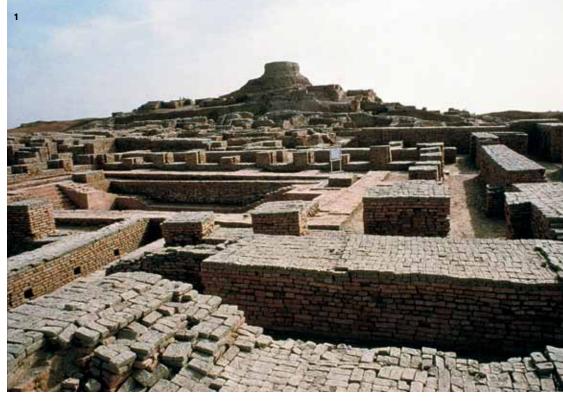
The mysteries of the

Andrew Robinson examines the achievements of the inhabitants of the ancient cities of Harappa and Mohenjo-daro that flourished in the Indus Valley around 5000 years ago

hen pondering on the non-Western origins of civilisation long before the Classical Greeks in his television series and book Civilisation, Kenneth Clark observed: 'Three or four times in history man has made a leap forward that would have been unthinkable under ordinary evolutionary conditions. One such time was about the year 3000 BC, when quite suddenly civilisation appeared, not only in Egypt and Mesopotamia but [also] in the Indus Valley.'

Despite its unfamiliarity to most people, the Indus civilisation was, in its own way, as extraordinary as those in Ancient Egypt and Mesopotamia. But having disappeared around the 19th century BC, it left no direct legacy in the Indian subcontinent. Neither Alexander the Great, who invaded India from the north-west in the 4th century BC, nor Asoka, the emperor who ruled most of the subcontinent in the 3rd century, was even dimly aware of it; nor were the Arab, Mughal and European colonial rulers of India during the next two millennia. Indeed, the Indus civilisation remained altogether invisible until the 1920s, when the city of Harappa was almost accidentally discovered in the Punjab by British and Indian archaeologists.

In 1924, the Director General of the Archaeological Survey of India, Sir John Marshall, famously announced in *The Illustrated*



- 1. Mohenjo-daro with the Great Bath (left). © harappa.com.
- 2. Bronze 'dancing-girl' from Mohenjo-daro. 10.5cm x 5cm. © harappa.com.
- 3. Excavated wells stand like towers at Mohenjo-daro. Photograph: Asko Parpola.

London News: 'Not often has it been given to archaeologists, as it was given to [Heinrich] Schliemann at Tiryns and Mycenae, or to [Aurel] Stein in the deserts of Turkestan, to light upon the remains of a longforgotten civilisation. It looks, however, at this moment, as if we are on the threshold of such a discovery in the plains of the Indus.'

Since then, archaeologists from many countries have identified well over a thousand settlements belonging to the Indus civilisation in its various phases. They cover at least 800,000 square kilometres of what in 1947 became Pakistan and India - an area approximately a quarter the size of Western Europe – with an original population of perhaps one million people. This was the most extensive urban culture of its time, about twice the size of its equivalent in Egypt or Mesopotamia. Most Indus settlements were villages, but some were towns, and at least five were substantial cities. The two largest cities, Harappa and Mohenjodaro, located some 600 kilometres apart beside the Indus river and one of its many tributaries, were comparable with cities like Memphis in Egypt and Ur in Mesopotamia during the 'Mature' period of the Indus civilisation, that is, between about 2500 BC and 1900 BC.

However, for all their excellent brick-built construction, these cities do not boast pyramids, palaces, temples, graves, statues or paintings; neither did they yield hoards of gold or treasure.

The grandest building is the socalled Great Bath at Mohenjo-daro, the earliest public water-tank in the world, a rectangle measuring 12 metres by 7 metres, with two wide staircases on the north and south leading down to a brick floor at a maximum depth of 2.4 metres, made watertight by a thick layer of bitumen. Though without doubt technically astonishing for its time, the Great Bath was apparently unadorned by carving or painting.

