

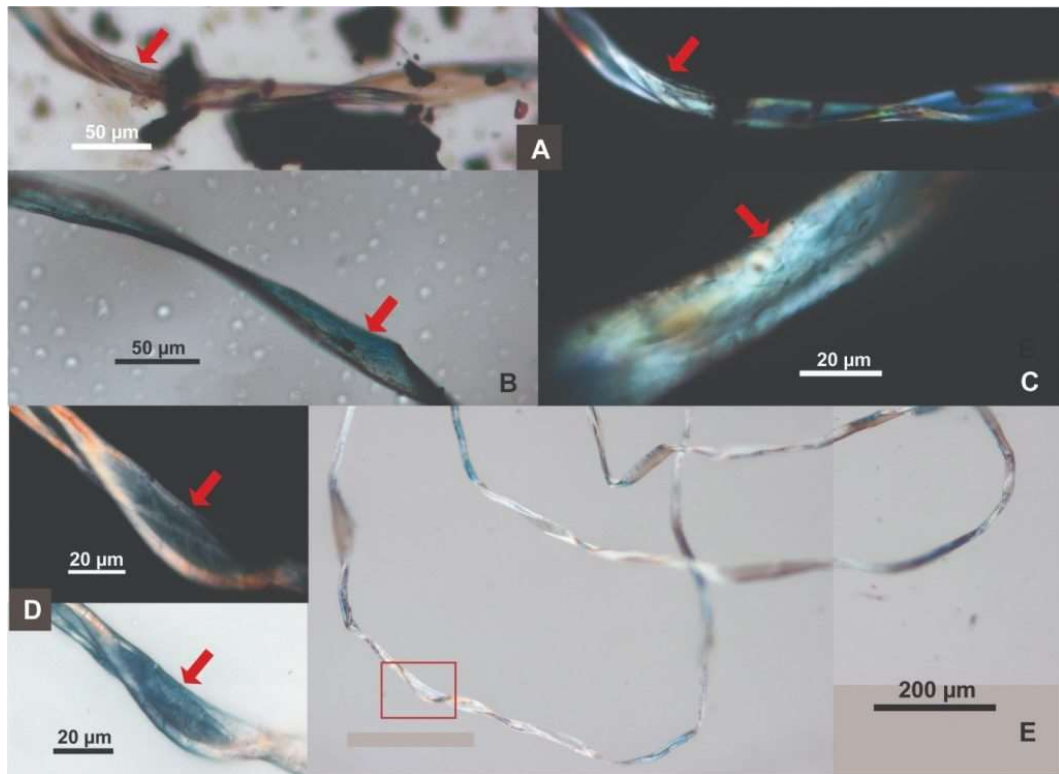
The challenging modernity of the Indus Valley Civilization

Karel Vereycken, Paris, France, January 2023



Toys for children, Indus Valley Civilization.

A major [archaeological discovery](#) has just been made in Israel in 2022: **the first evidence of the use of cotton fibers in the Near East and among the oldest in the world, dating back nearly 7,000 years**, was discovered by Israeli, American and German archaeologists during an archaeological excavation at Tel Tsaf, southeast of Beit She'an, in the Jordan Valley of Israel.



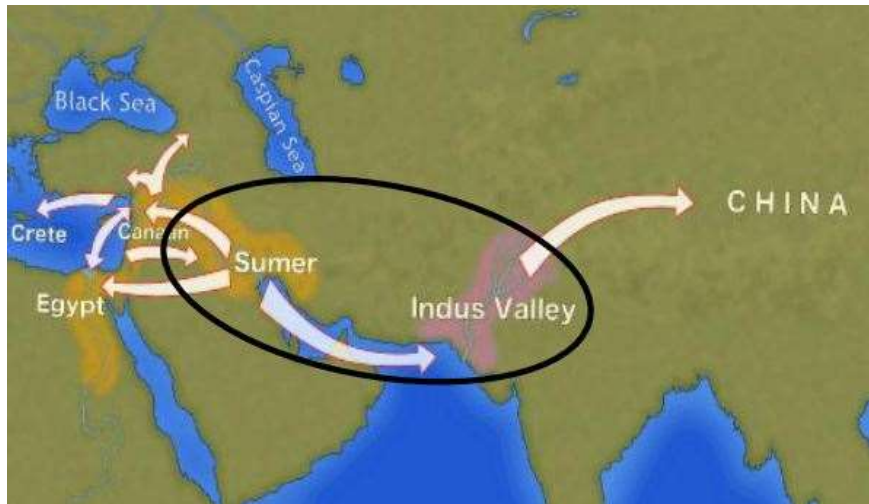
Microscopic remains of cotton discovered in Tel Tsaf,
using micro-remains analysis. (Courtesy University of Haifa)

So far, the earliest available evidence of cotton fibers in the area was dated to a few hundred years later, to the late Chalcolithic (Copper Age) and Early Bronze Age (about 5,000 to 6,500 BCE) from the archaeological site of [Dhuweila](#) in eastern Jordan.

Discovered in 1940, the site of Tel Tsaf reveals its secrets. « *Tsaf is characterized by an amazing preservation of organic materials,* » said Professor Danny Rosenberg of the Zinman Institute of Archaeology at the University of Haifa. « *Tel Tsaf was a kind of pole that concentrated important commercial activities and had established contacts with many other peoples,* » Rosenberg believes. « *There was massive storage capacity there to accommodate grain, enormous capacity if you compare it to other sites.*

For example, the earliest evidence of the social use of beer drinking and ritual food storage has been found there. Rosenberg and the other researchers also found beads from contemporary Anatolia, Romania, Egypt and other parts of Africa; pottery from Iraq, Syria and Armenia; and the earliest copper and other metals found in the world.

“Wool Tree” and “Cotton Roads”



Trade relations of the Indus Valley Civilization.

The cotton found in Israel, probably came from **the Indus region—modern Pakistan/India—** **which was the only place in the world that had begun to domesticate cotton at that time** before its cultivation appeared in Africa thousands of years later.

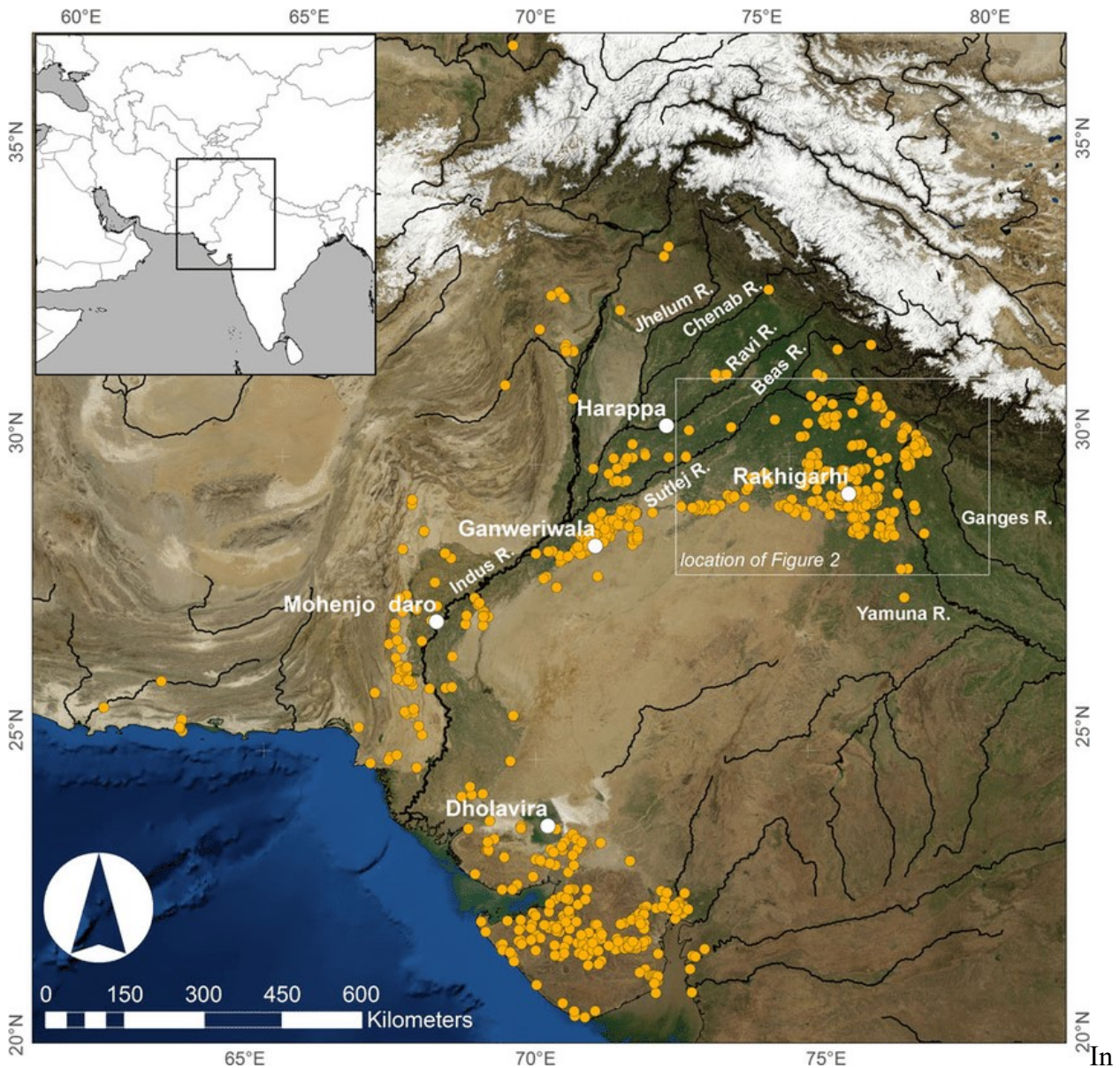
« What's interesting about this early evidence of a link to such a distant region is that it comes from fibers – microscopic pieces of ancient yarn. We assume that these cotton fibers, found along with wool fibers and plant fibers, arrived at the site as part of fabrics or clothing, i.e., ancient textiles, » Rosenberg says.

