcolithic in the Anatolian chronology. In addition, it represents the physical move from the East to the West Mound at Çatalhöyük – the world-famous site inscribed in the UNESCO World Cultural Heritage List – which is the general reference stratigraphy for the Neolithic and early farming in Anatolia, and which represents one major thread of Neolithization: movement. And finally, it relates to the so-called 8.2 climate event which has been at least partially connected with this transformation and change across the Near East and Europe (Biehl and Nieuwenhuyse 2016). We wanted to create an artificial time marker in order to ask the authors, “Which changes and continuities can we see around 6000 cal BC in your region?” Though we were aware of the fact that in Anatolia both 6,500 cal BC and 5,500 cal BC are probably considered more significant in terms of cultural change (Özbaşaran and Buitenhuis 2002; Düring 2011; see also M. Özdoğan this volume), we wanted to problematize chronologies and histories (Figure 1.1) of cultural and environmental change and transformation within this specific timeframe of about 2,000 years of a broadly defined Neolithic. We also

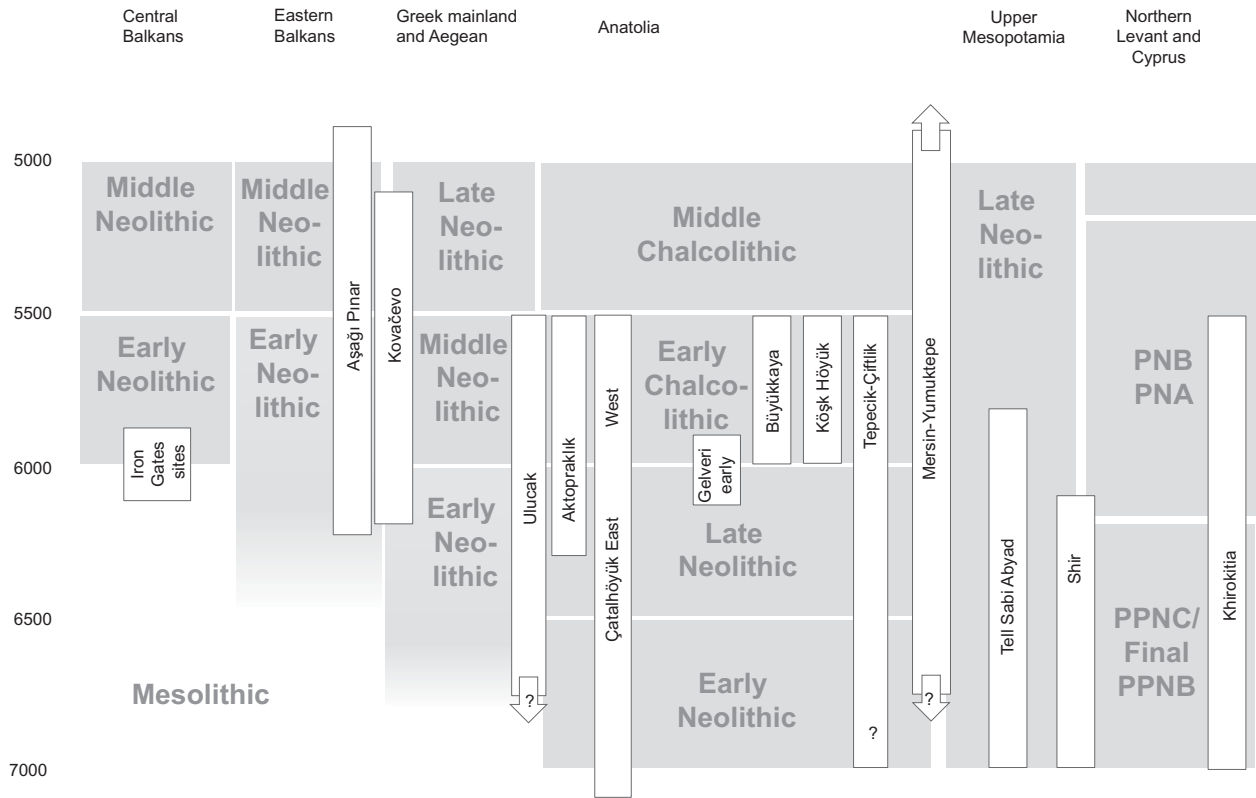


Figure 1.1 Regional periodization schemes ca. 7000 to 5000 cal BC (see also Parzinger 1993:355, fig. 16); Bami (2019:19, table 1) and dating of sites discussed in the conference according to the authors. (Eva Rosenstock)

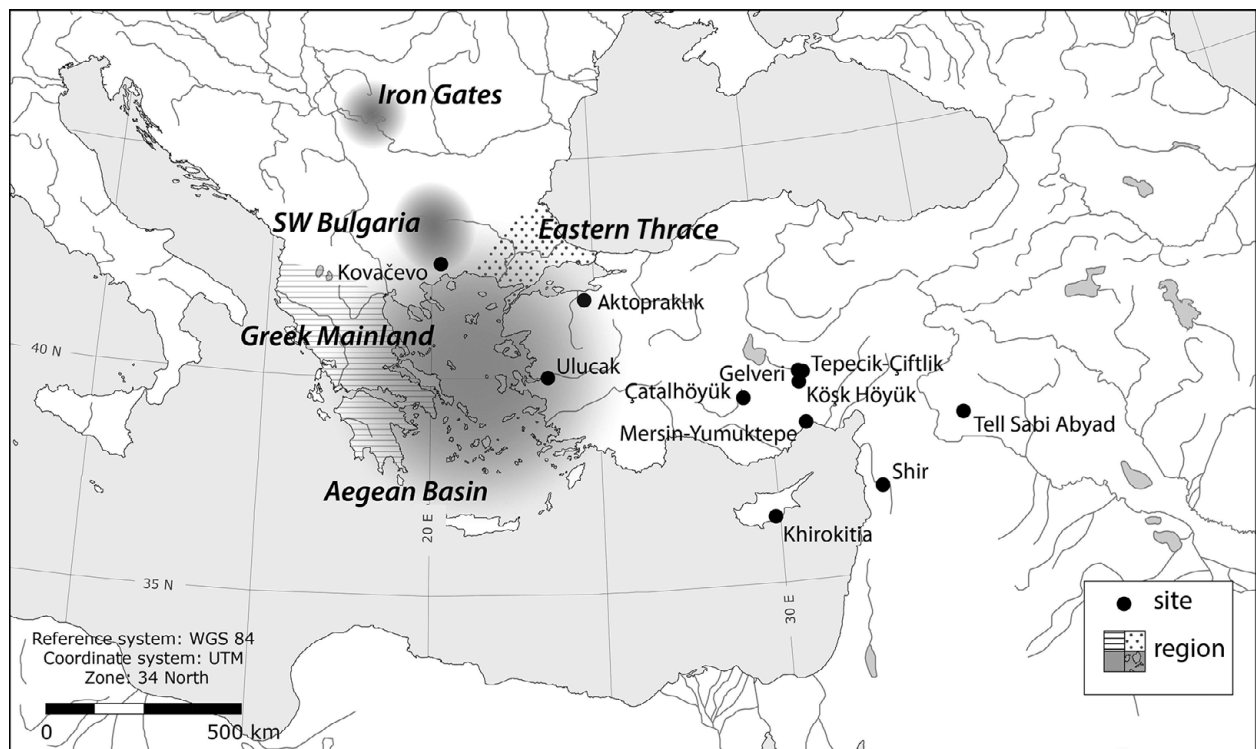


Figure 1.2 Map of the regions and sites discussed in this volume. (Conception: Eva Rosenstock/Peter F. Biehl, Cartography: Daniela Kelm)

wanted to compare material culture in this time-frame across the wide geographical scope from southwestern Asia and Near East to southeastern Europe (Figure 1.2) and to overcome the borders between modern geopolitical entities as well as between archaeological sub-disciplines.

RECENT PUBLICATIONS

The book builds on a sequence of conferences about the Neolithic and early farming and its important role for Near Eastern and European Prehistory that took place in the last two decades and which are briefly described here: the first conference and proceedings is the *Central Anatolian Neolithic e-Workshop* (CANeW; Gérard and Thissen 2002) which highlights the importance of Central Anatolia in the Neolithization process; *How Did Farming Reach Europe? Anatolian-European Relations from the 2nd Half of the 7th through the First Half of the 6th Millennium BC* (Lichter 2005) also discusses Neolithization but with a particular focus on the Aegean and Southeast Europe. The same is true for *Going West? The Dissemination of Neolithic Innovations between the Bosphorus and the Carpathians* (Reingruber, Tsirtsoni and Nedelcheva 2017b) as well as *Beginnings - New Research in the Appearance of the Neolithic between Northwest Anatolia and the Carpathian Basin* (Krauß 2011a), which both trace the western expansion of early farming communities to the Balkans. *The Central/Western Anatolian Farming Frontier* (Brami and Horejs 2019) focuses on the major change between ca. 6800 and 6500 cal BC in Turkey and discusses in detail the beginning of farming and its spread westward. Several chapters in the last volume of the series *Neolithic in Turkey* address the Turkish Neolithic in the context of research done in the Levant, Mesopotamia and the Persian Highlands as well as eastern and southeastern Europe (Özdoğan, Başgelen and Kuniholm 2014). A conference

volume solely focused on the Near Eastern Neolithic entitled *Interpreting the Late Neolithic of Upper Mesopotamia* (Nieuwenhuys et al. 2013) discusses the changes from the Mesopotamian Pre-Pottery to the Pottery Neolithic and describes the period as “an epoch of tremendous change in social, economic, and symbolic realms” (Bernbeck and Nieuwenhuys 2013:18). The most recent conference volume, *Concluding the Neolithic. The Near East in the Second Half of the Seventh Millennium BC*, is edited by Arkadiusz Marciniak and provides an excellent overview of the period preceding our book, the 7th millennium cal BC in the Near East and Anatolia (Marciniak 2019a). Marciniak summarizes succinctly that at the end of the 7th millennium BC, “social and ideological changes [...] not only contributed to the disintegration of constitutive principles binding larger social groupings of the preceding period and initiated the development of a new social system, but more importantly contributed to the development of fully-fledged farming communities in the Near East and beyond” (Marciniak 2019b:12). Our book highlights several new key themes from a chronologically and geographically diachronic and methodologically and theoretically multi-scalar perspective.

