

THE ARCHAEOLOGY OF EARLY HISTORIC SOUTH ASIA

THE EMERGENCE OF CITIES AND STATES

F. R. ALLCHIN

Emeritus Reader in Indian Studies, University of Cambridge

With contributions from George Erdosy, R. A. E. Coningham,
D. K. Chakrabarti and Bridget Allchin

Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
40 West 20th Street, New York, NY 10011-4211, USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 1995

First Published 1995

Printed in Great Britain at the University Press, Cambridge

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

Library of Congress cataloguing in publication data

Allchin, F. Raymond (Frank Raymond), 1923–
The archaeology of early historic South Asia: the emergence of cities and states /
F. R. Allchin; with contributions from G. Erdosy ... [*et al.*]
p. cm.

Includes bibliographical references and index.

ISBN 0 521 37547 9. – ISBN 0 521 37695 5 (pbk.)

1. South Asia – Antiquities.
2. Excavations (Archaeology) – South Asia.

I. Erdosy, George. II. Title.

DS338.A45 1995

934-dc20 94-23181 CIP

ISBN 0 521 37547 9 hardback

ISBN 0 521 37695 5 paperback

CONTENTS

<i>List of figures</i>	<i>page</i>	ix
<i>Preface</i>		xiii
<i>Acknowledgements</i>		xvi
Part I The background		I
1 The archaeology of early historic South Asia		3
2 The environmental context BRIDGET ALLCHIN		10
3 The end of Harappan urbanism and its legacy		26
4 Language, culture and the concept of ethnicity		41
5 Dark Age or continuum? An archaeological analysis of the second emergence of urbanism in South Asia R. A. E. CONINGHAM		54
Part II The rise of cities and states		73
6 The prelude to urbanization: ethnicity and the rise of Late Vedic chiefdoms GEORGE ERDOSY		75
7 City states of North India and Pakistan at the time of the Buddha GEORGE ERDOSY		99
8 Early cities and states beyond the Ganges Valley		123
9 The rise of cities in Sri Lanka R. A. E. CONINGHAM and F. R. ALLCHIN		152

Part III The Mauryan empire and its aftermath	185
10 The Mauryan state and empire	187
11 Mauryan architecture and art	222
12 Post-Mauryan states of mainland South Asia (c. BC 185–AD 320) D. K. CHAKRABARTI	274
Part IV Conclusion	327
13 The emergence of cities and states: concluding synthesis	329
<i>Bibliography</i>	342
<i>Index</i>	358

FIGURES

2.1	Map of South Asia, showing principal sites referred to in Chapter 2	<i>page</i>	14
3.1	Map of principal sites of the post-urban period referred to in Chapters 3 and 4		27
6.1	Map of principal sites referred to in Chapter 6		77
6.2	Map of settlement pattern, Allahabad district, period I, c. BC 1000–600		81
7.1	Map of principal sites referred to in Chapter 7		101
7.2	Map of settlement pattern, Allahabad district, period II, c. BC 550–400		106
7.3	Map of settlement pattern, Allahabad district, period III, c. BC 400–100		108
7.4	Map of the Sixteen Mahajanapadas (great states), with their capital cities, other janapadas and tribal names		116
8.1	Map of regions and sites referred to in Chapter 8		124
8.2	Taxila, map showing the Red Burnished ware in the Hathial settlement area in relation to Bhir mound and Sirkap		126
8.3	Kandahar, plan of early fortifications		128
8.4	Kandahar, section of early (? Achaemenid) fortifications		129
8.5	Taxila, Bhir mound, pottery from Period IV, c. BC 400–320		132
8.6	Ujjain, plan of ramparts		135
8.7	Ujjain, section of rampart		135
8.8	Prakash, Black and Red ware and other pottery of period II		138
8.9	Sisupalgarh, aerial photograph of city		143
8.10	Sisupalgarh, section of ramparts		144
8.11	Sisupalgarh, photograph of excavated gateway		145
8.12	Arikamedu, Black and Red ware, showing examples of scratched graffiti from early period		148
8.13	Arikamedu, rouletted ware		149
8.14	Arikamedu, stamp decorated grey ware of Wheeler's 'type 10'		149

