Investigating the Indus Valley (2600-1900 B.C.)

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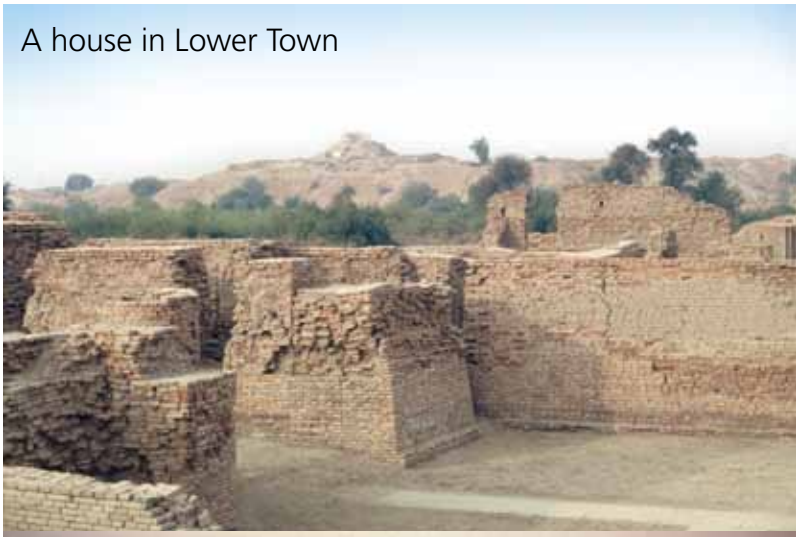
Introduction

In 1924 *The Illustrated London News* broke the story of a sensational discovery in the Indian subcontinent. Ruined mounds at Mohenjodaro and Harappa, 600 km apart, were forgotten cities of a lost civilisation. Nearly all we know about the Indus Civilisation comes from archaeology. What survives leaves many unanswered questions, so the topic is ideal to engage children in enquiry, facilitated by cross-curricular activities They can explore evidence as archaeologists do, find out how they explained it, why they disagree and how conclusions change. It can tap children's innate curiosity and fulfil history curriculum objectives.



