

THE ARCHAEOLOGY OF SOUTH ASIA

This book offers a critical synthesis of the archaeology of South Asia from the Neolithic period (c. 6500 BCE), when domestication began, to the spread of Buddhism accompanying the Mauryan Emperor Asoka's reign (third century BCE). The authors examine the growth and character of the Indus civilisation, with its town planning, sophisticated drainage systems, vast cities and international trade. They also consider the strong cultural links between the Indus civilisation and the second, later period of South Asian urbanism which began in the first millennium BCE and developed through the early first millennium CE. In addition to comparing the evidence for emerging urban complexity, this book gives equal weight to interactions between rural and urban communities across South Asia and considers the critical roles played by rural areas in social and economic development. The authors explore how narratives of continuity and transformation have been formulated in analyses of South Asia's Prehistoric and Early Historic archaeological record.

Robin Coningham is UNESCO Chair in Archaeological Ethics and Practice in Cultural Heritage at Durham University. He has participated in more than twenty UNESCO missions and currently codirects UNESCO's excavations in Nepal at Tilaurakot and Lumbini, the birth-place of the Buddha. He has published eight books and more than eighty papers and chapters.

Ruth Young is Senior Lecturer in the School of Archaeology and Ancient History at the University of Leicester. She has published in journals such as *Antiquity*, *International Journal of Heritage Studies*, *International Journal of Historical Archaeology*, *Historical Archaeology* and *World Archaeology*. She is also writing a monograph on her work in northern Pakistan.



CAMBRIDGE WORLD ARCHAEOLOGY

SERIES EDITOR
NORMAN YOFFEE, University of Michigan

EDITORIAL BOARD
SUSAN ALCOCK, Brown University
TOM DILLEHAY, Vanderbilt University
TIM PAUKETAT, University of Illinois
STEPHEN SHENNAN, University College London
CARLA SINOPOLI, University of Michigan
DAVID WENGROW, University College London

The Cambridge World Archaeology series is addressed to students and professional archaeologists, and to academics in related disciplines. Most volumes present a survey of the archaeology of a region of the world, providing an up-to-date account of research and integrating recent findings with new concerns of interpretation. While the focus is on a specific region, broader cultural trends are discussed and the implications of regional findings for cross-cultural interpretations considered. The authors also bring anthropological and historical expertise to bear on archaeological problems and show how both new data and changing intellectual trends in archaeology shape inferences about the past. More recently, the series has expanded to include thematic volumes.

RECENT BOOKS IN THE SERIES

CLAUDIA SAGONA, The Archaeology of Malta FRANCES F. BERDAN, Aztec Archaeology and Ethnohistory PETER MAGEE, The Archaeology of Prehistoric Arabia којі міzобисні, The Archaeology of Japan MIKE SMITH, The Archaeology of Australia's Deserts A. BERNARD KNAPP, The Archaeology of Cyprus LI LIU AND XINGCAN CHEN, The Archaeology of China STEPHEN D. HOUSTON AND TAKESHI INOMATA, The Classic Maya PHILIP L. KOHL, The Making of Bronze Age Eurasia LAWRENCE BARHAM AND PETER MITCHELL, The First Africans ROBIN DENNELL, The Palaeolithic Settlement of Asia CHRISTOPHER POOL, Olmec Archaeology and Early Mesoamerica SAMUEL M. WILSON, The Archaeology of the Caribbean RICHARD BRADLEY, The Prehistory of Britain LUDMILA KORYAKOVA AND ANDREJ EPIMAKHOV, The Urals and Western Siberia in the Bronze and Iron Ages DAVID WENGROW, The Archaeology of Early Egypt PAUL RAINBIRD, The Archaeology of Micronesia PETER M. M. G. AKKERMANS AND GLENN M. SCHWARTZ, The Archaeology of Syria TIMOTHY INSOLL, The Archaeology of Islam in Sub-Saharan Africa



THE ARCHAEOLOGY OF SOUTH ASIA

From the Indus to Asoka, c. 6500 BCE-200 CE

ROBIN CONINGHAM

Durham University

RUTH YOUNG

University of Leicester







Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

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

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

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

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

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9780521609722

© Robin Coningham and Ruth Young 2015

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

First published 2015

First paperback edition 2023

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

Library of Congress Cataloging-in-Publication data

Coningham, Robin.

The archaeology of South Asia : from the Indus to Asoka, c. 6500 BCE–200 CE / Robin Coningham (Durham University), Ruth Young (University of Leicester).

pages cm. - (Cambridge world archaeology)

Includes bibliographical references and index.

