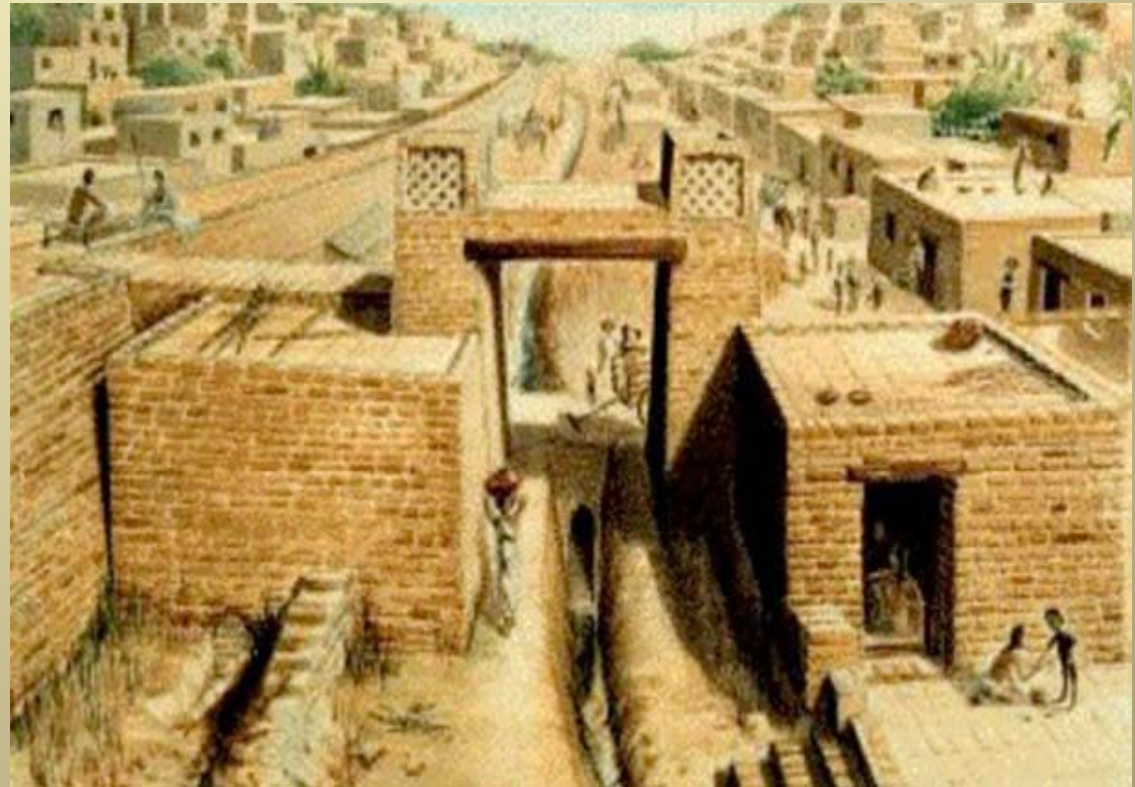


INDUS VALLEY CIVILIZATION



By: Maria Mian

INTRODUCTION

❖ Bronze Age civilization (3300–1300 BCE; mature period 2600–1900 BCE)

❖ Primarily centered along the Indus and the Punjab region, the civilization extended into the Ghaggar-Hakra River valley and the Ganges-Yamuna Doab, encompassing most of what is now Pakistan, as well as extending into the westernmost states of modern-day India, southeastern Afghanistan, and the easternmost part of Balochistan, Iran

❖ The mature phase of this civilization is known as the Harappan Civilization, as the first of its cities to be unearthed was the one at Harappa, excavated in the 1920s in what was at the time the Punjab province of British Sub-continent. Excavation of IVC sites have been ongoing since 1920, with important breakthroughs occurring as recently as 1999. Mohenjo-Daro, a UNESCO World Heritage Site

❖ The Harappan language is not directly attested and its affiliation is unknown, though Proto-Dravidian, Elamo-Dravidian, or (Para-)Munda relations have been posited by scholars



DISCOVERY AND EXCAVATION



❖ The ruins of Harrappa were first described in 1842 by Charles Masson in his *Narrative of Various Journeys in Balochistan, Afghanistan, and the Punjab*. No archaeological interest would attach to this for nearly a century

❖ In 1856, British engineers John and William Brunton laid the East Indian Railway Company line connecting the cities of Karachi and Lahore

❖ In 1872–75 Alexander Cunningham published the first Harappan seal. It was half a century later, in 1912, that more Harappan seals were discovered by J. Fleet, prompting an excavation campaign under Sir John Hubert Marshall in 1921–22 and resulting in the discovery of the civilization at Harappa

❖ Following the Partition of India, the bulk of the archaeological finds were inherited by Pakistan where most of the IVC was based, and excavations from this time include those led by Sir Mortimer Wheeler in 1949, archaeological adviser to the Government of Pakistan.

