

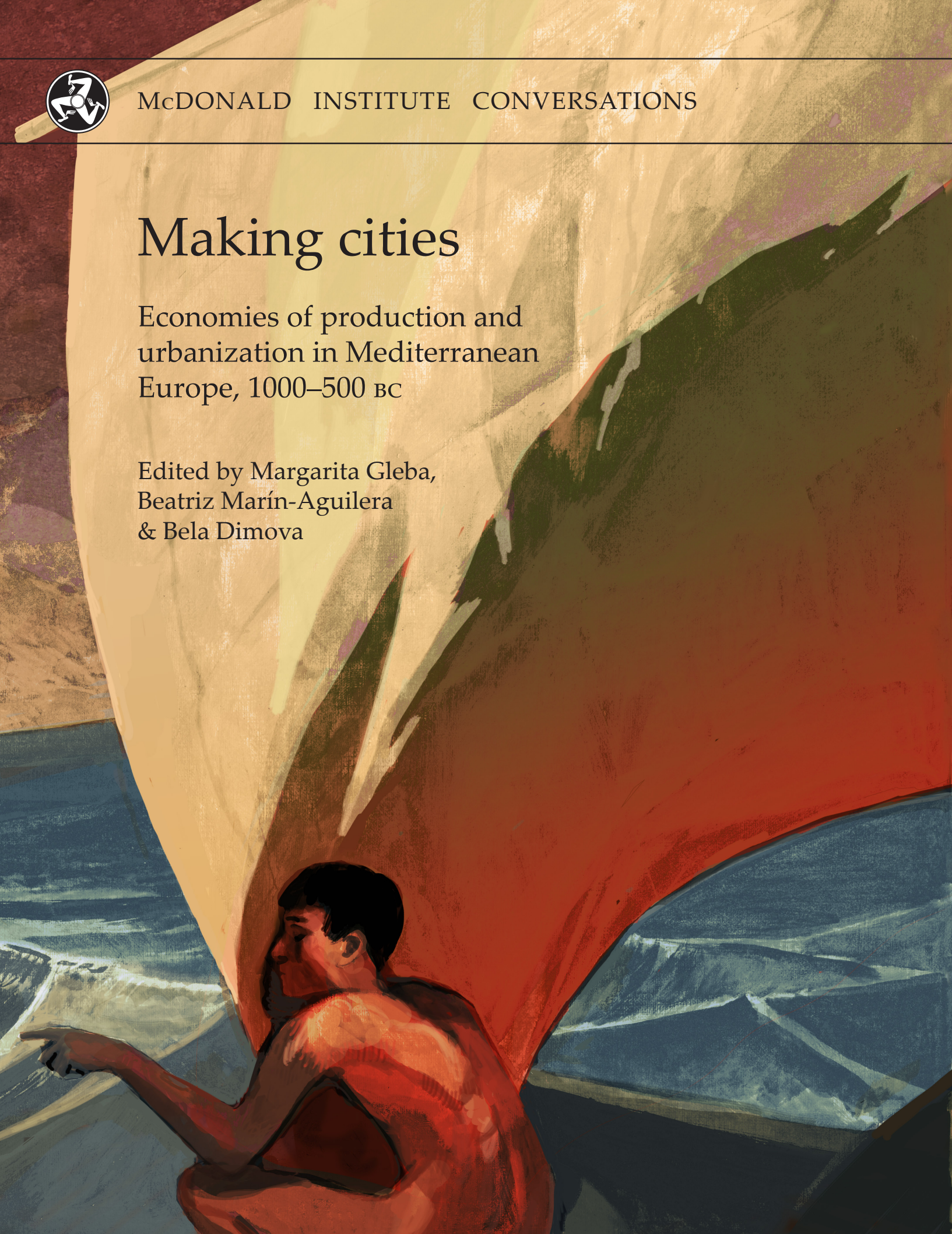


McDONALD INSTITUTE CONVERSATIONS

Making cities

Economies of production and
urbanization in Mediterranean
Europe, 1000–500 BC

Edited by Margarita Gleba,
Beatriz Marín-Aguilera
& Bela Dimova



Making cities



McDONALD INSTITUTE CONVERSATIONS

Making cities

Economies of production and urbanization in Mediterranean Europe, 1000–500 BC

Edited by Margarita Gleba,
Beatriz Marín-Aguilera & Bela Dimova

with contributions from

David Alensio, Laura Álvarez, Giovanna Bagnasco Gianni, William Balco,
Lesley Beaumont, Jeffrey Becker, Zisis Bonias, Simona Carosi, Letizia
Ceccarelli, Manuel Fernández-Götz, Eric Gailledrat, Giovanna Gambacurta,
David Garcia i Rubert, Karina Grömer, Javier Jiménez Ávila, Rafel Journet,
Michael Kolb, Antonis Kotsonas, Emanuele Madrigali, Matilde Marzullo,
Francesco Meo, Paolo Michelini, Albert Nijboer, Robin Osborne, Phil
Perkins, Jacques Perreault, Claudia Piazzzi, Karl Reber, Carlo Regoli,
Corinna Riva, Andrea Roppa, Marisa Ruiz-Gálvez, Joan Sanmartí Grego,
Christopher Smith, Simon Stoddart, Despoina Tsiafaki, Anthony Tuck,
Ioulia Tzonou, Massimo Vidale & Jaime Vives-Ferrándiz Sanchez

Published by:

McDonald Institute for Archaeological Research
University of Cambridge
Downing Street
Cambridge, UK
CB2 3ER
(0)(1223) 339327
eaj31@cam.ac.uk
www.mcdonald.cam.ac.uk



McDonald Institute for Archaeological Research, 2021

© 2021 McDonald Institute for Archaeological Research.
Making cities is made available under a Creative Commons
Attribution-NonCommercial-NoDerivatives 4.0 (International)
Licence: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

ISBN: 978-1-913344-06-1

On the cover: *Urbanization of Mediterranean Europe powered by sails*, by Kelvin Wilson.

Cover design by Dora Kemp and Ben Plumridge.
Typesetting and layout by Ben Plumridge.

Edited for the Institute by Cyprian Broodbank (*Acting Series Editor*).

CONTENTS

Contributors	ix
Figures	xiii
Tables	xvii
<i>Chapter 1</i> Making cities: economies of production and urbanization in Mediterranean Europe, 1000–500 BC	1
BELA DIMOVA, MARGARITA GLEBA & BEATRIZ MARÍN-AGUILERA	
Definitions of urbanism	2
Urbanism and textiles	2
Contributions to this volume	3
Cover illustration	4
Part I Eastern Mediterranean	
<i>Chapter 2</i> Argilos: the booming economy of a silent city	9
JACQUES PERREAULT & ZISIS BONIAS	
<i>Chapter 3</i> Regional economies and productions in the Thermaic Gulf area	21
DESPOINA TSIAFAKI	
Thermaic Gulf economies and production	22
Ancient Therme and its harbour	26
Conclusion	34
<i>Chapter 4</i> Production activities and consumption of textiles in Early Iron Age Eretria	39
KARL REBER	
Eretria in the Early Iron Age	39
Eretria's economic situation	41
The production and consumption of textiles	41
Conclusion	45
<i>Chapter 5</i> Productive economy and society at Zagora	47
LESLEY A. BEAUMONT	
<i>Chapter 6</i> Making Cretan cities: urbanization, demography and economies of production in the Early Iron Age and the Archaic period	57
ANTONIS KOTSONAS	
Urbanization	58
Demography	66
Economies of production	69
Conclusion	71
<i>Chapter 7</i> Production, urbanization, and the rise of Athens in the Archaic period	77
ROBIN OSBORNE	
<i>Chapter 8</i> Making Corinth, 800–500 BC: production and consumption in Archaic Corinth	89
IOULIA TZONOU	
Eighth century, to the end of the Geometric period and the transition into the Early Protocorinthian, 720 BC	95
Seventh century, the Protocorinthian and Transitional period into Early Corinthian, 720–620 BC	97
Sixth century, the Corinthian period, 620–500 BC	98
Conclusion	100

Part II	Central Mediterranean	
Chapter 9	Making cities in Veneto between the tenth and the sixth century BC	107
	GIOVANNA GAMBACURTA	
	Urbanization criteria	107
	Landscape and population	109
	Settlements	110
	Necropoleis	111
	Borders and shrines	112
	Inscriptions	114
	Myths	115
	Conclusion	116
Chapter 10	Attached versus independent craft production in the formation of the early city-state of Padova (northeastern Italy, first millennium BC)	123
	MASSIMO VIDALE & PAOLO MICHELINI	
	Materials and methods	124
	General patterns of industrial location	126
	Methodological issues	128
	The craft industries through time	130
	New craft locations: size and size variations through time	131
	Duration of urban craft workshops	132
	Ceramic, copper and iron processing sites: size versus duration of activities	133
	Discussion	134
	A historical reconstruction	138
	Onset of proto-currency and the issue of remuneration	141
	Conclusion	142
Chapter 11	Resource and ritual: manufacturing and production at Poggio Civitate	147
	ANTHONY TUCK	
Chapter 12	Perugia: the frontier city	161
	LETIZIA CECCARELLI & SIMON STODDART	
	Geology and culture	161
	History of research	163
	The emerging city from the rural landscape	165
	The topographical development of the city	166
	The city and its hinterland	168
	The rural settlements associated with the city	169
	Conclusion	172
Chapter 13	Tarquinia: themes of urbanization on the Civita and the Monterozzi Plateaus	177
	GIOVANNA BAGNASCO GIANNI, MATILDE MARZULLO & CLAUDIA PIAZZI	
	Approaching themes of urbanization at Tarquinia	177
	On the positioning of the protostoric site of Calvario and its road links	178
	The Calvario village on the Monterozzi Plateau and its economic activities during the eighth century BC	180
	The process of urbanization based on the evidence for the fortifications	185
	The limits of Tarquinia before its fortification, a theoretical approach	188
Chapter 14	Prolegomena to the material culture of Vulci during the Orientalizing period in the light of new discoveries	195
	SIMONA CAROSI & CARLO REGOLI	
	New data from Poggio Mengarelli Necropolis	195
	Conclusion	202

<i>Chapter 15</i>	Defining space, making the city: urbanism in Archaic Rome	205
	JEFFREY A. BECKER	
	Making civic space – the <i>Forum Romanum</i> and its environs	206
	Monumentality	210
	Peri-urban evidence	211
	Discussion	214
<i>Chapter 16</i>	Commodities, the instability of the gift, and the codification of cultural encounters in Archaic southern Etruria	219
	CORINNA RIVA	
	Agricultural surplus and a new funerary ideology	220
	Oversize vessels and fixing the gift	221
	Codification in the encounter	222
	Conclusion	226
<i>Chapter 17</i>	The Etruscan <i>pithos</i> revolution	231
	PHIL PERKINS	
	The <i>pithos</i> as artefact	232
	Making <i>pithoi</i>	236
	Using <i>pithoi</i>	240
	Socio-economic agency of <i>pithoi</i>	243
	<i>Pithoi</i> , economic development, and inequality	245
	<i>Pithoi</i> , economic growth and cities	248
	Conclusion	250
<i>Chapter 18</i>	Birth and transformation of a Messapian settlement from the Iron Age to the Classical period: Muro Leccese	259
	FRANCESCO MEO	
	The Iron Age village	259
	The Archaic and Classical settlement	266
	The Hellenistic period and the end of the town	276
<i>Chapter 19</i>	Indigenous urbanism in Iron Age western Sicily	281
	MICHAEL J. KOLB & WILLIAM M. BALCO	
	Settlement layout	282
	Demographic changes	286
	Production, consumption and exchange	288
	Ritual and cultic activity	290
	Conclusion	291
Part III	Western Mediterranean	
<i>Chapter 20</i>	Colonial production and urbanization in Iron Age to early Punic Sardinia (eighth–fifth century BC)	299
	ANDREA ROPPA & EMANUELE MADRIGALI	
	Colonial production and <i>amphora</i> distribution in Iron Age Sardinia	299
	Case studies: Nora and S’Urachi	301
	Discussion	305
	Colonial economies and urbanization	309
<i>Chapter 21</i>	Entanglements and the elusive transfer of technological know-how, 1000–700 BC: elite prerogatives and migratory swallows in the western Mediterranean	313
	ALBERT J. NIJBOER	
	Movement of peoples and goods	314
	Iron	316
	The alphabet	319
	Early monumental architecture	321
	Discussion and epilogue	323

