CHAPTER 3

HISTORIES OF SOUTH ASIAN ARCHAEOLOGY

INTRODUCTION

An understanding of the history of the practice and theory of archaeology in South Asia is crucial for understanding the development of the discipline, and this becomes increasingly important when we explore the different explanations made before and after Partition and Independence (Figure 3.1). Not only is this history closely tied to the history of foreign and colonial activity and domination within South Asia, but it is also possible to demonstrate that the very nature of empire and imperialism over the last 300 years has also had an impact on the way archaeological narratives are now practiced by many within South Asia, particularly with regard to postcolonial discourse. We will not provide a definitive history of the development of archaeology within South Asia as there are a number of general synthetic volumes already available, such as Dilip Chakrabarti’s *History of Indian Archaeology* (1988a) and *A History of Indian Archaeology since 1947* (2003) and Upinder Singh’s *The Discovery of Ancient India* (2004). There are also more detailed autobiographies and biographies of specific individuals such as Mortimer Wheeler’s *My Archaeological Mission to India and Pakistan* (1976) and *Still Digging: Interleaves from an Antiquary’s Notebook* (1955), Himanshu Ray’s *Colonial Archaeology in South Asia: The Legacy of Sir Mortimer Wheeler* (2007), Jacquetta Hawkes’s *Mortimer Wheeler: Adventurer in Archaeology* (1982), Abu İman’s *Sir Alexander Cunningham and the Beginnings of Indian Archaeology* (1966), Shanti Pappu’s *Prehistoric Antiquities and Personal Lives: The Untold Story of Robert Bruce Foote* (2008) and B. B. Lal’s autobiography (2011). There are also more detailed studies of specific themes such as Charles Allen’s *The Buddha and Dr Fuhrer* (2008), Donald Lopez’s *Curators of the Buddha: The Study of Buddhism under Colonialism* (1995), Nayanjot Lahiri’s review of colonial Indology (2000), and Tapati Guha-Thakurta’s (2004) volume *Monuments, Objects, Histories: Institutions of Art in Colonial and Post-Colonial India*, which all explore ways in which pasts have been created and some of the motivations behind the processes involved.
We begin by examining the colonial origins for modern archaeology within South Asia, primarily reviewing the work undertaken by William Jones and other pioneers of the Royal Asiatic Society. These individuals laid down a number of concepts and models that are still perceived by many as fundamental to a study of not only South Asian archaeology, but also linguistics, numismatics, inscriptions and related areas today. As already noted in Chapter 2, amongst these enduring concepts is that of an Indo-European language family and the related debate as to whether modern patterns of languages represent ancient movements of peoples (Tiwari 2010). We will also consider the pervasive impact of the diffusionistic models of Mortimer Wheeler, Gordon Childe, D. H. Gordon and Stuart Piggott, which suggested that people from outside the region played critical roles in the emergence of the Indus and Early Historic...
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Moreover, we will consider the evidence supporting Wheeler's and Piggott's suggestions that the Indus Civilisation was destroyed by a wave of Indo-European speakers, and the way this model has permeated explanation throughout South Asian archaeology. Closely linked were the preoccupations of colonial scholars with linking South Asia to Western chronologies, which has greatly contributed to the perception that South Asia was a largely 'passive' realm throughout its history and prehistory (Wheeler 1959).

Following this, we will briefly consider the nature of postcolonial archaeology in South Asia and the shift in focus by some of the nation states from diffusionistic explanations to indigenous explanations (Chakrabarti 2003). The influence of nationalism will also be traced, and different aspects of the relationship between archaeology and politics in modern South Asia will be explored, primarily by recent claims by a number of Indian scholars that the Indus civilisation was Vedic (Tiwari 2010; Lal 2005). We will return to this issue in Chapter 12, when we consider some of the ways in which the development of cities and states in the early years CE has shaped South Asian social organisation in more recent times, but it will also recur at many points throughout this book.

TRADING AND COLONIAL BEGINNINGS

Awareness of, and interest in, South Asia’s past did not originate with European colonial contact, although it was under colonial expansion that such an interest became more concentrated and eventually systematic in approach. An example of this early interest in the past comes from Firuz Shah Tughlak (r. 1351–1388 CE), a Muslim ruler and Sultan of Delhi who was well known during his own lifetime as a respecter of other faiths and of scholarship. He was also aware of the importance of legitimation and the value of the past, and took care to transport two Asokan pillars, one from Meerut in Uttar Pradesh and the other from Ambala in Haryana, to his palace in Delhi where they were re-erected (Chakrabarti 1988a: 1) (Figure 3.2). Even during the Raj, South Asian leaders and scholars were concerned with their own heritage, and it was not left solely to the British to preserve and explore the past. The support given to John Marshall by the Begum of Bhopal during his field activities at the Buddhist site of Sanchi illustrates this relationship (Marshall, Foucher and Majumdar 1940), as does Ratan Tata's sponsorship of the Archaeological Survey of India's excavations at ancient Pataliputra (Spooner 1913). However, the early history of archaeology in South Asia is more closely linked to the activities of European travellers, military officials and those linked to trade, particularly in the form of the East India Company (1600–1834 CE). The English East India Company obtained permission from the Mughal Emperor Jahangir (r. 1605–1627 CE) to begin trading in India in 1619, but by 1764 had extended their role to one of territorial control and conquest when the army of the East India Company
ensured the subjugation of Bengal. This process of territorial hegemony continued until the conquest of Punjab and the annexation of Awadh in the 1840s and 1850s. Britain remained the primary colonial power in South Asia until Independence in 1947, although Portuguese and French enclaves legally survived until 1961 and 1963 respectively.

With the expansion of British mercantile, military and administrative capabilities within South Asia, the number of officers and officials expanded dramatically, and many of these early expatriates took an interest in their new surroundings. Whilst some immersed themselves in the contemporary literature and culture of the Mughal courts like James Achilles Kirkpatrick, Resident at the court of the Nizam of Hyderabad in the 1790s, others developed interests in the ancient past of South Asia. One of the earliest influential antiquarians was William Jones (1746–1794 CE), who travelled to India as a Judge of the Supreme Court at Fort William in Calcutta (Kolkata). Jones was an ‘Orientalist’, who admired and studied the achievements and cultures of Asia and was an accomplished linguist and scholar (Figure 3.3). In 1784 Jones and other like-minded individuals founded the Asiatic Society of Bengal, which invited select members of the East India Company and the British military to share their knowledge and investigations of history, geography and natural
history. This society was the first to collectively explore the history of different cultures in India and later produced papers on the importance of antiquity and archaeology in the subcontinent, and even hosted a museum.

Many of the antiquarians involved in the Asiatic Society had been educated in Britain prior to their arrival in India, and this had a great impact on their studies and findings, with many linking the monuments, coins and cultural remains of South Asia to perceived counterparts in the European and Classical world. For example, William Jones identified the Indo-European language family by drawing links between Sanskrit and Greek and Latin in 1786, while James Prinsep (1799–1840) dated the inscriptions of the Emperor Asoka through references made to them by Ptolemy II (Figure 3.4). Alexander Cunningham (1814–1893) identified sites in what is now Pakistan according to their association with Alexander the Great, and even managed to draw parallels between Stonehenge and the great stupa of Sanchi (1854) (Figure 3.5).