Yet, fed by crops watered by the great river and its tributaries flowing from the Himalayas, the Indus civilisation was remarkably productive and sophisticated in other



Indus civilisation



ways. The inhabitants constructed ocean-going merchant ships that sailed as far as the Persian Gulf and the river-based cities of Mesopotamia, where Indus-made jewellery, weights, inscribed seals and other objects have been excavated, dating to *circa* 2500 BC. Mesopotamian cuneiform inscriptions refer to the Indus region as 'Meluhha', the precise meaning of which is unknown.

The drainage and sanitation systems of the Indus cities were two millennia ahead of those of the Roman Empire; besides the Great Bath, they included magnificent circular wells, elaborate drains running beneath corbelled arches, and the world's first lavatories. Their well-planned streets, usually laid out in the cardinal directions, put to shame all but the town planning of the 20th century AD.

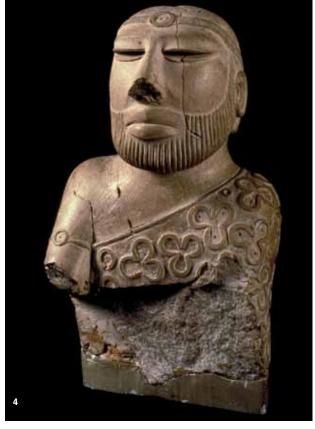
Their binary/decimal system of standardised weights - consisting of stone cubes and truncated spheres - is unique in the ancient world, suggesting a highly developed economy. Some of their many personal ornaments, such as the necklaces of finely drilled, biconical carnelian beads up to 13 centimetres in length, excavated at Ur, rival the treasures of the Egyptian pharaohs. Certain figurines – most notably the stately 'priest-king' carved in steatite and defiant 'dancing-girl' cast in bronze - are compelling, if enigmatic, works of art.

Most tantalising of all, though, are the partially pictographic signs and exquisite human and animal motifs of the still undeciphered Indus script (including a mysterious

'unicorn'), inscribed on miniature seal stones and terracotta tablets, occasionally on metal.

These form 'little masterpieces of controlled realism, with a monumental strength in one sense out of all proportion to their size and in another entirely related to it', enthused the best-known Indus excavator, Sir Mortimer Wheeler. Once seen, the seal stones are never forgotten – as witness the more than 100 differing decipherments of the Indus script proffered since the 1920s, some by distinguished academics such as the Egyptologist Sir Flinders Petrie, not to mention many amateurs and cranks.

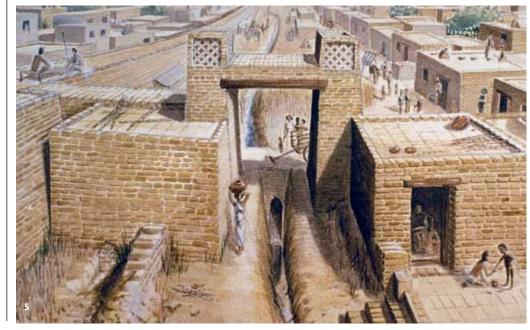
Indus archaeology has come a long way in almost a century. Nevertheless, it throws up many more unanswered fundamental



4. Steatite 'priestking', from Mohenjodaro, Mature Indus period. 17.5cm x 11cm. © harappa.com.

5. Reconstruction of Harappa showing its gateway and drain. © harappa.com.

questions than the archaeology of ancient Egypt and Mesopotamia (and China). A 'great cloud of unknowns... hangs over the civilisation', noted an Indus scholar, Jane McIntosh, in 2002. In particular: was the civilisation an indigenous development, apparently emerging from neighbouring Baluchistan,