In addition, cotton was not only used for clothing: *« In the prehistoric era, textiles were involved in many areas of life, not only in clothing but also in hunting, fishing ... This is much more important than just saying that what we found are pieces of clothing that were worn by the inhabitants of the area. This discovery tells us a lot about the economic practices of the area, » says Rosenberg.*

Since cotton had never been grown in Tel Tsaf, it was a surprise for the researchers to find it, and they felt that its presence underscored the city's importance as a global trading hub at the heart of what could be called, the « Cotton Roads » of those days.

Growing cotton poses major challenges: a moderate to tropical climate and vast amounts of water. Just to produce a single T-shirt and a pair of jeans (representing about 1 kg of cotton), no less than 20,000 liters of water are required! Which civilization can afford such a performance at the beginning of the 7th millennium BC?

The Indus Valley civilization (IVC)



yellow: settlements, colonies and outposts of the IVC. In white, the Himalayan snow which feeds the Indus Valley water flow.

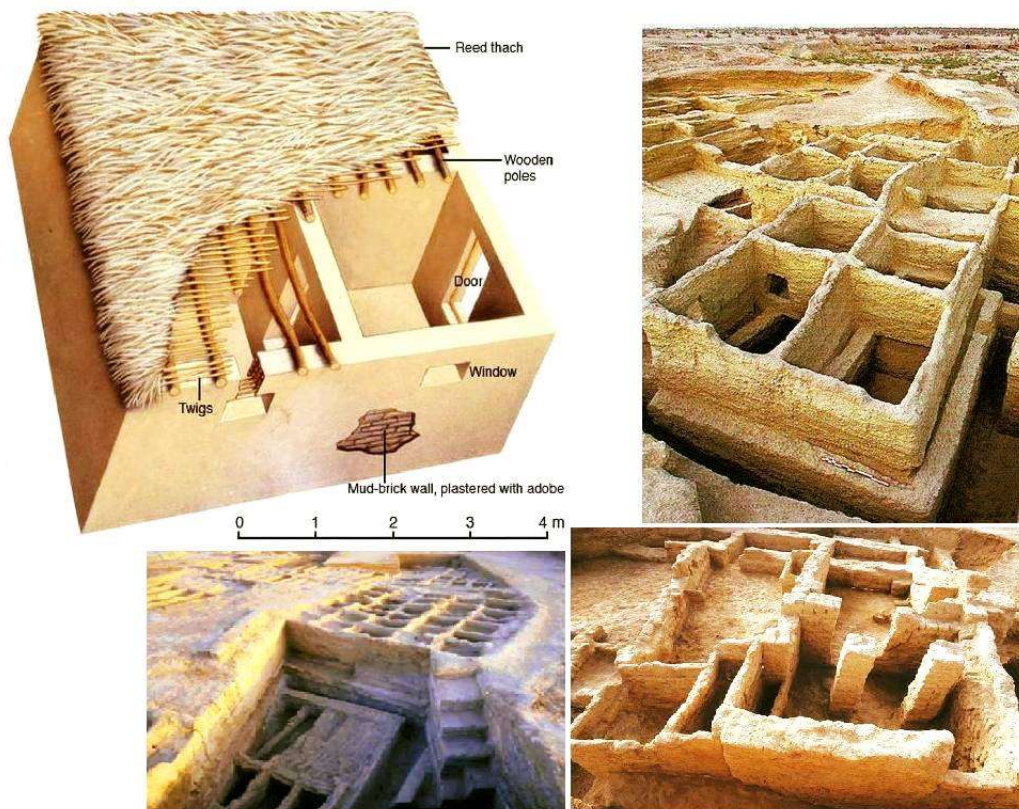
The term « Indus Valley Civilization » (IVC) refers to a vast cultural and political entity that flourished in the northern region of the Indian subcontinent between about 8000 and about 1900 BCE, a region that stretched from Baluchistan (Pakistan) in the west to Uttar Pradesh (India) in the east and from northeastern Afghanistan in the north to Gujarat (India) in the south.

In the absence of both literary sources and remnants of palaces and temples to confirm it, one cannot qualify this entity as a “Kingdom” or an “Empire”. Its modern name (IVC) derives simply from its location in the Indus Valley, but also goes under the name of the « Indus-Sarasvati

civilization » or « Harappan civilization ». These last designations come from the river Sarasvati, mentioned in the Vedic sources, which flowed next to the Indus and which would have disappeared, and from the ancient city of **Harappa** (Punjab, Pakistan), a city discovered by the British in 1829, but deliberately left unexplored.

The rise of a great urban civilization in the Indus Valley, which reached its maturity around 2500 - 2400 BCE, was long considered a sudden and mysterious phenomenon. Today, a series of discoveries allows us to follow, from 7000 to 2500 BCE, a series of transformations and innovations whose cumulative effects, stimulated by the enlargement of the network of exchanges from 3000 BCE onwards, created the conditions for the development of an incredibly modern and prosperous urban civilization.

Enter Mehrgarh, the light of the world!



Remnants of Mehrgarh (Balochistan, Pakistan).
Houses and food storage facilities.

Since prehistoric times, the Indus region has been pioneering and rich in discoveries. As an example, for the *Guinness Book of Records*, although a case apart, the small farming village of **Mehrgarh** (Baluchistan, Pakistan) which dates from the Neolithic (using only stones as tools) but can be considered as the key culture and city that lead humanity, as early as in the 8th millennia BCE, from the Stone Age into the Age of Copper.

The site is located on the principal route between what is now Afghanistan and the Indus Valley: this route was also undoubtedly part of a trading connection established quite early between the Near East and the Indian subcontinent. Excavations in Mes Aynak (Afghanistan), where archaeologists are only beginning to find remnants of a 5,000-year-old Bronze Age site beneath the Buddhist level, including an ancient copper smelter, will undoubtedly shed new light on these relationships.

On the basis of a variety of well-documented archaeological finds, it has been established that “pre-Harrapan” Mehrgarh, made several historical breakthroughs for the benefit of humanity as a whole.