ISBN 978-0-521-84697-4 (hardback)

South Asia – Antiquities.
 Antiquities, Prehistoric – South Asia.
 Archaeology and history – South Asia.
 Excavations (Archaeology) – South Asia.
 Cities and towns, Ancient – South Asia.

6. Indus civilization. 7. Indus River Valley – Antiquities. 8. Social archaeology – South Asia.

9. Social change – South Asia – History – To 1500. I. Young, Ruth, 1963 – II. Title.

DS338.C64 2015

934-dc23 2015016107

ISBN 978-0-521-84697-4 Hardback ISBN 978-0-521-60972-2 Paperback

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



CONTENTS

List of Illustrations, Timelines and Boxes

Aci	knowledgements	X1X
PA	RT I THE CONTEXT	
I	Introduction and Definitions	3
	Scope and Themes	3
	Chronological and Geographical Span	6
	Key Concepts and Their Archaeological Indicators	IO
	Differentiation and Social Inequality	II
	Urban Form	12
	Craft Specialisation	15
	Indo-Aryan/Indo-European	16
	Complexity	17
	Collapse and Transformation	18
	Nomenclature and Terminologies	20
	Chronologies in South Asia	23
	Traditions, Eras and Phases	25
	Dating Conventions in the Text	30
	Conclusions	30
2	Environment and Culture: South Asia's Environmental,	
	Linguistic and Religious Patterns	32
	Introduction	32
	Definitions of South Asia	33
	The Main Geographical Features of South Asia	35
	Mountains and Rivers: Barriers or Opportunities?	39
	Areas of Attraction and Areas of Relative Isolation	45
	Major Changes in the Environment of South Asia,	
	The Last 10,000 Years, and Their Impact	46
	Summary of Some of the Major Environmental	
	Changes in the Holocene	46
	Major Linguistic Families of South Asia	53
	Caste in South Asia	57

vii

page xii



viii			Contents
		Religious Identities in South Asia Conclusions	61 66
	3	Histories of South Asian Archaeology	67
	3	Introduction	67
		Trading and Colonial Beginnings	69
		From the Early Twentieth Century to Partition	77
		Foundations of Postcolonial Archaeology	85
		Post-Partition Archaeology	90
		Conclusions	96
	PA	RT II THE INDUS VALLEY TRADITION (C. 6500—1900 BCE)
	4	Food Producers: Multiple Neolithics (c. 6500-2000 BCE)	103
		Introduction	103
		Baluchistan	108
		Mehrgarh	109
		Kashmir-Swat	119
		Ganga Basin and Vindhyan Escarpment	127
		Western India and Gujarat	130
		Peninsular India Sri Lanka	131
		Conclusions	136
			137
	5	Regionalisation and Differentiated Communities	
		(c. 5000–2600 BCE)	141
		Introduction	141
		An Era of Regionalisation? (c. 5000–3200 BCE)	145
		Variation and Material Culture	147
		The Baluchistan Uplands	148
		Kili Gul Muhammad Phase (c. 4300–3500 BCE)	149
		Kechi Beg Phase (c. 3500–3000 BCE)	151
		Damb Sadaat Phase (c. 3000–2600 BCE)	151
		The Lower Indus Plain	153
		Balakot Phase (c. 4000–3500 BCE)	153
		Amri Phase (c. 3600–3000 BCE)	154
		The Punjab Hakra/Ravi Phase (c. 3500–2700 BCE)	157
		The Helmand Tradition (c. 3500–2800 BCE)	157
		Anticipating Integration	159 160
		Kot Diji Phase (c. 3200–2600 BCE)	160
		Conclusions	168
			100
	6	An Era of Integration: The Indus Civilisation (c. 2600–1900 BCE)	177
		Introduction	 177
		Physical Spread and Setting	178
		History of Discovery and Interpretation	180
		What Characterises the Integration Era?	182