CHRONOLOGY

<i>Date range</i>	<i>Phase</i>	<i>Era</i>
7000 - 5500 BC	Mehrgarh I (aceramic Neolithic)	Early Food Producing Era
5500-3300	Mehrgarh II-VI (ceramic Neolithic)	Regionalisation Era 5500-2600
3300-2600	Early Harappan	
3300-2800	Harappan 1 (Ravi Phase)	
2800-2600	Harappan 2 (Kot Diji Phase, Nausharo I, Mehrgarh VII)	
2600-1900	Mature Harappan (Indus Valley Civilization)	Integration Era
2600-2450	Harappan 3A (Nausharo II)	
2450-2200	Harappan 3B	
2200-1900	Harappan 3C	
1900-1300	Late Harappan (Cemetery H); Ochre Colored Pottery	Localisation Era
1900-1700	Harappan 4	
1700-1300	Harappan 5	
1300-300	Painted Gray Ware, Northern Black Polished Ware (Iron Age)	Indo-Gangetic Tradition

GEOGRAPHY

- ❖ The Indus Valley Civilization encompassed most of Pakistan, extending from Balochistan to Sindh, and extending into modern day Indian states of Gujarat, Rajasthan, Haryana, and Punjab, with an upward reach to Rupar on the upper Sutlej.
- ❖ There is evidence of dry river beds overlapping with the Hakra channel in Pakistan and the seasonal Ghaggar River in India. Many Indus Valley (or Harappan) sites have been discovered along the Ghaggar-Hakra beds
- ❖ According to some archaeologists, over 500 Harappan sites have been discovered along the dried up river beds of the Ghaggar-Hakra River and its tributaries, in contrast to only about 100 along the Indus and its tributaries
- ❖ "Harappan Civilization" remains the correct one



Extent and major sites of the Indus Valley Civilization



EARLY HARAPPAN

❖ The Early Harappan Ravi Phase, named after the nearby **Ravi River**, lasted from circa 3300 BCE until 2800 BCE. The earliest examples of the Indus script date from around **3000 BCE**

❖ The mature phase of earlier village cultures is represented by **Rehman Dheri** and **Amri** in Pakistan. **Kot Diji** (Harappan 2) represents the phase leading up to Mature Harappan

❖ Trade networks linked this culture with related regional cultures and distant sources of raw materials, including **lapis lazuli** and other materials for bead-making.



MATURE HARAPPAN

- ❖ By 2600 BCE, the Early Harappan communities had been turned into large urban centers.
- ❖ Such urban centers include Harappa, Ganeriwala, Mohenjodaro in modern day Pakistan, and Dholavira, Kalibangan, Rakhigarhi, Rupar, and Lothal in modern day India.
- ❖ In total, over 1,052 cities and settlements have been found, mainly in the general region of the Indus Rivers and their tributaries.

