

HOUSEHOLDS & COLLECTIVE BUILDINGS IN WESTERN ASIAN NEOLITHIC SOCIETIES



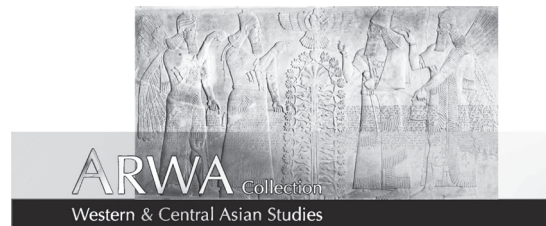
LEMA IV STUDIES IN THE ARCHAEOLOGY & HISTORY OF THE LEVANT & EASTERN MEDITERRANEAN

General Editors

Hermann Genz, *American University, Beirut*
Marc Lebeau, *European Centre for Upper Mesopotamian Studies*

Editorial Board

Frank Braemer, *CNRS, UMR 7264, Nice*; Isabella Caneva, *Università del Salento, Lecce*
Peter M. Fischer, *University of Gothenburg*; Raphael Greenberg, *Tel Aviv University*
Eric Gubel, *Royal Museums of Art & History, Brussels* Maria Iacovou, *University of Cyprus, Nicosia*
Karin Kopetzky, *Austrian Academy of Sciences, Vienna* Ourania Kouka, *University of Cyprus, Nicosia*
Michel al-Maqdissi, *Institut d'études avancées de Paris*; Pierre de Miroschedji, *CNRS, UMR 7041, Nanterre*
Mirko Novák, *Universität Bern*; John K. Papadopoulos, *Cotsen Institute of Archaeology, UCLA, Los Angeles*
Vasif Şahoğlu, *Ankara Üniversitesi*; Karin Sowada, *Macquarie University, Sydney*; Aslihan Yener, *(Emerita) University of Chicago / Koç Üniversitesi, Istanbul*; Sireen El-Zaatari, *Eberhard-Karls-University, Tübingen*



Cover image: House from the modern village of Halula (Syria). Photo taken in the early 2000s during fieldwork season at Tell Halula (SAPPO-GRAMPO/UAB).

Volumes published in this series are listed at the back of the book.

VOLUME 4

HOUSEHOLDS & COLLECTIVE BUILDINGS IN WESTERN ASIAN NEOLITHIC SOCIETIES

Edited by

Joaquim Sisa-López de Pablo,
Anna Bach-Gómez & Miquel Molist



BREPOLS

© BREPOLS PUBLISHERS

THIS DOCUMENT MAY BE PRINTED FOR PRIVATE USE ONLY.
IT MAY NOT BE DISTRIBUTED WITHOUT PERMISSION OF THE PUBLISHER.

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library.

Keywords: Neolithic, Housing, Household, Collective Buildings, Architecture.

© 2024, Brepols Publishers n.v., Turnhout, Belgium

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the publisher.

D/2024/0095/34
ISBN: 978-2-503-60953-9
e-ISBN: 978-2-503-60954-6
DOI: 10.1484/M.LEMA-EB.5.135835

Printed in the EU on acid-free paper

TABLE OF CONTENTS

JOAQUIM SISA-LÓPEZ DE PABLO, ANNA BACH-GÓMEZ & MIQUEL MOLIST

- Introduction to the Volume 1

TREVOR WATKINS

1. Aggregation: Key to the Art of Being Neolithic 5

BILL FINLAYSON

2. House and Household in the Neolithic 15

ERGÜL KODAŞ

3. Évolution des bâtiments communautaires au PPNA en Anatolie Orientale : diversité
et similarité..... 37

MORITZ KINZEL

4. South-West Asian Neolithic Architecture — Perspectives from Göbekli Tepe..... 59

A. TUBA ÖKSE

5. Internal Divisions of the PPNB Settlement at Gre Filla in the Upper Tigris Region..... 79

ZEYNEP BEYZA AĞIRSOY

6. Obsidian Knapping Techniques in Communal Structures during the PPNB: A Case Study on
Gre Filla in the Upper Tigris Region 93

ELISHA VAN DEN BOS & FOKKE GERRITSEN

7. Adjoining Spaces, Building Communities: Agglutinative Architecture at Neolithic Barcın
Höyük in North-West Anatolia 103

PATRYCJA FILIPOWICZ & ARKADIUSZ MARCINIAK

8. Special-Purpose Buildings at Late Neolithic Çatalhöyük..... 117

HALIL TEKIN

9. Some Observations on the Late Neolithic Houses of the Southern Foothills of the Taurus
Mountains..... 129

PASCAL FLOHR & BILL FINLAYSON

10. Rebuilding the Neolithic: What Does a Decade Change? 143

YOUSSEF KANJOU

11. Funerary Structures from the Neolithic Period at Tell Qaramel, North-West Syria 159

**JOAQUIM SISA-LÓPEZ DE PABLO, ANNA BACH-GOMEZ, JULIA WATTEZ &
MIQUEL MOLIST**

12. Re-thinking the Use-Life Cycle of PPNB Houses at Tell Halula.....171

ANNA BACH-GOMEZ & WALTER CRUELLS

13. Diversity in Shape and Function. Chagar Bazar: A Household Approach.....185

EMMANUEL BAUDOUIN

14. New Considerations on the Neolithic Architecture in the Southern Caucasus201

Index213



LIST OF ILLUSTRATIONS

2. House and Household in the Neolithic — *Bill Finlayson*

Figure 2.1	Dhira' residential structure with stone wall revetted into slope and cup-hole mortar in floor	17
Figure 2.2	Stratigraphy at Dhira' showing from left, replacement of lowermost stone walled residential building by granary with upright stones to support raised floor and finally food preparation structure with remains of wattle-and-daub wall showing as a mud wall footing	18
Figure 2.3	Overall plan of WF16 at end of excavations, showing all object numbers	19
Figure 2.4	Plan of Object 12	20
Figure 2.5	Photograph of Object 12 showing partition wall, inserted mud plaster floor with cup-hole mortar, and the tops of upright stones visible through mud plaster floor	21
Figure 2.6	Detailed plan of Object 12, showing overall complexity and location of sondage through wall . . .	21
Figure 2.7	Photograph and plan of sondage in Object 12, showing succession of wall construction events . . .	22
Figure 2.8	Plan of Object 11	23
Figure 2.9	Photograph and section drawing of Object 11	24
Figure 2.10	Vertical photograph of Object 45, showing interior cell, marginal upright stones (and slots where stones have been removed), and wall relationships to surrounding structures	25
Figure 2.11	Plan of Object 45, illustrating complexity of walls and relationships with surrounding structures .	26
Figure 2.12	Plan of Object 56	27
Figure 2.13	Photograph of Object 56 and (B) working floor, with (C) bead making anvil	28
Figure 2.14	Plan showing the large communal structure Object 75 with its location within the settlement of WF16 and its relative size compared to other structures	29
Figure 2.15	Plan showing positions of postholes in Object 75 and the symmetry of this structure	30

3. Évolution des bâtiments communautaires au PPNA en Anatolie Orientale : diversité et similarité — *Ergül Kodaş*

Carte 3.1	Répartition des bâtiments communautaires en Mésopotamie du Nord	38
Carte 3.2	Répartition des piliers en Mésopotamie du Nord	50
Carte 3.3	« Cultures » Néolithique Précéramique en Mésopotamie du Nord	51
Figure 3.1	Évolution typo-chronologique des bâtiments communautaires en Anatolie Orientale	39
Figure 3.2	Évolution chronologique d'un bâtiment et vue générale du site de Göbekli Tepe	40
Figure 3.3	Bâtiments mis au jour à Karahan Tepe	41
Figure 3.4	Bâtiment et le bas-relief mis au jour à Sayburç	42
Figure 3.5	<i>Flagstone Building</i> de Çayönü et son emplacement spatial	43

Figure 3.6	Bâtiment communautaire mis au jour à Çemka Höyük et son évolution chronologique	44
Figure 3.7	Bâtiments communautaires mis au jour à Boncuklu Tarla : a ; phase ancien du Bâtiment O11, b ; phase recent du Bâtiment O11, c ; Bâtiment GD2, d ; Bâtiment GD 4, e ; Bâtiment STR 1.	45
Figure 3.8	Bâtiment communautaire mis au jour à Hallan Çemi et son emplacement spatial	46
Figure 3.9	Bâtiments communautaires mis au jour à Gusir Höyük et le placement spatial du bâtiment STR 7 .	46
Figure 3.10	Bâtiment communautaire mis au jour à Hasankeyf Höyük et son emplacement spatial	47
Figure 3.11	Bâtiments communautaires mis au jour à Gre Filla, leur évolution chronologique et leur placement spatial	48
Figure 3.12	Évolution chronologique et typologique des piliers selon la région	49
Figure 3.13	Fixation des piliers : Gusir Höyük, Boncuklu Tarla et Göbekli Tepe	50
Figure 3.14	Évolution possible des deux « cultures » épipaléolithiques et néolithiques en Anatolie Orientale .	52
 4. South-West Asian Neolithic Architecture — Perspectives from Göbekli Tepe — <i>Moritz Kinzel</i>		
Figure 4.1	Building phases in the south-east area at Göbekli Tepe	62
Figure 4.2	Building TYPE B and TYPE C for PPNB rectangular structures	64
Figure 4.3	Plan of Building G and reconstruction of building phases of Building G	65
Figure 4.4	Plan of Structure DR1-2	67
Figure 4.5	Plan of Space 8	69
Figure 4.6	Plan of Space 61 and photo	71
 5. Internal Divisions of the PPNB Settlement at Gre Filla in the Upper Tigris Region — <i>A. Tuba Ökse</i>		
Figure 5.1	General plan of Gre Filla in PPNB	81
Figure 5.2	Plan of settlement divisions of Gre Filla in PPNB	81
Figure 5.3	Plan and section of Lower PPNB levels	82
Figure 5.4	Plan and section of Middle PPNB levels	83
Figure 5.5	Plan and section of Upper PPNB levels	84
Map 5.1	Map of PPN Sites in the Upper Tigris Region	80
 6. Obsidian Knapping Techniques in Communal Structures during the PPNB: A Case Study on Gre Filla in the Upper Tigris Region — <i>Zeynep Beyza Ağırsoy</i>		
Figure 6.1	Gre Filla — small finds and chipped stones from Structure 8	95
Figure 6.2	Pressure microblade knapping strategy of Gre Filla	96
Figure 6.3	Cores and core trimming elements of Gre Filla	98
Figure 6.4	<i>In situ</i> hand pressure tool from Gre Filla	98
Map 6.1	Location of Gre Filla and sites mentioned in the text	94
Table 6.1	The chipped stone assemblage from Structure 8 in Gre Filla.	95

