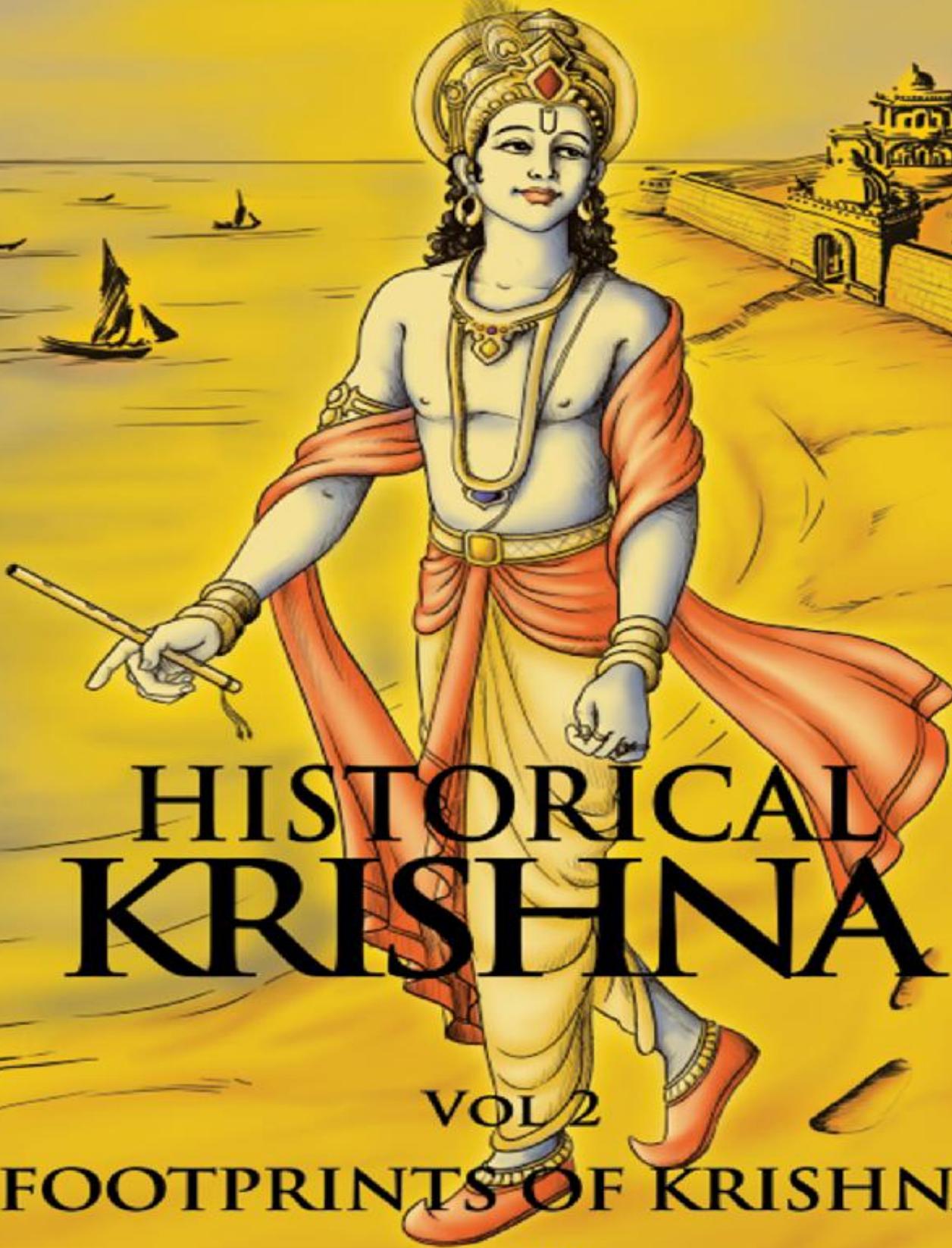




Bharath Gyan®



# HISTORICAL KRISHNA

VOL 2

## FOOTPRINTS OF KRISHNA

D.K. HARI  
D.K. HEMA HARI

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Book Cover

Krishna is a paradox.

While events connected with Krishna find a place in Geography, Krishna does not find a place in History.

Historicity today demands evidence from archaeology and geography.

If Krishna is historical, then He must have walked this earth.

Where did He live? What did He leave behind?

Seas and deserts are good preservers of ruins.

Unaccessible and untouched by man, ruins safely submerged in the sea or buried in the sands can tell tales of the people and the times they were in use.

This book uncovers the footprints left behind by Krishna to logically establish Him in history.



Bharath Gyan<sup>®</sup>

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## Cover Design

Krishna looks back with pride at the port city of Dwaraka that He built by reclaiming land from the sea.

A city that He built when He was barely in his twenties.

A city that was the original Gateway Of India.

A city which flourished due to trade.

A city that was shortlived though.

A city that lies undersea today.

But its imprints remain.

---

This is an interdisciplinary approach to place Krishna in history.

This work is presented as 3 volumes.

**Volume 1 – Dating of Krishna**, arrives at dates for Krishna in the modern Gregorian calendar.

**Volume 2 – Footprints of Krishna**, traces Krishna across the geography of India.

**Volume 3 – Facets of Krishna**, looks at the different sides of Krishna to understand His historicity.

You are now holding Volume 2  
**Footprints of Krishna**.

Divinity is a matter of faith.  
Historicity is a matter of existence.



D.K.Hari and D.K.Hema Hari are founders of Bharath Gyan, a knowledge initiative to compile and present the knowledge of India, its traditions, its culture, its global ties - in short, its ethos, from an Indian perspective.

This husband-wife duo of management and IT professionals who have turned research collators, have authored 12 books, many articles and a host of short films. They are also active on social media.

*"This work is encyclopaedic."*

- Dr. S .Kalyanaraman,  
Sarasvati Research Centre

*"This is monumental. This will appeal to the public."*

- Prof. Narahari B Achar,  
Memphis University, USA

*"Beyond this, if someone wants further proof on Historicity of Krishna, they have to approach Devaki and Vasudeva."*

- An Avid Reader



Bharath Gyan®

# HISTORICAL KRISHNA

Vol - 2

## Footprints of Krishna

D.K. HARI  
D.K. HEMA HARI

Bharath Gyan Series

# Benedictory Note



H.H. Sri Sri Ravi Shankar  
Founder - Art of Living

Krishna's historicity raises no doubts in the hearts and minds of a billion Hindus. It is some academicians who fashionably dismissed the historicity of Krishna. This book will pose some challenges to them. It will make them sit up and rethink about their imaginations, which they believed and made others believe as the gospel truth.

26 June, 2013  
Bengaluru, India.

# About Bharath Gyan



**B**harath Gyan has been collating specific, scientific knowledge of India, using ancient knowledge sources and modern scientific tools and methods, from a present day perspective and relevance.

The knowledge of the Indian civilization is available scattered in various forms – books, manuscripts, oral tradition amongst scholars, various art forms, customs and traditions of the land.

The current generation is facing a barrier in reaching out to this knowledge due to the limited access to such sources. The ancient languages, the style of expression used and their approach to the subjects which differ from the present way of expression, pose a challenge too.

In Bharath Gyan, as part of our quest for the specific scientific knowledge and practices of the civilization, we have come across many stories, ideas, views, theories, factual events and statements.

With the help of traditional scholars with a modern bent of mind and modern scientists open to traditional knowledge systems, we have

endeavoured to carefully sift through all this data, with an inquisitive, rational, logical and scientific mind to understand the knowledge from a fresh interdisciplinary perspective. The outcome of this analysis is the compilation of Bharath Gyan.

Over 13 years, spanning across 108 subjects, the independent facts and data collated, self validate and corroborate each other beautifully in this compilation, as pieces of a jigsaw.

Bharath Gyan, a not for profit, research organization, is in the process of bringing this knowledge out through far reaching and engaging mediums so that it can be easily understood and enjoyed by all across the world.

The objective is to bring out this knowledge and wisdom, with relevance to current day topics of interest, trials and tribulations faced by Indians as well as the world.

Besides filling the readers with wonder at the not-so-commonly known scientific facets of our ancient civilization, it is hoped that this knowledge and approach of the ancients will kindle or aid future research for the benefit of science and mankind.

Can we make the past converge with the present for the future?

Ours is perhaps not the first effort in this direction, neither should it be the last ...

As one of the initiatives, Bharath Gyan, encouraged by His Holiness Sri Sri Ravi Shankar, has entered into an alliance with the Art of Living group to jointly repurpose the compiled knowledge into various knowledge products for dissemination to the community at large.

Our website [www.bharathgyan.com](http://www.bharathgyan.com) provides more insights into our activities.

# Foreword



भारतीय इतिहास अनुसंधान परिषद्

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I am grateful to Sri D. K. Hari and Smt. Hema Hari, for bestowing on me the great benefit of browsing their three volume typescript of “**Historical Krishna**” before it goes public.

Numerous works have come by now on various facets of Lord Krishna. Perhaps, ‘Historical’ may be a new title or attribute to Him. It is necessitated by the times now.

Though he declared Himself as *Kala* (the Time), Lord Krishna taught us through His life how to respect time in one’s earthly existence. In all our known past, right from the days of Creation, we witness a physically strong and powerful section of people known as *Danavas* at one time and ‘intellectuals’ who are wedded to *pratyakshavadain* the present times who questioned the existence of Lord Vishnu and His human incarnations. We have also seen that the devotees had to wait patiently bearing with all the insult and physical pain committed to them by this powerful anti-Vishnu section till some Prahlada like devotees or Vishnu-incarnations come down to earth and provide relief to those who are following the noble path. It is said in the *Vishnupurana* that Prahlada could at last make his father realise the Truth and later Hiranyakashyapa ruled for several years with devotion to Hari.

It is also said that Ravana knew that none else than Hari had come in the guise of Raja Rama and that he departed having realised the Truth. Even in our contemporary world, we personally know a number of our friends and family members who changed their line of thinking at least in their ripe age and realised that they were wrong till then.

The efforts of our Hari couple to make the present ‘intellectual’ world realise that Lord Krishna incarnated as Yadu Krishna and lived during such and such time may atleast help doubting ones

to gain faith in their belief.

No doubt, the divinity of Lord Krishna was doubted by some of his contemporaries, but now his very historicity is being questioned by the modern ‘intellectuals’.

The western educated being separated from the traditional knowledge are following these ‘intellectuals’ blindly cutting off the branch on which they stand. The uneducated are still protected from these tendencies. I am not a specialist in the history of our ‘remote’ past. So I would only look at the question from a lay man’s point of view representing millions of lay-devotees.

Sri Rama and Sri Krishna are the heroes of the world’s oldest epics, the *Ramayana* and the *Mahabharata*. They are worshipped as very important incarnations of God, one as manifestation of *Dharma* and the other for Bodha (teaching) to guide men in the path of *Sanatana Dharma*.

The family trees of both Iksvaku and Yadu dynasties are clearly given in the Puranas with slight differences. Sri Rama had about 60 predecessors and about 30 successors in the line and the last ruler in the main line fought in the *Mahabharata* War on the side of Kauravas and he was killed by Abhimanyu, son of Arjuna. Later, the dynasty was split into many minor lines and Suddhodhana father of Siddhartha Gautama was the last ruler of a major sub-line as Siddhartha took *sanyasa* followed by his son, Rahula. Yaduvamsa (Yadu dynasty) came to an end quarrelling among themselves after the departure of Sri Krishna as ‘cursed’ by Queen Gandhari.

The title ‘Ramayana’ itself means the life journey of Sri Rama written by none other than a Rishi (a ‘Jnani’) who was also a contemporary of Sri Rama. The title of ‘Maha Bharata’ (originally known as Jaya *kaavya* meaning victory to Dharma) is the history of Bharata *vamsa* connected to Chandra *vamsa*, the lineages are clearly given in the ancient literature. The writer was also a sage (Rishi- Jnani) who was not only a contemporary to Pandavas but also to three preceding generations.

Both of the writers were not only contemporary but they were also ‘participatory observers’ to use the terminology of modern “empiricists”. We find no parallel to such a phenomenon in the world’s ancient literatures of nations other than India. Both, Sage Valmiki of Ramayana and Sage Vyasa of Mahabharata stand role models for a ‘true historian’, being unbiased and truthful in their expositions. Though, both of them strongly believed that Sri Rama and Sri Krishna were none other than Lord Vishnu, they were keen in presenting facts as they happened impartially, leaving the judgement of the event to the readers.

To-day our intellectuals could criticize some of the actions of these great personalities, Sri Rama and Krishna, taking references only from these works.

Being devoted to Lord Vishnu, the sages could have hidden some negative references on the lines of some modern researchers who depend on select-data for their interpretations. But these

great writers held Truth above even their venerable God. The birth-days of both, Valmiki Jayanthi and Vyasa Poornima, are being celebrated since times immemorial with great veneration in India. Their *Ashramas* are well identified. They have become pilgrimages being visited by thousands.

There are some ‘intellectuals’ who argue that the writers were real but not their ‘stories’.

In ancient Indian literature, Vedic literature is ‘heard’. Various *Sastras* are not fiction. The *Purana*, history of the Universe, was flashed to Sage Parasara, father of Sage Vyasa, as a ‘revived memory’. The subject-matter of later *Kaavya* literature was only taken from the earlier literature. Buddha’s *Jataka* stories are considered the stories of his previous births revealed to his disciples by the Buddha himself. Fiction writing has become more prevalent in the modern times when writing and printing have become gainful professions. By no means, we can bring the epic writers to the category of present fiction writers. The *Kathasaritsagara* or *Panchatantra* do not of course belong to the genre of modern fiction.

Both the epics give us a clear understanding of the geographical expanse of Bharat from Afghanistan in the north-west to Rameswaram in the south-east, and from Himalayan range in the north to the Dravidadesa in the south. The then inhabiting tribes -civilian and forest – are described. Their life styles, their customs and traditions, interrelations, social and political systems etc are also given to us very clearly. The geographical regions and political demarcations are described. The dynastic lineages are given. The events are narrated with the essential coordinates of time and space. The time is given so specifically that it is astronomically dated, the *tithi*, *nakshatra* constellations etc., which is more specific than modern dating.

As a text, the *Mahabharata* is more comprehensive than the *Ramayana*. The *Mahabharata* is also described as encyclopedia and revered as Fifth book of Veda. The *Bhagavad Gita* is considered the essence of Vedic knowledge guiding its followers in their *laukika* and *aadhyatmika* life. Lord Krishna’s *bodha* is meant for the present *Kali* times.

These facts are enough for a common man to believe the epic stories to be real and true. By raising doubts in the minds of Indian educated being alienated from their tradition about the historicity of Rama and Krishna, no good purpose will be served to the society by misleading people.

All the sites of *Ramayana* and *Mahabharata* are already identified. They are not only known to people since generations but they are considered pious *kshetras* for common man.

*Mahabharata* sites are identified archaeologically in the post-independent survey. Hastinapura, Indraprastha, Kurukshetra, Mathura, Dwaraka (submerged) are well known to every one. Kings from all parts of Bharat participated in the Great War. They along with their kingdoms are identified.

Archaeology suggests that the origin and growth of civilisation in the world could be traced to the end of last ice-age, may be around 10,000 years BP (Before Present). Many scholars -Indian and foreign - have brought out their theses on the date of Mahabharata War referring to the astronomical and scientific data given in the epic. Most of the modern works suggest the dates between 4500 BP to 5200 BP. Since about 30-38 rulers have succeeded Rama in Iksvaku lineage, the gap between Rama and Krishna should be as wide as 30+ generations. There were about 60 rulers before Rama in his line. Even by rough estimate, the origin of civilisation in India could be pushed back to a hundred generations from the Mahabharata times.

Early European scholars had arbitrarily fixed the average reigning years of a king to as low as single digit years. But, we find that all main characters of the epics, like Dasaratha, Dhrutarashtra, Bhishma, Drona, Krishna and others lived for quite a long time, some of them were even hundred plus. They, even at that age, were also active and strong. They fought a big war. By any estimate the hundred generations before Mahabharata might be in the range of about 3000 years on an average of 30 years (may be arbitrarily) for each reigning period. Thus, the state formation in India could be traced back to at least 8000 BP. We should not forget that even archaeological estimates or carbon analyses are also approximations but not precise. (I owe this understanding to Sadguru, Mahamahopadhyaya, Dr K Sivananda Murtyji, D.Litt, Bheemunipatnam, AP).

Here, the author-couple have endeavoured to answer the questions of many a doubting Thomas and presenting a scientific analysis of data available in the Mahabharata itself. They deserve a lot of appreciation from the scholars and serious readers.

Since the work has received the blessings of His Holiness Sri Sri Ravi Shankarji, it needs no more authentication.

I wish the learned couple all the best in their struggle for the cause of Sanatana Dharma.

Dated: 10.12.2014



(Y. Sudershan Rao)

# Preface



D.K.Hari and D.K.Hema Hari  
Founders, Bharath Gyan

While people at large accept the divinity of Krishna, some, at the same time, have doubts about the historicity of Krishna. This book is an effort to understand Krishna from a historical angle and bring out the fact that Krishna, a hero of the land of India, was indeed historical. Krishna had walked and lived on this earth, some time in the remote past.

## **When precisely is this remote past?**

## **Do we have proof of His historical existence?**

This book aims to shed light on the historicity of Krishna, using logic and science.

## ***Out of Syllabus***

Religious expressions of Krishna, the miracles attributed to Him and detailed discussions on philosophy, *Nishkama Karma* and the *Gita*, are not the focus of this book.

## ***Historicity and Divinity***

Some may feel that we are taking away the divinity from Krishna with this effort of trying to establish His historicity.

The idea here is not to offend the religious sentiments of such people. On the contrary, with the relegation of Krishna and the events of His times, to the status of a myth, the basis for His divinity itself is put to test too.

