

# A Study on the Possible Role of Ideological Conflict in the Decline of Indus Valley Civilisation

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**Abstract:-** The Indus Valley Civilisation (IVC) was unique amongst the contemporaneous civilisations of the bronze Age because of its geographical extent, technological advancements, an organised civic society, well-planned cities, unprecedented standardization of construction materials and methods, weights and measures, manufacturing, and bristling trade as far away as Mesopotamia, Egypt, and Afrika. The rise of Indus Civilisation (8<sup>th</sup> to 4<sup>th</sup> millennium BCE) culminated in its mature phase that lasted from 2600 BCE to 1900 BCE and by 1300 BCE its cities were abandoned. The reasons advanced for this decline include, climatic changes, rivers changing courses, recurring floods, and loss of international trade etc. The possibility of ideological conflicts, though indicated by Hussain has not been seriously investigated [1]. In this paper, an attempt is made to establish if ideological conflict could indeed have led to the collapse of this civilisation.

**Keywords:-** Indus Valley Civilisation; Decline; Genetics; Ideological Conflict.

## I. INTRODUCTION

The knowledge of ancient Indian civilisation presents itself in two forms namely the architectural remains of IVC covering time span from 7000 BCE to about 1300 BCE and the sacred Vedic texts dated 1500 BCE to 600 BCE. The excavations of hundreds of sites, spread over 1.5 million square kilometres, showcase the organisational acumen in planning and raising of cities integration through standardization of weights and measure and technological. Widespread use of Indus seals and the characters appearing on these indicate the use of a common language throughout the geographical region. However, no written record of their achievements exists. Vedas composed by 'Aryans' on the other hand contains mathematics, geometry, trigonometry, astronomy, astrology, medicine etc. but do not present any clue as to the material evidence to support it. Aryans are believed to have inhabited the land between rivers Saraswati (Ghaggar-Hakra) and Drashadvati [2]. Various aspects of IVC, including reasons for its decline are covered by several authors through their seminal works. Possehl [3] Rao [4] McIntosh [5] Lahari [6] We will confine ourselves to examine some of the issues, namely contemporaneity of IVC, Saraswati and the Aryans, genetics, cultural fabric, Indus seals, religion, or rituals to identify the undercurrents

that point to ideological difference as possible cause of the decline.

## II. RIVER SARASWATI AND IVC CONTEMPORANEITY

The course of the river Ghaggar-Hakra (Saraswati) and its changes have been studied using isotopic, radiocarbon, luminescence Sedimentological, subsurface Chronostratigraphy studies A Saraswati like river might have flown to Arabian sea through Rann of Kachchh until 10 ka [7]. It can be traced to Bhirrana in north-west in the Thar desert between 9 to 7 ka [8]. The river was perennially fed by Himalayas during 80-20 ka and 9-4.5 ka [9]. Sutlej changed to its present course about 8 ka before present providing stability to the settlements [10]. The paleochannels of the rivers were fed by seasonal rains [11]. The river disappeared 15 ka to 5 ka before IVC settlements reached the peak [12,13]. Thus, when Rigveda describes Saraswati, coming down from the Himalayas in all its ferocious beauty, which river is being immortalised?

## III. GENETIC STUDIES AND MIGRATION

Genetic research has added more certainty in establishing the direction of migration of human beings. Ancient DNA (aDNA) studies support that South Asia and Europe both were affected by migration from Iranian and Steppe regions, and both contributed to the Indian cline [14]. Danino also suggests that the genetic admixture of the Indian population is a result of migrations 40k to 50k bp and conclude that the population of south Asia remain autochthons [15]. Silva suggests that the maternal lineages, primarily reflect pre-Holocene processes and paternal lineages, within last 10ka, were dominated by male gene flow from central Asia [16]. Narasimhan et. al. proposes mixture of Holocene population of Iran and south Asia [17]. Reich suggests that after the decline of IVC this population mixed with north-western groups and with steppe ancestry to form Ancestral North Indians (ANI) and with south-eastern groups to form Ancestral South Indian (ASI) [18]. Thus both have Iranian farmer-related ancestry, though in different percentages. The closest proxy for ASI were the Andamanese with whom they shared common ancestors fifty thousand years ago [19]. Analysing samples from many regions and periods and comparing results with the samples from present day population, it is shown that Iranian agriculturist population has contributed to the west of Indus periphery population between 4700 BCE to 3000 BCE [20].