Table 6.2	Blade and Bladelets of Structure 8 in Gre Filla.....	97
Table 6.3	Width of obsidian pressure blades from Gre Filla and Çayönü.	99
7. Adjoining Spaces, Building Communities: Agglutinative Architecture at Neolithic Barcın Höyük in North-West Anatolia — <i>Elisha van den Bos & Fokke Gerritsen</i>		
Figure 7.1	Architecture row: photo of field situation, looking east. Buildings and surfaces of Phases VIe and VIId1 on the left, and a combined view of Phases VIId1–VIC on the right	106
Figure 7.2	Above: superimposed plans of the architecture of Phases VIe through VIC; below: schematic section .	107
Figure 7.3	Phase VIId1 settlement plan	108
Map 7.1	Map of Anatolia, denoting sites mentioned in the text	105
8. Special-Purpose Buildings at the Late Neolithic Çatalhöyük — <i>Patrycja Filipowicz & Arkadiusz Marciniak</i>		
Figure 8.1	Site of Çatalhöyük with the excavation areas	120
Figure 8.2	Storage room Space 493, B. 122, TPC Area	121
Figure 8.3	Burial chamber Space 327 with burial gifts, TP Area	121
Figure 8.4	Building 173 — charnel house	123
Map 8.1	Location of Çatalhöyük and other sites mentioned in the text	119
9. Some Observations on the Late Neolithic Houses of the Southern Foothills of the Taurus Mountains — <i>Halil Tekin</i>		
Figure 9.1	Building with an L-shaped corridor, Salat Camii Yanı	132
Figure 9.2	The Late Neolithic architectural plan of Hakemi Use	133
Figure 9.3	Animation of the Late Neolithic architectural plan from Hakemi Use	134
Figure 9.4	The Late Neolithic architectural plan of Karavelyan	135
Figure 9.5	An Early Halafian apsidal building from Karavelyan	135
Figure 9.6	Late Neolithic architectural plan of Domuztepe	136
Figure 9.7	An image about the Neolithic architecture of Domuztepe	137
Figure 9.8	A seasonal tent in Karacadağ (Diyarbakır)	137
Figure 9.9	Seasonal worker shelters around Domuztepe	138
Figure 9.10	The village of Şingalik, within the borders of Sason district in Batman province	138
Map 9.1	Map of south-eastern Anatolia	130
Map 9.2	Map of the Turkish eastern Mediterranean	131
10. Rebuilding the Neolithic: What Does a Decade Change? — <i>Pascal Flobr & Bill Finlayson</i>		
Figure 10.1	The Beidha replica structures seen from above after the first construction in 2004, in 2006, during the 2012 reparation season, and at the end of the 2012 season	145
Figure 10.2	exB-49 in 2004 after its initial build with the steeply pitched roof, in 2006 with a much flatter roof, which had nonetheless partly collapsed by 2012. Because of the continued collapsing of the roof and new archaeological information in 2022 a new roof frame was designed	146

Figure 10.3	exB-10 in 2006, with its upper storey and its rapid collapse, and in 2012, first collapsed and then rebuilt	147
Figure 10.4	Section drawing of the small trench near the entrance of exB-49, made at the beginning of the 2012 season. 1: loose light brown sand; 2: packet of light brown, soft sandy layers with charcoal, boundary not visible; 3: more compact light brown silty sand; 4: loose dark grey brown sand with very small grit; 5: as 3; 6: as 4; 7: as 3 and 5; 8: light brown sand, more compact than 2 but still friable; 9: light brown compact sand, more compact than 8, but still friable; 10: very hard silty brown layer; 11: compact friable medium hard brown sand; 12: clayey layer with charcoal flecks; 13: medium hard friable sandy layer with stones	149
Figure 10.5	The WF16 replica structure between 2010 and 2021	154
Figure 10.6	Goats eating the chaff out of the mud of the WF replica structure, March 2020	155
11. Funerary Structures from the Neolithic Period at Tell Qaramel, North-West Syria — <i>Youssef Kanjou</i>		
Figure 11.1	Tower V, general view and its vicinity. Square J-7 b,d/K-7	161
Figure 11.2	The distribution of the graves in the shrine/communal house (Horizon H3) in Tell Qaramel (the circle indicates human burials, and the quadrat indicates the place of animal graves)	162
Figure 11.3	Grave no. 11, typical primary grave from the Neolithic period Sq. L-4/M-4. Photo 3: Grave no. 3, post-cranium skeleton in the flexed position, from Sq. L-4/M-4	163
Figure 11.4	Distribution of Graves nos 5 to 8 in Sq. L-4/M-4/2007. The black line indicates the probable extension of the room's floor	163
Figure 11.5	Grave no. 3, post-cranium skeleton in the flexed position, from so L4/M4	164
Figure 11.6	Auroch's bucrania <i>in situ</i> (Square K-7. Horizon H3)	165
Figure 11.7	The second vertebra (axis) found in the Grave 2-07, which shows cut marks in three areas (A, B, and C), the numbers 1 and 2 refer to larger photos taken by scanning electron microscope (SEM)	166
Map 11.1	Tell Qaramel north Syria, along with other Levant PPNA sites	160
Table 11.1	Total number of graves and types according to their content of skeletons in relation to the time periods.	162
12. Re-thinking the Use-Life Cycle of PPNB Houses at Tell Halula — <i>Joaquim Sisa-López de Pablo, Anna Bach-Gomez, Julia Watzek & Miquel Molist</i>		
Figure 12.1	Views of the site showing excavation areas. a). General photograph of the site. b). Plan view of the trenches excavated at Tell Halula	173
Figure 12.2	Plan view of Occupation Phase 9 showing the usual layout of houses at Tell Halula	174
Figure 12.3	Photograph of House HF belonging to Occupation Phase 9 displaying the archetypal internal organization of houses at Tell Halula	175
Figure 12.4	Thin section scan of micromorphological samples from internal spaces of houses, their microstratigraphic sequence and deposit types. Note the differences in floors between A and B. a) Sample HA 92-12 collected from House CC belonging to Occupation Phase 8. b) Sample HA 96-31 collected from House DB ascribed to Occupation Phase 10	176

Figure 12.5	Paintings found on the floor of House F/EC belonging to Occupation Phase 11 showing twenty-three human figurative representations around a quadrangular motif with multiple parallel lines. Scale bar is 50 cm	177
Figure 12.6	Burial area in a Middle PPNB Tell Halula house. Note the sealing of the pits where burials were placed	178
Figure 12.7	Tell Halula seated burial under a floor. Note the presence of the lead on top of the skeleton	179
13. Diversity in Shape and Function: Chagar Bazar: A Household Approach — Anna Bach-Gomez & Walter Cruells		
Figure 13.1	General view from Chagar Bazar	188
Figure 13.2	a) First evidence of architectural elements at site, <i>tholos</i> L. 65. b) L. 76. architectural level and adjacent area with a rectangular building with rounded corners	189
Figure 13.3	Sequence of buildings, partially cut by Mallowan trench	190
Figure 13.4	<i>Tholos</i> with large corridor L. 56	191
Figure 13.5	Combustion structure L. 73	192
Figure 13.6	Schema with probable uses dealing with size	193
Figure 13.7	Scheme related to communal space management. Example using Shams-ed-Din schema for a domestic unit and management strategies of combustion structures	194
Map 13.1	Map with main Halafian sites	186
14. New Considerations on the Neolithic Architecture in the Southern Caucasus — Emmanuel Baudouin		
Figure 14.1	Evolution of the household during the Neolithic period. a, d) Snowman-shape organization at Hacı Elamxanlı Tepe ; b, e) Proto-compound organization in Phase 2 at Kiçik Tepe ; c, f) Compound organization at Shulaveris Gora	204
Figure 14.2	Summary diagram of the attestations of mud-bricks during the sixth millennium BC	205
Figure 14.3	Peculiar stigmas observed on moulded sun-dried mud-bricks at Mentesh Tepe	205
Figure 14.4	The evolution of architectural characteristics during the Neolithic period in the Southern Caucasus	206
Map 14.1	Map of the Southern Caucasus with a synthesis of architectural techniques on the main Neolithic sites	202



7. ADJOINING SPACES, BUILDING COMMUNITIES

Agglutinative Architecture at Neolithic Barcın Höyük in North-West Anatolia

Elisha van den Bos & Fokke Gerritsen

ABSTRACT – North-west Anatolia holds an intermediate position: environmentally, between the steppes of northern Mesopotamia and central Anatolia and the temperate zone of south-eastern Europe; and architecturally, between the mud-brick building traditions of Neolithic South-West Asia and the timber-based building traditions of Neolithic Europe. Excavations at the seventh-millennium BC site of Barcın Höyük in the Marmara region have produced a record of houses and settlement spaces spanning six centuries (6600–6000 cal. BC), making the site representative of what has been called the ‘pioneer’ dispersal of the Neolithic in western and north-western Anatolia, as well as a testimony to the long-term stability and development of Neolithic communities in the region.