### If there was no Krishna, how can He be divine?



Just Halo, an aspect of divinity sans historicity and  
Lord Krishna, a combination of historicity and divinity

### While divinity is a matter of faith, historicity is a matter of existence.

If the stories of Krishna are to be believed to have been true, then Krishna must have walked this earth.

In this effort, we are responding to those who tend to dismiss Krishna as a myth of cooked up stories.

Infact, once we are able to establish in our minds that Krishna was really a historical person, then those who are seeking the divine Krishna will find themselves a lot closer in established time and space, to cherish and revere Him better.

## **Krishna's times**

The period that Krishna walked this earth, was tumultuous. A major war was fought.

It was epoch changing times. *Dwapara Yuga* was coming to an end and the world was entering into *Kali Yuga*. This change of *Yuga* was not an event that occurred because of the birth and life of Krishna in that period. It was a unique astronomical event and the lifetime of Krishna overlapped with that period.

The occurrence of this unique event then, helps us now, to date the events during the times of Krishna, rather precisely.

## **Geography from Krishna's Times**

If a person has to be historical, then he must have walked on this earth and those places on the earth, must be identifiable today.

There are indeed a plethora of places connected with Krishna's lifetime that can be identified in India today. The region around Vrindavan and Mathura, collectively known as *Braj Bhumi*, where Krishna was born and played His delightful childhood pranks, still goes by the same name and tradition.

We have Dwaraka, a city that Krishna got built for Himself and His people to live in.

If within this geography, archaeological remains from remote antiquity, mapping well into the life and times of Krishna can be found, then these will form ground evidences, if we are to have any. At the same time, the mere absence of such remains, cannot conclusively deny either the historicity of Krishna or the geographical location of the events of His times.

## **Literature Speaks Volumes**

This land has had a continuity of literature mentioning the events in the life of Krishna with specific details. Such details are not sketchy accounts but are details that offer enough material for a detailed study to understand the historicity of Krishna and the events of His times.

## *An Interdisciplinary Approach*

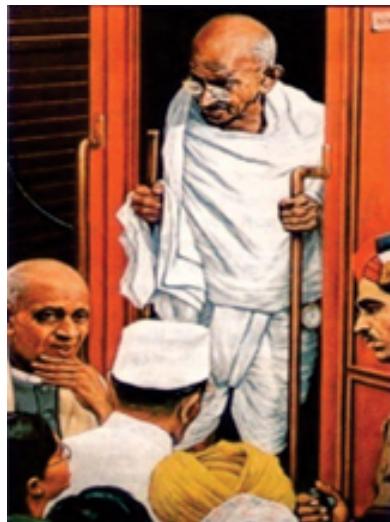
Converging results from a multi-pronged approach using inputs from literature, geography, archaeology and other disciplines can give the credibility that one would look for in establishing the historicity of Krishna.

Till recent times, the fields of history and sciences were distinct subjects, separate from each other, like parallel lines that do not meet. Today however, history needs the help of science to get uncovered and authenticated.

In modern times, sciences have to be judiciously used, correctly too, to prove the historicity of not just Krishna and Rama, but also a host of other such historical personages and events the world over.

This multi-disciplinary approach to any field of study is essential to move forward in an era where logic and science are at the forefront.

## *Historical Personages*



Mohandas Karamchand Gandhi

Mohandas Karamchand Gandhi was a historical person in India.

We have no doubt about this because we have all seen photos and films on Gandhi. We still have in our midst, people who have seen and interacted with Gandhi in flesh and blood. The memorabilia left behind by Gandhi

including his writings, can still be seen on display in museums and private collections.



[Robert Clive](#)

Robert Clive, the first British Governor General of India, who paved the way for the British colonial rule in India, is also a historical figure. The British have kept meticulous records and sketches of their exploits in India and Robert Clive figures prominently in them.

Akbar, the Mughal emperor is also a historical figure of India. Akbar figures prominently in the history books of our schools. The buildings that Akbar built are available with us today in Delhi, Agra and Fatehpur Sikri.



[Akbar and Fatehpur Sikri](#)

Ashoka, the great Mauryan emperor who fought the bloody Kalinga war and who, immediately after, in repentance, embraced Buddhism, is also a historical figure. The edicts of Ashoka, the Ashoka pillars and the *Stupa* that he built are prominent monuments of India.



Ashoka and Ashoka Pillar - Vaishali

Alexander the Great, the Macedonian king who conquered most of the civilizations of the ancient world and came upto the north western part of India, is also a historical figure as noted from tales in Greece, Egypt, Turkey and Persia.

### ***Challenges to History***

It is fascinating to see how the imprints left behind by historical personages have blurred with time.

Starting with memorabilia and photos from recent past we find only portraits as we go back in time. Going further back, we only have monuments. Still further back we have stray edicts and inscriptions alone. Further still we find only oral history. Beyond that, we only have legends.

Evidences to prove the historicity of personages thus become less and less tangible as we go back further and further in time.

## Fading Tangibility, Going Back In Time

3112 BCE	Krishna		Palm leaf	
326 BCE	Alexander		Tales	
300 BCE	Ashoka		Edicts	
1550 CE	Akbar		Fatehpur Sikri	
1790 CE	Robert Clive		Portrait	
1900 CE	Gandhi		Spectacles	

Photos

**If evidences have already blurred with the times of Alexander around 300 BCE, what can we expect to find from the times of Krishna to prove His historicity?**

In the case of Krishna, apart from oral legends, there are written palm leaf manuscripts going back by many hundred years, supported by carvings and images going back to thousands of years.

The native, history keeping tradition of India, has kept alive the legends from the past. The traditional scholars of India had followed a meticulous style of record keeping on palm leaf manuscripts and rewriting them on newer ones, as they age, thus passing them down from generation to generation, until recent times.

In the case of Krishna, we have with us today, the work authored during the life times of Krishna Himself. It is the epic, *Mahabharata*, which is called an *itihasa*, history of this land.

We also have with us today, the submerged city of Dwaraka, which is an archaeological remain of the city built by Krishna, along the sea coast.

There are many more literary and archaeological proofs of Krishna, among other proofs, very similar to what we have of the other similar historical personages we have seen above.

Krishna is also revered as God Himself by many, the world over. The basis for ascribing divinity to this historical personage is beyond the scope of this work as faith is something that transcends the boundaries of mere written or oral communication.

While Krishna is a historical persona and a God to many, He has been made a myth in the last couple of hundred years, consequent to the writings of the colonial historians on the history of India.

Emperor Ashoka too was in a state of a myth till about 150 odd years ago. The historicity of Ashoka was established in the modern history books of India only when James Prinsep, a British historian who lived in Calcutta around 1830 CE, stumbled upon an edict with the word Devanampriya Piyadasi, which through his research in 1836 CE, he successfully managed to link back to Ashoka.



The Prinsep monument by the Hooghly River in Calcutta

It is only after this, that the historicity of Ashoka was recognized and accepted. The historicity of Ashoka has not been doubted since. But for this research and linking by Prinsep, Ashoka would have stayed on as a myth.

Similarly, with regards to historicity of Alexander and his visit to India, there are no records in India that describe such an event. The tales of Alexander and records of a few historians such as Arrian, Strabo, were collected from all across the world between Greece to Persia and compiled into books on Alexander. Places were associated with Alexander as well as images to thus reconstruct a coherent history for Alexander.

Today, with all these evidences, there is no ambiguity about these personages having lived on this earth and in their life time having left an indelible impression on history. They are historical figures with historical dates.

Similarly, Krishna is also a historical figure.

The way in which, in the 1840s, by the collective work of some colonial historians and archaeologists, the historicity of Ashoka was established,

which we have since then unambiguously adopted in our history books. Similarly, in the last couple of decades, there has been a sustained effort by quite a few researchers to establish the historicity of Krishna from an inter-disciplinary perspective.

This work may also be added to this collective effort as our contribution to re-establish the historicity of Krishna.

### ***Challenges in Presenting***

There are so many evidences for the historicity of Krishna from various disciplines and sources, that more than the challenge of collating them, the bigger challenge in front of us was how to present them.

How to present them with technical details but still keep it lucid, easy to figure?

How to present them in logical sequence but still retain the interdisciplinary connect?

How to present them with sufficient details but still keep it manageable in size?

Keeping all these in mind, for the convenience of readers, we have split this work into 3 volumes currently.

**Volume 1 – Dating of Krishna** which deals with facts from history, literature and archaeo-astronomy that go towards establishing the historicity of Krishna as well as ascribing dates to Him and the events in His life.

**Volume 2 – Footprints of Krishna** which deals with imprints left behind by Krishna and His people on the Geography of this land. Evidences unearthed through Archaeology, both on land and underwater are used to examine the historicity of Krishna and the places connected with Him and His people.

**Volume 3 – Facets of Krishna.** Establishing the historicity of Krishna does not still answer many of the mysteries and myths that shroud Krishna. This volume is dedicated for unearthing the facts behind the various facets of Krishna to understand Him better as a historical personage.

You are now holding **Volume 2 - Footprints of Krishna**.

If Krishna walked this earth as a historical personage, it then follows that He should have left behind His footprints. In the evidence that has come into the hands of our generation, we do find marks of Krishna and His people imprinted across the land, underwater in the submerged Dwaraka and in the memories of people.

### **What do they reveal?**

In Volume 1, we have seen how Krishna can be dated to 3112 BCE and the Kali Yuga to 3102 BCE based on sky configurations recorded to have been observed during the Mahabharata period.

In this volume we shall see how ground evidences from Geography, Archaeology, Ecology also point to a similar period for the lifetime of Krishna and the Mahabharata.

Let us look at Krishna as a historical person who also walked the geography of this land and left behind memories and evidence like other historical personages.

**D. K. Hari**

**D. K. Hema Hari**

17<sup>th</sup> August 2014

*Sri Krishna Jayanthi, Janmashtami*

5126<sup>th</sup> Birth Anniversary of Krishna

# Acknowledgements

We have been singularly fortunate to have been born in this land of ancient wisdom and seers. We owe a lot to our parents who have brought us into this world and provided us with the right education, upbringing and guidance. The values and traditions of this ancient civilization inculcated in us by our family and teachers are what have formed the basis for our work at Bharath Gyan. We owe a lot to our family and friends for their continued support and encouragement in our endeavour.

Having embarked on our quest, many scholars, thinkers and students of the knowledge of India have come forward and helped us in this collation. Some have helped by offering data and some through their questions that made us think and look for the data.

Many traditional scholars have patiently tolerated our inquisitiveness and have laboriously searched and retrieved from the ancient texts, the data we had requested of them and explained the same to us in simple layman terms. Without their mastery over old and new, their knowledge, their mind-set and support, this bridge from the ancient to the present day would never have been built.

Then faced with the task of dissemination, many friends and experts have come forward to review our works and take it to stages of production and distribution. We owe a lot to their support, without which this compilation could not have seen the light of the day.

More specifically, we would like to thank H. H. Sri Sri Ravi Shankar, for the faith reposed in us and our work and for offering us a platform, to share the knowledgebase we have collated, with the community at large.

We would be failing in our character, if we do not acknowledge more importantly, the unseen forces which have connected us up with these right

sources of information and noble people just in time, just as we were looking for the information and help.

The list is therefore very long and words fail us to thank everyone sufficiently. Hence we take refuge in the all encompassing words of the 18<sup>th</sup> century Indian poet Saint Thyagaraja –

*Entharo Mahanu Bhavulu Anthariki Vanadanamulu*

There are many noble persons (behind this work) and we salute them all.

**D. K. Hari**

**D. K. Hema Hari**

# **PART SIX – IMPRINTS ON GEOGRAPHY**

# History, Geography, Geology and Ecology

## THE INTERCONNECT

In today's frame of mind, history is regarded as an account of the sequence of events from the recollectable past, committed to some form of concrete evidence either as texts, inscriptions or archaeological remains. Any event prior to such forms of evidence, are considered to be pre-historic.

History is commonly restricted to events surrounding people.

People live on land which is obviously a part of this globe, the earth.

Study of the places on the earth is geography. The factor that affects this geography is geology.

Both geography and geology affect the way men live on the earth, i.e., the way history evolves.

So, both geography and geology, intrinsically affect history.

Along with man's actions, they also shape the ecological conditions of the geography, which in turn further affects the history.

Thus the various geological and ecological factors at play in different geographical locations, have in turn, given a twist to the history in every part of the world, be it in India, in Europe or elsewhere.

This is a point many do not take into cognizance. We do not realize that geography, geology and ecology play an important role in determining the history of a land, of a civilization.

## GEOGRAPHY AND GEOLOGY TO FIX KRISHNA'S TIMES

Many of the events in Krishna's life, some of which were wrought about by Nature, took place at the transition period to *Kali Yuga*, which as we have seen occurred in 3012 BCE. Most of these have been dismissed as myths.

With our present day knowledge of various branches of science, if we are able to find a link between

- the events that unfolded during Krishna's lifetime,
- the geographical locations as mentioned in the legends
- the geological conditions then and
- natural events as recorded by the scientific community to have occurred around 3102 BCE,

then it can further prove that Krishna and His people had indeed lived on this earth and it was during the times and in the geographical locations mentioned.

## UNKNOWN HISTORICAL PERIOD OF INDIA?

The Harappa Mohenjodaro civilization which had been flourishing for more than a couple of thousand years along the *Sindhu*, Indus River and Sarasvati River basins, disintegrated around 2600 BCE.

From then on until 326 BCE, when Alexander and his army visited the north-western part of India, the period is referred to by the colonial and post colonial historians, as the '*unknown historical period of India*'.'

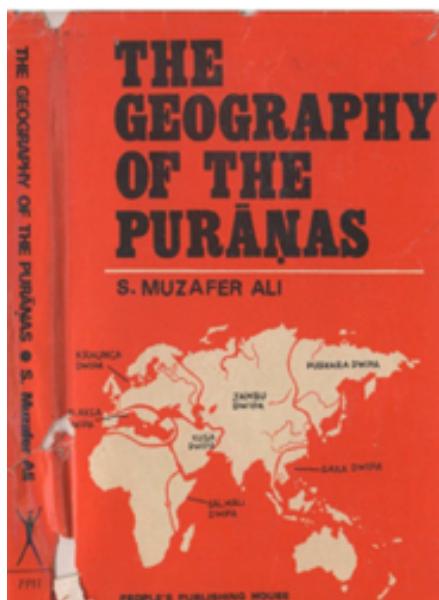
However, detailed genealogies of this period are available in Indian *Puranic* texts as they were updated regularly till about 100 CE and the data therein, fits in well with this time window. We have already showcased that of the Magadha dynasty in the volume **Dating of Krishna**.

Let us see what geology, ecology and geography have to say about this so called, '*unknown historical period of India*'.

# From Geography

## HISTORIAN, PROF. S.M. ALI

Professor S. Muzafar Ali, a respected historian, wrote his book, ‘The Geography of the Puranas’, published in 1966.



The Geography of the Puranas, the book

This work takes a very thorough look at the geographical material contained within the *Purana* and to some extent the epics, *Ramayana* and the *Mahabharata*.

In this book Prof. S. M. Ali writes,

“*The geographical matter contained in the Mahabharata is immense. It is perhaps the only great work which deals with geographic details and not incidentally as other works.*”

## **GEOLOGIST, PROF.K.S.VALDIYA**

Prof.K.S.Valdiya is a renowned geologist of India, who over the last fifty years has done extensive work on studying the Himalayas, hailing from the Himalayan Kumaon region himself.

His area of specialization being Tectonics with special reference to active faults and Environmental Geology, his focus has been on geological phenomena which destabilize the natural configuration of life and threaten the balance of ecosystems. One of his path breaking work is on the unearthing of the lost Sarasvati River along with the geological reasons for what caused the disappearance of the river.

Having read the texts of the *Purana* and the Epics thoroughly, he has been able to relate the descriptions in these texts to his finds on the geological history of the Indian subcontinent.



Prof.K.S.Validya

In a recently published book titled “**Geography, Peoples And Geodynamics Of India In Puranas And Epics: A Geologist’s Interpretations**”,-he demonstrates how the descriptions in the ancient *Samskrt* texts of India, when the veil of allegories and poetic expressions are set aside, contain valuable data on the geography and geology of different parts of this land along with the flora, fauna, ethnicity and social culture of the people who lived here. He

also demonstrates how some of the descriptions relate to geological and climatic events that have occurred in this region in the last 12000 years.

Like this, many other scholars have categorically mentioned that the geography mentioned in the *Mahabharata* text then, tallies with the present day geography of the land. Let us therefore look at some prominent examples – the places associated with Krishna's life.

## PROMINENT PLACES FROM KRISHNA'S TIMES



The geographical descriptions are not limited to just Dwaraka, the city built by Krishna, but also cover

- Mathura and Vrindavan - *Braj Bhumi*, where Krishna was born and lived during His childhood,

- The River Yamuna, whose banks, forests and groves provided Krishna and His cowherd friends with a large grazing field and playground
  - Hastinapura, the capital city of the *Kaurava*,
  - Indraprastha the city built by *Pandava*,
  - Kurukshetra, the battlefield between the Sarasvati and the Drishadvati rivers covering the seven forest groves,
  - Prabhas Patan by the sea in Saurashtra now known as Somnath,
  - Gandhara in present day Afghanistan, now called the region of Kandahar,
  - the dry bed of the Sarasvati River and
- many other such prominent places, descriptions of all of which, tally well with the present day places by the same name.

# Braj Beckons

## BRAJ BHUMI

*Braj Bhumi*, is the name given to the geographic area that Krishna was born in, played with all His childhood friends, the *Gopa - Gopi* and also performed many of His incredible deeds. This was the area where He enjoyed about first 12 years of His life.

This area, from His times, till date, has been called *Braj Bhumi*.