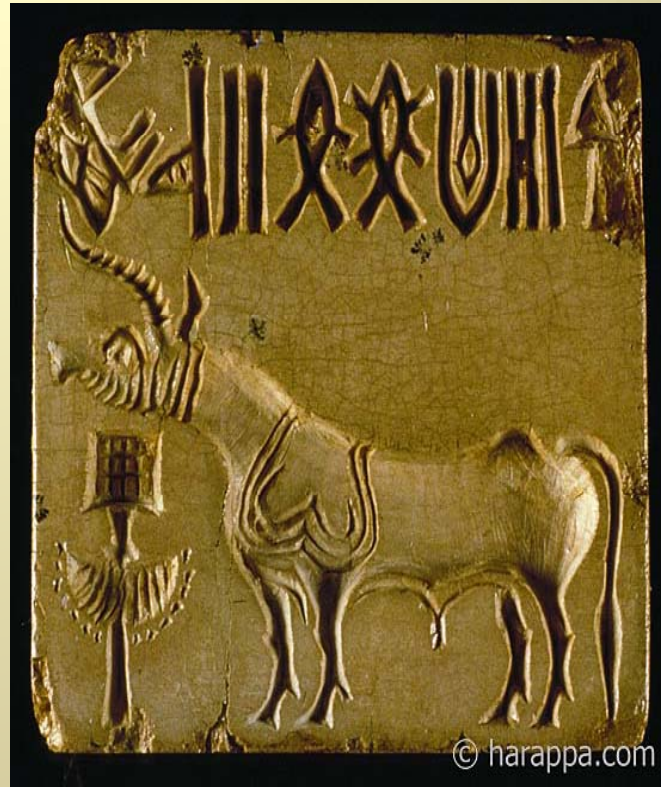




CITIES

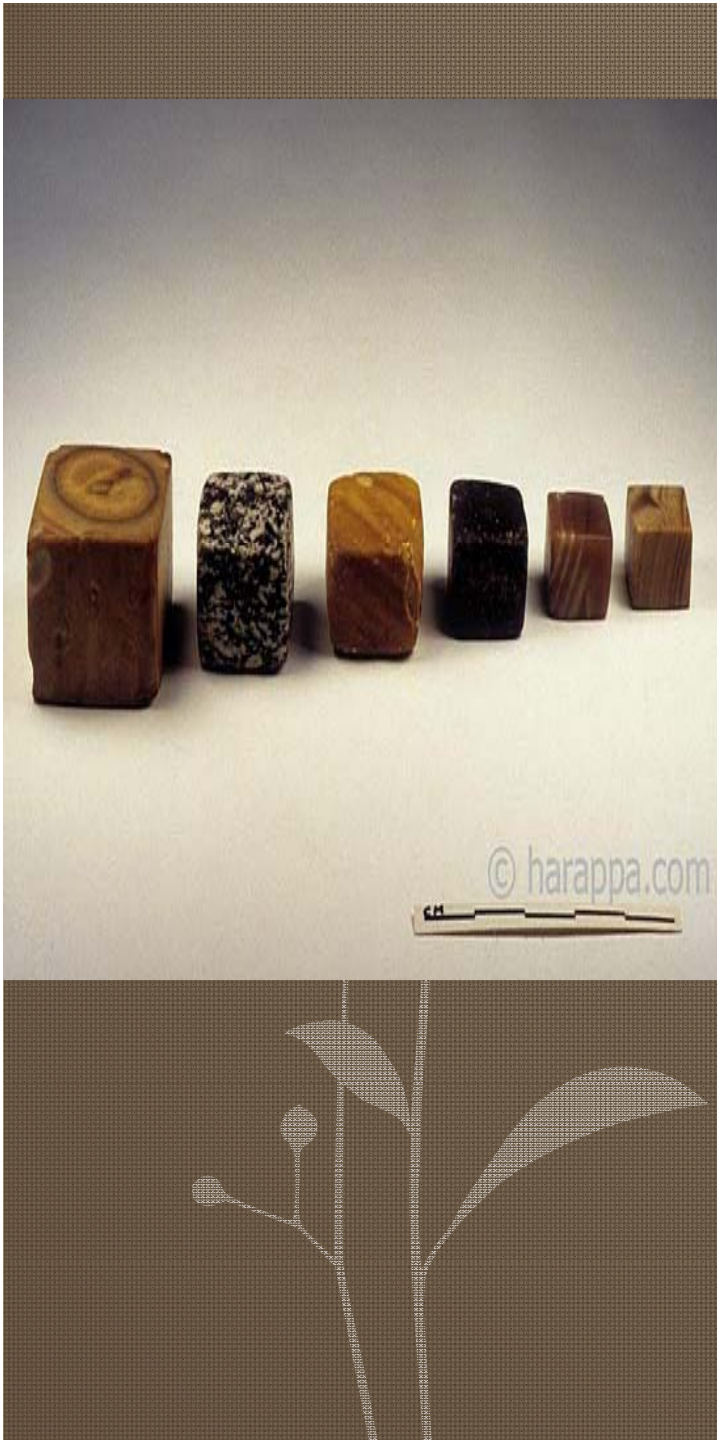
- ❖ knowledge of urban planning and efficient municipal governments which placed a high priority on hygiene, or, alternately, accessibility to the means of religious ritual.
- ❖ the world's first known urban sanitation systems
- ❖ far more advanced than any found in contemporary urban sites in the Middle East and even more efficient than those in many areas of Pakistan and India today
- ❖ massive walls of Indus cities most likely protected the Harappans from floods and may have dissuaded military conflicts
- ❖ The purpose of the citadel remains debated
- ❖ Most city dwellers appear to have been traders or artisans
- ❖ Beautiful glazed faience beads and Steatite seals have images of animals, people (perhaps gods)
- ❖ Apparent egalitarianism