<i>Chapter 22</i>	Making cities, producing textiles: the Late Hallstatt <i>Fürstensitze</i>	329
	MANUEL FERNÁNDEZ-GÖTZ & KARINA GRÖMER	
	Monumentality, production and consumption: the settlement evidence	330
	Textile use and display in funerary contexts	336
	Conclusion	340
<i>Chapter 23</i>	From household to cities: habitats and societies in southern France during the Early Iron Age	345
	ÉRIC GAILLED RAT	
	A question of time	346
	A contrasted image	347
	From one Mediterranean to another	348
	The evanescent settlement	349
	The emergence of the fortified group settlement	351
	The <i>oppida</i> of the sixth–fifth centuries BC	354
	The house in the context of the group settlement	358
	Craftspeople, crafts and workshops	361
	Conclusion	363
<i>Chapter 24</i>	Urbanization and early state formation: elite control over manufacture in Iberia (seventh to third century BC)	367
	JOAN SANMARTÍ, DAVID ASENSIO & RAFEL JORNET	
	The historical process	367
	Craft in its social context	369
	Conclusion	380
<i>Chapter 25</i>	Productive power during the Early Iron Age (c. 650–575 BC) at the Sant Jaume Complex (Alcanar, Catalonia, Spain)	385
	LAURA ÁLVAREZ, MARIONA ARNÓ, JORGE A. BOTERO, LAIA FONT, DAVID GARCIA I RUBERT, MARTA MATEU, MARGARITA RODÉS, MARIA TORTRAS, CARME SAORIN & ANA SERRANO	
	The Sant Jaume Complex	385
	Production in the Sant Jaume Complex chiefdom	388
	Conclusion	392
<i>Chapter 26</i>	Not all that glitters is gold: urbanism and craftspeople in non-class or non-state run societies	395
	MARISA RUIZ-GÁLVEZ	
	Craftspeople and workshops in Iberia	395
	Workshops in Iberia	398
	The Iberians as a House Society	400
	Conclusion	404
<i>Chapter 27</i>	Urbanization and social change in southeast Iberia during the Early Iron Age	409
	JAIME VIVES-FERRÁNDIZ SÁNCHEZ	
	Iberian urbanization: connectivity and dispersed territories	409
	Local economies into broader networks	411
	Agricultural intensification	412
	Urbanization, institutions and political authority	415
	Conclusion	420
<i>Chapter 28</i>	‘Building palaces in Spain’: rural economy and cities in post-Orientalizing Extremadura	425
	JAVIER JIMÉNEZ ÁVILA	
	Cancho Roano as a phenomenon	429
	The ‘post-Orientalizing’ world	432
	Post-Orientalizing economies	432
	Countryside and cities	438
	Final remarks	440
Part IV	Conclusion	
<i>Chapter 29</i>	Craft and the urban community: industriousness and socio-economic development	447
	CHRISTOPHER SMITH	

CONTRIBUTORS

DAVID ALENSIO

Departament de Prehistòria, Història Antiga i Arqueologia, Universitat de Barcelona, C/ Montalegre 6-8, 08001 Barcelona, Spain
Email: davidasensio@ub.edu

LAURA ÁLVAREZ ESTAPÉ

Independent scholar
Email: laura.alvarezestape@gmail.com

GIOVANNA BAGNASCO GIANNI

Dipartimento di Beni Culturali e Ambientali, Università degli Studi di Milano, via Festa del Perdono 7, 20122 Milano, Italy
Email: giovanna.bagnasco@unimi.it

WILLIAM BALCO

Department of History, Anthropology, and Philosophy, University of North Georgia, Barnes Hall 327, Dahlonega, GA 30597, USA
Email: william.balco@ung.edu

LESLEY BEAUMONT

Department of Archaeology, Faculty of Arts & Social Sciences, The University of Sydney, A18, Sydney, NSW 2006, Australia
Email: lesley.beaumont@sydney.edu.au

JEFFREY BECKER

Department of Middle Eastern and Ancient Mediterranean Studies, Binghamton University – State University of New York, 4400 Vestal Parkway East, PO Box 6000, Binghamton, NY 13902-6000, USA
Email: beckerj@binghamton.edu

ZISIS BONIAS

Ephorate of Antiquities of Kavala-Thasos, Erythrou Stavrou 17, Kavala 65110, Greece
Email: zbonias@yahoo.gr

SIMONA CAROSI

Soprintendenza Archeologia Belle Arti e Paesaggio per l'area metropolitana di Roma, la provincia di Viterbo e l'Etruria meridionale, Palazzo Patrizi Clementi, via Cavalletti n.2, 00186 Roma, Italy
Email: simona.carosi@beniculturali.it

LETIZIA CECCARELLI

Department of Chemistry, Materials and Chemical Engineering 'G.Natta', Politecnico di Milano, Piazza Leonardo da Vinci 32, 20133 Milano, Italy
Email: letizia.ceccarelli@polimi.it

BELA DIMOVA

British School at Athens, Souidias 52, Athens 10676, Greece
Email: bela.dimova@bsa.ac.uk

MANUEL FERNÁNDEZ-GÖTZ

School of History, Classics and Archaeology, University of Edinburgh, William Robertson Wing, Old Medical School, Teviot Place, Edinburgh, EH8 9AG, UK
Email: M.Fernandez-Gotz@ed.ac.uk

ERIC GAILLED RAT

CNRS, Archéologie des Sociétés Méditerranéennes, UMR 5140, Université Paul Valéry-Montpellier 3, F-34199, Montpellier cedex 5, France
Email: eric.gailledrat@cnrs.fr

GIOVANNA GAMBACURTA

Dipartimento di Studi Umanistici, Università Ca' Foscari Venezia, Palazzo Malcanton Marcorà, Dorsoduro 3484/D, 30123 Venezia, Italy
Email: giovanna.gambacurta@unive.it

DAVID GARCIA I RUBERT

Departament de Prehistòria, Història Antiga i Arqueologia, Universitat de Barcelona, Carrer Montalegre 6, 08001 Barcelona, Spain
Email: dgarcia@ub.edu

MARGARITA GLEBA

Dipartimento dei Beni Culturali, Università degli Studi di Padova, Piazza Capitaniato 7, Palazzo Liviano, 35139 Padova, Italy
Email: margarita.gleba@unipd.it

KARINA GRÖMER

Natural History Museum Vienna, Department of Prehistory, Burgring 7, 1010 Vienna, Austria
Email: karina.groemer@nhm-wien.ac.at

JAVIER JIMÉNEZ ÁVILA

Consejería de Cultura, Turismo y Deporte – Junta de Extremadura, Edificio Tercer Milenio, Módulo 4, Avda. de Valhondo s/n, 06800 Mérida, Spain
Email: jjimavila@hotmail.com

RAFEL JOURNET

Departament de Prehistòria, Història Antiga i Arqueologia, Universitat de Barcelona, C/ Montalegre 6-8, 08001 Barcelona, Spain
Email: rafeljornet@ub.edu

MICHAEL KOLB

Department of Sociology and Anthropology, Metropolitan State University of Denver, Campus Box 19, P.O. Box 173362, Denver, CO 80217-3362, USA
Email: mkolb5@msudenver.edu

ANTONIS KOTSONAS

Institute for the Study of the Ancient World, New York University, 15 East 84th St., New York, NY 10028, USA
Email: ak7509@nyu.edu

EMANUELE MADRIGALI

Independent scholar
Email: e.madrigali@gmail.com

BEATRIZ MARÍN-AGUILERA

McDonald Institute for Archaeological Research, University of Cambridge, Downing Street, Cambridge CB2 3DZ, UK
Email: bm499@cam.ac.uk

MATILDE MARZULLO

Coordinating Research Centre 'Tarquinia Project', Dipartimento di Beni Culturali e Ambientali, Università degli Studi di Milano, via Festa del Perdono 7, 20122 Milano, Italy
Email: matilde.marzullo@unimi.it

FRANCESCO MEO

Dipartimento di Beni Culturali, Università del Salento, Via D. Birago, 64, 73100 Lecce, Italy
Email: francesco.meo@unisalento.it

PAOLO MICHELINI

P.ET.R.A., Società Cooperativa ARL, Via Matera, 7 a/b, 35143 Padova, Italy
Email: paolo.mik@libero.it

ALBERT NIJBOER

Groningen Institute of Archaeology, Poststraat 6, 9712 ER Groningen, The Netherlands
Email: a.j.nijboer@rug.nl

ROBIN OSBORNE

University of Cambridge, Faculty of Classics, Sidgwick Avenue, Cambridge CB3 9DA, UK
Email: ro225@cam.ac.uk

PHIL PERKINS

Classical Studies, School of Arts & Humanities, The Open University, Perry C Second Floor, 25, Walton Hall, Milton Keynes MK7 6AA, UK
Email: Phil.Perkins@open.ac.uk

JACQUES PERREAULT

Université de Montréal C.P. 6128, Succursale Centre-Ville Montréal, QC, H3C 3J7, Canada
Email: jacques.y.perreault@umontreal.ca

CLAUDIA PIAZZI

Coordinating Research Centre 'Tarquinia Project', Dipartimento di Beni Culturali e Ambientali, Università degli Studi di Milano, via Festa del Perdono 7, 20122 Milano, Italy
Email: claudia.piazzzi2@gmail.com

KARL REBER

Université de Lausanne, Anthropolé 4011, 1015 Lausanne, Switzerland
Email: karl.reber@unil.ch

CARLO REGOLI

Fondazione Vulci, Parco Naturalistico Archeologico di Vulci, 01014 Montalto di Castro (Viterbo), Italy
Email: caregoli@gmail.com

CORINNA RIVA

Institute of Archaeology, University College London, 31–34 Gordon Square, London WC1H 0PY, UK
Email: c.riva@ucl.ac.uk

ANDREA ROPPA

Independent scholar
Email: roppaandrea@gmail.com

MARISA RUIZ-GÁLVEZ

Departamento de Prehistoria, Historia Antigua y Arqueología, Universidad Complutense de Madrid, Edificio B C/ Profesor Aranguren, s/n Ciudad Universitaria, 28040 Madrid, Spain
Email: marisar.gp@ghis.ucm.es

JOAN SANMARTÍ GREGO

Departament de Prehistòria, Història Antiga i
Arqueologia, Universitat de Barcelona, Carrer
Montalegre 6, 08001 Barcelona, Spain
Email: sanmarti@ub.edu

CHRISTOPHER SMITH

School of Classics, University of St Andrews, Fife
KY16 9AL, UK
Email: cjs6@st-and.ac.uk

SIMON STODDART

Department of Archaeology, University of
Cambridge, Downing Street, Cambridge
CB2 3DZ, UK
Email: ss16@cam.ac.uk

DESPOINA TSIAFAKI

Culture & Creative Industries Department, 'Athena':
Research & Innovation Center in Information,
Communication & Knowledge Technologies.
Building of 'Athena' R.C., University Campus of
Kimmeria, P.O. Box 159, Xanthi 67100, Greece
Email: tsiafaki@ipet.gr

ANTHONY TUCK

Department of Classics, University of Massachusetts
Amherst, 524 Herter Hall, 161 Presidents Drive
Amherst, MA 01003, USA
Email: atuck@classics.umass.edu

IOULIA TZONOU

Corinth Excavations, American School of Classical
Studies at Athens, Ancient Corinth 20007, Greece
Email: itzonou.corinth@ascsa.edu.gr

MASSIMO VIDALE

Dipartimento dei Beni Culturali, Università degli
Studi di Padova, Piazza Capitaniato 7, Palazzo
Liviano, 35139 Padova, Italy
Email: massimo.vidale@unipd.it