### *Brajwasi*

The people who lived in this area are the *Brajwasi*, *wasi* meaning “those who reside in”. *Brajwasi* are those who reside in the *Braj Bhumi* area.

This is similar to Balaji, Lord Venkateshwara, the lord of the Tirumala hills, Tirupati also being called as “*Srinivasa*”, which has become a popular name among the people of this land.

*Vas* means “to stay”. *Nivas* means “a place of residence”. *Srinivasa* is One who has *Sri*, i.e., Goddess Lakshmi residing in His heart.

### *Braj Bhasha*

*Braj* is known for Krishna. *Braj* is known for its delicious milk sweets. *Braj* is also known for its sweet, lyrical language - *Braj Bhasha*, *bhasha* meaning “language”.

*Braj Bhasha*, language of *Braj*, is a parent of the Hindi language as it is spoken today and is the language of many a lyrical poems on Krishna.

### *Spread of Braj Bhumi*

*Braj Bhumi* or *Vraj* as it is also popularly called, extends over an area of 3800 square km covering several important pilgrimage cities, such as

Vrindavan, Barsana and Mathura as well as places along the Yamuna River, forests, ponds, groves, hills and other locations where Krishna spent His early years.

In present day geography, it covers parts of the states of Rajasthan and Uttar Pradesh.



*Braj Bhumi*

According to the *Padma Purana*, there were twelve principal forests, *vana*, in the heartland of this region.

<b>Seven Vana, forests on the western side of Yamuna</b>	<b>Five Vana, forests on the eastern side of Yamuna</b>
Madhuvan	Bhadravan
Talavan	Bhandirvan
Kumudavan	Baelvan
Bahulavan	Lohavan
Kamyavan	Mahavan
Khadiravan	
Vrindavan	

*Braj Bhumi* had 24 fruit groves apart from these forests. It also covered numerous villages.

It is in these fruit yielding groves that Krishna played with the cows, His friends and the *Gopi* of that region. It is in these forests and groves that Krishna vanquished many an *Asura*, like,

- Dhenukasura, associated with the form of an ass, who was preventing the people of *Braj* from entering the groves
- Bakasura, associated with the form of a *Baka* meaning “crane”, who was a friend to Krishna’s maternal uncle, Kamsa and was sent by Kamsa to kill Krishna. This is different from the Bakasura that Bhima had to encounter in the forest
- Aghasura, associated with the form of a huge snake, who was a friend of Bakasura and Putana and was despatched by Kamsa to poison and kill Krishna when He was a baby
- Aristasura, associated with the form of a bull, who dug up the riverside and came charging into *Braj* with a deafening sound
- Kaliya, the fierce, venomous snake, which was poisoning the waters of the Yamuna.

Many areas still bear the same names as narrated in the tales of Krishna such as:

- **Phisalini Shila** – natural slides on which Krishna and his friends used to play
- **Bhojan Thali** – natural stone formation in the shape of a plate on which Krishna and His friends used to have lunch together while grazing their herds
- **Jadkhor Caves** – where Krishna and His cowherd friends used to take shelter
- **Saugandhini Shila** – a stone that Krishna touched and vowed never to leave *Braj Bhumi*.

It is not that we have suddenly identified these places today and are placing before all. These places that were witness to Krishna's pranks and antics as a child, still bear the same names as in the legends. Local traditions in these places too, over the last thousands of years, have connected these places continuously with these acts of Krishna.

## **CONTINUED REVERENCE BY FAMOUS PERSONAGES**

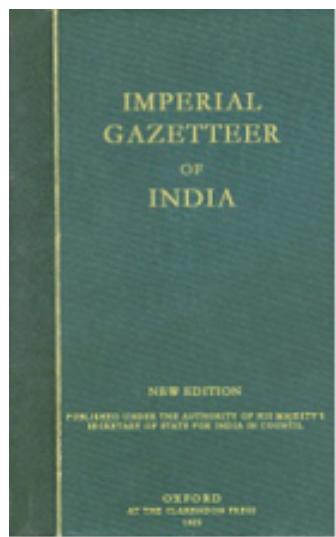
Through the ages, many people have continuously visited these places, have identified them for their times, venerated them and mentioned them in their records, as the places associated with the life and times of Krishna.

We shall see what some of the renowned personages who have walked through this land, through the times have had to say about this region.

### ***Soon After Krishna***

Local legends carry mention of the times starting from a century after Krishna, when Vajranabha, Krishna's great-grandson arrived from Dwaraka to reclaim sacred sites associated with Krishna, build temples and install Krishna's images.

### ***A Gazette Record***



The New Edition of the Imperial Gazetteer of India, published in 1881, in its Vol 18, pg 64, describes across many pages, the history and salient facts of Mathura, which it refers to as Muttra.

It describes Mathura as the capital of the ancient kingdom of Surasena. Surasena was the ancestor of Krishna and his clan was therefore also called Suraseni.

slightly more than the portions of the District on either side. Variations from year to year are large; the fall has been less than 16 inches, and has reached nearly 36.

Mutra was the capital of the ancient kingdom of SŪRASENA, and its importance as a religious centre is referred to by Ptolemy, who calls it

**History.** 'Modoura of the gods.' Arrian and Pliny describe it as Methora.

The earliest facts relating to its history are derived from the coins found here, which indicate that Muttra was ruled by a series of Hindu Rājās in the second and first centuries B.C., followed by Saka Satraps, who gradually assume Hindu names. In the first and second centuries A.D., the inscriptions, found in considerable numbers, prove that the sway of the great Kushan kings was recognized here, and Muttra was a stronghold of the Jains. In the sixth century Hiuen Tsiang found a large city, containing 20 monasteries with 2,000 priests. Muttra was probably one of the places sacked by Mahmūd of Ghazni in 1018-9, but the District plays little part in the early Muhammadan period, when it was largely held by Mewātis. While its political history is slight, Muttra is important in the religious history of modern Hinduism. The reformed Vaishnava creeds had their origin in Southern and Eastern India; but in the fifteenth and sixteenth centuries several new sects were founded here, which still influence Hindu thought. The western side of the District is celebrated as the Braj Mandal or country of Krishna, and almost every grove, mound, and tank is associated with some episode in his life. Throughout the year, and especially in the rains, bands of pilgrims from all parts of India may be seen reverently visiting the holy shrines. The increased religious zeal of the Hindus attracted the notice of Shāh Jahān and Aurangzeb, who took measures to repress it.

As the Mughal empire fell to pieces, the history of the District merges in that of the Jāts of Bharatpur, and only acquires a separate individuality with the rise of Sūraj Mal. In 1712 Badan Singh, father of the famous adventurer, proclaimed himself leader of the Jāts, and took up his residence at Sahār, where he built a handsome palace. In his old age he distributed his possessions among his sons, giving the south-western portion of Bharatpur to his youngest, Pratāp Singh, and the remainder of his dominions, including Muttra, to his eldest, Sūraj Mal. On Badan Singh's death, Sūraj Mal moved to Bharatpur and assumed the title of Rājā. In 1748 the Mughal emperor, Ahmad Shāh, invited the Jāt leader to join with Holkar under the command of Nawāb Safdar Jang in suppressing the Rohilla rebellion. When Safdar Jang revolted (see OUDH), Sūraj Mal and his Jāts threw in their lot with him, while Ghāzi-ud-dīn, the Wazīr, obtained the help of the Marāthās. Safdar Jang retreated to Oudh, whereupon Ghāzi-ud-dīn laid siege to Bharatpur, but, mistrusting his Marāthā allies, shortly returned to Delhi,

## ***The Greek Regard***

Greek philosopher, Ptolemy, regarded Mathura as a religious centre and referred to it as “*Medoura ton Theon*” or “Mathura of the Gods”. The Greek, Arrian and Pliny have also referred to Mathura as Methora.

## ***Buddha and Mahavir Jain visit Mathura***

Vardhamana Mahavira, the last Jain *Thirthankara* and Gautham Buddha are recorded to have visited Mathura during their times and founded monasteries here, to preach their teachings as they recognized it to be a place of scholars.

These monasteries continued to flourish even in 6<sup>th</sup> Century BCE as Buddhist and Jain texts of that period mention Mathura as a centre of learning.

These monasteries were also funded by Emperor Ashoka during his time.

In the 6<sup>th</sup> century CE, Chinese traveller Hiuen Tsiang visited Mathura. He describes it as a large city with 20 monasteries and 2000 priests.

## ***A Continuously Lived City***

Inscriptions on coins discovered here, belonging to 2<sup>nd</sup> and 1<sup>st</sup> century BCE, shows Mathura to have been ruled by local Kings prior to the Saka Satraps.

Mathura has subsequently been visited by many saints from across India, across the years.

All these show an unbroken continuity of Mathura being a lived in city with memories of Krishna passed on from generation to generation through stories, inscriptions and coins for over 5000 years.

## ***Nimbarka***

Nimbarka was a *Vaishnava* saint, a follower of the tradition of Vishnu worship. He propounded *Dvaitadvaita*, the philosophy of duality and non-duality in existence at the same time.

While the period in which he lived has not been conclusively dated, he is known to have lived before Adi Shankara, who propounded *Advaita*, the philosophy of non-duality. This means, he must have lived before 500 BCE since Adi Shankara can be dated to 509 BCE.



Nimbarka

He was named Niyamandana at birth and came to be called Nimbarka as he used to meditate under *Nimba*, “Neem” trees.

Nimbarka visited the region of *Braj* in search of knowledge and a *Guru*. He gained realization at Govardhan hill in this *Braj* and therefore established a hermitage near Govardhan which came to be called Nimbagrama.

Nimbarka came to *Braj* because he firmly believed that Krishna was an incarnation of Vishnu on earth and he wanted to experience the land where Krishna had walked. Also *Braj* was a scholarly centre. This was due to the presence of many such seekers of knowledge who had come to *Braj*. They all considered *Braj Bhumi* to be auspicious because of its association with Krishna, the great scholar and teacher.

## **Vallabhacharya**

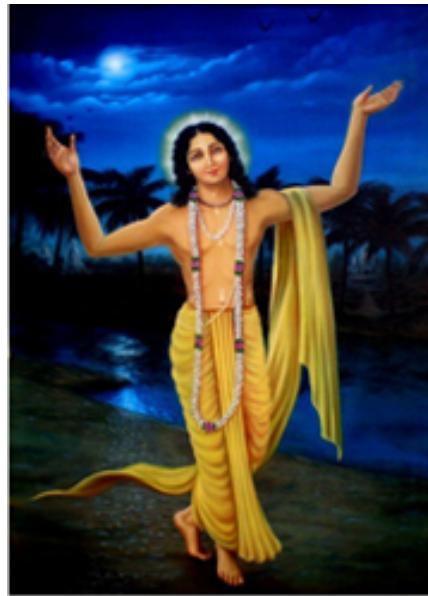
Vallabhacharya was a saint who hailed from the Telugu land, but was born in Benaras. He lived between 1497 and 1531 CE. He had studied all the six schools of Indian philosophy and the works of Adi Shankara, Ramanuja, Madhavacharya, Nimbarka, Buddha and Mahavira.



Vallabhacharya

He travelled throughout India preaching the worship of the divinity Vishnu in the form of Krishna and propounding *Vaishnavam* in the form of *Vishudhadvaita* philosophy. Being an ardent devotee of Krishna, he visited Mathura and Vrindavan before finally settling down at Benaras.

## **Chaitanya Mahaprabhu**

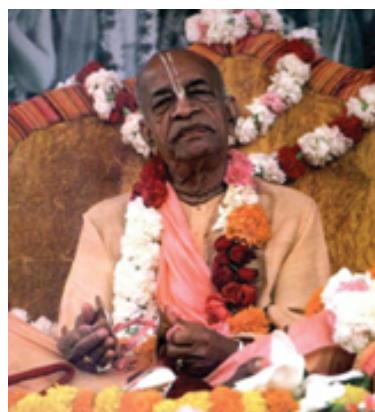


Chaitanya Mahaprabhu

Chaitanya Mahaprabhu was a poet saint who lived during the 16<sup>th</sup> century.

In the medieval period, there was a *Bhakti* movement all over India. *Bhakti* means “devotion” and Chaitanya Mahaprabhu was one of the founding pillars of that movement. He was a great devotee of Krishna.

The popular Krishna movement called ISKCON (International Society for Krishna Consciousness) founded by His Divine Grace Srila Prabhupada, draws its inspiration from Chaitanya Mahaprabhu.



Srila Prabhupada and ISKCON Logo



Chaitanya Mahaprabhu, Mayapur Iskcon Temple

Chaitanya Mahaprabhu, during His time, visited this *Braj Bhumi* in 1513 CE.



Everything was calm and serene at Braj. Krishna and His playmates were engaged in their daily routine of tending to the cows and having their quota of fun. The others in the village were busy with their usual work. It seemed another normal day at Braj but not for long.

Suddenly, the earth shook as if there was an earthquake. A cloud of dust and storm could be seen approaching. There was the sound of heaving and the stamping of hooves. When the cloud of dust came near, the village was shocked to find that it was a huge ferocious bull that was kicking up all the rage.

It was the bull called Arishtasura. It entered Braj and started running amuck. It started digging the earth with its powerful hooves and horns. Its fierce roars sent shivers of panic down the spine of the people and the cattle. This bull on seeing Krishna standing casually with His friends in the centre of the village, unafraid, started charging towards Him.

When the bull neared, Krishna took the bull by its horns and soon overpowered it and killed it.



Arishtasura, Popular illustration

It was yet another occasion for the people of Braj to rejoice at the valour and extraordinary act of Krishna.

After the slaying of Arishtasura, thus removing the menace that Aristasura was creating for the local populace, at the request of the Gopi, Krishna and His friends had constructed ponds, kunds, for the use of the locals. Since then, these ponds have shared a close bond with Krishna.

One was called Shyam Kund, since Shyam is another name for Krishna. Shyam means “dark as dusk”. The other pond was called Radha Kund, after Radha, one of the foremost of the Gopi,

who built the second kund, pond.



Legends bring out an interesting story of an altercation between Radha and Krishna which resulted in the digging of these two ponds. However the story of the bull digging the earth with its hooves and then Krishna building the pond in that spot, suggests an underlying temper of water harnessing in those times.

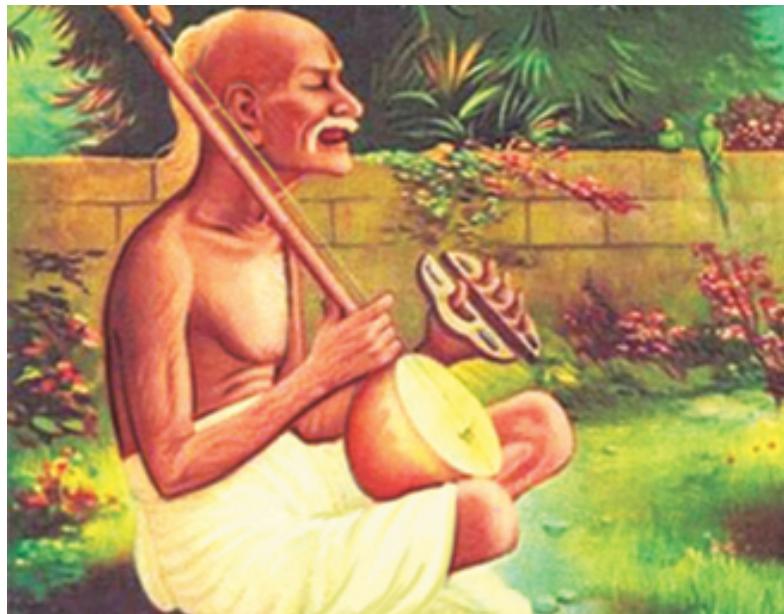
Among the various things that Chaitanya Mahaprabhu identified in *Braj Bhumi* during His visit, was to identify and revive these two ponds as well. People undergo a bathing ritual annually in these ponds in remembrance of this incident.

Perhaps we too, after any major milestone in our lives, should follow the footsteps of Krishna and Chaitanya Mahaprabhu and revive or build water bodies, which will not only serve as monuments for future generations but will serve the community well beyond our times, for ages to come.

The visit of Chaitanya Mahaprabhu, to this *Braj Bhumi*, emphasizes how even during the times of Chaitanya Mahaprabhu, 500 years ago, all these places were still identifiable with the legends, history and geography.

### ***Surdas***

Around the same period, in 1478 CE was born Surdas, the blind poet saint, who sang soulful songs on Krishna all his life, lived only in *Braj Bhumi*.



**Surdas**

At one end of the land of *Braj* is Runakuta where Surdas lived.

When invited to places outside of this *Braj Bhumi* area, Surdas refused such invitations and stayed back in his Krishna's *Braj Bhumi*, singing of his love for Krishna and seeking the love of Krishna.

This implies that this *Braj Bhumi* was a well known and a well demarcated area through the ages.

## ***Ibrahim Ras Khan***

During the 16<sup>th</sup> century, Vrindavan received yet another devotee seeking Krishna. This was Sayeed Ibrahim Khan, a Muslim by birth. Ibrahim Khan took to Krishna worship and became a Sufi poet singing the beauty of Krishna, the love of Radha-Krishna and transcending into the supreme divine love.

He composed many works in the mellifluous *Braj Bhasha*, the most well known being *Premavatika* – “The Forest of Love”.

He was given the name Ras Khan, as one who delved into the spiritual essence of love and beauty. *Ras* means essence.

Ras Khan and his works are an evidence of a continued veneration of Krishna and historicity of Vrindavan, even till about 500 years ago.

Ras Khan also stands as an example of the pan religious, moving power of the *Bhakti* movement that evolved around Krishna.