Barcın Höyük’s architectural record enables us to carry out analyses of house building techniques and settlement layout, which diverge from what is known from earlier and contemporary settlements in central Anatolia. Wood was the main construction material, with walls constructed of rows of thin upright posts, combined with daub and mud slabs. Raised wooden floors, coated with mud plaster, are a feature attested from at least the middle of

the seventh millennium BC. Looking at the spatial configuration of the settlement, we can trace a diachronic development from an agglutinative layout to a pattern of free-standing houses, combined with the vertical superimposition of domestic structures over several centuries.

Contextualizing the settlement at Barcın Höyük in a broader regional and interregional framework, we can see how the westward spread of the Neolithic way of life involved continuities and transformations in building techniques, settlement layouts, and habitation practices, and offer insights into the environmental and social correlations of these developments.

Introduction

Towards the middle of the seventh millennium cal. BC, Neolithic farming communities developed in north-west Anatolia. The site of Barcın Höyük in the eastern Marmara region is among the earliest settlements that have been extensively excavated. Far from being a temporary encampment on a westward route of farming expansion, this settlement shows six centuries of continuous occupation (c. 6600–6000 cal. BC).

From its foundation onwards, an architectural tradition based on agglutinative mud-and-wood construction developed, and the spatial organization of the settlement shows great stability during the first three to four centuries of occupation. In this contribution, we argue that architecture played a major role in how

Elisha van den Bos Barcın Höyük Research Project (elishavandenbos@gmail.com)

Fokke Gerritsen Netherlands Institute in Turkey, Leiden University (fa.gerritsen@nit-istanbul.org)

Households & Collective Buildings in Western Asian Neolithic Societies, ed. by Joaquim Sisa-López de Pablo, Anna Bach-Gómez & Miquel Molist, LEMA, 4 (Turnhout, 2024), pp. 103–115.

DOI 10.1484/M.LEMA-EB.5.136709

BREPOLS  PUBLISHERS

the community was conceived and how it reproduced through time. In a broader perspective, we suggest that Barcın's architecture and spatial organization contribute to the understanding of the social organization of early farming communities in north-west Anatolia, and its development during the seventh millennium BC. This analysis highlights the inherent diversity of the Neolithic in Anatolia.

Background: Houses, Settlements, and Communities in Neolithic Anatolia

The relationships between settlement layout, architecture, and household composition have been a longstanding topic of inquiry in the analysis of excavated settlements, as well as in larger-scale theories about changes in social organization associated with the development of farming. Both in the Neolithic Levant (Flannery 2002; Banning 2010) and in central Anatolia (Steadman 2004; Düring 2006; Düring & Marciniak 2006), archaeologists have related house plans and settlement layouts to household and community structures and have interpreted building layout and building sequences as social practice.

In recent years, the seventh millennium in Anatolia has come into focus as a period of several important transitions: changes in the social organization of central Anatolian 'clustered neighbourhood settlements', especially noticeable in the later levels of Çatalhöyük (Marciniak et al. 2015), and the development of new farming communities in regions in western and north-western Anatolia (M. Özdoğan 2013; Çilingiroğlu & Çakırlar 2013; Düring 2013; Weninger et al. 2014; Çevik & Abay 2016; Gerritsen & Özbal 2016; Bami & Horejs 2019). It has been suggested that these two processes were connected: the westward spread of farming received an impetus from the dissolution of close-knit communities in central and south-eastern Anatolia (e.g. Hodder 2013, 356; M. Özdoğan 2013), mirroring the collapse of PPNB societies in the Levant (M. Özdoğan 2014). Significant changes in central Anatolian clustered neighbourhood settlements after 6500 cal. BC culminated in population decrease, changes in household structure (Marciniak et al. 2015), and the segmentation of communities towards the end of the seventh millennium (Biehl et al. 2012; Anvari et al. 2017).

Recent fieldwork in western and north-western Anatolia has made it clear that rather than the outcome of these developments, new settlements such as Ulucak, Çukuriçi, and Barcın date to the first half of the

seventh millennium, and therefore predate or stand at the beginning of social changes in central Anatolia (E. Özdoğan 2015; Çevik & Abay 2016). Many of the settlements excavated show continuity of occupation well into the sixth millennium BC. Recent insights into the genetic and cultural background of these settlements suggest connections to a south Anatolian — Aegean realm of coastal expansion and interaction (Perlès et al. 2011; Hofmanová et al. 2016; Çilingiroğlu 2017) and suggest that genetic interactions with central Anatolian populations may have been of less importance than previously assumed.

With the development of farming communities in regions outside of the traditional 'core areas' of domestication and early settlement development, the question of social organization becomes one of understanding the social context in which migratory processes came about (Leppard 2014), how pioneers started farming in new environments, and how these communities developed over time. In order to understand the social organization of the Barcın community, we propose to focus on the architectural remains. We consider the remains of houses and courtyards as a spatial arrangement, while recognizing their temporal dimension. By adopting a stratigraphic and, in some ways, biographic approach, we discuss the temporal complexity of architectural remains at Barcın (cf. Gerritsen 2008; McAnany & Hodder 2009; Van den Bos 2021). A social understanding of the stratigraphic build-up of architectural remains invites us to think about practices of construction, maintenance, abandonment, and replacement, and the way these practices drew on the social relations within the Barcın community.

Architecture and Settlement Organization at Barcın Höyük (6600–6200 cal. BC)

Barcın Höyük is a mound located in the Yenişehir Valley in north-western Türkiye (Map 7.1) (Gerritsen et al. 2013; Groenhuijzen et al. 2015; Gerritsen & Özbal 2016; Gerritsen & Özbal 2019). Excavations between 2007 and 2015 have revealed that the Neolithic occupation of the site (6600–6000 cal. BC; Phases VIe–VIa) forms a c. 4-metre-thick deposit, followed by remains of the Middle and Late Chalcolithic, Bronze Age, and Byzantine era. The Neolithic settlement is estimated to have been no more than a hectare in size. Throughout its Neolithic occupation, architecture was built of mud and wood.

In Trenches L10, M10, and M11, a section of around 20 by 5 m contained a sequence of four vertically super-



Map 7.1: Map of Anatolia, denoting sites mentioned in the text (map by the authors).

imposed architectural phases, spanning four centuries of occupation (Phases VIe–VIc, 6600–6200 cal. BC) (Figs 7.1 and 7.2). In all phases of the architecture row, neighbouring rooms show a uniform alignment of central roof supports, suggesting that the rooms had a shared roof.

Of the earliest two buildings, Structures 24 and 25 (Phase VIe), only rows of individual postholes remained. Several associated floor surfaces and interior fire pits were identified. Small sections of open courtyards north and south of these buildings were excavated, as well as a wide and deep enclosure ditch.

From the following VI d1 phase, a new way of constructing walls was adopted, with foundation trenches, up to 50 cm in depth, and rows of thin (diameter = 5–10 cm) upright posts. These wall frames were filled in with packed mud, sod, chunks of burnt loam, and the occasional stone. Evidence for horizontal wattling was not found. Interior and exterior wall faces were coated with a smooth mud plaster. Neighbouring rooms shared

walls, leading to a pattern of agglutinated spaces, with entrances on the south side (Fig. 7.3). Larger rooms (Structures 2b and 19; 22–24 m²) and smaller rooms (Structures 2a and 21; 10–12 m²) seem to have been alternated. The larger rooms were structurally prior to the smaller rooms — we do not know exactly how much time passed between the construction of the larger rooms and the addition of the smaller rooms, but we are certain that all four rooms were occupied simultaneously for much of their use-life. In all rooms, remains of domestic installations such as hearths, ovens, and storage bins were present. The rooms opened to an annexe or porch area, leading to an open courtyard further south. To the north, the wide ditch was replaced by a curved mud and wood wall, presumably forming a settlement enclosure.

The fire that burnt down the Phase VI d1 buildings, apart from an undoubtedly significant event in the history of the settlement, forms an important stratigraphic marker. The fire preserved details of the Phase



Figure 7.1: Architecture row: photo of field situation, looking east. Buildings and surfaces of Phases VIe and VI d1 on the left, and a combined view of Phases VI d1–VI c on the right (picture by the authors).

VI d1 architecture not found in other phases, such as multiple layers of baked floor and wall plaster, charred wood from wall posts and floors, and botanical remains. Each of the rooms yielded evidence for multiple use phases, with early unburnt floor levels covered by fill layers about 20 cm thick. Alterations between the early and late use phases of the rooms included the installation of raised loam-coated wooden floors in Structures 2a and 21, and the narrowing of the entrances to all four structures.

Burnt collapse sealed the interiors of Structures 21, 2a, and 2b. During the period after the fire (Phase VI d2, around 6400–6350 cal. BC), the area seems to have been left temporarily unoccupied, and instead we found several fire pits dug through the burnt collapse of Structure 2b. In Structures 2a and 21, a deposit of burnt loam collapse was largely left in place, and was covered by fill layers. In Structures 2b and 19, we have indica-

tions for the removal of a large part of the burnt collapse. Otherwise, the VI d2 phase is poorly represented in this part of the settlement.