Like William Jones, Prinsep was also an important figure within the Asiatic Society and is best known for deciphering early Brahmi and Kharosthi scripts. He was something of a polymath, undertaking research into chemistry, meteorology, Indian scriptures, numismatics, archaeology and mineral resources, while fulfilling the role of Assay Master of the East India Company mint in East Bengal (Kolkata). It was his interest in coins and inscriptions that made him such an important figure in the history of South Asian archaeology, utilising inscribed Indo-Greek coins to decipher Kharosthi and pursuing earlier
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scholarly work to decipher Brahmi. This work was key to understanding a large part of the Early Historic period in South Asia, as Brahmi was the script used on a series of known stone pillars and rock inscriptions in Delhi, Allahabad and central areas, while Kharosthi was the script used on rock inscriptions and coins in the north-west at Mansehra and Shahbazgarhi. Prinsep was able to demonstrate that these pillars and rock inscriptions had all been the work of a single ruler, the Mauryan Emperor Asoka (r. 273–232 BCE), and he determined the

Figure 3.4. Early illustration of an Asokan edict by Postans in 1838.

Figure 3.5. Alexander Cunningham (1814–1893) as a young man.
dates of the inscriptions through references to contemporary rulers in western Asia. This of course was a hugely significant development as it gave a clear chronological and political link between India and the West, one on which much has been built, often uncritically, to this day (Box 11.1).

Following the political upheavals associated with the military reversals of 1857 (Box: 3.1), direct power was transferred to the British Government in London, and all facets of the newly acquired crown territories were

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**Box 3.1. The East India Company**

The East India Company was founded by royal charter on 31 December 1600, and was originally named the *Company of Merchants of London Trading into the East Indies*. The Company was formed by a group of London merchants to import spices and other exotic goods from Asia. Spices, of course, had been imported to Europe for many centuries along various land routes. However, during the sixteenth century, Portuguese navigators and explorers such as Vasco de Gama had identified a sea route down the west coast of Africa, around the Cape of Good Hope and up the east African coast to India and thence the East Indies, or directly across the Indian Ocean to the East Indies. This allowed the Portuguese, and then the Spanish, to trade directly with the spice-producing regions and cut out the numerous traders and markets that goods had previously passed through on their overland routes. The destruction of the Spanish Armada in 1588 allowed the Dutch and then the British to break the former Portuguese and Spanish monopoly in the east and create what would become the East India Company, which itself had the monopoly over British trade. However, British merchants still met with opposition from the Dutch in the Dutch East Indies (what is now Indonesia) and the Portuguese in India. In 1612 the British defeated the Portuguese in India, and were subsequently granted trading rights by the Mughal rulers of the time. It was because of these encounters, and numerous other threats to safety and security from other European traders as well as local leaders, that the company developed its own military and administrative capabilities, which allowed it to become an imperial power in its own right over time.

In 1615 negotiations with the Emperor Jahangir allowed the British to establish factories and trading posts at the port of Surat, in what is now the modern state of Gujarat, and, over the next hundred years, British trade flourished. Numerous trading posts were founded and significant British communities emerged, particularly in the cities of Calcutta, Bombay and Madras (now known as Kolkata, Mumbai and Chennai). The company had more than twenty factories around India by 1647, with major factories becoming the walled towns of Fort William in Bengal,

(continued)
investigated through the creation of a series of surveys. In addition to separate Geological and Ordinance Surveys, an Archaeological Survey was established in 1861, which went some way towards formalising the antiquarian activities across the region. The newly formed Archaeological Survey of India (ASI) played a major role in developing a more systematic approach
to discovering and recording archaeology. Under the leadership of General Alexander Cunningham (1814–1893), first as Surveyor and then between 1871 and 1885 as Director-General, numerous historical sites, including many associated with the life of Buddha were identified. Cunningham undertook a series of tours or surveys of the Indus–Gangetic valleys and central India, and he was meticulous about publishing his findings in twenty-three volumes of *Archaeological Survey Reports*.

Cunningham is particularly remembered for his rediscovery and identification of the great cities of early South Asian literary tradition, such as the Early Historic cities of Charsadda and Taxila, and other sites of note that had been documented in early texts (Figure 3.6). Because of this activity, Cunningham is often described as a ‘historical geographer’, by which we mean that he tried to locate sites of antiquity within a landscape by identifying unique or outstanding geographical features by which to place them. Indeed, recording and identifying monuments are what gave Cunningham his place in South Asian archaeology, as he undertook little excavation (Menon 2008: 17). As testimony to his detailed and thorough identification and recording, his study of early coins, and his 1854 monograph on the Buddhist remains at Sanchi in India,
The Bhilsa Topes are still used by scholars today (Willis 2000). However, and this is an issue to which we will return in later chapters, many of the identifications by Cunningham and others of this period have been accepted with little attempt at archaeological verification, and this has brought a number of problems and issues to South Asian heritage and archaeology.

This legacy of Cunningham, and of course William Jones, shaped the course of the study of prehistory and early history in this region right up to the early twentieth century. Rather than focusing on archaeology and material culture as a means of understanding the development of different cultures, and the way they changed over time, linguistics, numismatics, epigraphy, architecture and the analysis of early texts were seen as the most important approaches to understanding the past. With reference to methodology, Cunningham’s background as a military surveyor has provided a legacy of extremely accurate plans of archaeological sites set within their landscapes prior to the expansion of population and settlement. For example, Cunningham’s topographical studies and interpretations of the Taxila Valley and other sites offer a unique perspective, particularly as those landscapes have since been encroached by modern farming and habitation. His other great contribution was to offer holistic studies of sites as demonstrated by the Bhilsa Topes volume, which attempted to study a complex of Buddhist monuments with reference to its landscape, individual architectural monuments, artefacts, sculpture, and inscriptions rather than studying only one aspect (1854). Some scholars have accused Cunningham of having ulterior motives in his study of ancient South Asia, suggesting that he focused on Buddhism as an alternative to Hinduism in the belief that Buddhists could be made to convert to Christianity more freely (Chakrabarti 1988b: 44). Although disputed, it is quite clear that Cunningham subdivided the ancient South Asian past into broadly religious periods with a period of Buddhism succeeded by one of Hinduism and then one of Islam followed finally by European Christianity (Cunningham 1871). However, it is also clear that Cunningham’s political superiors were aware that others were observing their behaviour with the Governor-General stating that “It will not be to our credit, as an enlightened ruling power, if we continue to allow such fields of investigation … to remain without more examination than they have hitherto received. Everything that has hitherto been done in this way has been done by private persons, imperfectly and without system. It is impossible not to feel that there are European Governments, which, if they had held our rule in India, would not have allowed this to be said” (Canning 1862).