KEY THEMES

Let's start with **chronology**. On the one hand, the general chronological framework based on radiocarbon dating has been widely accepted. On the other hand, the culture historical phasing terminology is still far from being unified across Upper Mesopotamia, Anatolia and Southeastern Europe (see Figure 1.1; see also Brami (2019). For example, the term *Late Neolithic* is used in Upper Mesopotamia for the entire Pottery Neolithic until the first smelted copper artifacts appear at the end of the 6th millennium cal BC, marking the beginning of the *Chalcolithic* (Bernbeck and Nieuwenhuys 2013). In Anatolia, however, following the first

pottery production of the *Early Neolithic* at the beginning of the 7th millennium, the term *Late Neolithic* refers to a phase of more developed pottery production in the second half of the 7th millennium cal BC. For reasons rooted in the history of research (Schoop 2005:14–17; Rosenstock, Scharl, and Schier 2016:63), it is followed by the *Early Chalcolithic* and *Middle Chalcolithic* of the 6th millennium cal BC; these misnomers (Mellaart 1975:111) have survived despite explicit attempts at aligning Anatolian terminology with neighboring areas (Özbaşaran and Buitenhuis 2002). However, with a few exceptions (e.g. Duru 2012), tacitly, the Neolithic is also defined as ending around 5000 cal BC in Anatolian archaeology (see the scope of the *Neolithic in Turkey* volumes (Özdoğan, Başgelen and Kuniholm 2011a, 2011b, 2012a, 2012b, 2013, 2014). At the same time, the Greek *Early Neolithic* is roughly contemporary with the Anatolian *Late Neolithic*, and the Bulgarian *Early Neolithic* is contemporary with the Anatolian *Early Chalcolithic*. We hope that Figure 1.1 helps to better contextualize and incorporate this inconsistency regarding the diachronic comparisons in this book.

Second, the process of *Neolithization* stands for the spread of the Neolithic as a discontinuous, leap-frogging process (Guilaine 2003, 2019; Schier, this volume) out of its core area of domestication of animals and plants in the Fertile Crescent. While it is still debated whether Central Anatolia belongs to this core area or rather represents a case of early secondary expansion of Neolithic farmers (Düring 2011; Brami 2019), it is an accepted fact that the Neolithization of the Aegean is a result of culture transfer. Here as well as in the Central Balkans (Borič – Cristiani, this volume), the interaction between foragers and farmers (Reingruber, this volume; see also Hansen, Klimscha, and Renn (in press) seems only to be visible and evidenced in lithics sometimes originating from Central and Eastern Anatolia as well as from Melos (Çilingiroğlu, this volume) or Greece (Reingruber, this volume); and so far Mesolithic

sites are only known from Greece and Northwest Anatolia (Perlès; Karul, this volume) though M. Özdoğan (this volume) points out “that considering that the sea levels were at that time still about 30–35 m below its present level, it is also evident that most of coastal Mesolithic settlements must have been submerged and that our visibility is limited only by those located on higher areas.”

The book shows that within the long-lasting process of Neolithization four major time markers of change can be identified based on pottery typologies: 7000, 6500, 6000 and 5500 cal BC. Several authors in the volume argue that pottery can also be used as a proxy for subsistence and social practices (Nieuwenhuys; Godon – Özbudak; Pyzel – Franz; Last, this volume). After an early appearance of the so-called White Ware of the Pre-Pottery Neolithic in Mesopotamia and the Levant, it is around 7000 cal BC that we see the first ceramic containers in the entire Near East including Anatolia. Cookware with a wider range of forms for new culinary applications starts to appear slowly but is common around the middle of the 7th millennium cal BC (Nieuwenhuys; Çilingiroğlu, this volume). Around 6000 cal BC commensal practices become centered on elaborately fashioned, intricately painted bowls, goblets and small jars (Nieuwenhuys; Caneva; Pyzel – Franz; Last; Perlès, this volume). The only exception seems to be the rare variant of the so-called exotic/Gelveri-style ware (dated ca. 6000 – 5700 cal BC), which has incised, rather than painted decorations (Godon – Özbudak, this volume). Other chapters demonstrate the regionality of certain pottery types and styles. Cappadocia is a good example as it shows the sites of Köşk Höyük (Düring, this volume) and Tepeçik-Çiftlik (Bıçakçı, this volume) in the 7th and 6th millennia BC can stylistically be separated from Central Anatolia, with Çatalhöyük as its most important site. The same is true for the monochrome pottery of Western Anatolia (Çilingiroğlu, this volume),

and the Fikirtepe-type ceramic traditions of the Marmara and Thrace regions (Karul; M. Özdoğan, this volume).

Olivier Nieuwenhuys succinctly described this phenomenon of the sudden emergence of painted pottery in a vast area ranging from the Persian highlands (Bernbeck et al. 2003) to Greece (Perlès, this volume) as a “Painted Pottery Revolution” (Nieuwenhuys 2006) with a common and widely understood material vocabulary (see also Last; Demoule – Manolakakis, this volume) accompanying this time of change and transformation.

Third, several chapters clearly demonstrate that *cooking and food habits* change at ca. 6500 cal BC (Nieuwenhuys; Last; Godon – Özbudak; Pyzel – Franz, this volume), a process that might at least partially be triggered by an increase of dairy production (Hendy et al. 2018; Nieuwenhuys, this volume). The pottery discussed in various chapters also represents new ways of not only making food but also serving, displaying and consuming as well as storing food and drink around 6000 cal BC. Human dancing scenes and animals painted on vessels have been interpreted as representations of feasting (Nieuwenhuys; Brady et al., this volume). In addition, we have for the first time evidence for storage vessels representing either means of sharing and restituting equality or competitive practices to be understood in the context of increasing household storage at Shir, Sabi Abyad, Khirokitia, Mersin, Çatalhöyük and Ulucak (Bartl; Nieuwenhuys; Daune-Le Brun et al.; Caneva; Brady, et al.; Çilingiroğlu, this volume). And finally, a general growing importance of the household as a social unit – what Verhoeven (2012:799) calls domesticity – can be observed not only in Shir and Sabi Abyad (Bartl; Nieuwenhuys, this volume), but also from the so-called change at level P onwards in Çatalhöyük East (Czerniak – Marciniak, this volume). And especially the emergence of

two-storied buildings consisting of basements dedicated to storage and first floors dedicated to housing, buttressed architecture at Çatalhöyük West (Brady et al., this volume) and Canhasan I (French 1998), as well as Hacilar and Kuruçay in the Lakes Region (Mellaart 1970; Duru 2012) all demonstrate the new importance of food storage. This new form and function of buildings and their modified circular arrangement in the Marmara region such as in Aktopraklık (Karul, this volume) and Ilıpınar (Roodenberg 1995; Roodenberg and Thissen 2001; Roodenberg and Alpaslan Roodenberg 2008), continues to spread in the first half of the 6th millennium cal BC into Thrace and Greece (Perlès; E. Özdoğan; Lichardus-Itten, this volume).

All these changes and transformations start from the middle of the 7th millennium cal BC and go hand in hand with the further spread of farming from the core zone of the Neolithization process across Central and Western Anatolia into southeastern Europe.

Finally, *climate and subsequent environmental change* is discussed in detail in most of the chapters in this book referring to both a longer period of rapid climate change (RCC) between ca. 6600 and 6000 cal BC (Weninger et al. 2006; Clare and Weninger 2015) and a short so-called 8.2 cal BP climate event between ca. 6200 and 6000 cal BC (Roffet-Salque et al. 2018). Although several papers state that establishing a clear cause-and-effect scenario remains difficult (see also Biehl and Nieuwenhuys 2016:5), short- and long-term changes in the environment would certainly have compelled communities to adapt. But the current data for the sites discussed in this volume indicate that adaptations in the material culture start prior to the beginning of the RCC period (Godon – Özbudak; Nieuwenhuys, this volume); the foundation of Shir (Bartl, this volume), Sabi Abyad (Nieuwenhuys, this volume), Çatalhöyük and maybe Mersin-Yumuktepe (Caneva, this volume) starts around 7000 cal BC. The major changes from around

6500 cal BC described earlier do not correspond to the beginning of new sites or the abandonment of existing sites. But around 6000 cal BC we can see a number of new sites from Thrace (Kovačevo, Aşağı Pınar) to the Iron Gates region (Lichardus-Itten; E. Özdoğan; Borič – Cristiani, this volume). Furthermore, only the site of Mersin-Yumuktepe remains settled across all four time markers. Around 6000 cal BC, some sites, including Shir (Bartl, this volume), are abandoned, while 5500 cal BC is a major phase of abandonment in Cyprus (Daune-Le Brun et al., this volume), Anatolia (Düring; Bıçakçı; Brady et al; Çilingiroğlu; Karul, this volume) and southeastern Europe (E. Özdoğan; Lichardus-Itten, this volume). Partial abandonment or a shift in settlement has also been observed at Shir (Bartl, this volume) and Çatalhöyük (Brady et al., Czerniak – Marciniak this volume) around both 6500 and 6000 cal BC and at Lepenski Vir around 6000 BC (Borič – Cristiani, this volume).

Although we are still unable to fully understand such events, we believe that they represent new and still understudied cases for research of change and transformation in the Neolithic World in Europe and the Near East. The following summaries of the book chapters illustrate this.

CHAPTER SUMMARIES

The book is organized into six parts beginning with this introductory chapter, followed by eighteen chapters geographically organized in four parts ranging from Upper Mesopotamia and the Eastern Mediterranean, Anatolia, Aegean and Marmara to Southeast Europe; the fifth part includes two chapters with supra-regional chronological and methodological discussions, followed by two commentary chapters in the concluding sixth part of the book.

In the following, we briefly summarize the eighteen chapters as they hang together in addressing the key themes outlined above: chronology, Neolithization, cooking and food habits, and climate and environmental change in the Neolithic World around 6000 cal BC in the Near East and Europe.

UPPER MESOPOTAMIA AND THE EASTERN MEDITERRANEAN

Bartl discusses the settlement of *Shir* in Syria which began, according to new radiocarbon dates, around 7000 cal BC. This is a period marked by the appearance of pottery production in the northern Levant, which defines the beginning of the Late Neolithic period. *Bartl*'s chapter describes the extension and gradual growth or "shifting" of the settlement. It also shows that at around 6500 cal BC significant changes occur in architecture, finds, and particularly in the development of pottery. Like a number of settlements discussed in this book, the site was abandoned around 6100 or even 6000 cal BC and after that never resettled. *Bartl* proposes four models to explain the abandonment: (1) a long-term change in climate, (2) short-term natural catastrophes, (3) war-like conflicts, and (4) even reasons in the symbolic sphere such as a "bad spirit" connected with specific events before the abandonment. *Bartl* also considers "a change from stationary settlement to a mobile or semi-mobile way of life and habitation forms, which were more flexible in consideration of climatic challenges, as far as subsistence is concerned."