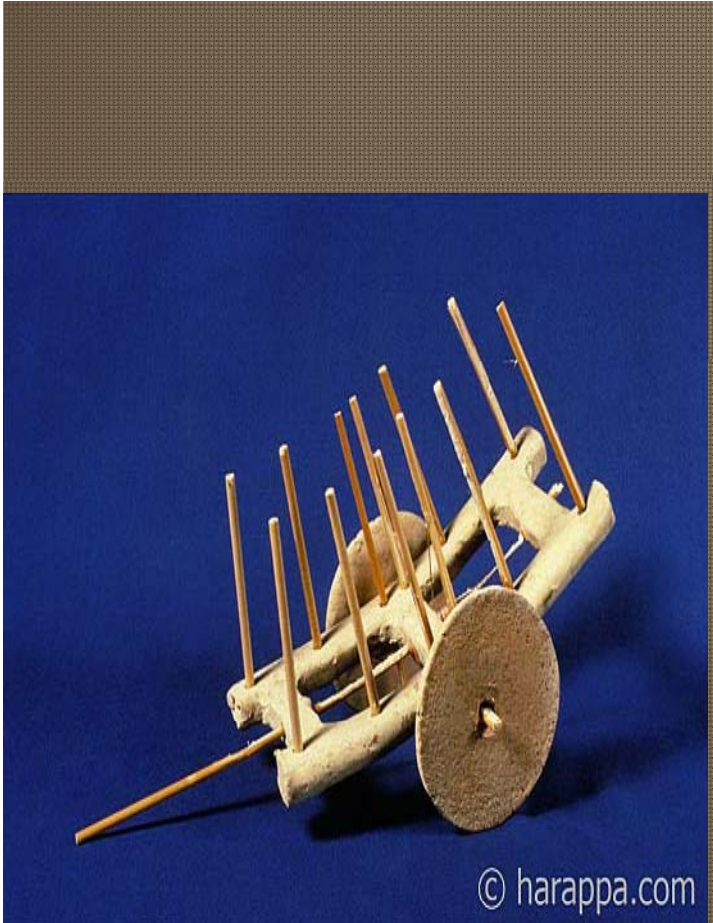




SCIENCE

- ❖ achieved great accuracy in measuring length, mass, and time
- ❖ among the first to develop a system of uniform weights and measures
- ❖ measurements are said to be extremely precise
- ❖ followed the decimal division of measurement for all practical purposes, including the measurement of mass as revealed by their hexahedron weights
- ❖ These chert weights were in a perfect ratio of 5:2:1 with weights of 0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50, 100, 200, and 500 units, with each unit weighing approximately 28 grams



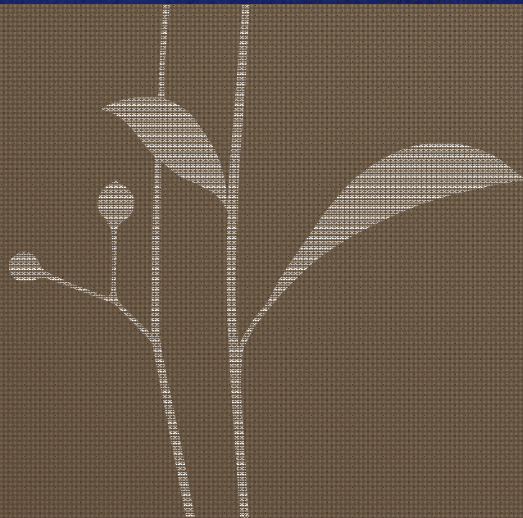


❖ instrument which was used to measure whole sections of the horizon and the tidal lock

❖ evolved some new techniques in metallurgy and produced copper, bronze, lead, and tin.