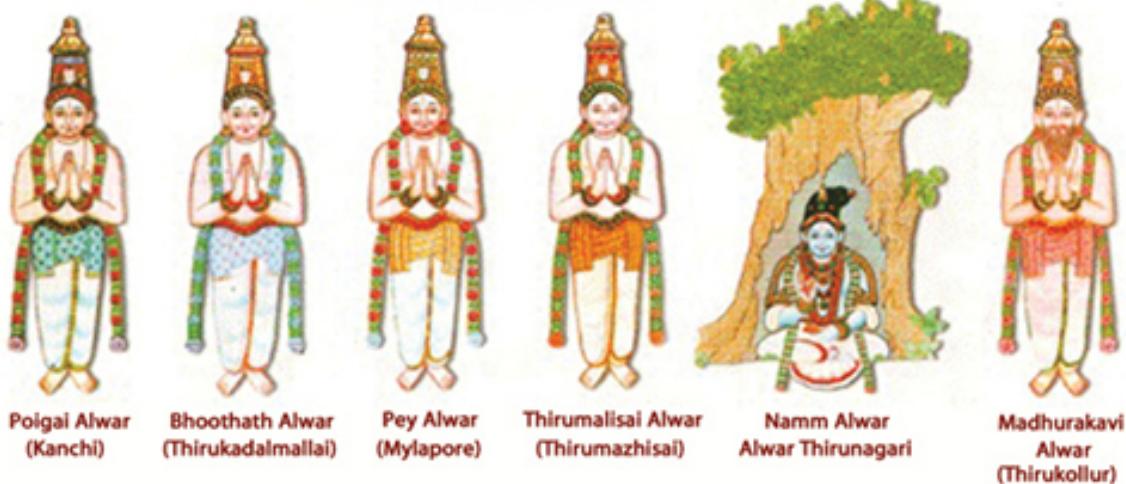
## ***Braj revered in the South***

Tamil literature is considered incomplete without the soulful poetry of the *Alwars*.

The *Alwars* were 12 in number, who were born in the Tamil land, spread across different periods.

They were *Vaishnava*, followers of Vishnu.

## ALWAR GOSHTEE



### The 12 *Alwars*

Amongst all their soulful poetry, eulogizing Vishnu, they have devoted a large share of their devotion to Krishna, considered an embodiment of Vishnu.

Some of the *Alwars* known for their devotion to Krishna include Nammalwar, Kulasekhara Alwar and Andal.

***Andal***



[Andal](#)

Andal was a beacon for spreading the light of Krishna in the south.

Of the 12 Alwars, it was Andal, whose songs on Krishna, further fuelled the popular strain of *Bhakti*, devotion, among the people, to relish the thoughts of Krishna through the times till date.

One of the most popular compositions of Andal is called *Thiruppavai*, meaning “the divine maiden”. It comprises of 30 poems, one for each day of the month of *Margazhi* or *Margashira* as per Indian calendar which falls during the months of mid December- mid January.

These poems contain references to Krishna as the son of *Vada Madura* i.e., the Madura in the North. Mathura is referred to thus, as *Madura* with a qualifier “*Vada*” meaning ‘North’ in Tamil, as there exists another equally ancient city called Madurai in the south of Tamil Nadu.

*Braj* is referred to as *Aayarpadi* in these poems as well as other Tamil literary works. “*Aa*” in Tamil means “cow”. The state owned dairy in Tamil Nadu in present times is called “*Aavin*”, meaning “that of the cow”. *Aayar* means “those who tend to cows”, “cowherds”.

*Braj*, as *Aayarapadi*, was thus known as being the land of cowherds, way down, even in the tradition and local songs of South India.

### ***Braj – Spread Beyond Geography***

Across millennia, *Braj* was an accepted geographical area, associated with Krishna, for people across the land of India, who had given it different names in their own languages.

The association of the place in time, space and history however was the same for all.

## **CONTINUED HISTORY OF THE GEOGRAPHY OF BRAJ**

The geographical region of *Braj Bhumi* with Mathura, has thus had a continuous stream of prominent visitors from across the lands and times. They were attracted to this land, by the glory and legends of Krishna. They were drawn there by the scholars and kings who had settled down there to bask in the glorious ambience of knowledge and of a divine connect, left behind by Krishna.

This popularity had naturally made this city wealthy over time.

This can be gathered from the records of European travellers to Mathura.

### ***European Notes***

Francois Bernier in his book “**Travels In The Moghul Empire**”, writes,

“*Between Dehli and Agra, a distance of fifty or sixty leagues, there are no fine towns such as travellers pass through in France; the whole road is cheerless and uninteresting ; nothing is worthy observation but Maturas where an ancient and magnificent temple of idols is still to be seen.*”

His footnotes on Mathura read,

*“Mathura (Muttra), on the right bank of the Jumna, about 30 miles above Agra.”*

*“Mathura, considered by the Moguls one of the most fertile and agreeable situations in Hindoostan.”*

*“The eighth incarnation was the most remarkable; That of Vishnu as Krishna, in which he is supposed to have been completely incarnate, at Brindabun in the Mathura (Muttra) District.”*

### ***Plunder of Mathura by Mahmud of Ghazni***

It was the greed and the ravaging nature of the invaders from the North West such as Mahmud of Ghazni in 1020 CE and Sikander Lodi in 1500 CE as well as the maliciousness of Moghul emperor Aurangazeb and finally the Afghan, Ahmad Shah Abdali, which finally reduced the wealth, riches and heritage sites of Mathura to cinders.

One of the early, well recorded plunders of India, especially Mathura, is the plunder by Mahmud bin Sabuktgin, Sultan of Ghazni, a province of modern day Afghanistan as recorded by his chronicler Al-Beruni in **“Kitab-ul-Hind”**.

In his chronicles, Al-Beruni graphically describes the looting by his Sultan, targetted at the then prosperous towns such as Somnath in Gujarat and Mathura by the Yamuna River and others in that region.

The exact amounts of wealth annexed from Somnath and Mathura have also been chronicled by Al-Beruni.

Mahmud of Ghazni invaded India 17 times between 1001 CE and 1024 CE and carried back as enormous booty, 6.5 tons of Gold and 50,000 war prisoners, who were sold as slaves in his country.

Al-Beruni writes in detail about Mathura and its riches, looted by the Sultan of Ghazni.

"The city was surrounded by a massive stone wall, in which were 2 lofty gates opening on to the river. There were magnificent temples all over the city and the largest of them all stood in the centre of it. The Sultan was very much struck by the grandeur of it. In his estimate, it cost not less than 100,000,000 red Dinar."

Among the large number of idols in the temple, five were made of pure gold, the eyes of one of them were laid with 2 rubies worth 100,000 Dinar and another had a sapphire of a very heavy weight.

All these 5 idols yielded gold weighing 98,300 mishkal. The idols made of silver numbered 200 ...

He seized all the gold and silver idols ...

The city was pillaged for 20 days ..."

#### Notes of Plunders

This above passage, an eye witness account of the ransacking of Mathura and the account of the other well known repeated raid of the rich Saurashtra city of Somnath by Mahmud of Ghazni again, are but only two of the famous spots, oft mentioned.

Al-Beruni, in his same book, mentions that the whole landscape of this region was prosperous and the looting of this belt of India, by the troops of Mahmud of Ghazni, was wide spread and yielded enormous booty.

## ***PARIKRAMA***

This geographical area of *Braj* has been so well defined and so well known through the ages that there are well demarcated *Parikrama*, circumambulatory paths that have been followed over thousands of years.

### ***Braj Parikrama***

During the rainy months of *Sravan* and *Bhadra / Bhadon*, the months of August – September, the area of *Braj* comes alive with millions from all

over India, flocking there, to go around that land, where their favourite Krishna grew up and played His various childhood pranks.

It is a trek called “*Chaurasi kos*”, *chaurasi* meaning “84” and *kos*, being a local measure of distance, where one *kos* is roughly equal to about 3.2 km or 2 miles. It is a trek that covers the forests, groves, Govardhan hill, the river Yamuna and many other places associated with the memories of Krishna.

The acts and deeds of Krishna are recreated through colourful plays and festive decorations.

### ***Govardhan Parikrama***

Another smaller circumambulatory path is one that goes only around the Govardhan Hill.

26 km west of Mathura, is a narrow sandstone hill, about 8 km in length. This hill is known as Giriraj or Govardhan and has been a pilgrimage site for thousands of years due to its association with a profound incident during Krishna's childhood. It was when Krishna lifted this hill on His little finger to offer protection to the people of *Braj* from the deluge of rain, which continued incessantly for 7 days and nights. More on this profound incident is available in volume 3, **Facets of Krishna**.



Govardhan *Parikrama* Path

All these *Parikrama* indicate that this area has been geographically identified, venerated and visited regularly, since the times of Krishna.

It is a continued, set tradition based on ground reality.

## **BRAJ, COLOURED BY FESTIVALS**

India is a land of colours, a land of festivals.

For every season, there is a festival.

For every reason there is a festival.

For every region there is a festival.

The birth of Krishna, *Janmashtami* or Sri Krishna *Jayanthi* festival, is celebrated by those who can relate to Krishna, all over the world.

The region of *Braj* too has a festival unique to it.

Krishna in His youth, along with the other lads of the village, celebrated the festival of Holi with the *Gopika stree*, milkmaids.

This celebration of Holi started on *Phalgun Poornima*, the Full Moon day in the lunar month of *Phalgun* and continued upto *Ranga Panchami*, the fifth phase of the moon when colours were splashed on each other, symbolic of the colour in Nature springing forth with the forthcoming spring season or *Vasant Ritu*.



Krishna playing Holi

In the village of Barsana, in *Braj*, Holi is celebrated even today, in a distinct style where the women chase the men with sticks and the men dodge getting caught and beaten. This is a symbolic representation of the times of Krishna, when the *Gopika*, women of the village would chase away the cowherd boys who had come to steal butter along with Krishna.

Through the last 5000 years, this unique tradition of celebrating this period as *Braj Holi* and *Lathmar Holi*, has continued in this land of *Braj Bhumi*.

The birth of Krishna, *Janmashtami* or *Sri Krishna Jayanthi* is a festival celebrated with great pomp at Mathura, the birthplace of Krishna and with equal fervour by all those who relate to Krishna, all over the world.

These festivals, with such antiquity and continuity, in tune with the cycle of seasons, are now celebrated all across the land to revel in the acts of Krishna, knowledge of Krishna, the values that Krishna gave forth. These historic festivals transport people back in time to the historical pastimes of Krishna in the historical land bound by the geography of *Braj*.

# Sandipani Teaches

*ugraseno tato banhaat mumoca madhusuanah  
abhishincattaaivainam nija raajye hataatmajam*

- Vishnu Purana Panchamaamsa- Chapter 21- Sloka 9

Then Krishna released from jail, king Ugrasena, who had lost his son and on the same day he crowned him as the king.

*viditakhila vijnanau sarvajnanamayaadapi  
sishtaacaarakramam veerau khyaapayantau yaduttamau  
tatassandipineem kashyamavantipuravaasinam  
vidyaartham jagmaturbaalau krtopanayanakramau*

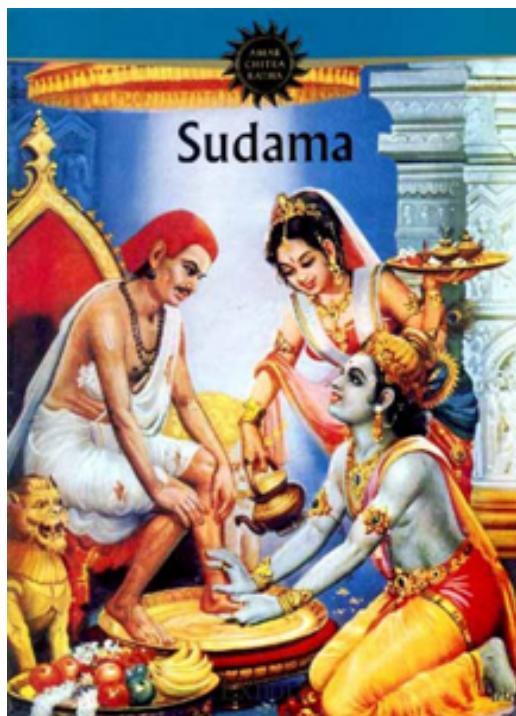
- Vishnu Purana Panchamaamsa- Chapter 21- Sloka 18,19

Even though they knew every thing and they had the knowledge of all the sastras, in order to protect the Guru Sishya Parampara in this world,Balarama and Krishna, after undergoing the samskara of thread ceremony, went to the Gurukula of Sandipini who had taken birth in Kashi and was living in Avanti.

The thread ceremony, *Upanayana*, is a *samskara* that is typically performed between the ages of 7 to 11. This implies that when Krishna and Balarama slayed Kamsa and then went to Sandipani Ashram, they must have been less than 12 years old. It also means that when Krishna left Vrindavan for Mathura, never to return to Vrindavan again, He was less than 12 years old.

Krishna and Balarama thus went to *Rishi* Sandipani's *Ashram* for their schooling.

At this ashram, Krishna made many friends, the most prominent of them being Sudama. The meeting between Krishna and Sudama, later in their lives, when a poverty stricken Sudama visits Krishna in His palatial home, the welcome he receives, fit for a king, from Krishna, has stuck on as a popular lore. Krishna - Sudama relationship has been retold many times over across times and stands as a model for friendship.



Krishna and Sudama Story  
Cover of the Amar Chitra Katha Rendition

There are many other legends connected with Krishna's life in Sandipani's Ashram.

One of them accounts how Krishna acquired His famous conch *Panchajanya*, while completing the task He had undertaken in deference to His *Guru* Sandipani's wish. This was His *Guru Dakshina*, a token fee given to a teacher by a student out of his own effort, in accordance with the teacher's wishes.

This Sandipani Ashram was located in Avantika, Ujjain as it is known today.

An ashram on the outskirts of Ujjian is regarded by people as the location of the Sandipani Ashram of Krishna's times.



Balarama, Krishna and Sudama at Sandipani *Ashram*

- A modern day painting

Ujjain is also famous for the Maha Kaleshwara temple which forms one of the 12 *Jyotir Linga*. The deity here is called Maha Kaleshwara as this temple is on the ancient meridian, time line for those days. Ujjain marks the place where this timeline meets the Tropic of Cancer and hence has had its importance from time immemorial.



Maha Kaleshwara Temple

Ujjain also features in the maps of the ancient Greeks. It was called “Ozene” then.



Greek map showing city of Ozene with temple marking  
Map of west coast of India and places as referred to by the Greeks

This place, Avantika, Ujjain thus has had a continuity for the last 5100 years and more. It retains memories of Krishna and His teacher Sandipani. Guru Sandipani's lessons still echo here.

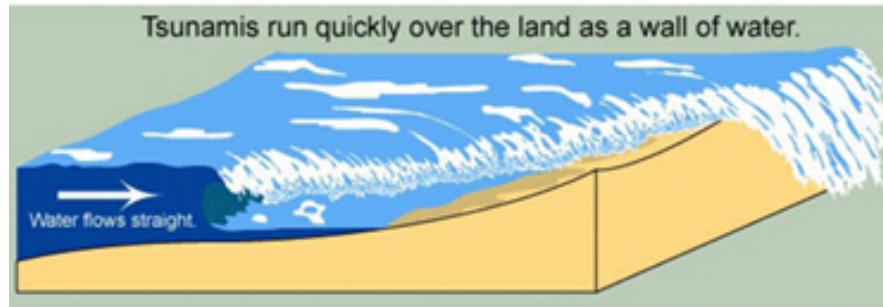
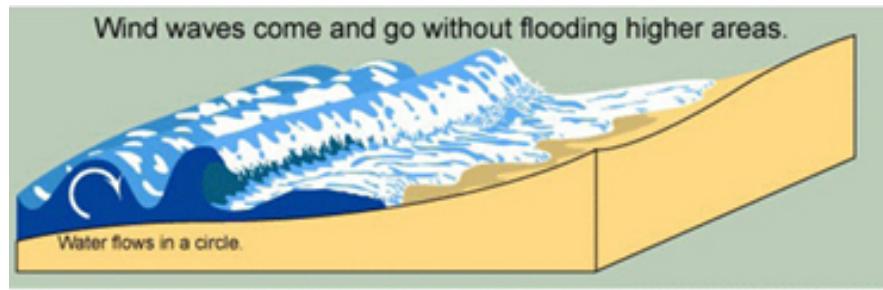
# Dwaraka From the Deep

## A TSUNAMI

Tsunami as a terminology has come into the Indian vocabulary with a big bang after a tsunami struck the south coast of India and South East Asia, on 26<sup>th</sup> December, 2004 leaving behind wide spread, untold destruction.



Tsunami - A Japanese painting



#### Wave Vs Tsunami

Until then, in recent memory, tidal floods of a massive scale were not associated with coastal India. Tsunami is a Japanese word for these giant tidal waves emanating from the ocean after a massive earthquake.

## TSUNAMI AT DWARAKA?

The destruction of Dwaraka is ascribed to a major ecological upheaval that occurred after the demise of Krishna.

Post the departure of Krishna and the *Yadava* civil war, this city of Dwaraka was swallowed by the sea. This is mentioned in the *Mahabharata*.

नियीते तु जने तस्मिन्सागरो मकरालयः।  
द्वारकां रत्नसंपूर्णां जलेनापलवयद॥

*Mausala Parva - Mahabaratha 8.40*

“The sea, the abode of monsters,  
engulfed the gem filled Dwaraka with waves,  
soon after the people departed the place.”

तदद्भुतमर्मभिप्रेश्र्य द्वारकावासिनो जनाः।  
तूण्ट्लूण्टरं जग्मुरहो दैवमिति ब्रुवन्॥

*Mausala Parva - Mahabaratha 8.41*

“Seeing this astounding incident,  
the citizens of Dwaraka ran away,  
exclaiming, ‘Oh, our fate!’. ”

**Was Dwaraka hit by a Tsunami?**

**ARJUNA – A WITNESS TO THE TSUNAMI**

Before the impending major catastrophe, Krishna calls His people and advises them to move to other lands, saying Dwaraka was in danger. He Himself then moved down south to Prabhas Patan, near present day Somnath where He shed His mortal coils.

