

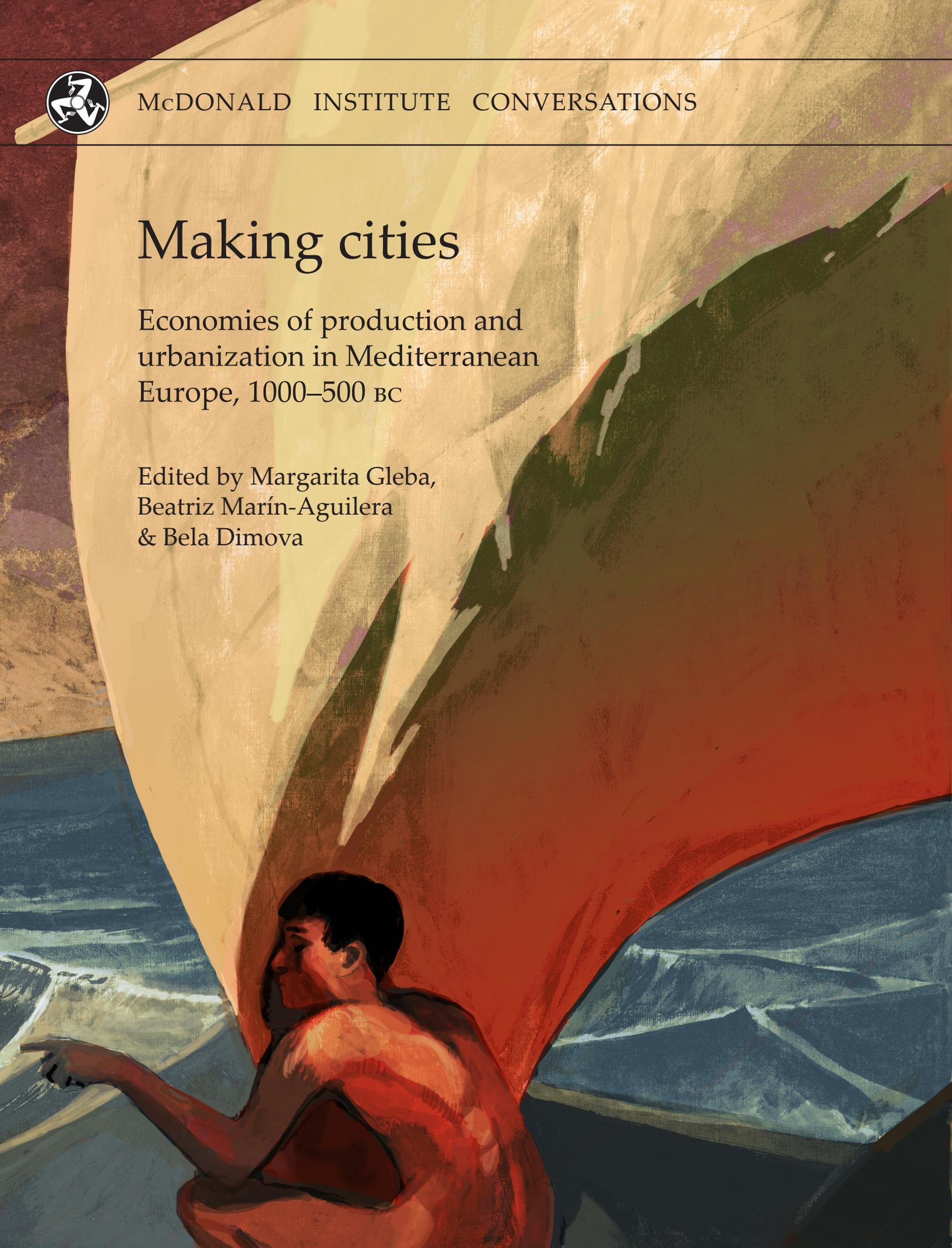


McDONALD INSTITUTE CONVERSATIONS

# Making cities

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

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



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Beatriz Marín-Aguilera & Bela Dimova

*with contributions from*

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# 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
<b>Part I Eastern Mediterranean</b>	
<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