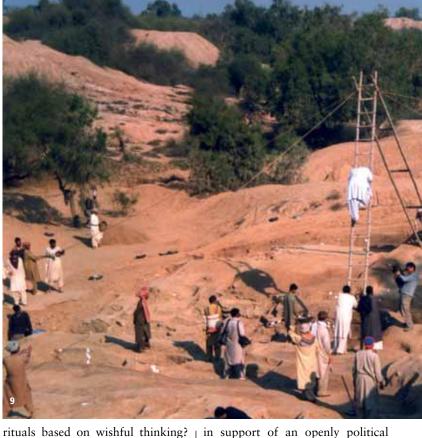
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where there is ample evidence for village settlement at Mehrgarh as early as 7000 BC? Or was it stimulated by the growth of civilisation in not-so-distant Mesopotamia during the 4th millennium BC? What type of authority held together such an evidently organised, uniform and widespread society, if it truly did manage to prosper without palaces, royal graves, temples, powerful rulers and even priests? Why does the Indus civilisation offer no evidence for warfare, in the form of fortifications, metal weapons and warriors; a situation without parallel in war-addicted ancient Mesopotamia, Egypt and China? Did the Indus religion contain the origin of Hinduism? Or is the apparent resemblance of some images on Indus seals and Indus practices to much later Hindu iconography and

- 6. Bullock cart in the Indus Valley, 1971.
 Terracotta models of similar carts have been found at sites in the area. Photograph: Asko Parpola.
- 7. Toy bronze figurine of a buffalo on wheels from Daimabad (western India), Late Indus Period. 31cm x 25cm. Photograph: Asko Parpola.
- 8. Decorated terracotta goblets from Mundigak (southeastern Afghanistan), Early Indus period. Photograph: Asko Parpola/courtesy of Musée Guimet, Paris.
- 9. Excavations at Harappa, 2000, by the American-led Harappa Archaeological Research Project. Photograph: Asko Parpola.



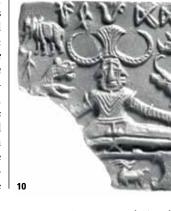
rituals based on wishful thinking? Is the Indus language that is written in the script (assuming only a single written Indus language) related to extant Indian languages, such as the Dravidian languages of south India (for example, Tamil) or the Sanskrit language of north India? Lastly, why did the Indus civilisation decline after about 1900 BC, and why did it leave no trace in the historical record? The signs of the Indus script seem to have become indecipherable almost 4000 years ago. They certainly bear no resemblance to the next Indian writing: the Brahmi and Kharosthi alphabetic scripts used in Asoka's rock and pillar inscriptions.

To complicate matters, some Indus debates have acquired a partisan political edge. The civilisation's discovery understandably promoted national pride during India's movement towards independence from British rule. Marshall started the trend in 1931 by claiming controversially that 'the religion of the Indus peoples... is so characteristically Indian as hardly to be distinguishable from living Hinduism'. Before becoming India's Prime Minister in 1947, Jawaharlal Nehru noted, reasonably enough: 'It is surprising how much there is in Mohenjo-daro and Harappa which reminds one of persisting traditions and habits - popular ritual, craftsmanship, even some fashions in dress.' Since then, however, and especially since the 1980s, Hindu nationalists in India have gone much further, disregarding archaeological and linguistic evidence

in support of an openly political agenda. They are keen to recruit the Indus civilisation as the *fons et origo* of Indian civilisation, and the origin of Hinduism, untainted by foreign influences. Indeed, a few Hindu nationalist scholars claim (absurdly) to read the Indus script in Vedic Sanskrit and find a reference to the Saraswati, a sacred river revered in the Rigveda.

Today, although the Saraswati is not visible as a single stream, ground surveys show that it was a major river during the Indus civilisation. Surveys on the Pakistani side of the desert border region in the 1970s and after have traced much, though not all, of the Saraswati's former course, part of which flowed in parallel with the Indus rather than as its tributary. While surveying, Pakistani archaeologists stumbled upon close to 200 settlements from the Mature period of the Indus civilisation clustering along the ancient course (almost all of which await excavation).