Contents

	Settlements of the Indus Valley Tradition	183
	Mohenjo-daro ,	184
	Harappa	189
	Dholavira	190
	Rakhigarhi and Ganweriwala	192
	Urban and Rural Sites of the Indus Valley Tradition	192
	Public Buildings, Palaces, Granaries, Great Halls or	
	Warehouses?	202
	Baths, Drains and Wells	204
	Cemeteries	206
	Seals, Sealings and Script	211
	Weights and Measures	213
	Sourcing, Manufacturing and Redistribution	216
	The Baluchistan Uplands and the Indo-Iranian Plateau	224
	The Helmand Basin	226
	The Arabian Sea	229
	Conclusions	234
7	Localisation: Transformations of a System	
	(c. 1900–1200 BCE)	241
	Introduction	241
	Regional Analysis	245
	The Northern Valleys	246
	Western India	248
	The Punjab/Cemetery H	250
	The Lower Indus	254
	The Baluchistan Uplands	257
	The Helmund Basin	259
	The Arabian Sea	263
	Theories of Collapse	263
	Invasions	265
	Floods and Sea Level Change	267
	River Shift	268
	Wearing Out the Landscape, Salinity and New Crops	270
	Climate Change	271
	Epidemics	272
	Trade Collapse	272
	Multicausal Explanations	274
	Conclusions	275
PA1	RT III THE EARLY HISTORIC TRADITION (C.1900–200 BCE)	
8	South Asia: Transformations and Continuities	
	(c. 1900–1200 BCE)	281
	Introduction	281
	Regional Analysis	290
	The Northern Valleys	290
	Gandharan Grave Culture (c. 1700–1400 BCE)	290



X

Cambridge University Press & Assessment 978-0-521-60972-2 — The Archaeology of South Asia Robin Coningham , Ruth Young Frontmatter More Information

		Contents
	The Ganga-Yamuna Doab	297
	Ochre Coloured Pottery Phase (c. 1750–1250 BCE)	297
	Western India and the Deccan	298
	Ahar-Banas Phase (c. 3000–1500 BCE)	300
	Kayatha Phase (c. 2000–1700 BCE)	302
	Malwa Phase (c. 1700–1500 BCE)	303
	Jorwe Phase (c. 1500–900 BCE)	305
	Peninsular India (c. 2100–1700 BCE)	308
	Sri Lanka (c. 2300–1000 BCE)	310
	Conclusions	311
9	The Re-Emergence of Regional Differentiation	
	(c. 1200–600 BCE)	315
	Introduction	315
	Taxila, Charsadda and the Northern Valleys (c. 1200–600 BCE)	324
	The Bannu Basin (c. 900–600 BCE)	330
	The Helmand Basin	331
	Mundigak (c. 1500–1000 BCE)	331
	Kandahar (c. 1200–600 BCE)	332
	Baluchistan	332
	Pirak (c. 1300–800 BCE)	332
	The Arabian Sea (c. 1300–600 BCE)	333
	The Ganga Basin	333
	Painted Grey Ware Phase (c. 1200–600 BCE)	333
	The Deccan	337
	Late Jorwe Phase (c. 1000–700 BCE)	337
	Peninsular India	339
	Black and Red Ware (c. 1200–600 BCE)	339
	Megalithic Sites	339
	Settlement Sites	344
	Sri Lanka	348
	Anuradhapura (c. 1000–600 BCE)	348
	Conclusions	350
10		
	(c. 600–250 BCE)	354
	Introduction	354
	Key Challenges and Constraints	356
	The Helmand Basin	363
	The Oxus	370
	The Bannu Basin	372
	The Northern Valleys	372
	The Vale of Peshawar	376
	The Taxila Valley	377
	The Arabian Sea	379
	The Ganga Basin and Central India	380
	Peninsular India	386
	Sri Lanka	390
	Conclusions	396



Contents

The Mauryans and the Asokan Ideal (c. 321–185 BCE)	406
Introduction	406
Physical Spread and Setting	410
What Characterises the Era of Mauryan Integration?	412
Settlements of the Mauryan Empire	415
Urban and Rural Sites of the Mauryan Empire	427
Public Buildings	433
Script, Boulders and Pillars	444
Sourcing, Manufacturing and Redistribution	447
Conclusions	450
PART IV CONCLUSIONS	
12 Conclusions and Challenges	461
Introduction	461
Legacies of the Mauryan Empire	464
Asoka's Successors	467
Transformations and Continuities	474
Prospect	487
References	493
Index	523



