

HOW DEEP ARE THE ROOTS OF INDIAN CIVILIZATION?

--An archaeological and Historical Perspective*

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For nearly half-a-century, India has been witnessing what may be called a kind of 'cultural invasion' from the West. One sees, for example, in metropolises like Delhi, Mumbai, etc., 20-25-year-young girls clad in jeans and tops (and, of course, boys) haunting disco-clubs and reveling on Valentine days. I have no grudge against that. It had to happen because of 'globalization'.

But if we ignore this recent phenomenon and go deeper we come across what may be called the 'basal features' of Indian culture. These are more manifest in rural India than in urban and it must be emphasized that more than eighty percent of India lives in villages. We shall discuss some of these features and examine how far back in time their roots go.

It is said that religious practices followed by a community keep going on and on. The same has happened in the context of Indian culture. Thus, for example, the worship of Śiva is duly attested to by a seal from Mohenjodaro (Pl. I), dating back to the 3rd millennium BCE, which, scholars hold, depicts him in the form *Paśupati* (Lord of Beasts). Today, in many temples we come across *Śivaliṅga-cum-yoni* (Pl. IIA).



MODERN LINGA-YONI

Pl. II

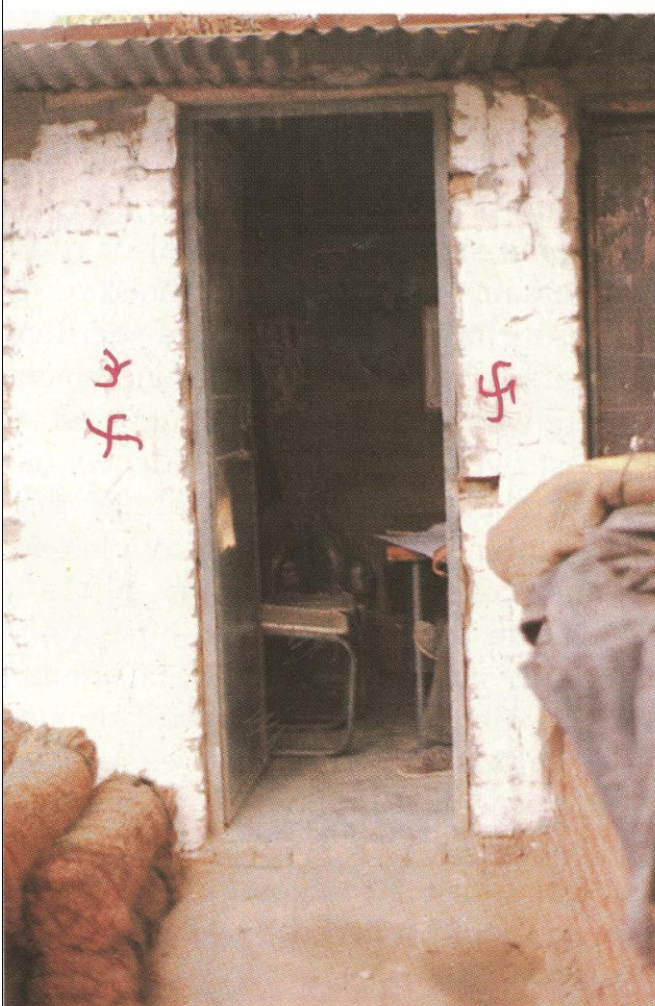


KALIBANGAN LINGA-YONI

Exactly the same combination of *liṅga-cum-yoni* has been found in the Harappan levels of Kalibangan. *Triśūla*, an *āyudha* (weapon) held usually by Śiva in one of his hands, has been found engraved on one of the buttocks of a terracotta bull discovered at Dhalewan, a Harappan site in Haryana. This establishes not only the use of the *triśūla* during the Harappan times, but also the branding of animals – something practiced even now.

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The svastika motif is considered very auspicious by Indians. It is painted by businessmen on their safe-vaults and even by the poor on the two sides of the entrance to their house



Entrance to a Hindu house,
painted with svastika symbol on
either side

Pl. III



Mohenjo-daro: the svastika motif
engraved on a seal. Mature Harappan.