8.15	Arikamedu, potsherds with scratched inscriptions in Brahmi script, some in Tamil, c. AD 1st–2nd century	150
9.1	Map of Sri Lanka showing principal sites	154
9.2	Plan of the city of Anuradhapura and its surroundings, showing principal early monasteries and irrigation works	160
9.3	Plan of the citadel at Anuradhapura, showing excavated sites	161
9.4	Anuradhapura excavations at ASW2, southern section	162
9.5	Burial pit in ASW2, period J	164
9.6	Plan of part of a circular house from ASW2, period J	165
9.7	Plan of part of a rectangular house, ASW2, period I	166
9.8	Clay sealing inscription from ASW2, period H	168
9.9	Ibbankatuva, megalithic graves	171
9.10	Anuradhapura, Bassavakulam tank from the embankment	175
9.11	Early Brahmi inscriptions on potsherds, Anuradhapura, ASW2	177
9.12	Early coins from Anuradhapura ASW2 excavations	180
10.1	Diagrammatic representation of administrative and settlement hierarchy of a janapada (after Kautilya)	197
10.2	Map of findspots of Asokan edicts and of place-names occurring in Mauryan inscriptions	199
10.3	Conjectural reconstruction of the plan of Mauryan Pataliputra	201
10.4	Bulandibagh, Patna, remains of timber rampart excavated in 1927–28	203
10.5	Map of probable provincial groupings of the Mauryan empire, with cities graded according to their size	208
10.6	Asokan pillar edict in Brahmi script, Lumbini, Nepal	210
10.7	Kharosthi inscription of Menander (c. BC 175), Bajaur, Northwest Frontier Province, Pakistan	211
10.8	Aramaic inscription of Asoka, Pul-i Darunta, Afghanistan	213
10.9	Bilingual Greek and Aramaic inscription of Asoka, Kandahar, Afghanistan	214
10.10	Mahasthangarh, Bangladesh, stone inscription in Brahmi script, 3rd century BC	215
10.11	Sohgaura copper plate inscription in Brahmi script, 3rd century BC	215
10.12	Coinage ascribable to the pre-Mauryan period (c. BC 4th century)	220
10.13	Coinage ascribable to the Mauryan and immediately post-Mauryan period	221
11.1	Diagrammatic section of a typical city fortification	223
11.2	The silted-up moat at Mahasthangarh, viewed from the rampart	224
11.3	View of stone walls round the valley of Rajagriha	225
11.4	Early brick rampart of Kausambi	226
11.5	Layout of a fortified settlement, according to the Arthashastra	227
11.6	A city and its surroundings, after the Arthashastra	228
11.7	Sisupalgarh, the city and its surroundings	229

11.8	Plan of a fortified camp site, according to the Arthashastra	230
11.9	Bhita, plan of rampart and settlement	232
11.10	House plans of the 3rd to 2nd centuries BC, Bhita	233
11.11	House plans of the 3rd to 2nd centuries BC, Bhir Mound, Taxila	234
11.12	Taxila, Bhir mound, excavations of 1944–45, view of structures assignable to the Mauryan period	235
11.13	Pataliputra, Kumrahar, plan of the pillared hall	236
11.14	Pataliputra, Kumrahar, side elevation of the pillared hall	237
11.15	Central elements of the religious complex at Sarnath in the Mauryan period	241
11.16	Sanchi, relative position of the great stupa, Asokan column and caitya hall No. 18	242
11.17	Vaisali, early brick stupa showing projections at the cardinal points and periods of reconstruction	243
11.18	Bairat, circular caitya hall	245
11.19	Plan of Jivakarama monastery, Rajgir	246
11.20	(1) Barabar hills, Lomasrishi cave, plan and section: (2) Sudama cave, plan and section	248
11.21	Lomasrishi cave, facade	249
11.22	Vidisa, excavation of Bhagavata shrine	250
11.23	Asokan column from Lauriya Nandangarh	253
11.24	Sarnath capital, the four lions	255
11.25	Sarnath capital, the four noble beasts on the abacus	256
11.26	Rampurva bull capital	257
11.27	Didarganj, Patna, sandstone Yaksi	259
11.28	Lohanipur, sandstone torso (? Jaina)	260
11.29	Dhaulti, elephant	261
11.30	Stone brackets or capitals suggestive of the Ionic order: (a) Sarnath; (b) Pataliputra, Bulandibagh	262
11.31	Ringstones from Taxila and Patna	264
11.32	Rajgir, stone relief	266
11.33	Kausambi, stone cup-form with relief figures	267
11.34	Vaisali, stone relief	267
11.35	Mauryan terracottas from Patna and Buxar	270
11.36	Mauryan terracottas from Mathura	271
12.1	Map of cities and principal states of South Asia (c. BC 200–1)	275
12.2	Map of cities and principal states of South Asia (c. AD 1–250)	276
12.3	Shaikhan Dheri, aerial photograph	284
12.4	Shaikhan Dheri, house of Naradakha	285
12.5	Taxila, Sirkap, plan of defenses	287
12.6	Taxila, Sirkap, successive plans of house 2, block 1, indicating continuity of the street and block plan	289
12.7	Taxila, Sirsukh, part of defenses	291