ILLUSTRATIONS, TIMELINES AND BOXES

ILLUSTRATIONS

I.I	Map of South Asia showing modern nation states	page 4
2.I	View of the Himalayas from Pokhara, Nepal	34
2.2	Map showing South Asia's tectonic plates	35
2.3	View of the Padma River, Bangladesh	36
2.4	Ploughing in Rajbari District, Bangladesh	37
2.5	View of Brahmagiri, India	38
2.6	View of the Western Ghats from Madurai, India	39
2.7	View of tank and bund complex from Yapahuwa, Sri Lanka	40
2.8	View of the Horton Plains, Sri Lanka	40
2.9	Map showing monsoon circulation	42
2.10	View of the Hindu Kush from Malam Jabba in the	
	Swat Valley, Pakistan	43
2.11	View across Karimabad to the Hunza River and the Hindu	
	Kush, Pakistan	44
2.12	Map showing the distribution of Indo-European languages	54
2.13	Map showing the distribution of non-Indo-European languages	56
3.I	Map of sites mentioned in Chapter 3	68
3.2	Asokan pillar on the Firoz Shah Kotla, Delhi, India	70
3.3	Engraving of William Jones (1746–1794)	71
3.4	Early illustration of an Asokan edict by Postans in 1838	72
3.5	Alexander Cunningham (1814–1893) as a young man	72
3.6	Alexander Cunningham's plan of the Taxila Valley	75
3.7	Meadows Taylor's early recording of stratigraphy in the 1850s	78
3.8	Harappa railway station, Pakistan	78
3.9	Taxila Museum, Pakistan	79
3.10	Mortimer Wheeler (1890–1976) on fieldwork at the Bala	
	Hisar of Charsadda, Pakistan	82
3.11	Wheeler's box grid in action in Sri Lanka	82
3.12	The old French Jesuit Mission at Arikamedu, India	84
3.13	Mortimer Wheeler's section at the Bala Hisar of Charsadda, Pakistan	
3.14	Looters excavating the Indo-Greek city of Shaikhan Dheri, Pakistan	. 96

хii



Illustrations, Timelines and Boxes

xiii

3.15	The standing Buddha of Bamiyan before its destruction, Afghanistan	97
3.16	The Bombing Temple of Tooth in Kandy, Sri Lanka	98
3.17	Graffiti on Buddha carving in the Swat Valley, Pakistan	99
4. I	Map of sites mentioned in Chapter 4	104
4.2	View up the Bolan Pass, Pakistan	108
4.3	Plan of the site of Mehrgarh, Pakistan	IIO
4.4	Mud-brick compartmentalised structure at Mehrgarh, Pakistan	III
4.5	Deep section at Mehrgarh, Pakistan	112
4.6	Map of sites in the Northern Valleys	120
4.7	View across the Kashmir Valley, India	120
4.8	The site of Burzahom, India	121
4.9	The cave site of Ghaligai, Pakistan	123
4.10	Section of pits at Kalako-deray, Pakistan	125
4.11	'Pit Dwelling' at Kalako-deray, Pakistan	126
4.12	Plan of the site of Mahagara, India	129
4.13	Plan of the site of Utnur, India	132
4.14	Section through the ash mound at Utnur, India	133
4.15	Plan of structure built within boulders at Tekkalakota, India	134
4.16	Plan of building at Tekkalakota, India	135
5.I	Map of sites mentioned in Chapter 5	142
5.2	Plan of mud-brick platform at Damb Sadaat, Pakistan	152
5.3	Map showing the location of Amri, Pakistan	155
5.4	The site of Amri, Pakistan	156
5.5	Plan of the site of Amri, Pakistan	157
5.6	Ravi phase levels on Mound AB at Harappa, Pakistan	158
5.7	Plan of the residential structures at Area A at Mundigak	
	during Period II-3, Afghanistan	159
5.8	Kot Dijian phase walls around Harappa, Pakistan	161
5.9	Air photograph of Rehman Dheri, Pakistan	166
5.10	Building visible on surface at Rehman Dheri, Pakistan	167
5.11	Map showing settlement patterns in Cholistan during the	
	Regionalisation Era	168
5.12	The site of Shahr-i Sokhta, Iran	170
5.13	Seals from Rehman Dheri, Pakistan	173
6.1	Map of sites mentioned in Chapter 6	179
6.2	Map of key Indus sites	184
6.3	Plan of the city of Mohenjo-daro, Pakistan	185
6.4	The Great Bath at Mohenjo-daro, Pakistan	186
6.5	Plan of the Granary at Mohenjo-daro, Pakistan	187
6.6	The 'Granary' at Mohenjo-daro, Pakistan	187
6.7	Lane view in the Lower Town of Mohenjo-daro, Pakistan	188
6.8	Circular brick 'grain-threshing' platforms on Mound F at	
	Harappa, Pakistan	190
6.9	The 'granary' at Harappa, Pakistan	190
6.10	Plan of the city of Dholavira, India	191
6.11	Plan of the site of Kalibangan, India	193
6.12	Plan of the site of Banawali, India	194