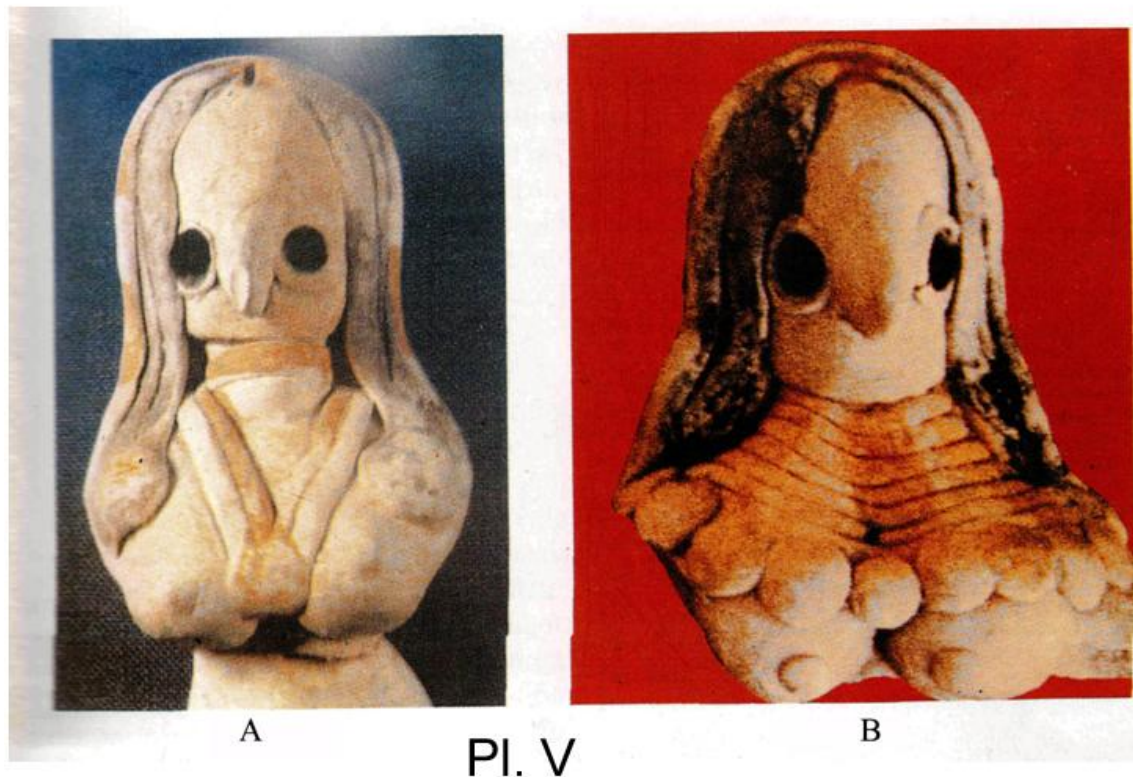
The symbol is rooted back in the Harappan culture



Pl. IV. Air Marshal T.M. Asthana and his sweet wife Kiran. Mark the Streak of Vermilion (Sindūra) in the medial partition-line of the hair (*māṅga*) of the lady, which is a sign of her marital status.

You may have observed that married women in rural India (particularly in northern India), and sometimes even in cities, apply *sindūra* (vermilion) to their *māṅga* (medial line of partition of the hair on the head), which is a sign of their marital status (Pl. IV).

We have come across terracotta female figurines from a site called Nausharo in Pakistan, dating back to c. 2800-2600 BCE, which depict this very feature.(P1.V)



A & B Nausharo: Terracotta female figures, painted. The yellow colour on ornaments suggests that these were made of gold; the hair is black, while the red on the line of partition of the hair indicates the use of vermillion. Period IB, 2800-2600 BCE

These figurines are painted with three colors: the ornaments with yellow, indicating that these were made of gold; the hair with black, which is its natural color; and the *māṅga* with red, representing the application of *sindūra*.

In Panjab, Rajasthan and Haryana, it is a common practice in rural areas to offer to the daughter-in-law, at the time of her wedding, a conical ornament which she puts on her head.(Pl. VI)



A newly married lady, on the right, wearing a conical ornament on the head (covered by the *dupattā*). She also wears bangles all over her right arm

Pl. VI

Mohenjo-daro: Gold cone.
Mature Harappan



Depending on the economic status of the father-in-law, the ornament is of either gold or silver. It is interesting to note that exactly the same kind of conical ornament, in gold, was found during the excavations at Mohenjo-daro (Pl. VIB). It is ascribable to about the middle of the 3rd millennium BCE.