JAIME VIVES-FERRÁNDIZ SANCHEZ

Museu de Prehistòria de València
Email: jaime.vivesferrandiz@dival.es

Figures

1.1	<i>Map indicating the volume coverage.</i>	4
2.1	<i>Argilos, aerial view.</i>	10
2.2	<i>Argilos, general plan.</i>	10
2.3	<i>Small furnace in building E.</i>	11
2.4	<i>View of building L.</i>	12
2.5	<i>Plan of Koutloudis area with buildings H, L, P, and Q.</i>	13
2.6	<i>Building L, press-bed in room 4.</i>	13
2.7	<i>Building Q, room 1.</i>	14
2.8	<i>Building L, room 11, crushed amphorae.</i>	16
2.9	<i>Dividing wall between L7–L8 with remains of clay over the lower courses of stone.</i>	17
2.10	<i>Building L, facades of L2–L3.</i>	18
3.1	<i>Thermaic Gulf region.</i>	22
3.2	<i>Iron sword, grave offering, Nea Philadelphia cemetery, late sixth century BC.</i>	24
3.3	<i>Miniature iron wagon, grave offering, Sindos cemetery, late sixth century BC.</i>	25
3.4	<i>Methone. Pottery kilns in Building A at Sector B.</i>	26
3.5	<i>Ancient settlement at Karabournaki, aerial view.</i>	27
3.6	<i>Ancient settlement at Karabournaki, storeroom with pithoi.</i>	28
3.7	<i>‘Eggshell’ type vases made at the pottery workshop at Karabournaki.</i>	29
3.8	<i>Karabournaki settlement metal workshop.</i>	30
3.9	<i>Weaving tools from the Karabournaki settlement.</i>	31
3.10	<i>Loom weight with stamp depicting a satyr, Karabournaki settlement.</i>	32
3.11	<i>Karabournaki: distribution of textile production tools within the excavated area.</i>	33
4.1	<i>Map of Geometric Eretria.</i>	40
4.2	<i>Plan of the Sanctuary of Apollo in the eighth century BC.</i>	40
4.3	<i>Spindle whorl with dedication, from the Sanctuary of Apollo.</i>	42
4.4	<i>Cruche à haut col C41 (tankard) from the Aire sacrificielle.</i>	42
4.5	<i>Cruche à haut col C37 (tankard) from the Aire sacrificielle.</i>	43
4.6	<i>Fragment of linen from Grave 10 in the Heroon Necropolis.</i>	44
4.7	<i>Close-ups of wool weft-faced textiles from the Heroon Necropolis.</i>	45
5.1	<i>View of Zagora promontory from the northeast.</i>	48
5.2	<i>Plan of Zagora.</i>	49
5.3	<i>Aerial view of Trench 11, partially excavated.</i>	52
6.1	<i>Map of Crete showing sites mentioned in the text.</i>	58
6.2	<i>Plan of Karphi.</i>	59
6.3	<i>Plan of the Knossos valley.</i>	62
6.4	<i>Plan of Prinias.</i>	64
6.5	<i>Plan of Azoria.</i>	65
6.6	<i>Knossos North Cemetery: maximum and minimum number of cremation urns over time.</i>	68
6.7	<i>Knossos North Cemetery: number of cremation urns per year.</i>	68
6.8	<i>Fortetsa Cemetery: number of burials over time.</i>	68
6.9	<i>Fortetsa Cemetery: number of burials per year.</i>	68
6.10	<i>Reconstruction of the pottery workshop at Mandra di Gipari, near Prinias.</i>	70
7.1	<i>Attica, 1050–900 BC.</i>	80
7.2	<i>Attica, 900–800 BC.</i>	80
7.3	<i>Attica, 800–700 BC.</i>	81
7.4	<i>Attica, 700–600 BC.</i>	81
7.5	<i>Attica, 600–500 BC.</i>	85
8.1	<i>Map of the northeast Peloponnese showing sites mentioned in the text.</i>	90
8.2	<i>Corinth: Geometric Period multiphase plan (900–720 BC).</i>	91
8.3	<i>Corinth: Protocorinthian to Transitional Period multiphase plan (720–620 BC).</i>	91
8.4	<i>Corinth: Corinthian Period multiphase plan (620–500 BC).</i>	92
8.5	<i>Corinth: fifth century BC multiphase plan.</i>	93

8.6	<i>Corinth: multiphase plan up to 400 BC.</i>	93
8.7	<i>Corinth: Forum, all periods.</i>	94
8.8	<i>South Stoa, Tavern of Aphrodite Foundry.</i>	99
8.9	<i>Late Corinthian kraters from the sixth-century BC floor.</i>	101
8.10	<i>The Arachne aryballos, Late Early Corinthian or Middle Corinthian (600 BC).</i>	102
9.1	<i>Maps of Veneto.</i>	108
9.2	<i>Maps of cities with different orientations: a) Oderzo; b) Padova.</i>	110
9.3	<i>Este, clay andirons with ram's heads.</i>	112
9.4	<i>Padova, funerary stone monuments: a) Camin; b) Albignasego.</i>	112
9.5	<i>Padova, via Tadi, boundary stone with Venetic inscription on two sides.</i>	114
9.6	<i>Padova, via C. Battisti, boundary stone with Venetic inscription on four sides.</i>	114
9.7	<i>Padova, via Tiepolo–via San Massimo 1991, Grave 159, bronze figured belt-hook.</i>	115
9.8	<i>Este, Casa di Ricovero, Grave 23/1993 or Nerka's grave.</i>	116
9.9	<i>Isola Vicentina, stele with Venetic inscription.</i>	117
10.1	<i>Location of Padova and the study area in northeastern Italy.</i>	124
10.2	<i>Padova, general cumulative map of the craft locations, c. 825–50 BC.</i>	125
10.3	<i>Padova, location of the craft areas and workshops in the early urban core.</i>	127
10.4	<i>Padova, the extra-urban location of craft industries in Roman times.</i>	129
10.5	<i>New manufacturing areas per different craft.</i>	131
10.6	<i>Maximum total area occupied by craft production sites.</i>	132
10.7	<i>New craft areas activated in each period.</i>	132
10.8	<i>Frequency distribution of dimensional class of craft areas per period.</i>	132
10.9	<i>Padova, Questura, site 2, northeast sector.</i>	133
10.10	<i>Workshop size and duration of activity.</i>	134
10.11	<i>Padova, Questura, site 2. Ceramic tuyère.</i>	136
10.12	<i>Padova, Questura, site 2. Cluster of fine feasting pottery.</i>	137
10.13	<i>Padova, Questura, site 2. Antler combs from the metallurgical workshop.</i>	137
10.14	<i>Sherds of Attic pottery from workshop areas in Padova.</i>	138
10.15	<i>Padova, Piazza Castello, site 3: vertical kiln and modular perforated grid.</i>	139
10.16	<i>Part of an elite grave's furnishings from Padova, end of the eighth century BC.</i>	140
10.17	<i>Vessels from the cemetery of Piovego, Padova, fifth century BC.</i>	141
11.1	<i>Map of central Italy.</i>	148
11.2	<i>Early Phase Orientalizing Complex Building 4 (c. 725–675 BC) reconstruction.</i>	148
11.3	<i>Orientalizing Complex (c. 675–600 BC) reconstruction.</i>	149
11.4	<i>Archaic Phase Structure (c. 600–530 BC) reconstruction.</i>	149
11.5	<i>Orientalizing Complex roofing elements.</i>	150
11.6	<i>Partially worked and complete bone, antler and ivory.</i>	150
11.7	<i>Unfired cover tiles with human footprints.</i>	151
11.8	<i>Distribution of variable sized spindle whorls.</i>	152
11.9	<i>Carbonized seeds from Orientalizing Complex Building 2/Workshop.</i>	153
11.10	<i>Fragment of statuette from Orientalizing Complex Building 2/Workshop.</i>	153
11.11	<i>Frieze plaque depicting banqueting scene, Archaic Phase Structure.</i>	155
11.12	<i>Elements of a banquet service from the Orientalizing Complex.</i>	155
11.13	<i>Compote with incised khi.</i>	156
11.14	<i>Map of Poggio Civitate and surrounding traces of settlements or other human activity.</i>	157
12.1	<i>Location of Perugia.</i>	162
12.2	<i>The immediate environs of Perugia with key sites.</i>	162
12.3	<i>The geological context of Perugia.</i>	163
12.4	<i>Plan of the city of Perugia.</i>	166
12.5	<i>Hierarchical relationship of Perugia to its territory.</i>	169
12.6	<i>Civitella d'Arna survey area.</i>	171
12.7	<i>Montelabate survey area.</i>	172
13.1	<i>Positioning of the structures of the Calvario.</i>	179
13.2	<i>Tarquinia and its territory around the middle of the eighth century BC.</i>	180

13.3	<i>Plan of the Villanovan village on the Monterozzi Plateau.</i>	181
13.4	<i>Plans of some of the Villanovan huts.</i>	183
13.5	<i>Finds from the huts.</i>	184
13.6	<i>Walls, gateways and roads of ancient Tarquinia.</i>	185
13.7	<i>Tarquinia, Bocchoris Tomb, lid.</i>	189
14.1	<i>Location of the excavation area at Vulci.</i>	196
14.2	<i>Aerial photograph of the excavation (2016–2018).</i>	197
14.3	<i>General plan of the excavation (2016–2018).</i>	197
14.4	<i>Textile fragment from the ‘Tomb of the Golden Scarab’.</i>	198
14.5	<i>Detail of the grave goods from Tomb 35 during excavation.</i>	199
14.6	<i>Tomb 29 during excavation.</i>	200
14.7	<i>Tomb 29: detail of the traces of cloth on the lid of the sheet bronze stamnos.</i>	201
14.8	<i>Tomb 72: a textile with colour pattern of small red and white checks.</i>	202
15.1	<i>Plan of Rome’s territory in the Archaic period.</i>	206
15.2	<i>Area of the Volcanal and the Comitium in the seventh and sixth centuries BC.</i>	207
15.3	<i>Reconstructed plan of Rome within the so-called ‘Servian Wall’.</i>	208
15.4	<i>Sketch plan of the area of the Forum Boarium and Velabrum in the seventh century BC.</i>	210
15.5	<i>Phase 1 of the so-called ‘Auditorium site’ villa.</i>	212
15.6	<i>Phase 2 of the so-called ‘Auditorium site’ villa.</i>	212
15.7	<i>The Republican ‘Villa delle Grotte’ at Grottarossa.</i>	213
16.1	<i>White-on-red pithos with lid, Cerveteri.</i>	223
16.2	<i>Figurative decoration of the Gobbi krater.</i>	224
16.3	<i>Black-figure amphora, Vulci, side A.</i>	226
16.4	<i>Black-figure amphora, Vulci, side B.</i>	226
17.1	<i>Pithos types 1–6.</i>	233
17.2	<i>Distribution map of Etruscan pithoi within the study area in Etruria.</i>	240
17.3	<i>Comparison between the altitude of pithos find spots and the range of altitude.</i>	241
17.4	<i>Map of sample area.</i>	242
17.5	<i>Distribution of architectural terracottas, pithoi, amphorae, and tiles.</i>	249
18.1	<i>Muro Leccese and the other Iron Age settlements in the Salento peninsula.</i>	260
18.2	<i>Muro Leccese, find spots of Early Iron Age and Archaic ceramics and structures.</i>	261
18.3	<i>Muro Leccese, Cunella district, traces of two huts.</i>	262
18.4	<i>Muro Leccese, DTM with location of the Iron Age ceramics and structures.</i>	263
18.5	<i>Vases and decorative motifs characteristic of matt-painted ware from Muro Leccese.</i>	264
18.6	<i>Vases imported from Greece and Greek apoikiai.</i>	265
18.7	<i>The Messapian era road network in the Salento peninsula.</i>	267
18.8	<i>Muro Leccese, Palombara district.</i>	268
18.9	<i>Muro Leccese, Palombara district. Vases.</i>	270
18.10	<i>Muro Leccese, Cunella district. Plan of the residential building.</i>	272
18.11	<i>Diorama of the place of worship in the archaeological area of Cunella.</i>	273
18.12	<i>Muro Leccese, Masseria Cunella district. Tombs 1 and 2.</i>	274
18.13	<i>Muro Leccese, fourth century BC walls.</i>	275
19.1	<i>Map of Sicily, showing the Bronze Age sites mentioned in the text.</i>	282
19.2	<i>The defensive wall at Bronze Age site of Mursia, Pantelleria.</i>	283
19.3	<i>The Late Bronze Age excavations at Mokarta.</i>	283
19.4	<i>Monte Bonifato, showing its steep approaches.</i>	284
19.5	<i>Map of western Sicily showing the Iron Age sites mentioned in the text.</i>	284
19.6	<i>The urban layout of Eryx.</i>	285
19.7	<i>The urban layout of Segesta.</i>	286
19.8	<i>The orthogonal grid and Iron Age/Classical/Hellenistic finds of Salemi.</i>	287
19.9	<i>The archaeological sites of Salemi territory.</i>	287
19.10	<i>The temple of Segesta, facing west.</i>	291
20.1	<i>Map of Sardinia showing sites mentioned in the text.</i>	300
20.2	<i>Plan of Nora and the Punic quarter under the forum.</i>	301