In the VI d3 phase (around 6350–6300 cal. BC), a new row of agglutinated rooms followed a layout and orientation similar to the Phase VI d1 architecture, but with several changes (Fig. 7.2). Structure 15 (c. 29 m²) only partly overlies Structure 2b. While the interior of this building was poorly preserved, an oven or hearth structure was found in its south-east corner. Structure 15 had narrow neighbouring spaces on both sides (Structures 3, 10, 23, and 27). Structures 3 and 10 yielded well-preserved floor levels, with abundant evidence for bone tool production, stone-working, and red pigment production, but there were no indications for domestic installations. Structure 4 was partially excavated, and may have been another large structure, given its sturdy west wall with a deep wall foundation trench. An indica-

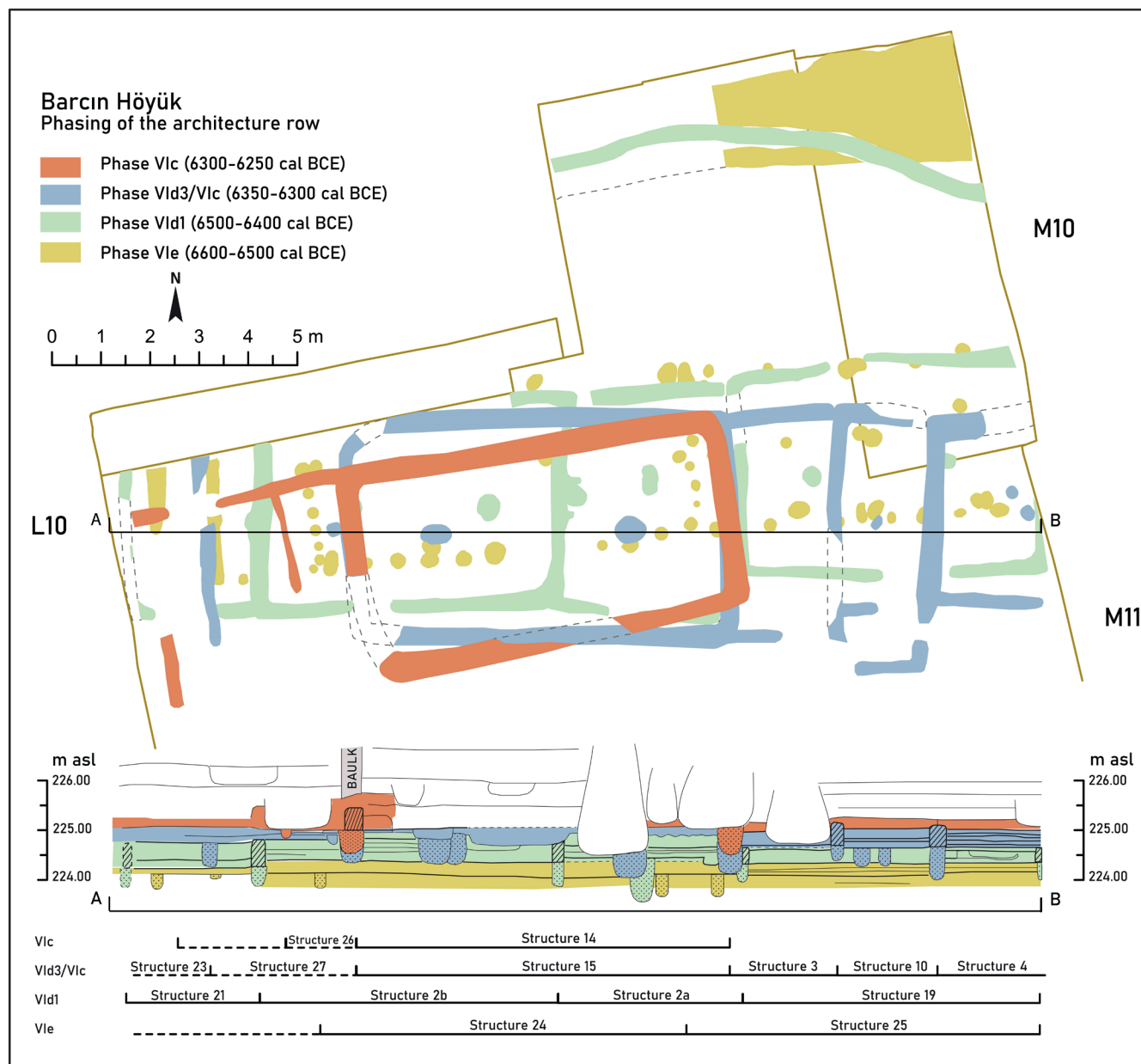


Figure 7.2: Above: superimposed plans of the architecture of Phases VIe through VIc; below: schematic section (image by the authors).

tion for the long use-life of this building is provided by a sequence of at least six interior floor levels, forming a nearly 40 cm thick deposit of lenses and layers, covering the transition from Phase VIId3 to VIc.

Structure 14 (Phase VIc, 6300–6250 cal. BC) overlies Structure 15, with a slight change in orientation. At least one annexe space, Structure 26, was located to its west. The construction of Structure 14 seems to have been accompanied by the disturbance of the floor levels, and the partial destruction of walls and roof supports of Structure 15. Floor surfaces and standing walls of Structure 14 were poorly preserved as well; apart

from disturbance by Middle Chalcolithic pits, this may relate to another phase of fragmentarily preserved architecture dating to the last stage of Phase VIc.

The section through the architecture row shows that the three to four centuries of occupation, perhaps with a brief intermission during Phase VIId2, condensed into a mere 1–1.5 m of floor levels and fill layers (Fig. 7.2). New wall foundation trenches cut deep into previous phases, and often destroyed older walls. Walls were preserved to a maximum height of about 40 cm, and many walls were not preserved at all. Central roof supports seem to have been removed after a building phase came



Figure 7.3: Phase VI d1 settlement plan (image by the authors).

to an end. Slight changes in positioning and orientation of the architecture between phases may have been, in part, opportunistic adjustments allowing for less interference from earlier architectural remains.

The long-term adherence to the same settlement layout is also found in the open areas to the north and

south of the architecture row. These courtyard areas seem to have had various but stable functions: the northern courtyard yielded no structural remains apart from rows of stake holes and informal dirt surfaces, suggesting use as a refuse and animal penning area. The southern courtyard showed more evidence of domes-

tic use, including small hearths in porch areas and fire pits. A sequence of numerous courtyard surfaces containing pebbles was found in Trenches L11 and M11 (Phases VI_{d3}–VI_c), showing the long-term continuity in the use of this area. Apart from domestic use, the southern courtyard yielded numerous adult human burials, dating to Phases VI_e–VI_c. Further south, architectural remains of another sequence of houses in Trench L12, first established in Phase VI_{d3}, as well as midden and courtyard deposits in Trenches L13 and M13 have been found.

Discussion: Diversity in Settlement and Community in Seventh Millennium Anatolia

While tightly conglomerated architecture is a defining characteristic of the clustered neighbourhood settlements of central Anatolia (Düring 2006; Rosenstock 2014), the agglutinated row of rooms found at Barcın compares better to Early and Late Neolithic settlements in south-west and west Anatolia, with row-like arrangements and open courts. The plans of Structures 2b and 19, and later 15 and 14, resemble the rectilinear houses of Bademağacı ENII.4–ENII.2, Hacılar VI, and Çukuriçi X–VIII, with an entrance in the middle of the long wall, and two roof supports on the middle axis (Umurtak 2000; Mellaart 1970, 10–25; Bami et al. 2016). At Bademağacı and Hacılar, ovens and hearths were usually located on the back wall facing the entrance, while at Barcın, these structures were located in the right-hand corner.

A further difference with the Bademağacı ENII architecture is that houses there were built of mud-brick from at least the middle of the seventh millennium onwards, while at Barcın and later sites in the Marmara region, wood remained the principal construction material until well into the sixth millennium. Likewise, at seventh-millennium Çatalhöyük, walls were made of mud-bricks and mud slabs. Wooden posts were present in interiors, but it has been argued that the mud walls, rather than wooden posts, carried the weight of the roof (Stevanović 2013). For late eighth-/early seventh-millennium settlements in south-west Anatolia, mud and wood (wattle and daub) architecture has been proposed for Girmeler and Bademağacı ENI, but this is not yet supported by well-preserved house remains (Umurtak 2008, 1; Takaoğlu et al. 2014, 114–15). Evidence for round wood architecture on stone foundations was found at Bahçelievler (Fidan 2020), Aktopraklık C (Karul & Avcı 2011), and at later seventh-millennium Fikirtepe (M. Özdoğan 2013). In the context of this fragmentary

evidence for wood construction, we find some of the earliest well-preserved and documented timber-based rectilinear buildings of Neolithic Anatolia at Barcın VI_e–VI_{d1}. The transition from Phase VI_e to VI_{d1} architecture shows that the early inhabitants of Barcın experimented with wood construction, and that for example the idea of wall ditches and various ways to fill up the walls developed locally. These wall construction techniques, with thin upright posts in wall foundation trenches, continue at Menteşe stratum 3 upper (6200–6000 cal. BC) (Roodenberg et al. 2003), and Ilıpınar X–VIII (6000–5800 cal. BC) (Roodenberg 2008).

The layout of the Barcın settlement as a whole is unclear. The excavated architecture of Phases VI_{d1} and VI_{d3} may have been one of several multiroom buildings, comparable to examples from Bademağacı ENII, or, alternatively, there may have been a much longer chain of rooms. The latter would show similarity to early sixth-millennium mud-brick settlements at Early Chalcolithic Ilıpınar VI–VA (Cookson 2008), and Aktopraklık B (Karul 2020), which consisted of circular arrangements of conglomerated buildings — built against each other, but each with their own walls. Aşağı Pınar Layers 7–6 (late seventh/early sixth millennium BC) in Turkish Thrace form an even closer parallel (Eres & Özdoğan 2012; Özdoğan & Schwarzberg 2020), with neighbouring mud-and-wood buildings sharing walls. The spatial arrangement of these settlements is characterized by an inward focus, with shared activity areas enclosed by buildings. The settlement at Barcın shows that this type of settlement plan may have been employed over half a millennium earlier than previously thought.