The lady appearing on Pl. VIIA wears a series of bangles on her arms. This practice too goes back to the Harappan times as would be clear from the figure of the famous 'dancing girl' of bronze found at Mohenjo-daro (Pl. VIIB). In fact, the antiquity goes back even earlier, since an actual specimen of spiraled bangles has been found in the pre-Mature Harappan levels at Kunal (Pl. VIIC).



A woman wearing spiralled bangles

Mohenjo-daro The famous bronze figure of a 'dancing girl', wearing spiralled bangles on the upper left arm. Mature Harappan



Pl. VII

Kutch: Spiralled bangles silver, Early Harappan

About two decades ago I got from the market in Aligarh a three-in-one gadget of copper (Pl. VIIIB). Of these, the one with pointed end is used for cleaning spaces between the teeth, that having a very small cup at the tip is meant for taking out wax from ears, while the tweezers are used for plucking small-sized hair that sometimes grows on the inner side of the eyelid. Exactly the same kind of three-in-one gadget was found in the Mature Harappan levels at that site (Pl. VIIIA).



Harappa: A three-in-one toiletary gadget, copper. Mature Harappan



A modern three-in-one toiletary gadget, copper

Pl. VIII

From make-up and toiletry we may pass on to games. At present, in the game of 'Serpent and Ladder' the players throw a particular kind of dice which is cubical in shape and is marked with circlets, numbering 1 to 6 on the respective six faces of the cube (Pl. IXA). One does not know if this very game was played during the Harappan times, but the Harappans certainly used exactly the same kind of dice (Pl. IXB).



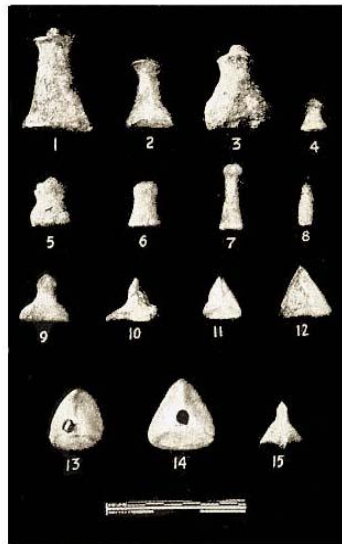
Modern example of cubical dice, with 1-6 blind holes on respective faces

Pl. IX



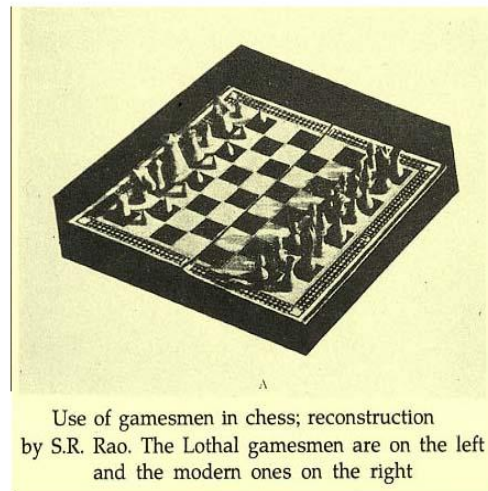
Mohenjo-daro: Cubical dice in terracotta, with 1-6 blind holes on respective faces. Mature Harappan

No less surprising is that the Harappans seem to have played chess, as is evidenced by the occurrence of gamesmen in the Harappan levels at Lothal. Plate X shows respectively the gamesmen from Lothal and the reconstruction of the game by Dr. S.R. Rao.