<b>Part II</b>	<b>Central Mediterranean</b>	
<i>Chapter 9</i>	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
<i>Chapter 10</i>	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
<i>Chapter 11</i>	Resource and ritual: manufacturing and production at Poggio Civitate	147
	ANTHONY TUCK	
<i>Chapter 12</i>	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
<i>Chapter 13</i>	Tarquinius: 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
<i>Chapter 14</i>	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
<b>Part III</b>	<b>Western Mediterranean</b>	
<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 GAILLEDRAT	
	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
<b>Part IV</b>	<b>Conclusion</b>	
<i>Chapter 29</i>	Craft and the urban community: industriousness and socio-economic development	447
	CHRISTOPHER SMITH	

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## 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 Estinçells.</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



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## Chapter 2

# Argilos: the booming economy of a silent city

Jacques Perreault & Zisis Bonias

The lower Strymon region was in antiquity an area extremely rich in gold and silver mines (Zannis 2012, 184ff; Nerantzis 2015). Many ancient texts refer to the mineral wealth of this region, which was the envy of all, and this is attested by the more than 50 mine galleries found on Mount Pangaion, many of them going back at least to the Archaic period. It is thus not surprising that Thracians, Greeks, Macedonians and Persians all tried to profit from the mining activities and control the access to these mineral resources.

Since 1992, a team of Greek and Canadian archaeologists has been excavating ancient Argilos (Fig. 2.1), one of the two earliest Greek colonial settlements in the lower Strymon region.<sup>1</sup> Argilos is the northernmost of the four colonies founded by inhabitants of the Cycladic island of Andros in the mid-seventh century BC. The others, Sane, Akanthos and Stagira, were situated along the eastern coast of the Chalkidiki Peninsula (Tiverios 2008, 52–66; Perreault & Bonias 2010, 225–33). Before our excavations, very little was known about the history of the city, as there is very little mention of it in literary sources. When Argilos is mentioned, it is never for the city itself, but in relation to historical events that took place in the area, such as the Persian presence or the Peloponnesian War and its implications for Amphipolis, the Athenian colony founded in 437 BC just a few kilometres east of Argilos (Isaac 1986, 36–45; Liampi 2005, 83–7). At first, this may seem surprising, especially in regard to the economic wealth of the area. But it may also be due to the fact that Argilos was a short-lived city. It was conquered by Phillip II in 357 BC, and then rapidly abandoned, the population probably forcefully displaced to Amphipolis.

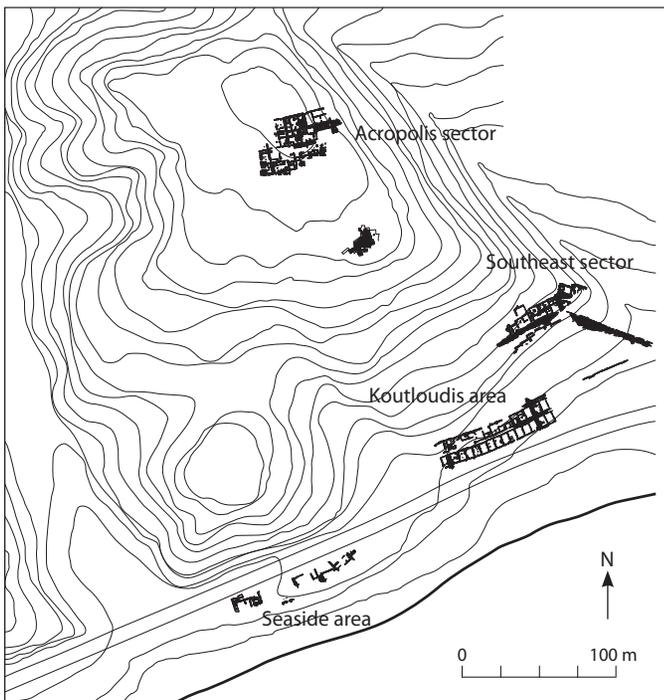
The colony was established on a small hill along the north Aegean coast. The site was already occupied by Thracians when the Greeks arrived, but there is no indication that the locals were expelled. On the contrary, it seems that both communities cohabited for a

few generations. This is shown by the abundance of Thracian material before and during the early years of Greek occupation, down to c. 550 BC (Perreault & Bonias 2010). This cohabitation was most surely beneficial to the Greeks, as the territory of the Bisaltians, on which the colony of Argilos was founded, was also renowned for its sources of gold and silver (Isaac 1986, 29–30; Zannis 2012, 211–12). In addition to this, as noted by Strabo (VII fr. 34), both sides of the Strymon River, which is in the vicinity of the colony, were also rich in these minerals.