Mehrgarh gave the world:

- among the [oldest traces of agriculture](#) (wheat and barley) and breeding (cattle, sheep and goats) in South Asia ;
- the [first breweries](#) (with wheat and barley);
- the [oldest reservoirs](#) for irrigated agriculture and flood prevention;
- the oldest traces of [cotton culture \(6th millennium BCE\)](#);
- the oldest jewel, called the [« Mehrgarh amulet » \(6th millennium BCE\)](#), produced with the « lost wax » bronze casting technique ;
- the oldest [bow drills](#) (in green jasper) allowing to drill holes in lapis lazuli and carnelian;
- the very first traces of successful [dentistry practices \(!\) \(9th millennium BCE\)](#); The inhabitants of Mehrgarh appeared to have developed an understanding of surgery and dentistry, as evidenced by the drilled teeth of some of the skeletons found at the site.

Analysis of the teeth shows that prehistoric dentists worked to treat toothaches with drills made from flint heads. The work was so elaborate that even modern dentists are surprised at the efficiency with which the Mehrgarh « dentists » removed decaying tooth tissue. Among the remains, a total of eleven drilled crowns were found, with one example showing evidence of a complex procedure involving the removal of tooth enamel followed by carving of the cavity wall. Four of the teeth show evidence of decay associated with the drilled hole. None of the individuals with drilled teeth appear to have come from a special tomb or shrine, indicating that the oral health care they received was available to all.

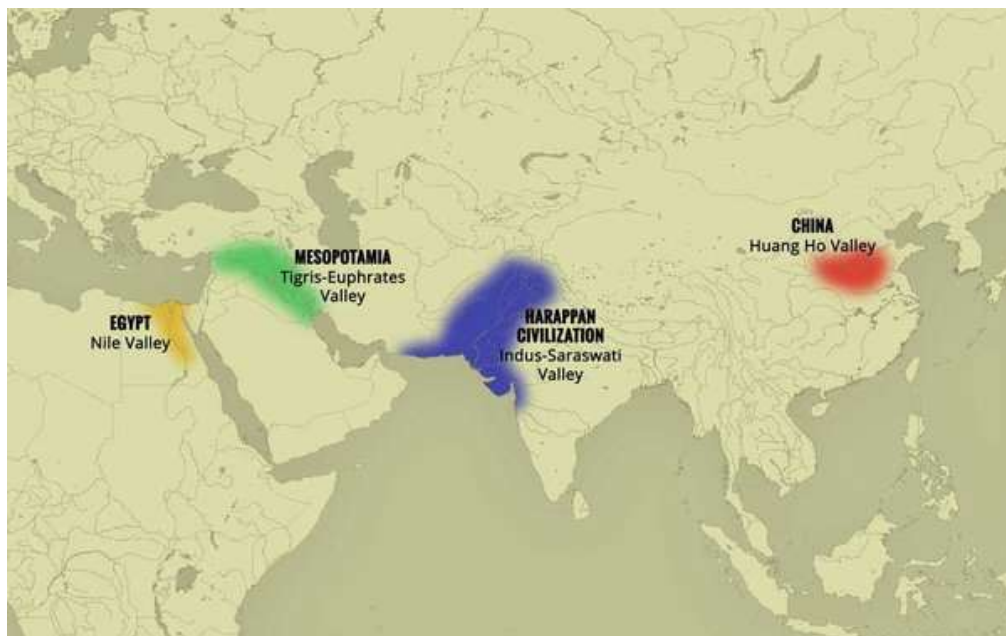


Dentistry practices were common
in 9000 BCE in Mehrgarh.

Densely populated

Originally, the IVC was built around the fishy meanders of the Indus, a river nearly 3200 kilometers long that flows from the Himalayan mountains towards the Arabian Sea. Like the populations of other great river valleys, this society was seduced by the fertility of the land as well as by the possibility of using the Indus as a transportation route.

The IVC, whose prosperity rests largely on the increasingly systematic exploitation of the rich silt of the Indus, spread over an immense territory encompassing the entire Indus Valley and part of Indian Gujarat. It is necessary to add to the vast zone of distribution of the Indus civilization some Harappan “colonies” and outposts like **Sutkagan Dor** (Baluchistan, Pakistan) near Gwadar, on the edges of the sea of Oman, at the Iranian-Pakistani border, and the lapis lazuli mining village of **Shortugai** (close to the Amu Darya river, at the Afghan-Tajik border), at nearly 1,200 kilometers of Mohenjo-daro, by far the largest IVC urban concentration.

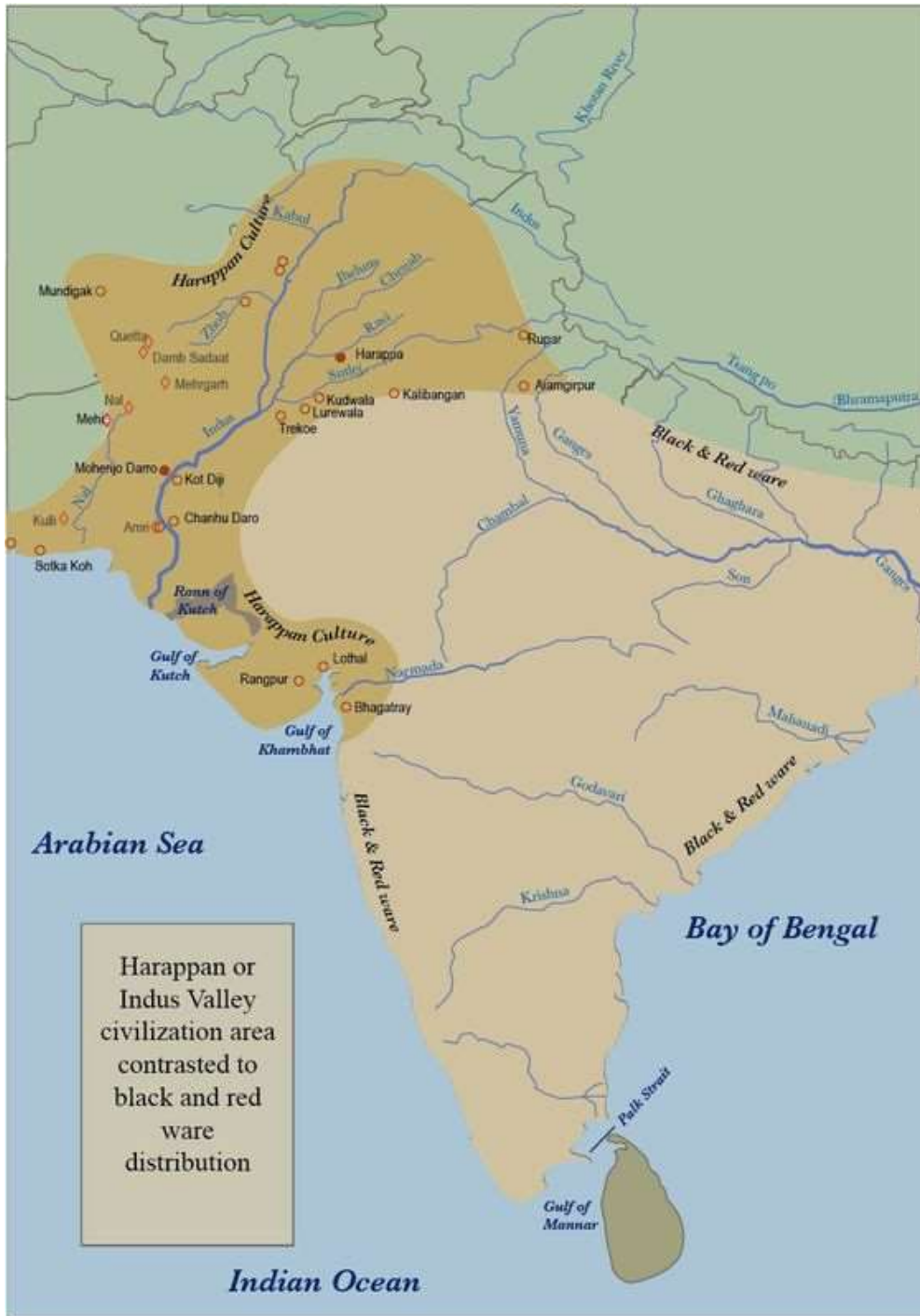


Four famous river basin based civilizations.