❖ The engineering skill was remarkable, especially in building docks after a careful study of tides, waves, and currents

❖ archaeologists studying the remains of two men from Mehrgarh, Pakistan, made the discovery that the people of the Indus Valley Civilization, from the early Harappan periods, had knowledge of proto-dentistry



ARTS AND CRAFTS

- ❖ Various sculptures, seals, pottery, gold jewelry, and anatomically detailed figurines in terracotta, bronze, and steatite have been found at excavation sites
- ❖ A number of gold, terra-cotta and stone figurines of girls in dancing poses reveal the presence of some dance form
- ❖ these terra-cotta figurines also included cows, bears, monkeys, and dogs
- ❖ Terracotta female figurines were found which had red color applied to the "manga" (line of partition of the hair)
- ❖ Seals have been found at Mohenjo-daro depicting a figure standing on its head, and another sitting cross-legged in what some call a yoga-like pose
- ❖ A harp-like instrument depicted on an Indus seal and two shell objects indicate the use of stringed musical instruments.
- ❖ Also made various toys and games, among them cubical dice (with one to six holes on the faces)





The "dancing girl of Mohenjo Daro"

10.8 cm high

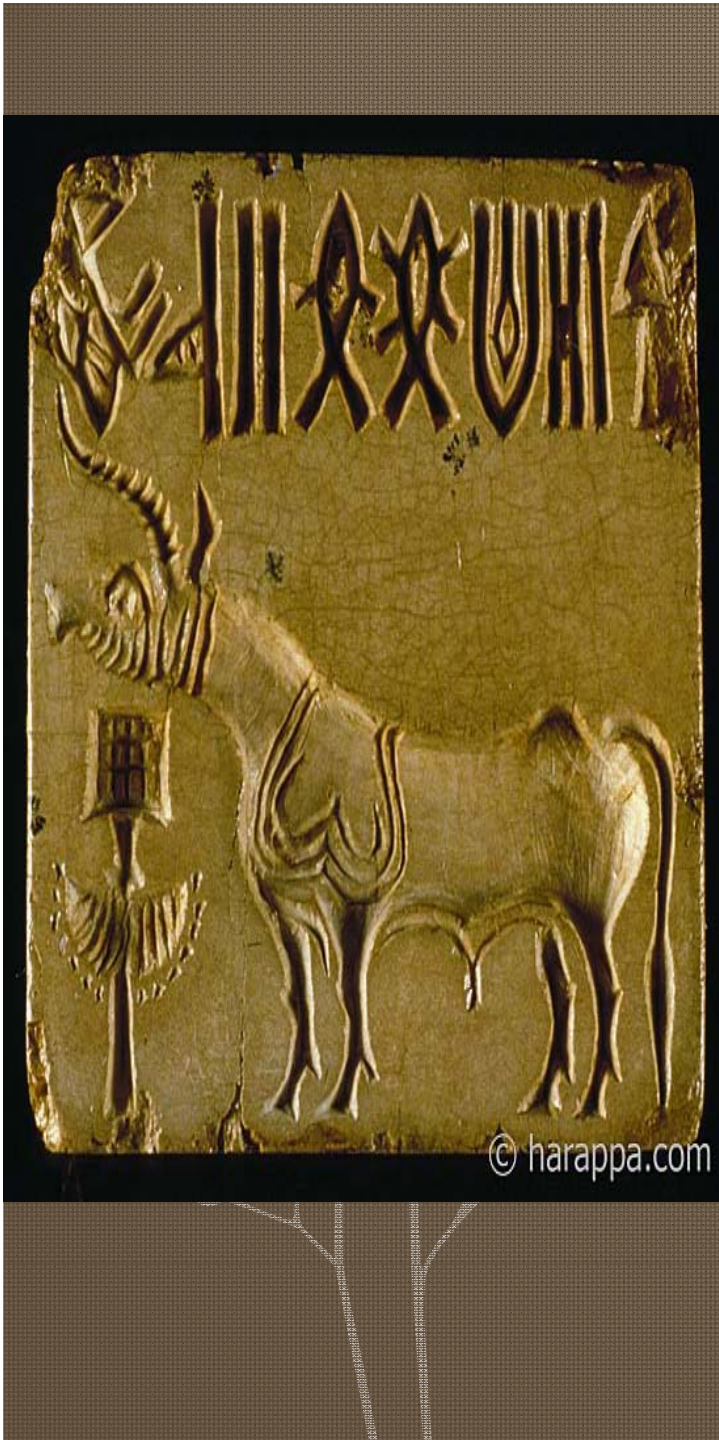
Found in 1926 in a house in Mohenjo-daro



TRADE AND TRANSPORTATION



- ❖ bullock carts that are identical to those seen throughout South Asia today, as well as boats
- ❖ Archaeologists have discovered a massive, dredged canal and what they regard as a docking facility at the coastal city of Lothal in western India (Gujarat state).
- ❖ An extensive canal network, used for irrigation, has however also been discovered by H.-P. Francfort
- ❖ During 4300–3200 BCE of the chalcolithic period (copper age), the Indus Valley Civilization area shows ceramic similarities with southern Turkmenistan and northern Iran
- ❖ During the Early Harappan period (about 3200–2600 BCE), similarities in pottery, seals, figurines, ornaments, etc., document intensive caravan trade with Central Asia and the Iranian plateau.
- ❖ Judging from the dispersal of Indus civilization artifacts, the trade networks, economically, integrated a huge area, including portions of Afghanistan, the coastal regions of Persia, northern and western India, and Mesopotamia.