12.8	Sisupalgarh: houses built of laterite blocks (?c. 1st century BC–AD)	303
12.9	Nagarjunakonda, city plan (c. 2–4th centuries AD)	307
12.10	Satanikota, plan of fortified settlement (c. 2–3rd centuries AD)	308
12.11	South Asian coinage (BC 200–AD 200)	310
12.12	Sanchi, the great stupa	313
12.13	Amaravati, drum slab relief of the great stupa, 3rd century AD	314
12.14	Bhaja, rock-cut caitya	315
12.15	Karle, rock-cut caitya, plan and section	316
12.16	Taxila, Jandial temple plan	317
12.17	Taxila, Jandial, detail of capital and base of pillar	318
12.18	Bharhut, relief sculpture with inscribed label	319
12.19	Amaravati relief sculpture from drum of great stupa	320
12.20	Gandhara relief sculpture of phyllite. Late 1st–early 2nd century AD	321
12.21	Mathura, Katra Keshava Deva, seated Buddha (Bodhisatva) figure, c. late 1st century AD	322
12.22	Gandhara Buddha figure, Loriyan Tangai	323
12.23	Sunga period terracottas	325

THE ARCHAEOLOGY OF EARLY HISTORIC SOUTH ASIA

F. R. ALLCHIN

The aim of this book is to review the broad developments leading up to and attending the emergence of cities and states in South Asia, and to the formation of what we may call an Indian urban style of life and culture. Our approach will be primarily archaeological, but we shall also take into account such textual, inscriptional or other evidence as available and relevant to our aim. We shall use a definition of archaeology that is rather wider than is common today, but one which has emerged over the past two centuries of research on early India. This definition accepts as ancillary parts of early historic archaeology such subjects as: domestic architecture, city planning and the construction of secular and religious monuments; the development of various branches of art including sculpture and painting; epigraphy and the early use of writing in South Asia; the standardization of weights and measures and the use of coinage. We accept all these as relevant to our subject and as contributing to building up a balanced picture of early historic Indian civilization. We consider them to be as much fit subjects of archaeological investigation as are the more fashionable aspects of the subject. Another feature of our study is that it seeks to adopt an international approach, treating South Asia as a whole (i.e. India, Pakistan, Bangladesh, Sri Lanka and Nepal), rather than restricting our scope to a single country or region. This is probably the first time that such a broad overview has been attempted. In this context we should remark that Afghanistan is for the most part treated as peripheral to South Asia. We shall on occasion refer to such cities as Kandahar, Begram or Ai Khanum, but rather as comparisons for South Asian cities than as integral parts of South Asia.

At the outset we must make another point regarding this book. Although our subject deals centrally with the emergence of cities and states in South Asia, it is not our aim to offer definitions of these and other such terms, nor to become involved in lengthy discussions of matters of archaeological theory. Rather it offers a primarily descriptive account of the emergence of South Asian cities and states, attempting to integrate the several categories of evidence mentioned above.