Mascarenhas et al, using R1a1 Y-haplogroup, for Goud Saraswat brahmins of Lotli (Loutolim) town in Goa, traced the origin of gene flow to West Asia from where the subclade L657 originated and made ingress through Bolan pass [21]. The genetic footprint of at least three different pools of R1a1 Y-HG, indicates migration along route north of the Iranian Dasht- i- Lut desert making ingress to north through Khyber Pass and to Sindh, Gujrat, and the Deccan through Bolan pass [Figure (1) reproduced from Fig. 6. Ref 22] [22]. The analysis of the iconography of animals on the seals, indicate that cultural/religious similarities exist between North East (region 1) and South West (regions 4 & 5). Elamite-Persian caprid and hybrid animal icons are common to all these regions except the Harappa (region 2).

mentioned therein are located in Afghanistan. Parpola, the two emphasizing the similarities in language and Gods between scriptures, also points out the presence of a large number of Dravidian loan words in Rigved and proposes bipartite cultural contributions of migrating tribes and local.

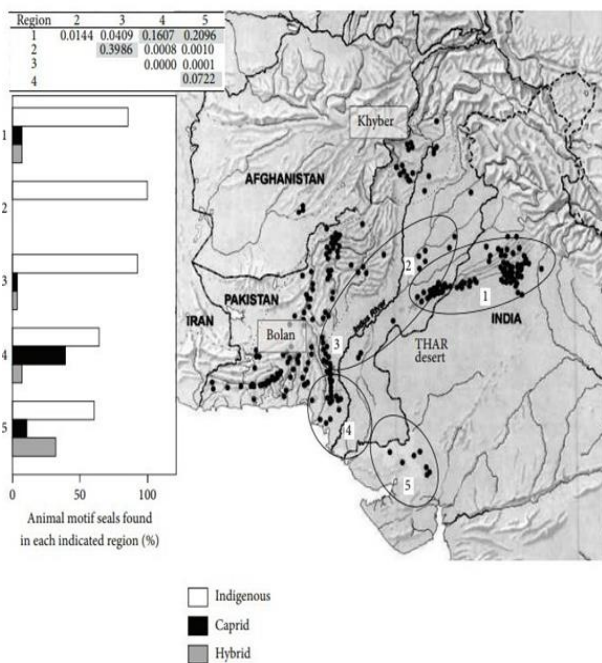


Fig 1. Distribution of find-spots for Harappan animal motif seals. Reproduced courtesy Mascarenhas et al [Ref. 22 figure (6)]

The routes of migration from Iran to Indus region are investigated by Petrie [23]. Migration often results in sharing and assimilation of cultures, ideas, and beliefs. Similarities of cultural fabrics has been used to study migration of people. The seals with concentric circles show continuity all the way from Baluchistan, Punjab to Ghaggar region [24]. The similarity of seals from Gilund of chalcolithic time with those from Bactria-Margiana Architectural Complex (BMAC) indicate cultural exchanges even before the mature phase of IVC [25]. Similarity of architecture of a warehouse building at Shahr e Sukhteh of Helmond region and Gilund in Rajasthan confirm exchange of knowledge over such a long distance [26, 27]. Comparison of languages, rituals and Gods of the Iranian scripture Avesta and Rigveda (RV) reveal common words with same meanings, similar Gods, and rituals [28, 29]. Sonawani suggests that Reg Veda was composed in the vicinity of Harahvaiti (Sk. Sarasvati), Avestan name for Helmand River of Afghanistan [30]. He also refers to Nadistuti (RV 10.75) and points out that many rivers