xiv

Illustrations, Timelines and Boxes

6.13	Plan of the site of Lothal, India	195
6.14	Street view in Lothal, India	196
6.15	The 'Warehouse' at Lothal, India	197
6.16	Isometric plan of the 'Warehouse' at Lothal, India	198
6.17	Lothal 'dock' and sluice, India	199
6.18	Plan of the site of Surkotada, India	199
6.19	Plan of the site of Kuntasi, India	200
6.20	Map showing settlement patterns in Cholistan during the	
	Integration Era	201
6.21	Buildings at Nausharo, Pakistan	202
6.22	Bathroom and drain in the Lower Town of Mohenjo-daro, Pakistan	205
6.23	Plan of burial within Cemetery R37 at Harappa, Pakistan (i)	207
6.24	Plan of burial within Cemetery R ₃₇ at Harappa, Pakistan (ii)	208
6.25	Plan of part of the cemetery at Lothal, India (i)	209
6.26	Plan of part of the cemetery at Lothal, India (ii)	210
6.27	Distribution map of seals	212
6.28	Indus unicorn seal	213
6.29	Indus seals and sealings	214
6.30	Indus weights from Shikarpur	215
6.31	Semi-precious stone debitage and working in Kutch, India	219
6.32	Plan of Mundigak, Afghanistan	226
6.33	Plan of Palace at Mundigak, Afghanistan	227
6.34	Plan of Shahi-i Sokhta, Iran	228
6.35	Two of the tower tombs at Bat, Oman	233
7. I	Map of sites mentioned in Chapter 7	246
7.2	Plan and section of structures at Kalako-deray, Pakistan	248
7.3	Urn burial from Cemetery H in the Harappa Museum, Pakistan	254
7.4	Map showing settlement patterns in Cholistan during the	
	Localisation Era	255
7.5	The site of Jhukar, Pakistan	256
7.6	The site of Pirak, Pakistan	258
7.7	Isometric plan of building at Pirak, Pakistan, in Period IIb	259
7.8	Terracotta camel from Pirak, Pakistan, Period II	260
7.9	Terracotta horse from Pirak, Pakistan, Period II	260
7.10	Plan of buildings at Pirak, Pakistan, in Period IIIa	261
7. I I	Isometric plan of the stepped structure on Mound A at	
	Mundigak, Afghanistan	262
7.12	Skeletons in the lane between Houses CVIII and XXXIII,	
	VS Area, Mohenjo-daro	264
8.1	Map of sites mentioned in Chapter 8	282
8.2	Anthropomorph from the 'Copper Hoard Culture' in the	
	National Museum, New Delhi, India	288
8.3	Harpoon from the 'Copper Hoard Culture' in the National	
	Museum, New Delhi, India	289
8.4	Map of sites associated with the Gandharan Grave Culture	291
8.5	Plan and section of Gandharan Grave Culture	
	burial at Kherai, Pakistan	294



Illustrations, Timelines and Boxes

XV

8.6	Gandharan Grave Culture burial at Timargarha, Pakistan	295
8.7	Anthropomorphic vessel from the Gandharan Grave	
	Cemetery at Timargarha, Pakistan	295
8.8	The Bala Hisar of Charsadda, Pakistan	296
8.9	Plan and section of 'pit-dwellings' at Bir-kot-ghwandai, Pakistan	296
8.10	Plan of buildings at Lal Qila, India	299
8.11	Plan of the site of Ahar, India	300
8.12	Plan of buildings in Trenches F and G at Ahar, India	301
8.13	Plan of buildings at Navdatoli, India	303
8.14	Plan of buildings at Inamgaon, India, during the Malwa Phase	306
8.15	Intramural urn burial at Inamgaon, India (i)	307
8.16	Intramural urn burial at Inamgaon, India (ii)	308
8.17	Plan of buildings at Daimabad, India, during the Jorwe Phase	309
8.18	View of the Prehistoric settlement at Brahmagiri, India	310
9.1	Map of sites mentioned in Chapter 9	316
9.2	Iron swords in the Indian Museum, Kolkata, India	322
9.3	Antennae swords in the Vellore Government Museum, India	323
9.4	Plan of buildings at Aligrama, Pakistan	326
9.5	Plan of the early buildings at Balambat, Pakistan	327
9.6	Excavation trench at the Bala Hisar of Charsadda, Pakistan	330
9.7	Plan of buildings at Inamgaon, India, during the Late Jorwe Phase	338
9.8	Cists with portholes at Hire Benekal, India	340
9.9	Map of megalithic cemeteries in the Deccan and Peninsular India	341
9.10	Terracotta sarcophagus in the Kanchipuram Government	
	Museum, India	342
9.11	Plan of the megalithic cemetery at Brahmagiri, India	343
9.12	Circular buildings within the Citadel of Anuradhapura, Sri Lanka	349
9.13	Megalithic cemetery at Ibbankatuva, Sri Lanka	349
9.14	Plan of the megalithic cemetery at Ibbankatuva, Sri Lanka	350
IO.I	Map of sites mentioned in Chapter 10	355
10.2	Map of the Makaira and a	357
10.3	Map of the <i>Mahajanapadas</i> Map shaving the location of the site of Deban a Chaleman Iran	359
10.4	Map showing the location of the site of Dahan-e Gholaman, Iran Plan of Building QN ₃ at Dahan-e Gholaman, Iran	364
10.5 10.6	Isometric plan of Building QN ₃ at Dahan-e Gholaman, Iran	365 366
	Altar oven in Building QN ₃ at Dahan-e Gholaman, Iran	366
10.7 10.8	Portico of QN ₃ at Dahan-e Gholaman, Iran	367
10.0	Plan of the city of Old Kandahar, Afghanistan	368
-	Section through the city walls at Old Kandahar, Afghanistan	369
	The town wall at Bir-kot-ghwandai, Pakistan	373
	The settlement of Aligrama, Pakistan	374
	The 'Achaemenid' buildings at Balambat, Pakistan	375
	Plan of the 'Achaemenid' buildings at Balambat, Pakistan	375
	The Hathial Mound in the Taxila Valley, Pakistan	378
	Map of key sites within the Ganga Basin	380
	Plan of the city of Rajgir and section through the rampart	<i>J</i>
,	of New Rajgir, India	382