20.3	<i>Main amphora types discussed.</i>	302
20.4	<i>Dating profiles of amphora types.</i>	303
20.5	<i>Plan of nuraghe S'Urachi and cross-section of the ditch in area E.</i>	304
20.6	<i>Dating profile of the amphora types from the case study at nuraghe S'Urachi.</i>	305
20.7	<i>Dating profiles of Phoenician amphora types.</i>	306
21.1	<i>Early iron and the distribution of Huelva-Achziv type fibulae on the Iberian Peninsula.</i>	317
21.2	<i>Three copper alloy bowls dated to the decades around 800 BC.</i>	319
21.3	<i>The Phoenician, Euboean, Etruscan and Latin alphabetic letters.</i>	320
21.4	<i>Early monumental architecture in Italy and Spain.</i>	322
21.5	<i>Provenance of ceramics from the ninth century BC, pre-Carthage Utica (Tunis).</i>	324
22.1	<i>Fürstensitze north of the Alps and selected sites in Mediterranean Europe.</i>	330
22.2	<i>The Heuneburg agglomeration during the mudbrick wall phase.</i>	331
22.3	<i>Indicative lifespans of selected Fürstensitze sites.</i>	331
22.4	<i>Aerial view of the gatehouse of the Heuneburg lower town during the excavation.</i>	332
22.5	<i>Large ditch at the south foot of wall 3 at Mont Lassois.</i>	333
22.6	<i>Reconstructed monumental building in the Heuneburg Open-Air Museum.</i>	334
22.7	<i>Fired clay loom weight and spindle whorls from the Heuneburg.</i>	335
22.8	<i>Comparison between grave textiles and other textiles.</i>	337
22.9	<i>Tablet-woven band, reproduced after a textile from Hochdorf.</i>	338
22.10	<i>Functions of textiles in graves.</i>	339
23.1	<i>Map of the south of France showing the main settlements of the Early Iron Age.</i>	346
23.2	<i>Mailhac (Aude).</i>	350
23.3	<i>Examples of apsidal floorplans of wattle-and-daub (a) or cob houses (b–d).</i>	352
23.4	<i>Examples of rectangular floorplans of houses with one or more rooms.</i>	353
23.5	<i>Pech Maho (Sigean, Aude).</i>	355
23.6	<i>Examples of functional combinations of apsidal and rectangular floorplans.</i>	356
23.7	<i>Early examples of urban planning combining blocks of houses with a system of streets.</i>	357
23.8	<i>a–c) Examples of rectangular floorplans; d–e) houses of La Liquière.</i>	359
23.9	<i>Montlaurès (Narbonne, Aude).</i>	360
24.1	<i>Map of northern Iberia showing the sites mentioned in the text.</i>	368
24.2	<i>Pottery workshop of Hortes de Cal Pons.</i>	371
24.3	<i>Bases of Iberian amphorae.</i>	372
24.4	<i>Les Guàrdies (El Vendrell).</i>	373
24.5	<i>Castellet de Banyoles.</i>	375
24.6	<i>Mas Castellar de Pontós.</i>	376
24.7	<i>Coll del Moro de Gandesa.</i>	378
24.8	<i>Sant Antoni de Calaceit.</i>	379
24.9	<i>Els Estincells.</i>	380
25.1	<i>General location of the area under study.</i>	386
25.2	<i>View of Sant Jaume.</i>	387
25.3	<i>Plan of Sant Jaume.</i>	387
25.4	<i>Aerial view of La Moleta del Remei.</i>	389
25.5	<i>Aerial view of La Ferradura.</i>	389
26.1	<i>Tumulus 'A' at Setefilla.</i>	396
26.2	<i>Sample of matrices and tools from the so-called goldsmith's graves at Cabezo Lucero.</i>	397
26.3	<i>Iberian tombs with grave goods connected with weighing metal.</i>	398
26.4	<i>Spatial distribution of tools in rooms of Iberian oppida.</i>	400
26.5	<i>Iberian funerary pillars crowned by heraldic beasts.</i>	402
26.6	<i>Enthroned Iberian ladies: a) Cerro de los Santos; b) Baza.</i>	403
26.7	<i>Reconstructions: a) La Bastida de les Alcusses; b) El Castellet de Banyoles.</i>	403
26.8	<i>Bronze horseman from La Bastida de Les Alcusses and reconstruction as a sceptre.</i>	404
27.1	<i>Map of the study area showing the main sites mentioned in the text.</i>	410
27.2	<i>Metallurgical workshop at La Fonteta.</i>	412
27.3	<i>Plan of Alt de Benimaquia and local amphorae.</i>	413

27.4	<i>Plan of El Oral.</i>	414
27.5	<i>The territory of El Puig d'Alcoi and the secondary rural settlements.</i>	416
27.6	<i>Different furnaces for iron metalwork from La Cervera.</i>	416
27.7	<i>Plans of walled settlements: a) Covalta; b) Puig d'Alcoi; c) La Bastida de les Alcusses.</i>	417
27.8	<i>Aerial view of the storerooms at La Bastida de les Alcusses.</i>	418
27.9	<i>Plan of Block 5 at La Bastida de les Alcusses.</i>	419
27.10	<i>Weapons ritually 'killed' in the West Gate, La Bastida de les Alcusses.</i>	419
28.1	<i>Cancho Roano: a) general plan; b–c) reconstructions of the external rooms.</i>	426
28.2	<i>Map of sites considered as post-Orientalizing palatial complexes.</i>	427
28.3	<i>La Mata.</i>	428
28.4	<i>Post-Orientalizing settlements: a,d) El Chaparral; b) La Carbonera; c) Los Caños.</i>	431
28.5	<i>Millstones and amphorae from post-Orientalizing sites in Middle Guadiana.</i>	433
28.6	<i>Storage building at the Orientalizing site of El Palomar, Oliva de Mérida.</i>	434
28.7	<i>Greek pottery from Cancho Roano, late fifth century BC.</i>	436
28.8	<i>Antique (sixth-century BC) goods in post-Orientalizing contexts.</i>	437
28.9	<i>The Orientalizing site of Medellín.</i>	439
28.10	<i>Ancient toponymy in southwestern Iberia.</i>	440

Tables

7.1	<i>Sites in Attica, late eleventh to seventh century BC.</i>	78
8.1	<i>Dates: abbreviations and chronology.</i>	90
9.1	<i>List of criteria for defining cities.</i>	108
9.2	<i>Inventory of houses and buildings with their shape, dimensions and chronology.</i>	111
10.1	<i>Variations through time of principal type of craft occupation.</i>	128
10.2	<i>Variations through time of the maximum area of all craft occupations.</i>	129
10.3	<i>Padova, average duration in years of the main craft occupations for each period.</i>	129
10.4	<i>Padova, the development of craft industries as monitored in 29 craft workshops.</i>	130
10.5	<i>Positive correlation between size and duration of activity of craft workshops.</i>	134
10.6	<i>The composition of funerary vessels in the earliest graves from Padova.</i>	140
14.1	<i>Types of tombs excavated at Poggio Mengarelli, Vulci (2016–2018).</i>	196
17.1	<i>Type 1.</i>	234
17.2	<i>Type 2.</i>	234
17.3	<i>Type 3.</i>	235
17.4	<i>Type 3A.</i>	235
17.5	<i>Type 3B.</i>	235
17.6	<i>Type 3C.</i>	236
17.7	<i>Type 4.</i>	236
17.8	<i>Type 5.</i>	237
17.9	<i>Type 6.</i>	237
17.10	<i>Chaîne opératoire of Etruscan pithos manufacture.</i>	238
21.1	<i>Number of iron artefacts per phase at Torre Galli (c. 950–850 BC).</i>	318

Chapter 22

Making cities, producing textiles: the Late Hallstatt *Fürstensitze*

Manuel Fernández-Götz & Karina Grömer

The Hallstatt period (c. 800–450 BC) represented a time of fundamental changes for Central European societies. A process of increasing social stratification initiated in the eighth and seventh centuries BC with the appearance of rich elite burials such as those of Frankfurt-Stadtwald and Gomadingen (Fernández-Götz & Arnold 2017). From the end of the seventh century BC, and then increasingly during the sixth century BC, this process was accompanied by the development of some large agglomerations in the area immediately to the north of the Alps (Krausse 2008; 2010; Fernández-Götz *et al.* 2014; Krausse *et al.* 2016). These Late Hallstatt centres are traditionally known as *Fürstensitze* ('princely seats'), a problematic term (cf. Eggert 1989) that has nonetheless become established in the scientific literature and is used here solely as a *terminus technicus*. Their general distribution ranges from central France in the west to the Czech Republic in the east, with the Heuneburg, Mont Lassois, Bourges, Glauberg and Ipfl as some of the most prominent and best-investigated examples (Fig. 22.1).

The 'classic' model of the *Fürstensitze*, based primarily on the results of the excavations at the Heuneburg, was presented by Wolfgang Kimmig in 1969. He defined the *Fürstensitze* as political and administrative centres comprising a fortified central area on a topographically elevated site, with Mediterranean imports and sumptuous burials in their immediate surroundings (Kimmig 1969). More recent research has, on the one hand, confirmed many of these assumptions and expanded the list of known *Fürstensitze*, but on the other hand, emphasized the diversity and heterogeneity of the sites which have been classified as such (Krausse 2008; 2010; Fernández-Götz & Ralston 2017). Moreover, the scale of many of these centres is sometimes considerably larger than originally thought. For example, at the time when Kimmig wrote his seminal works, the Heuneburg and other comparable sites

were assumed to have an area of just a few hectares. However, new fieldwork during the last two decades has uncovered that some settlements were indeed much larger. The most spectacular cases are the Heuneburg, with an outer settlement of c. 100 ha accompanying the three ha of fortified hilltop in the sixth century BC (Kurz 2010b; Fernández-Götz & Krausse 2013; Krausse *et al.* 2016) (Fig. 22.2), and Bourges, which during the fifth century BC covered an area of 200 ha or more (Augier *et al.* 2007; 2012; Ralston 2010). In terms of demographic estimations, the approximately 5000 inhabitants that have been proposed as the peak population during the mudbrick wall period at the Heuneburg agglomeration (Kurz 2010b; Fernández-Götz & Krausse 2013; Krausse *et al.* 2019) surpass the size of many contemporaneous Aegean, Etruscan and Iberian centres.

Although definitions of urbanism are disputed (see Smith 2016 for a recent approach based on archaeological urban attributes), some of the *Fürstensitze* are increasingly recognized as the first cities or towns north of the Alps (Biel & Krausse 2005; Fernández-Götz & Krausse 2013; Krausse *et al.* 2016), thus preceding by several centuries the *oppida* of the second and first centuries BC (Collis 1984; Fichtl 2005). However, and in contrast to the urbanization processes observed in large parts of the Mediterranean during the first millennium BC (Osborne & Cunliffe 2005; Garcia 2013; Fernández-Götz & Krausse 2016a), the *Fürstensitze* were an ephemeral or fragile phenomenon (Brun & Chaume 2013; Fernández-Götz & Ralston 2017; Stoddart 2017; Fernández-Götz 2018a), which lasted for no more than 200 years. Although some of these sites continued for one or two generations into the Early La Tène period, by the beginning of the fourth century BC, all of them had been abandoned or were in marked decline (Fig. 22.3).

The economic basis of the Early Iron Age centralization and urbanization phenomenon are still insufficiently understood, with some authors



Figure 22.1. Fürstensitze north of the Alps and selected sites in Mediterranean Europe (after Fernández-Götz & Ralston 2017).

highlighting the importance of Mediterranean influences (Frankenstein & Rowlands 1978; Wells 1980; Kimmig 1983) and others giving more weight to internal developments (Gosden 1985; Krausse *et al.* 2016). Connections with Mediterranean societies became particularly intense during the late sixth and fifth centuries BC; however, they are insufficient to explain the origins of the centralization and urbanization process observed north of the Alps. In general terms, the appearance of Mediterranean imports in temperate European graves and settlements could be regarded mainly as a consequence of endogenous developments such as population growth and status differentiation linked to land ownership and the control of local production and labour (Karl 2015; Fernández-Götz & Arnold 2017; Fernández-Götz & Ralston 2017). In this way, Mediterranean goods would have arrived at pre-existing indigenous centres of power, rather than explain the appearance of those settlements (Dietler 1995).

Ongoing research is demonstrating that we need to rethink not only the size and characteristics of the *Fürstensitze*, but also the scale of the exploitation and

processing of natural resources. An example is the discovery of proto-industrial iron production in the north Black Forest during the Late Hallstatt and Early La Tène periods (Gassmann & Wieland 2015). One aspect that has traditionally received rather little consideration in relation to general discussions about the *Fürstensitze*, but was central to the economy and culture of other societies in antiquity, is textile production and display (cf. for example Dimova 2016 for Thrace, and contributions in this volume). In what follows, we will present an overview of some of the main settlement and burial evidence of this period, with particular consideration given to textiles.