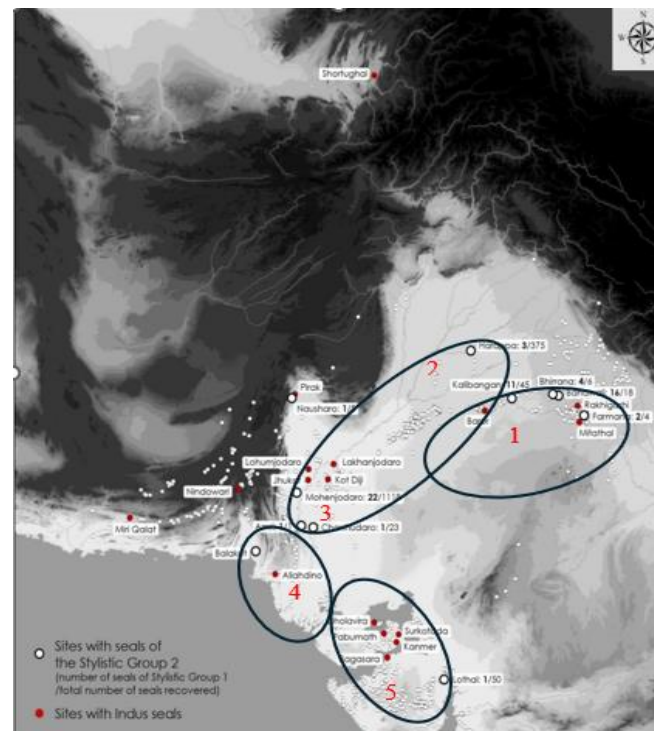


Fig 2. Distribution of right facing icons Indus seals. The number shown depict ratio of right facing seals to total number of seals recovered. [Reproduced courtesy Uesugi et al. ref. 36, Figure. (2)] with regions marked by author for comparison with regions of FIGURE 1.

Harappans to form the Hindu culture [31]. In his opinion, wars and conquests described in the Vedas relate to conflicts between Indo-Iranians and Indo-Aryan tribes. Dhavalikar suggests that the Aryan’s forefathers lived in the foothills of Altai Dag mountains in Kazakhstan before migration to Afghanistan ten thousand years ago [32]. It is shown, using IE languages as marker, that ingress into Indus Valley also occurred through northern passes from Asian mountain belt and Bactria from steppe near Urals [33]. The DNA analysis of present-day communities of Panjab and Haryana point to this migration [34].

#### IV. DISCUSSION

It is clear from above that ideological differences did exist between different regions. Let us now look at other differences, namely the distribution of icons on seals. The unicorn is the most used icon as about 70% of all the seals found have this image [35]. Also, the percentage of unicorn seals, at Banawali (17%) and Kalibangan (63%) [region (1) Figure 1] is much less than that from Mohenjo Daro, Chanhudaro and Harappa at (80%) each [region (2) and (3)]. While goat, markhor and urus are prominent icons at Banawali and Kalibangan, very few of these are found at Mohenjo Daro (1%) and Harappa (0%). Another distinction that can be made is the direction the image of icon, whether



facing left or right [36]. The right facing seals are concentrated in region (1) Fig. (2) [reproduced from Fig 2, ref. 36]. The number of right facing icon seals, shown as its ratio to total seals found, decrease with increasing distance of sites from this region. On the other hand, majority of seals from Punjab and Sindh [region2] have left facing icon. The right facing icon seals (2600-2450) BCE are dated prior to the left facing (2450-2200) BCE ones [37]. The oldest unicorn seal, found at Farmana, is dated to (2600-2450) BCE [38]. Another characteristic that differentiates these regions is presence of Vedic altars [39, 40]. It is instructive to note that Kalibangan and Rakhigarhi [region (1)] and Nageshwar and Lothal [region (5)] also have Vedic altars. Kalibangan has several altars in the citadel and a separate mound for rituals [41, 42]. It can therefore be summarised that regions (1, 4 and 5) have similar ideological dispensation that differ from that of region (2).

Fire altars probably symbolise one strand of belief system and horned deity, Pashupati seals and lingam the other [43,44]. The Architectural context of Pashupati and right icon seals, burial urns copper tablets and sculptures are shown in Figure (3), [reproduced from figure (9.1 ref. 45) from Possehl] [45]. Four Pashupati seals were found in DK G area [46]. This is the largest number of Pashupati seals at a single location. Several identical copper tablets with incised images and script found at the same or proximate locations are believed to be amulets for protection of the wearer or tokens of votive offerings [47]. A number of fractional burials and post-cremation urns are found within houses and in the vicinity of the great bath [48, 49]. The cemeteries are located away from the habitation areas [50]. No cemetery has yet been found in Mohenjo Daro [51]. The great bath, buildings in its proximity and the house with double staircase are believed to be used for rituals [52]. Apart from the great bath, another bath is located in the HR B area [53, 54]. Though smaller in size it is built with similar layout as the great bath. A large building, next to this bath, with several rooms, courtyard, and monumental pillars at its entrance, according to Vidale is a palace. However, presence of fractional burials at other locations, including this, cannot be ignored. These probably indicate a sacred place for last rites rituals. In House 1, HR A, dead man's lane, a probable temple, several right facing unicorn seals were found. Contrary to DK G area no Pashupati seal was found here probably signifying their allegiance to the group from region (1).