At its peak, this civilization was **twice as large as the Old Kingdom of Egypt**. With an area of 2.5 million square kilometers, it was at the time the largest civilization in the world: it included 5 million people, or 10 % of the world population at the time, much more than less older civilizations as Sumer (0.8 to 1.5 million people) or ancient Egypt (2 to 3 million).

To date, about 2,000 sites have been discovered in India, Pakistan and Afghanistan. Because of various wars and conflicts, only 10 % of the territory of these sites has been excavated and scientifically investigated. On the Indian subcontinent, the main centers of this civilization are **Harappa** (est. 23,500 inhabitants) and **Mohenjo-daro** (est. 40,000 inhabitants) in Pakistan and **Lothal**, **Dholavira** and **Kalibangan** in India. In addition to trade relations with Mesopotamia and Iran, the Harappan city-states also maintained active trade relations with the peoples of Central Asia.

Agriculture, crafts and industry



IVC and India.

Agriculture, animal husbandry, industry, trade and commerce were the main source of income.

Agriculture was the main occupation of the people of the Indus Valley. They cultivated barley and wheat on a large scale (and made beer) but also other crops such as legumes, cotton, cereals, sesame, dates, mustard, melons, peas, etc.

There is no real evidence of rice, but a few grains of rice have been found in Rangpur and Lothal.

In the village of Mehrgarh and the cities of Harappa, and Mohenjo-daro, there are remains of large granaries, suggesting that they produced more than they needed and physically stocked cereals and other food products in case of crop failure.



Bull from IVC

Animal husbandry was another major occupation. Seals suggest that they domesticated cows, buffalos, goats, sheep, pigs, etc. Camels and bullocks were also domesticated and used as beasts of burden. Camel bones have been found in large numbers at many sites, but there is no trace of them on the seals. During the excavation of Surkotado in Gujarat, India, the jawbone of a horse was found. Terracotta figurines representing a horse were found in Nausharo and Lothal.

The inhabitants of the Indus Valley were very skillful. They made ceramics, metal vessels, tools and weapons, weaved and spun, dyed and practiced other crafts with potter's wheels. The weavers wore clothes made of cotton and wool. They knew leather, but there is no record of silk production.



Ceramics from Mehrgarh (3000 BCE).

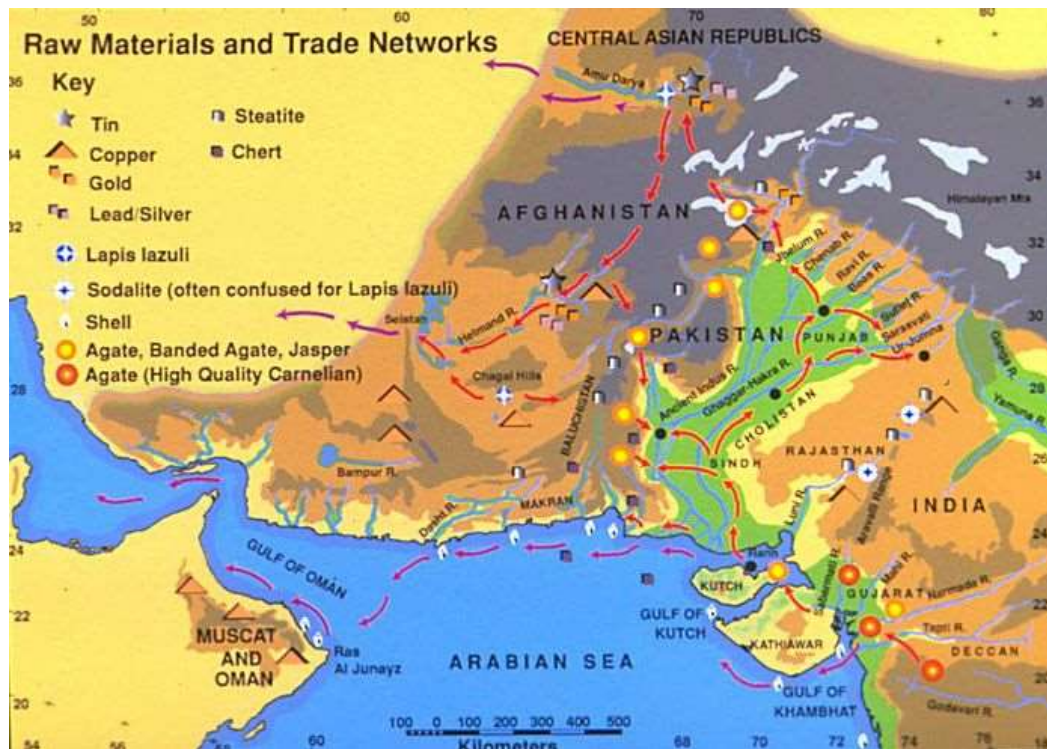
The inhabitants of this civilization originally came from the Bronze Age and used stone tools, but they soon excelled in the manufacture and processing of gold, silver, copper, lead and bronze, especially for artistic ornaments of great finesse.

Artisans made **jewelry** in Mohenjo-daro, Chanho-daro and Lothal. They used ivory and various precious stones such as carnelian, lapis lazulite, agate and jasper to make them.

Shell work was also a thriving industry. Craftsmen in the coastal colonies used shells to make buttons for shirts, pendants, rings, bracelets, beads, etc.

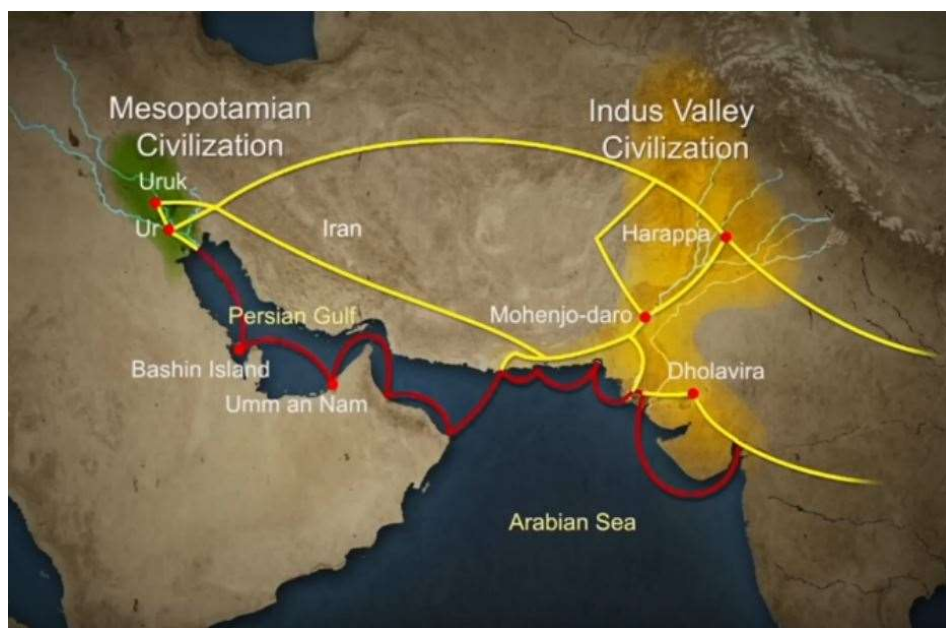
To supply the production of these craft professions, they needed to import various raw materials. To produce bricks and ceramics, clay was available locally, but for metal they had to acquire it from abroad. Trade focused on importing raw materials to be used in Harappan city workshops, including minerals from Iran and Afghanistan, lead and copper from other parts of India, jade from China, and cedar wood floated down rivers from the Himalayas and Kashmir.

Other trade goods included terracotta pots, gold, silver, metals, beads, flints for making tools, seashells, pearls, and colored gemstones, such as lapis lazuli and turquoise.