We have seen that through time, the Barcın community maintained a stable spatial arrangement. Place continuity of architecture is not uncommon in Neolithic Anatolia: at central Anatolian sites such as Çatalhöyük and Aşıklı, building continuity plays a major role in how archaeologists have interpreted the practices of Neolithic households (Düring 2006; Hodder 2013; Özbaşaran 2012; Bami et al. 2016). At Çatalhöyük East, some buildings have been interpreted as ‘history houses’, due to their long sequence of vertical replacement and symbolic practices such as wall-painting, bucrania, and intramural burial, associated with their interiors (Hodder 2013, 356). Apart from the apparent importance of expressing continuity between generations of inhabitants, practical considerations may underlie the vertical superimposition of houses in densely built settlements (Steadman 2000). Indeed, vertical sections through two of Çatalhöyük’s stacked

buildings show the use of the filled-in older building as a platform for constructing its successor, leading to a fast vertical build-up of strata (McAnany & Hodder 2009, 18, fig. 6). For Çukuriçi and Ege Gübre in western Anatolia, Brami et al. (2016) have discussed building sequences involving the insertion of new buildings within the walls of older buildings. Again, a combination of practicality (older walls provided support against sagging) and symbolic meaning are proposed. Brami et al. interpret place continuity as related to household strategy and identity, and propose a taboo on disturbing the remains of abandoned buildings. Overall, Neolithic building continuity in Anatolia is seen as related to the reproduction of social relations through time, emphasizing social status and household autonomy.

At Barcın, however, we are inclined to interpret the vertical superimposition of architecture as a communal, rather than a household-centred practice. What we see is not a sequence of replacement of individual houses, but of a row of agglutinated structures, with changes in the placement of the larger rooms. The fact that the row of rooms had a shared rhythm of construction, maintenance, and replacement, suggests collective decisions, choices, and practices. Although there are continuities in layout and interior organization, for example in the sequence of Structures 24, 2b, 15, and 14, these houses were not exactly superimposed on one another, and we find evidence of severe disturbance of abandoned houses by their successors. In this interpretation, the architecture, while no doubt an important structuring force, did not invoke the historical lineage of the house, but rather the spatial and social arrangement of the settlement as a whole. While we can imagine quite a few challenges associated with these practices, we can also imagine that the row of houses over time formed a slightly elevated and firmer part of the settlement, easier to build on than lower lying and softer courtyard deposits. Moreover, a different perspective on the choice to construct new buildings on the location of their predecessors is formed by a conscious avoidance of building in the courtyards. As we have seen, the courtyard south of the buildings was an area where domestic activities were carried out in a shared space, and the place where adult community members were buried from the earliest period of occupation onwards. Respecting an area that had long been important to the community may have outweighed the challenges of constructing new houses over old ones.

Recently, ancient DNA (aDNA) studies have contributed to discussions about household composition and family relations in Neolithic Anatolia. At Barcın, Yaka et al. (2021) analysed several infants buried together in Structures 4, 15 (Phase VID3–VIC), and 5 (Phase VIB). They identified family relationships among pairs of infants buried in Structures 5 and 15 respectively, whereas four additional infants from Structure 4 did not show close genetic relations. This is interpreted as evidence for a decrease in the significance of biological kinship in co-residency compared to the central Anatolian PPN sites of Aşıklı and Boncuklu (Yaka et al. 2021). It is important to note that Structure 4 was only partially excavated, yielded five more infant burials not sampled, and seems to have been occupied for a long time. Indeed, burial practices need to be taken into consideration — at Barcın, only infants were buried inside and in close proximity to the houses, whereas children and adults were buried under porches and in courtyards, which means a considerable difference with intramural burial practices in PPN and PN central Anatolia. Given these concerns, we should not expect a one-to-one relationship between intramural infant burials and co-residents. Nonetheless, these results are in line with the collective character of the architecture of early Barcın Höyük, and the use of courtyard areas for burial suggests attitudes towards death that stressed the membership of the deceased in the collective rather than in the domestic group.

While building and replacement practices suggest a collective approach to architecture, we cannot ignore the fact that the subdivision into spaces with individual access and domestic installations suggests community segmentation into smaller co-residential groups. In this context, we see changes over time in the relationship between architectural spaces and domestic groups. For Phase VID1, all four spaces seem to have been domestic living rooms, despite size differences. We consider it possible that Structures 2a and 21 were built slightly later than Structures 2b and 19, though still during the early use phase of these buildings, as a way to accommodate changes in household composition, e.g. for housing older family members or dependent households. For Phases VID3 and VIC, and later VIB, the division into smaller and larger spaces seems compatible with a division into living rooms and annexes. The smaller rooms seem less suitable as residential units because of the lack of domestic installations and their narrow width. This development is taken one step further during the later Phase VIB (6200–6100 cal. BC) when, after a spatial rearrangement of the settlement,

houses with narrow annexe rooms become free-standing structures. The construction of these VIb houses over former courtyard areas emphasizes discontinuity in community practice.

Conclusions

A spatial and stratigraphic view of the architecture found at Barcın Höyük shows that collective construction and structural unity characterized the first centuries of occupation. The earliest inhabitants determined the layout of the settlement for centuries to follow. With shared walls and a shared roof, the structures reflect a large degree of interdependence. Through time, the architecture row displays a shared rhythm of construction, maintenance, and replacement, creating a bond between neighbouring spatial units, and resulting in a compact and complex stratigraphy. These architectural bonds suggest that, by extension, the small groups of pioneers who established new settlements such as Barcın, may have been close-knit family groups. Despite the small size of the settlement throughout its occupation history, its occupants managed to found a strong local tradition and managed to form and maintain regional and interregional networks.

Besides an important line of evidence for understanding the social organization of the Barcın community, the architectural practices provide insights into their identity and cultural connections. Rather than showing direct connections to central Anatolia, the architectural remains place Barcın more firmly in a south-west, west, and north-west Anatolian realm, that already in the early seventh millennium was developing new ways of building settlements and communities. These communities should be seen as playing a vital role in transforming and diversifying Neolithic ways of life during the seventh millennium in Anatolia. Barcın, in this sense, stands for the emergence of a smaller-scale Late Neolithic, no longer characterized by the large-scale aggregations of the eighth and early seventh millennia.

Acknowledgements

The research presented in this paper has been made possible by grants from the Dutch Research Council (NWO) to Fokke Gerritsen (grant no. 380-62-005) and Elisha van den Bos (grant no. 322-60-003). The authors would like to thank the members of the Barcın Höyük Research team, and especially Rana Özbal and Laurens Thissen for many stimulating discussions on issues of stratigraphy and phasing that underlie the present paper.



Works Cited

- Anvari, Jana; Brady, Jacob; Franz, Ingmar; Naumov, Goce; Orton, David; Ostaptchouk, Sonia; Stroud, Elizabeth; Willett, Patrick T.; Rosenstock, Eva & Biehl, Peter F.**
- 2017 'Continuous Change: Venturing into the Early Chalcolithic at Çatalhöyük', in Sharon R. Steadman & Gregory McMahon (eds), *The Archaeology of Anatolia, II: Recent Discoveries (2015–2016)*. Cambridge Scholars, Newcastle: 6–39.
- Banning, Edward B.**
- 2010 'Houses, Households, and Changing Society in the Late Neolithic and Chalcolithic of the Southern Levant', *Paléorient* 36/1: 49–87.
- Biehl, Peter F.; Franz, Ingmar; Ostaptchouk, Sonia; Orton, David; Rogasch, Jana & Rosenstock, Eva**
- 2012 'One Community and Two Tells: The Phenomenon of Relocating Tell Settlements at the Turn of the 7th and 6th Millennia in Central Anatolia', in Robert Hofmann, Fevzi-Kemal Moetz & Johannes Müller, *Tells: Social and Environmental Space*. Habelt, Bonn: 53–66.
- Brami, Maxime & Horejs, Barbara (eds)**
- 2019 *The Central/Western Anatolian Farming Frontier: Proceedings of the Neolithic Workshop Held at 10th ICAANE in Vienna, April 2016* (Oriental and European Archaeology 12). Austrian Academy of Sciences Press, Vienna.
- Brami, Maxime; Horejs, Barbara & Ostmann, Felix**
- 2016 'The Ground Beneath their Feet. Building Continuity at Neolithic Çukuriçi Höyük', *Anatolian Studies* 66: 1–16.
- Çevik, Özlem & Abay, Eşref**
- 2016 'Neolithisation in Aegean Turkey: Towards a More Realistic Reading', in Ünsal Yalçın (ed.), *Anatolian Metal, VII: Anatolien und seine Nachbarn vor 10.000 Jahren*. Deutsches Bergbau-Museum, Bochum: 199–210.
- Çilingiroğlu, Çiler**
- 2017 'The Aegean before and after 7000 BC Dispersal: Defining Patterning and Variability', *Neo-lithics* 1/16: 32–41.
- Çilingiroğlu, Çiler & Çakırlar, Canan**
- 2013 'Towards Configuring the Neolithisation of Aegean Turkey', *Documenta praehistorica* 40: 21–29.
- Cookson, Ben C.**
- 2008 'The Houses from Ilıpınar X and VI Compared', in Jacob Roodenberg & Songül Alpaslan-Roodenberg (eds), *Life and Death in a Prehistoric Settlement in Northwest Anatolia (the Ilıpınar Excavations III): With Contributions on Hacılartepe and Menteşe*. Nederlands Instituut voor het Nabije Oosten, Leiden: 149–204.
- Düring, Bleda S.**
- 2006 *Constructing Communities: Clustered Neighbourhood Settlements of the Central Anatolian Neolithic*. Nederlands Instituut voor het Nabije Oosten, Leiden.
- 2013 'Breaking the Bond: Investigating the Neolithic Expansion in Asia Minor in the Seventh Millennium BC', *Journal of World Prehistory* 26: 75–100.
- Düring, Bleda S. & Marciniak, Arkadiusz**
- 2006 'Households and Communities in the Central Anatolian Neolithic', *Archaeological Dialogues* 12/2: 165–87.
- Eres, Zeynep & Özdoğan, Eylem**
- 2012 'A New Approach in Studying the Structural Systems of Prehistoric Wooden Post Buildings: A Case Study from Aşağı Pınar in Eastern Thrace', in Robert Carvais, André Guillerme, Valérie Nègre & Joël Sakarovich (eds), *Nuts and Bolts of Construction History: Culture, Technology and Society*, III. Picard, Paris: 149–56.