Nieuwenhuys discusses pottery from Mesopotamia in general, and from Tell *Sabi Abyad* in Syria in particular. Characteristic for this and other central villages in Mesopotamia is a dense agglomeration of large multi-roomed buildings, used collectively for storage and towards more secluded forms of ritual centering on the individual household as well as large

collective feasts in the Pottery Neolithic. About the role of climate change, he points out that “certain key innovations in the later 7th millennium had roots stretching back centuries before the 8.2 ka event, and changes in the ecology would certainly have compelled Late Neolithic communities to adapt, but some of their ‘adaptations’ seem to have been well under way irrespective of climatic-environmental changes.” Importantly, Nieuwenhuyse stresses that “almost no pottery containers were around at about 6700 cal BC and some five centuries later pottery containers were everywhere.” This was also the time of the development of specialized cooking wares which he connects to the domestication of cattle as a trigger for stimulated culinary changes – with the world’s earliest evidence for dairy processing from the site.

Caneva discusses the site of *Mersin-Yumuktepe* in Southeast Turkey with its uninterrupted stratification of building levels. This spans from the early 7th to roughly the mid-6th millennium cal BC, with the 8.2 ka climatic event falling in the very middle of this time interval. Though the use of wattle and daub architecture continued until the uppermost level of the site, stone-based architecture was introduced for a storage structure as well as the emergence of massive basements built using several courses of river stones starting in about 6250 cal BC; in general, there is a change in the layout of the village, including new elements such as large houses, ovens, silos, and open working areas. Particularly, the emergence of numerous silo structures indicates the increasing importance of storage, which is also something noted in other sites discussed in the book. Substantial changes also occur in ceramic production, including a decline in the Dark-Faced Burnished Ware and the appearance of the first painted pottery. We also see a new vessel repertory, with the so called *yıldırım*, “waving” vertically from a horizontal band, as the most frequent motif. Finally, a remarkable innovation

of this phase is the presence of child and adult human burials in close association with the dwelling areas, particularly with storage structures.

Daune-Le Brun et al. focus in their discussion of the settlement of *Khirkitia* on Cyprus on the time period between 6600 and 6100 cal BC, which was “encircled by an enclosure wall that’s outline has been modified several times.” They describe episodes of erosion, flooding and re-location of this settlement close to a river; furthermore, circular buildings with changing architecture through time, such as internal arrangements, stone and mud brick architecture, and massive pillars – interpreted as supports for a loft (second storey) probably for storage. Unlike other settlements in the book, there are human burials in individual pits dug inside the buildings throughout the settlement occupation. Similar to the settlements on the Konya Plain, “after ca. 5500 cal BC, the *Khirkitia* culture disappears from the archaeological record of Cyprus, and there is a gap of about a millennium before evidence of any settlement on the island reappears, the populations there having likely reverted to small mobile communities, far less visible archaeologically.”

ANATOLIA

Bıçakçı discusses the long sequence of the Cappadocian settlement of *Tepecik-Çiftlik*, which stretches from the beginning of the 8th to the middle of 6th millennium cal BC and provides evidence of cultural stability from the early Pottery Neolithic to the Middle Chalcolithic (from ca. 7000 to 5500 cal BC). Though domestication of animals existed throughout the Neolithic levels, it interestingly decreased toward the end of the settlement when hunting clearly increased. There are also changes in the layout of the settlement and its architecture; densely clustered buildings were now

separated by open areas including a large central open area. In addition, skulls were removed from some individuals buried in certain buildings – a practice which *Düring* discusses at *Köşk Höyük*.

Godon and Özbudak focus on the pottery of the *Tepecik-Çiftlik* sequence and point out that “it is around 6400–6300 cal BC, at the turn between Levels IV and III that major typological, technological and decors-related developments are seen.” This includes new vessel creation methods, such as the use of baskets as pottery moulds and the beating method; it further includes new vessel types such as jars – indicating different cooking habits – the increasing use of red slip along diversification in firing methods, and the development of applied zoomorphic and anthropomorphic decors. As one of their major contributions, they confirm the dating of the Gelveri Early Phase with its typical incisions around 6000–5700 cal BC. They also highlight that as in other sites in Anatolia, this incised decoration style, with a mere 4 percent of the pottery production for an overall time frame 500 years, was a rarity. They echo other authors in the volume that “if major cultural changes or developments need to be underlined around 6000 cal BC, their roots may be traced back to around 6400 cal BC, as far as central Anatolia is concerned, to the time when Neolithization spread toward western Anatolia.”

Düring focuses on the Early Chalcolithic Levels 3 and 2 of the Cappadocian site of *Köşk Höyük* and its burials (only neonates, infants, and children) and plastered skulls – a well-known tradition in the Pre-Pottery Neolithic B in the Levant. Based on the iconography as well as data from domesticated animals, he points out that the Early Chalcolithic was the ‘true Neolithic.’ Most importantly, he succinctly stresses “that it is time to start taking the diversity that characterizes Anatolian prehistory seriously and counter efforts to fit the data into overarching narratives that link key sites into single syntheses whilst glossing over the manifold archaeological

and chronological facts and discrepancies in the rich records of primary archaeological data that have been amassed over the last decades.”

Czerniak and Marciniak present data from the top of the East Mound at *Çatalhöyük* that add to the now accepted fact that two contemporaneous settlements existed on the East and West Mounds at *Çatalhöyük* around 6000 cal BC. They discuss changes in almost all domains, including settlement layout, house architecture, burial practices, human-animal relations and lithics procurement and technology toward the end of the East Mound settlement. Of particular note is the removal of burials from the house – here in the form of the two, so-called burial chambers. The demise of a long-lasting burial practice was the most significant development in the final stage of the East Mound settlement occupation. It marks the beginning of a new tradition of placing the adult dead outside living areas. *Czerniak and Marciniak* describe the shifting of settlements on the East Mound itself and eventually to the West Mound in the context of continuous migration of segments of the population within and beyond the Konya Plain. They also discuss the ethnic composition of the *Çatalhöyük* populations and its importance in regard to the socio-political units of house, household and community neighborhood as well as feasting and migration as major forms of social practice.

Franz and Pyzel focus on the pottery from *Çatalhöyük* and point out that “one of the most important discoveries on the West Mound of recent years is a dark-colored, double-sided burnished restricted ellipsoid carinated bowl with S-profile, knoblets, and standing, which represents a ‘missing link’ between the East and West Mound pottery assemblages.” This pottery type combines elements of both traditions: the shape is typical for the West Mound pottery, but color, surface treatment and fabric are typical of East Mound pottery. They also demonstrate the

evolution of cooking and serving ware which is later added by storage vessels. They argue that the skill of painting – so typical for the Early Chalcolithic – originated in the Late Neolithic in the form of red slip and single paint trials. Importantly, they are able to show for the first time that there is a continuation in pottery from the East to the West Mound both in form and decoration, as well as with specific techniques such as the use of pot-stands for cooking, which also originated in the Late Neolithic.

Last also focuses on pottery from *Çatalhöyük* – in particular from building 25, which he excavated on the West Mound – but contextualizes it across Anatolia. He highlights the importance of the new form emerging in the Early Chalcolithic, the S-profile or carinated bowl. He compares the East Mound wall paintings and these vessels which were re-slipped and re-fired over older decoration, literally embedding decoration within the vessel; the practice has intriguing parallels with the East Mound practice of re-plastering and repainting house walls. The idea that decorated ceramics took the place of wall-painting was first proposed by Mellaart (1970:38). *Last* suggests their portability, capacity to stand metaphorically for categories of people, and association with the serving and consumption of food and drink may all be relevant to the question of why pots were decorated rather than houses. Consequently, he argues that social networks were stretching well beyond *Çatalhöyük*, and pottery may have been implicated in the expression and differentiation of community identities at a time of settlement expansion and/or fission; and in the 6th millennium cal BC, it seems that spatial relationships in the present were of more significance than historical links with the past.

Moving from Central to Western Anatolia, *Çilingiroğlu* discusses Late Neolithic Level V and the Early Chalcolithic Level IV (ca. 6400/6300–5800/5700 cal BC) at *Ulucak* in the context of “an abrupt and region-wide abandonment of settlements [that] occurs first around

5700/5600 cal BC.” She also points out that painted pottery does not emerge as a significant component of the material culture at any of the excavated sites in Aegean Turkey which differentiates the region from Central Anatolia and limits the role of pottery as a chronological marker. But there are several other changes which can be connected to Central Anatolia such as the storage practices from bins to large storage vessels. Though the size of the buildings increases through time, their architecture with mud brick and single rooms continues. Another difference with Central Anatolia is the reliance on Melian instead of Cappadocian obsidian.

Karul discusses the Western Anatolian site of *Aktopraklık*, where the oldest layers found date to 6400–6300 cal BC. On the one hand, he compares *Aktopraklık* with the important sites of *Fikirtepe*, and *Pendik* and *Ilıpınar*, and on the other some characteristics such as the buttressed structures with *Çatalhöyük West* and *Canhasan 2B*. On the other hand, he underlines that settlements in this region including Layer 6 of *Aşağı Pınar* in eastern Thrace and *Hacılar I* in the Lakes Region differ from the Central Anatolian settlement with their circular layout. At the end of the first quarter of the 6th millennium cal BC, *Aktopraklık* as well as *Fikirtepe* and *Pendik*, were abandoned and at the same time, hillside settlements in the *Eskişehir* region, such as *Orman Fidanlığı* and *Kanlıtaş*, emerged. *Karul* points out that during the Late Neolithic–Early Chalcolithic period, the Bosphorus was a uniting element rather than a barrier, but also that it did not play a significant role in the spread of innovations in architecture and material culture further west into the Balkans. It is also worth mentioning that this seems to be the only place from which we have been able to gain information on Mesolithic societies in Anatolia, although this information is at present based only on surface collections, and that the Mesolithic way of life continued during the Neolithic period. Around 5800 cal BC,

impressed decorated pottery begins to appear in Aktopraklık and the other settlements in the region, and continues until around 5500 cal BC, when the Early Chalcolithic settlements in the whole region are abandoned.