The subject of this book, *Early historic South Asia, the emergence of cities and states*, is one which has been hitherto largely neglected. The late A. Ghosh, the

first Director General of Archaeology in independent India, was the first archaeologist to produce a monograph on *The City in Early India* (1973). To date there are few comparable works: T. N. Roy's *The Ganges Civilization* (1983) is an invaluable and detailed study of the material culture of 'the painted grey ware and northern black polished ware periods in the Ganga plains', but its somewhat restricted geographical horizon, its focus on specifically archaeological data, and its limited concern with many questions of wider interpretation, make it less helpful for our purpose than it might otherwise have been. Two other recent studies, using settlement archaeology as their base, deserve mention: they are Makkhan Lal's *Settlement History and the Rise of Civilization in the Ganga-Jamuna Doab* (1984) and G. Erdosy's *Urbanisation in Early Historic India* (1988). The scope of both these works is mainly limited to the Ganges valley, and they report the results of field surveys of sites in Kanpur and Allahabad districts respectively. Romila Thapar's *From Lineage to State* (1984) offers a far broader focus on social formations in the Ganges valley in the mid-first millennium BC, and provides many insights into the central questions of the rise of cities and states; but its approach is essentially that of the ancient historian. In some respects similarly oriented is another important contribution, also the work of an ancient historian, Ram Sharan Sharma, whose *Material Culture and Social Formations in Ancient India* (1983) offers a thoughtful and detailed study, although with a somewhat more restricted scope. Its timescale concludes around BC 300, thus leaving aside the Mauryan and post-Mauryan periods which we regard as integral to our subject.

In this situation there appears to be a prima facie case for a book of this kind. It is clear that our aims differ from those of most of the earlier writers, both with regard to the breadth of the geographical and chronological horizons we have set, and in terms of the breadth of our definition of archaeology. The task is not made easier by the paucity and restricted nature of much of the available evidence, and one may well wonder why this should be the case. In seeking to find an answer to this question, it may be helpful to enquire into the history of early historic archaeological research in the countries of South Asia, and into its current position. Therefore, before embarking on our subject itself, we shall briefly review this question, if only to offer some explanation of why there should have been such a neglect of early historic archaeology.

The archaeological background

Archaeology was first introduced to South Asia by European merchants, colonial adventurers and travellers. These were followed from the late eighteenth century onwards by British officers serving with the East India Company or in the army. The inception and early growth of archaeology were the work of a series of brilliant scholars, among whom Sir William Jones stands first. Under his inspiration and that of the Asiatic Society of Bengal which he founded in 1784, a

small band of scholars was formed, and the serious business of data collection began. Only thereafter did archaeology take root. Among the achievements of the first half of the nineteenth century were the decipherment of the earliest datable Indian inscriptions, many until that time unreadable even by indigenous scholars, and the discovery of coins of the Indo-Greek and Bactrian Greek rulers of Afghanistan and northwest India. With a few notable exceptions excavation, if resorted to, was crudely done and amounted to little short of plunder.

A notable step forward occurred in 1861 when Major General Alexander Cunningham retired from the army and was appointed as the first Surveyor, later Director General, of the newly created Archaeological Survey of India. Cunningham was no newcomer to the subject: he had already made a study of early coins, and in 1854 published a monograph on the Buddhist remains at Sanchi, *The Bhilsa Topes*, besides numerous other pieces of research. He now embarked upon an epic series of archaeological tours which took him to many parts of northern India, ranging from Bengal to the Northwest Frontier, published year by year in the twenty three volumes of his *Archaeological Survey Reports*. One of his central goals was the rediscovery and identification of the great cities of early Indian literature, that is to say of the early historic period. During his remaining years he published a series of other important works. Although Cunningham contributed little to the development of archaeological research techniques, particularly excavation, his contribution in terms of the rediscovery of ancient India was enormous.

By the end of the nineteenth century certain characteristic features of archaeology in South Asia had become well established. In its protohistoric and early historic phases archaeology had become recognized as an aid to the rediscovery of an emerging and later fully formed civilization, and had accepted its scope as including evidence deriving from inscriptions and textual sources, as well as from coins. It had from the time of Sir William Jones onwards been generally accepted that the study of the monumental remains and ancient arts of Indian civilization were integral parts of the subject.