By the end of the nineteenth century, much was known about the Historic, Early Historic and even Protohistoric periods of South Asia but what sort of enquiries into prehistory had taken place? Those involved in the Geological Survey of India were of course ideally placed to observe the landscape and artefacts within it of the regions being surveyed, and this is indeed what happened. Robert Bruce Foote was a geologist with the Geological Survey
of India, and many modern archaeologists agree that he was a key figure in
the prehistory of South Asia (Chakrabarti 1988a: 8–9; Kennedy 2000: 11–12;
Pappu 2008). In 1863 Foote formally identified the first Palaeolithic tool in
South Asia, which he recovered from a gravel bed in Pallavaram near Chennai.
Foote discovered and recorded over 460 Palaeolithic sites across southern
India, along with many more sites with microlithic finds that he believed
to be later in date. Foote also linked early human activity sites with finds of
Pleistocene fauna, thus opening up a whole new area of study. A contempo-
rary of Foote’s in the Geological Survey was William King who also devoted a
great deal of time and effort to the discovery and recording of stone artefacts
from southern India. They were supported by many colleagues, both South
Asian and European, but their extensive survey and publications provided a
solid foundation for early prehistory, in the south at least. Another remark-
able achievement by Foote was his correct identification of the Neolithic
ash-mounds of Peninsular India in 1872. Foote (1887) suggested on the basis
of his observations that these mounds were in fact cattle pens that had been
repeatedly burnt, this interpretation was largely passed over by archaeologists
for many years, with the purpose of the mounds the subject of great debate
until work at sites such as Utnur and Pikhlihal confirmed Foote’s interpreta-
tion as correct (Allechin 1963). However, despite the enthusiasm of individu-
als such as Foote, the archaeology of Peninsular India was thereafter largely
neglected on account of the strength of historic and other texts associated
with northern areas of the Raj. This neglect did not always extend into field
techniques as Meadows Taylor was already experimenting with stratigraphic
recording whilst excavating megalithic burials in the Deccan in the 1850s
(Figure 3.7).

FROM THE EARLY TWENTIETH CENTURY TO PARTITION

Field archaeology largely stopped at the ASI on the retirement of Cunningham
in 1885 as he was replaced by James Burgess, an architect. In 1902, how-
ever, John Marshall (1876–1958) was appointed as the Director-General of
Archaeology in India, and almost immediately began a systematic excava-
tion at Charsadda, in what is today the Khyber Pakhtunkhwa Province in
the north-west of Pakistan. This signalled a change of approach in the way
archaeology was carried out in India, as Marshall was a Classical scholar and
archaeologist, with solid experience of excavation and archaeological tech-
nique, particularly large area trenches in Crete with Arthur Evans. Marshall
is credited with having ‘discovered’ the Indus Civilisation, with his recogni-
tion of the site of Mohenjo-daro and his later excavation and publication of
‘Mohenjo-daro and the Indus Civilization: Being an Official Account of Archaeological
Excavations at Mohenjo-daro Carried out by the Government of India Between the
Years 1922 and 1927’ in 1931. The ASI’s campaign along the Indus was extremely
timely as many of the structures on Mound AB at Harappa had already been stripped by contractors looking for ballast for the Multan railway (Figure 3.8).

Under Marshall’s twenty-six years of leadership, archaeology and its related subjects advanced greatly in India and, in addition to regular ‘scientific’ excavation, he produced publications and journals such as ‘Memoirs of the Archaeological Survey’ and began programmes of conservation and preservation with a mission to “dig and discover, to classify, reproduce and describe, to copy and
decipher, and to cherish and conserve” (Marshall 1939: 13). He also promoted the founding of site museums, thus demonstrating a major shift in focus from the collection of individual objects to the preservation and conservation of monuments in situ. Following his excavations at Taxila (see Chapters 10 and 11), he established a museum at the site which is still running today, along with a Government Rest House for visiting officials and scholars, which still contains some of the furniture and the dinner service he had brought out from England (Figure 3.9). As with many of his contemporaries, not all of Marshall’s contributions have been without their critics, and Indra Sengupta has shed light on an early and rather naive example of Marshall questioning the sanctity of space during his tour of temples in Orissa in 1904, quoting his retort that “[i]f the Government decides that the pavement is sacred and belongs indisputably to the temple, then it should be fenced and a notice warning people not to step on it should be posted up.” (2010: 168). This episode aside, most scholars would agree that a further service Marshall rendered to South Asian archaeology was his facilitation of the surveys by Aurel Stein, whose extensive travels throughout South and Central Asia and Iran provided a wealth of archaeological and historical detail (e.g. Stein 1928), although the methods by which Stein collected materials have been subject to considerable scrutiny and question. Marshall also introduced the concept of major horizontal excavations to South Asia and his archaeological campaigns were typified by the opening up of major portions of ancient South Asian cities, whether at

Figure 3.9. Taxila Museum, Pakistan.
Mohenjo-daro and Harappa, or in Bhita and the Taxila Valley. These campaigns offered unique opportunities to study town planning and urban morphology as well as to recover large numbers of artefacts to publish and display in the new museums. His discoveries across the northern portions of South Asia provided a clear chronology for the region. In turn, this enabled him to link the antiquity of South Asia firmly to the Old World Civilisations of Egypt and the Near East and, when he retired, it was said of him that he left India 3,000 years older than he had found it.

When Marshall retired in 1928, he was succeeded by a series of elderly Directors-General – Hargreaves, Rai Bahadur Daya Ram Sahni, Blakiston and Rao Bahadur K. N. Dikshit – the last of whom coincided with a review of the ASI by Leonard Wooley. Wooley was deeply critical of the ASI, its plans, its excavations and its training (Woolley 1939) and his report resulted in the appointment of the next notable figure in South Asian archaeology – Mortimer Wheeler – perhaps one of the most charismatic and influential archaeologists in world archaeology in the twentieth century (Box 3.2). Wheeler (1890–1976) had an impressive background in British archaeology, excavating at both Verulamium (St Albans) and Maiden Castle (Dorset) before

**Box 3.2. Mortimer Wheeler (1890–1976)**

Sir Robert Eric Mortimer Wheeler was born in Glasgow, but brought up in Saltaire, Bradford, attending Bradford Grammar School before reading Classics at University College, London. He married Tessa Verney in 1914, joined the Royal Field Artillery, and was subsequently posted to Italy and Germany where he was awarded the Military Cross. After the war he was appointed Keeper of Archaeology in the National Museum of Wales, where he stayed until 1926. He then moved to London to take up the directorship of the London Museum. In 1937 he founded the Institute of Archaeology at University College London and became its first director. Wheeler excavated many sites in Britain between 1920 and 1939, including the Lydney Roman Temple, Gloucestershire, Roman Verulamium, and Maiden Castle, an Iron Age hill fort in Dorset. Tessa Wheeler, who had become a noted archaeologist herself, died in 1936 and he married his second wife Mavis de Cole in 1939. This marriage lasted until 1942, when the couple divorced, and then Wheeler married Margaret Norfolk (a former pupil), in Simla in 1945.

Wheeler served again in the Second World War in the 42nd Royal Artillery Regiment at El Alamein, Tunisia and Italy. He became Director-General of the Archaeological Survey of India in 1944, taking on the task of restructuring the organisation, as well as providing training at Harappa, Taxila, Charsadda and Arikamedu, and developing publications. He became
adviser to the Government of Pakistan following Partition in 1947, and was then appointed Professor of Archaeology of the Roman Provinces at the Institute of Archaeology, London (1948–1955), continuing to direct excavations within Britain. At the same time he continued to spend part of the years 1949 and 1950 in Pakistan as an adviser to the Government, overseeing the establishment of the government’s Department of Archaeology in Pakistan and the National Museum of Pakistan in Karachi. He was knighted in 1952, and was president of the Society of Antiquaries in Britain from 1954 to 1959 and secretary of the British Academy between 1949 and 1968.