From the first years of excavation, we noticed a rapid economic development and evident prosperity of the city (Fig. 2.2). If, at first, the settlers had occupied the coastal area and the *acropolis*, from the second quarter of the sixth century onwards, many residential and public buildings were erected on the southern slope of the hill and we see the implementation of a veritable urban plan. Large streets link the different sectors of the city and a mudbrick fortification wall encloses it (Ouellet 2014). During the third quarter of the sixth century, Argilos established a small colony at the eastern limit of its territory, on a hilltop overlooking the Strymon River, Kerdylion, yet another indication of its growing prosperity (Th. V 6.3–5; Koukouli-Chryssanthaki 1997). This strategic position allowed the Argilians to keep an eye on activities along the river. Excavators have also found several indicators of economic activity covering all phases of the city's short history. First and foremost, the presence of metalworking and other industrial activities for which various furnaces have been found. The earliest one was uncovered in the coastal area and dates to the second quarter of the sixth century BC (Perreault & Bonias 2007, 81–3). The horseshoe-shaped furnace, measuring 50 × 38 cm, has a small cubic platform made of baked clay placed in its centre. Around the furnace the remains of three charcoal pits were found. On the southeast slope of



**Figure 2.1** (above). Argilos, aerial view.



**Figure 2.2** (left). Argilos, general plan (F. Gignac, J. Perreault, K. Zambas and X. Samaras, 2018).

the hill, where several impressive buildings border a large street that must have led from the port to the *acropolis*, excavators uncovered a house dating to the sixth century BC (Perreault 2011, 40–2). It comprised, in its first phase, two rooms, the larger of which had a small hearth in one of the corners and served as living quarters. The second room, much smaller, roughly 5 × 5 m, had a small furnace in the centre with two or three channels linked to it (Perreault & Bonias 2015, 268–70, pl. 31,1–2). The furnace’s circular floor was originally lined with small stones placed vertically. The furnace may have been used for smelting or smithing, and quantities of slag were found around the structure. It was clearly in use during the first half of the fourth century BC, which corresponds to the latest phase of occupation of this dwelling, but the objects found in its vicinity indicate that it was already in use during the fifth century BC. In the neighbouring building E, another small metallurgical furnace was uncovered (Fig. 2.3). It is of the same type as the one just described and was in use during the second half of the sixth century BC. At least two other kilns linked to metallurgical activities have been found in other areas of the city.

The presence of metal workshops in domestic contexts is not unusual (Sanidas 2013, 189–91).<sup>2</sup> Examples are known from other sites, where one generally

distinguishes two types of installations, temporary or permanent (Sanidas 2016, 20–1). The furnace uncovered in the seaside area is difficult to characterize because the excavated area around it is too small. On the other hand, the two furnaces found in buildings in the southeast sector clearly fit into these categories. The installation in the front room of the large building E is undoubtedly a temporary installation used during its construction, as it was covered by the earliest floor. It should be noted that building E is quite unique: it is very well built when compared to the surrounding buildings and its internal tripartite division, consisting of a front elongated room opening on two smaller rectangular ones, is related to sixth-century BC buildings of similar shape, often associated with public or religious dining halls (Perreault & Bonias 2011, 42–6). The furnace in the room next to house A has a more permanent look to it. The small pit oven is located near the centre of the room and a stone base used to support a large *pithos* was built at the southeast corner. The room is too small to have served for more than industrial activity.

Other types of objects testify to a variety of economic activities such as fishing, farming, weaving and the production of locally made pottery. Argilos also started minting its own coinage from the last quarter of the sixth century BC, another testimony to its



Figure 2.3. Small furnace in building E.

economic development and its access to silver sources (Liampi 2005). However, until recently, archaeological evidence of economic activity seemed to us to be a bit scanty when compared to the tremendous architectural development of the city during the sixth and fifth centuries BC.