Ox carts were used to transport goods from one place to another. They also constructed barges used on the waterways along the Indus and its tributaries for transportation.

One of the ways historians know about the maritime trade network operating between the Harappan and Mesopotamian civilizations is the discovery of Harappan seals and jewelry at archaeological sites in regions of Mesopotamia, which includes most of modern-day Iraq, Kuwait, and parts of Syria.



Long-distance sea trade over bodies of water—such as the Arabian Sea, Red Sea and the Persian Gulf—may have become feasible with the development of plank watercraft that were each equipped with a single central mast supporting a sail of woven rushes or cloth.

Historians have also made inferences about networks of exchange based on similarities between artifacts across civilizations. Between 4300 and 3200 BCE, ceramics from the Indus Valley Civilization area show similarities with southern Turkmenistan and northern Iran.

During the Early Harappan period—about 3200 to 2600 BCE—there are cultural similarities in pottery, seals, figurines, and ornaments that document caravan trade with Central Asia and the Iranian plateau.

The wonders of Mohenjo-daro



Sometimes referred to as the « Manhattan of the Bronze Age » for the grid pattern of the city plan, the town of **Mohenjo-daro** (Sind, Pakistan) remained buried under meters of alluvial sediment until 1922.

A real metropolis made of baked bricks, it covers more than 200 hectares. Strictly squared, cut in two by a street of ten meters wide, divided from north to south by a dozen arteries drawn with the cord, and crossed from east to west by paved streets, Mohenjo-daro represents, by its strictly reflected urban framework, the model city of the Indus civilization.

It could have accommodated up to 40,000 people!



Major breakthroughs of the IVC: production of standardized bricks, tower water wells (left), circular grinding place (mill) for cereals (right), unified system of measurement (center), shipbuilding and sailing (below).

The Harappans were masters of hydraulic engineering, a “riparian” people working in river corridors practicing irrigated agriculture.

They mastered both the *shaduf* (an irrigation tool used to draw water from a well), and windmills.

In the Harappan cities, the domestic and manufacturing areas were separated from each other.

The inhabitants, living in one-, two-, and sometimes three-story dwellings, seem to have been mainly artisans, farmers, and merchants.

The people had developed the wheel, cattle-drawn carts, flat-bottomed boats large enough to carry goods, and perhaps also sailing.

In the field of agriculture, they had understood and used irrigation techniques and canals, various agricultural implements, and had established different areas for livestock grazing and cultivation.

Seals and harrapan script



Seals with trade-marks.

Among the thousands of artifacts found at the various sites are small soapstone seals just over one inch (3 cm) in diameter, used to sign contracts, authorize land sales, and authenticate the point of origin, shipment, and receipt of goods in long-distance trade. On each seal is a small text in Harappan, a language yet to be deciphered.

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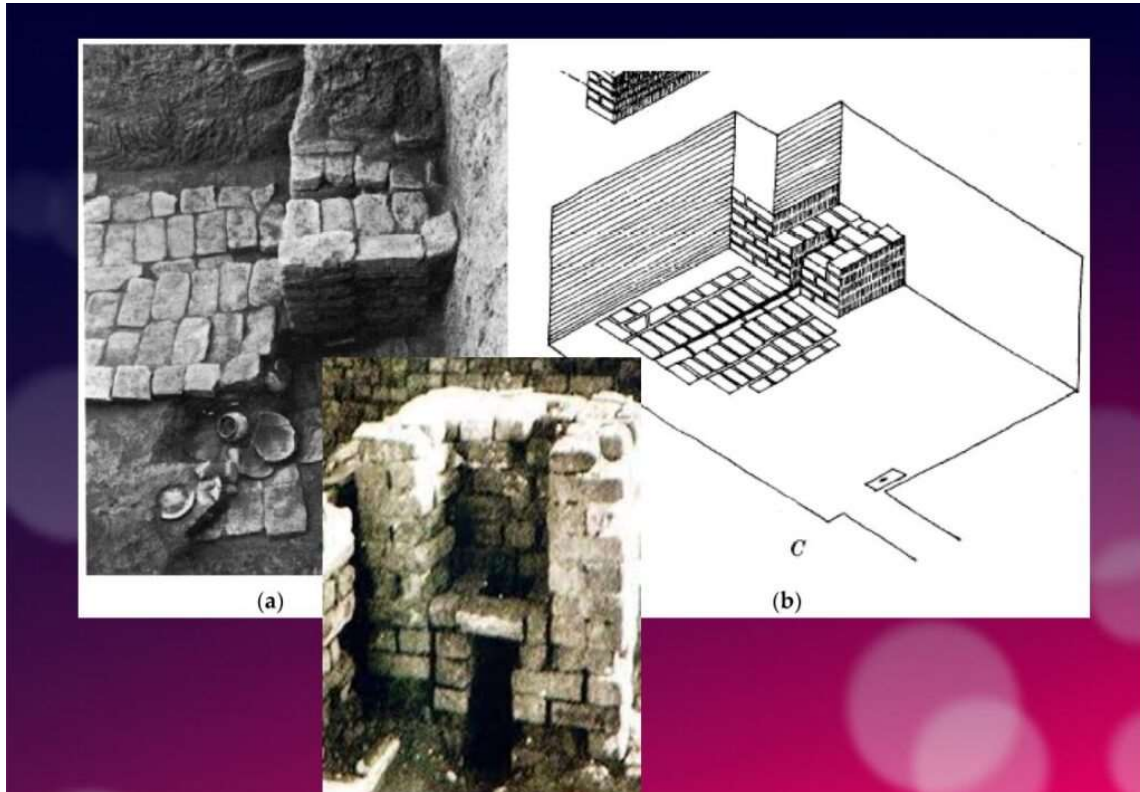
Commercial contacts between the Indus and Sumer populations are well documented. Numerous seals from the Indus Valley have been discovered in Mesopotamia. On each seal, a small text in Harappan, a language that remains to be deciphered.

If 4200 texts reached us, 60% of them are seals or mini-tablets of stone or copper, engraved, and they comprise on average... only five signs! The longest text has 26 signs.

The texts are always accompanied by the image of an animal, often a unicorn or a majestic buffalo. They were intended to mark goods, probably indicating the name of the owner or the recipient and a quantity or a year.

Trying to decipher the Indus language is a bit like trying to learn French only from the labels on the food shelf of a supermarket!

The invention of sanitation



Several cities such as Mohenjo-daro or Harappa had individual « flush toilets ».

In addition to this particular attention that they paid to urban planning, the members of the Indus civilization also seem to have been pioneers of modern hygiene. Some cities, notably Mohenjo-daro, were equipped with small containers (dustbins) in which the inhabitants could deposit their household waste.

Anticipating our « all to the sewer » systems imagined in the 16th century by Leonardo da Vinci for the project envisaged by François I for the new French capital Romarantin, many cities had already public water supply and an ingenious sanitation system.

In many cities, including Mohenjo-daro, Harappa, Lothal and Rakhigari, individual houses or groups of houses were supplied with water from wells. This quality fresh water was used as much for food and personal hygiene (baths, toilets) as for the economic activities of the inhabitants.



Remnants of a bathing room and evacuation system in Lothal.

As an example, the sanitation system of the port city of Lothal (today in India) where many houses had a bathroom and private brick latrines. The wastewater was evacuated through a communal sewer system that led either to a canal in the port, or to a soaking pit outside the city walls, or to buried urns equipped with a hole allowing the evacuation of liquids, which were regularly emptied and cleaned.



Water from wells was brought to the highest level of the city.

From there, it could flow to households, to bathrooms. Once used, the water flow would be evacuated via underground pipes and sewer systems and be conducted outside the city.

Excavations at the Mohenjo-daro site have also revealed the existence of no less than 700 brick water wells, houses equipped with bathrooms and individual and collective latrines. Toilets were an essential element. However, early archaeologists erroneously identified most toilets as post-cremation burial urns or simple cesspools. Many buildings in the city were two or more stories high. Water from the roof and bathrooms of the upper floors was channeled through closed clay pipes or open troughs that emptied, if necessary via the toilets, into the covered sewers underneath the paved street.