In this respect, the Indus (or Indus-Saraswati) civilisation resembles







ancient Mesopotamia, which developed between the Tigris and the Euphrates rivers, rather than Egypt, where civilisation was the 'gift' of a single river, the Nile. However, the Indus civilisation's geographical environment was more complex and varied than either: a fact that influenced its evolution more than is obvious from the evidence of its cities alone. Whereas the city-states of Mesopotamia remained focused on areas watered by its rivers, the Indus cities (or perhaps they were city-states) exerted direct control over a far wider area, often through large and small settlements, which supplied the cities with metals such as copper, semi-precious stones and minerals, and timber. Beyond the alluvial plains of the Indus Valley, this area may be divided into four regions: the western mountains and piedmont border zone, the mountain ranges to the north, the eastern border zone and Thar desert, and peninsular India.

The regions west of the Indus Valley are the highlands and plateaus of Baluchistan and along the



Below: three steatite seals from Mohenjodaro showing:

10. A three- or fourheaded figure wearing a horned headdress and in a yogic posture, surrounded by animals and signs of the Indus script. 3.56cm x 3.53cm. Some scholars have seen this figure as an early prototype of the Hindu god Shiva.

11. A zebu (humped bull) with signs from the Indus script. 3.75cm x 3.9cm.

12. A high-prowed, flat-bottomed boat with a central cabin and a double rudder. 3.33cm x 1.64cm. Photographs of the three seals courtesy of Asko Parpola.

13. Mohana houseboats with sailing masts on the Indus river near Mohenjo-daro, 1971. The Indus civilisation had a flourishing maritime export trade with the Persian Gulf. Photograph: Asko Parpola.

rugged Makran coast, where an Indus settlement has been excavated at Sutkagen-dor near the modern border with Iran. In the mountainous areas of northern Pakistan, Afghanistan, Tajikistan and Uzbekistan, the civilisation established a far-flung settlement, Shortugai, on the northern border of Afghanistan with Tajikistan beside the Oxus river, in order to obtain lapis lazuli from this soughtafter mineral's most important mine. To the east of the Indus Valley, the ancient Saraswati river was bordered by the Thar (Great Indian) desert, which covers the modern Indian states of Rajasthan and parts of Punjab, Haryana and Gujarat all of which contain settlements of the civilisation extending almost as far as the foothills of the Himalayas (in the northeast) and the Aravalli ranges (in the east); from the latter mountains the Indus cities obtained steatite (for making seal stones), copper and other metals.

East of the Indus Delta, in what is now part of western Gujarat, lay the coastal region of Kutch, consisting of many islands in the third millennium BC, unlike today's huge salt marsh, the Rann of Kutch, and the peninsula of Saurashtra – both of which contain many Indus civilisation settlements, including

Dholavira and a port, Lothal, from which ships traded with Mesopotamia. Beyond Saurashtra, on the Indian peninsula proper, the settlements peter out; yet the Indus civilisation obtained large quantities of agate and carnelian from the mines of Rajpipla in hilly eastern Gujarat and possibly gold from fardistant south India.

Less than 10 per cent of the Mature Indus civilisation settlements have been excavated. Important clues, including further inscriptions, unquestionably remain to be dug up, as has happened in recent decades. Nonetheless, the civilisation is far from being lost. In 1980, Mohenjodaro was added to the list of World Heritage Sites by UNESCO.

The half-understood mysteries of the Indus civilisation continue to fascinate anyone interested in the origins of civilisation. I am drawn to what appears to be its success in combining artistic excellence, technological sophistication and economic vigour with social egalitarianism, political freedom and religious moderation over more than half a millennium. If further investigation were to show this attractive picture to be accurate, the Indus civilisation could be seen as a hopeful sign for the future of humankind.



• The Indus Civilisation by Andrew Robinson will be published by Reaktion Books in autumn 2015. His book India: A Short History is published in hardback by Thames & Hudson at £16.95.

• Deciphering the Indus Script by Asko Parpola (Cambridge University Press 2009).

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