He returned to Pakistan in 1958 to carry out excavations at Charsadda and then joined the UNESCO team concerned with the preservation and conservation of Mohenjo-daro during the 1960s. Mohenjo-daro was eventually inscribed as a UNESCO World Heritage site in 1980. In addition to his scholarly reports, he introduced the archaeology of South Asia to the wider public through his many popular books and radio and television appearances, which brought archaeology to the attention of the listening and viewing public. He hosted *Animal, Vegetable, Mineral?, Buried Treasure* and *Chronicle* and was named British TV Personality of the Year in 1954.

Wheeler made an immense contribution to archaeology and archaeological techniques, particularly in stratigraphic excavation and the principles of stratigraphy. The ‘Wheeler box-grid’ is still used frequently in South Asia today, whereby baulks of unexcavated earth are retained in a grid pattern between larger areas of excavation. This means that a record of stratigraphy is held in the sections of the baulk, thus allowing relationships across a site to be better understood and recorded.

being appointed Director-General of Archaeology in India (1944–1948) and then acting as Archaeological Adviser to the newly formed Government of Pakistan (1948–1950) (Figure 3.10). Wheeler was particularly committed to scientific principles of excavation, following on from those established by Pitt Rivers. Wheeler’s box grid technique crucially allowed him to expose both open areas and stratigraphy on sites, and is the basis of techniques widely used today. The box grid is one of Wheeler’s long-lasting methodological legacies and is still used across South Asia although it has been replaced in Europe by open area excavation (Figure 3.11). Wheeler also needs to be recognised for his use of trained volunteers and students in excavation in Europe, rather than workmen. When Wheeler was appointed Director-General of Archaeology in 1944, he realised that he had a short time to re-establish the Survey before Independence and quickly identified a list of priorities. The first of these was
to undertake the training of key field excavators, and it is a tribute to this regime of field training schools that many of its graduates were to play major roles in the development of archaeology in Post-Partition archaeology, such as B. B. Lal and A. H. Dani (Box 3.3). He also ensured that the training camps were focused on key archaeological sites such as Mohenjo-daro, Harappa,
Box 3.3 B. B. Lal

Professor Braj Basi Lal was born in the village of Baidora, some 20 kilometres from Jhansi in Uttar Pradesh, India in 1921, and his passion for archaeology and ancient history has led to his status as one of the most influential teachers and researchers on India’s past. He attended Allahabad University and achieved a first class MA in Sanskrit but also participated in the archaeological training camp set up at Taxila by Mortimer Wheeler in 1944–1945 along with Professor A. H. Dani, with whom he became good friends. B. B. Lal also worked at Arikamedu under Wheeler and then joined the staff of the Archaeological Survey of India at the age of twenty-three as an assistant superintendent. He excavated at Harappa, where he first came across Wheeler’s idea of Vedic Aryans destroying the Indus Civilization and then Brahmagiri, also under the training and teaching of Wheeler. B. B. Lal went on to direct his own excavations at the sites of Sisupulgarh and Hastinapura, and then at many other sites in the course of his long career (Lal 2011).

Lal moved to Kolkata to take up a post as superintending archaeologist in charge of the Eastern Circle of the Archaeological Survey of India in 1953, taking care of the area from Orissa in the south to Assam in the north. In 1955 he was placed in charge of the Agra Circle, which included the world renowned Taj Mahal, the Fort at Agra, and the monuments at Fatehpur Sikri. Lal undertook some of the most important excavations of his career at Kalibangan in Rajasthan between 1961 and 1969. His career went from strength to strength and ultimately he served as director general of the Archaeological Survey of India from 1968 to 1972.

In 1959 he was the first director of the School of Archaeology founded under auspices of the Archaeological Survey. This school expanded Wheeler’s original training vision by covering both the practical and theoretical sides of archaeology. The school was open to students not only from India but from the wider region, including countries such as Thailand, Nepal and Afghanistan. The school was renamed the Institute of Archaeology in 1985 and its campus is located in the Red Fort, Delhi. B. B. Lal also worked outside India, leading a team to Nubia and Egypt in 1962, which threw valuable light on issues such as Egyptian prehistory and the possible domestication of cotton in Sudan. In 1971 he was the Alexander White Visiting Professor at the University of Chicago.

In 1972 he left the Survey and joined the Jiwali University in Gwalior, School of Studies in Ancient Indian History, Culture and Archaeology and carried out research and training excavations at the Gupteshwar Valley among others. At this time the ‘Archaeology of the Ramayana Sites Project’ was initiated in order to systematically explore the key sites named in the Ramayana. B. B. Lal then left Gwalior and took up a National Fellowship with the

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Institute of Advanced Study, Shimla which enabled him to continue the Ramayana Sites Project, specifically targeting Ayodhya, Bharadvaja Asrama, Sringaverapura, Chitrakuta and Nandigram. Professor B. B. Lal has received many honours and awards, including presentation of the VS Wakankar Award in 2010 and being honoured with Padma Bhusana by K. R. Narayanan, President of India, in 2000.

Throughout his career, two research questions have played a major role in shaping B. B. Lal’s scholarship; these are determining the historical and archaeological basis for the two great epics, the Mahabharata and the Ramayana, and exploring the Aryan Invasion. A controversial figure on account of his interpretations at Ayodhya, his long and wide reaching career means that his research has greatly influenced the development of both academic and popular narratives of Indian prehistory and proto-history.

Figure 3.12. The old French Jesuit Mission at Arikamedu, India (courtesy Jo Shoebridge).

Taxila and Arikamedu and were geared towards examining deep sequences, chronology and links between the two great civilisations, as well as attempting to bring a more certain chronology to the south in the form of contact with the Near East, the Roman world and Indian Ocean trade (Figure 3.12). He also focused on the need to publish swift and full excavation reports and to
provide artefactual and ceramic typologies to allow the cross, or relative, dating of sites throughout the region. Wheeler trained many students in archaeological practice, and his legacy is apparent throughout Pakistan and India, as we discuss further later.

FOUNDATIONS OF POSTCOLONIAL ARCHAEOLOGY

Having outlined some of the key events and key characters in the pre-Independence history of archaeology in South Asia, we now need to consider the legacy that such scholars as Marshall, Piggott, Childe and Wheeler left for the twenty-first century. In this section we will consider explicitly archaeological theories, although many of these are inextricably entwined with textual material and interpretations. John Marshall excavated extensively at Mohenjo-daro, and his three published volumes on the site remain the most extensive text to date (1931a). When it came to interpretation and explanation, he was convinced of the similarities between the artefacts and structures of the Indus Civilisation and those of Mesopotamia to the west (1931a: 102). He claimed that the similarities indicated not only that they were contemporary, but also that there was extensive contact between the two. Marshall suggested that there must have been a long period of development, perhaps as much as 1,000 years, before the urban form known through excavation was reached (ibid.). With regard to the origins of the Indus Civilisation, Marshall outlined two main speculative theories of the time – that the people of the Indus Civilisation were Vedic Aryans, thus dominant incomers; or that they were connected to the Sumerians – but stated emphatically that there was no evidence to support either theory (ibid.: 107). Although he ultimately suggested that the people of Sindh and the Punjab were likely to be of mixed origin, he did subscribe to the then highly fashionable practice of unearthing ethnic origins through cranial measurements and morphology. Now widely discredited in anthropology, such practices continued to be used into the 1960s and were used by Dani at the site of Timargarha in Dir (1967).