Fidan, Erkan

- 2020 'Fikirtepe Culture and Before: Preliminary Results from the Rescue Excavation of Bilecik Bahçelievler', *Arkeoloji ve Sanat* 163: 29–38.

Flannery, Kent V.

- 2002 'The Origins of the Village Revisited: From Nuclear to Extended Households', *American Antiquity* 67/3: 417–33.

Gerritsen, Fokke

- 2008 'Domestic Times. Houses and Temporalities in Late Prehistoric Europe', in Andrew Jones (ed.), *Prehistoric Europe: Theory and Practice* (Blackwell Studies in Global Archaeology 12), Wiley-Blackwell, Malden: 143–61.

Gerritsen, Fokke & Özbal, Rana

- 2016 'Barcın Höyük and the Pre-Fikirtepe Neolithization of the Eastern Marmara Region', in Ünsal Yalçın (ed.), *Anatolian Metal, VII: Anatolien und seine Nachbarn vor 10.000 Jahren*. Deutsches Bergbau-Museum, Bochum: 211–20.
- 2019 'Barcın Höyük, a Seventh Millennium Settlement in the Eastern Marmara Region of Turkey', *Documenta praehistorica* 46: 58–67.

Gerritsen, Fokke; Özbal, Rana & Thissen, Laurens

- 2013 'Barcın Höyük: The Beginnings of Farming in the Marmara Region', in Mehmet Özdoğan, Nezih Başgelen & Peter Kuniholm (eds), *The Neolithic in Turkey, V: Northwestern Turkey and Istanbul*. Archaeology and Art Publications, Istanbul: 93–112.

Groenhuizen, Mark; Kluiving, Sjoerd; Gerritsen, Fokke & Künnel, Michiel

- 2015 'Geoarchaeological Research at Barcın Höyük: Implications for the Neolithisation of Northwest Anatolia', *Quaternary International* 359–60: 452–61.

Hodder, Ian

- 2013 'From Diffusion to Structural Transformation: The Changing Roles of the Neolithic House in the Middle East, Turkey and Europe', in Daniela Hofmann & Jessica Smyth (eds), *Tracking the Neolithic House in Europe* (One World Archaeology). Springer, New York: 349–62.

Hofmanová, Zuzana; Kreutzer, Susanne et al.

- 2016 'Early Farmers from across Europe Directly Descended from Neolithic Aegeans', *PNAS: Proceedings of the National Academy of Sciences of the United States of America* 113/25: 6886–91.

Karul, Necmi

- 2020 'Living in an Enclosed Settlement: Settlement Pattern and Social Organisation at Aktopraklık', in Nenad N. Tasić, Dushka Urem-Kotsou & Marcel Burić (eds), *Making Spaces into Places: The North Aegean, the Balkans and Western Anatolia in the Neolithic* (British Archaeological Reports, International Series S3001). BAR, Oxford: 225–30.

Karul, Necmi & Avcı, Mert Bertan

- 2011 'Neolithic Communities in the Eastern Marmara Region, Aktopraklık C', *Anatolica* 37: 1–15.

Leppard, Thomas P.

- 2014 'Mobility and Migration in the Early Neolithic of the Mediterranean: Questions of Motivation and Mechanism', *World Archaeology* 46/4: 484–501.

Marciniak, Arkadiusz; Baranski, Marek Z.; Bayliss, Alex; Czerniak, Lech; Goslar, Tomasz; Southon, John & Taylor, R. E.

- 2015 'Fragmenting Times: Interpreting a Bayesian Chronology for the Late Neolithic Occupation of Çatalhöyük East, Turkey', *Antiquity* 89: 154–76.

McAnany, Patricia A. & Hodder, Ian

2009 'Thinking about Stratigraphic Sequence in Social Terms', *Archaeological Dialogues* 16/1: 1–22.

Mellaart, James

1970 *Excavations at Hacilar*. Edinburgh University Press, Edinburgh.

Özbaşaran, Mihriban

2012 'Aşıklı', in Mehmet Özdoğan, Nezih Başgelen & Peter Kuniholm (eds), *The Neolithic in Turkey, III: Central Turkey*. Archaeology and Art Publications, Istanbul: 135–58.

Özdoğan, Eylem

2015 'Current Research and New Evidence for the Neolithization Process in Western Turkey', *European Journal of Archaeology* 18/1: 33–59.

Özdoğan, Eylem & Schwarzberg, Heiner

2020 'Contextualising the Neolithic House: A View from Aşağı Pınar in Eastern Thrace', in Nenad N. Tasić, Dushka Urem-Kotsou & Marcel Burić (eds), *Making Spaces into Places: The North Aegean, the Balkans and Western Anatolia in the Neolithic* (British Archaeological Reports, International Series S3001). BAR, Oxford: 211–24.

Özdoğan, Mehmet

2013 'Neolithic Sites in the Marmara Region: Fikirtepe, Pendik, Yarımburgaz, Toptepe, Hoca Çeşme, and Aşağı Pınar', in Mehmet Özdoğan, Nezih Başgelen & Peter Kuniholm (eds), *The Neolithic in Turkey, V: Northwestern Turkey and Istanbul*. Archaeology and Art Publications, Istanbul: 167–269.

2014 'The Neolithic Collapse, or the Transition from the Pre-Pottery Neolithic to the Pottery Neolithic', in Bill Finlayson & Cheryl Makarewicz (eds), *Settlement, Survey and Stone: Essays on Near Eastern Prehistory in Honour of Gary Rollefson*. Ex oriente, Berlin: 169–75.

Perlès, Catherine; Takaoğlu, Turan & Gratuze, Bernard

2011 'Melian Obsidian in NW Turkey: Evidence for Early Neolithic Trade', *Journal of Field Archaeology* 36/1: 42–49.

Roodenberg, Jacob

2008 'Stratigraphy and Architecture. The Basal Occupation Levels (Phases X and IX)', in Jacob Roodenberg & Songül Alpaslan-Roodenberg (eds), *Life and Death in a Prehistoric Settlement in Northwest Anatolia (the Ilipinar Excavations III): With Contributions on Hacilar-tepe and Menteşe*. Nederlands Instituut voor het Nabije Oosten, Leiden: 1–34.

Roodenberg, Jacob; van As, Abraham; Jacobs, Lou & Wijnen, Mies H.

2003 'Early Settlement in the Plain of Yenişehir (NW Anatolia)', *Anatolica* 29: 17–59.

Rosenstock, Eva

2014 'Like a Su Böreği: Settlements and Site Formation Processes in Neolithic Turkey', in Mehmet Özdoğan, Nezih Başgelen & Peter Kuniholm (eds), *The Neolithic in Turkey, VI: 10500–5200 BC: Environment, Settlement, Flora, Fauna, Dating, Symbols of Belief, with Views from North, South, East and West*. Archaeology and Art Publications, Istanbul: 223–63.

Steadman, Sharon R.

2000 'Spatial Patterning and Social Complexity on Prehistoric Anatolian Tell Sites: Models for Mounds', *Journal of Anthropological Archaeology* 19: 164–99.

2004 'Heading Home: The Architecture of Family and Society in Early Sedentary Communities on the Anatolian Plateau', *Journal of Anthropological Research* 60/4: 515–58.



Stevanović, Mirjana

- 2013 'New Discoveries in House Construction at Çatalhöyük', in Ian Hodder (ed.), *Substantive Technologies at Çatalhöyük: Reports from the 2000–2008 Seasons* (Çatalhöyük Research Project Series 9; British Institute of Archaeology at Ankara Monograph 48; Monumenta archaeologica 31). Cotsen Institute of Archaeology Press, Los Angeles: 97–113.

Takaoğlu, Turan; Korkut, Taner; Erdoğan, Burçin & Işın, Gül

- 2014 'Archaeological Evidence for 9th and 8th Millennium BC at Girmeler Cave near Tlos in SW Turkey', *Documenta praehistorica* 41: 111–18.

Umurtak, Gülsün

- 2000 'A Building Type of the Burdur Region from the Neolithic Period', *Belleten* 64/241: 683–706.
- 2008 'Some Observations on a Group of Buildings and their Finds from the Early Neolithic II/2 Settlement at Bademağacı', *Adalya* 11: 1–23.

Van den Bos, Elisha

- 2021 'Living Neolithization. A Multi-scalar Approach to Houses, Settlements and Habitation Practices in Western Anatolia and Southeastern Europe (c. 7000–5000 BCE)' (unpublished doctoral thesis, Vrije Universiteit).

Weninger, Bernhard; Clare, Lee; Gerritsen, Fokke; Horejs, Barbara; Krauß, Raiko; Lindstädt, Jörg; Özbal, Rana & Röhling, Eelco J.

- 2014 'Neolithisation of the Aegean and Southeast Europe during the 6600–6000 cal BC Period of Rapid Climate Change', *Documenta praehistorica* 41: 1–31.

- Yaka, Reyhan; Mapelli, Igor; Kaptan, Damla; Doğu, Ayça; Chyleński, Maciej; Erdal, Ömür Dilek; Koptekin, Dilek; Vural, Kılıncım Başak; Bayliss, Alex; Mazzucato, Camilla; Fer, Evrim; Çokoğlu, Sevim Seda; Lagerholm, Vendela Kempe; Krzewińska, Maja; Karamurat, Cansu; Gemici, Hasan Can; Sevkari, Arda; Dağtaş, Nihan Dilşad; Kılınç, Gülşah Merve; Adams, Donovan; Munters, Arielle R.; Sağlıcan, Ekin; Milella, Marco; Schotsmans, Eline M. J.; Yurtman, Erinc; Çetin, Mehmet; Yorulmaz, Sevgi; Altınışik, N. Ezgi; Ghalichi, Ayshin; Juras, Anna; Bilgin, C. Can; Günther, Torsten; Storå, Jan; Jakobsson, Mattias; de Kleijn, Maurice; Mustafaoğlu, Gökhan; Fairbairn, Andrew; Pearson, Jessica; Togan, İnci; Kayacan, Nurcan; Marciniak, Arkadiusz; Spencer Larsen, Clark; Hodder, Ian; Atakuman, Çiğdem; Pilloud, Marin; Sürer, Elif; Gerritsen, Fokke; Özbal, Rana; Baird, Douglas; Erdal, Yılmaz Selim; Duru, Güneş; Özbaşaran, Mihriban; Haddow, Scott D.; Knüsel, Christopher J.; Götherström, Anders; Özer, Füsun; Somel, Mehmet
- 2021 'Variable Kinship Patterns in Neolithic Anatolia Revealed by Ancient Genomes', *Current Biology* 31: 2455–68.