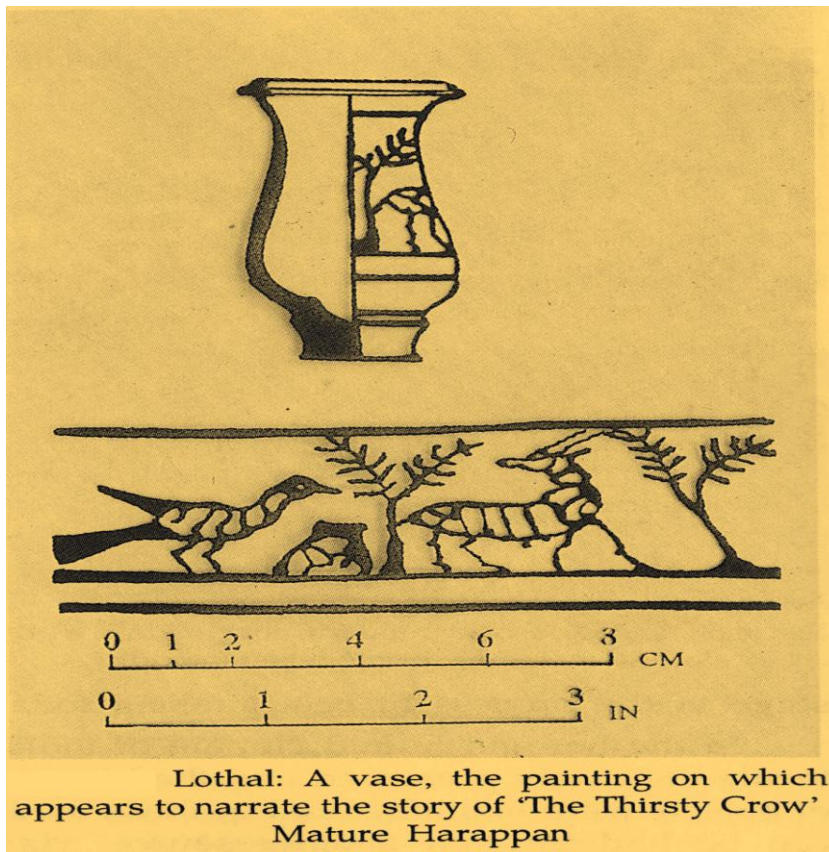


Lothal: Terracotta
gamesmen. Mature Harappan

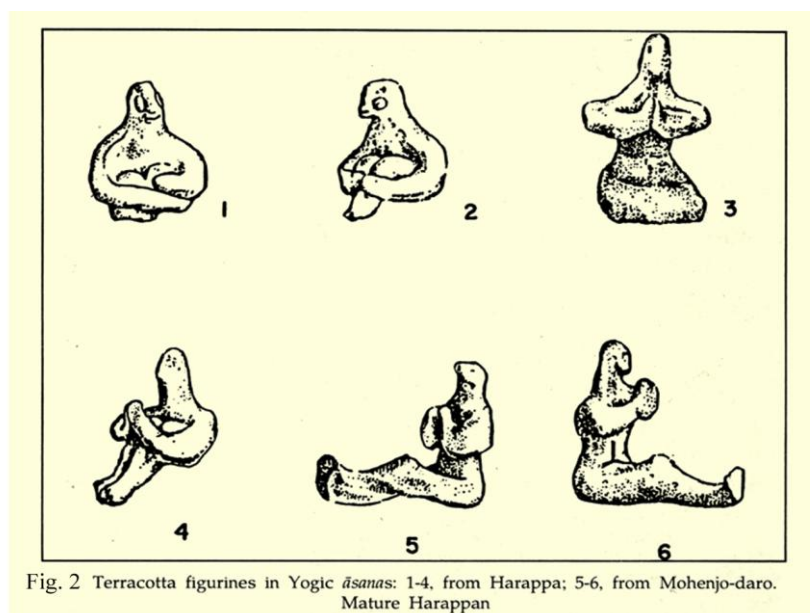
Pl. X



Even some of the bed-side stories narrated by grandmothers to the children go back to the Harappan times. For example, on a pot found at Lothal is painted the story of the 'Thirsty Crow'. The picture shows a deer who failed to drink water from out of a pitcher since he could not put his mouth inside it because of the long antlers, while the wise crow collected a few pebbles, dropped them into the pitcher so as to raise the water-level and succeeded in drinking the water (Fig. 1).



The practicing of yogic *asanas* is becoming a craze not only in India but abroad as well. Indeed, I was surprised to notice during my recent visit to Los Angeles sign-boards at least three centers within a stretch of only two miles where training in yoga was imparted. While the yoga system is very well defined in the *yogasūtras* of Patañjali dating to ca. third century BCE, it is surprising that the system goes back to the Harappan times, as may be seen from Fig. 2.