Monumentality, production and consumption: the settlement evidence

Monumental fortifications are a frequent trait of early civilizations (Trigger 2007), and indeed constitute one of the main characteristics of the Late Hallstatt *Fürstensitze*. The defensive systems would have had, at least in the majority of cases, a protective function against

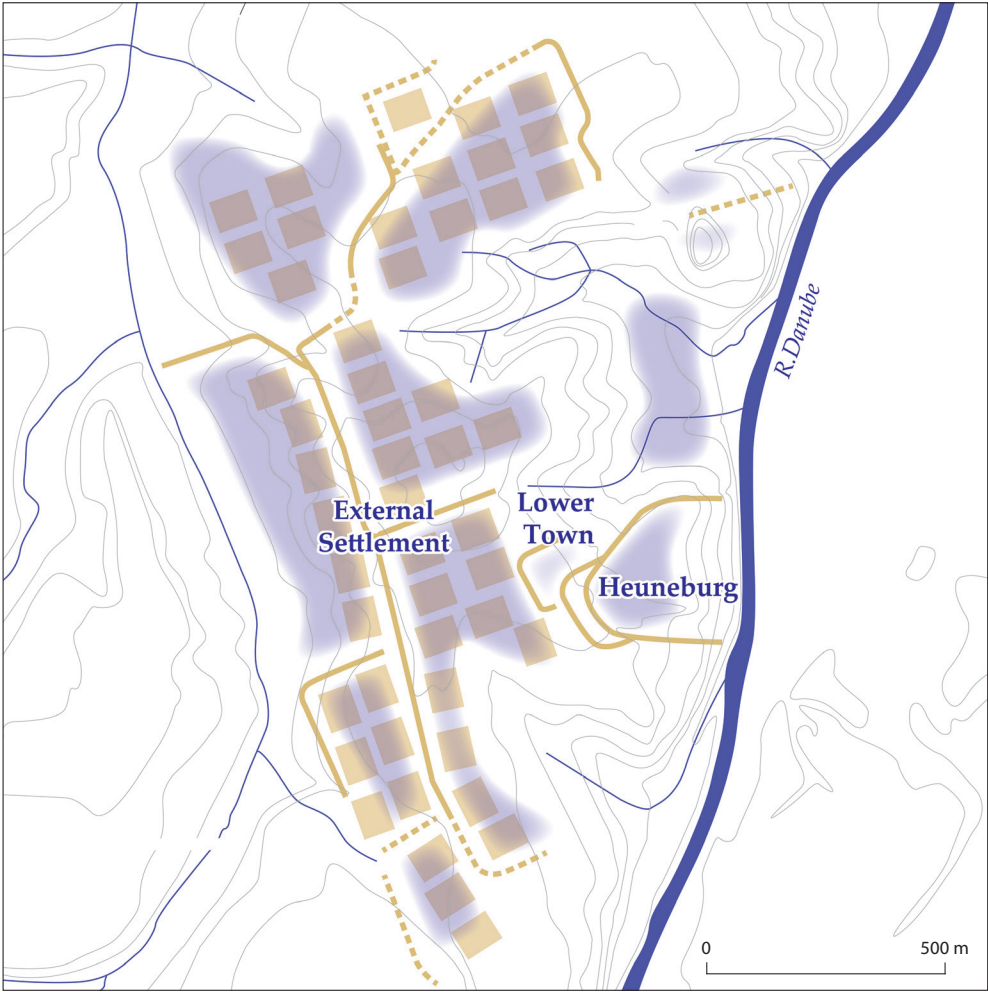


Figure 22.2. Plan of the Heuneburg agglomeration during the mudbrick wall phase (after Fernández-Götz & Ralston 2017, based on Kurz 2010b).

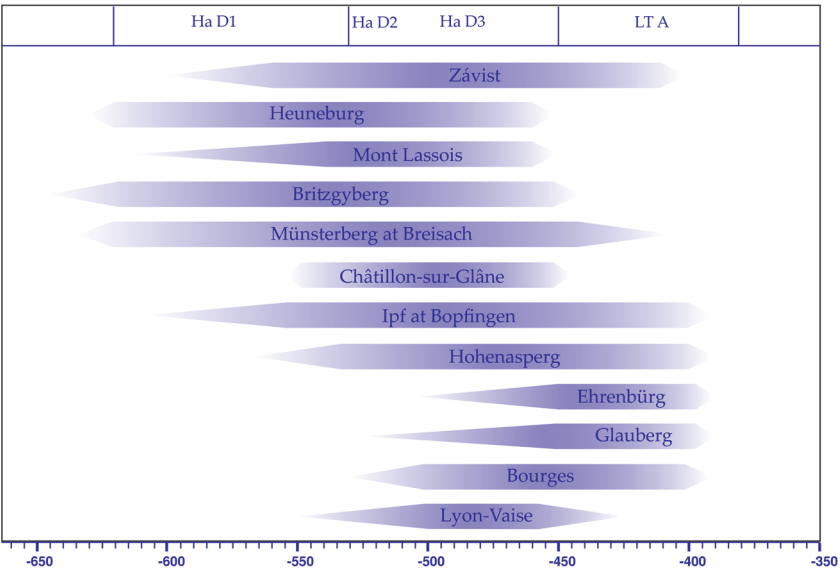


Figure 22.3. Indicative lifespans of selected Fürstensitze sites (after Fernández-Götz & Ralston 2017).



Figure 22.4. Aerial view of the gatehouse of the Heuneburg lower town during the excavation (after Krausse et al. 2016; photo O. Braasch, © Landesamt für Denkmalpflege im RP Stuttgart) and idealized reconstruction (after Krausse et al. 2016, design F. Courtial, © Landesamt für Denkmalpflege im RP Stuttgart).

potential enemy threats. Simultaneously, they would have also acted as a symbol of status that demonstrated the power of the communities (Fernández-Götz & Krausse 2016b). This is particularly evident in the case of the mudbrick wall that surrounded the Heuneburg plateau during the first half of the sixth century BC, which was enhanced by 17 towers or bastions along its northern and western fronts (Gersbach 1995). This fortification was built following an exotic technique that was widespread in the Mediterranean but exceptional in temperate Europe, and can be regarded as an example of hybrid architecture combining indigenous and foreign influences (Burkhardt 2010; Arnold & Fernández-Götz 2018). The different lines of banks and ditches protecting the Heuneburg lower town at the foot of the hilltop added to the monumentality of the ensemble, which was accessed through a monumental gatehouse over 16 m deep and 10 m wide (Fig. 22.4) (Kurz 2008; Fernández-Götz 2018b).

Although less exotic in their construction techniques, the fortifications surrounding other *Fürstentzitze* such as Mont Lassois, Ip and Glauberg were equally important as an expression of monumentality and community identity. At Mont Lassois, the hilltop

settlement was surrounded by a complex system of various banks and ditches (Fig. 22.5). The massive, excavated banks were typically constructed of earth, wood and stone (Chaume & Mordant 2011). Their enormous dimensions are remarkable, for example, Bank 3 is still preserved today to a height of five m and in some places exceeds 30 m in width.

Monumentality was not restricted to fortification works. At Mont Lassois itself, several large, apsidal buildings have been discovered on the hilltop plateau, and the largest was completely excavated (Chaume & Mordant 2011; Chaume *et al.* 2013). Its exceptional size (33 × 20 m), shape and elaborate decoration with painted walls are indications that it enjoyed a highly prestigious function. This is further emphasized by the associated finds of fragments of wine *amphorae* from Massalia, imported Attic ceramics, and impressive quantities of high-quality indigenous pottery, suggesting conspicuous consumption at large-scale meetings or celebrations held within it. At the Heuneburg, during the mudbrick wall period, a large building with several rooms and a floor area of about 320 sq. m stood in the outer settlement, beneath one of the later burial mounds of the Gießübel-Talhau necropolis. This stately



Figure 22.5. Large ditch at the south foot of wall 3 at Mont Lassois (after Chaume *et al.* 2012).



Figure 22.6. Reconstructed monumental building (so-called Herrenhaus) in the Heuneburg Open-Air Museum (after Krausse et al. 2016, photo M. Friemelt, © Landesamt für Denkmalpflege im RP Stuttgart).

structure has been compared by Stéphane Verger (2008) to palace buildings in Etruria. After the violent destruction of the mudbrick wall around 540–530 BC, some prestigious houses of large proportions, the so-called *Herrenhäuser*, were erected on the hilltop plateau, the largest of which boasted a floor area of more than 400 sq. m (Gersbach 1996) (Fig. 22.6).

Finally, monumentality could also be connected to the sacred, as exemplified by the hilltop sanctuary at Závist (Drda & Rybová 2008), or by the structures at the foot of the Glauberg (Baitinger & Pinsker 2002). In the case of the latter, a processional avenue 350 m long and 10 m wide led to the central tumulus with its associated anthropomorphic stone sculptures. This was in turn incorporated within an enormous system of banks and ditches that dominated and sub-divided the landscape around the Glauberg. The entire complex could have served as a supra-local sanctuary and gathering place related to ancestor worship, serving as a religious focus for the communal identity of various clans and lineages (Herrmann 2005).

Although information is uneven due to varying degrees of fieldwork and conservation, the majority, if not all, of the *Fürstensitze* seem to have been centres

of production and exchange. Most of these sites provide evidence for Mediterranean imports, or even local imitations of southern products, testifying their long-distance connections with places such as Greece, Italy, southern France or even Spain (see for example Bonomi & Guggisberg 2015; Sacchetti 2016). In terms of craft production, at the Heuneburg there is ample evidence that skilled craftsmen produced goods such as ceramics, brooches and sapropelite jewellery (Drescher 1995; Kurz 2010a). There are good reasons to assume that certain ceramic types that are found within the surrounding area and beyond were developed and produced at the Heuneburg. An example of locally produced ceramics are the high-necked, red and white coloured vessels that were apparently traded across wide areas of southwest Germany (Stegmaier 2016). Moreover, zooarchaeology provides interesting information on food supply and consumption: according to isotope analysis, during the mudbrick wall period of the Heuneburg, with its highly concentrated population, a significant proportion of the animals were imported over a distance of 50 to 60 km, sometimes further. This suggests that the needs of the large population of several thousand inhabitants could only

be satisfied by importing animals from considerable distances (Stephan 2016).

At the site of Bourges in Berry, sub-rectangular features interpreted as workshops were discovered in St-Martin-des-Champs (Milcent 2007) and elsewhere (e.g. Hôpital Baudens). This area provided evidence for craft activities such as lignite bracelet manufacturing and iron smithing in contexts that also furnished imports indicating wine consumption (Attic red-figure pottery and Massaliote *amphorae*). Similar workshops, also intimating copper-alloy jewellery-making, horn-working and weaving, as well as iron-working, were found interspersed with other features at Port-Sec over an extensive area (Augier *et al.* 2012).

Concerning textile production, clay spindle whorls and loom weights are relatively common finds at numerous *Fürstensitze* (Fig. 22.7). We also have some excavated evidence for looms, for example at the Heuneburg hilltop plateau, where two buildings from the early period IVb showed sill-beam features indicative of the frames for warp-weighted looms (Gersbach 1995). In the area of the Heuneburg lower town, one of the sunken houses was a textile workshop as indicated by finds of spindle whorls and loom weights. The fine imprints in a small shallow ditch could be from a loom that stood in it (Bofinger & Goldner-Bofinger 2008).

Hallstatt period spindle whorls of various sizes and weights indicate that the yarn spun with those spindles had specific qualities. The most common type is the biconical spindle whorl with a weight mostly ranging between 6 and 26 g, thus providing a toolkit that makes it possible to spin thread of various qualities

(e.g. Belanová-Štolcová & Grömer 2010, 11–15). In addition, the loom weights provide an indication of the quality of the textiles that were produced. For example, by using fine yarn of only 0.2 to 0.3 mm in diameter, that was spun with small, light spindles, it was possible to weave both fine, dense, high quality textiles and flexible, even translucent cloth (veil-like textiles; cf. Banck-Burgess 1999). Larger and heavier whorls up to 40 g have also been found at the settlements and were employed to spin thicker threads used for warmer cloth (for a correlation between size and weight of spindle whorls and yarn produced, see e.g. Andersson Strand 2010; Kania 2013; Grömer 2016).

Iron Age textile production was organized at various levels. In Central Europe during the period of the *Fürstensitze* we know of different settlement types, including isolated farmsteads, small villages and larger central sites, almost all of which contained textile equipment (Grömer 2016, 280–8), primarily spindle whorls, but also loom weights and needles. This likely points to production on a domestic level. Nevertheless, some outstanding sites like Smolenice-Molpír (Belanová-Štolcová & Grömer 2010), with more than 2200 spindle whorls and over 200 loom weights, were likely larger-scale production centres. In the Hallstatt period there are various ‘standard’ sizes of looms: smaller looms up to 0.9 m wide, medium looms between 1.20 and 1.90 m wide, and large looms of 3–4 m in width (Grömer 2016, 114–17, with examples). The large looms were not only used in fortified hilltop settlements, but also in the lowland ones. Altogether, the ubiquity of textile tools and highly developed textile



Figure 22.7. Fired clay loom weight and decorated and undecorated spindle whorls from the Heuneburg (after Krausse *et al.* 2016, photos Y. Mühleis, © Landesamt für Denkmalpflege im RP Stuttgart).

art indicate that specialized textile production took place during the Hallstatt period (cf. Grömer 2016, 243–55 for a detailed discussion).

Due to the climatic conditions of temperate Europe, little is known about the actual textiles from settlement contexts. However, mineralized textiles found in graves provide some clues. As textiles in graves are usually preserved in contact with metal artefacts, we are relatively well informed about textiles in elite burial contexts (Banck-Burgess 1999; 2012), but not for poorer graves or those without any metal elements.