Eylem Özdoğan discusses the site of *Aşağı Pınar* in Turkish Thrace and its connections to both Western Anatolia and the Balkans. She focuses on its Level 8, which predates Karanovo I in Bulgaria and does not show any changes into Layer 7. She also discusses relief-decorated sherds depicting bucrania motifs from *Hoca Çeşme*, which earliest horizon dates to ca. 6200 cal BC. She also compares the applied relief decorations with those from Tepecik Çiftlik and Köşk Höyük. The curvilinear layout of the settlement in *Aşağı Pınar* bears significant similarities to that of sites on the Anatolian side of the Marmara Sea such as Aktopraklık-Area B and Ilıpınar VI. She highlights both similarities and differences between eastern Thrace and Anatolia.

Perlès discusses the Middle Neolithic (ca. 6140–6000 cal BC) in *Greece*, which is primarily defined and characterized by the development of fine, inventive, regionally distinctive painted wares. She points out that continuity of sites from the Early to the Middle Neolithic prevails in most domains and that of 300 sites where Early Neolithic occupation has been recorded from surface surveys and excavations, about 80 percent were still occupied during part or all of the Middle Neolithic. Most settlements continued vertically, rather than horizontally, and building materials and architecture continue to be as varied as they were during the Early Neolithic, both within and between settlements. However, a tendency for more partitioning within the houses emerges, which can be seen as a response to an increase in village population. In addition to new firing techniques for pottery, bulk storage and cooking in coarser and larger pots are part of the functional diversification signaling increasing household independence for food storage and

preparation, and feasting as an important practice in the Neolithic of Greece. *Perlès* also discusses the change in the social role of pottery. The insistence on visual display leaves little doubt that pottery, formerly restricted to rare ceremonial, possibly ritual occasions, now enters a broader social sphere as an item of reciprocal exchange, display and competition. Furthermore, she argues that “pottery, and painted pottery in particular, takes on the dual function that we commonly associate with body ornaments” and “establishing differences of status within the group, while, at the same time, asserting local or regional identity.”

As a starting point for her discussion of *Aegean* networks, *Reingruber* states that “around 6400 cal BC the Neolithic way of life appeared together with *tell*-settlements in Thessaly.” But she also highlights that the absence of Mesolithic sites limits our understanding of the Early Neolithic in the Aegean. She discusses obsidian from Melos as a connecting element across the Aegean. There are changes in pottery around 6000 cal BC when flat bases predominate and large storage vessels appear; painted pottery appears only during the Early Neolithic II (c. 6300/6200–6100 cal BC) and from around 6100/6000 cal BC added by *impresso*-decoration. Furthermore, mud-brick constructions appear as well as figurines, stamps and domesticated crops. She describes how an Aegean identity had been molded by Anatolian influences, and that at the beginning of the Middle Neolithic, the Aegean-Anatolian network reached its peak with the appearance of *impresso*-pottery. She interprets this new style as a strong signal for integration and cooperation.

Lichardus-Itten discusses in detail the Early Neolithic site of *Kovačevo* in the Struma Valley in Bulgaria and dates its founding to the time between 6200 and 6100 cal BC. This makes it “not only the longest time of occupation, but it is also the most ancient durable Early Neolithic settlement in Bulgaria.” She stresses that of its about thirty, generally badly preserved buildings,

half of them were built on pits. She interprets the placement as a means to drain water and to circulate air under the floors. She also postulates that “many of the so-called ‘pit-houses’ of the Balkan Neolithic should not be considered as primitive tent-like buildings with strange ground plans, but correspond in fact to such houses on pits with straight walls and normal rectangular or square ground plans.” She also discusses succinctly the important role of water in the Bulgarian Neolithic. Many site names refer to water, like bath (*banja*) or water (*voda*), and testify to such relationships. Controlling access to and protection from water seems to have been a central part of settlement planning and house architecture. Importantly for the regional chronology, she points out there is no “monochrome” pottery at the beginning of the settlement and that there is a certain discontinuity in the settlement (between Kovačevo periods Ia and Ib), and finally that new elements from Anatolian origin appear and finally put an end to the Ia *koine*.

Borić and Cristiani's chapter discusses the *Iron Gate Gorge* with its rich radiocarbon measurements from 14 sites dating the Danube Gorges Late Mesolithic (7th millennium cal BC) and Early to Middle Neolithic (early 6th millennium cal BC). They describe major changes in the archaeological record starting from around 6200 cal BC, the period that coincides with the emergence of Early Neolithic farming communities across the Balkans. The main site of *Lepenski Vir* was reoccupied only after 6200 cal BC and shows around 6000/5950 cal BC a significant shift in the type of settlement pattern and was eventually abandoned before 5500 cal BC along with many other sites that were used more or less continuously throughout the Mesolithic and the Early Neolithic phases in the Danube Gorges. They point out that newly founded settlements of Early Neolithic farmer groups became established fairly rapidly across the region and had a profound impact on the way of life of the existing foraging communities in

southeast Europe. They also eventually led to the collapse of this way of life.

In their diachronic and synthesizing overview of the Neolithic and the Neolithization, both *Demoule and Manolakakis* and *Schier* discuss the importance of reliable dating for strengthening the credibility of links in material culture between Anatolia and the Aegean and southeast Europe. They also stress the importance of better understanding the interaction between foragers and farmers, and that the spread of the Neolithic is nonlinear and heterogenous.

OUTLOOK

We believe the chapters confirm the significance of our original question, “*What happened at 6000 BC at your site and in your region?*” It helped us to break down chronological, theoretical and methodological barriers which until now had prevented us from connecting the Near East and Europe. We think the book closes chronological and conceptual gaps in our understanding of the Neolithic at the transition of the 7th and 6th millennium BC and lays the groundwork for a new and multifaceted approach to the phenomenon of the “Neolithization.” As discussed here, this occurred during a time of socio-economic and religious-symbolic as well as environmental-climatic changes and transformations in the Near East and Europe.

REFERENCES

- Bernbeck, Reinhard and Olivier Nieuwenhuys 2013 *Established Paradigms, Current Disputes and Emerging Themes: The State of Research on the Late Neolithic in Upper Mesopotamia*. In *Interpreting the Late Neolithic of Upper Mesopotamia*, edited by Olivier Nieuwenhuys, Reinhard Bernbeck, Peter M. M. G. Akkermans and Jana Rogasch, pp. 17–37. Brepols, Leiden.

- Bernbeck, Reinhard, Susan Pollock, Susan Allen, et al. 2003 The Biography of an Early Halaf Village: Fıstıklı Höyük 1999 – 2000. *Istanbul Mitteilungen* 53:9–77.
- Biehl, Peter F., and Olivier P. Nieuwenhuys (eds.) 2016 *Climate and Cultural Change in Prehistoric Europe and the Near East*. SUNY Press, Albany.
- Brami, Maxime and Barbara Horejs (eds.) 2019 *The Central/Western Anatolian Farming Frontier*. Austrian Academy of Sciences Press, Wien.
- Brami, Maxime 2019 Anatolia: From the Origins of Agriculture ... to the Spread of the Neolithic Economies. In *The Central/Western Anatolian Farming Frontier*, edited by Maxime Brami and Barbara Horejs, pp. 17–43. Austrian Academy of Sciences Press, Wien.
- Clare, Lee and Bernhard Weninger 2015 The Dispersal of Neolithic Lifeways: Absolute Chronology and Rapid Climate Change in Central and West Anatolia. In *The Neolithic in Turkey. New Excavations and New Research. 10500–5200 BC: Environment, Settlement, Flora, Fauna, Dating, Symbols of Belief, with Views from North, South, East and West*, edited by Mehmet Özdoğan, Neziğ Başgelen and Peter Kuniholm, pp. 1–65. Arkeoloji ve Sanat Yayınları, İstanbul.
- Düring, Bleda S. 2011 *The Prehistory of Asia Minor: From Complex Hunter-Gatherers to Early Urban Societies*. University Press, Cambridge.
- Duru, Refik 2012 The Neolithic of the Lakes Region. Hacilar – Kuruçay Höyük – Höyücek – Bademağacı Höyük. In *The Neolithic in Turkey. New Excavations and New Research. Western Turkey*, edited by Mehmet Özdoğan, Neziğ Başgelen and Peter Kuniholm, pp. 1–65. Arkeoloji ve Sanat Yayınları, İstanbul.
- French, David 1998 *Canhasan Sites 1: Stratigraphy and structures*.
- Gérard, Frédéric and Laurens C. Thissen (eds.) 2002 *The Neolithic of Central Anatolia. Internal Developments and External Relations during the 9th-6th Millennium cal BC. Proceedings of the International CANew Table Ronde Istanbul, 23–24 November 200*. Ege Yayınları, İstanbul.
- Guilaine, Jean 2003 *De la vague à la tombe: la conquête néolithique de la Méditerranée, 8000-2000 avant J.-C.* Seuil, Paris.
- Guilaine, Jean 2019 The Neolithisation of Europe: An Arrhythmic Process. In *The Central/Western Anatolian Farming Frontier. Proceedings of the Neolithic Workshop Held at 10th ICAANE in Vienna, April 2016*, edited by Maxime Brami and Barbara Horejs, pp. 241–250. Austrian Academy of Sciences Press, Wien.
- Hansen, S., F. Klimesch and J. Renn (eds.) in press *Prehistoric Networks in the longue durée: Palaeolithic Innovations Enabling the Neolithic Revolution*. Edition Topoi, Berlin.
- Hendy, Jessica, Andre C. Colonese, Ingmar Franz, et al. 2018 Ancient Proteins from Ceramic Vessels at Çatalhöyük West Reveal the Hidden Cuisine of Early Farmers. *Nature Communications* 9/1:4064.
- Krauß, Raiko (ed.) 2011a *Beginnings – New Research in the Appearance of the Neolithic between Northwest Anatolia and the Carpathian Basin*. Leidorf, Rahden/Westfalen.
- Krauß, Raiko 2011b Neolithization Between Northwest Anatolia and the Carpathian Basin – an Introduction. In *Beginnings – New Research in the Appearance of the Neolithic between Northwest Anatolia and the Carpathian Basin*, edited by Raiko Krauß, pp. 1–7. Leidorf, Rahden/Westfalen.
- Lichter, Clemens (ed.) 2005 *How Did Farming Reach Europe? Anatolian-European Relations from the 2nd Half of the 7th through the First Half of the 6th Millennium BC*. Ege Yayınları, İstanbul.
- Marciniak, Arkadiusz (ed.) 2019a *Concluding the Neolithic*. Lockwood, Atlanta.
- Marciniak, Arkadiusz 2019b. Introduction. In *Concluding the Neolithic: The Near East in the Second Half of the Seventh Millennium BCE*, edited by Arkadiusz Marciniak, pp. 1–16. Lockwood, Atlanta.
- Mellaart, James 1970 *Excavations at Hacilar*. University Press, Edinburgh.
- Mellaart, James 1975 *The Neolithic of the Near East*. Thames and Hudson, London.
- Nieuwenhuys, Olivier P. 2006 *Plain and Painted Pottery: The Rise of Late Neolithic Ceramic Styles on the Syrian and Northern Mesopotamian Plains*. Brepols, Turnhout.
- Nieuwenhuys, Olivier, Reinhard Bernbeck, Peter Akkermans and Jana Rogasch (eds.) 2013 *Interpreting the Late Neolithic of Upper Mesopotamia. Papers on Archaeology from The Leiden Museum of Antiquities, Volume 9*. Brepols, Leiden.
- Özbaşaran, Mihriban, and Hijlke Buitenhuis 2002 Proposal for a Regional Terminology for Central Anatolia. In *The Neolithic of Central Anatolia. Internal Developments and External Relations during the 9th–6th Millennium CAL BC*, edited by Frédéric Gérard and Laurens C. Thissen, pp. 67–78. İstanbul.
- Özdoğan, Mehmet 1993 *Vinça and Anatolia. A New Look at a Very Old Problem, or Redefining Vinça Culture from the Perspective of Near Eastern Tradition Anatolica 19: 173–193*.
- Özdoğan, Mehmet, Neziğ Başgelen and Peter Kuniholm (eds.) 2011a *The Neolithic in Turkey. New Excavations and New Research. The Euphrates Basin* Arkeoloji ve Sanat Yayınları, İstanbul.
- Özdoğan, Mehmet, Neziğ Başgelen and Peter Kuniholm (eds.) 2011b *The Neolithic in Turkey. New Excavations and New Research. The Tigris Basin* Arkeoloji ve Sanat Yayınları, İstanbul.