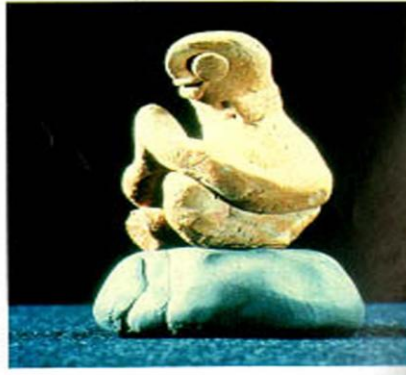
Have you observed how Hindus greet one another when they meet or depart? If not, have a look at Plate XIA



Top : The President of India, Shri K.R. Narayanan (extreme left), being greeted with *namaste* by the Prime Minister, Shri Atal Bihari Vajpayee (extreme right), and other dignitaries on the eve of the President's departure on a foreign tour

Pl. XI

Bottom right : Harappa: A terracotta figurine greeting with *namaste*. Mature Harappan



which shows the then Prime Minister and his colleagues greeting the President when the latter was about to leave on a foreign tour. This mode, called 'Namaste', goes back, once again, to the Harappan times (Pl. XIB).

One of the great surprises that we had during the course of our excavations at Kalibangan in northern Rajasthan was the discovery of an agricultural field assignable to pre-Mature Harappan times, i.e. somewhere in the first half of the third millennium BCE. It had two sets of furrows: one running north-south and the other east-west (Pl. XII).



Kalibangan An agricultural field

Pl. XII

In the former set the intermediary distance between the furrows was 1.9 meters while that in the latter set only 30 cm. Would you believe that exactly the same pattern of plowing agricultural fields obtains even today not only in Rajasthan but also in Haryana and western Uttar Pradesh (Pl. XIII).



Pl. XIII Kalibangan: Modern system of ploughing, which also has the criss-cross pattern

At present mustard plants are grown in north-south furrows, while gram in the east-west ones (Pl. XIV). The reason for such a distribution is as follows. These crops are grown during the winter, when the sun goes down south, casting long south-north shadows. Thus, the mustard plants are grown in the widely-distanced furrows so that their long shadows are not cast over the gram plants, impairing the latter's growth. Since both mustard and gram have been discovered amongst the plant remains of the Harappan times, it would be a reasonable assumption that these very plants were grown in the field discovered at Kalibangan. Should we not give high marks to the Early Harappans for such an ingenious planning!



PI. XIV Around present Kalibangan village: A field with mustard plants in the widely distanced furrows and those of horse gram in the others

Scores of other examples of this backward journey from the present to the Harappan times can be cited, but we shall stop here. However, a million-dollar question is: who were these Harappans whose cultural traits we have inherited? To answer this, a somewhat longish discussion seems necessary.

In the 19th century, the renowned German scholar, Max Muller, dated the Vedas to 1200 BCE. He did it on a very ad-hoc basis. Accepting that the *Sūtra* literature was ascribable to ca. 6th century BCE, he assigned two hundred years to each of the preceding periods of the Vedic literature, namely, those of the *Āraṇyakas*, *Brāhmaṇas* and *Vedas*. Thus, $600 + 200 + 200 + 200 = 1200$. However, when his contemporaries like Goldstucker, Whitney and Wilson objected to this kind of ad-hocism, Max Muller surrendered, saying (1890, Reprint 1979): “If now we ask how we can fix

the dates of these periods, it is quite clear that we cannot hope to fix a *terminum a qua* [sic]. Whether the Vedic hymns were composed [in] 1000 or 1500 or 2000 or 3000 BC, no power on earth will ever determine.” However, the most unfortunate part of the story is that in spite of such a candid surrender by Max Muller himself, his blind followers, for no valid reason, still hold on to 1200 BCE as the date of the Vedas. However, as would be demonstrated later, we have now positive evidence to show that the **Vedas are in no case later than 2000 BCE.**

In 1920s the Harappan Civilization was discovered and dated to the 3rd millennium BCE on the basis of its contacts with the already dated Mesopotamian civilization. Since, according to the fatwa of Max Muller, the Vedas were only as old as 1200 BCE, it became a *prima facie* conclusion that the Harappan Civilization was not the product of the Vedic people. Further, since the only other major linguistic group in the country was that of the Dravidian-speaking people, it was an obvious corollary that the Harappans were a Dravidian-speaking people.

In 1946, Mortimer Wheeler discovered a fortification wall around one of the mounds at Harappa. On learning that the Vedas refer to the Aryan god Indra as a destroyer of forts (*puramdara*), he lost no time in declaring (1947, p. 82), “On circumstantial evidence, Indra stands accused (of destroying the Harappan Civilization.” It was further argued that the defeated (Dravidian-speaking) Harappans were driven all the way to South India.