Although he discounted the Vedic Aryans as contenders for the architects of the Indus Civilisation, Marshall did consider that they existed as a group, and that accounts of fair skinned, fine featured Aryans in the Vedic literature were more or less statements of facts (1931a: 110). It was this uncritical acceptance of the oral and historical sources that has led to one of the most enduring and widely debated issues of South Asian archaeology throughout the twentieth century and unfortunately on into the start of the twenty-first century. The existence of a group of people called Indo-Europeans or Vedic Aryans has achieved the status of received wisdom – it has been repeated so often that it is now accepted fact, despite there being no satisfactory archaeological evidence whatsoever to support the presence of an incoming group of such numbers as historical and archaeological explanations require (Trautmann 1997).
Marshall’s acceptance and promulgation of descriptive material found in epics and chronicles was not new but, given his role as a key South Asian archaeologist in the early twentieth century, he helped to solidify ideas which had no legitimacy outside these oral accounts and myths, yet which have shaped the direction of much archaeological enquiry for nearly a century. With regard to his work at the later Early Historic site of Taxila, Marshall himself was keenly aware of projecting his own knowledge of the Classical world into South Asia (1951: xv), although he did not consider that this in any way impacted unfavourably on his interpretation of the archaeology there. In his discussion of the origins of the earliest phases of the Bhir Mound, then considered the earliest settlement in the Taxila Valley, Marshall suggested that the urban form was the product of Persian influence or instruction, although he was aware that there was little evidence to support this surmise (1951: 12–13). He was, however, very little concerned in his interpretations with the form of settlement or culture prior to this historically recorded contact with the West.

Although highly critical of much of Marshall’s field archaeology, Mortimer Wheeler developed many of Marshall’s earlier ideas and suggested that the different industries and cultures to be found in Baluchistan were the result of stimuli from “the west: across Afghanistan ... from the Persian Plateau” (1968: 23). He went on to suggest that the earliest known towns and villages on the Indus Plain itself, such as Amri and Kot Diji, were the successors of earlier Baluch towns (1968: 24). When considering the origins of the Indus Tradition, Wheeler was aware of the many differences between Mesopotamian and Indus culture, but was nevertheless convinced that the urban form of the Indus was the result of diffusion from the west. He claimed that “[a]s the evidence stands, civilization emerged in Mesopotamia some centuries before it emerged in Sind[h] or Punjab.... It is difficult to suppose that, in spite of a parallelism of opportunity, so complex a conception can have arisen independently in each of the great riverine regions, related as they are to a common stem on the Irano-Afghan plateau” (1968: 25). Wheeler reconciled the issues he raised by suggesting that it was primarily ‘ideas’ that had been transferred or diffused, which went some way in explaining similarities in urban development, domestication, as well as differences in pottery styles, script and types of metal artefacts. He was aware that although excavations had been limited, the earliest known levels at both Mohenjo-daro and Chanhu-daro showed continuity from pre-urban to urban stages. Despite this evidence for continuity, he remained convinced that the driving force of urban development had come to South Asia from the west, and then certain forms and features of an urban civilisation were given a local twist. Wheeler said, “[I]t can at least be averred that, however translated, the idea of civilization came to the Indus from the Euphrates and Tigris, and gave the Harappans their initial direction or at least informed their purpose” (1968: 135). Although he noted the presence in both Sumer and the Indus of artefacts from the other civilisation, he declined to call
this contact ‘trade’ as the evidence he had seen was so small in quantity. Rather, he viewed it as further evidence of contact between the two civilisations that would have allowed the movement of ideas from Sumer to the Indus without the more formalised links that trade implies. As we will see in Chapter 7, excavations carried out at Indus Tradition sites since the 1950s have provided archaeologists with a great deal more in the way of material culture which has been interpreted as part of an extensive trade network.

Wheeler also worked on the Early Historic site of Charsadda (see also Chapter 10). Charsadda had already been identified by Alexander Cunningham as Pushkalavati, one of the ancient capitals of the Persian province of Gandhara, through his analysis of historical texts; an identification which Wheeler later accepted without question (1962: 3) (Figure 3.13). This identification provided Wheeler, and all other early scholars working there, with a solid historical date to which they could link their archaeological investigations – that of the invasion of Alexander the Great and his troops in 327 BCE. Wheeler considered the period between the end of the Indus Civilisation during the early second millennium BCE and the arrival of the Achaemenid or Persian kings in the mid-sixth century BCE to be one of localised activity based around minor

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**Figure 3.13.** Mortimer Wheeler’s section at the Bala Hisar of Charsadda, Pakistan.
leaders, indeed a major cultural transformation (see Chapters 8 and 9). While he acknowledged that Charsadda (ancient Pushkalavati) and Taxila (which became another major city), were in existence prior to the sixth century BCE, he suggested that their development as urban centres was entirely due to the spread of Persian control (1962: 5). The presence of iron objects in early levels allowed Wheeler to suggest that the site was first occupied sometime around the sixth century BCE, and further, “it is here inferred that, at any rate as a city, Pushkalavati should be associated with the pacification of the region by Cyrus or Darius” (1962: 13). Iron, Wheeler asserted, was not found in South Asia prior to the sixth century BCE, and that the spread of iron after that time was due to Achaemenid rule in the north-west (1962: 33–34).

Although Stuart Piggott was primarily a prehistorian of Europe, he carried out various desktop surveys within South Asia during the Second World War, as well as studying museum collections and synthesising earlier published works, which allowed him to comment on both Pre and Protohistory (1950). Piggott’s greater knowledge of the Near East and Mesopotamia greatly influenced his interpretations of South Asian material, just as the Classical world influenced Marshall’s work. Piggott was similarly explicit in his work about this Western leaning: “So far as India is concerned, therefore, we must look westwards for the introduction of the arts of agriculture, and it will be seen throughout this book how the Indian material can be properly understood only in terms of its general Western Asiatic setting” (1950: 50). Piggott also repeatedly referred to the links between South Asia and the Old World Civilisations to the west, particularly in Mesopotamia, when exploring the origins and development of the Indus Civilisation (1950: 67). Indeed, Piggott went further than simply finding connections between the Indus and neighbouring Mesopotamia; he attempted to find connections that stretched from South Asia through to the Near East, building up an almost pan-continental network of links and influences (1950: 110–111). Piggott was also struck by the uniformity of much of the Indus material culture, not only over a large geographical area, but also over a chronological period that he estimated to be at least 700 years in duration (1950: 139). He contrasted this uniformity in technologies and forms with similar artefacts from the Mesopotamian civilisations, and concluded that the “stagnation and uniformity” of Indus material was the product of fixed ideas and lack of forward development, or progress (1950: 140). When discussing the end of the cities of the Indus Tradition, Piggott strongly supported the idea of a relatively sudden demise of extended urban living, which he claimed is shown through evidence for burning and violence and intrusive populations from the west (1950: 215ff). He stated that “the long-established cultural traditions of North-Western India were rudely and ruthlessly interrupted by the arrival of the new people from the west” (1950: 238–239), and went on to liken the end of the Harappan with similarly abrupt and violent occurrences in Mesopotamia.
Piggott drew heavily on the *Rig Veda* to demonstrate that Aryan peoples had invaded or moved into northern South Asia in great numbers in what he called a ‘Dark Age’ in the period between the end of the Harappan and the Early Historic urban-focused phase (see Chapter 8). Piggott did not commit himself to absolutely claiming that the Aryans were directly responsible for the end of the Harappan, but he did believe that, as a migrating people, they were entirely non-urban and more ‘tribal’ in their social organisation (1950: 263). Piggott presented a somewhat confusing picture of the developments of the Early Historic period, when he moved directly from the apparent cultural, linguistic and social transformation in northern India in the second half of the first millennium BCE to the Greek accounts of the court of Chandragupta Maurya, the Mauryan Emperor based at Pataliputra on the Ganges dated to circa 300 BCE. Piggott wrote effusively of Chandragupta Maurya’s great state and organisation, and suggested that there must have been some Harappan legacy at work there (1950: 287–288). What Piggott failed to address here was the importance of the other Early Historic developments across the region and the impact of the Achaemenids and Greeks, whose activities in South Asia have been the subject of considerable historical records by eyewitnesses, unlike the Aryans.