Textile use and display in funerary contexts

One of the defining characteristics of the *Fürstensitze* is that they are surrounded by burial mounds that served as the final resting places for members of the social elite and their relatives or retinues (Krausse 2006). Among the most prominent examples are Hohmichele, Gießübel-Talhau and Bettelbühl near Heuneburg, Sainte-Colombe and Vix near Mont Lassois, and Hochdorf, Grafenbühl and Kleinaspergle near Hohenasperg. The concentration of rich burials in the immediate vicinity of the *Fürstensitze* suggests an important political and administrative role for these central places, which would have served as focal points for their wider surroundings. Some of the richest burials of the period belong to women, illustrating their prominent social roles that included positions of political and religious leadership (Milcent 2003; Metzner-Nebelsick 2009). The recently excavated grave of Bettelbühl, situated across the Danube near the Heuneburg and dendrochronologically dated to the very beginning of the sixth century BC, is among the earliest examples of these sumptuous female graves (Krausse *et al.* 2017). However, the power of socio-political elites was far from uncontested, as indicated by the abundance of ancient graves that were looted, sometimes relatively soon after their time of construction (Kümmel 2009), as well as evidence of the destruction of settlements by fire, which is sometimes suggestive of violent conflict (Fernández-Götz 2017; Fernández-Götz & Arnold 2019).

The most sumptuous graves from the Late Hallstatt period incorporated elements that distinguished them from the majority of burials. These could include wagons, imported bronze vessels, objects made of gold or with gold appliqué, and valuable textiles. The latter were of high quality and made with various weaving and patterning techniques. Although their fragmentary preservation has often led to an underestimation of their importance, some discoveries in prominent elite burials suggest that textiles could on occasion have a similar value to grave goods such as bronze vessels.

In this sense, textiles can also be interpreted as ‘instruments of power’ (Banck-Burgess 2012; Harris 2017).

It has been debated to what extent textiles recovered in funerary context were made specifically for the burial or if they were used by people in everyday life and then re-used in the graves. At Hochdorf near Hohenasperg, there is evidence that the elaborately made, high quality textiles found in the grave had been exclusively produced for the burial (Banck-Burgess 1999, 2012). However, in other graves the situation is not that clear (cf. also Grömer 2015). There is also interesting complementary evidence from a very different context: the salt mine of Hallstatt in Upper Austria (Grömer *et al.* 2013). At this site, salt has allowed for the preservation of textiles that date roughly to the time between the eighth and fourth centuries BC. Hundreds of textiles have been found, some of which were discarded in the mine as rags after wear and tear, and some might have been parts of the miners’ gear. The textiles, woven using various techniques, are of different qualities, coarse and fine, the latter with up to 40 threads per cm. More than half feature decorative techniques such as spin pattern, dyes, woven-in checks and stripes, and even elaborate techniques such as tablet weaving (Fig. 22.8). It is likely that these textiles are representative of the textiles used more widely in society. Interestingly, these textiles in all their variety are comparable to textiles found in the graves from the Hallstatt cemetery and from burials across the Eastern Hallstatt region (see e.g. Bender Jørgensen 2005). The variety of weave types is similar, and the yarn diameters and thread counts are within the same range. Therefore, it is likely that the textiles found in graves reflect the common ‘textile culture’ of a certain period and region (on textile cultures, see Gleba 2017). Nevertheless, there are some technical differences between textiles from the Eastern and Western Hallstatt areas. In the east, single yarn was used, while in the west, plied yarn was employed in the warp (Bender Jørgensen 1989).

During the Hallstatt period, a range of animal and plant based fibres were available to make textiles. Among the animal fibres, sheep wool was the preferred material. Remarkable progress in sheep breeding is noticeable between the Bronze and Iron Age, with the result that fibres became lighter (a prerequisite for being dyed) and finer (e.g. Rast-Eicher & Bender Jørgensen 2013). There is sparse evidence of other animal fibres, for instance from domestic animals such as goat and horse (long tail hair; see summary in Grömer 2016, 58–61), or wild animals such as badger known from Hochdorf (Banck-Burgess 1999, 102–3). Among the plant fibres used in the Hallstatt period, flax can be named, but also some surprising evidence



Figure 22.8. Comparison between grave textiles and other textiles used within a certain period and area. Example from the cemetery and salt mine at Hallstatt, Austria, 800–400 bc. Scale: small boxes 2 × 2 cm each (A. Rausch, © Natural History Museum Vienna).

of hemp, which again has been identified at Hochdorf (Banck Burgess 1999, 83, 100–1).

In general, textile qualities of the Western Hallstatt area can be described as highly variable. Different types of cloth were made to meet various needs within the society. Most of the textiles are twills in simple

and more complex variants (zigzag, herringbone and lozenge). The threads employed are of fine quality (0.2–0.4 mm in diameter; thread counts between 15 and 30 threads per cm), but also include simpler tabby and basket weaves. Spin as well as colour patterns seem to be a typical way of expressing wealth and status



Figure 22.9. Tablet-woven band, reproduced after a textile from Hochdorf, on display in the Natural History Museum Vienna (S. Galz).

within elite burials. Examples have been identified in the sumptuous grave of Hochdorf (Banck-Burgess 1999), as well as in other graves of the Western and Eastern Hallstatt areas and in Italy (Bender Jørgensen 2005; Gleba 2008; 2012; 2017). Among the colours, blue and red have been detected quite often in rich burials such as those of Hochdorf, Hohmichele and Glauberg (Hofmann-de Keijzer 2016).

The burial at Hochdorf, with its patterned textiles, is particularly relevant for the present discussion (Biel 1985; Banck-Burgess 1999). The technique of tablet weaving plays an important role here and was employed to produce elaborate designs such as meander, swastika and the like (Fig. 22.9). As Johanna Banck-Burgess (1999) noted, textile technology during the Hallstatt period was particularly based on patterns that were made during weaving. Patterns that look like embroidery were created with the so-called ‘weft wrap technique’ or ‘flying shuttle technique.’ Those techniques generated diamond patterns and an element in form of the letter ‘Z’ at Hochdorf (Banck-Burgess 1999), as well as a lozenge and swastika pattern on a larger cloth from the burial of Hohmichele identified near the Heuneburg (Hundt 1962). Other luxury

elements incorporated into textiles are the thin gold strips recovered from the Late Hallstatt elite burials of Hohmichele Grave I (Hundt 1962) and Grafenbühl (Banck-Burgess 1999).

As mentioned above, the *Fürstensitze* display connections to the Mediterranean world, including Greek pottery such as transport *amphorae* and Attic vases. In the case of textiles, insect dyes point to long-distance exchange. Textiles dyed with kermes have been found in Hohmichele, Hochdorf (Banck-Burgess 1999) and Glauberg (Balzer *et al.* 2014). In these cases, the weaving technique used to make the textiles points to local production, whereas the dyestuff (or even the dyed fleece or yarn) was likely imported.

Within funerary contexts, textiles were used in different ways (Fig. 22.10). In cases when textiles were found *in situ* on fibulae or belt buckles on the body of the deceased, those remains would have been from the garments of the buried person (Grömer 2015), used either during their lifetime or only for the funeral. Clothing plays an important role in the representation of the identity of the dead. At Hochdorf (Banck-Burgess 2012), there is evidence for elaborately made textiles that served as wall hangings and floor coverings to

furnish the grave. Mattresses and cushions have also been found. More generally, textiles might have also been used as burial gifts, probably equal in their value to other grave goods such as bronze vessels. This practice is attested in contemporary Greece (Wagner-Hasel 2006) and Italy. At Verucchio, for example, textiles were found folded, suggesting that they were deposited as burial gifts (Stauffer 2012). Sometimes, textiles could be included in a grave as functional components of other artefacts, e.g. inner lining of a sword, dagger or sheath (e.g. at Gomadingen-Steingebronn, see Banck-Burgess 1999).

A common practice that can be found in various graves of the Hallstatt area, as well as in Italy, is the use of textiles for wrapping objects, the corpse or even the cremated remains (Banck-Burgess 1999; 2012; Gleba 2008; 2014; Harris & Douny 2014; Grömer 2015, 2016). This practice could have not only a functional, but also a ritual meaning. Textile wrappings can serve as containers to hold together cremated remains or small

objects. Wrappings also protect the items they cover, depending on the quality of the textiles used. However, as Banck-Burgess (2012) has noted, the act of wrapping is also indicative of rituals and beliefs common in the Hallstatt period. It may have been customary to 'render the visible invisible', to hide something from the viewers, but maybe also to protect the viewers from the objects that might have belonged to the dead person. Thus, the act of wrapping can be seen as an act of communication between the living and the dead. Further suggestions are given by Margarita Gleba (2014), who differentiated between wrappings that were employed to make objects 'invisible' and those that were intended for the opposite effect. Covering artefacts with precious, decorated and patterned cloth, maybe with tablet woven bands, bestows a specific focus on them. In Italy, some urns were dressed like the dead person or tied with ribbons. Through cloth, the cremated bones in a vessel were given a human form again.

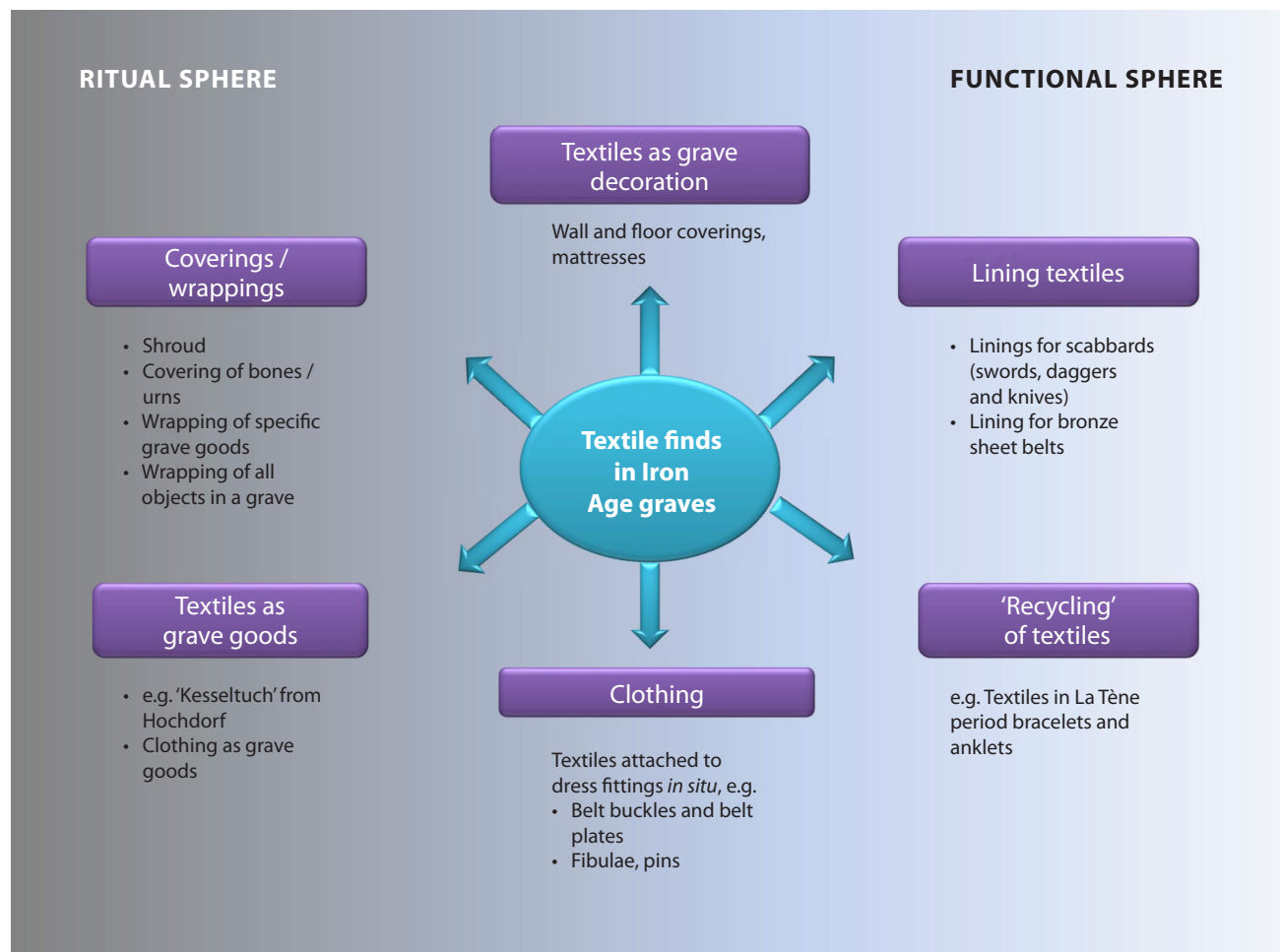


Figure 22.10. Functions of textiles in graves (after Grömer 2015).