- Özdoğan, Mehmet, Nezih Başgelen and Peter Kuniholm (eds.) 2012a *The Neolithic in Turkey. New Excavations and New Research. Western Turkey (Istanbul)*.
- Özdoğan, Mehmet, Nezih Başgelen and Peter Kuniholm (eds.) 2012b *The Neolithic in Turkey. New Excavations and New Research. Central Turkey* Arkeoloji ve Sanat Yayınları, Istanbul.
- Özdoğan, Mehmet, Nezih Başgelen and Peter Kuniholm (eds.) 2013 *The Neolithic in Turkey. New Excavations and New Research. Northwestern Turkey and Istanbul*. Arkeoloji ve Sanat Yayınları, Istanbul.
- Özdoğan, Mehmet, Nezih Başgelen and Peter Kuniholm (eds.) 2014 *The Neolithic in Turkey. New Excavations and New Research. 10500–5200 BC: Environment, Settlement, Flora, Fauna, Dating, Symbols of Belief, with Views from North, South, East and West*. Arkeoloji ve Sanat Yayınları, Istanbul.
- Parzinger, Hermann 1993 *Studien zur Chronologie und Kulturgeschichte der Jungstein-, Kupfer- und Frühbronzezeit zwischen Karpaten und Mittlerem Taurus*. Zabern, Mainz.
- Reingruber, Agathe, Zoï Tsirtsoni and Petranka Nedelcheva 2017a Introduction. In *Going West? The Dissemination of Neolithic Innovations between the Bosphorus and the Carpathians* edited by Agathe Reingruber, Zoï Tsirtsoni and Petranka Nedelcheva, pp. 1–5. Routledge, London & New York.
- Reingruber, Agathe, Zoï Tsirtsoni and Petranka Nedelcheva (eds.) 2017b *Going West? The Dissemination of Neolithic Innovations between the Bosphorus and the Carpathians*. Routledge, London & New York.
- Roffet-Salque, Mélanie, Arkadiusz Marciniak, Paul J. Valdes, et al. 2018. Evidence for the Impact of the 8.2-kyBP Climate Event on Near Eastern Early Farmers. *Proceedings of the National Academy of Sciences* 115:8705–8709.
- Roodenberg, Jacob J. (ed.) 1995 *The Ilımar Excavations I. Five Seasons of Fieldwork in NW Anatolia, 1987–91*. Nederlands Historisch-Archaeologisch Instituut te Istanbul, Istanbul.
- Roodenberg, Jacob J., and Songül Alpaslan Roodenberg (eds.) 2008 *Life and Death in a Prehistoric Settlement in Northwest Anatolia. The Ilımar Excavations, Volume III, with Contributions on Hacilar-tepe and Menteşe*. Nederlands Instituut voor het Nabije Oosten, Leiden.
- Roodenberg, Jacob J., and Laurens Thissen (eds.) 2001 *The Ilımar Excavations II*. Nederlands Instituut voor het Nabije Oosten, Istanbul.
- Rosenstock, Eva, Silvine Scharl and Wolfram Schier 2016 Ex oriente lux? – Ein Diskussionsbeitrag zur Stellung der frühen Kupfermetallurgie Südosteuropas. In *Von Baden bis Troia – Ressourcennutzung, Metallurgie und Wissenstransfer. Eine Jubiläumsschrift für Ernst Pernicka. Oriental and European Archaeology* 3, edited by Martin Bartelheim, Barbara Horejs and Raiko Krauss. Leidorf, Rahden/Westfalen.
- Schoop, Ulf 2005 *Das Anatolische Chalkolithikum*. Bernhard Albert Greiner, Remshalden/Grunbach.
- Verhoeven, Marc 2012 Retrieving the Supernatural: Ritual and Religion in the Prehistoric Levant. In *The Oxford Handbook of the Archaeology of Ritual and Religion*, edited by Timothy Insoll, pp. 795–810. Oxford University Press, Oxford.
- Weninger, Bernhard, Eva Alram-Stern, Eva Bauer, et al. 2006. Climate Forcing due to the 8200 cal yr BP Event Observed at Early Neolithic Sites in the Eastern Mediterranean. *Quaternary Research* 66:401–420.

Part I

UPPER MESOPOTAMIA AND
EASTERN MEDITERRANEAN

Chapter 2

THE LATE NEOLITHIC SITE OF SHIR IN WESTERN SYRIA

The Final Phase of Occupation circa 6000 cal BC

Karin Bartl

INTRODUCTION: RESEARCH ON THE LATE NEOLITHIC IN WESTERN SYRIA

THE LATE NEOLITHIC SITE of Shir is located in the central part of the northern Levant, which today is one of the most important agricultural regions in Syria. Archaeological research here started rather early during the French Mandate period in the 1930s but focused mainly on the historical periods. Although research activities increased enormously during the last two decades, including surface investigations as well as excavations, the number of documented sites dating to prehistoric periods is still rather limited. Concerning the Neolithic period, there are almost no sites of the early Pre-Pottery Neolithic phases, i.e. the PPNA to the Middle PPNB (ca. 10,200–7600 cal BC) and only very few of the Late PPNB (7600–6900 cal BC) (dates according to Atlas des sites du Proche Orient [ASPRO] [Hours et al. 1994]): Layers from the end of the 8th millennium cal BC were reached only at Ras Shamra in the coastal area (De Contenson 1992) and Tell ʿAin el-Kerkh and Tell el-Kerkh in the Rouj basin near Idlib (Iwasaki and Tsuneki 2003). Some more settlements are attested for the Late Neolithic of the 7th millennium cal BC;

For the excavation permission as well as for the generous and efficient support during the preparatory work, we would like to sincerely thank Dr Bassam Jamous, the then Director General of Antiquities and Museums in Syria, and Dr Michel al-Maqdissi, the then Director of Excavations and Studies of the DGAMS. The interest and assistance of the Department of Antiquities at Hama contributed greatly to the achievement of our work. The members of the excavation campaigns and the Syrian workers are expressly thanked for their supportive participation.

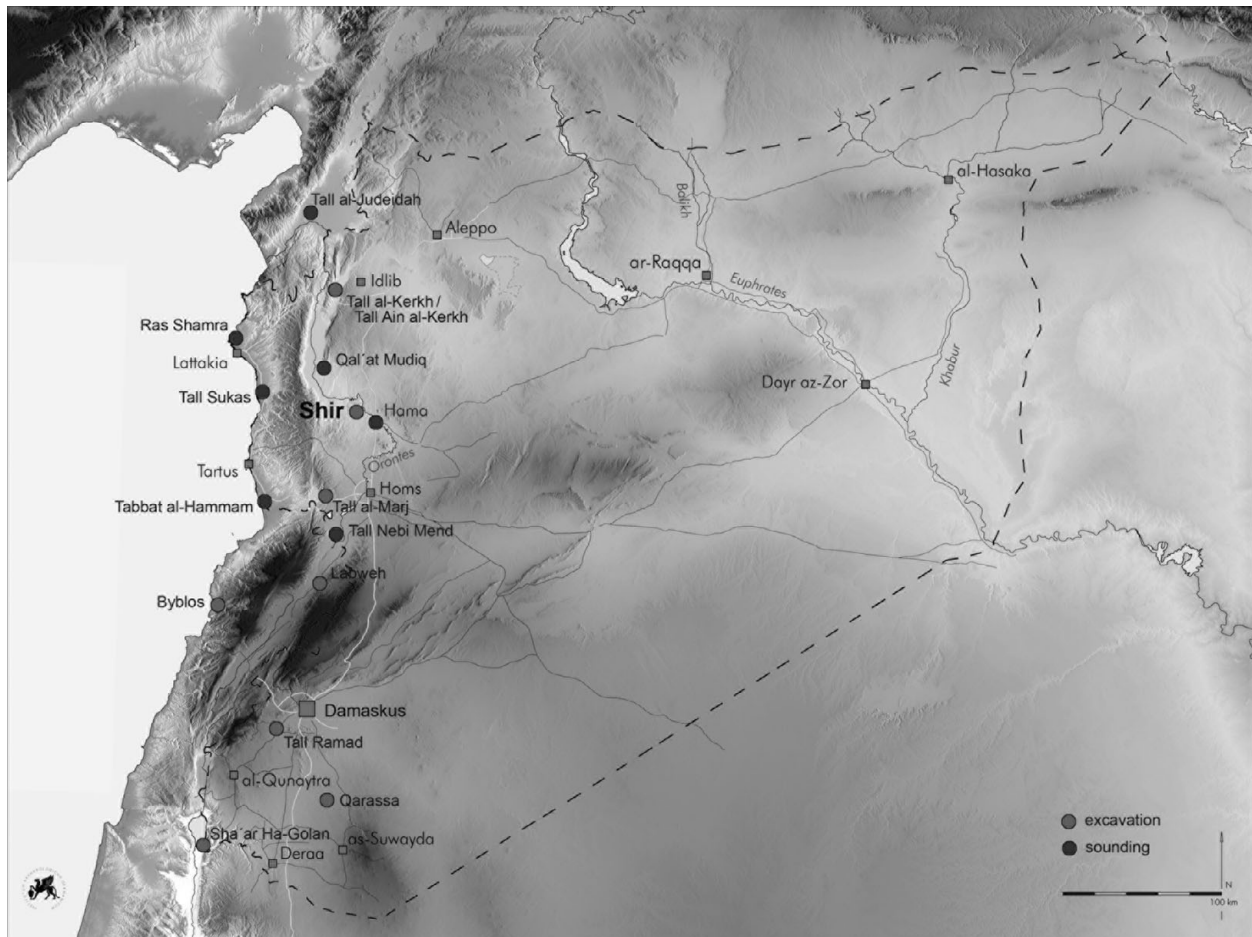


Figure 2.1 Late Neolithic sites of the 7th millennium cal BC in the northern Levant. (map: German Archaeological Institute, Orient Department, Thomas Urban)