The unicorn seal as we have seen is used throughout IVC. How could the two ideologically different populace reconcile? It is suggested that the unicorn icon is styled after Mesopotamian aurochs bull, and the depiction of a single horn, following Eurasian and south Asian legends, is a phallic symbol [55]. The unicorn's body image is from the nilgai antelope, which incidentally is revered in Vedic literature, because of the mythological association with Prajapati, the creator God. Thus, unicorn seems to be acceptable to the two groups, the only difference being the choice of the direction the image on the seals is facing and probably in rituals. Though sharing the common material gains of the organised society, the two ideologically distinct groups would have coexisted until one started dominating

over the other. Rigid worships Gods who are deified personification of natural phenomena [56]. These include Surya, Agni, Indra, Varuna, Mitra, Vayu, Surya, Prithvi, Rudra, etc. Rudra, considered a non-Aryan deity, is preceded by Indra, Vayu, and Agni in importance in Vedic literature [57]. Rudra having the same attributes as Pashupati. Pashupati is considered a cult figure whereas Rudra is considered a deity. Pashupati is not given any significance in Rigveda, devoting only three verses out of about 1027 to Him [58]. It was much later, in Yajurveda, that Pashupati found a prominent place. Rigveda in fact abhorred the worship of phallus deity 'Shishna-deva' (Book 7, 21.5). It should be mentioned that ancient Iranian scriptures also do not have a phallus deity [59]. These differences, in due course, could have resulted in a fight for dominance. Evidence of intentionally obliterating the genitals of male statues of mature Harappan phase of Lothal and Mohenjo Daro point to ideological conflict [60, 61]. Sankalia, finding Shiva lingams amongst the debris in the drains at Mohenjo Daro, reasons that these were not the object of reverence [62]. The element of fear, due to possible persecution at the hands of the followers of rival ideology, for unceremoniously discarding objects of worship therefore cannot be ruled out. Another evidence of conflict is the conversion of the Great Bath complex, a probable symbol of rituals for one ideology, into manufacturing facility with bath itself used for dumping industrial waste.

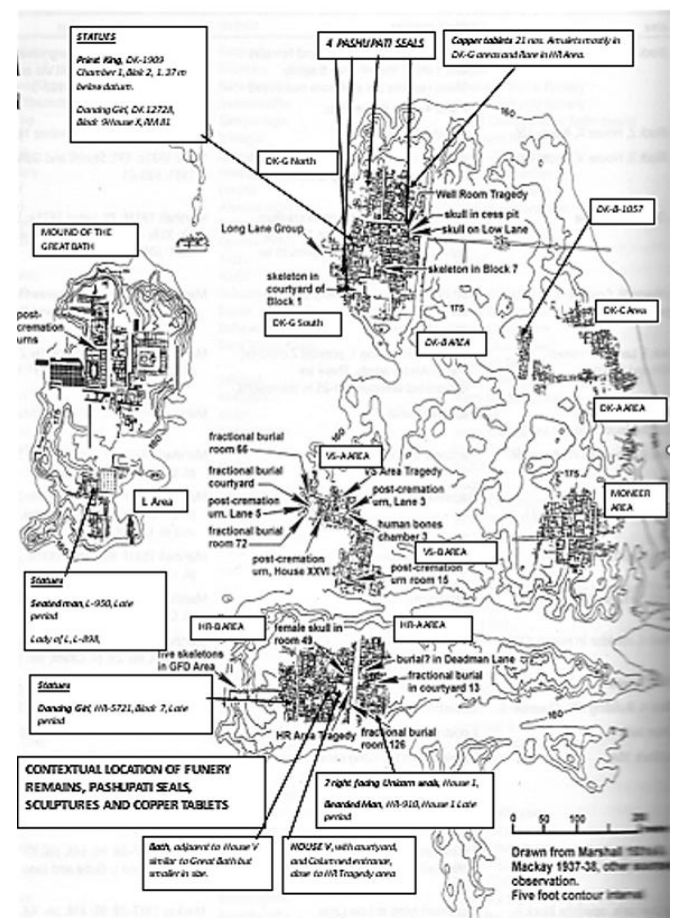


Fig 3. Contextual location of Funerary remains, Pashupati Seals, Sculptures and Copper tablets, reproduced from Possehl [reference 45 figure (9.1)] with details of locations of artifacts from same reference added.

Governance of IVC, spread over a vast area, would not have been possible without an organisation and means of enforcement and control. Unitary power centre like king or priest is ruled out because of the absence of monumental buildings, temples, royal palaces, and tombs. The state is thought to be heterarchical [63, 64]. Thompson terms it a stateless society with a purely voluntary government [65]. From the uniformity of material articles of daily use and health of individuals, a consensus has emerged that the society might have been governed by a common ideology [66]. Egalitarian nature of IVC implies that all stake holders are equally respected, have equal opportunities and have a stake in smooth running of civil and the municipal infrastructure. Advent of any new technology leads to the emergence of artisans, technicians, workers, etc. all specialists in their trade. The society pays for their services out of the agricultural surplus generated through its collective efforts [67].