Finally, reference should be made to Vere Gordon Childe who, like Stuart Piggott, was not a South Asian archaeologist but a Professor of Prehistoric Archaeology at Edinburgh University. Like Piggott, and very much in keeping with the approach of the mid-twentieth century, he attempted to synthesise knowledge about the early Old World Civilisations. In his discussion of the Indus Civilisation, Childe emphasised the homogeneity of the material culture, despite the distance between the main sites known at the time, being Mohenjo-daro, Chanhu-daro and Harappa (1954: 173). Childe noted similarities in the form of certain pottery types, metal objects and other artefacts between the Indus and Mesopotamia, but he was also clear that these civilisations were in fact very separate: “Enough has been said to show that India confronts Egypt and Babylonia by the third millennium with a thoroughly individual and independent civilization of her own, technically the peer of the rest. And it is plainly deeply rooted in Indian soil” (1954: 183). However, he then went on to point out that the three civilisations all had the same basic concepts, and suggested that it was unlikely that all three were the result of entirely separate, indigenous development. Trade was acknowledged as one means of sharing both goods and ideas, but in Childe’s view, trade “may explain some rather superficial agreements between the two civilizations, but not the underlying technological and economic bases, common to both” (1954: 186). He expanded this concept further by explaining that in his view, both Mesopotamia and the Indus were based on the same fundamental inventions and discoveries, but during the third millennium BCE there was great divergence and separate development.
Like Piggott, Childe claimed that there was no internal development within the material culture of the Indus; that there were no cultural changes to distinguish different levels or stages over time in the civilisation itself (1954: 186). This is of course partly a product of limited data from a limited number of sites available at the time Childe was writing, and also the difficulties of closely dating stratigraphic events and changes. While Childe was cautious in his commentary on the origins of the Indus, he was very clear about its end and focused on a period of internal degradation in the civilisation, evident through the reuse of brick and the much smaller scale of building carried out. This was then followed by a barbarian invasion which destroyed the cities and most of the civilisation itself (1954: 187). While not fully committing himself to identifying these invaders as Aryans, he did suggest that they came from the region of north-western Iran, and attributed to them a gap in the cultural record, which lasted until the time of the Persian King Darius (1954: 188). Finally, reference should be made to Colonel D. H. Gordon, whose ‘Pre-Historic Background of Indian Culture’ epitomised earlier diffusionistic narratives although it was published as late as 1960. With a clearly stated philosophy that “[a]s we trace the cultural progress of man in India we shall see how influences in the shape of immigrants or invaders made their way into India” (1960: 35), all of South Asia’s major cultures were attributed to Western Asia. Collectively, this group of foreign scholars were to greatly influence the development of archaeological explanation and theory within South Asia, and their concepts have been repeated and delivered to generations of students and scholars through key textbooks. However, it is also important to recognise the contributions made by large numbers of South Asians during this period. This contribution included patrons, as foreign governments were not the only sponsors of excavations as demonstrated by the financial support of the Begum of Bhopal and Ratan Tata, but also included the pioneering fieldwork undertaken in the region of Sindh by Majumdar, who was killed by dacoits whilst surveying, or the mapping of Lumbini, the birthplace of the Buddha, by P. C. Mukherji in Nepal or, indeed, the discovery of Lumbini itself by General Khadga Shumsher J. B. Rana in 1899. Similarly, it is worth noting that some of the individuals may have sponsored archaeological activities for more personal reasons and Basak has suggested that Ratan Tata’s focus at Pataliputra may have been partly driven by a wish to explore his own “Persian roots” (2008: 47).

**POST-PARTITION ARCHAEOLOGY**

As is clear from Wheeler’s own memoirs, the devastating events and mass migrations associated with Partition were to make the latter half of the 1940s extremely unsettled for archaeological professionals, but archaeology within South Asia was soon to recast its role by contributing to the emerging identities of the new nation states. To an extent, such a contribution had already been
made by scholars like Marshall. Indeed, he had clearly demonstrated a substantial depth to the cultural sequences of South Asia, identified the presence of a literate, urban civilisation much earlier than those of Europe, and his conservation programme has created what he termed a “national heirloom for posterity” (1939: 27). Wheeler also contributed as he assisted the archaeologists of the new state of Pakistan to recognise the distinct character of the cultural heritage of West and East Pakistan in a volume called *Five Thousand Years of Pakistan*, which he admitted was a wilful paradox (1950). Acknowledging the territorial allocation of the Indus Valley and its cities to the new state of Pakistan, he then advised the archaeologists of the new state of India that “recent Partition has robbed us of the Indus Valley…. We now have therefore no excuse for deferring longer the overdue exploration of the Ganges Valley. After all if the Indus gave India a name, it may almost be said that the Ganges gave India a faith” (Wheeler 1949: 10). The professionals of the new nation-states needed little encouragement and quickly developed a level of state sponsorship, scarcely seen before within the region, as Pakistan launched archaeological missions to Bahrain whilst India sponsored missions to Afghanistan, Indonesia, Cambodia and Nepal as well as European exhibitions (Lal 1964).