Our knowledge of the economic life of the city experienced a major turning point with the opening, in 2012, of a new area of excavation, situated between the coastal strip and the southeastern slope of the hill. Here we uncovered two very large buildings (Fig. 2.4). Building L is composed of a total of 12 rooms, the dimensions of which may vary slightly from one room to another but are on average 4.50 x 7.50 m, the total length of the complex being a little more than 60 m. The back wall of this building also serves as a retaining wall for a terrace on which stands the second building, H. This is due to the fact that both buildings are constructed parallel to the natural slope of the hill. On the western side, the buildings are bordered by an open channel running along the external wall and used to collect rainwater from the rooftops. To the east, the buildings are bounded by a 1.70 m wide Northwest-Southeast street, which also separates L and H from two other buildings, P and Q, built further east (Fig. 2.5). A slightly narrower passage also runs along the back of complex L and provides access to

the rooms of building H. We quickly realized, after excavating the first five rooms of building L, that these had a commercial function. This is clearly apparent in room L4, where a press-bed of an olive press was found (Fig. 2.6). In fact, since the wall bordering the building on its western side continues southward, we had concluded that these rooms most likely belonged to a *stoa*, composed of shops in the back and a covered walkway in the front. But while excavating the passage in front of the entrance of a few of the rooms, the discovery of roof tiles in front of the entrances led us to question our interpretation of the shape of the building. Indeed, these tiles indicate the presence of porches located above the doors to protect the entrance of the rooms from rain. These rooms could therefore no longer be associated with a *stoa*. This was additionally confirmed when we finally reached the eastern limit of the building, where the external wall does not continue southward as the western one does. In fact, the reason why the western wall extends southward is probably simply to avoid the possibility that the water flowing in the gutter might flood the area in front of the shop entrances.

Additional excavations around building L have now shown that this commercial building is part of a much larger complex of shops, workshops and housing units that may have marked the northern limit of the