We may now examine the above-mentioned postulations. First, if the Harappans were driven away to South India, one would expect a few Harappan settlements, howsoever fugitive, in that region. But the hard fact is that **there is not even a single Harappan or even Harappan-related site in the whole of South India -- be it Tamil Nadu, Andhra Pradesh, Karnataka or Kerala.**

The issue can be looked at from another angle as well. It is known that even when people are ousted from an area, the names of some of the places, rivers and mountains given by them continue to linger on. As an example of this may be cited the names of places like Massachusetts and Chicago and of rivers like Missouri and Mississippi – all in USA, which were the names given by the original inhabitants of the area, viz., the Red Indians, who were ousted from these areas by the Europeans a few centuries back. **But no Dravidian names exist in the entire area once occupied by the Harappans, i.e., from the Indus on the west to the Ghaggar (ancient Sarasvatī) basin on the east.**

Thus, there is no case whatsoever for the Harappans having been a Dravidian-speaking people. If that be so, were they the Sanskrit-speaking Vedic people?

It may be recalled that the 1200-BCE date given to the Vedas by Max Muller was a major argument against the Vedic people having been the authors of the Harappan Civilization which dates back to the 3rd millennium BCE. It, therefore, becomes necessary to re-examine the date of the Vedas.

In this context, the history of the ancient Sarasvatī River is of vital importance. In the *Ṛigveda*, it has been referred to as a mighty river, lying between the Yamunā and the Sutlej (*RV* 10.75.5-6) and flowing all the way down to the sea (*RV* 7.95.2). The entire evidence suggests that the ancient Sarasvatī is none other than what is known as the Ghaggar at present, which is now dry except for a small stretch at its beginning. It is in no way the Helmand of Afghanistan, as some people willfully hold.

On the bank of the ancient Sarasvatī there lay Kalibangan, the well known site of the Harappan Civilization. After a prolonged occupation, starting from the Early Harappan times around 3000 BCE through the Mature Harappan period, it was suddenly abandoned. Carbon-14 dates assign this abandonment to circa 2000 BCE. Hydrological investigations indicate that it is about this time that the adjacent river dried up, cutting off the water-supply on which the city depended. The drying up of the Sarasvatī is also corroborated by the *Pañchaviṃśa Brāhmaṇa* (XXV.10.16), a later Vedic text.

From the foregoing evidence it becomes abundantly clear that the *Ṛigveda*, which refers to the Sarasvatī as a mighty flowing river, is anterior to 2000 BCE. How much earlier? It would be anybody's guess. In any case, at least a 3rd millennium BCE horizon is indicated.

What is the fall out of this **3rd mill.-BCE** dating of the *Ṛigveda*? Its contents give a very interesting insight into the geography of the times. For example, *RV* 10.75.5-6 clearly show that the Ṛigvedic people inhabited the region from the Indus on the west to the upper reaches of the Yamunā-Gaṅgā on the east. A question may now be asked: archaeologically, which civilization spread over this very area during the 3rd millennium BCE? One has no option but to admit that it was none other than the Harappan Civilization. **Thus, space and time coordinates duly establish that the Vedas and the Harappan Civilization are but two faces of the same coin** (Fig. 3).