In 1902, as a result of the direct enthusiasm of the Viceroy, Lord Curzon, John Marshall, a young archaeologist whose early experience had been in Greece, was appointed as the new Director General of Archaeology. His appointment marked the beginning of an altogether new stage of archaeological discovery which lasted, till Marshall's retirement in 1928 and beyond, until the outbreak of the Second World War. During this period almost every aspect of the subject was advanced: excavation, architectural conservation, epigraphy, publication and the creation of museums. Although Mortimer Wheeler was later to criticize Marshall's methods of excavation, the fact remains that they were the basis of his momentous discoveries of the Indus civilization, and the excavation of a whole series of important early Buddhist sites and monuments. Among the early historic cities of South Asia several of Marshall's excavations remain to this day without parallel and as such will be frequently referred to in later chapters of this book. This

positive assessment does not however mean that progress in archaeology in India during this period was uniformly excellent: by the thirties there were already many signs of stagnation and a lack of fresh thinking, and these were highlighted in the critical report produced for the Government by Sir Leonard Woolley in 1939.

Sir Mortimer Wheeler's brief spells as Director General of Archaeology in India and later as Archaeological Adviser in Pakistan, between 1944 and 1947, witnessed his tempestuous impact on what had by then become the sleepy and quietly inefficient Archaeological Survey of India; and on its successor in the newly created Pakistan. Many things demanded revitalization and many needed drastic change. Particularly in the field of excavation techniques Wheeler set out to train a body of young scholars as field archaeologists. The success of this programme has left a lasting record in the great spate of published excavations of the following two decades, and undoubtedly marked the start of a major turning point in South Asian archaeology. Wheeler, however, was from the outset clearly aware of his limited occupancy of both these posts, and perhaps for this reason he set clearly defined objectives for what could be achieved. He realized that there was not time to develop equally all aspects of archaeology or archaeological training; something which in different circumstances he might well have done. As it was many departments were scarcely touched by his reforming zeal. Among the topics which did not receive the attention they deserved were consideration of the wider aims of the excavation of early historic cities, and the practical demonstration of how much might be achieved by more extensive excavation. Apart from the limited training dig carried out under his direction at Taxila (Sirkap), his only other excavation of an early historic city was a second training dig at Taxila, on the Bhir mound. This excavation, which photographs show to have been on a considerable scale, has so far not been published.

Early historic archaeology in South Asia since Independence

It is not our intention to follow the history of South Asian archaeology through the past five decades. Rather, we shall touch briefly on certain aspects of recent archaeological research in South Asia, particularly insofar as they relate to the early historic period. Our aim is to indicate some areas of research which in our view need enhancement, and to point to some instances which deserve further stimulus.

There has been a tendency to neglect the use of archaeology to augment the limited information available for the early historic period, from other sources. This has arisen partly because much greater interest has been generated by the later prehistoric and protohistoric periods; partly because the research programme inaugurated by Sir Mortimer Wheeler concentrated primarily upon establishing basic culture sequences at selected sites; and partly also because of the enigmatic character of the Indus civilization, with its undeciphered script and

sudden demise, which tended to hold archaeologists' attention. Little attention has so far been given to the great potential of the excavation of early historic settlements as a means of learning more about almost every aspect of life and society, and of augmenting the information derived from texts. For example, few complete house plans have been excavated at any early historic site. To find published examples of such plans we have to return to the excavations of Marshall in the early decades of this century! With only a few exceptions, for example at Sonkh (Hartel 1976; 1993a), early historic excavations in the second half of the twentieth century have been confined to cutting tiny sections through city ramparts or occupation deposits with a view to obtaining pottery sequences and chronological data. There are many topics within the field which require properly designed research programmes. For example, archaeologists have scarcely attempted to find ways of throwing light on such longstanding historical debates as those concerned with establishing or confirming the dates of the Buddha or of the era founded by Kaniska.