**Figure 2.4.** View of building L.

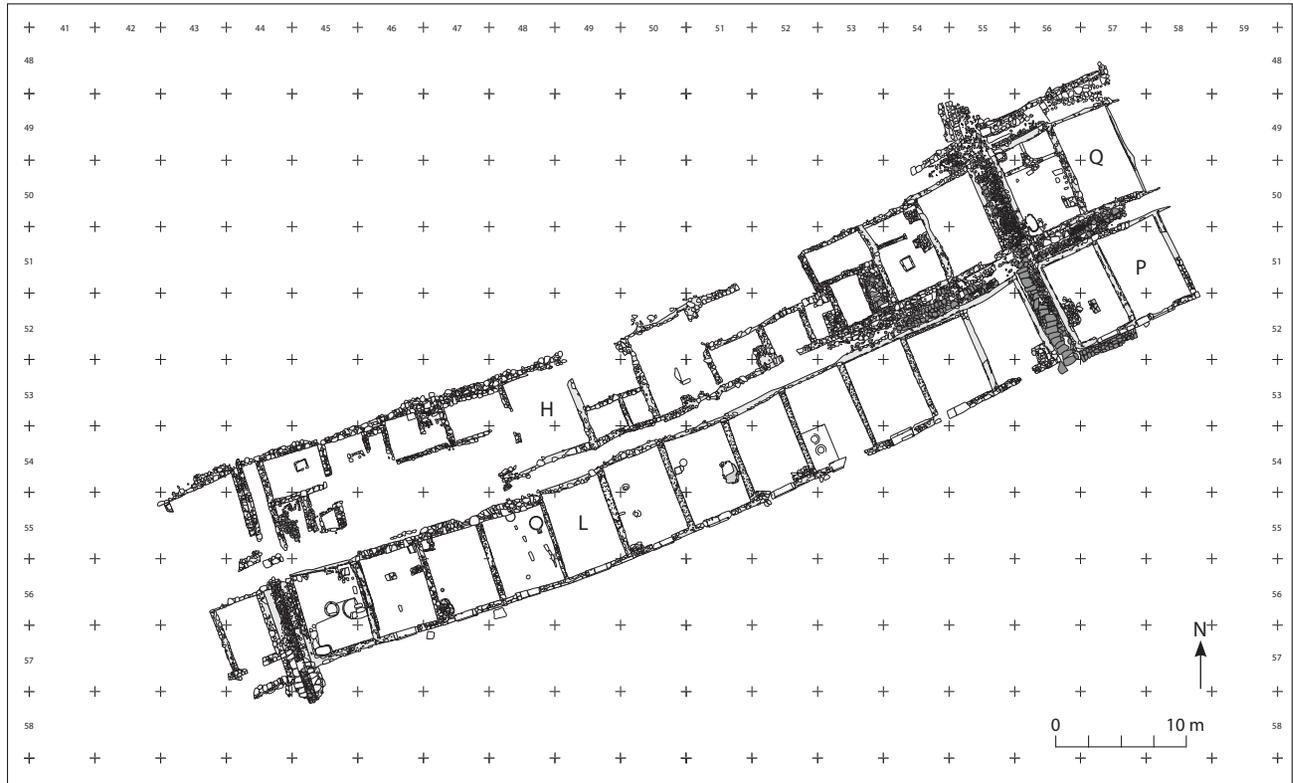


Figure 2.5. Plan of Koutloudis area with buildings H, L, P, and Q (F. Gignac, J. Perreault and X. Samaras, 2018).



Figure 2.6. Building L, press-bed in room 4.

*agora* of the city. Buildings H and Q are of the same length as building L, and so probably is building P. The two western-most rooms of building P have been partly excavated. They are built in the same way as those of neighbouring building L, and it is probable that they shared a common commercial function. Building H is unfortunately not as well preserved as L. It was also divided in 12 rooms, but here the rooms have internal divisions, usually one small wall which separates each room in two distinct spaces. A first analysis of the finds seems to indicate that these units were used both as workshops and living spaces. The building east of H, Q, is in a better state of preservation. We have uncovered the total length of its back wall and excavated the first room to the west (Fig. 2.7). It is in fact a small house, consisting of a ground floor with a large room in the front, comprising a bathtub

and cooking area, and two smaller ones in the back. The discovery in the front room of the lower part of a staircase is proof of the existence of an upper floor.

If the entire Building Q were composed of individual houses, we would have here a typical example of Ionic city planning. One should also note the analogy between this elongated building and a similar housing unit at the site of Vrachos on the island of Euboea (Fachard 2012, 300–1; Sapouna Sakellarakis *et al.* 2002; Tritle 1992). The Euboeans were a dominant force in the colonization of northern Greece, mainly in the areas of the Thermaic Gulf and the Chalkidiki, but they are also said to have played a role in the foundation of the Andrian colonies (Tiverios 2008, 52–3). At Vrachos, we find a long complex consisting of four buildings of equal size, placed side by side. Each consists of five rooms, for a total of 20. According to the excavators,



**Figure 2.7.** *Building Q, room 1.*

Vrachos was a fortress built on the top of a hill and the four aligned buildings, which the authors date from the end of the Archaic period, were used to house the soldiers. This interpretation has been questioned, other scholars considering the Vrachos site as an urban, not a military, establishment (Tritle 1992, 142–4). In this case, the buildings would rather have served as simple dwellings. The presence of hearths in the centres of some of the rooms exclude the possibility of these being shops or workshops.

So here we have four buildings, all probably of the same length and equally divided in 12 rooms, but with different functions. The two southern ones, facing the sea, L and P, were commercial establishments composed of individual shops. The two buildings in the back of this front row seem to be workshops and/or living quarters.

Building L has been more extensively excavated than the other three, and although there remains a lot of work to be done, the numerous finds uncovered shed light on the construction and use of the building. As regards the chronology, it is now clear that all of the shops were occupied during the fifth and first half of the fourth centuries BC. But the construction date may in fact be earlier. Certain characteristics in the masonry of the back walls of the rooms resemble those of sixth-century public and private structures found elsewhere on the site. More importantly, in two rooms, L6 and L9, we have uncovered an occupation layer dating to the second half of the sixth century BC. In clearing the fifth century floor in room L6, excavators noticed the presence of small sand pockets. It turned out that this floor had been laid over a 60–80 cm thick sand fill. Under this fill lay a floor dating back to the sixth century BC, which contained yet another small furnace probably linked to metallurgical activities. In 2018, a sixth-century BC occupation floor containing pits for large, *pithos*-type storage jars was uncovered in room L9. We do not yet know if the entire building was constructed during this period, but it is clear that at least some of the rooms were. The chronological sequence of occupation corresponds for now to what we see elsewhere on the southern slope of the hill: intense building activity in the second half of the sixth century BC, destruction, and reconstruction, often on a larger scale, in or close to the second quarter of the fifth century BC, followed by another destruction during the last quarter of the fifth century BC, which may be in connection with the aftermath of the Peloponnesian War reconstruction, this time on a lesser scale, and abandonment shortly after 357 BC.<sup>3</sup>