xvi

Illustrations, Timelines and Boxes

10.18	The fortified valley of Rajgir, India	383
10.19	Gateway through Rajgir's walls, India	383
10.20	Plan of the city of Ujjain and section through its ramparts, India	385
10.21	Cist burial at Brahmagiri, India	387
10.22	Pit burial at Brahmagiri, India	387
10.23	Section of Megalith X at Brahmagiri, India	388
10.24	Plan of Megalith X at Brahmagiri, India	389
10.25	Plan of square building within the Citadel of	
	Anuradhapura, Sri Lanka	391
10.26	Square building within the Citadel of Anuradhapura, Sri Lanka	391
10.27	First phase of the city rampart at Anuradhapura, Sri Lanka	392
10.28	Grey Ware vessel from Anuradhapura engraved	
	with a ship, Sri Lanka	395
10.29	Map of the Persian Empire	397
10.30	Gold Achaemenid foundation slab in the	
	National Museum, Tehran, Iran	398
	The Great Staircase at Persepolis, Iran	399
-	Plan of the palace at Persepolis, Iran	400
	The Citadel of Kandahar	401
	Map of sites mentioned in Chapter 11	407
	The Great Stupa of Sanchi, India	415
	Map of key sites associated with South Asian Buddhism	416
	Plan of an idealised city from the Arthashastra	420
	The wooden palisade of Pataliputra, Patna, India	421
	City rampart and moat at Mahasthangarh, Bangladesh	422
	Asokan rock edict at Mansehra, Pakistan	423
	The winding streets of the Bhir Mound, Pakistan	424
	Plan of the street layout of the Bhir Mound, Pakistan	425
	Aerial photograph of the city of Sisupalgarh, India	426
	Plan of an idealised kingdom from the <i>Arthashastra</i>	428
	Plan of the site of Bhita, India	429
	Plan of street layout in Bhita, India	430
	Early Brahmi inscription at Anuradhapura, Sri Lanka	433
_	Plan of the Pillared Hall at Patna, India Elevation of the Pillared Hall at Patna, India	434
		435
	Stupa of Gotihawa with Asokan pillar in foreground, Nepal	437
	The Asokan edict at Niglihawa, Nepal	441
	Plan of the Buddhist shrine at Lumbini, Nepal The Asokan pillar at Lumbini, Nepal	442
	Plan and section of the Buddhist shrine at Bairat, India	443
	Asoka capital at Sarnath, India	443
	The Asokan edict at Taxila, Pakistan	445
	Detail of Rouletted Ware from Anuradhapura, Sri Lanka	446
	View across Khor Rori towards the natural harbour, Oman	448
-	Alternative map of the Mauryan Empire (after Smith 2008)	449
	Pillars at Persepolis, Iran	453
	The Asokan pillar at Lauriya-Nandangarh	454
11,40	The Libertain piliar at Lauriya-1 valldangani	455