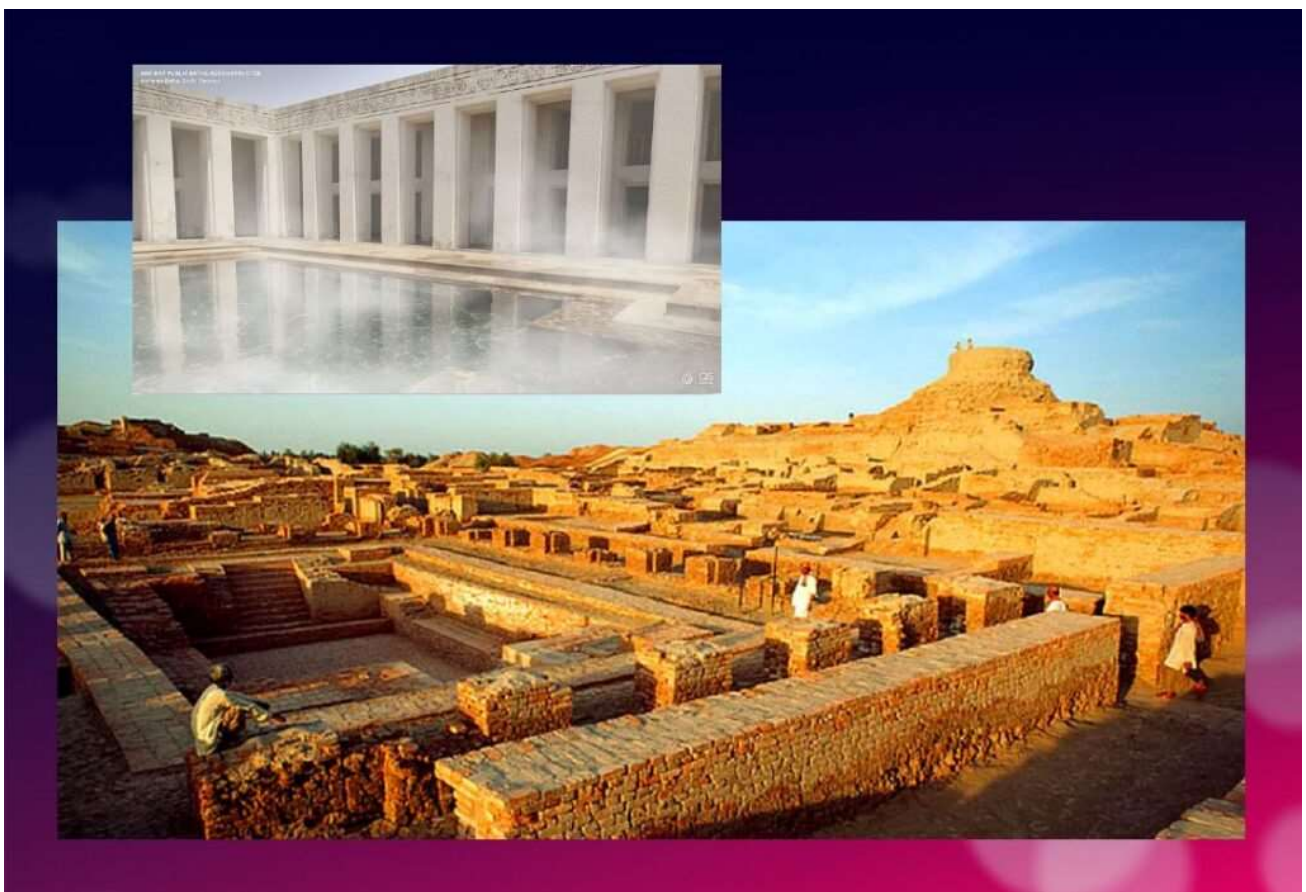
This extraordinary achievement is confirmed by [a 2016 scientific study, entitled « *The Evolution of Toilets Around the World Across the Millennia*, »](#) which reports that,

“The earliest multi-flush toilets connected to a sophisticated sewage system that have been identified so far were found in the ancient cities of Harappa and Mohenjo-Daro in the Indus Valley, dating from the middle of the third millennium BC. Nearly every dwelling unit in Harappa, Mohenjo-daro, and Lothal was equipped with a private bath-toilet area with drains to carry dirty water into a larger drain that emptied into the sewer and drainage system.”

Till now, it are the Minoan (Crete) civilization and China that have been credited for the first use of underground clay pipes for sanitation and water supply. In the Cretan capital Knossos, there was a well-organized water system to bring in clean water, to evacuate wastewater and to provide storm sewers for overflow in case of heavy rains.

In Knossos existed also one of the earliest uses of flush toilets, dating back to the 18th century BCE. The Minoan civilization had stone sewers that were periodically cleaned with clean water. Crete, of course, was a large provider of Copper ore for the entire world in Antiquity and had vast international trade connections.

Religious and cultural worldview



« Great Bath » in Mohenjo-daro, swimming pool or religious temple?
In medaillon: artist view.

In the IVC, fertility rituals were probably observed in order to promote a full harvest as well as for women's pregnancies, as evidenced by a number of figurines, amulets and statuettes with female form.



“King-Priest” found at Mohenjo-daro (4500 BCE).

It is thought that the people, like the Dravidians who some believe were the origin of the Indus Civilization, worshiped a “mother goddess” and possibly a male companion represented as a horned figure in the company of wild animals.

The “Great Bath” at Mohenjo-daro would have been used for purification rites related to religious belief, but it could just as easily have been a public pool for recreation.

Our knowledge of the religious beliefs of this culture remains in the realm of mere hypothesis.

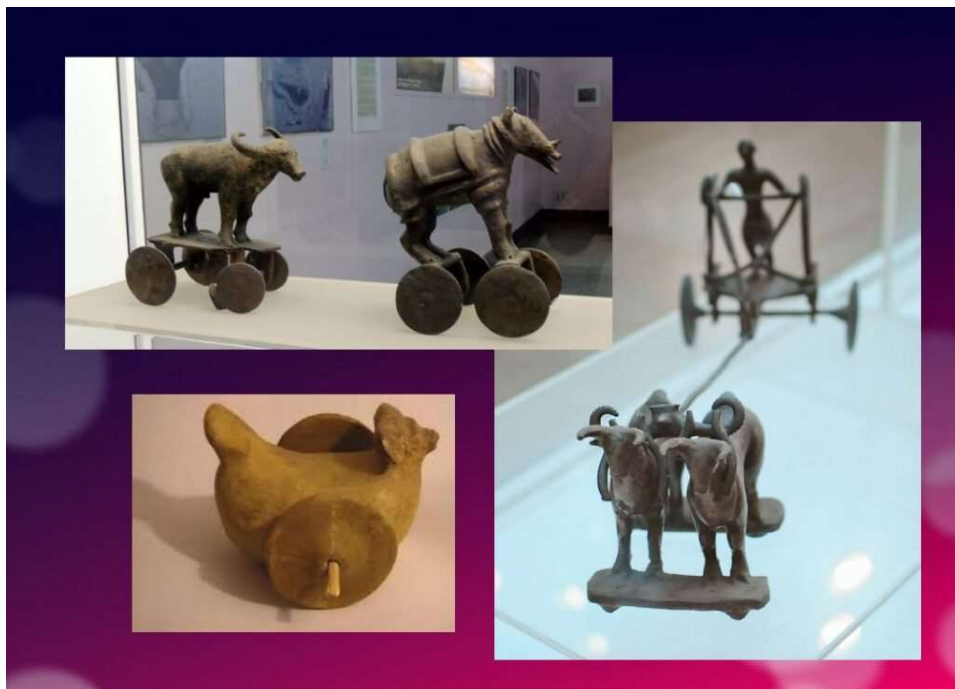
The title of the famous statue of the “Priest-King” found at Mohenjo-daro is misleading, as there is no evidence that it is a king or a priest, and it may be a simple cotton trader...