A house in Lower Town

The Great Bath and 'Granary' on the 'Citadel' Mound

Structuring an enquiry

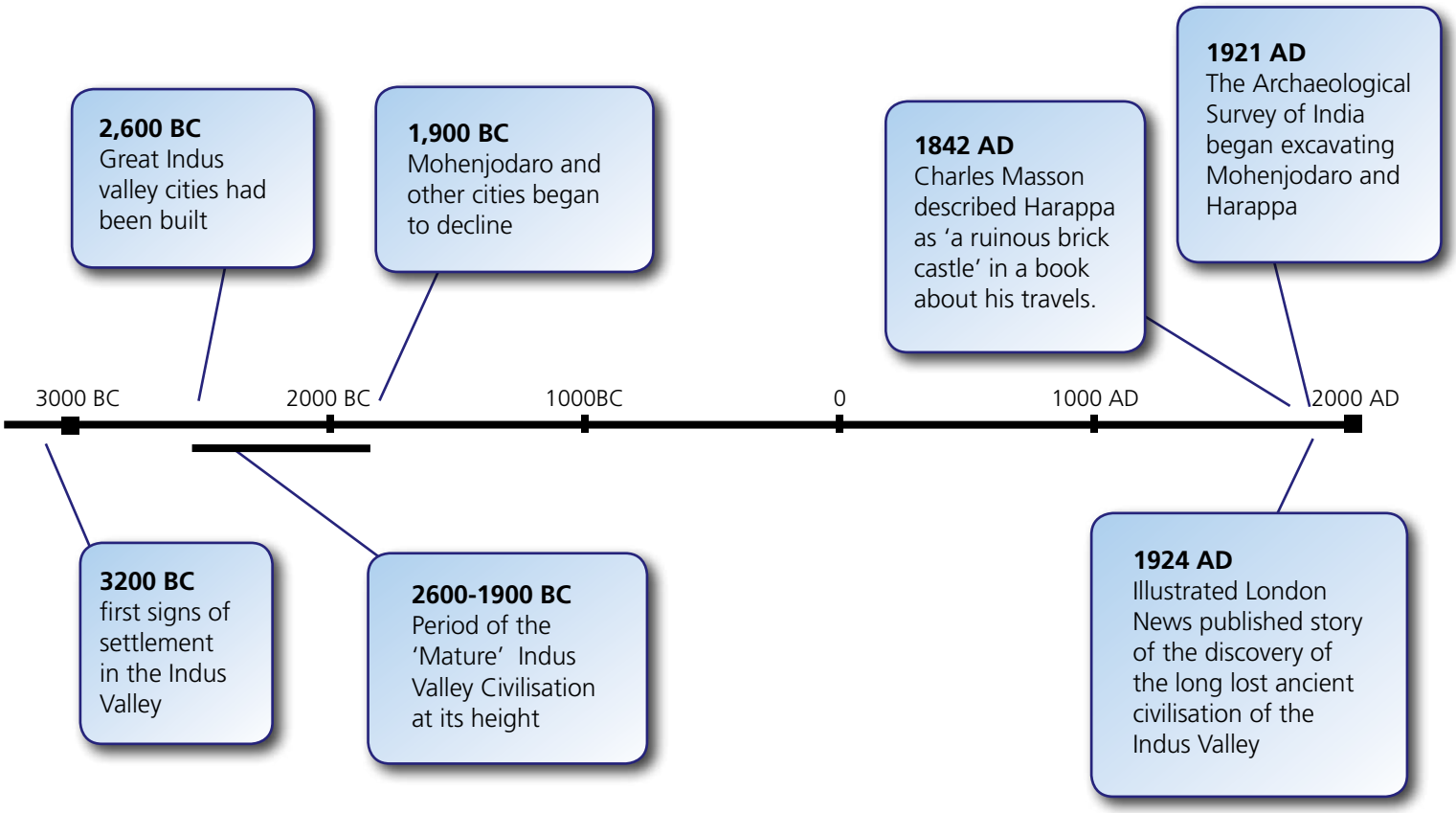
The Indus Valley Civilisation is (undeservedly) far less famous in the UK than Ancient Egypt. As a new or unfamiliar teaching topic it can seem daunting. In the first year of teaching, enquiry questions could be more structured; as your subject knowledge increases it may feel easier to challenge children to formulate their own questions. It should be introduced as an exploration of a mystery (a lost city, for example, with footage of Mohenjodaro) and structured in stages. 1) Where is it, how was it discovered? 2) How can we find out about it? What can we learn about the way of life from artefacts and architecture? 3) What have archaeologists disagreed about? Why have they had, and still have, different explanations about the evidence? It is rewarding to tackle 2) and especially 3) as interpretations and explanations have been so starkly different.

How was the Indus (or Harappan) Civilisation discovered and dated?

Local people, European travellers and the Archaeological Survey of India (ASI; 1853) had no idea of the antiquity of a 'mound of the dead' (Mohenjodaro) or a 'ruinous brick castle' (Harappa). In