Illust	Illustrations, Timelines and Boxes		xvii
I2.I	View across the Main Street of Sirkap in the Taxila Valley, Pakistan	468	
12.2	The city wall of Sirkap in the Taxila Valley, Pakistan	468	
12.3	The Temple of the Double-Headed Eagle at Sirkap in the		
	Taxila Valley, Pakistan	470	
12.4	Map of the Kushan Empire	472	
12.5	Stirup bastion at Sirsukh in the Taxila Valley, Pakistan	473	
12.6	The discovery of the 'Priest King' at Mohenjo-daro	484	
TIM	IELINES		
I.I	General timeline for the Indus Valley and Early Historic Traditions	8	
4. I	Timeline for Chapter 4	105	
5. I	Timeline for Chapter 5	142	
6.1	Timeline for Chapter 6	180	
7. I	Timeline for Chapter 7	247	
8.1	Timeline for Chapter 8	283	
9.1	Timeline for Chapter 9	317	
IO.I	Timeline for Chapter 10	356	
ВОХ	KES		
I.I	Childe and Urban Forms	т 2	
I.1	What Are Microliths?	13 20	
2. I	The South Asian Monsoon	41	
2.1	Proxy Environmental Indicators	47	
2.3	Pollen Evidence for Environmental Change	50	
2.4	Early Historic Texts and Traditions	62	
3. I	The East India Company	73	
3.2	Mortimer Wheeler (1890–1976)	73 80	
3.3	B. B. Lal	83	
3.4	Romila Thapar	92	
3.4 4.1	The Neolithic	106	
4.2	Mehrgarh Human Skeletal Material	113	
4.3	How Do We Identify Domesticates?	117	
ς. I	Seals and Sealings	143	
5.2	Kalibangan	163	
5.3	Rehman Dheri	164	
6.1	Reconstructing the Location of Craft Activities	217	
6.2	Indus Subsistence	221	
6.3	Searching for Dilmun	230	
7. I	Settlement Survey Methods	243	
7.2	Cemetery R ₃₇ and Cemetery H	243 251	
8.1	The Gandharan Grave Culture	284	
8.2	The Copper Hoard Culture	291	
9.1	Iron Technology	318	
9.2	Brahmagiri	345	



12.I

XVIII Illustrations, Timelines and Boxes Ideology and Food IO.I393 10.2 Punch-Marked Coins 402 Prinsep and the Rediscovery of Asoka II.I 408 Urban Microcosms 11.2 417 Searching for Kapilavastu 11.3 438

Priest-Kings and Dancing Girls

481



ACKNOWLEDGEMENTS

We are both extremely grateful to the many individuals and institutions who have contributed to the research and scholarship which underpins this volume. Much of our writing has also been informed by long seasons of fieldwork with colleagues and friends across South Asia and Iran.

In the field and in conferences, seminars and lectures, we have particularly benefitted from contributions and feedback from Kosh Prasad Acharya, Gamini Adikari, D. P. Agrawal, P. Ajithprasad, M. S. Alam, Ihsan Ali, Taj Ali, Bridget Allchin, the late Raymond Allchin, Alessandra Avanzini, the late Massoud Azarnoush, Hossein Azizi, the late Senake Bandaranayake, Nicholas Barrington, Nabha Basnyat-Thapa, Kuldeep Bhan, Mokammal H. Bhuiyan, Basanta Bidari, Ravindra Singh Bisht, Irina Bokova, Osmund Bopearachchi, Crispin Branfoot, Charlotte Cable, Pierfrancesco Callieri, Dilip Chakrabarti, Ranabir Chakravarti, P. J. Cherian, James Cormick, Bhesh Narayan Dahal, the late George Dales, Mahinda Deegalle, Siran Deraniyagala, M. K. Dhavalikar, Senarath Dissanayake, R. Dittmann, the late Fazand Ali Durrani, Mukhtar Ali Durrani, Roland Fletcher, Dorian Fuller, Krista Gilliland, Gavin Gillmore, Ian Glover, Prishanta Gunawardhana, Sunil Gupta, Norman Hammond, U Nyunt Han, Jason Hawkes, K. Hemachandran, Hengameh Ilkmani, Shahnaj Husne Jahan, Rukshan Jayewardhana, Peter Johansen, J. P. Joshi, Maiya Kaiti, Hassan Karimian, Mangala Katugampola, Steven Kemper, Jonathan Mark Kenoyer, Farid Khan, Gul Rahim Khan, Muhammad Ashraf Khan, Shakir Ullah Khan, Ravi Korisettar, Krishna Bahadur KC, K. Krishnan Nampoothiri, Ram Kunwar, Takefumi Kurose, Win Kyaing, Nayanjot Lahiri, Sirinimal Lakdusinghe, Shanti Limbu, Roland Lin, Lisa Lucero, U Kyaw Oo Lwin, U Thein Lwin, John MacGinnis, Mehran Maghsoudi, R. Mahalakshmi, Mala Malla, Christian Manhart, B. R. Mani, K. S. Mathew, Richard Meadow, Costantino Meucci, David Michelmore, V. N. Misra, Mats Mogren, Rabindra Mohanty, Elizabeth Moore, Kathleen Morrison, Mehdi Mortazavi, Mohammed Rafique Mughal, the Rev. Toshun Murakami, Ohnmar Myo, Muhammad Naeem, Maryam Naeemi, S. Nagaraju, Kalum Nalinda, Harendralal Namalgamuwa,