### *Krishna's Forewarning*

Krishna in His wisdom had probably recognized the signs of an impending geological upheaval and had warned His people of this foreboding calamity.

एते घोरा महोत्पाता द्वार्वत्यां यमकेतवः । मुहूर्तमति न स्थेयमत्र नो यदुपुङ्गवा ॥  
स्त्रियो बालाश्च वृद्धाश्च शङ्खोद्धारं व्रजन्वितः । वयं प्रभासं यास्यामो यत्र प्रत्यक् सरस्वती ॥

*Bhagavat Purana, Skanda 11, Adhyaya 30, verses 5 - 6*

"O great Yadava! These mighty and fearful portents are seen over Dwaraka,  
Like the flag of Yama, the God of Death.  
We should not stay here even for a moment.  
Let women, children and old men leave this and go to Sankhodhara and  
We shall go to Prabhasa, where the Sarasvati flows to the west."

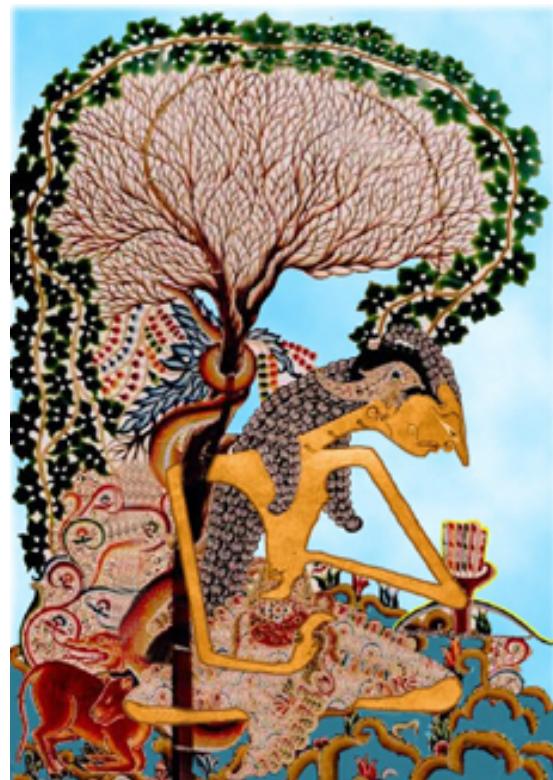
Some of His people though, complacent in their lives of luxury, did not pay heed to His advice and stayed on. An internecine war for the kingdom of Dwaraka broke out amongst them.

### *Arjuna Comes to Dwaraka*

Arjuna, on hearing of the departure of Krishna from this world and the ensuing bitter war, rushed towards Dwaraka, from Hastinapura. He was pained to see the loss of lives and destruction to property all over Dwaraka, due to the war.

He rescued the wives and other women of Dwaraka and headed back towards Hastinapura. Soon as he left the city of Dwaraka, he saw the coastal city of Dwaraka being engulfed by a major tidal wave, like a tsunami, in which the whole city of Dwaraka was washed away.

Arjuna gives an eye witness report in the *Mausala Parva* of what he saw from a distance.



Arjuna viewing the Tsunami from a tree top  
– a Southeast Asian representation

"Sea had been beating against the shore constantly,  
Broke the boundary and rushed into the city.  
Saw the beautiful buildings submerged one by one.  
The sea covered up the entire city  
In a matter of few minutes, it was all over.  
Sea had now become a placid lake.  
There was no trace of the beautiful city.  
Dwaraka was just a name,  
Just a memory".

This poetic but precise, heart-rending, eyewitness account of Arjuna can be easily understood by us now as that of a Tsunami, as we have come to read of many similar tragic, eyewitness accounts by the survivors of the Tsunami of 26<sup>th</sup> December, 2004.

## **THE MAUSALA PARVA CHAPTER IN MAHABHARATA**

*Mausala Parva* is one of the concluding chapters in the *Mahabharata* text. *Parva* means chapter.

This *Mausala Parva* has just 270 *sloka*, verses in it. It is the shortest *Parva* in the *Mahabharata*. It describes the incidents that took place about 36 years after the Kurukshetra war and lists various ominous signs that were visible in and around Dwaraka before widespread destruction took place due to a geological upheaval. We will look at some of them.

### **OMINOUS SIGNS**

*Restless behaviour of birds and animals.*

Today, from our recent experiences of natural disasters, we have seen that just before a natural disaster, be it an earthquake or a volcanic eruption or

a Tsunami, birds and animals have an intuitive foreboding of the impending disaster because of which they exhibit an unusual and restless behaviour.



Restless behaviour of birds and animals

An observance of such a behaviour of the birds and animals is graphically expressed in the *Mausala Parva*, before the actual occurrence of a giant wave.

### ***Shower of Fiery meteors***



Fiery meteors

It is well known that the Earth, in its travel through space, at various points of time, comes in the path of astral bodies which when they pass through the Earth's atmosphere, appear as fiery meteors.

From the description in the text, it appears that during the times of the Dwaraka calamity, the earth was in such a position in its orbit and was experiencing a fiery shower of meteors.

### *Volcanic Discharge*



Volcanic discharge

The Deccan plate and consequently the Deccan plateau is constantly pushing the Himalayan, Asian plate, because of which, there is a regular occurrence of earthquakes in these regions. We also know how earthquakes can trigger volcanic activity.

There could have been such a tectonic movement then, which could have lead to a volcanic activity in that region.

### Is this what happened?

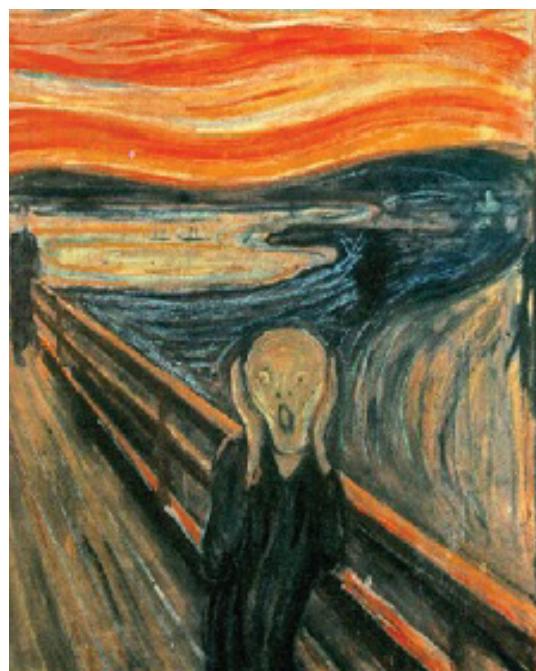
#### *Sky filled with dust and smoke*

When there is a large scale volcanic discharge, the direct offshoot is the volcanic ash which, depending upon the extent of volcanic activity, could take weeks or months to settle down.

We have seen this happen in various recent volcanic explosions such as Mount St.Helens in the US and Krakatoa near Indonesia. We have seen it more recently in Iceland's Eyjafjallajökull volcanic explosion in 2010, when many flights had to be grounded, airports shut down and thousands of passengers stranded in airports all over the world, due to a volcanic ash cloud that kept hovering over Europe and some parts of Asia, for weeks.

Such an occurrence of smoke and dust filled sky is a natural outcome of volcanic activity and seems to be what is described in the *Mausala Parva*.

### ***Sun and Moon without rays – devoid of lustre***



The Scream – Renowned painting by Norwegian artist Edvard Munch on the effect of the 1883 Krakatoa Explosion on the sky in Europe between November, 1883 CE to February 1884 CE

When there is a heavy pall of volcanic dust, the visibility and the rays from the sun and the moon get substantially reduced. Due to this, both the heavenly bodies, the sun and the moon, lose their lustre and just make a dim presence.

A good example of this is the infamous Krakatoa explosion in the Indonesian island chain in 1883 CE. The volcanic ash from this explosion affected the atmosphere not only in South East Asia but had its impact in

the whole Indian Ocean region, including Eastern coast of Africa and the effect of the dust was felt even in Europe.

A similar situation is being described explicitly in the *Mausala Parva*.

### **Rivers change course**

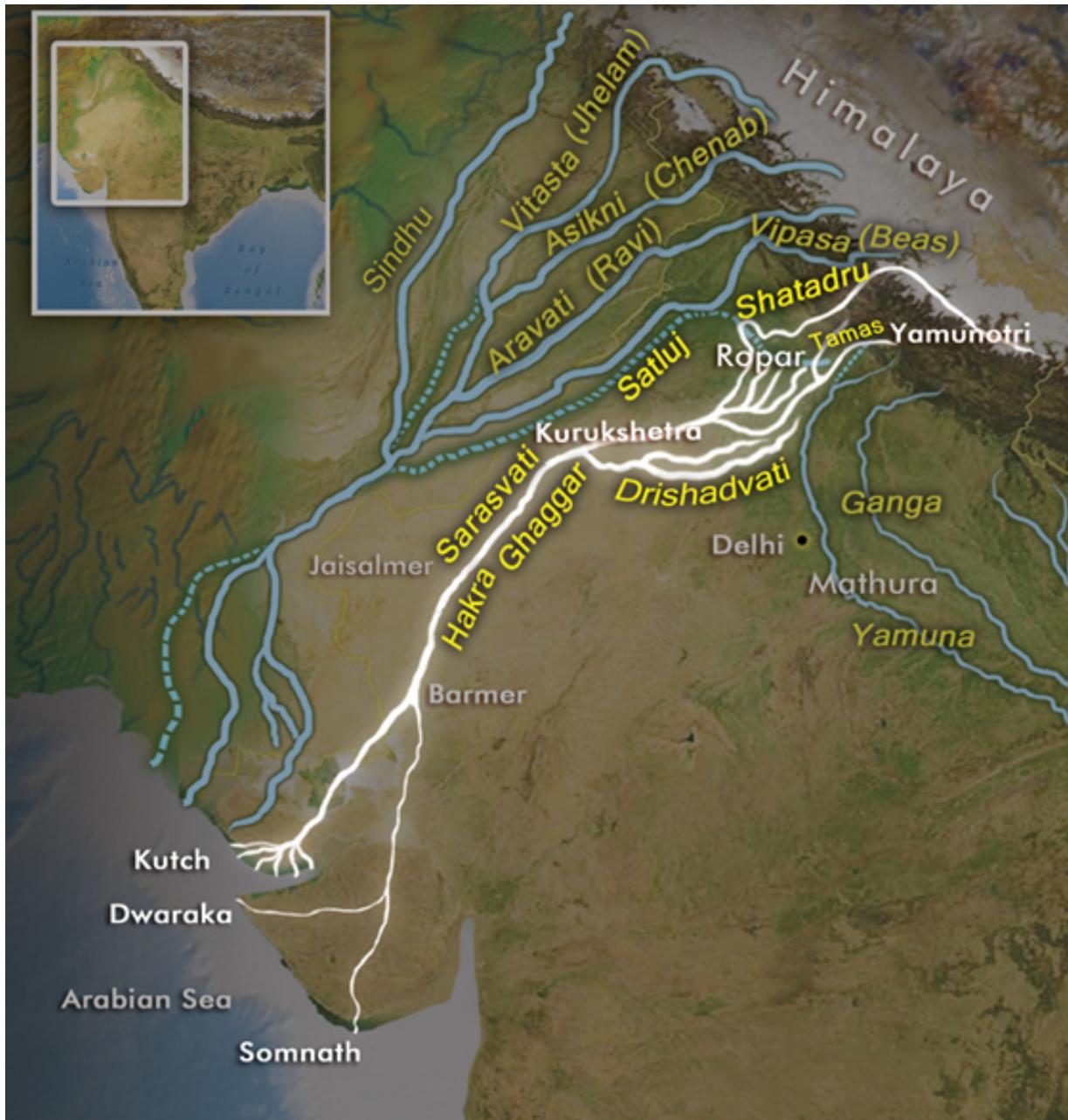
The *Mausala Parva* describes how rivers changed course.

During a massive earthquake, the gradient of the land often shifts.

This sometimes leads to rivers changing their course.

There have been many examples the world over, of rivers temporarily or permanently changing course during an earthquake.

The Sarasvati River became dry because of such a change in the gradient of the land due to which its feeder rivers turned direction, away from the Sarasvati. We cover more of this in our work on the “Sarasvati” in the Bharath Gyan series.



The Sarasvati River goes dry as feeder rivers change course

## Rivers go Reverse

The *Mausala Parva* also describes how rivers flowed in the reverse direction.

One of the well documented, modern examples of a river flowing in the reverse, is the case of 1850 CE earthquake in Central America. In this

quake, it was observed that the Mississippi River started flowing in the reverse direction because of an upheaval in the land.

So, the observation in the *Mausala Parva* of rivers flowing in reverse, is in order of events observed during an earthquake.

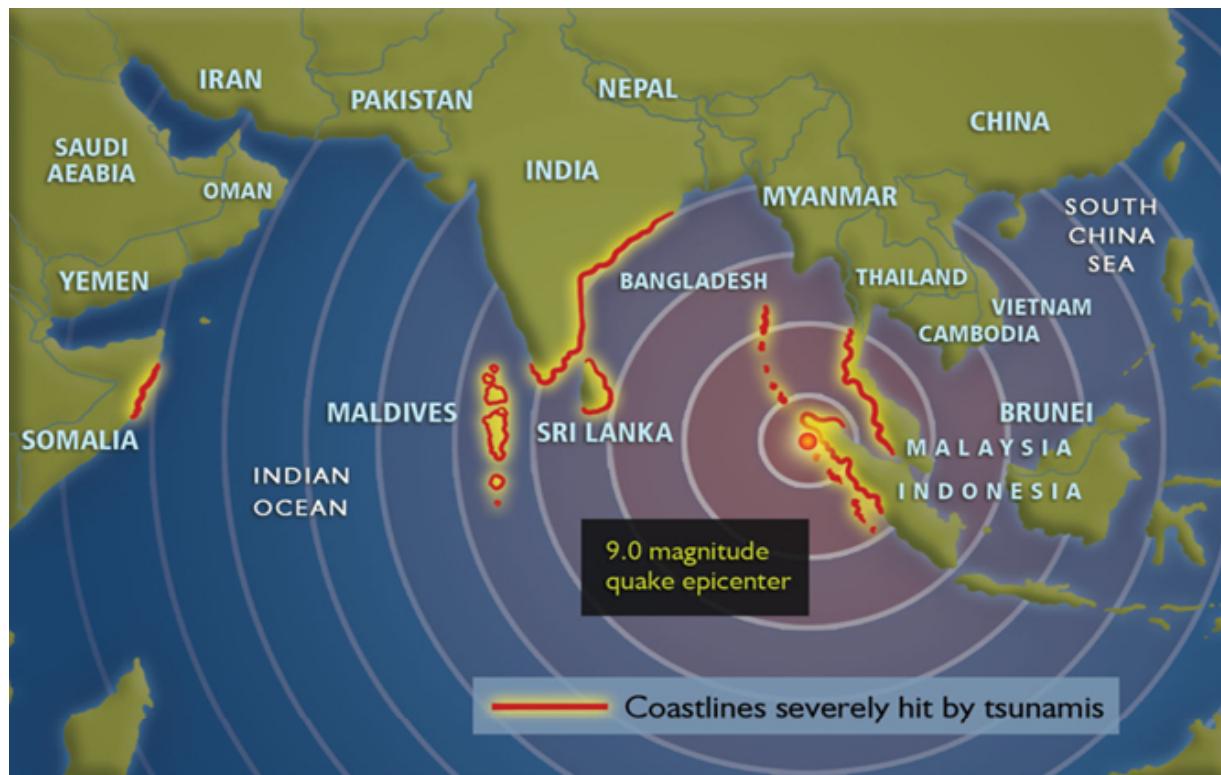
## NOT A MINOR DISASTER

All these descriptions mentioned in the *Mausala Parva* have since occurred in different parts of the modern world, at different times.

But all of them occurring around the same time, as listed in *Mausala Parva*, seem to point to a massive geological upheaval of gigantic proportion.

If there indeed was such a major earthquake which caused a Tsunami such that it completely destroyed Dwaraka city then this Tsunami, could not have been restricted to Dwaraka alone. Such a large tidal wave would have had a wide sweep across the coastlines, hundreds or even thousands of kilometres from Dwaraka.

We all know how the tidal wave which started in Indonesia in December 2004 after a massive earthquake, travelled all the way upto the coasts of India, Sri Lanka, Maldives, South Africa etc. and caused major destruction to life and property in all these places.



Spread of Aceh Tsunami

**Could the huge tidal wave that drowned Dwaraka have resulted from a major geological upheaval somewhere in the seas?**

**If so, was Dwaraka alone washed off or did it also impact other parts of the world?**

## A GEOGRAPHICAL ARC OF DESTRUCTION

It is interesting that, if we look at the arc of the coastline from Arabia to India, we find different descriptions of floods having occurred in these areas. All the local legends of the floods, in these different parts of civilization, seem to converge around the period 3000 BCE.

### *Dwaraka*

We do find that the *Mahabharata* text, in the *Mausala Parva*, does clearly speak of a shower of fiery meteors which had an explosive impact on the earth.