We are now certain that all rooms of building L, except for room L1, had a commercial function during the two most recent occupational phases, those of the

fifth and fourth centuries BC. The discovery of close to 400 coins in these shops supports this interpretation. The number in some of the rooms is quite surprising. In room L7, 73 coins have been found; 58 coins were uncovered in L9; another 52 in room L5. And since we have not finished excavating most of the rooms, these numbers will probably increase. In addition to these coins, some of the rooms contained one or more small portable altars, rectangular in shape. They all have a small circular cavity in the centre of the top, which recall certain small altars found at Olynthos (Robinson 1930, fig. 222), Pella,<sup>4</sup> and on Delos (Chamonard 1924, 104; Deonna 1938, 384, fig. 449). This cavity was probably used for incense burning. In the case of room L1, the commercial function is clear for the fifth century BC occupation, but during the first half of the fourth century BC, it was used as living quarters. The room was separated in two, the front part containing a bathtub, and as such used as a living area, while the back part looks more like a working and storage area, as it contains an Olynthian-type millstone placed on a support in one of the corners, and a small hearth made from three large pieces of *pithoi* rims. There is also no front (southern) entrance to L1, so it had to be accessed from L2 during this last phase of occupation.

As we are still excavating this building, it is difficult to ascertain the products manufactured and/or sold in each of the shops. The press-bed found in Room L4 probably testifies to the production of olive oil. Our late colleague Joanne Cutler did considerable work on the large number (38) of loom weights found in room L7. Her preliminary results indicate that they were used together with extremely fine thread, probably to make weft-faced tabby fabrics.<sup>5</sup> This same room contained a small rectangular feature built against its western wall. It is coated with white stucco, and two circular flat stones made of gneiss were found at its base.

In room L8, we now know that objects made of bone and antler were produced. Indeed, many fragments of antler and worked bone were discovered in the back of the room and it has been ascertained that these were all worked using the same techniques, and that these techniques differ from those used on worked bone found elsewhere on the site.<sup>6</sup> In the eastern most room of the building, L12, we have uncovered remains of a large oven in the southeast corner. Beneath a pile of stones, excavators cleared a large flat base consisting of fragments of flat tiles, slabs of gneiss and large bricks of baked clay. The adjoining room, L11, also has its particularities. It is the only one which contained a low bench, about 30 cm wide, that runs along the back wall of the room. It is still unclear if this structure served as a support for objects, as an actual bench or as reinforcement for the back wall. At the front of

the room, to the right of the entrance, are remains of *amphorae*, circular clay supports for *amphorae*, and various lids (Fig. 2.8), as well as a few large pieces of roof tile and small stone blocks, indicating the presence of a permanent installation that allowed for the easy placement of *amphorae* and access to their contents. About 10 *amphorae* were found in the room and at least one of these contained olives. In another room, L5, the layout and objects found indicate yet another type of activity. Here, fragments belonging to three millstones of the Olynthian type were discovered, as well as a miniature one made of marble. Furthermore, the owners had fixed a row of large rectangular gneiss slabs on the face of the western wall of the room. Room L3 contained a bathtub in the southwest corner, which had been repaired in several places as indicated by the numerous lead clamps. With its lead stopper still in place on the drain hole, its purpose must have been different than that for which these objects are generally employed. A second bathtub, in the northwest corner of the room, was reused in the construction of a wall of a small storage space.

The variety of objects discovered in the shops demonstrates a great diversity, each shop having its own speciality. This contrasts with what has been found later, in the *agora* of Pella for example, where shops grouped in one area produced and/or sold the same category of products. Of course, these shops also changed hands over time, and the products that were sold probably changed also. Those enumerated here correspond to the latest phase of occupation.