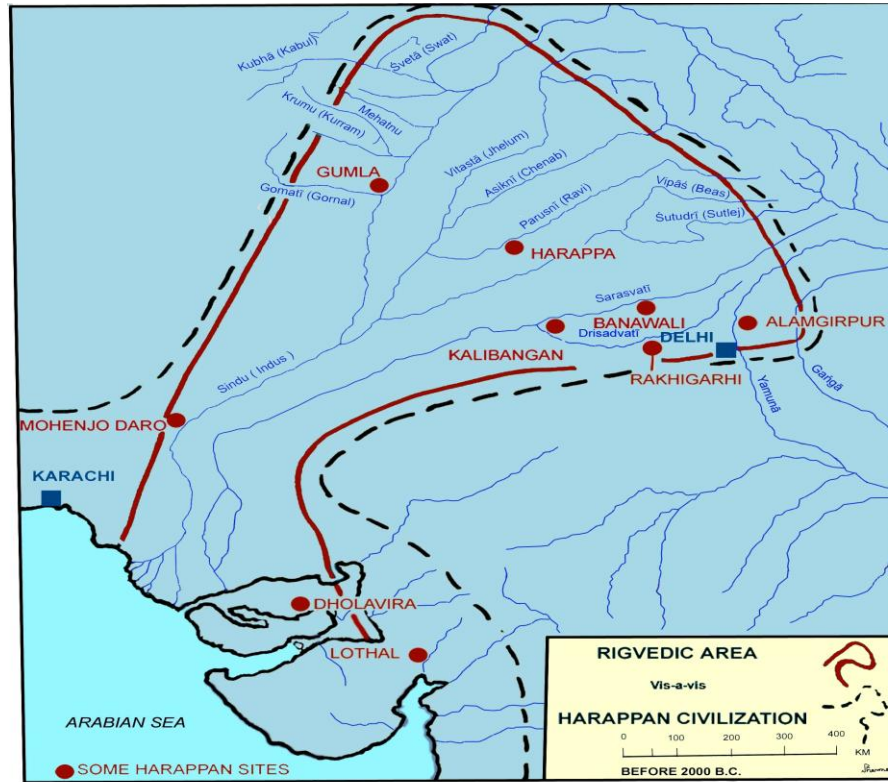


Fig. 3 Map showing a correlation between the Rigvedic area and the spread of the Harappan Civilization, before 2000 B.C.

Against this Vedic=Harappan equation, three objections have been raised. One, the Vedic people were nomads, whereas the Harappans were highly civilized. Two, the Vedic vehicles were provided with spoked wheels, while the Harappans did not know such a wheel. Three, the horse played a very important role in the life of the Vedic people, whereas the Harappans did not domesticate the horse. We shall now examine the validity of these objections.

Nomads keep on wandering from place to place and have no permanent settlements. On the other contrary, the Vedic people not only had regular settlements but many of these settlements were fortified (RV 7.15.14). On the economic front too, they were well off and were engaged in both internal as well as external trade. Their sea-faring boats were provided with 'a hundred oars' (RV 1.116.5). In matters of governance, they had a well defined hierarchy of rulers. Thus, for example, whereas Abhyāvartin Chāyamāna was called a *Samrāt* (sovereign; RV 6.27.8), Chitra was a *Rājan* (king) and others were just *Rājakas* (kinglings; RV 8.21.18). Let not anybody think that these tiers were not real. The *Śatapatha Brāhmaṇa* (V.1.1.13) clearly states:

By offering the *Rājasūya* he becomes Rā jā and by the *Vājapeya* he becomes Samrāt, and the office of Rā jā is lower and that of Samrāt the higher. A Rājā

might indeed wish to become a Samrāṭ, for the office of Rājā is lower and of Samrāṭ the higher. But the Samrāṭ would not wish to become a Rājā for the office of the Rājā is lower, and that of the Samrāṭ the higher.

Would you still hold the view that people having fortified settlements, carrying on overseas trade using hundred-oar ships, and having a three-tier system amongst the rulers were ‘nomads’?

Now to the spoked wheel. In the hot and human climate of India, one does not expect examples of wooden wheels to survive. But that the Harappan wheels did have spokes is clearly borne out by the terracotta models of wheels recovered from various sites (Pl. XV). Thus, for example, in the specimens from Rakhigarhi and Kalibangan, the spokes are represented by radial painted lines emanating from the central hub and reaching the periphery. In the specimen from Banawali, the spokes are shown by similar radial lines, but in low relief.



The horse's bones have been the bone of contention amongst scholars. Those who hold that the Harappans weren't Vedic people, strongly deny all

the available evidence regarding its presence at Harappan sites. To begin with, they do not accept the terracotta figurine from Mohenjo-daro, which the excavator, E.J.H. Mackay, categorically pronounced as that of a horse: “Perhaps the most interesting of the model animals is the one that **I personally take to represent a horse** (Mackay 1938, Vol. I, p.289, pl. LXXVIII, no.11). Let that alone, the excavation at Lothal has thrown up another terracotta figurine of the horse (Pl. XVI; S.R. Rao 1985).