however, most of them are known solely through soundings (Figure 2.1). Moreover, almost no precise data are available for the time of transition, the 7th to 6th millennium cal BC. Only very few settlements are attested through which the nature of the transition could be determined. Among the settlements of the 7th millennium, there are very few in which archaeological contexts could be uncovered on a larger scale, one of which is the site of Shir located near Hama.

THE SITE OF SHIR

The settlement is situated on a limestone terrace that rises on the southern bank

above the Nahr Sarut, a tributary of the Orontes River. The landscape of today is marked exclusively by intensive crop cultivation with only a few relicts of the original vegetation (Figure 2.2). However, as paleobotanical investigations have shown, it can be assumed that the environment of the Neolithic settlement consisted of open forest vegetation, in which smaller areas were cleared for growing cereals and legumes. The cultivated species evidenced in Shir are emmer, einkorn, naked wheat and barley as well as chickpeas, lentils and peas (Neef 2009, 2018).

The water supply probably came from the Sarut River, whose riverbed at that time likely did not cut as deeply into the valley floor as it does today and was thus easier to reach. At present, the region



Figure 2.2 Shir. The site, located on a natural mound across the river, seen from the northwest. (photo: German Archaeological Institute, Orient Department, Karin Bartl)

receives an average precipitation of ca. 400 mm, so that even with climatic variations the rainfall suffices for agricultural production. However, precise data on the paleoclimatic development in the environment of Shir are still not available. Nevertheless, the thick *terra rossa* soil cover is quite conducive for a wide variety of crop cultivation, and this is supplemented by intensive pastoralism. Like the entire hinterland of the Levant, the surroundings of Shir are part of the optimal climate zone of the so-called Levantine corridor.

The Settlement Layout and Southern Area

Between 2006 and 2010 German-Syrian excavations have been conducted in Shir, which have

concentrated on three parts of the site: south, central and northeast (Figure 2.3). The aim of these investigations was to clarify the stratigraphic sequence on the one hand, and the layout of the settlement on the other hand (Bartl and Haidar 2008; Bartl and Ramadan 2008; Bartl, Hijazi and Ramadan 2009; Bartl, Ramadan and al-Hafian 2009; Bartl, Ramadan and al-Hafian 2011; Bartl 2012; Bartl, Farzat and al-Hafian 2012; Bartl and al-Hafian 2014; Bartl 2018; Bartl in prep.).

As excavations have shown, the stratigraphic situation in the southern area differs distinctly from that in the northern area. Whereas in the south a sequence of settlement layers reaching 6 m in height and a total of six building levels with several sub-phases could be determined, a sequence of only 3 m of cultural layers was

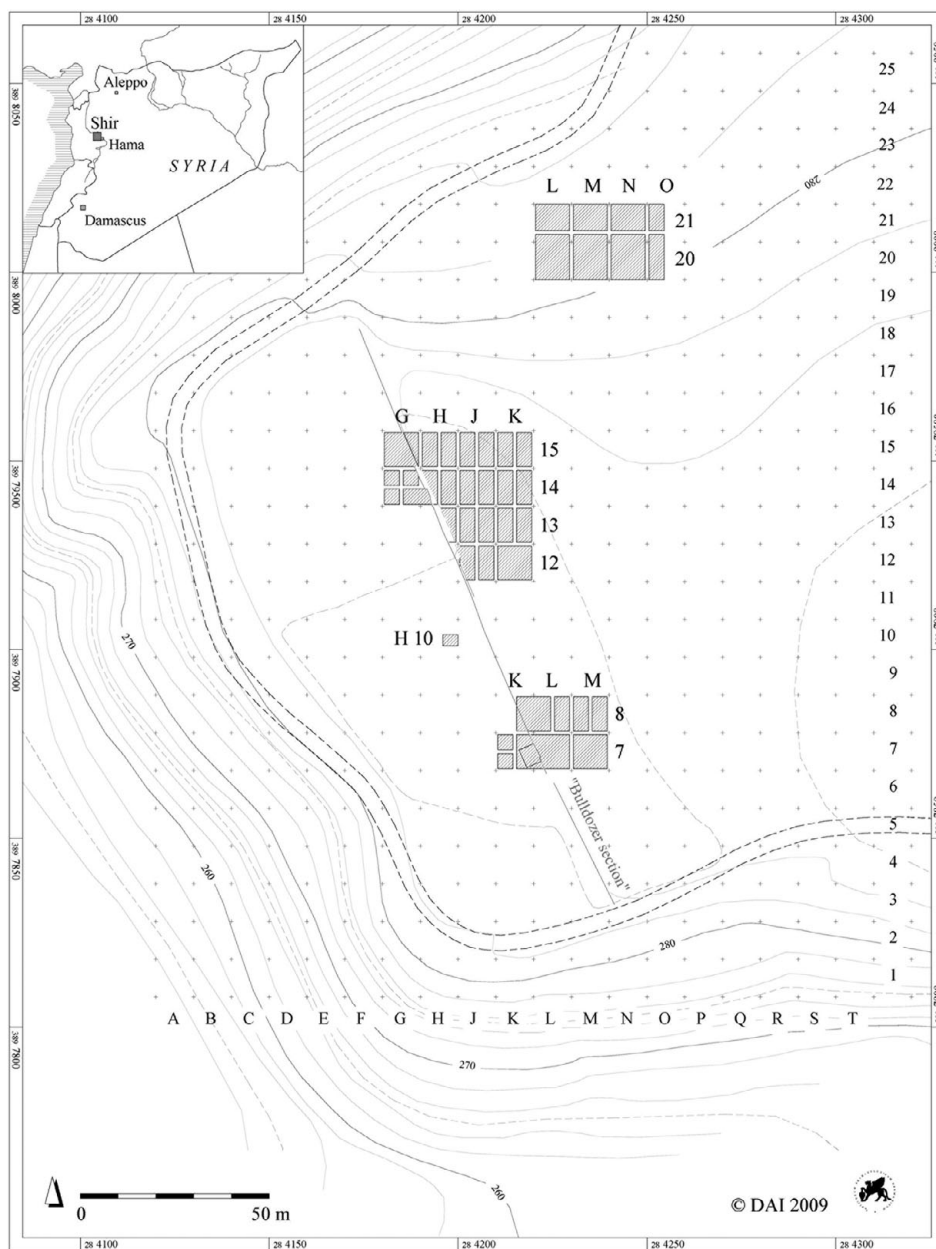


Figure 2.3 Shir. Excavation areas. (plan: German Archaeological Institute, Orient Department, Thomas Urban)

discovered in the northeastern area. The stratigraphical sequence in the central area is not yet clear since excavations focused on the uppermost layers.

Radiocarbon dates confirm the oldest layers in the southern area: Settlement began there around 7000 cal BC – a point in time marked by the appearance of pottery production in the northern Levant which defines the beginning of

the Late Neolithic period. The oldest layer in the northeastern area in Shir dates to around 6550 cal BC. Generally, at Shir the time around 6500 cal BC seems to be a period of significant changes which can be observed in architecture, finds and particularly in the development of pottery (Nieuwenhuys 2009, 2018).

Layers of the (preceramic) Early Neolithic have not yet been reached. Several ^{14}C dates for

the second half of the 8th millennium cal BC stem from the southern area, but evidence of an even older settlement core might be present elsewhere (Weninger et al. 2018).

At the time of its greatest expanse, the settlement at Shir covered some four hectares, with buildings apparently grouped in a large semicircle along the edge of the terrace, around an open space in the east. At least this settlement form is suggested by geophysical data. However, it is quite imaginable that the entire area was not inhabited at the same time, but instead that there was a “shifting settlement,” that is to say, areas of habitation were abandoned and new ones built elsewhere throughout time. This possibility is supported by radiocarbon dates: While the uppermost settlement layers in the southern part date to ca. 6500 cal BC, a date for the uppermost settlement layer in the central area indicates 6200/6100 cal BC. Additionally, dates from the northeastern area range between 6550 and 6200 cal BC. These last dates, however, derive from deeper layers of fill in the buildings, so the latest use-phase there can be estimated at around 6100 cal BC or perhaps even later. Hence, the latest phase of settlement in Shir was at the end of the 7th millennium cal BC: Around 6100 or even 6000 cal BC the site was apparently abandoned and after that never resettled.

The Central Area

The finds and contexts situations documented in the central area and the northeastern area differ distinctly from each other.

Buildings in the central area consist of single, one- or multi-roomed structures, whose outstanding features are thick floors made of lime-mortar. With regard to the construction, it can be assumed that the socles of the houses were built of the local limestone, while the standing walls were built of mud bricks or pisé; but almost no traces of these walls are preserved (Figure 2.4).

Among the finds were grinding stones, pounders, mortars and pestles for preparing food; exceptional objects include seals, palettes and beads of different kinds of stone.

The uppermost architectural remains lie at ca. 5–10 cm below the present-day surface and have two notable features: First, severe disturbances in the form of pits and stones looted from the walls, and, second, occasional special objects found in primary contexts on the lime-mortar floors (Figure 2.5). Other special features are fragments of large vessels inside and outside the buildings, which were surely still complete at the time of the settlement’s abandonment.