Building L has certain original architectural features that should be noted: first, all the adjoining walls were constructed in the same way (Fig. 2.9). The lower part of the wall consisted of multiple rows of small squared stones, the upper part of mudbrick. At the rear, where the walls interlock at the back wall, the height of the stone portion is greater with the addition of a few additional rows over a length of about 30 cm. The entire outer surface of these two wall sections, the lower part in stone and the higher part in clay, were then coated with an additional layer of clay. This technique is still apparent on some of the adjoining walls.<sup>7</sup>



Figure 2.8. Building L, room 11, crushed amphorae.



**Figure 2.9.** *Dividing wall between L7–L8 with remains of clay over the lower courses of stone.*

Second, there is no evidence to suggest that the shops had an upper storey. At the most, we can imagine the presence of a mezzanine for storage at the back of the rooms. In L6, a piece of a millstone that was placed vertically may have been used to secure the feet of a ladder allowing access to such a structure. The absence of a second floor is interesting, particularly in the case of room L7, since it means that the warp-weighted loom would have been exposed to the public.<sup>8</sup>

Third, all the rooms, except for the first, L1, opened onto the street, and gneiss, poros or marble thresholds were found in all shops except two, from where they seem to have been robbed in antiquity, as shown by the openings in the front wall. These thresholds, differing slightly in shape and dimensions, were most likely reused. They have, however, a common characteristic: the position of the pivot holes indicates that the doors opened outwards and not inwards, as is customary. This arrangement is an interesting one since it avoids having to free the interior space on either side of the threshold. But also, as is still visible in many shops in the old areas of Athens, Istanbul and many Near Eastern cities, often the single or double leafed doors are not pushed against the outer wall, they remain open so they are perpendicular to the wall, thus creating an additional exterior space for

displaying products. A few of the rooms have pivot holes on both sides.

Fourth, who owned these shops? The size of the building, its commercial character, its position facing the sea and therefore close to port facilities, all suggest a public building, constructed by the city. However, certain architectural features contradict this interpretation. The façades of the shops are all different (Fig. 2.10). The stones used for the construction of the lower courses vary from one shop to the other. In addition, by looking closely at the back walls of the rooms, one has the impression that here, too, different masons were at work from one room to another. It may be that the city decided to grant a space for the construction of a commercial building and determined the size of each shop, yet the construction was the responsibility of the owners, who employed their own masons and procured for themselves the stones used in the construction of each shop façade. Building L is not the only known shop complex with this architectural particularity. In Athens, the Classical ‘commercial building’, of which up to seven contiguous rooms opening onto the street and identified as shops have been excavated, was also built using various types of material. But here, excavators offer a different explanation, suggesting that the building may have been built ‘piecemeal, room by room,



**Figure 2.10.** *Building L, facades of L2–L3.*

rather than according to a single, unified plan' (Camp 2003, 249). The Athenian building is not as regular as building L, the rooms at the southern end are wider and deeper than the northern ones, the cross-walls between the rooms are not parallel, shops differ in size and shape (Rotroff 2013, 103, fig. 22). So, it may be that the city authorized the construction of rows of shops in this particular area of the town, without imposing specific standards for the size of each one, the result being a more disorganized complex. This, of course, differs from what we have at Argilos.

With regard to its early construction date, Building L is quite unique in Greece. The evidence of rows of shops or strip-malls is a common feature in the Hellenistic period, as shown for example by the streets lined with shops on Delos (Hellmann 2010, 283). Closer to Argilos, there is a strong resemblance between our building and the rows of small commercial shops in Thasos, along the street bordering the eastern side of the *agora* (Marc 2015, 339–43). But as on Delos, these buildings are later than those of Argilos, dating from

the first half of the third century BC. We can also compare our complex with the gigantic *agora* of Pella, with its rows of shops and workshops, grouped according to their specialties (food, perfumes, etc.), but which date to the fourth century BC. Examples going back to the sixth or fifth century BC are much rarer. On the Greek mainland, one must turn to Athens to find vestiges of buildings with commercial functions of the Classical period. Susan Rotroff has recently suggested that some of the buildings uncovered on and around the *Agora*, for which other functions had been originally proposed, may have served as shops (Rotroff 2009). These buildings are all characterized by a series of small rooms, mostly of identical size, arranged in rows or on either side of a street or small courtyard. None of these buildings pre-dates the Persian Wars and they are all smaller than the Argilos complex. In the Greek colonial world, there exist a few examples of interest for us. The site of Locri Epizefiri in south Italy, even though the architectural features are dated to the first half of the fourth century BC, offers an interesting