It is important to note, however, that this new Independence-inspired archaeological agenda was still largely fuelled by a continued reliance on diffusion and the movement of people as the main explanation for cultural change. Thus Banerjee initiated a search through Iron Age cultural assemblages in order to identify the presence of the diffusion of Aryan colonists (1965). Even later, Sankalia considered contemporary Western trends for processual models of indigenous cultural development before rejecting them in favour of diffusionism (1977). Not all research was driven by earlier diffusionistic antecedents, as illustrated by B. B. Lal’s ‘Epic Archaeology’, a term utilised by Menon to describe attempts to link archaeological sequences within India with the textual content of the *Ramayana* and *Mahabharata* (2008: 25). Despite the collective influence of the colonial scholars discussed earlier, huge changes have occurred within South Asian archaeological method, theory and practice over the last forty years. For example, concepts of a diffused Neolithic have been replaced by not one but multiple Neolithic developments in different regions. This includes the chance discovery of Mehrgarh in Baluchistan, which is the sixth millennium BC archaeological site from which we can see clear developmental links to the later cities of the Indus Tradition. Similarly, the apparent appearance of the Indus cities is now known to have been presaged by the presence of a series of proto-urban planned forms from the middle of the fourth millennium BC. Similarly, sites like Inamgaon, Pirak and Charsadda suggest that the intervening period between the two major urban-focused developments was actually a period of innovation and growth in many aspects, and that a number of later Early Historic cities had their genesis in the preceding late ‘Chalcolithic’ and Iron Age periods. Menon has suggested that
the acceleration in the study and excavation of Early Historic sites in India reflected this desire “to fill the gap” between Harappan and Early Historic (2008: 19). The vast majority of these developments and discoveries were initiated after Partition, and this event also caused the development of very different trajectories of archaeological practice within each separate South Asian state. Moreover, there was also a growing critical awareness of the impact of colonialism and postcolonialism on the discipline (Chakrabarti 2003, 1988a; Thapar 1995, Tiwari 2010) (Box 3.4).

Box 3.4. Romila Thapar

Professor Romila Thapar is one of the leading authorities on ancient South Asia, particularly Indian history, and her work spans both textual sources and material culture analysis. She obtained a BA from Punjab University and then went on to study for a PhD on the Mauryan Empire at the School of Oriental and African Studies (SOAS) in London in 1958. Born in India in 1931 in Punjab, Thapar’s career has been both illustrious and influential. For example, she has defended the right of universities to teach broadly debated interpretations of the Ramayana, and has engaged with discussing the motivations behind different interpretations of South Asian history, particularly in relation to religious tradition. Thapar has taught ancient Indian history at Delhi University and Jawaharlal Nehru University (JNU), and has been an Emeritus Professor at JNU since 1993. She has also been awarded numerous honorary degrees and distinctions, including honorary degrees from Peradeniya University, Sri Lanka, University of Chicago, University of Calcutta, Oxford University, and Edinburgh University. Some of her recent distinctions include being appointed to the Visiting Kluge Chair at the Library of Congress, Washington DC, and being awarded the Kluge Prize, being voted a Corresponding Fellow of the Royal Society of Edinburgh, elected to the American Academy of Arts and Sciences, and being elected an Honorary Member of the American Historical Association. Such international recognition is in keeping with the scope and impact of Thapar’s research.

What has made Thapar such an important figure in the study of South Asia’s ancient history? One of the key elements of her research is her use of social context and her attempts to place analysis and interpretation within a specific cultural context, that of South Asia. Thapar’s work has also challenged two major narratives of ancient India; the first of which cast South Asia in terms of past glory, a once-great culture that had degenerated; and the second which portrayed ancient South Asia as a non-violent and progressive region up to colonial contact. Thapar’s work challenged both these
views and this has led to a great deal of intellectual debate. Arising from her PhD research on the Mauryan Empire, Thapar has also carried out much analysis of the role of religion in the history of South Asia and, in particular, the development of both Hinduism and Buddhism in social terms. She has cautioned against the uncritical use of texts (1985: 16), stating: “the chronological stratification of literary texts, particularly those which arose out of religious needs or came to serve a religious function and which have been preserved as part of an oral tradition before being edited and recorded in writing, do present multiple problems in providing data on precise points of historical and social change”.

Professor Romila Thapar continues to publish widely on ancient South Asia, and to promote debate and discussion about many different aspects of her work. She remains based in New Delhi, although she travels widely in order to lecture about her work and undertake visiting research and teaching fellowships.

Up to the mid-twentieth century, archaeology throughout most of South Asia came under the auspices of the ASI and of course the British, with a separate Archaeological Survey Department in Sri Lanka. Following independence from Britain, and in the case of Pakistan and Bangladesh, each country developed its own agenda for the study and practice of archaeology. In Post-Independence India, the major change was in the scale of support and approach. As we saw earlier, it was not until 1902 that archaeological excavation became accepted in South Asia within the ASI. After Independence, India retained the structure of the Survey, but greatly extended its scale and activity. As Dilip Chakrabarti has commented “The basic shape of the central Archaeological Survey remains the same, but in scale there can be no comparison between the official strength of the pre-1947 Survey and that of post-1947 India. In terms of approved human resources, budget and the number of its ‘circles’ and ‘branches’, the modern Indian ‘Survey’ is truly an archaeological juggernaut” (1999: 17). In addition to the national survey, states took control of research and conservation within their own territory, and the Indian University Grants Commission has provided funding for universities to conduct teaching and research in different parts of the country. This means that Indian archaeology is well-funded and multi-tiered, and this has resulted in a great deal of exploration since 1947, as well as a very strong commitment to archaeology and archaeological science in higher education. Bishnupriya Basak observed that there has also been parallel growth in the development of regional archaeologies and histories, reflecting individual states, some of which were newly formed such as Gujarat and Maharashtra (2008: 49). In some cases,
this in turn has influenced how the archaeological sequences of larger areas or regions have been presented and researched with Aloka Parasher–Sen stating that some “corridors of cultural interaction ... were now blocked out only to highlight the archaeological personality of a newly constructed administrative entity” (2008: 316). Finally, it is necessary to note that the impact of increasing numbers of Buddhist pilgrims from Japan, South-east and East Asia has acted as a catalyst for an investment in ancient Buddhist sites across northern India.

The other countries of South Asia have also inherited a similar structure from the ASI – in all, archaeology is the affair of the government, either directly through both federal and state departments (or circles), or indirectly through state-funded universities. The major differences are in the amount of funding and the size of the departments. In Pakistan, for example, archaeology is taught at fewer institutions, and still owes a huge debt to Mortimer Wheeler for its interpretation and approach. More recent legislation has divided archaeological jurisdiction of sites between UNESCO World Heritage sites under the care of the Federal Department of Archaeology and Museums whilst other sites are now entrusted to provincial governments. Nepal has an active government Department of Archaeology as well as a Lumbini Development Trust archaeological unit, but little formal tertiary teaching in the subject, while Sri Lanka is fiercely proud of its own separate archaeological tradition, with high standards of training and excavation. Moreover, its departmental activities have been augmented by fieldwork and excavation sponsored by the Central Cultural Fund and the Universities of Kelaniya and Peradeniya. The Central Cultural Fund is also now responsible for management and research within the island’s UNESCO World Heritage sites, which include a striking range of important Early Historic and Mediaeval capitals and their hinterlands. Finally, one should note that whilst Bangladesh has an established Department of Archaeology, the archaeology of the Maldives and Bhutan is as yet underdeveloped. A number of Myanmar’s senior archaeologists were trained at the ASI’s Institute of Archaeology and now its Department of Archaeology and National Museum runs its own programs under the auspices of the Department’s Field School of Archaeology (Moore 2007).