INDEX

- ‘Ain Ghazal: 28, 31, 37, 60, 118, 167
- ‘Ain Mallaha: 16, 60
- abandonment, settlement: 18, 66, 93–94, 104, 124, 147–48, 156, 171, 177, 185, 191, 195
- Abu Hureyra: 124
- aggregation, sites: 2, 5, 8–10, 31, 111
- agriculture: 7, 37, 171, 189, 201
- Akkermans, Peter M. M. G.: 187–88, 192
- Aktopraklık: 109
- Anatolia: 2, 18, 104, 109–11, 117, 129, 201
- Central: 9, 103–04, 109–11, 117–18, 186
- North-west: 103–04, 111, 118
- South-eastern: 59, 104, 129–30
- Southern: 187
- South-west: 109, 122
- Western: 109–10
- Araxes, valley: 201, 203, 206–7
- architecture: 1–3, 5, 8, 10, 16–18, 25, 27, 29–31, 38, 59–61, 63, 65, 68, 70, 72, 79–80, 85, 87–88, 103–11, 117, 120, 123–24, 129, 134, 137, 139, 144–45, 150, 155, 161, 171, 185–88, 191, 194, 201, 203, 207
- communal: 8, 10, 16, 25, 31
- domestic: 2–3, 16, 23, 29, 59, 63, 66, 85–86, 94, 96, 99, 103, 105–06, 109–10, 119, 122–24, 159, 171–77, 185–87, 192, 201
- monumental: 8, 10, 17, 38, 64, 72, 85, 129, 139
- Neolithic: 3, 15, 59, 60–61, 72, 143, 156, 201, 203
- Arpachiyah: 187–88, 191–92
- Aşikli Höyük: 60, 109–10, 118
- Aurenche, Olivier: 188, 192
- Ba’ja: 24, 60
- Bademağacı: 109
- Bahçelievler: 109
- Banning, Edward, B.: 16
- Barcin Höyük: 2, 103–04, 109–11
- Basta: 24, 37, 60, 145
- Beidha: 3, 16–17, 22–24, 27–29, 31, 60, 87, 118, 143–48, 151–52, 155–56
- benches: 26, 31, 63–64, 66, 68, 70, 83, 85, 118–20, 122, 162, 192
- Bettencourt, Luis: 7
- Boncuklu Tarla: 42, 44–45, 47–49, 51, 53, 84, 99, 110, 129, 165
- Bouqras: 124
- Braidwood, Robert, J.: 5
- Brami, Maxime: 110
- Breniquet, Catherine: 187–88, 192
- Bronze Age: 5, 104, 134, 189
- buildings: 2, 8, 15–18, 20, 22–23, 25–29, 31, 37–45, 47, 49, 51–53, 59–61, 63–64, 66, 68, 70, 72, 79–81, 83–88, 93–96, 99, 103–07, 109–11, 117–20, 122–24, 131–34, 136–37, 139, 143–45, 147–53, 155–56, 159, 161–67, 171–75, 177–78, 185–95, 201, 203, 206–07
- above-ground: 80, 86, 153, 203
- cell-planned: 23, 25, 29, 45, 47, 79, 82, 84, 86, 117, 122, 133, 143, 173, 185, 187, 190, 193
- circular: 18, 22–23, 29, 41, 44–45, 47, 51–52, 85, 109, 144, 147, 152, 160–64, 171, 185, 187, 190–94, 203, 206–07
- collective: 15, 22, 31, 38, 79, 111
- communal: 2, 8, 10, 16–17, 25, 29, 31, 37–40, 42–45, 47, 49, 51–53, 83, 85, 88, 93, 118–19, 159, 162–64, 166, 191
- domestic, *see* architecture, domestic
- free-standing: 18, 22, 66, 103, 111
- grill-planned: 79, 82–84, 87
- monumental, *see* architecture, monumental
- non-domestic: 2, 117–20, 122–23, 195
- quadrangular: 79–80, 82–88, 94
- rectangular: 23, 41, 43, 45, 47, 51–52, 61, 63, 66, 122, 137, 147–48, 151–52, 171, 173, 185, 187, 190, 203
- rectilinear: 16, 23, 29, 31, 109, 152, 187
- residential: 3, 16–17, 22, 25–29, 31, 66, 72, 79, 110, 123, 155, 159, 167, 191, 193
- semi-subterranean: 18, 20, 25, 41, 85, 145, 149, 153, 156, 203, 207
- special: 2, 22, 27, 59, 61, 63–64, 66, 72, 117–24, 162, 165
- subterranean: 63, 79–80, 82–88, 93, 132
- built environment: 1–2, 15–16, 31, 59, 63, 70, 143, 171
- burials: 3, 80, 85, 109–10, 117–20, 122–24, 133–34, 159, 161–67, 171, 173, 177–79
- Byrd, Brian: 16, 26, 145, 148



- Cafer Höyük: 84, 88
 camp-sites: 6, 10, 85, 103, 139
 Caucasus: 2–3, 201, 203, 207
 cave-sites: 6, 85–86
 Chagar Bazar: 3, 185–86, 188–89, 191–95
 Chalcolithic: 9, 104, 107, 109
 channels, drainage: 66, 83, 144, 174
 Chataigner, Christine: 204
 Chesson, Meredith: 16, 144
 Childe, Vere Gordon: 5, 7, 87
 city (archaeological concept): 2, 5–7
 Clare, Lee: 59, 66
 copper: 82, 99
 corridors: 63, 131–32, 173, 191
 courtyards: 26–27, 31, 105, 108–11, 185, 206
 Cyprus: 145–46
 Çakmak Tepe: 38, 40–42, 45, 47, 49
 Çatalhöyük: 3, 5–6, 8, 17, 37, 59–60, 104, 109, 117–21, 123–24, 176
 Çayönü: 37, 42–43, 45, 48, 59–60, 82–85, 87, 99, 124, 129
 Çemka Höyük: 42–45, 47, 53
 Çukuriçi: 104, 109–10
- Dhra': 17–18, 20, 28, 30, 60
 Diyarbakır: 48, 93, 137
 Dja'de el-Mughara: 124
 domestication, animal and plant: 6, 15–16, 31, 104, 172
 Domuz Tepe: 136–39, 186, 188
 dwellings: 61, 63, 84–88, 117–18, 120, 124, 165, 185, 187, 189, 192, 194, 203
- egalitarian, society: 29, 31, 85, 88
 El-Hemmeh: 25, 31, 118
 Epipalaeolithic: 2, 6–8, 10, 37, 44, 48, 53, 60, 85, 160
 Euphrates, River: 59, 85, 88, 129, 136, 164, 172, 187
 evolution, cultural: 2, 6–8
 social: 15, 107
- family: 16, 28–29, 31, 88, 110–11, 143, 155
 extended: 16, 29, 31
 nuclear: 16, 143, 155
 farming: 5–6, 10, 103–04, 185
 Fikirtepe: 109
 Flannery, Kent, V: 16
- floors: 17, 20, 22–26, 29, 61–64, 68, 70, 80, 82–85, 87–88, 103, 105–08, 117–20, 122, 124, 132–34, 146, 149, 151, 153, 156, 159, 163–66, 173–79, 185–86, 190–92, 195
 earthen: 61, 175, 192
 paved: 83–84
 plaster: 20, 63–64, 68, 70, 82, 146, 153, 175–76
 terrazzo: 82, 85, 118
- Forest, Jean-Daniel: 187
- Göbekli Tepe: 2, 17, 37–42, 45, 47–49, 59–64, 66, 68, 70–71, 83, 85–86, 118, 129–30
 Göy Tepe: 203, 206–07
 graves: 25, 48, 52, 122, 153, 159, 161–67, 178
 Gre Filla: 2, 43, 47–48, 52, 79–80, 85, 87–88, 93–100, 129
 grill-plan, structure: 79, 82–84, 87, 163, 173–79
 Guliyev, Farhard: 206–07
 Gusir Höyük: 37, 45–50, 85
- Hacı Elamxanlı: 203–04
 Hacılar: 109
 Hakemi Use: 132–34, 136
 Halaf, period: 3, 134–36, 185–91, 193–94
 Early: 134–36, 194
 Late: 187, 190, 194
 Proto-: 187, 189
 Hallan Çemi: 42, 45–46, 82, 85–86, 129, 139
 Hasankeyf Höyük: 37, 42, 47–48, 85
 Hassuna: 131–34, 136, 187
 Hauptmann, Harald: 59, 64
 Henrich, Joe: 6–7
 hearths: 10, 22, 31, 70, 82–84, 86, 105–06, 109, 118, 132–34, 139, 148, 161–62, 173, 175–76, 179, 187
 hierarchy: 79, 85, 87–88
 as complex systems: 25
 and societies: 9
 Hodder, Ian: 119–20
 Holocene: 6
 home: 6, 9, 15, 185
 house: 2–3, 6, 8, 15–18, 20, 22–23, 26, 28–29, 31–32, 61, 63, 66, 70, 84–87, 103–04, 109–11, 117–20, 122–24, 129, 133, 144, 147–48, 150, 152, 159, 161–66, 171–79, 185–87, 190, 192–93, 207
 households: 2, 9, 15–16, 18, 25, 28–29, 31, 88, 104, 109–10, 171–72, 178–79, 185, 192, 194, 204, 206–07
 hunter-gatherer, communities: 6, 10, 15, 83, 85, 88
 huts: 15, 85