comparison (Bagnasco & Aimar 1992, 18; Bagnasco 2000, 28; Meirano 2012, 257–79). At Locri, facing the sea, there are two groupings, perhaps three, of shops built against the outer face of the city's fortification wall. The first group comprises eight rooms, the second 12. Unfortunately, the function of these spaces is still debated, certain scholars favouring a commercial function, while others preferring to see them as accommodation for sailors and visiting merchants. But there is another group of at least four rooms, considered as shops, built along a street more or less perpendicular to the fortification (Costamagna & Sabbione 1990, 212, area 3). More interesting are the Classical-period structures considered as rows of shops found at Morgantina on Sicily; although a bit later in date than the ones at Argilos, they clearly had a commercial function (Bell & Holloway 1988). Finally, the Archaic shops at Gela, again on Sicily, offer another example of this type of commercial architecture (Wilson 1987–1988, 129; 1995–1996, 98). They consist of a series of adjoining square rooms built of mudbrick and preserved in some cases to a height of 2 m.

In Argilos, we are therefore in the presence of one of the earliest examples in mainland Greece of what can be considered, without doubt, as a truly commercial building. It is part of a larger complex: Building P to the east is built exactly in the same manner, and both buildings may have marked the northern limit of the *agora* of the city. Unfortunately, we may never know this for sure, as the modern coastal road is built just a few metres in front of these shops.

Our initial astonishment at the absence of signs of major economic activity in agreement with a remarkable urbanistic development is thus resolved by the discovery of building L. The economic dynamism of the city in the sixth and fifth centuries is no longer in doubt. But this dynamism was most likely a regional phenomenon and must have involved other Greek, Macedonian or Thracian cities of the lower Strymon valley, which in turn could explain why ancient authors repeatedly mentioned the richness of the region without mentioning that of each individual city. Unfortunately, this economic boom was short-lived, as with the foundation of Amphipolis in 437 BC and its takeover of the main economic activities of the region, Argilos' access to the mineral resources of the Pangaion area was cut off. Building L remained active, but there is no clear evidence on the site of new building programs or urban development comparable to earlier periods. Economic activities continued during the first half of the fourth century BC in building L, but like many other cities of the lower Strymon valley, with the conquest of Philip II in 357 BC, Argilos was soon to be silenced.

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## Notes

- 1 Argilos was founded on the west side of the Strymon River. Another Greek colony, Eion, was founded, maybe a bit earlier than Argilos if we take into account the Greek pottery found on the site, on the east side of the river (Malamidou 2009). There are no literary sources regarding the foundation date of Eion or the provenance of its colonists (Zannis 2012, 231–2, 246–9).
- 2 Closer to Argilos, at Olynthos, Cahill 2002, 236–65; at Thasos, Grandjean 1999, 161–9; Burford 1972; Rotroff 2014, 39–40.
- 3 The latest occupation phases are very clearly illustrated in room L1 where the fourth century BC floor was built over a thick fill made up of debris from the destruction of the previous phase. Under this debris, excavators uncovered the fifth-century BC floor containing a large basin, at the bottom of which were a few complete vases.
- 4 Archaeological Museum of Pella, inv. n. 90.411, from the sanctuary of Darron.
- 5 Information sent to us after her preliminary analysis of this group of 38 loom weights.
- 6 The meticulous study of these bone and antler fragments were done by Angelos Gkotsinas, a zooarchaeology PhD student at the Université de Montréal and the Université de Montpellier.
- 7 Particularly for L4–L5. It is not clear if the upper clay part of the walls consisted of clay bricks or simply of different layers of clay, as is the case in other buildings on the site.
- 8 Recent studies suggest that textile work was carried out by people of different genders, according to the place where it was practised (Harlow & Nosch 2014, 10 and note 49).

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## 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.

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