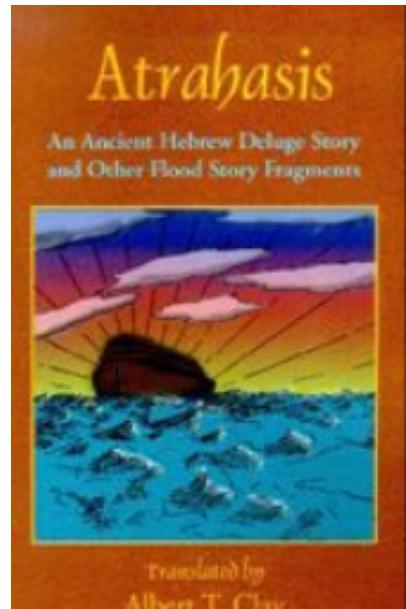
*Mahabharata* text also speaks of the earth shaking a lot, implying a series of earthquakes and then the Tsunami at Dwaraka.



Dwaraka submerged by a Tsunami

## *Sumeria*

The Epic of Atrahasis describes a great flood that submerged the Sumerian civilization around 3000 BCE.



Epic of Atrahasis flood

## Noah's Ark

The Biblical flood in which Noah's ark rescued various species for the continuity of life is said to have occurred around 3000 BCE.



Noah's arc

## ***Mesopotamia***

Mesopotamia had the famous legend called the epic of Gilgamesh. Most of the epic of Gilgamesh is lost to mankind due to widespread destruction which happened to their civilization because of a massive tidal wave.

Many scholars independently have arrived at a date of around 2800 BCE for when this civilization was washed out by a massive tidal wave. Some stone inscriptions have also been deciphered which speak of an extensive flooding which annihilated civilizations. They have been dated to 3123 BCE.



Gilgamesh and stone inscription

## ***Kumari Kandam***



Projected location of Kumari Kandam and Migration of people into South India

In South India, in the *Sangam* literature, we have mention of a *Kadalkol*, a sea rising, swallowing the land of Kumari Kandam.

Kumari Kandam is the lost submerged land, south of the southern coast of India. Description of the sea engulfing the land of Kumari Kandam is described in detail, in the ancient Tamil texts.

Tamil texts such as *Silappadigaram*, *Manimeghalai*, *PuraNanooru*, *Aga Nanooru*, *Ain Thinai* and *Ettu Thogai*, describe the submergence of Kumari Kandam as having occurred many thousand years ago.

### ***Poompuhar***

Poompuhar was a prosperous port which also finds mention in early *Sangam* Tamil literature.

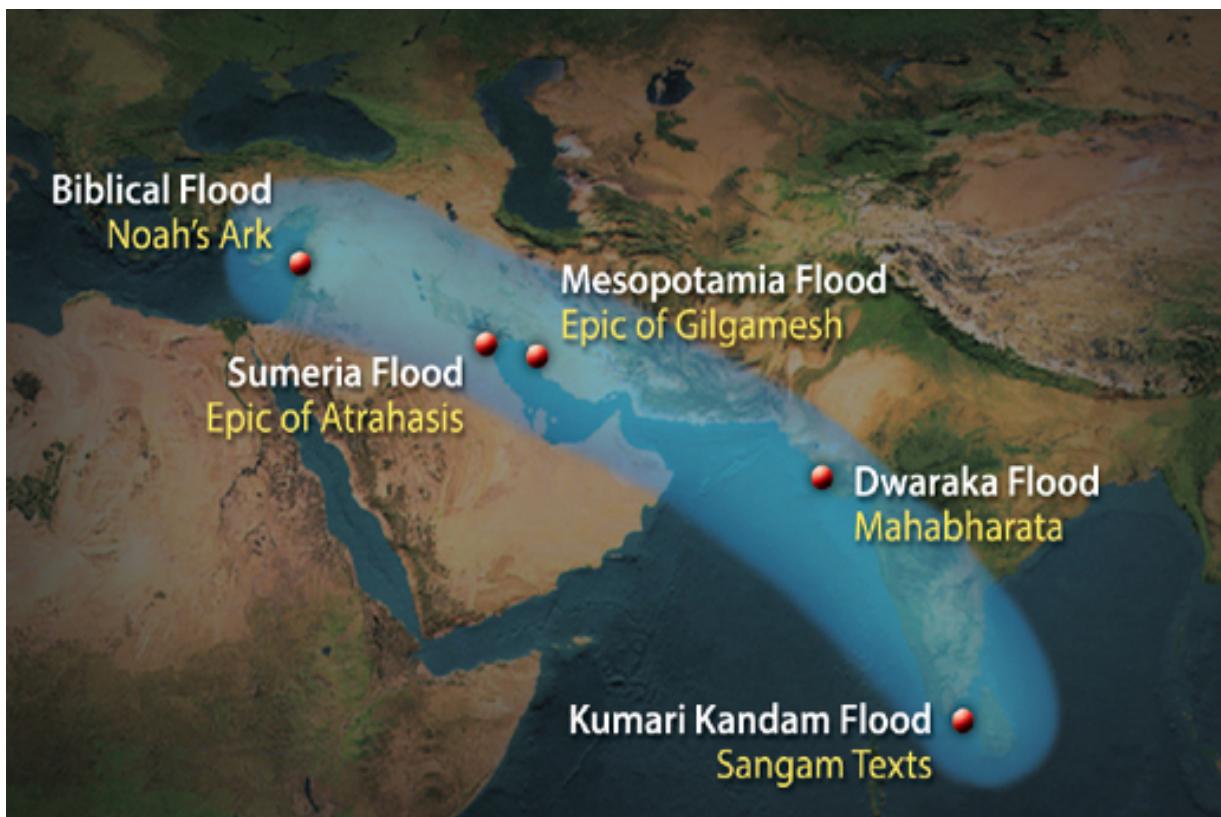
Today Poompuhar is a small coastal town in Tamil Nadu.

Marine archaeologists, Dr.S.Badrinarayan, former Director General of the Geological Survey of India and Graham Hancock, author of the book, “Underworld”, have photographed the old Poompuhar submerged in the sea a few miles off the coast of this Poompuhar. They estimate this submergence to have taken place about 5000 years ago i.e.,around 3000 BCE.

### *A Geographical Arc*

The massive tidal wave at Dwaraka and the other similar tidal waves in the Gilgamesh epic, the Biblical flood, the tidal wave in Sumeria and Mesopotamia as well as Kumari Kandam and Poompuhar, all seem to have been dated to around the period of 3000 BCE.

They form an arc along the coast too.



Geographical arc of flood hit areas

**In their own way, are they all accounts of the same natural disaster, which occurred around 3000 BCE?**

By dating the event of submergence of Dwaraka, we can perhaps help fix the date of the tidal waves that struck the other civilizations too in the geographical arc.

## **MATCHING ARCHAEOLOGICAL AND LITERARY EVIDENCE**

While the geological and archaeological evidence are available in those parts of the world, the literary evidence is available in the Indian text.

This is but just one example where we can juxtapose archaeological evidences available world over and match it with the literary evidences available in India.

This step is needed because literary evidences world over, were destroyed when the famous libraries of the ancient civilizations were burnt down due to ravages by man. Hence we know very little about the past of these civilizations which also lost continuity soon thereafter. Historians over the last couple of centuries have been trying to piece together the data about these civilizations.

While in India too, a lot of literary evidence was destroyed due to continuous onslaughts, a substantial portion is still available to us, not just to piece together, but to recreate with confidence, parts of Indian as well as world history.

## **SEA LEVEL RISE - OCEANOGRAPHY A DATING TOOL**

*Global Warming*



The Earth is warming up in recent times, a phenomenon called “global warming”.

This is attributed to both natural cycles as well as manmade factors.

### ***Melting of ice caps and glaciers***

Consequent to the gradual warming which has been going on for thousands of years, the waters locked up as ice, in the polar caps are slowly melting.

This melt down of the ice in the polar ice caps, increases the waters in the sea, due to which the sea level has been steadily rising.

### ***Sea Level Rise***

Sea level rise is not uniform at all parts of the earth.

Even for the same continent, the sea levels on its different coasts can vary. For example, in America, there is a 1 metre sea level difference between the west coast and east coast.

Similarly, the sea levels between the east coast and west coast of India also vary. Studying the sea level rise and drop in the field of oceanography is a very specialized study.

Specific studies have been done for the different coastal portions of India. For the region around Dwaraka, it has been done by the National Institute of Oceanography.

A simplified summary of their study, suggests that the sea level rise in certain areas around the coast of India has been estimated to be on an average, about one metre in 700 years.

This is on actual site conditions.

The submerged ruins of Dwaraka are at an average depth of about 20 feet, i.e., 6 to 7 metres, from the present mean sea level. From a common calculation, going by a 1 metre rise in 700 years, we get 4900 or 5000 years as the period during which the sea would have risen by 7 metres.

So the general understanding of the research findings of oceanography and the real situation on ground, rather on sea, tally.



Sea level rise, 1 metre every 700 years

This indicates the time period of Dwaraka and therefore of Krishna from yet another perspective - using sea level rise, as a dating tool.

**The descriptions in the *Mausala Parva* are real.**

**The destruction was real.**

**Krishna's Dwaraka was real.**

# Sarasvati Speaks Up

## **SARASVATI, THE GRACEFUL**

Sarasvati was a major flowing river during the times of Krishna. Sarasvati, means “flowing, one with a graceful flow”. The word *Saras* is connected with ponds, lakes, river as well as “graciousness”. The famous Indian crane is called *Saras*, for its grace and also since ponds are its favourite fishing spot.

From the literary information available to us of that period, it is clear that the primary river of India for many millennia was the Sarasvati *Nadi*. It is clearly expressed not only as the broadest of the rivers then, but also as the mother of all rivers.

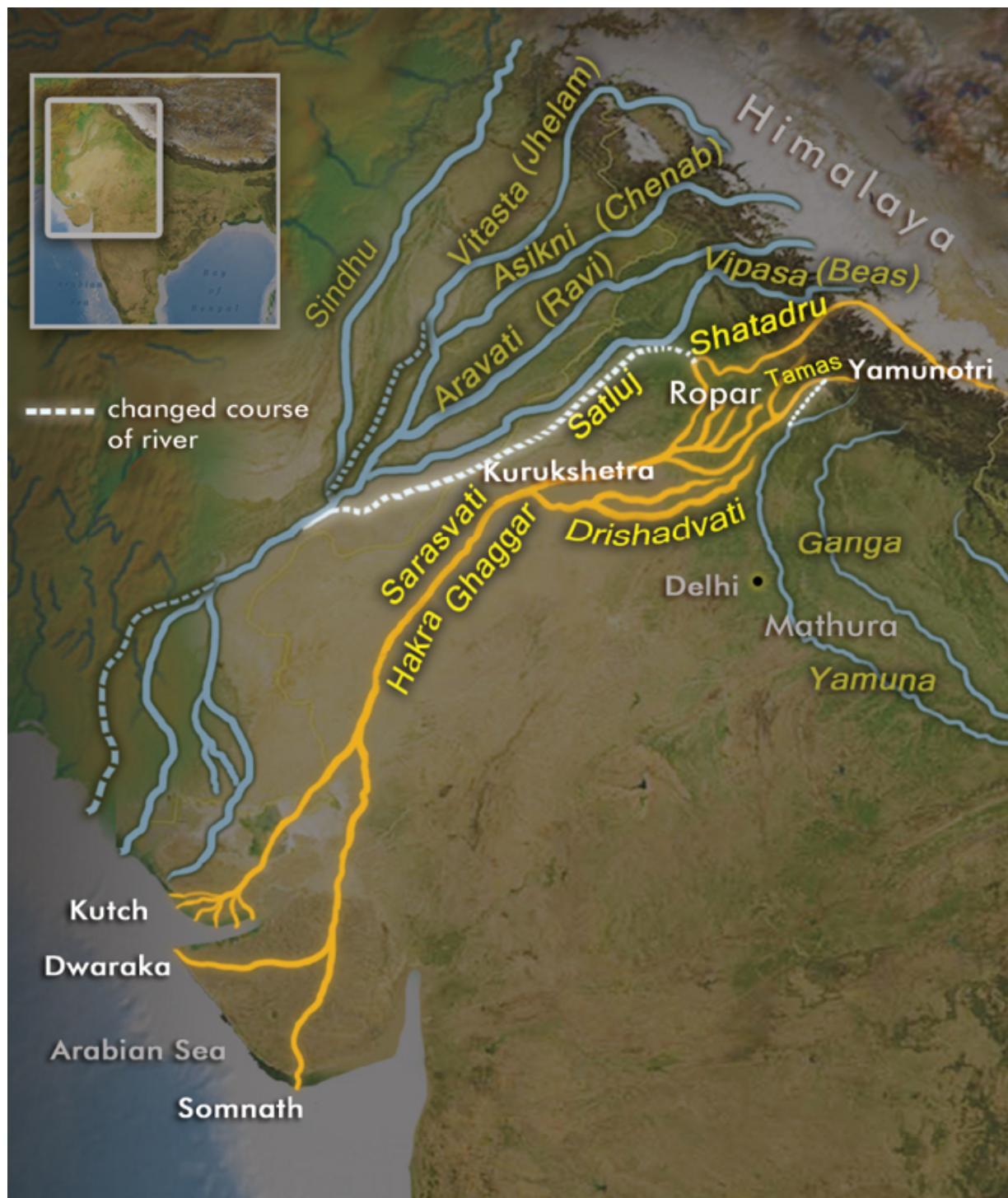
She is described as “*Naditame Ambitame*” which means mother among the rivers. *Amba* means mother and *Nadi* is river.

There were many *Rishi ashrama* on the banks of this river.

All this changed when due to plate tectonics in the Shivalik region of the Himalayas, the main Sarasvati river was blocked by hillsides and its tributaries changed course.

The river Sutlej, which was then called Sutudru and was one of the main tributaries of the Sarasvati, changed course near present day Ropar in Punjab, turned west and joined as a tributary of the Indus river.

The Tamas River, which was the other main tributary of the Sarasvati, turned east and joined the Yamuna in the Shivalik range of the Himalayas.



The Sarasvati River and its tributaries

This upheaval is geologically dated to have happened about 4500 years ago.

Consequent to this, the Sarasvati River from being the mightiest and perennial river became a narrow, seasonal river flowing only during monsoons as it had lost its connection with its glacial water sources.

Over the next couple of thousand years, even its seasonal flow slowly withered and the mighty river became a legend.

Over the last hundred years and more, many scholars, both European and Indian, have identified the bed of the erstwhile river and the causes due to which it dried up.

Today with conviction, one can say that the Sarasvati was a wide river flowing gracefully from the Himalaya, in the North West of India, through the present day states of Haryana, Rajasthan, Gujarat, draining into the Arabian Sea, at Kutch and Saurashtra Peninsula.

The Sarasvati features in the historical texts of India, the epics *Ramayana* and *Mahabharata*, in the description of events of those times. These have helped in understanding the geography and geology of those times.

## BALARAMA'S TREK ALONG SARASVATI RIVER

Just prior to the *Mahabharata* war, not interested in taking part in the war, disassociating himself from the whole war, Balarama decided to go on a *theertha yatra*, pilgrimage.

Starting from Dwaraka, he went to Prabhas Pathan i.e., Somnath, walked upstream of the Sarasvati river upto Yamunotri, then came down to Mathura and then went west to Kurukshetra battlefield.

In the *Mahabharata* epic in the chapter of *Shalya Parva*, it is mentioned that, on the last day of the Kurukshetra war, Balarama witnessed the *Gadha Yuddha* – mace fight between Bhima and Duryodhana, both of whom were his students in this particular variety of warfare.

Post this, he trekked down south, downstream of the Sarasvati River, back to Dwaraka.

This roundtrip took him 42 days. His camp every day, during this 42 day period, which for most part is along the Sarasvati River, is well documented and is identifiable with sites on ground today.

So, during the times of Krishna, Balarama and the *Mahabharata* war, Sarasvati evidently was a flowing river going by the trek of Balarama up and downstream this river.

If Balarama is to have walked along the then flowing Sarasvati river, then that event should have occurred prior to the Sarasvati drying up. We know from present geological studies that the Sarasvati dried up 4500 years ago. Hence Balarama's trek and the war should have taken place atleast 4500 years ago.

This fits in well with the date of Krishna having lived around 3100 BCE.

**Sarasvati graciously reveals the time period of Krishna.**

**We see another convergence between History, Geography, Geology and Ecology.**

# Yamuna Takes a Turn

## BEND IN THE YAMUNA

Near Vrindavan, at Kamyavan, Ram Ghat, there is a bend in the river Yamuna. The path of the Yamuna seems to have deviated and turned unnaturally at this place.



The Yamuna at Kamyavan, Ram *Ghat*

Devotees throng this area and the temple standing there today, to pay homage to Balarama and the Yamuna, at this spot where she turned unnaturally.

Balarama, the brother of Krishna was a well built and strong man. He was well versed in the art of *Mal Yuddha*, wrestling and *Gadha Yuddha*, fighting with the mace. He is also called *Halayudhapani*, bearer of the

plough, *Hala*, since the plough as we use it today, is considered to have been designed by him.

As the legend goes, once in a stupor, Balarama took his plough and changed the course of the Yamuna.