Ancient sacred texts contain, apart from religion and philosophy, knowledge about a variety of subjects like astronomy, astrology, geometry, mathematics, medicine etc, the very knowledge without which unique infrastructure of the urban centers could not have materialised. However, neither there is any indication of it being related to the achievements of IVC nor it reveals its foundational basis. Vedic Aryans emphasised exclusively, learning, preservation, and transmission of knowledge through ‘Shruti’ the oral tradition. Unlike contemporary civilisations of west Asia, where text is preserved on clay tablets, no such text is found in excavations so far. Thus, the text was written either on perishable medium or was deliberately destroyed. Kenoyer is of opinion that since knowledge is power, making it exclusive through oral tradition would have served the purpose for control and dominance [68]. Also, the knowledge contained in the Vedic literature was in the form of hymn, composed in with very strict metre, and with absolute precision of text, intonation, and reindentation. This would have made the new format of knowledge incomprehensible to the existing workforce. It would then have marginalised the specialist classes who would have abandoned their civic responsibilities and opted out. Absence of unitary authority and state levers of enforcement would have resulted in degradation of the municipal infrastructure. Over time the cities would have become unworthy of habitation leading to abandonment and hence the decline. However, this alone could not have been the sole reason.

Spatio-temporal studies of the Indus urbanisation and de-urbanisation reveal the decline in the number of village settlements during the urbanisation and increase during deurbanization [69]. Spatio-temporal analysis using GIS information, radio-carbon dating, and archaeological data, show that the maximum change in the number of settlements was along Ghaggar-Hakra (Saraswati) region while the change in Baluchistan region is small and Gujrat region remained unaffected [70]. It is observed that the villages, around Rakhigarhi, Farmana, Kalibangan, Banawali, Bhirrana even though located in the same favourable climatic zone were abandoned during the de-urbanisation phase (1900-1300) BCE. The village settlements and new

centres grew but without the Harappan characteristics. This could only have happened if the social mores have changed so drastically that the society renounced the materialistic comforts gained through understanding and controlling nature and adopting ascetic lifestyle.

The philosophical basis for ideological differences in IVC can be traced to Rigveda itself in the form of materialism on one hand and spiritualism on the other [71]. Rigveda contains prayers beseeching from deities, cows, wealth, progenies, happy life, and protection from illness and enemies, the very essentials of material comforts. Rigved also mentions about sage Bṛhaspati, who propounded materialism, based on the premise that only that which can be perceived through senses is real and all other imaginaries. This thought later developed into Charvak (Lokayata) school which holds direct perception, empiricism, and inference as a proper source of knowledge and rejects supernaturalistic cosmologies [72, 73]. This materialism, hallmark of the material culture of IVC, later became anti-Vedic [74]. The two ideologies, one believing in understanding and controlling nature for social good and the other deifying nature and engaging in rituals for spiritual upliftment and glorious afterlife, could have become a reason for renouncing worldly comforts and reverting to pre-Harappan frugal lifestyle. It is through this approach that the gains of scientific and technological achievements of IVC were lost resulting in such a philosophical change of the social mores that no comparable urban centres developed in the region for millennia thereafter.

## V. CONCLUSION

Using gene flow studies to mark the route of ingress and diffusion of migrant population to different regions of the Indus valley, their similarities and differences of cultural fabric and the iconography of the Indus seals are used to identify inherent streams of ideology present in the society, lingam worshipers on one hand and Vedic preachers on the other. Deliberate obliteration of phallus from male statues and discretion of the great bath point to possible conflicts between fire worshipers and the lingam worshipers. On a more philosophical level disenchantment with the worldly material comforts to care for the afterlife might have motivated people to adopt frugal village lifestyle. The concept of Maya, an illusion, though inherent in early Vedic thought in a different context (Rigveda 10.177-1 to 3) might have induced asceticism and adoption of frugal living shorn of all material comforts. Another consequence of the emphasis on oral learning might have marginalized the technician classes, responsible for maintaining the civil infrastructure, leading to the abandonment of duties and hence degradation of the cities to the point of becoming inhospitable.

## ACKNOWLEDGEMENT

I wish to acknowledge extensive discussions on the subject with Late Shri S. K. Bhattacharjee, a scientist, formerly with the Department of Atomic Energy, India.

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