The southern part of the central area is characterized by numerous burials, some of which – differing from older *intra muros* burials – were laid in an open space inside an intentionally created layer of small stones (Figure 2.6). The individuals were not buried in uniform orientation, but all deceased were laid down in a contracted position. Grave goods like tools made of bone, silex or obsidian were found only very rarely (Resch and Gresky in prep.).

The archaeological evidence shows that the houses were abandoned at a similar time, and moreover, various objects like food-processing tools (grinding stones, mortars, pestles) or large pots were left behind. Later, when the buildings had already decayed and the mud brick walls had deteriorated, the larger stones in the wall foundations were removed and possibly reused elsewhere. Simultaneously, or even later, larger pits were dug in the area of the collapsed buildings. The pits’ original contents consisted solely of gray, powder-ash earth; hence, it can be assumed that pyrotechnical activities took place there after the last known habitation in the settlement.

The exact temporal association between this last building phase and the area with burials cannot be determined at the moment. Since the graves lay only 10 to 15 cm below the present-day surface, theoretically it is conceivable that they



Figure 2.4 Shir. Central area seen from the northeast. (photo: German Archaeological Institute, Orient Department, Thomas Urban)



Figure 2.5 Shir, central area. Building of the last phase of occupation with lime plaster floor, installations and in situ finds of pestles (circles), seen from north. (photo: German Archaeological Institute, Orient Department, Thomas Urban)



Figure 2.6 Shir, central area. Burial ground. (plan: German Archaeological Institute, Orient Department, Thomas Urban)

were dug at a later time, for example, in the Early Bronze Age, when the site Tell esh-Shir existed west of the Neolithic settlement. Age determination of the bones has not yet been carried out. However, one of the burials, in which a large stone marked the upper body of the deceased, point to the Neolithic period. A comparable example is known from the nearly contemporary site of Tell ʿAin el-Kerkh in the Rouj basin near Idlib (Tsuneki et al. 2007). Burials of this type are not known from the Early Bronze Age.

To summarize, the stratigraphic sequence in the central area can be described as follows:

1. Emergence of the youngest settlement layer;
2. Abandonment of buildings and their inventory;
3. Erosion of the roofs and brick walls;
4. Removal of stones from the foundations and/or socket;
5. Deposition of a layer of small stones in the southern area;

6. Use of this area as burial ground; and
7. Simultaneously or later, the appearance of pits.

The Northeastern Area

A complex of at least three buildings constitutes the northeastern part of the settlement; two have been excavated (Figure 2.7). A section in the northeast reveals that they sit on older settlement layers, whose architecture, however, was not determined.

The two excavated buildings are elongated rectangular structures, each with two parallel rows of three or five rooms. Both buildings have a maximal preserved height of ca. 1.4 m; there are no external entrances on ground level. There are various indications that the buildings originally had a second storey: Thick lime plaster floor fragments were found in the fill of the rooms that must have fallen from a storey above. The



Figure 2.7 Shir, northeastern area. Storage buildings seen from the north. (photo: German Archaeological Institute, Orient Department, Thomas Urban)

lower floor of the houses, or at least the socket, was built of limestone, while the upper storey was probably built of mud bricks or pisé; however, no traces of these walls are preserved.

The entire complex underwent a number of successive alterations during the course of its use (Rogasch 2011; Dietrich in prep.). Both first emerged as two planned, individual structures; then at a later point in time they were connected by a structure with two rooms erected in between, and finally enlarged by various additions in the south. During this last construction phase, further structures were probably erected in the north, which, however, do not adjoin the two houses. Furthermore, a large fragment of floor was found in the south, at about the same level as the southerly additions, indicating that further structures originally existed in the vicinity of the complex – at least during the earlier phase of use.

The interiors of both buildings display several layers of use: The first phase in the eastern house

consists of small rooms with floors made of mud with a cover of thin lime mortar. In the next phase, various small circular stone settings were constructed in some of the rooms, which served as vessel stands or containers. In the earliest phase some of the rooms must have already been partially filled with debris, before further installations were built in the fill.

The stratigraphic division in the western house is less complex. There also the rooms were simple cells with different kinds of floors, which often display a lime mortar cover. Various installations had then been placed on the floors of three rooms, among which a large tub-like clay structure, renewed twice, in the west represents quite an outstanding context. The majority of finds in the building consist of objects connected with food preparation. Large vessels stood in two rooms, while in another room a large “white-ware” bowl was found.

Just as in the central area, at a certain point in time the buildings in the northeastern area – including

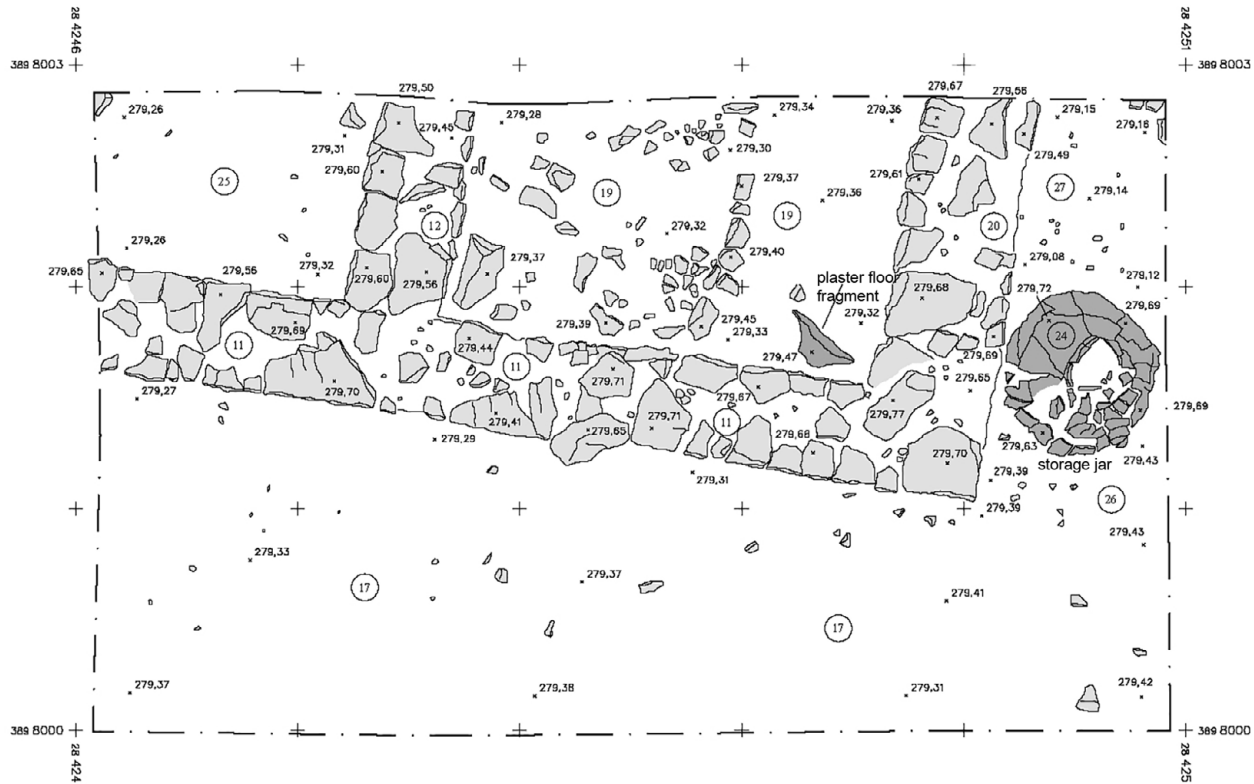


Figure 2.8 Shir, northeastern area. Storage vessel of the last phase of building A. (drawing: German Archaeological Institute, Orient Department, Thomas Urban)

their entire inventories – were abandoned. Likewise, several large vessels were found in the outer area, which had been left behind (Figure 2.8).

A peculiar phenomenon observed in the latest phase of use, in which the buildings must have already collapsed, are remains of various large vessels (Figure 2.9), which had been placed in the wall remains (Figure 2.10). They are similar to the vessels used during the “lifetime” of the buildings, so that the interval of time between the abandonment of the buildings and their later use was likely not all that long, perhaps about 50 to 100 years.

Consequently, the stratigraphy excavated in the northeast area indicates the following sequence of use:

1. Foundation of two houses, probably on older structures;
2. Construction of a connecting building and structures adjoining in the south;

3. Emergence of further buildings in the north and south;
4. Abandonment of the buildings;
5. Erosion of the roofs and mud walls, accumulation of fill in the rooms that reached the upper edge of the stone socle-storey;
6. Erosion or removal of some of the stone walls in the west; and
7. Placement of large vessels in these wall remains and in open spaces.

THE ABANDONMENT OF THE SITE

Toward the end of the 7th millennium cal BC, Shir was a middle-sized, unfortified settlement amid fertile surroundings and in the vicinity of natural resources such as silex, limestone, basalt and clay, which were needed to