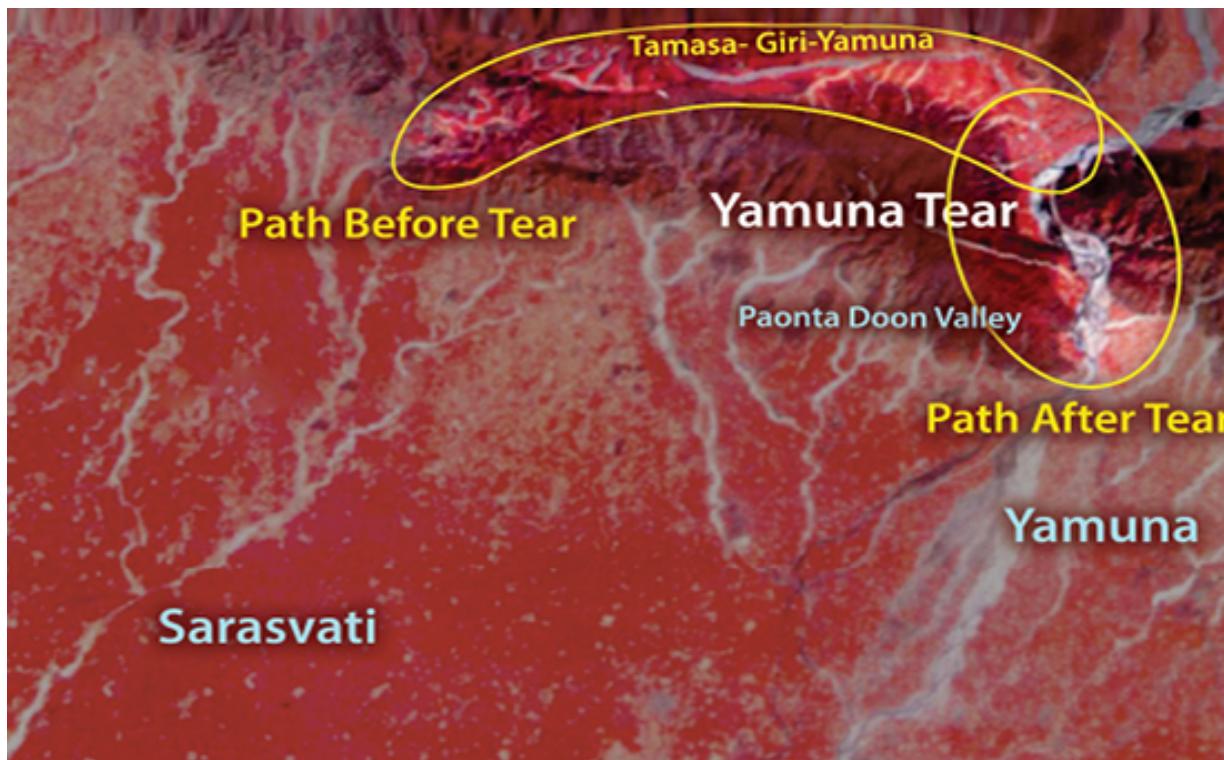
In commemoration of that effort, a temple was constructed there, after the time of Balarama. Legends narrate that Balarama spent his leisure times in this place.

Here, the legend matches with the physical flow of the river and its bend.

## CONVERGING ON THE BEND

While this legend may seem like a story, there could have been a need for such an act during the times of Balarama.

In the tumultuous period around 3000 BCE, the waters which earlier flowed into the river Sarasvati, due to plate tectonics, moved east, changed course and joined the Yamuna. This happened due to a series of earthquakes in the Shivalik range of the Himalayas.



The Yamuna Tear

The effort of Balarama in changing the course of the river Yamuna, is probably a way of conveying to us that as the river was adjusting to the rumblings in the Himalaya, probably a course correction was required to

make the river flow in a manner conducive to the inhabitants of *Braj Bhumi* and Balarama implemented this change.

The legend, the river flow, the geo-morphology of the river, the satellite mapping of the change in the direction of the river flow and the location of the temple, all map in well, to tell the same story.

This deed of Balarama has been one among the popular themes of the paintings of the medieval period.



"Balarama – Widening the Yamuna River"- A Pahari painting, an artist's sketch impression

## A COURSE TO FOLLOW

Bending Nature to make her rivers, plants and soil conducive for living has been an age old way of mankind.

### **But how much to bend? What will break her back?**

These are the questions that man has to first learn to ask himself before he strays off the course too far.

It is the way in which he harnesses Nature in a sustainable way that speaks of his culture.

# A 300 Year Drought – The Hand of Ecology

Modern researchers on ecology have come to the opinion that in all probability there was a drought extending for a period of over 300 years around 2000 BCE, which affected the world from Egypt, across Babylonia, Persia, right upto the Indus Valley civilization.

This 300 year drought could have been one of the reasons for the disintegration of the great civilizations of

- The Old Empire in Egypt ,
- The Akkadian Empire of Mesopotamia and,
- The Harappan civilization of the Indus valley.



The areas affected by 300 years drought

Because of these naturally occurring extended droughts for over 300 years, a substantial portion of civilization would obviously have disintegrated, which means the people would have lost their bearings for over 15 generations spanning that 300 years.

This could be the reason why even in India, though we have traditionally well recorded history of the period

- of *Ramayana*, around 5000 BCE, as we have shown in our work, **Historical Rama**,
- of *Mahabharata*, around 3000 BCE as traced in the earlier volume, **Dating of Krishna**,
- of the kings in between Rama and Krishna, in the form of the various *Purana*,
- of Buddha, around 1800 BCE, as can be seen in the previous volume, **Dating of Krishna**,

records of the period between 3000 BCE and 2000 BCE are a bit sketchy in these regions.

For the Indus Valley civilization, this period seems to have been a double whammy. Not only did the Sarasvati dry up, this region also underwent a long spell of drought. This could well be the reason for the abandoning of the Harappa – Mohenjodaro period cities.

These examples amply show us that besides archaeological artifacts which provide historical dates, the geography, geology and even ecological factors are equally important for understanding and establishing historical facts.

## Summing up

### **GROUND TRUTH, *BHUMI SATYA***

The correlation of local legends, names of the places and their location indicates the history of the geography. It indicates the association with Krishna and His times.

For a legend to be historical, it must be based in a particular land, at a particular time.

In this section on geography, we are able to clearly place the events that took place during Krishna's lifetime at specific geographical locations.

We have also been able to see how these events broadly fall into the timeframe around 3100 BCE. In the previous volume, *Dating of Krishna*, using Archaeo-Astronomy, we have also been able to identify exact year and dates for the events around Krishna's life, thus making these events historical.

This is further supported by the fact that there are continuous records of these places being identified with Krishna, His pranks and His other precocious deeds.

This convergence of geography with continuous records, with precise dating, places the historicity of Krishna on these geographical locations as ground truth, *Bhumi Satya*.

### **WIDESPREAD CONTINUITY**

If *Mahabharata* were a fictional story concocted by an author sitting in one place, in those remote days, it would have permeated down into the local stories and legends of only that geographical region.

In the case of the *Mahabharata*, we see different events and personages from that epic in different art forms ranging from storytelling to poetry to singing to dancing to sculpting to painting and many more across times, in different parts, across the length and breadth of the land. This could have happened only if it is an *itihasa*, “that which happened in reality”.

It is also a continuity that has permeated through 5100 years.

### ***In Sum Total***

According to legal experts,

*“Continuity in tradition, name and practices of a place, across the ages itself, can be accepted as legal evidence in jurisprudence, for establishing the history of the place and its people”.*

# **PART SEVEN - EVIDENCES FROM ARCHAEOLOGY**

# Facts About Artifacts

## **ARCHAEOLOGY - TRADITIONAL AND MARINE**

Archaeology is a field of work that involves identifying ancient sites, some buried under mounds of sand, excavating artifacts from these ancient sites and by studying them, trying to establish the historical time period to which those artifacts must have belonged.

Until a few decades ago, archaeology meant only excavating artifacts from sites on land.

With advancements in deep sea diving bringing to light many sunken treasures and remnants of ancient cities that lie buried underwater, a branch called marine archaeology has also emerged to shed more light on the finds under the sea.

Archaeology therefore may broadly be divided into 2 –

1. Traditional Archaeology where ancient structures, inscriptions, copper plates, coins, pottery, metal ware, jewellery, skeletal remains of humans and animals and other artifacts from excavation sites on the ground are dug out, dated and deciphered to obtain information about ancient civilizations.
2. Marine Archaeology, wherein underwater explorations are undertaken, to look for and study submerged structures – signs of an earlier civilization.

This field of Marine Archaeology has enabled mankind to cross the hitherto known limits of land and has extended the boundaries of our search for our ancients.

## **APPROACHING KRISHNA THROUGH ARCHAEOLOGY**

In trying to unravel the historicity and timelines of Krishna and the *Mahabharata* period, artifacts yielded by both traditional archaeology as well as marine archaeology, both in India and elsewhere, help fit the pieces of history together.

What emerges is the outline of Krishna against the backdrop of archaeology.

# Evidences For Krishna – Foreigners’ Records

## ***HELIODORUS STHAMBA - HANDIWORK OF A GREEK***

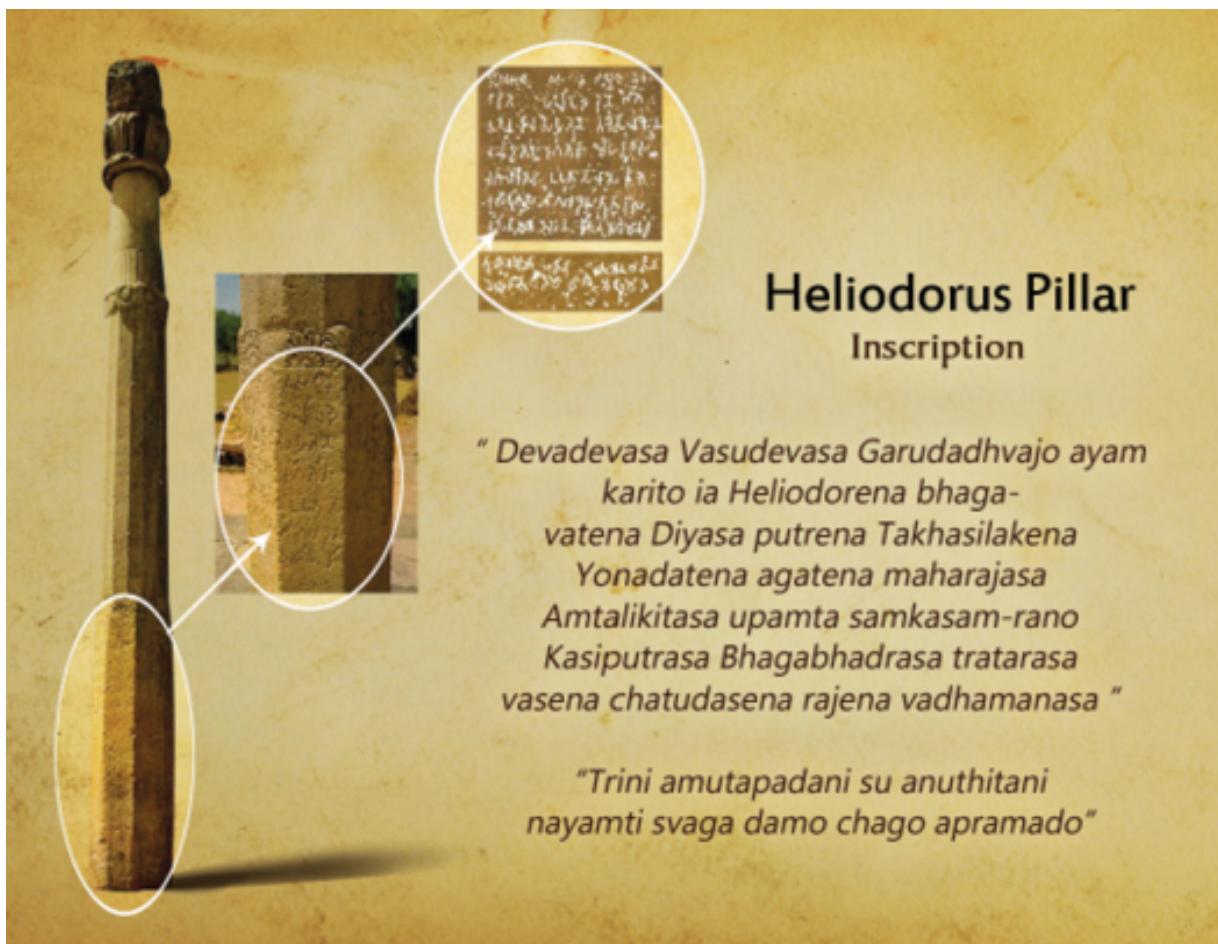
On land, one of the earliest archaeological samples that mentions Krishna as Vasudeva is probably the Heliodorus *Sthamba*.

This *sthamba*, a pillar, stands in *Vidisha* near Sanchi, in present day Madhya Pradesh, India. It is a *Garuda sthamba*, pillar with a *Garuda* on the top. It was erected by Heliodorus, a Greek Ambassador to India in 120 BCE. Hence the pillar has acquired the name Heliodorus *Sthamba*.



Heliodorus *Sthamba* and Heliodorus

Historians have dated this pillar to 113 BCE based on the text inscribed on this *sthamba*, which reads as



Inscription on Heliodorus *Sthamba*

*"Sthamba of Vasudeva erected by Heliodorus, son of Dion, a resident of Takshasila, Ambassador of Greek King Antalikita (also pronounced as Antialki Das), to the court of Raja Kasiputra Bhagabhadra, ruler of Desnagar in the 14<sup>th</sup> year of his prosperous reign".*

*Heliodorus* in this inscription is stating who he was and what he was installing the *sthamba* for.

He mentions that this *sthamba* was being erected in commemoration of Vasudeva. We all know that Vasudeva was the father of Krishna and Krishna was and is still, often referred to as "Vasudeva", the son of Vasudeva. So the reference here is clearly ascribed to Krishna.

In the later part of the text, Heliodorus mentions that he had turned into a follower of the philosophy as espoused by Krishna.

This is one of the early references to Krishna as mentioned by a foreigner in India.

## BACTRIAN COINS

A few of the Greek soldiers who came with Alexander in 326 BCE, stayed back in the regions to the north west of India.

Those who stayed back became kings of those north western regions, now historically known as Bactria. This Bactria region is around the area of present day Afghanistan.

One of their more prominent kings was Agathocles or Ai-Khanoum, who ruled between 180 BCE to 165 BCE.

He issued coins during his reign, embossed with text both in the Greek language and in the *Brahmi* script.



Agathocles imprinted on a coin

These coins depict various symbols such as a *stupa* like building, a *trishula* i.e., trident, a dancing girl holding a flower and so on.

In one of the square coins unearthed, is seen the depiction of a man standing with a conch and shield.

The archaeologist who unearthed six of such coins is P.Bernard of the French Archaeological expedition. After studying these coins he stated his finding as,

*“the shield and conch represent Krishna, who was considered a hero by the Bactrian kings also”.*



Bactrian Coin with symbols associated with Krishna

The circular shaped object in the left hand of this man has been interpreted as a shield. It could also be taken as a larger imagery of a disc, *chakra* that Krishna used to wield.

In another square coin unearthed, is the depiction of a man holding aloft in his left hand, an instrument that looks like a plough.



Coin showing man holding a plough in left hand

This is a typical manner in which Krishna's brother Balarama is depicted in Indian imagery.

We need to understand that these casts are Bactrian representations.

It is what their artists had come up with, at that time. We should recognize that representations in art form vary from artist to artist, land to land and time to time.

The deciphering of this image as that of Krishna, by the archaeologists using these finds and other ancillary data, should be understood from this perspective.

These coins show the popularity of Krishna in Bactria. This goes to show that they too had believed Krishna to be historical inorder to issue coins portraying Krishna.

## A BACTRIAN TEMPLE

Another piece of history in this regard comes from King Menander of Bactria, who was of Greek origin.

He visited Muttra in present day Pakistan, where he built a *stupa* near the famous, ancient Takshasila University.

This *stupa* is called *Sirkap Stupa*. One of the prominent sculptures in this *stupa* is that of the Greek hero Herakles but in the garb of Krishna, with all the accessories and adornments commonly associated with Krishna.



Tetradrachm of Menander I in Greco-Bactrian style



Srikap *Stupa*, Takshashila

The inscriptions of Heliodorus and coins of Bactria make it amply clear that the Greek Bactrians looked upto Krishna as a great hero of this land.

# Evidences for Krishna – Indian Inscriptions

## CHALLENGES OF A CONTINUOUS CIVILIZATION

The noted archaeologist B.B.Lal has remarked that because of the continuous civilization in many places in India, it would not be possible for many inscriptions to have survived.



B.B. Lal

A continuous civilization means people have been living in the same place, generation after generation. In such a scenario, people who had lived there would have built and rebuilt over the older structures, generation after generation, thus destroying evidences and prints of their ancestors, the way we do with many of our old buildings today.

Given this fact, it would be very difficult to expect to find inscriptions of 5000 year old antiquity in these places. They perhaps lie buried beneath our present towns and houses.

## THE MORA INSCRIPTIONS – FROM NORTH

Inscriptions on stone were found in a well at Mora near Mathura. These have come to be called the Mora Inscriptions.

The first line of the inscription dates it to the time of Sodasa, the son of Mahakshatrap Rajuvula. The archaic characters used in the engraving also places it to the period of Sodasa around 200 BCE.



Mora near Mathura

This inscription of Mora, recorded in Epigraphica Indica, Volume 24, page 194, reads as,

*Bhagavatam, Vrshninam pancha-viranam pratimah....*

*Archadesam sailam pancha-jvalata iva*

The translation of which means,

*“The five worshipful heroes of the Vrishni dynasty are shown here in their 5 luminous stone forms”.*

The images of five heroes referred to in this inscription being,

1. Vasudeva ie.Krishna
2. Samkarshana, i.e., Balarama, the brother of Krishna
3. Pradyumna, the son of Krishna
4. Aniruddha, the son of Pradyumna and
5. Satyaki, from the Vrishni clan, a student of Arjuna as well as co-student of the *Pandava*, under Dronacharya. Satyaki was devoted to Krishna.

Some readings have associated the fifth as that of Samba, another son of Krishna. However this is ruled out by few others in favour of Satyaki, as Samba was a descendant whose act of folly marked the start of the decline of the *Yadava* race and hence could not have been considered worshipful.

These are probably some of the earliest archaeological inscriptions discovered till date, where Krishna and His lineage are looked at as heroes and not just from the perspective of Divinities.

## **THE NIDHANPUR INSCRIPTION – FROM EAST**

Nidhanpur in Assam, in the far east of India provides us with a vital clue to date the *Mahabharata*.