From the late 1960s and 1970s, a growing interest in environmental and scientific archaeology may also be traced, particularly within India. Examples of this include the palynological work by Singh (1971) (see Chapter 2) and work within the field of archaeometallurgy by D. P. Agrawal (1971). This was in line with a broader concern with these sub-disciplines in archaeology worldwide, and contributed greatly to the environmental determinist approaches which dominated much archaeological explanation and interpretation in the 1970s and 1980s. Whilst some departments and universities have remained more traditional in approach, both Deccan College, Pune and the MS University of Baroda pursued routes of science-based archaeology in their publications in the 1970s and 1980s. The impact of radiocarbon dating was also quickly
recognised as reflected in the initial publications of scholars such as Agrawal and Ghosh (1973), Agrawal and Kusumgar (1974) and Mandal (1972). This scientific and environmental approach allowed the development of alternative explanations for both the origins and the demise of the Indus Civilisation (see also Chapters 2, 6 and 8), as well as attempting to explain many earlier cultural developments, such as the advent of the Mesolithic or periods associated with the use of microlithic tools (see Chapter 4) or the general health of ancient populations (Lukacs and Walimbe 1996). Additional archaeological science units were developed across India, including at Banaras Hindu University, Garhwal University, the Birbal Sahni Research Institute of Palaeobotany, Tata Institute of Fundamental Research, and the Bombay and Physical Research Laboratory. While an understanding of prevailing and changing environmental conditions is obviously important to gain a full picture of landscape use and the exploitation of plants and animals, to rely on environmental determinism as a single or main driver of change ignores human agency and the importance of cultural adaptation. Other important foci, such as the postgraduate Centre for Historical Studies at Jawaharlal Nehru University, are committed to investigating reconstructions of the past through the interface between socio-economic history and archaeology. In the following chapters we will, of course, cover environmental issues, but we will consider them as just one part of a suite of factors that have contributed to, shaped, and been shaped by human activity.

Similarly, settlement and landscape archaeology has become of increasing interest to South Asian archaeologists, just as it has developed as an archaeological sub-discipline in other parts of the world. In South Asia, survey archaeology ranges from the compilation of gazetteers of sites by archaeologists such as Rafique Mughal (1997), George Erdosy (1988), and Ihsan Ali (2003) to consideration of religious landscapes (e.g. Shaw 2000; 2013), the place of rock art in landscapes (e.g. Dani 1995) and the links between landscape and identity (e.g. Young 2010, 2009). There have also been developments in the application of different methodologies and different interpretative approaches to understanding urban-rural landscapes and their development (e.g. Bandaranayake and Mogren 1994; Coningham and Gunawardhana 2013, Coningham et al. 2007a; Mohanty and Smith 2008). Moreover, there have also been limited but successful transborder collaborations, such as the participation of Indian specialists like B. K. Thapar, P. B. Karunaratne, P. P. Joglekar and M. D. Kajale in the excavations at Mantai in Sri Lanka (Carswell et al. 2013). These methodological and technological innovations have occurred in parallel with increasing recognition of the challenges and limitations presented by culture history (Johansen 2003), as well as consideration of the negative impact of colonialism and neo-colonialism on contemporary South Asian archaeology as a whole (Chakrabarti 2010). Alongside these focused developments, however, there is still strong diffusionist or anti-diffusionistic debate even today as illustrated
by the collection of papers presented by Tiwari in 2010 and the 12th World Association for Vedic Studies conference on ‘Harappan Civilisation and Vedic Culture’. That these opposing views still exist, and result in such polarised debate, demonstrates the power of the legacy of early archaeologists.

CONCLUSIONS

Whilst it would be true to say that never has there been so much archaeology practised within South Asia, whether by the state or national government or by South Asian or international universities, it would also be true to say that the threats to South Asia’s heritage have never been greater. Urbanisation, industrialisation and the development of more intrusive farming technologies in addition to the development of national and international markets for South Asian antiquities are taking their toll. With regard to the illegal trafficking of antiquities, a series of surveys in north-west Pakistan in the 1990s estimated that over half of all known Buddhist archaeological sites in Charsadda District had been targeted by illegal excavators (Ali and Coningham 2002), and similar evidence has been produced from Anuradhapura District in Sri Lanka, where two-thirds of all Buddhist sites had been targeted (Coningham and Gunawardhana 2012) (Figure 3.14). As the population grows, this human risk to the preservation of heritage keeps pace. To this may be added the destruction of sites and monuments from ‘nationalistic’ and ‘ideological’ motives. The oft-cited example of the destruction of the Mughal Emperor Babur’s mosque in Ayodhya in 1992

Figure 3.14. Looters excavating the Indo-Greek city of Shaikhan Dheri, Pakistan.
demonstrated that even the modern nation state of India was unable to protect certain monuments as political popularism and fundamentalism focus on individual sites. This disaster also saw archaeologists turn against each other with some even loosely associated with the destruction of the mosque on account of the postulated presence of a Hindu temple beneath (Ratnagar 2004). Sadly, at the same time that the Babri mosque in Ayodhya was destroyed, similar

Figure 3.15. The standing Buddha of Bamiyan before its destruction, Afghanistan.
The destruction of the Bamiyan Buddhas in Afghanistan in 2001 (Figure 3.15), the bombing of the Temple of the Tooth in Kandy, Sri Lanka, in 1998 (Figure 3.16), the attack on the Sacred Bodhi tree at Anuradhapura, Sri Lanka, in 1986 and the bombing at the shrine of Bodh Gaya in India in 2013 all demonstrate that heritage in South Asia is highly vulnerable, and that dominant and separatist ideologies have few scruples over the targeting of heritage.
as in the case of the recent destruction of Buddhist images in the National Museum at Male.

This current state of affairs shows that while archaeology is now integral to South Asia and highly professional, it also has a high profile, and attempts to control the use and misuse of the past will make its preservation increasingly difficult, although this is the context of archaeology globally (Chakrabarti 2010) (Figure 3.17). It is also important to note, however, that not all popularism is
necessarily damaging to sites. For example, neither the Sri Lankan government’s Department of Archaeology nor the Sri Lankan Royal Asiatic Society has been able to control the current popular interest in sites associated with the *Ramayana* as hundreds of thousands of pilgrims come to the island seeking authentic evidence of Lankapura, Ravana, Sita, Rama and Hanuman as sites without any archaeological evidence are transformed into cult pilgrimage stops (Dissanayake 2010). These developments are not without their positive aspects as there is also growing awareness of the social and economic benefits of cultural heritage across South Asia with a range of exemplars stretching from the Asian Development Bank’s investment in infrastructure to support international Buddhist pilgrimage, to the original model of Sri Lanka’s Cultural Triangle which has generated sufficient income to both preserve and conserve its monuments. This promotion shares a parallel in the surge of interest in the search for the submerged continent of Lemuria. Identified by some scholars as the lost ancestral homeland of Dravidian speakers, Sumathi Ramaswamy has charted how they have used this concept to explain why there is an apparent lack of early complexity in Peninsular India – its cities and temples lie beneath the Indian Ocean (2004). The SAARC member states have also had a number of major monumental sites inscribed on the UNESCO World Heritage Site list, although the pervasive and arguably intrinsic imbalances of the list are reflected in the types of sites inscribed and the number of sites from each of the different countries. This context suggests that the next phase of the development of archaeology as a discipline within South Asia will witness increasing pressure on the archaeological resource as professionalism and popularism clash, but will have a clear path forward, one which will offer the potential for archaeologists to blend research objectives with real societal impact and benefit. Finally, it must be recognised that these challenges do not face only South Asian archaeologists, but also confront their colleagues and contemporaries around the world. Once again, it is this sheer diversity which makes the study of archaeology in South Asia so challenging and so rewarding.