A 'unicorn' seal 5.08 x 5.08 cm

Indus Valley time-line

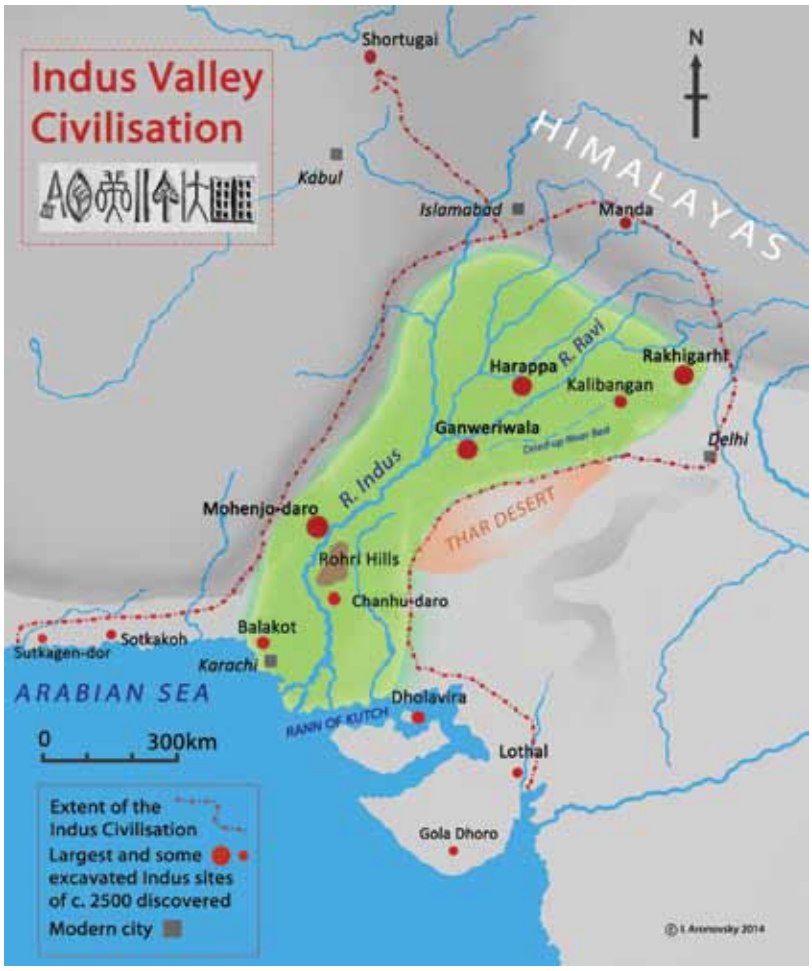


the 1920s ASI excavators Daya Ram Sahni and Rakal Das Banerji found artefacts in common, especially small soapstone seals engraved with 'unicorns' or other animals and unknown script, proving the two cities belonged to one time and culture. John Marshall, ASI Director General, authorised large-scale excavation in the 1920s and 30s. After the 1924 publicity scholars alerted him to Indus-style seals in Mesopotamia (Iraq) and Elam (Iran), found in dated contexts. Marshall was thrilled. This dated Indus cities right back to the Bronze Age proving the subcontinent had one of the first urban civilisations in the world.

Mortimer Wheeler, a towering figure in British archaeology, excavated in India and Pakistan during 1944-50. Post partition, discoveries of numerous sites continue to expand the known area of the civilisation in India and Pakistan. Radio Carbon dates for the Mature period are 2600-1900 B.C.

What was the Indus Civilisation?

Over 2,500 Indus (or Harappan) sites are known in an area of c. 1 million km^2. The map only shows the largest and some other significant sites. Mohenjodaro, the most famous, rises above the flood plain on a man-made mound. It is a massive construction, of brick architecture, thought to be a New Town, built on virgin soil. A high walled area (usually known as The Citadel) enclosed unique structures, notably the



One side of an amulet depicts a river boat, length – 4.6 cms.

'Great Bath', with a deep watertight pool, designed for important ceremonies. A massive structure of brick platforms was interpreted as the City Granary by Wheeler (see photograph on page 30). It has been re-interpreted as a secure warehouse for valuable goods, (Ratnagar) and a palace (Kenoyer). A grid of main streets intersected the separate Lower Town with residential blocks off narrow lanes. It has large and small buildings. All homes had access to deep brick wells in the vicinity and their own bathing rooms with outlets into city wide brick drains, designed with square pits to trap sewage. The wells were built with innovative wedge-shaped bricks to withstand force.

Harappa was badly damaged by brick robbing for a nineteenth-century railway. Excavation and research with modern scientific methods since the late twentieth century have illuminated its phases prior to the Mature Civilisation, and the technology of extensive craft production.

Indus cities depended on flood plain agriculture, and many sites are in the river valley, along other rivers and the north-west coast. They were linked by river transport and land routes. Boats sailed up the Persian Gulf to Mesopotamia. Raw materials and goods such as deodar (Indian cedar) were transported immense distances from the Himalayan foothills. The sole source of flint (chert) for fine blades was the Rohri Hills. This was used in all regions. Ore for copper or bronze dishes and tools, carnelian, lapis and other semi-precious stones, conch and other shell

A terracotta figurine wears a bead girdle?

A performing dog?

Case Study:
artefact enquiry – 'toy' wheeled cart

The terracotta frames (chassis) (c.17 cm long) and (two) wheels, with slot holes, are frequent finds in Indus sites. Accurate working replicas are easy to make in air dried clay or Das Pronto for a structured investigation or open-ended enquiry. They are thought to be toys, but toys give clues about what's important in any society. They indicate the immense importance of bulk transport for sustaining city life, traders and farmers. Design aspects show how people invent appropriate technology for their time and environment.