xix



xx Acknowledgements

Hassan Fazeli Nashli, Lotika Nehru, Yukio Nishimura, Wannasarn Noonsuk, Pashupati Nyaupane, K. Paddayya, S. K. Pandey, Asko Parpola, Beena Paudyal, Cameron Petrie, the late Gregory Possehl, Saubhagya Pradhanang, Sheikh Sultan bin Mohammed Al Qasimi, Gyanin Rai, K. Rajan, Umanga Roshani Rammungoda, Colin Renfrew, Poori Saeedi, Minoo Salimi, Jean-Francois Salles, Vern Scarborough, V. Selvakumar, Swadhin Sen, Jayampath Senanayake, Sudharshan Seneviratne, S. Settar, Sri Acharya Karma Sangbo Sherpa, Vasant Shinde, B. B. Shrestha, H. Shrestha, Sudhir Bhakta Shrestha, Steven Sidebotham, Ian Simpson, Upinder Singh, Prakash Sinha, Monica Smith, Janice Stargardt, Bharat Subedi, A. Sundara, Farooq Swati, Romila Thappar, Chris Thornton, Rakesh Tiwari, Roberta Tomber, Maurizio Tosi, Himal Kumar Upreti, Supriya Varma, Massimo Vidale, Willem Vogelsang, Jagath Weerasinghe, Kai Weise, Michael Willis, Rita Wright, Mumtaz Yattoo and Muhammad Zahir.

We are also very grateful to a number of our former and current colleagues for their continued support and advice, including Janet Ambers, Ian Bailiff, Graeme Barker, Cathy Batt, Julie Bond, Julie Bone, Mary Brooks, Chris Caple, Mike Church, Christopher Davis, Steve Dockrill, Randy Donahue, Dave Edwards, Lin Foxhall, Christopher Gerrard, Mark Gillings, Tony Gouldwell, Colin Haselgrove, Carl Heron, Rob Janaway, Chris Knusel, Anna Leone, Nick Lewer, Paul Luft, Mark Manuel, Armineh Marghussian, David Mattingly, Terry O'Connor, Deirdre O'Sullivan, Marilyn Palmer, Graham Philip, Mark Pollard, Charlotte Roberts, Chris and Judith Scarre, Geoffrey Scarre, Armin Schmidt, Sarah Semple, Jo Shoebridge, Ben Stern, Keir Strickland, Jill Thompson, Jen Tremblay-Fitton, and the late Tony Wilkinson. These lists are not exhaustive and the authors extend their apologies to anyone inadvertently omitted.

We are also indebted to the following individuals for allowing us to reproduce their images within this volume: Bridget Allchin and William Allchin; Jo Shoebridge; Peter Johansen; Chris Thornton for the Bat Archaeological Project; K. Krishnan for the Department of Archaeology and Ancient History, MS University of Baroda, India; Luca Maria Olivieri for the Italian Archaeological Mission to Pakistan; Armineh Marghussian and Warwick Ball. Craig Barclay of Durham University's Oriental Museum facilitated access to the photographic archive of John Marshall and we are grateful to him for allowing the reproduction of some of Marshall's images. Mark Manuel, Chris Davis, Armineh Marghussian and Keir Strickland kindly prepared the line drawings and scanned many of the images. Jen Tremblay-Fitton kindly assisted with the creation of the index, Chris Davis with the preparation of a number of boxes, and Jeff Veitch provided invaluable help by scanning many of the original slides.

Finally, we should like to acknowledge the highly professional assistance of the Cambridge production and editorial team as well as the invaluable prompts and recommendations from Professor Norman Yoffee of the University of



Acknowledgements xxi

Michigan, the Series Editor, who guided our way through to the current volume. We also benefitted from the close reading of earlier versions of the text by Professor Carla Sinopoli of the University of Michigan, two anonymous Cambridge readers, Professor K. Krishnan of MS University of Baroda, Professor Prishanta Gunawardana of the University of Kelaniya and Director-General of Sri Lanka's Central Cultural Fund, Professor Hassan Fazeli Nashli of Tehran University and Kosh Prasad Acharya, former Director-General of Archaeology, Government of Nepal.