Conclusion

Traditional scholarship divides between ‘prehistoric’ and ‘classical’ studies, and between ‘barbarian’ and ‘civilized’ societies, have long obscured the fact that early urbanization processes similar to those observed in Archaic Greece and Etruria also took place in the area to the north of the Alps (Fernández-Götz & Krausse 2016a; Zamboni *et al.* 2020). Rather than seeing the emergence of the *Fürstensitze* as dependent on contacts with the Mediterranean, we can envisage similar social responses to processes of demographic growth and increasing production among interconnected communities (Collis 2014; 2016). Within this framework, textile production and consumption played an important role, not only as an economic activity within settlements, but also as a means of expressing status in both life and death and a way to perform complex ritual displays. Although factors of preservation and visibility make it difficult to determine the exact scale and characteristics of textile production, the recovered evidence clearly demonstrates the high skills and quality reached during the Hallstatt period. Therefore, textiles can be interpreted as the materialization of wider social changes within Early Iron Age societies.

References

- Andersson Strand, E., 2010. Experimental textile archaeology, in *North European Symposium for Archaeological Textiles X*, eds. E. Andersson Strand, M. Gleba, U. Mannering, C. Munkholt & M. Ringgaard. (Ancient Textiles Series Vol. 5.) Oxford: Oxbow Books, 1–3.
- Arnold, B. & M. Fernández-Götz, 2018. Agency in architectural choice: the Heuneburg hillfort as monument and metaphor, in *Understanding Ancient Fortifications: Between Regionality and Connectivity*, eds. A. Ballmer, M. Fernández-Götz & D. Mielke. Oxford: Oxbow Books, 147–55.
- Augier, L., O. Buchsenschutz & I. Ralston (eds.), 2007. *Un complexe princier de l'âge du Fer. L'habitat du promontoire de Bourges (Cher) (VIe-IVe s. av. J.-C.)*. Bourges & Tours: Bituriga.
- Augier, L., O. Buchsenschutz, R. Durand, A. Filippini, D. Germinet, M. Levéry, P. Maçon, B. Pescher, I. Ralston, M. Salin & J. Troadec, 2012. *Un complexe princier de l'âge du Fer: le quartier artisanal de Port Sec sud à Bourges (Cher)*. Bourges & Tours: Bituriga.
- Baitinger, H., 2010. *Der Glauberg – ein Fürstensitz der Späthallstatt-/Frühlatènezeit in Hessen*. Wiesbaden: Materialien zur Vor- und Frühgeschichte von Hessen 26.
- Baitinger, H. & B. Pinsker (eds.), 2002. *Das Rätsel der Kelten vom Glauberg. Glaube – Mythos – Wirklichkeit*. Stuttgart: Konrad Theiss Verlag.
- Balzer, I., C. Peek & I. Vanden Berghe, 2014. Neue Untersuchungen an den eisenzeitlichen Textilfunden der ‘Fürstengräber’ vom Glauberg. *Denkmalpflege und Kulturgeschichte* 3, 2–10.
- Banck-Burgess, J., 1999. *Hochdorf. IV: Die Textilfunde aus dem späthallstattzeitlichen Fürstengrab von Eberdingen-Hochdorf (Kreis Ludwigsburg) und weitere Grabtextilien aus hallstatt- und latènezeitlichen Kulturgruppen*. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 70. Stuttgart: Konrad Theiss Verlag.
- Banck-Burgess, J., 2012. *Mittel der Macht. Textilien bei den Kelten / Instruments of Power. Celtic Textiles*. Stuttgart: Konrad Theiss Verlag.
- Belanová-Štolcová, T. & K. Grömer, 2010. Loom-weights, spindles and textiles? Textile production in Central Europe from the Bronze Age to the Iron Age, in *North European Symposium for Archaeological Textiles X*, eds. E. Andersson Strand, M. Gleba, U. Mannering, C. Munkholt & M. Ringgaard. (Ancient Textiles Series Vol. 5.) Oxford: Oxbow Books, 9–20.
- Bender Jørgensen, L., 1989. European textiles in later prehistory and early history. A research project. *Journal of Danish Archaeology* 8, 144–58.
- Bender Jørgensen, L., 2005. Hallstatt and La Tène textiles from the archives of Central Europe, in *Hallstatt Textiles. Technical Analysis, Scientific Investigation and Experiment on Iron Age Textiles*, eds. P. Bichler, K. Grömer, R. Hogmann-de Keijzer, A. Kern & H. Reschreiter. (BAR International Series 1351.) Oxford: Archaeopress, 133–50.
- Biel, J., 1985. *Der Keltenfürst von Hochdorf*. Stuttgart: Konrad Theiss Verlag.
- Biel, J. & D. Krausse (eds.), 2005. *Frühkeltische Fürstensitze. Älteste Städte und Herrschaftszentren nördlich der Alpen? Esslingen: Archäologische Informationen aus Baden-Württemberg* 51.
- Bofinger, J. & A. Goldner-Bofinger, 2008. Terrassen und Gräben – Siedlungsstrukturen und Befestigungssysteme der Heuneburg-Vorburg, in *Frühe Zentralisierungs- und Urbanisierungsprozesse. Zur Genese und Entwicklung frühkeltischer Fürstensitze und ihres territorialen Umlandes*, ed. D. Krausse. (Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 101.) Stuttgart: Konrad Theiss Verlag, 209–27.
- Bonomi, S. & M.A. Guggisberg (eds.), 2015. *Griechische Keramik nördlich von Etrurien: Mediterrane Importe und archäologischer Kontext*. Wiesbaden: Reichert Verlag.
- Brun, P. & B. Chaume, 2013. Une éphémère tentative d’urbanisation en Europe centre-occidentale durant les VIe et Ve siècles av. J.C. *Bulletin de la Société Préhistorique Française* 110(2), 319–49.
- Burkhardt, N., 2010. Die Lehmziegelmauer der Heuneburg im mediterranen Vergleich, in *‘Fürstensitze’ und Zentralorte der frühen Kelten*, ed. D. Krausse. Teil II. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 120/2. Stuttgart: Konrad Theiss Verlag, 29–50.
- Chaume, B. & C. Mordant (eds.), 2011. *Le complexe aristocratique de Vix. Nouvelles recherches sur l’habitat, le système de fortification et l’environnement du mont Lassois*. Dijon: PU Dijon.
- Chaume, B., N. Nieszery & W. Reinhard, 2012. Der Mont Lassois – ein frühkeltischer Fürstensitz im Burgund, in

- Die Welt der Kelten. Zentren der Macht – Kostbarkeiten der Kunst*. Ostfildern: Jan Thorbecke Verlag, 132–8.
- Chaume, B., N. Nieszery & W. Reinhard, 2013. L'enclos des grands bâtiments absidaux du plateau du mont Saint-Marcel. *Bulletin archéologique et historique du Châtillonnais* 7ème série, n° 47 ser 4, 13–19.
- Collis, J., 1984. *Oppida. Earliest Towns North of the Alps*. Sheffield: University of Sheffield.
- Collis, J., 2014. Urbanisation in Temperate Europe in the Iron Age: Mediterranean influence or indigenous?, in *Paths to Complexity: Centralisation and Urbanisation in Iron Age Europe*, eds. M. Fernández-Götz, H. Wendling & K. Winger. Oxford: Oxbow Books, 15–23.
- Collis, J., 2016. Spheres of interaction: Temperate Europe and the Mediterranean world in the Iron Age, in *Eurasia at the Dawn of History: Urbanization and Social Change*, eds. M. Fernández-Götz & D. Krausse. New York (NY): Cambridge University Press, 265–76.
- Dietler, M., 1995. The cup of Gyptis: rethinking the colonial encounter in Early Iron Age Western Europe and the relevance of world-systems models. *Journal of European Archaeology* 3(2), 89–111.
- Dimova, B., 2016. Textile production in Iron Age Thrace. *European Journal of Archaeology* 19(4), 652–80. doi:10.1080/14619571.2016.1164457
- Drda, P. & A. Rybová, 2008. *Akropole na hradišti Závist v 6.-4. stol. př. Kr.* Prague: Památky archeologické, Supplementum 19.
- Drescher, H., 1995. Die Verarbeitung von Buntmetall auf der Heuneburg, in *Baubefunde der Perioden IVc-IVa der Heuneburg*, ed. E. Gersbach. (Heuneburgstudien 9. Römisch-Germanische Forschungen 53.) Mainz: Philipp von Zabern, 255–364.
- Eggert, M. K. H., 1989. Die 'Fürstensitze' der Späthallstattzeit: Bemerkungen zu einem archäologischen Konstrukt. *Hammaburg NF* 9, 53–66.
- Fernández-Götz, M., 2017. Contested power: Iron Age societies against the state? in *Rebellion and Inequality in Archaeology*, eds. S. Hansen & J. Müller. Bonn: Habelt, 271–87.
- Fernández-Götz, M., 2018a. Urbanization in Iron Age Europe: Trajectories, patterns and social dynamics. *Journal of Archaeological Research* 26, 117–62. doi:10.1007/s10814-017-9107-1
- Fernández-Götz, M., 2018b. Das Tor als Symbol der Gemeinschaft: Architektursoziologische Überlegungen zum Steintor der Heuneburg-Vorburg, in *KunstHandWerk: Beiträge der 26. Tagung der AG Eisenzeit gemeinsam mit der Keltenwelt am Glauberg und der hessenARCHÄOLOGIE*, 2013, eds. S. Wefers, I. Balzer, M. Augstein, J. Fries-Knoblach, C. Later, K. Ludwig, C. Tappert, P. Trebsche & J. Wiethold. Langenweissbach: Beier & Beran, 137–49.
- Fernández-Götz, M. & B. Arnold, 2017. Elites before the Fürstensitze: Hallstatt C sumptuous graves between Main and Danube, in *Connecting Elites and Regions. Perspectives on Contacts, Relations and Differentiation During the Early Iron Age Hallstatt C Period in Northwest and Central Europe*, eds. R. Schumann & S. van der Vaart-Verschoof. Leiden: Sidestone Press, 183–99.
- Fernández-Götz, M. & B. Arnold, 2019. Internal conflict in Iron Age Europe: Methodological challenges and possible scenarios. *World Archaeology* 51(5), 654–72. doi:10.1080/00438243.2020.1723682
- Fernández-Götz, M. & D. Krausse, 2013. Rethinking Early Iron Age urbanisation in Central Europe: the Heuneburg site and its archaeological environment. *Antiquity* 87(336), 473–87. doi:10.1017/S0003598X00049073
- Fernández-Götz, M. & D. Krausse (eds.), 2016a. *Eurasia at the Dawn of History: Urbanization and Social Change*. New York (NY): Cambridge University Press.
- Fernández-Götz, M. & D. Krausse, 2016b. Early centralisation processes north of the Alps: Fortifications as symbols of power and community identity, in *Le fortificazioni arcaiche del Latium vetus e dell'Etruria meridionale (IX-VI sec. a.C.)* *Stratigrafia, cronologia e urbanizzazione*, eds. P. Fontaine & S. Helas. Brussels & Rome: Institut Historique Belge de Rome, 267–86.
- Fernández-Götz, M. & I. Ralston, 2017. The complexity and fragility of Early Iron Age urbanism in West-Central temperate Europe. *Journal of World Prehistory* 30(3), 259–79. doi:10.1007/s10963-017-9108-5
- Fernández-Götz, M., H. Wendling & K. Winger (eds.), 2014. *Paths to Complexity: Centralisation and Urbanisation in Iron Age Europe*. Oxford: Oxbow Books.
- Fichtl, S., 2005. *La ville celtique. Les oppida de 150 av. J.-C. à 15 ap. J.-C.* Paris: Errance.
- Frankenstein, S. & M.J. Rowlands, 1978. The internal structure and regional context of Early Iron Age society in south-western Germany. *Bulletin of the Institute of Archaeology* 15, 73–112.
- Garcia, D. (ed.), 2013. *L'habitat en Europe celtique et en Méditerranée préclassique: Domaines urbains*. Arles: Errance.
- Gassmann, G. & G. Wieland, 2015. Early Celtic iron production at Neuenbürg in the northern Black Forest (southern Germany), in *Persistent Economic Ways of Living. Production, Distribution, and Consumption in Late Prehistory and Early History*, eds. A. Danielisova & M. Fernández-Götz. Budapest: Archaeolingua, 91–9.
- Gersbach, E., 1995. *Baubefunde der Perioden IVc-IVa der Heuneburg*. (Heuneburgstudien 9. Römisch-Germanische Forschungen 53.) Mainz: Philipp von Zabern.
- Gersbach, E., 1996. *Baubefunde der Perioden IIIb-Ia der Heuneburg*. (Heuneburgstudien 10. Römisch-Germanische Forschungen 56.) Mainz: Verlag Philipp von Zabern.
- Gleba, M., 2008. *Textile Production in Pre-Roman Italy*. (Ancient Textiles Series Vol. 4.) Oxford: Oxbow Books.
- Gleba, M., 2012. Italy: Iron Age, in *Textiles and Textile Production in Europe from Prehistory to AD 400*, eds. M. Gleba & U. Mannering. (Ancient Textiles Series Vol. 11.) Oxford: Oxbow Books, 215–41.
- Gleba, M., 2014. Wrapped up for safe keeping: 'Wrapping' customs in Early Iron Age Europe, in *Wrapping and Unwrapping Material Culture: Archaeological and Anthropological Perspectives*, eds. S. Harris & L. Douny. Walnut Creek (CA): Left Coast Press, 135–46.
- Gleba, M., 2017. Tracing textile cultures of Italy and Greece 1000–400 BCE. *Antiquity* 91(359), 1205–22. doi:10.15184/aqy.2017.144
- Gosden, C., 1985. Gifts and kin in Early Iron Age Europe. *Man* 20, 475–93.