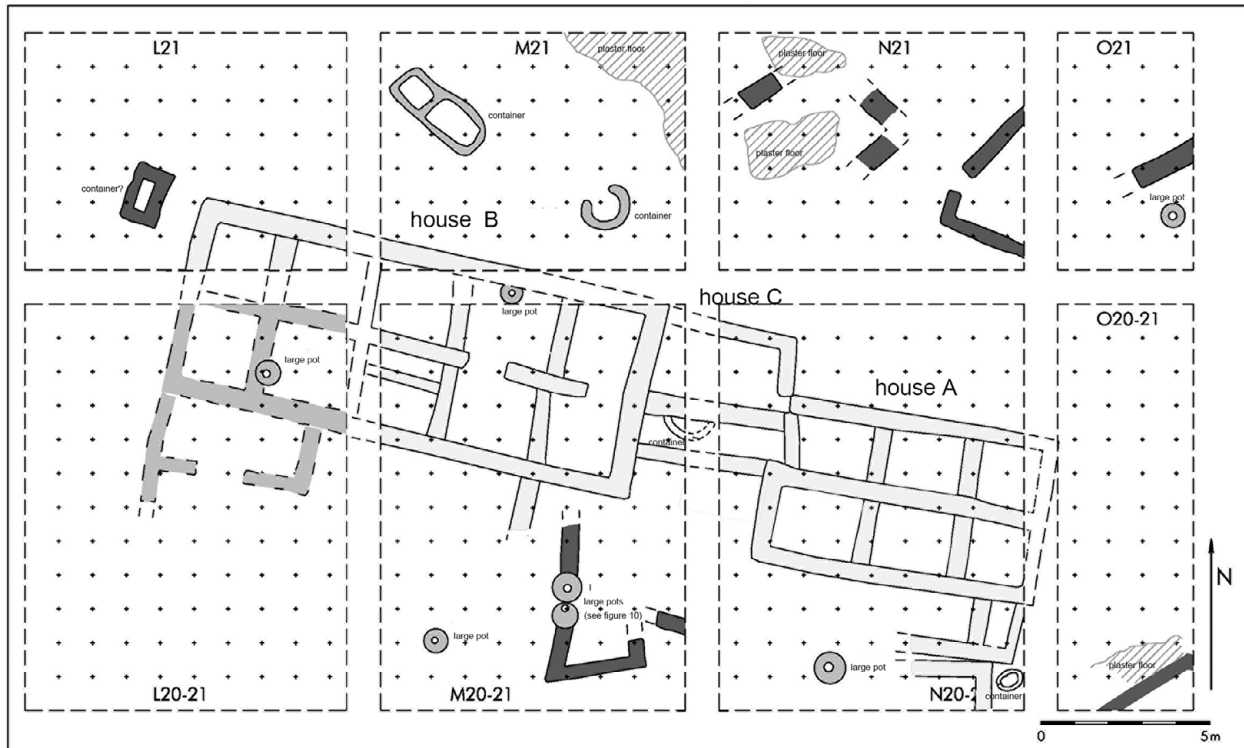


Figure 2.9 Shir, northeastern area. The final phase of use after the abandonment of the houses (very light gray = main phase of the storage buildings A and B, light gray = later alterations of building B and construction of containers in the north, dark gray = last phase of construction before abandonment of the site). (plan: German Archaeological Institute, Orient Department, Thomas Urban)

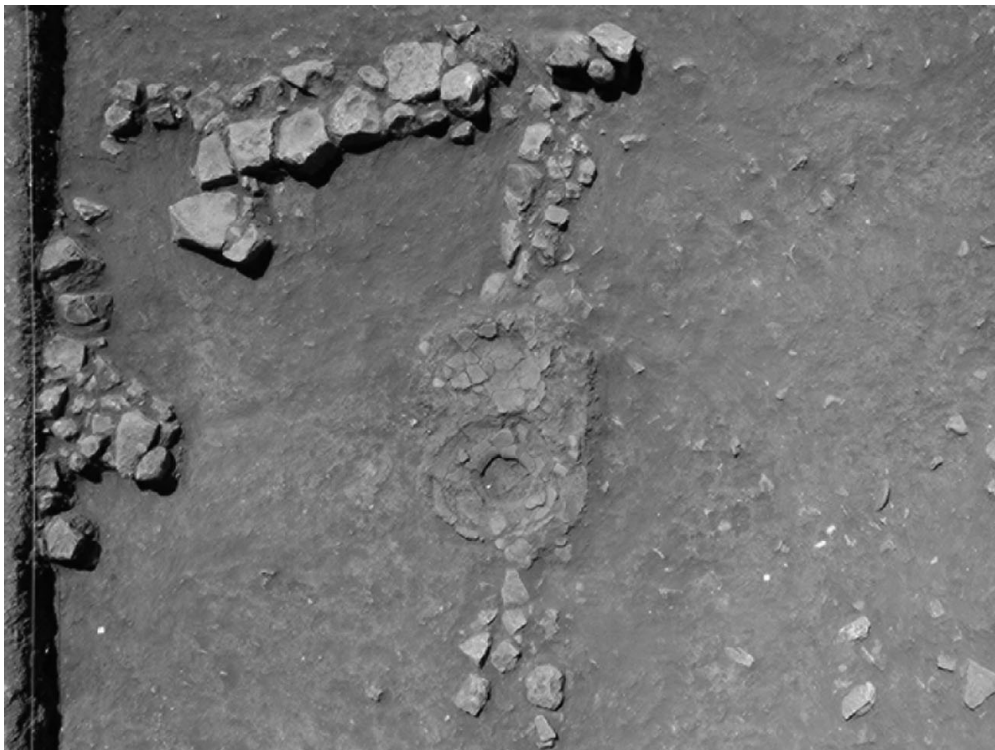


Figure 2.10 Shir, northeastern area. Storage vessels placed in the collapsed walls during the last phase of use. (photo: German Archaeological Institute, Orient Department, Thomas Urban)

produce the necessary objects of daily use. The settlement is characterized by a multitude of domestic structures in various sizes and forms. In the northern area two significant building structures were discovered, which in view of the preserved remains (room sizes, inventories) found there can be addressed as storage facilities, probably mainly for storing and preparing food-stuff. However this storage was organized, the existence of these buildings might be an indicator of a certain prosperity of the site and its inhabitants (Bartl et al. 2012). This settlement situation ceased toward the end of the 7th millennium cal BC, when the houses and storehouses were abandoned and left behind. Nonetheless, some people must have stayed at the site or in the vicinity for a longer time, people who made use of the deteriorated buildings for storage and buried their dead in the deserted village.

Currently it is not clear whether or not the central area and the northeastern area were abandoned at the same time. A few ¹⁴C dates from the northeastern area point to around 6150/6100 cal BC for the use of the houses. The abandonment might have taken place a little later, perhaps around 6050/6000 cal BC. The only ¹⁴C sample analyzed from the central area is of slightly younger date but points to the time span between 6200 cal BC for the latest settlement phase as well.

The process of abandonment at the site is difficult to understand at the moment. According to various studies on sub-recent abandonment of sites (villages or houses), there are two different kinds of abandonment: permanent and temporary. Both can happen in a planned or unplanned manner and leave different traces in the archaeological context. Planned permanent abandonment is characterized by the almost complete absence of valuable goods and required materials, which will be used in the next site chosen for settling. Conversely, planned or unplanned temporarily abandoned sites show

more refuse and many objects that are not required for immediate use at the alternate site. Moreover, valuable objects were more likely to be stored in special places or caches (Stevenson 1982; Cameron and Tonka 1993; Nelson and Schachner 2002).

According to that pattern, it seems that the people of Shir did not intend to leave the site forever, but to return at a later date. Many items, e.g. large vessels and valuable objects, like palletes, seals, were left within the houses, thus indicating that a return was anticipated.

However, a fact that remains inexplicable is that small objects of daily use like pestles were left behind as well. In any case, the houses in the central and northeastern areas were abandoned permanently around 6200/6100 BC and never resettled again.

Of course, questions arise concerning the reasons that led to the abandonment of an – at first sight – optimal settlement site. Several models are imaginable, such as a long-term change in climate, short-term natural catastrophes, war-like conflicts or even reasons in the symbolic sphere like a “bad spirit” connected with specific events before the abandonment.

Deterioration in climatic conditions and an accompanying decrease in the subsistence basis, as might be assumed in connection with the 8.2–8.6 ka event (Weninger et al. 2009), cannot be recognized in Shir at the moment, due to the generally sparse remains of fauna and flora there. However, a reduction of means of subsistence cannot be rejected in general. Considering the serious effects following a short-term deterioration in climate that lasted only a few years, it would seem possible – at least hypothetically – that the abandonment of the settlement was linked with a short-term climatic change and originally not to be intended as permanent.

In this context it should be noted that the Neolithic basis of subsistence in Shir comprised a comprehensive spectrum of wild and

domesticated species, but it cannot be determined which of these foodstuffs was used perpetually.

Furthermore, unmistakable indicators of climatic deterioration, as supposedly represented in the so-called rubble slides in the southern Levant, are not attested in Shir. It is assumed that these avalanches of stones were caused by severe rainfall and destroyed or covered constructions during the Yarmoukian period (Simmons 1997; Rollefson 2009). Although theoretically the stone settings associated with the burials in the central area might possibly be linked with this phenomenon, the spatial restriction of this layer to an area outside of the built zone rather indicates an anthropogenic construction. Further traces of stone accumulations are completely missing at the site.

No evidence of regional natural catastrophes such as earthquakes, which occur quite frequently there, has been detected yet, if one disregards the unique case of one single collapsed wall in the youngest building layer. Further, local catastrophes such as a large fire in the settlement are not recognizable. An attack by a hostile group, which the graves in the central area might hypothetically be attributed to, seems unlikely as – as far as observed on the skeletal remains – there are no signs of injuries caused by violent acts.

In spite of the lack of clear indicators, the abandonment of the site must relate to a serious, long-term disturbance in the community. It remains uncertain whether this arose from local reasons or whether it was linked with short-term climatic changes that did not leave any traces in the archaeological contexts. The fact, however, that the remains of walls from the abandoned buildings were probably in use long after the end of the settlement, for example, in the northeastern area as a place for depositing large vessels, shows that there must have been people present in the vicinity after the end of habitation at the

site. They could have settled either in another place in Shir itself or in a neighboring area. Possible sites could have been the southeastern part of the settlement area of the site or a place on the northern bank of the river. Settlement remains were found during our survey in 2005, but have since been destroyed in the course of terracing activities. They probably dated to the end of the 7th millennium cal BC (Bartl and al-Maqdissi 2007).

ABSENCE OF SETTLEMENT ACTIVITIES IN WESTERN SYRIA IN THE 6TH AND 5TH MILLENNIUM CAL BC

Questions remain regarding the development of settlement activities in the time following the abandonment of Shir, the 6th millennium cal BC. The results of the Orontes Survey have revealed that the 6th and 5th millennium cal BC represent a time span for which almost no settlements are known (Bartl and al-Maqdissi 2014, 2016). This also applies to regions farther north in the Ghab (Fortin 2007; Fortin and Cooper 2014) and the “gap of Homs” (Haïdar-Boustani et al. 2003–2004; al-Maqdissi et al. 2014) and in the Homs region (Philip and Bradbury 2010; Philip and Newson 2014), where scarcely any evidence of the Late Neolithic/Early Chalcolithic was documented in surveys conducted during the past years.

The sequence at the nearby tell of Hama, suggesting a continuous settlement between the 7th and 5th millennium cal BC, is based on such a meager amount of data that no further-reaching conclusions can be made (Thuesen 1988). Although several radiocarbon dates are available for settlements such as Ras Shamra (Hours et al. 1994) and sites in the Rouj basin farther north (Iwasaki and Tsuneki 2003), these cannot be used to unquestionably attest a transition