Apart from pottery, certain types of elementary weapons (spearheads, axes, arrows, etc.) and certain tools for practical purposes, two types of artifacts give us cultural clues about Harappan society.



Dancing girl, bronze, Delhi.

First, some figurines, which we try to interpret as devotional objects, seem to be simple toys. For others, they are clearly toys, notably animals (oxen, buffaloes, elephants, goats and even a simple hen), made of bronze or terracotta, mounted on small carts with wheels.



Toys.

Second, among other objects expressing a high level of sensitivity and consciousness, a series of masks, some of which seem inspired by Mongolian masks.

These masks are clearly intended to serve comic or tragic representations and remind us of the ancient masks that have come down to us from classical Greece.



Masks of IVC.

Older than Sumer and Egypt?

Archaeological excavations of the IVC got off to a late start, and it is now believed that some of the achievements and « firsts » attributed to Egypt (3150 BCE) and Mesopotamia (4500 BCE) may in fact belong to the inhabitants of the Indus Valley civilization.

In May 2016, the report published by a team of researchers from IIT Kharagpur, Institute of Archaeology, Deccan College Pune, Physical Research Laboratory and Archaeological survey of India (ASI), [published by the journal *Nature*](#), shattered a number of “facts” that were considered unshakable certainties.

Until now, the 900 years of the « mature » phase of the IVC was dated as ranging from 2800 to 1900 BCE. However, the aforementioned Indian study indicates that this civilization was much older than previously thought – it is at least 8,000 years old!

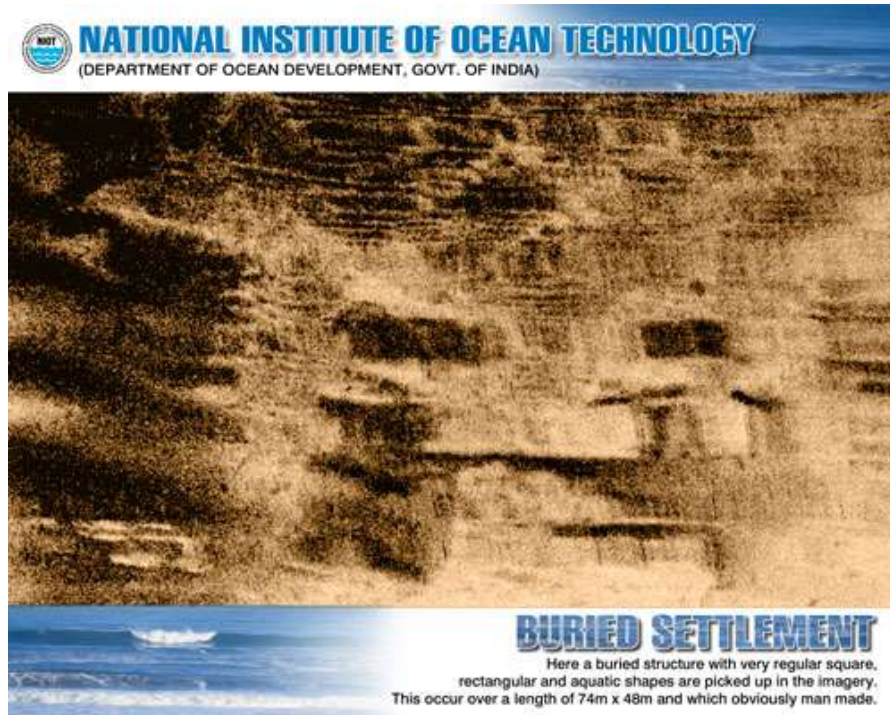
To determine the age of this civilization, researchers dated pottery using a technique called **Optically Stimulated Luminescence (OSL)** – and found it to be nearly -6,000 years old, the oldest pottery known to date.

Other artifacts have been dated to 8,000 years ago. The results come from a major site excavated at **Bhirrana** (Haryana, India) that shows the preservation of all cultural levels of this ancient civilization, from the pre-Harappan phase through the Early Harappan to the Mature Harappan period. Bhirrana was part of a high concentration of sites along the mythical Vedic river « Saraswati », now dried up, an extension of the Hakra-Ghaggar River in the Thar Desert.

The submerged cities of the Gulf of Khambhat

These new dates converge with [the discovery, in January 2002, of ruins of submerged cities in the Gulf of Khambhat \(formerly Cambay\)](#), off the coast of the state of Gujarat in northwest India.

It is the oceanographers of the National Institute of Ocean Technology (NIOT) of Madras who made this discovery. The team was surveying the muddy sea 30 km off the coast of the state of Gujarat, in the Gulf of Khambhat, to measure the levels of marine pollution. As a routine measure, they recorded acoustic images of the ocean floor.



One of NIOT's sonar scans of underwater constructions.

It was only several months later, while analyzing the data, that the team realized that they had, without knowing it, obtained images of the ruins of a huge city, sunken 40 meters below sea level. And, at the end of January 2002, after having spent weeks to dredge the site and to bring up more than 2,000 objects, the team of the NIOT was able to make extraordinary revelations.

The ruins stretch for 9 km along the banks of an ancient river, and the remains of a dam can be distinguished. The sunken city shares striking similarities with the sites of the Indus civilization. One of the buildings, the size of an Olympic swimming pool, with collapsed steps, recalls the Great Bath of Mohenjo-daro. Another rectangular monument, 200 m long and 45 m wide, is as large as the acropolis discovered at Harappa. The team of NIOT also glimpsed another building, a kind of granary, made of mud bricks, 183 m long. Near these monumental installations, rows of rectangular buildings that resemble the foundations of ruined houses can be seen, and even a drainage system and roads. On another visit to the site, the team recovered polished stone tools, ornaments and figurines, pottery debris, semi-precious stones, ivory and the fossilized remains of a human spine, jaw and tooth. But the team was not at the end of its surprises.

It sent samples of a fossilized log to two major Indian laboratories specializing in dating methods: the Birbal Sahni Institute of Paleobotany (BSIP) in Lucknow and the National Geophysical

Research Institute (NGRI) in Hyderabad. The BSIP dated it to 5500 BCE, while the NGRI dated the sample much earlier, probably to 7500 BCE.

This dating would make Khambhat the oldest site discovered in India. According to some, this discovery could mark the end of the theory according to which urbanization spreads from Asia from the west towards the Indus. This dating caused intense controversy.

Archaeologist G. Possehl points out that there is no reason to believe that the fossilized piece of wood belongs to the ruins of the ancient city, given the strong sea currents in the region, it could have come from elsewhere. NIOT's team acknowledged the validity of these criticisms and assured that other objects would be subjected to dating methods. It is also a question of understanding how this city was sunk and how it ended up 30 km from the coast. Harsh Gupta, geologist, thinks that it is a gigantic earthquake which caused the destruction of the city. We are in a high seismic risk area, and the 2001 Bhuj earthquake showed the vulnerability of the region to such phenomena. However, the priority is to definitively establish the age of the sunken city and prove to be the most exciting discovery of this century.

Historical cradle of textiles



In his book *Empire of Cotton, A Global History* (2015) Sven Beckert traces in depth the development of what the ancients, intrigued by its resemblance to the feel of wool, called the « wool tree. » While this plant grows in both temperate and tropical climates, it needs an abundance of moisture to thrive fully, which consigns its cultivation to naturally and then artificially irrigated river valleys.

According to the author, “*The farmers of the Indus Valley were the first to spin and weave cotton. In 1929, archaeologists found fragments of cotton textiles at Mohenjo-daro, in present-day Pakistan, dating from 3250 to 2750 BCE. Cotton seeds found in nearby Mehrgarh have been dated to 5000 BCE. Literary references also attest to the antiquity of the cotton industry in the subcontinent. The Vedic scriptures, composed between 1500 and 1200 BCE, allude to the spinning and weaving of cotton...*”

Historically, the discovery of the first cotton fragments was made at Mohenjo-daro during an expedition led by Sir John Marshall, Director General of the Archaeological Survey of India from 1902 to 1928. In his book on Mohenjo-daro and the Indus Civilization, Sir Marshall relates that fragments of cloth were wrapped around a silver perfume pot and a salt shaker.