- Grömer, K., 2015. Bekleiden – bedecken – verhüllen. Kontextualisierung und Theoriebildung zu eisenzeitlichen Grabtextilien, in *Interpretierte Eisenzeiten. Fallstudien, Methoden, Theorie. Tagungsbeiträge der 6. Linzer Gespräche zur interpretativen Eisenzeitarchäologie 2014*, eds. R. Karl & J. Leskovar. Linz: Studien zur Kulturgeschichte von Oberösterreich 42, 89–103.
- Grömer, K., 2016. *The Art of Prehistoric Textile Making – The Development of Craft Traditions and Clothing in Central Europe*. Vienna: Verlag des Naturhistorischen Museums Wien.
- Grömer, K., A. Kern, H. Reschreiter & H. Rösel-Mautendorfer (eds.), 2013. *Textiles from Hallstatt: Woven Culture from Bronze and Iron Age Salt Mines. Textilien aus Hallstatt. Gewebte Kultur aus dem bronze- und eisenzeitlichen Salzbergwerk*. Budapest: Archaeolingua.
- Harris, S., 2017. From value to desirability: the allure of worldly things. *World Archaeology* 49(5), 681–99. doi:10.1080/00438243.2017.1413416
- Harris, S. & L. Douny (eds.), 2014. *Wrapping and Unwrapping Material Culture: Archaeological and Anthropological Perspectives*. Walnut Creek (CA): Left Coast Press.
- Herrmann, F.-R., 2005. Glauberg – Olympia des Nordens oder unvollendete Stadtgründung? in *Frühkeltische Fürstensitze. Älteste Städte und Herrschaftszentren nördlich der Alpen?*, eds. J. Biel & D. Krausse. Esslingen: Archäologische Informationen aus Baden-Württemberg 51, 18–27.
- Hofmann-de Keijzer, R., 2016. Dyeing, in *The Art of Prehistoric Textile Making – The Development of Craft Traditions and Clothing in Central Europe*, ed. K. Grömer. Vienna: Verlag des Naturhistorischen Museums Wien, 140–69.
- Hundt, H.-J., 1962. Die Textilreste aus dem Hohmichele, in *Der Hohmichele. Ein Fürstengrabhügel der späten Hallstattzeit bei der Heuneburg*, by G. Riek. Berlin: Römisch-Germanische Forschungen 25, 199–214.
- Kania, K., 2013. The Spinning Experiment: influences on yarn in spinning with a hand-spindle, in *Ancient Textiles, Modern Science. Proceedings of the First and Second European Textile Forum 2009 and 2010*, ed. H. Hopkins. Oxford and Oakville: Oxbow Books, 11–29.
- Karl, R., 2015. Labour procurement in pre-monetary Europe, in *Persistent Economic Ways of Living. Production, Distribution, and Consumption in Late Prehistory and Early History*, eds. A. Danielisova & M. Fernández-Götz. Budapest: Archaeolingua, 21–36.
- Kimmig, W., 1969. Zum Problem späthallstattischer Adelssitze, in *Siedlung, Burg und Stadt. Studien zu ihren Anfängen*, eds. K.-H. Otto & J. Herrmann. Berlin: Deutsche Akademie der Wissenschaften zu Berlin, 95–113.
- Kimmig, W., 1983. Die griechische Kolonisation im westlichen Mittelmeergebiet und ihre Wirkung auf die Landschaften des westlichen Mitteleuropa. *Jahrbuch des Römisch-Germanischen Zentralmuseums* 30, 5–78.
- Krausse, D., 2006. Prunkgräber der nordwestalpinen Späthallstattkultur. Neue Fragestellungen und Untersuchungen zu ihrer sozialhistorischen Deutung, in *Herrschaft – Tod – Bestattung. Zu den vor- und frühgeschichtlichen Prunkgräbern als archäologisch-historische Quelle*, eds. C. von Carnap-Bornheim, D. Krausse & A. Wesse. Bonn: Habelt, 61–80.
- Krausse, D. (ed.), 2008. *Frühe Zentralisierungs- und Urbanisierungsprozesse. Zur Genese und Entwicklung frühkeltischer Fürstensitze und ihres territorialen Umlandes*. (Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 101.) Stuttgart: Konrad Theiss Verlag.
- Krausse, D. (ed.), 2010. *‘Fürstensitz’ und Zentralorte der frühen Kelten*. (Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 120.) Stuttgart: Konrad Theiss Verlag.
- Krausse, D., N. Ebinger-Rist, S. Million, A. Billamboz, J. Wahl & E. Stephan, 2017. The ‘Keltenblock’ project: discovery and excavation of a rich Hallstatt grave at the Heuneburg, Germany. *Antiquity* 91(355), 108–23. doi:10.15184/aqy.2016.228
- Krausse, D., M. Fernández-Götz, L. Hansen & I. Kretschmer, 2016. *The Heuneburg and the Early Iron Age Princely Seats: First Towns North of the Alps*. Budapest: Archaeolingua.
- Krausse, D., M. Fernández-Götz, A. Gutekunst & L. Hansen, 2019. Size matters – A reevaluation of the Heuneburg demography. *Germania* 97, 179–89.
- Kümmel, C., 2009. *Ur- und frühgeschichtlicher Grabraub. Archäologische Interpretation und kulturanthropologische Erklärung*. (Tübinger Schriften zur Ur- und Frühgeschichtlichen Archäologie 9.) Münster: Waxmann.
- Kurz, G., 2008. Ein Stadttor und Siedlungen bei der Heuneburg (Gemeinde Herbertingen-Hundersingen, Kreis Sigmaringen). Zu den Grabungen in der Vorburg von 2000 bis 2006, in *Frühe Zentralisierungs- und Urbanisierungsprozesse. Zur Genese und Entwicklung frühkeltischer Fürstensitze und ihres territorialen Umlandes*, ed. D. Krausse. (Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 101.) Stuttgart: Konrad Theiss Verlag, 185–208.
- Kurz, S., 2010a. Zum Nachweis von Handwerk auf der Heuneburg, in *‘Fürstensitze’ und Zentralorte der frühen Kelten*, ed. D. Krausse. Teil I. (Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 120/1.) Stuttgart: Konrad Theiss Verlag, 34–40.
- Kurz, S., 2010b. Zur Genese und Entwicklung der Heuneburg in der späten Hallstattzeit, in *‘Fürstensitze’ und Zentralorte der frühen Kelten*, ed. D. Krausse. Teil I. (Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 120/1.) Stuttgart: Konrad Theiss, 239–56.
- Metzner-Nebelsick, C., 2009. Wagen- und Prunkbestattungen von Frauen der Hallstatt- und frühen Latènezeit in Europa, in *Alpen, Kult und Eisenzeit. Festschrift für Amei Lang*, eds. J. M. Bagley, C. Eggli, D. Neumann & M. Schefzik. Rahden/Westf.: Verlag Marie Leidorf, 237–70.
- Milcent, P.-Y., 2003. Le contexte historique, in *La tombe princière de Vix*, ed. C. Rolley Paris: Picard, 327–66.
- Milcent, P.-Y. (ed.), 2007. *Bourges-Avaricum: un centre proto-urbain celtique du Ve s. av. J.-C.* Bourges: Bituriga.
- Osborne, R. & B. Cunliffe (eds.), 2005. *Mediterranean Urbanization 800–600 bc*. Oxford: Oxford University Press.
- Ralston, I., 2010. Fragile states in mid-first millennium B.C. Temperate Western Europe? The view from Bourges. *Social Evolution & History* 9(2), 135–59.

- Rast-Eicher, A. & L. Bender Jørgensen, 2013. Sheep wool in Bronze Age and Iron Age Europe. *Journal of Archaeological Science* 40, 1224–41. doi:10.1016/j.jas.2012.09.030
- Sacchetti, F., 2016. Transport amphorae in the West Hallstatt zone: reassessing socio-economic dynamics and long-distance Mediterranean exchange in western Central Europe in the Early Iron Age. *Oxford Journal of Archaeology* 35(3), 247–65. doi:10.1111/ojoa.12088
- Smith, M.E., 2016. How can archaeologists identify early cities? Definitions, types, and attributes, in *Eurasia at the Dawn of History: Urbanization and Social Change*, eds. M. Fernández-Götz & D. Krause. New York (NY): Cambridge University Press, 153–68.
- Stauffer, A., 2012. Case study: the textiles from Verucchio, Italy, in *Textiles and Textile Production in Europe from Prehistory to AD 400*, eds. M. Gleba & U. Mannering. (Ancient Textiles Series Vol. 11.) Oxford: Oxbow Books, 242–53.
- Stegmaier, G., 2016. The Heuneburg – a centre of pottery production, in *The Heuneburg and the Early Iron Age Princely Seats: First Towns North of the Alps*, eds. D. Krause, M. Fernández-Götz, L. Hansen & I. Kretschmer. Budapest: Archaeolingua, 88–90.
- Stephan, E., 2016. Faunal remains at the Heuneburg and its rural environs, in *The Heuneburg and the Early Iron Age Princely Seats: First Towns North of the Alps*, eds. D. Krause, M. Fernández-Götz, L. Hansen & I. Kretschmer. Budapest: Archaeolingua, 68–70.
- Stoddart, S. (ed.), 2017. *Delicate Urbanism in Context: Settlement Nucleation in pre-Roman Germany*. Cambridge: McDonald Institute Monographs.
- Trigger, B.G., 2007. *Understanding Early Civilizations*. Cambridge: Cambridge University Press.
- Verger, S., 2008. Enterré dans le souvenir de la maison. A propos du tumulus 4 de la Heuneburg dans la haute vallée du Danube, in *Sepolti tra i vivi. Evidenza ed interpretazione di contesti funerari in abitato*, eds. G. Bartoloni & M.G. Benedettini. Rome: Scienze dell'Antichità 14, 919–58.
- Wagner-Hasel, B., 2006. Gift exchange: modern theories and ancient attitudes, in *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*, eds. S. Deger-Jalkotzy & I.S. Lemos. Edinburgh: Edinburgh University Press, 257–69.
- Wells, P.S., 1980. *Culture Contact and Culture Change: Early Iron Age Central Europe and the Mediterranean World*. Cambridge: Cambridge University Press.
- Zamboni, L., M. Fernández-Götz & C. Metzner-Nebelsick (eds.), 2020. *Crossing the Alps: Early Urbanism between Northern Italy and Central Europe (900–400 BC)*. Leiden: Sidestone Press.

Making cities

Large and complex settlements appeared across the north Mediterranean during the period 1000–500 BC, from the Aegean basin to Iberia, as well as north of the Alps. The region also became considerably more interconnected. Urban life and networks fostered new consumption practices, requiring different economic and social structures to sustain them. This book considers the emergence of cities in Mediterranean Europe, with a focus on the economy. What was distinctive about urban lifeways across the Mediterranean? How did different economic activities interact, and how did they transform power hierarchies? How was urbanism sustained by economic structures, social relations and mobility? The authors bring to the debate recently excavated sites and regions that may be unfamiliar to wider (especially Anglophone) scholarship, alongside fresh reappraisals of well-known cities. The variety of urban life, economy and local dynamics prompts us to reconsider ancient urbanism through a comparative perspective.

Editors:

Margarita Gleba is a Professor at the University of Padua and Honorary Senior Lecturer at University College London.

Beatriz Marín-Aguilera is a Renfrew Fellow at the McDonald Institute for Archaeological Research, University of Cambridge.

Bela Dimova is a A. G. Leventis Fellow in Hellenic Studies at the British School at Athens.

*Published by the McDonald Institute for Archaeological Research,
University of Cambridge, Downing Street, Cambridge, CB2 3ER, UK.*

The McDonald Institute for Archaeological Research exists to further research by Cambridge archaeologists and their collaborators into all aspects of the human past, across time and space. It supports archaeological fieldwork, archaeological science, material culture studies, and archaeological theory in an interdisciplinary framework. The Institute is committed to supporting new perspectives and ground-breaking research in archaeology and publishes peer-reviewed books of the highest quality across a range of subjects in the form of fieldwork monographs and thematic edited volumes.

Cover artwork by Kelvin Wilson.

Cover design by Dora Kemp and Ben Plumridge.

ISBN: 978-1-913344-06-1



UNIVERSITY OF
CAMBRIDGE

ISBN 978-1-913344-06-1



9 781913 344061