Assembling a replica cart

Pupil Comment 'They must have wanted their children to have nice childhoods.'

Key Question: What can model 'toy' carts tell us about the way of life

Learning Aim: Devise historically valid questions from one or more sources. Cross-curricular work supports this enquiry. Extension learning: forces, wheeled vehicles, energy cycle, animations with carts and other models.

Assessment: can children evaluate the significance of an artefact?

Activity

1. Blind assembly with sticks and ties (fun start if children haven't made a model themselves) Observe and describe the assembled object.

   Add photos of a cart, such as the one found at Nausharo, bull and water buffalo figurines which can also be modelled.

   What is it?

   Questions that arise: Who used it? Are there a lot? Where are they found? Is it a toy? Who made them? How? (A. They are fired. Potters?)

   Are there other toys? (A. terracotta bird whistles, rattles, animals with wheels or moveable heads) Can toys give clues about our way of life?

2. Test the cart design: try varied surfaces – grass, sand, gravel, mud, shallow water, thick carpet etc. Compare with modern toy vehicles. Test loaded, load and unload; (the chassis tilts for rolling large objects on and off).

   Write a description and design brief to fit. (Two large wheels + high chassis turn easily, cope with rough terrain and can be dismantled to overcome obstacles)

   Questions that arise: Were there real carts? How were they pulled? What animals pulled them and how were they attached? (A. Cart ruts 1.5 m apart excavated at Harappa. Ox and water buffalo. (Ox carts are still used in rural areas) What loads could they carry? How fast? How heavy? (a loaded ox-cart goes at 2 kms an hour) Would they need roads (like the Romans?) Could they cross water?

3. What else would we like to find out? e.g What were real carts used for? What would city people need? What more can we find out about traffic and transport in a city?


This is a street in Lower Town. It is 11m wide, which would allow heavy traffic in both directions. Ask children to pace this width and compare with a modern street. They can discuss why roads were important for ancient cities. Indus cities were not linked with roads like the Romans built, but there must have been tracks which carts used.

4. Plenary: what have we learnt from the carts? Are they a useful source of evidence?

   Modelling templates, instructions, briefings and cross-curricular activities with videos of activities are available in The Indus Valley Civilisation Cart Kit from Teach Indus (see Resources, p. 35).

A bath floor in house with outlet to street drain

for jewellery were also brought long distances for manufacture in the cities.

How are Indus sites identified?

Indus sites have unique architecture and artefacts; bricks to the ratio 4:2:1, graduated stone weights kept to a uniform standard, pottery (mass-produced on the foot wheel) decorated black on red, steatite (soapstone) seals carved with the Indus and terracotta 'toy' model cart frames and wheels. They also have figurines of people and animals.

What we know and what we don't know

At Mohenjodaro roofless, bare brick walls delineate buildings and streets. If there were vivid murals, we can never know. Organic matter has vanished, though modern techniques can find thread fragments (cotton, jute, wild silk). Carbonised grains, fish and animal bones provide evidence of crops and diet.

A limited number of graves have been found, one with a complete set of household pottery: www.harappa.com/indus/72.html

> 'They must have had different beliefs about the afterlife' - pupil making a spontaneous comparison with Ancient Egypt.

Other than bangles and tiny beads people were never buried with any other artefacts, or valuable jewellery. Cremation may have been the norm. No grave of a king or noble filled with items such as the Egyptians, Chinese or Sumerians were buried with, has been discovered. Does this prove there were no great kings? Just who ruled the Indus Civilisation or its cities? There can only be theories. Children can explore evidence from architecture and artefacts, such as Indus seals, and small stone statues from Mohenjodaro and learn there are no definite conclusions.

Children can compare differences between these civilisations and place them in a chronological framework.

We can read Egyptian hieroglyphs, so we have a narrative of events. We don't have one for the Indus, nor can we identify a single individual. The script survives on seals (and some tools, pottery, plus a large shell inscription embedded over a gateway, at Dholavira). It has not been deciphered, but there are child-friendly theories about 'Fish' and 'Stickmen' variants by leading scholars. Why did it go out of use, why was it invented and what was writing used for?