- ❖ There was an extensive maritime trade network operating between the Harappan and Mesopotamian civilizations as early as the middle Harappan Phase, with much commerce being handled by "middlemen merchants from Dilmun"
- ❖ Such long-distance sea trade became feasible with the innovative development of plank-built watercraft, equipped with a single central mast supporting a sail of woven rushes or cloth.
- ❖ Several coastal settlements like, Sokhta Koh , and Balakot in Pakistan along with Lothal in India testify to their role as Harappan trading outposts.

SUBSISTENCE

- ❖ Food production was largely indigenous to the Indus Valley
- ❖ people of Mehrgarh used domesticated wheats and barley




WRITING OR SYMBOL SYSTEM

- ❖ Well over 400 distinct Indus symbols (some say 600) have been found on seals, small tablets, or ceramic pots and over a dozen other materials, including a "signboard" that apparently once hung over the gate of the inner citadel of the Indus city of Dholavira

- ❖ Typical Indus inscriptions are no more than four or five characters in length, most of which (aside from the Dholavira "signboard") are tiny

- ❖ The longest on a single surface, which is less than 1 inch (2.54 cm) square, is 17 signs long; the longest on any object has a length of 26 symbols.





❖ generally characterized as a literate society on the evidence of these inscriptions, this description has been challenged on linguistic and archaeological grounds

❖ Farmer, Sproat, and Witzel (2004) argue that the Indus system did not encode language, but was instead similar to a variety of non-linguistic sign systems used extensively in the Near East and other societies

❖ P. N. Rao et al.: codes for an as-yet-unknown language

❖ Farmer et al: the method used by Rao et al. cannot distinguish linguistic systems from non-linguistic ones

❖ Parpola: Photos of many of the thousands of extant inscriptions published in the *Corpus of Indus Seals and Inscriptions*

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RELIGION

- ❖ worshipped a Mother goddess symbolizing fertility (disputed)
- ❖ seals show swastikas which are found in later religions and mythologies, especially in Indian religions such as Hinduism, Buddhism and Jainism
- ❖ symbols resembling the Hindu Siva lingam have been found in the Harappan remains
- ❖ One famous seal shows a figure seated in a posture reminiscent of the Lotus position and surrounded by animals was named after Pashupati (lord of cattle)
- ❖ In the earlier phases of their culture, the Harappans buried their dead
- ❖ later, especially in the Cemetery H culture of the late Harappan period, they also cremated their dead and buried the ashes in burial urns, a transition notably also alluded to in the Rigveda, where the forefathers "both cremated and uncremated" are invoked

BURIAL POTTERY



LATE HARAPPAN

❖ Around 1800 BCE, signs of a gradual decline began to emerge, and by around 1700 BCE, most of the cities were abandoned

❖ Sir Mortimer Wheeler: decline caused by the invasion of an Indo-European tribe from Central Asia called the "Aryans"

❖ Most scholars: caused by drought and a decline in trade with Egypt and Mesopotamia

❖ The Indus valley climate grew significantly cooler and drier



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LEGACY

❖ In the formerly great city of Harappa, burials have been found that correspond to a regional culture called the Cemetery H culture.

❖ At the same time, the Ochre Colored Pottery culture expanded from Rajasthan into the Gangetic Plain.

❖ The Cemetery H culture has the earliest evidence for cremation, a practice dominant in Hinduism until today.



HISTORICAL CONTEXT AND LINGUISTIC AFFILIATION

has been tentatively identified with the toponym Meluhha known from Sumerian records

compared in particular with the civilizations of Elam

Asko Parpola says that the uniformity of the Indus inscriptions dismisses any possibility of widely different languages being used, and that an early form of Dravidian language must have been the language of the Indus people



DEVELOPMENTS IN JULY 2010

On July 11, heavy floods hit Haryana in India and damaged the archaeological site of Jognakhera, where ancient copper smelting were found dating back almost 5,000 years

The Indus Valley Civilization site was hit by almost 10 feet of water as the Sutlej Yamuna link canal overflowed



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