The site has also yielded the faunal remains of that animal (Rao, *ibid.*, p. 641). Yet another site in Gujarat, namely, Surkotada, has also thrown up faunal remains of the horse (A.K. Sharma in J.P. Joshi 1990, p. 381). This identification has duly been endorsed by an internationally recognized authority on horse bones, namely, Professor Sandor Bokonyi, through a letter written to the Director General, Archaeological Survey of India, in the following words:



Pl. XVI Lothal: Terracotta horse. Mature Harappan

Through a thorough study of the equid remains of the prehistoric settlement of Surkotada, Kutch, excavated under the direction of Dr. J.P. Joshi, I can state the following: The occurrence of true horse (*Equus Caballus* L.) was evidenced by the enamel pattern of the upper and lower cheek and by the size and form of the incisors and phalanges (toe bones). Since no wild horse lived in India in post-Pleistocene times, **the domestic nature of the Surkotada horse is undoubtful.** This is also supported by an inter-maxilla fragment whose incisor tooth shows clear signs of crib-biting, a bad habit only existing among domestic horses which are not extensively used for war.

In a subsequent paper (Bokonyi 1997, p. 300), he re-confirmed his findings: **“All in all, the evidence enumerated above undoubtedly raises the possibility of the occurrence of domesticated horses in mature phase of the Harappa Culture, at the end of the third millennium BC.”**

From what has been stated in the foregoing paragraphs, it becomes abundantly clear that all three objections, namely, that the Vedic people were nomads, that the Harappans did not use spoked wheels and that they did not domesticate the horse, are entirely baseless. **In the sequel, it gets re-confirmed that the Harappan Civilization and the Vedas, as already stated, are but two faces of the same coin.**

We now pass on to the final aspect of the issue, namely, were these Harappans=Vedic people immigrants or indigenous?

Soon after the discovery of the Harappan Civilization in the 1920s, a view was advanced that this civilization had its origin in West Asian civilizations. However, when the protagonists of this view were asked to point out exactly which features of this civilization were derived from West Asia, they fumbled since none of the features of the Harappan Civilization was identical with any feature of the West Asian civilizations – be it town-planning or drainage system or use of kiln-fired bricks or pottery or sculptural art or the writing system. When this view took the beating, another curious view was put forward, namely, if not the actual civilization was drawn from West Asia, at least the ‘idea of civilization’ came from there!

However, excavations at a number of sites on the Indian subcontinent – such as Mehrgarh, Kot Diji, Harappa, and Rehman Dheri in Pakistan and Kalibangan, Banawali, Rakhigarhi, Kunal, Bhirrana and Dholavira in India – have shown that the Harappan Civilization had evolved on the Indian soil itself. At least two clear-cut antecedent stages have come to light which have been designated as Early Harappan and Ravi-Hakra. The C-14 dates for the

lower levels of Bhirrana, in the Sarasvati basin, are as follows (L.S. Rao: 2005, p. 67).

Sample No. BS 2314. Calibrated age: 1 Sigma 4770 (4536, 4506, 4504) 4353 BCE

Sample No. BS 2318. Calibrated age: 1 Sigma 5336 (5041) 4721 BCE

Sample No. BS 2333. Calibrated age: 1 Sigma 6647 (6439) 6221 BCE

It is thus abundantly clear that the origin of the Harappan Civilization goes back to the 6th millennium BCE, if not earlier. It is also likely that further field work may bring to light a still earlier stage. **Anyway, the Harappan Civilization cannot be regarded as an ‘import’ from elsewhere. It is ‘indigenous’. And since, as already shown, the Harappans and the Vedic people are the same, the latter *ipso facto* are indigenous – neither invaders nor immigrants.**

Looking ahead. – As we have already noted, the Bhirrana stage goes back to the 6th millennium BCE and the evolutionary story then goes on to the Mature Harappan times in the 3rd millennium BCE.

On the basis of the astronomical data in *RV* 1.105.1, this *Maṇḍala* is datable to circa 4,500 BCE, whereas, on the same basis the *Atharva Veda* is ascribable to 2300 BCE. Is it then possible to work out the evolution of the material culture from the time of the *Rigveda* to that of the *Atharva Veda* and see if it matches the cultural evolution as gleaned from the archaeological sites?

To achieve the foregoing, a competent team of archaeologists and Sanskrit scholars will have to work together, say for about five years. What is then needed is to set up a Special National Project for the purpose. But who would support it financially? The Government of India or State Governments or Big Businesses or some/all of these together? Let us see whose conscience is aroused!

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