- Ibáñez, Juan José: 9
 Ilipinar: 109
 Iraq: 130
 Jarmo: 5
 Jerf el-Ahmar: 37, 83, 85, 164
 Jericho: 5, 17, 37, 60, 118, 160, 166–67
 Jordan: 2, 8, 15–18, 22–23, 28–31, 143–45, 156, 167
 Karahan Tepe: 37, 40–42, 45, 47–49, 118
 Kendale Hacela: 134
 Kenyon, Kathleen: 5, 167
 Kfar HaHoreh: 118, 159
 Khramis Didi Gora: 203–04, 206
 Kizik Tepe: 203–04, 206
 Kirkbride, Diana: 26, 144
 Konya Plain: 118, 123
 Kuijt, Ian: 8, 16, 20, 178
 Kültepe: 203
 Kura valley: 201, 203–04, 206–07
 Kurapkat, Dietmar: 59, 68, 70, 72
 Laland, Kevin: 7
 Levant, region: 2–3, 6–10, 17–18, 29, 52, 59, 85, 104, 117–18, 144–45, 148, 155–56, 159–60, 166, 185
 Levi-Strauss, Claude: 16
 Maher, Lisa: 8
 Makarewicz, Cheryl: 16
 Matthews, Wendy: 172
 Mazurowski, Ryszard, F: 160–61
 Mellaart, James : 5, 118–20, 123
 Mentesh Tepe : 203–04
 Menteşe: 109
 Mesopotamia: 2, 7, 9, 72, 88, 103, 117–18, 123, 129, 131, 134, 137, 185, 187, 194, 201, 203
 Mezraa Teleilat: 87
 mortars: 17–22, 26, 31, 61, 80, 82–83, 86, 143, 151–53, 155, 177
 mud-bricks: 79, 83, 86–87, 103, 109, 118, 143, 153, 155, 173, 177, 185–92, 194, 203–07
 Mureybet: 52, 60, 84, 159
 Natufian: 15–16, 31, 159, 166
 Nemrik: 47–49, 52, 60, 84
 Neolithic, period: 1–3, 5, 8–10, 15–16, 28–29, 31, 37–38, 59–61, 63, 70, 72, 86, 103–04, 109–11, 118, 120, 124, 129, 131, 136, 139, 143–44, 146, 148, 150, 152–53, 156, 159, 161, 171, 186, 201, 203–04, 206–07
 Early: 1–2, 9–10, 16, 18, 25, 31, 59, 60, 72, 109, 117–18, 120, 129, 130–31, 139, 159
 Late: 1, 3, 30, 109, 111, 117–18, 120, 123, 129, 130–34, 136–37, 139, 185, 188, 195
 Pottery Neolithic: 66, 88, 110, 124
 Pre-Pottery Neolithic: 2, 5, 8–10, 17, 23, 29, 31, 52, 60, 79–80, 88, 93, 110, 117–18, 124, 131, 154, 160–61, 203
 Pre-Pottery Neolithic A: 2, 17–18, 20, 22–23, 25, 27–28, 31, 37–38, 40, 42–45, 48, 51, 53, 61, 63, 80, 82–83, 85–86, 88, 117, 143–44, 153, 155, 159, 161, 165–67, 204
 Pre-Pottery Neolithic B: 3, 16–17, 22–24, 27–29, 31, 37–38, 40, 42, 44–45, 48, 51, 63, 66, 68, 70, 72, 79, 80, 82–88, 93–95, 99, 104, 124, 143–45, 155, 159, 166, 171–73, 175, 178–79
 Netiv Hagdud: 18, 153
 Nevalı Çori: 59, 61, 64, 84–86, 118, 129
 niche, cultural: 5–7
 Nishiaki, Yoshihiro: 206–07
 O'Brien, Mike: 7
 Obeid: 187
 obsidian: 2, 9, 88, 93–97, 99–100, 207
 open areas: 108, 173–74, 189–92, 194
 ovens: 7, 22, 48–49, 105–06, 109, 118, 120, 122, 133, 173, 175–76, 193, 203
 Özdoğan, Mehmet: 118
 Palaeolithic: 6
 Papazgözü: 99
 Parrot, André: 187
 Piesker, Katja: 59
 pisé: 18, 132, 134, 136–37, 143, 150, 153, 155–56, 185–86, 189, 191
 plaster floor
 mud: 20–22, 25, 63, 80, 83–84, 103, 105, 146, 153, 156, 175, 185, 190
 lime: 63–64, 68, 70, 148, 173, 175, 177, 179, 191
 Pleistocene: 6
 PN, *see* Pottery Neolithic
 porches: 105, 109–10, 147, 173–74, 177–78
 PPN, *see* Pre-Pottery Neolithic
 PPNA, *see* Pre-Pottery Neolithic A
 PPNB, *see* Pre-Pottery Neolithic B
 pre-urban, societies: 5, 7–10, 161

- private, spaces: 28, 31, 87
 public, spaces: 17, 26, 38, 45
- Qermez Dere: 48–49
- ritual, symbolism: 3, 6, 8, 10, 16, 22, 25, 28–29, 31, 61, 82–83, 85–88, 93–94, 117–19, 122–23, 159, 162, 164, 166
- rock shelter, sites: 6, 85
- Rollefson, Gary: 152
- roof, structures: 25, 60–61, 63, 68, 70, 80, 82, 84, 86, 93, 105, 107, 109, 111, 122, 124, 134, 144–56, 173, 177, 186, 191–92, 195
- Rosenberg, Michael: 45
- roundhouses: 61, 63, 66, 150
- Sabi Abyad: 123–24, 187, 192
- Salat Carnii Yanı: 130–32
- salvage excavations: 2, 79, 93, 95–96, 98, 130, 132
- Samarra: 132–33, 136
- Sayburç: 38, 40–42, 48–49, 63
- Schmidt, Klaus: 59, 61
- sculpture, human: 52, 83
- sedentism: 8–10, 15–16, 85, 143, 155, 171, 187, 206
- settlement scaling theory: 5, 7–9
- Shkarat Msaied: 22, 29, 60, 118, 144–45, 152
- South-west Asia, region: 1–2, 5, 8, 10, 59, 60, 103, 171
- storage, features: 17, 23, 25, 28–29, 31, 66, 81, 105, 120, 123, 161, 173, 185–87, 189, 193, 203
- Sumaki Höyük: 84, 99, 130, 132
- Syria: 3, 130, 132, 139, 159–60, 166, 188–89, 195
- Şanlıurfa, region: 2, 37–39, 41–42, 48–49, 51–53, 60, 72, 118
- Taurus, mountains: 3, 79, 129–30, 134, 136, 139, 160, 188
- Tell Abr 3: 37, 48–49
- Tell Aswad: 118, 160, 166
- Tell Halaf: 188
- Tell Halula: 3, 171–73, 177–79, 187
- Tell Qaramel: 3, 37, 85, 159–66
- Tell Qarassa: 159
- Tell Ramad: 160
- Tigris, River: 2, 79, 93, 99, 129, 130–34, 136, 185
- town, in archaeology: 2, 5
- Tsuneki, Akira: 188, 192
- Türkiye: 5, 79, 93, 104, 129–30, 137, 166
- Ulucak: 104
- urban
 revolution, as V. Gordon Childe's concept: 5, 7, 9
 science: 2, 5, 7
 societies: 5, 7–10
- village (archaeological concept): 2, 5, 15, 28, 31, 37–38, 40, 43, 47, 87, 144, 193, 195
- Wadi Faynan 16: 3, 17–18, 22–23, 25–26, 28–29, 31, 60, 118, 143–45, 152–53, 155–56
- Wadi Tumba: 44
- walls: 5, 20, 22, 25–28, 31, 63, 66, 68, 70, 82–87, 103, 105–07, 109–11, 118, 120, 122–23, 131–32, 143–44, 146–54, 161–65, 173–75, 177, 185–86, 188, 191–92, 204, 206
 mud-brick, *see* mud-bricks
 mud-plastered: 18, 84, 106, 122, 148, 155
 pies, *see* pisé
 stone: 17–18, 61, 70, 80, 83, 85–86, 146–47, 151–52
 wood: 105–06, 137
- wall-paintings: 109, 118–20, 122–23, 177, 179
- Watkins, Trevor: 16
- wattle-and-daub: 18, 79, 83–84, 109
- WF16, *see* Wadi Faynan 16
- Woolley, Leonard: 187
- workshop, area: 23, 26, 93, 100
- Yaka, Reyhan: 110
- Yarim Tepe: 187–88, 192



STUDIES IN THE ARCHAEOLOGY & HISTORY OF THE LEVANT & EASTERN MEDITERRANEAN

All volumes in this series are evaluated by an Editorial Board, strictly on academic grounds, based on reports prepared by referees who have been commissioned by virtue of their specialism in the appropriate field. The Board ensures that the screening is done independently and without conflicts of interest. The definitive texts supplied by authors are also subject to review by the Board before being approved for publication. Further, the volumes are copyedited to conform to the publisher's stylebook and to the best international academic standards in the field.

Titles in Series

Bassit (Syrie). Fouilles P. Courbin (1971-1984), Volume 2 : le tell du XVI^e siècle av. J.-C. au VI^e siècle ap. J.-C., par Frank Braemer & Pascal Darcque (2022)

Mari Yamasaki, *Conceptualizing Bronze Age Seascapes: Concepts of the Sea and Marine Fauna in the Eastern Mediterranean in the Second Millennium BCE* (2023)

Jebel al-Mutawwaq, *A Fourth Millennium BCE Village and Dolmen Field: Six Years of Spanish-Italian Excavations (2012-2018)*, ed. by Andrea Polcaro, Juan Ramon Muñoz & Alessandra Caselli (2024)