Early forms of Self-government?



Remnants of Mohenjo-daro. Note: the buddhist temple (stupa) on top of the « citadel » is much more recent than the foundation of the city itself.

The fact remains that the political organization of the Indus cities escapes the experts. Because contrary to the Mesopotamian and Egyptian civilizations, the researches realized on the sites of the valley of the Indus did not bring to light any temple or palace of scale. There is no proof either of the existence of a permanent army...

Of what to wonder about the presence or not of a political power. Panic among British archaeologists and geopoliticians always inclined to project their own colonial ideology of aristocratic castes on the rest of the world.

In reality, each city seems to have had its own governor, or citizen council coordinating with other urban areas, all adhering to a number of common principles considered mutually beneficial.

This “*Coincidence of Opposites*”, of great diversity with perfect similarity, intrigues expert John Keay:

“What amazed all those pioneers, and what remains the distinguishing characteristic of the several hundred Harappan sites now known, is their apparent similarity: ‘Our overriding impression is of cultural uniformity, both throughout the several centuries during which Harappan civilization flourished, and over the vast area it occupied.’ The ubiquitous bricks, for example, all have standardized dimensions, just as the stone cubes used by the Harappans to measure weight are also standardized and based on the modular system. The width of roads conforms to a similar module; thus, streets are

generally twice as wide as side streets, while main arteries are two or one and a half times as wide as streets. Most of the streets excavated so far are straight and run north to south or east to west. The city plans thus conform to a regular grid pattern and seem to have retained this arrangement through several phases of construction.”

Hence, given the existence of a unified system of weights and measures; given the similarity of urban organization as well as the standardization of the size of terracotta bricks for hundreds of cities, it is therefore simply impossible that the every man for himself reigned supreme.

Cradle of democracy?

In 1993, in an article entitled « *The Indus Valley Civilization, Cradle of Democracy?* », published by the [*UNESCO Courier*](#), the internationally renowned Pakistani archaeologist and museologist, Syed A. Naqvi, who has been fighting for the preservation of the Mohenjo-daro site, attempted to answer the question:

“In all the highly developed civilizations of the past – Mesopotamia, the Nile Valley, Anatolia, China – the pervasive influence of an imperial authority can be felt, providing patronage for the arts and directing the evolution of society. A close examination of such an imperial authority over this civilization, which flourished some 5,000 years ago and covered almost twice the area of the civilizations of Mesopotamia and the Nile combined seems to belie the presence of an authoritarian regime, the Indus civilization had a well-disciplined way of life, civic controls and organizational system which could only have stemmed from the kind of “rule by the people” that was exercised in some Greek city-State some 2,000 years later. Did Greece give birth to democracy, or did Greece simply follow a practice developed earlier?”

Although there are no large structures acting as centers of authority,

“the discoveries made so far suggest that the rule of law extended over an area measuring roughly 1,600 kilometers from the north to the south and more that 800 kilometers from east to west. The main argument in support of this thesis is the existence of well-established norms and standards which would have required the consensus of the people if they had not been imposed by an authoritarian regime. It is impossible to ignore the evidence furnished by the perfect planning of the great city of Mohenjo-daro and the use in its construction of standard-sized bricks 27.94 cm long, 13.96 cm wide and 5.71 cm thick.”

In the two large cities of Mohenjo-daro and Harappa, about 600 km distant,

“the grid pattern of the street layout uncovered by the archaeological excavations shows that great attention was paid to the security of the inhabitants and suggests the existence of a highly developed and well-monolithic system of civic control.”

The same is true of the highly sophisticated sewage system and the existence of

“a virtually complete series of highly polished stone weights. Their shapes are cubical, half-cubical, cylindrical and spherical, and very few of them are reported to be defective. They provide yet another proof of a civic authority maintaining consistent commercial standards.”

It is not possible to conclude that such “*a philosophical conception of democracy exists until the Harappan script is deciphered and written evidence is provided. But the signs are there, and further research in this direction may well establish that ‘government by the people’ originated in the Indus Valley,*” the author concludes.

Finally, since this agricultural people, who knew the use of the spears and the arrows but didn’t leave any trace of a major military activity – few weapons nor fortifications with exclusively defensive purpose have been found – , many observers agree to say that this society could have known the longest period of peace of the history of the humanity.

Conclusion

In two of his books, the *Timaeus* and the *Critias*, the Greek philosopher Plato tells the story “certainly true, although strange” of a maritime people with incomparable power: the Atlantes whose civilization and capital he describes in great detail.

Starting 10,000 years before our era from an island located beyond the columns of Hercules, the Atlanteans would have ended up dominating the whole of Africa and Western Europe.

In a passage which is not without recalling the type of political organization which could exist in Mohenjo-daro, Critias specifies that Atlantis was then inhabited “*by the various classes of men who deal with the trades and agriculture. The warriors, separated from the beginning by divine men, lived separately, possessing all that was necessary for their existence and that of their children. Among them, there were no particular fortunes; all goods were in common: they demanded from the other citizens nothing beyond what they needed to live, and fulfilled in return all the obligations that our talk of yesterday attributed to the defenders of the fatherland as we conceive them.*”

Perhaps speaking metaphorically, Plato states that initially virtuous, the Atlantis civilization would have sunk into excess, arrogance and corruption to the point of being chastised by Poseidon himself for having embarked on one war too many, this time against Athens. And « *in the time lapse of a single terrible day and night (...) the island of Atlantis sank into the sea and disappeared* ».

At the historical level, the sudden decline of the Indus civilization around 1900 BC remains a mystery. Historians point to aspects of Minoan civilization (Crete) showing [astonishing similarities](#) with the IVC, especially water management and early sewer systems in Knossos, lost wax broze casting techniques and bull fighting.

A few traces of fire and destruction, as well as forty skeletons wounded with knives and found without burial at Mohenjo-daro, first suggested an invasion by Aryan peoples from Central Asia or the Iranian plateau. “*This theory has now been abandoned. We have indeed found no effective trace of massacres or violence on the sites of the Indus Valley, or furniture that could be associated with such populations,*” says Aurore Didier, researcher at the CNRS and director of the Indus mission.

Another hypothesis, an inability to strengthen its resilience to climatic chaos. “*The samples taken in the northwest of India have shown that the climate there has changed significantly about 2000 years before our era. It is reported that this was also the case in Mesopotamia. “It became more like the dry and arid climate of today, which disrupted the cultivation and, in fact, the trade of the Indus civilizations. The ensuing socioeconomic upheaval may have led to the decline of these societies. This hypothesis is the most commonly accepted to date,*” says the archaeologist.

The inhabitants would have left their valleys become infertile to migrate to the plains of the Ganges. *“This was accompanied by a change in livelihood strategies. The Indus civilization gradually converted to summer cereal crops based on rice and millet, two commodities more able to withstand these new climatic conditions and requiring, for rice, the development of irrigated agriculture,”* says Aurore Didier. *“It has also forged links with new trading partners.”*

So there is no reason to talk about the “collapse” of a society in the sense of collapsologists. It is rather a gradual adaptation to the evolution of the environment, spread over several centuries.

As the excavations of the sites of the Indus Valley civilization continue, new information will undoubtedly contribute to a better understanding of its history and development. Any additional knowledge of this common civilizational legacy will serve in the future as a basis for fraternal cooperation between Pakistan, India and Afghanistan and others.

In the meantime, instead of trying to copy the barbaric “models” of the Mongolian Empire, the Roman Empire or the British Empire, the “elites” of the transatlantic world would do better to draw inspiration from a magnificent civilization that seems to have prospered for 5,000 years without perpetual wars and massacres, but simply thanks to a good mutual understanding, at the national level, between citizens, and thanks to mutually beneficial cooperation with the overriding majority of its distant partners.

The Indus Valley Civilization’s modernity, capable of offering food, shelter, water and sanitation to all, in a mirror image, shows all of us living in the present, how backwards we became.

Source and contact:

<https://artkarel.com/indus-valley-civilization-harappa-mohendo-daro/>