It is not an exaggeration to say that early historic archaeological research in South Asia has suffered from a number of major lacunae. Undoubtedly the basis of many of these has been the tendency to cling too closely to the methods and patterns of excavation laid down by Wheeler. There are remarkably few instances of innovation of techniques to meet changing objectives, or for that matter of experimentation with some of the new methods which have been developed and successfully employed elsewhere in the world. Another neglected area is in the adoption of new approaches including those which may be characterized as theoretical archaeology. One consequence of this is the all too frequent absence of a problem-oriented approach. Another is the rarity of the use of statistical methods comparable to those employed by the social sciences. A contributory factor may be the relatively limited interaction with archaeologists from outside South Asia possible under the system prevailing during much of this period. In some cases for example, in India, international exchanges and particularly co-operation in fieldwork were for a time actively discouraged. Happily this situation has now changed.

Such general criticisms of course call for some qualification. First of all, it must be remarked that the situation has differed from country to country within South Asia, some showing greater interest in early historic archaeology and others less. Secondly, it is evident that, for whatever reasons, palaeolithic, prehistoric, protohistoric and even medieval research have almost everywhere received more attention, and consequently have remained more lively than early historic archaeology. Thirdly, there are numerous examples of South Asian archaeologists and institutions whose work transcends our criticisms, even if it often lies outside the narrowly early-historic field. For example, in India, Deccan College, Pune, lovingly developed by the late H. D. Sankalia, stands out as a centre which has consistently sought to arouse public interest and support for all periods of archaeology, and to promote international co-operation and exchange. It has also

created a leading South Asian base for scientific specializations in archaeology; and in some of its recent excavations, notably that of the village of Inamgaon, its archaeologists have employed a theoretical approach, and new concepts of excavation and interpretation. Similarly the radiocarbon laboratory established first at the Tata Institute of Fundamental Research, Bombay, and later transferred to the National Physical Laboratory, Ahmedabad, has developed a South Asian centre of repute for physical methods of dating and their applications. In Pakistan, Rafique Mughal's Cholistan survey stands as an outstandingly important and innovative research project, still awaiting final publication, which although largely concerned with the protohistoric period demonstrates how much a problem-oriented approach can accomplish. In Sri Lanka, Siran Deraniyagala's extensive series of cave excavations and the systematic employment of radiocarbon dating in this context offer another outstanding model; so too does the same scholar's major project at Anuradhapura which has been applying modern sampling techniques and a carefully devised strategy of excavation to the rediscovery and study of this early historic city. More such innovative approaches are needed in the early historic field.

The need to enhance early historic archaeology

In the course of writing, we have quite frequently experienced feelings of despair, brought on by the realization of how many opportunities have been lost and how slow has been the advancement of knowledge in so many areas. What makes the situation particularly acute is that, with the continuing population explosion taking place throughout South Asia, whole areas, including ancient cities, which were still reasonably accessible and undamaged in 1947, have since been destroyed or at least put beyond the range of excavation by the process of development. In some cases the extent of change or destruction is extraordinary. For example, Pataliputra was probably the greatest city of South Asia in Mauryan times, and much of it was still available for investigation forty years ago, but since then a great part of the ancient city has been submerged by modern housing and other development as part of the expansion of the city of Patna. In Nepal, the Licchavi capital near the village of Hadigaon, with its royal palace complex, regarding which so much can be learned from inscriptions, has suffered a similar fate. In Pakistan, the second city of Puskalavati (Charsada), at Shaikhan Dheri, was still an open mound of some 36 hectares when we saw it in 1963, at which time the site was declared protected: returning thirty years later we found that nearly the whole mound had since been built on. What makes this case so deplorable is that the buyers of building plots first plunder any ancient remains they can discover and in the course of this excavation most objects and cultural evidence have been destroyed.

Such horrors of course can be found in many parts of the world, and we do not wish to imply that South Asia is in any way unique in this respect. But in some

respects the local situation is peculiarly unfavourable to conservation, because of the great density of population in many areas and its continuing growth, and because of the necessarily limited funds and resources available. Moreover, as we have indicated, the wider situation is not as bleak as the more narrowly early historic picture may suggest. Since the middle of the twentieth century there has been a slow, but steadily increasing, momentum of change, and particularly in the past decade the quality and quantity of archaeological publications, both from the Government departments and more particularly from universities, hold out the promise of progress to come. If our present book appears from time to time to be over critical, it is because of our deep concern at the destruction of the cultural heritage which we have witnessed taking place before our eyes during the past decades.