Indus terracotta figurines illuminate everyday life, human warmth and aspirations. They could be votive objects, offerings in home worship, toys or puppets, some recycled by children. Real jewellery correlates with bead girdles depicted on females. Terracotta beads which it is thought were used by ordinary people mimic the style of fabulous red carnelian beads belts (individual beads were 9-11 cm long) concealed in three hidden hoards.

How did the Indus Civilisation meet its end?

Differing theories about the decline of the Indus Cities are a story in their own right. New generations of archaeologists have challenged those of their predecessors. First came Mortimer Wheeler's ideas about hordes of invaders destroying the cities, followed by several theories of environmental disaster, (e.g. floods) and more recently, internal conflict leading to political collapse.

Wheeler was a well-known television personality who made archaeology very popular. The circumstantial evidence he put forward, in most persuasive language led to his theory being widely believed. (It mutated like Chinese Whispers in books by others.) Children can explore these ideas with an inquest into 38 skeletons found at Mohenjodaro; Wheeler said they were victims of a last massacre. They can construct alternative scenarios of the cause of death from later theories.

Ilona Aronovsky is a member of the HA Primary Committee and produces Teach Indus harappa.com/teach.

Want to find out more?

Childrens books

Jane Shuter, *The Indus Valley*, History Opens Windows series, Heinemann.

Gillian Clements, *Indus Valley City*, Building History series, Franklin Watts.

Brenda Williams, *Trading up: Indus Valley trade*, Raintree.

Rhona Dick, *The Indus Valley Civilisation*, Step-up History series, Evans.

Ilona Aronovsky and Sujata Gopinath, *The Indus Valley*, Excavating the Past series, Heinemann.

Resources

PCET How do we know about the Indus Valley Civilisation? 2003 Poster and Photo-pack with Teachers Booklet: Wildgoose Education www.wildgoose.ac/category_s/1477.htm

BBC Active Primary History – Indus Valley (2 programmes in India DVD with Photocards and Teacher Booklet – Geography Section) www.pearsonschoolsandfecolleges.co.uk

Indus Civilisation Cart Modelling Kit CD - Templates, modelling instructions, activities, and videos. Teach Indus: www.harappa.com/teach

Junior Education, Scholastic, subscribers only: poster and activities by Rhona Dick and Ilona Aronovsky.

Places to visit

The British Museum
Tiny collection in India Gallery, but Indus carnelian beads in Sumerian Section

Cambridge Museum of Archaeology and Anthropology

Ashmolean Museum

HA Resources

Podcast by Archaeologist Dr Mark Manuel on the Indus; an Indus Valley Topic Briefing Pack; 2014 Scheme of Work.

Primary History 62 Case Study 5 Animation & articles from past issues.

Decline of the Indus – What caused it? Time-line of theories for children Indus Valley Scheme of Work (Autumn 2014).

Websites

BBC Primary History Indus Valley website
www.bbc.co.uk/schools/primaryhistory/indus_valley/
Extensive resources

Teach Indus www.harappa.com/teach – for Primary Teachers.

Indus Investigators
investigators. Animated figurines from Indus Investigators, Mohenjodaro Mystery (Scholastic India) by Ilona Aronovsky
www.harappa.com/
Slide shows, site photos and artefacts, by archaeologists, articles, booklists and Q&A's with experts. Pages on Gola Dhoro, and Rohri Hills here.

British Museum – Go to
www.britishmuseum.org/explore.aspx
and search for 'A history of the world in 100 objects' this is their new resource – or if preferred this index page, which has the seals pictured and www.teachinghistory100.org/objects/indus_valley_seals

Ancient India www.ancientindia.co.uk/

National Museum, New Delhi
www.nationalmuseumindia.gov.in/departments-pre-history.asp?lk=dp1

Indus art gallery – especially jewellery and stone tools
http://heritage.gov.pk/html_Pages/Indus_Gallery.htm

Googling: (News reports) Use site names: versions of Mohenjo-daro, Moenjodaro, Mohenjodaro. Lothal, Dholavira, Rakhigarhi, Lakhian Jo Daro (2009 discovery) and Gola Dhoro.