A copper plate grant by BhaskaraVarma of the period of Emperor Harshavardhana i.e., 640 CE was discovered in Nidhanpur. It is popularly known as the Nidhanpur copper plate of Bhaskara Varma.



Nidhanpur Copper Plate

It tells us that Bhaskara Varma belonged to the Bhauma dynasty and that 3000 years after King Bhagadatta or his son Vajradatta, Bhaskara Varma's ancestor Pushya Varma was born. This Pushya Varma ruled approximately between 275—300 CE.

A simple math shows that King Bhagadatta must have therefore lived around 2700 BCE.

Elsewhere, in another work, “**Study of the Social History of Kamarupa**”, Nagendranath Vasu, the author, studies the *Raja Vamsavali*, royal lineage, written by Raja Upendra Sinha of the Bhauma dynasty of Assam.

In this *Vamsavali*, Raja Upendra Sinha states that his father-in-law was King Bhagadatta. He also states that King Bhagadatta was inspired by Duryodhana of the *Mahabharata* period and invited Brahmanas of the five gotras, namely Kasyapa, Sandilya, Bharadvaja, Upamanyu and Parasara to settle in his kingdom.

Putting these two details on King Bhagadatta together, we can conclude that even till 2700 BCE, memories of Kurukshetra war and the *Pandava*, *Kaurava* were prevalent as far east as Kamarupa, the present day Assam.

The Bhauma dynasty in fact is traced to have enjoyed high repute from the times of the *Kuru* and *Pandavas* for its heroism.

From this we can infer that,

- the *Mahabharata* events must have taken place before the time of King Bhagadatta, i.e., 2700 CE.
- Duryodhana was historical and hence the others of his period including Krishna.
- Duryodhana too had values which could inspire people.

## THE PALITANA PLATES – FROM WEST

Palitana is a very famous Jain pilgrimage centre in Bhavnagar district, in the Saurashtra peninsula, in the present day state of Gujarat. It comprises of a cluster of temples made of marble, dotted all over the Palitana hill side, which are a sight to behold.



Palitana

What is now called the Palitana Plates, are the inscriptions of the King Samantha Simhaditya dated to 574 CE, which state clearly that Dwaraka, the coastal town, was the capital of western Saurashtra and Krishna had lived there.



King Simhaditya



Palitana plates

The date for these Palitana plates, which is 574 CE, is well before the arrival of the Europeans or the Arabs / Persians.

These plates do not eulogize Krishna from a religious perspective but state, in a matter of fact manner that, Krishna, a person had lived in this town Dwaraka.

Much prior to external influences into India, we see through this inscription here, Krishna being acknowledged as one of the early ancestors, who had lived in that part of the world.

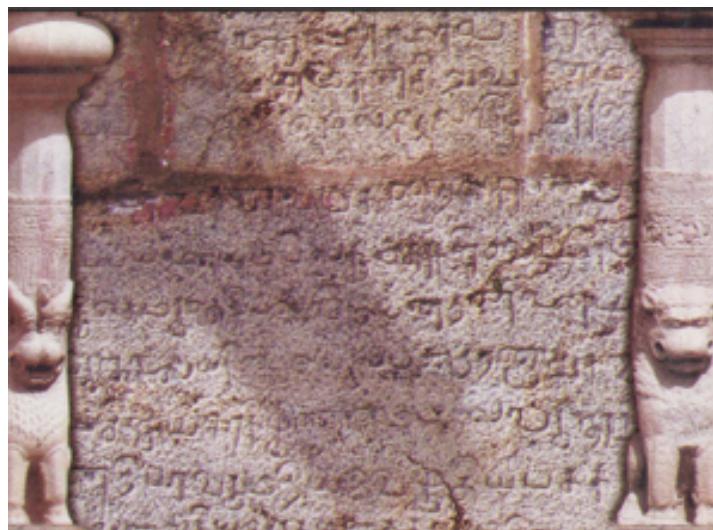
## THE MANIMANGALAM INSCRIPTION – FROM SOUTH

Inscriptions associating Dwaraka and people of South India can be found in temples in Tamil Nadu such as this one which is in a small temple in Manimangalam, a village about 30 kms from Chennai.

This village seems to have been recognized for its importance across times, as this has been a favoured seat of many ascetics over times.

In this village is a temple whose antiquity dates back to the *Chola* period, the pre-eminent kings of Tamil Nadu. From the main inscription of the Rajagopala temple in this village, earlier references to the divinity here as *Thuvarapathi*, can be gathered, meaning, ‘the one from Dwaraka.’

As per local legends and the records elicited over a century ago by the renowned Tamil scholar, Shri. U.Ve. Swaminatha Iyer, who was known as *Tamil Thatha*, Tamil Grandfather, for his contributions to the Tamil language and literature – the people here had migrated down south from *Thuvarai*, Dwaraka. These people had built this temple and named their deity *Thuvarapathi*, after the land from which they had come.



Inscription from Manimangalam



Rajagopala *Swamy* Temple Manimangalam

## INSCRIPTIONS FROM NEWS – NORTH, EAST, WEST, SOUTH

All these archaeological artifacts from all over India - North, East, West, South (NEWS), show a continuity in references to Krishna.

These archaeological evidences are ancient but from the medieval period. They are not from the period of Krishna Himself.

These archaeological artifacts may themselves have drawn their inspiration and story from earlier archaeological references of those ancient times. This is a norm in a continuous civilization where each generation carries forward some of the thoughts, practices, tradition and memories of its ancestors, as part of the process of reshaping its cities and lives, for its times.

Like these, as we go along, more and more such evidences could surface, corroborating one another. What we have shown here is only a sample from four directions.

It will be for future researchers to take the baton and link all these references of migrations from Dwaraka in different directions and see the connect in them across the land.

# Evidences for Krishna – A Clinching Proof

## DAMODARA KRISHNA – TIED AROUND THE WAIST



Krishna was so naughty as a child that Yashoda used to find it a challenge to keep Him out of mischief.

Once, tested to her very limits, she tied Krishna to a huge stone mortar in their backyard, to keep Him in one place.

Krishna being the precocious child He was, managed to move away dragging this stone mortar behind Him. In His path lay two huge trees growing close to each other. The small child Krishna managed to pass between the trees but the mortar following Him could not and got stuck between the trees.

Krishna wanting to keep moving, tugged at the mortar. This uprooted the trees and from them sprang out two beings who had been earlier cursed to become trees until liberated by Krishna. They paid their obeisance to Krishna, thanked Him for their liberation and disappeared.



Krishna dragging the mortar

Dama means thread, rope. Udhara means stomach. Damodara means one having a thread, rope around the waist. Dama also means restrained.

Krishna, after this episode thus also got the name Damodara meaning one who was restrained by the thread tied around the waist.



## THREAD BETWEEN DAMODARA AND INDUS VALLEY

### *A Clinching Archaeological Evidence*

The story of Damodara Krishna brings out the divinity of the precocious child. It has been told and retold in story, dance, drama, sculpture and other art forms, countless number of times through the millennia.

This story which seemed to be floating in the air, suddenly was rooted to a culture with the find of a steatite in Mohenjodaro, dated to be around 2600

BCE.

It shows a young boy uprooting two trees and human figures emerging from them.



Steatite from Mohenjodaro, dated to around 2600 BCE

Source : Mackay's report, Part I, pp-344-45, Part 2, plate no. 90, object no. D.K. 10237

## A PICTURE SPEAKS A THOUSAND WORDS

“A picture speaks a thousand words”, goes the popular adage.

The picturization in this steatite from Mohenjodaro, dovetails with the story of Damodara Krishna and is a decisive clincher for the argument that the Indus Valley culture was not disconnected from the *Vedic* and *Mahabharata* culture, for,

1. This tablet with the story of Krishna, shows the connect between the Indus Valley civilization artifacts and the events of the *Mahabharata*, which many have been seeking.
2. It also shows that this story must have been popular enough even before 2600 BCE, for it to have been engraved on a steatite.

3. Archaeologically, it therefore places Krishna before 2600 BCE.
4. This steatite gives the archaeological evidence for the prevalence of the *Purana*, tying the *Purana* archaeologically to a time period of 2600 BCE and before, which is beyond the presently believed period of 1500 BCE by over 1100 years.

## DAMAL DAMODARA

The D in our name stands for Damal, the village near the ancient temple town of Kanchipuram. The presiding deity of this village is Damodara. For this incident from history of 5100 years ago, to have pervaded all across India, shows the popularity of this hero of the land, His Divinity, His story and the continuity of history in India.

We consider it to be the grace of this deity that we have been able to stumble upon this evidence of the Harappan Damodara which clinches the connection between the *Mahabharata* civilization and the Harappan civilization.

Through this work, we pay our obeissance to this Damodara and to the lineage that has inculcated this knowledge in us.



The temple at Damal and Idol of Damodara as a Divinity with His consort, inside this temple



Authors flanking statue in the temple garden depicting  
the historical incident of Krishna as Damodara

# Sites of the *Mahabharata*

In 1860s, the Archaeology Survey of India (ASI) was founded by Sir Alexander Cunningham, a British army engineer cum archaeologist.

Since then, many archaeologists, in the last 150 years have done commendable work on individual archaeological sites.

Especially since independence, in the last 65 years, there have been hundreds of superintending archaeologists, who in their tenure, have taken up the challenge of archaeologically discovering the cities and other places mentioned in the *Purana* and *Itihasa* texts of India, to unearth the history and geography of India. It is a challenge because these cities are thousands of years old and due to the continuity of civilization in these areas, they have been remodelled and rebuilt many times over by successive generations, wiping out many signs of the past.

Yet there still exists a vast amount of information from a variety of sources which have been guiding these astounding excavations, such as:

- sighting of ancient mounds
- trail of shards and other relics from the past
- records of ASI through the century
- local legends
- Puranic data
- fairly recent monuments commemorating the ancient events.

The findings, excavation reports of all these individual excavations are filed with the ASI but sadly, most have remained buried within the report files of the ASI. They have not yet come out in the public domain where they can be accessed easily or in the history books of the land where they belong. This has left the official history of India still largely incomplete and out of sync with the other traditions of the land.

Whatever little findings are available today, reveal glimpses of an ancient civilization matching its descriptions in the traditional texts of the land.

If all these independent findings can be connected together, it will give us a wholistic picture of the true history and geography of the land.

## **GEOGRAPHY IN A HISTORICAL WORK**

The *Mahabharata* itself is a work that is replete with geography besides being a chronicle of the events surrounding the life of the *Pandava*. The Bheeshma *Parva* of the *Mahabharata* contains references to a large number of geographic regions. The events of *Mahabharata* unfolded across these regions.

It is remarkable that while many of these regions are traceable to present day cities and towns due to the continuous local legends in those places, modern day archaeological efforts in these locations are also unearthing matching evidences one after another. Many of the sites today are thus being identified as the places mentioned in the *Mahabharata*.

# Indraprastha of *Mahabharata* Period

In the ongoing tussle between the *Pandava* and *Kaurava*, at one stage, to bring in peace between the warring cousins, the senior courtiers and the King of Hastinapura, Dhritarashtra decided to give the western portion of the Kuru Jangla kingdom, along the banks of the river Yamuna to the *Pandava* brothers as a one time settlement. This region was forested then and known as the Khandavaprastha.

It was in these thickly forested Khandavaprastha region that the *Pandava* were expected to set up their capital and make their kingdom.

In this region, the *Pandava* built their capital and called it Indraprastha after Indra the leader of divinities. Indra also denotes senses. Indraprastha was a city which delighted the senses.

## ***Mayasabha***

This city was built by a descendant of Mayasura whose life Arjuna had saved earlier. This was an act of gratitude from the Mayasura clan with their timeless skills of architecture. Hence the best hall in this city was commemoratively called as Maya Sabha after the Mayasura.

This Maya Sabha was so finely crafted that what looked like water was actually a glazed floor and what looked like a glazed floor was actually a water surface.

It was into one such water pool that Duryodhana, who was invited to the opening ceremony, fell, mistaking it to be a solid floor. This incident made Draupadi laugh, causing Duryodhana to feel humiliated and angry. It was from that day onwards, that Duryodhana as a revenge, wanted to humiliate Draupadi.

This beautiful Maya Sabha and the city of Indraprastha filled Duryodhana with jealousy. It acted as a trigger that rekindled in him the suppressed animosity towards his cousins which culminated in the Kurukshetra war.

### *A Decade at Indraprastha*

It is here that the *Pandava* lived for about 12 years. Here Draupadi, the chief queen gave birth to her 5 children. It was here in Indraprastha that Abhimanyu was also born to Arjuna and Subhadra.

After the Kurukshetra war, the *Pandava* made Hastinapura their capital. Further down in history, various other kings who were descendants of the *Pandava* from the Parikshit lineage, ruled from Indraprastha.

## **INDRAPRASTHA TO PURANA KHILA, DELHI**

Indraprastha became Delhi after King Dhillu and finally the Tomars were the last to rule Delhi. They ruled for over 500 years until 12<sup>th</sup> century CE. The last of these kings was Prithviraj Chauhan.

The ruins of the palaces and forts of all these kings, form the area known as Purana Khila of Delhi today. *Purana* means old. A destroyed fort is called *Khila*.

After Prithviraj Chauhan was defeated by Muhamad of Ghori, successive Islamic dynasties ruled from Delhi such as the Mamluk or Slave dynasty, Khilji, Tughlaq, Lodhi and Mughals. Delhi became a Sultanate.

During those times this fort was called “*Shergarh*” after Emperor SherShah Suri who had taken it over from Humayun. *Ain-i-Akbari* refers to this fort as “*Kaurav-Pandav ka Qila*” meaning the fort of the Kaurava and Pandava.

Purana Khila area or Indraprastha, had thus been a continuous capital from 3100 BCE, when it was built by the *Pandava*, to 1192 CE, when it was ransacked by Muhammad of Ghori. So, for a period of 4000 years, it had been the capital city of the local kingdom. It therefore has enough scope for offering archaeological finds.

This area is not far away in some wilderness but right in the heart of the present day capital city of India, Delhi.

Dr.Upinder Singh, the noted historian has remarked that the Purana Khila was excavated in the 1950s by the Archaeological Survey of India, but its report has not been published so far.

Dr. Singh further states in her works, that the area around Purana Khila and different parts around Delhi regularly keep throwing up artifacts which keep on pushing the historical backgrounds of Delhi further and further, back in time.



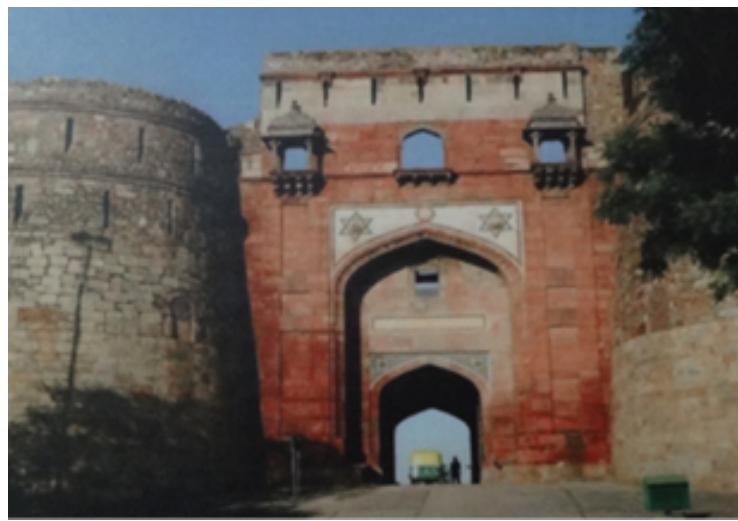
Purana Khila – an early photograph



Purana Khila fort in the background. Old Delhi houses in the foreground



An old painting of Purana Khila from a Mughal period perspective



Purana Khila in recent times



Illustration of the City of Delhi during the times of Shahjahan – Shahjahanabad  
Ruins of ancient Delhi are in the circled area, top left

Khandavaprastha has been traced to the areas around present day Delhi.

The word *Khandava* means plains. *Khandava* also means sugar candy or products that come out of sugar.

It is interesting to note that the region from Meerut in Western Uttar Pradesh to Kurukshetra and beyond in Haryana is a sugarcane belt indeed. The erstwhile Khandavaprastha falls within this belt.

When one travels through this region by land and air, we see endless sugarcane fields, molasses factories and the smoke that arises from their chimneys. An intermediary product between jaggery and sugar is called *khandsari*.



Stages of processing sugarcane - jaggery, *khandsari*, sugar



From unprocessed cane to refined sugar

In 1350 CE, about 700 years ago too, when Ibn Batuta, the Persian traveller visited these regions, he found this region abounding in sugarcane fields, which he has mentioned in his chronicles.



Ibn Batuta amidst sugarcane fields and An aerial view of sugarcane fields

Going by the name “Khandavaprastha” used for this region during the *Mahabharata* period, this perhaps must have been a feature, a produce of this land from 5100 years ago during the *Mahabharata* period too.

The present city of Delhi has therefore a long history to it, traceable atleast upto the *Mahabharata* period. The prominent cities that existed during earlier periods, in the region where Delhi stands today include:

- Indraprastha of *Mahabharata* period built by *Pandava*
- Dilli capital of the Tomar dynasty
- Prithviraj Chauhan’s Dilli
-

## Lodhi's Dehli

- Humayun's Dehli – present South Delhi
- Shah Jahan's Dehli – present North or Old Delhi
- Lutyens Delhi – The New Delhi

# Hastinapura of *Mahabharata* Period

Hastinapura was the capital city of the Kuru and derived its name from the early Kuru king, Hastin. It perhaps was also called Hastinapura because descriptions show this city to have had a large army of elephants. It was a city, elephantine in strength, literally.

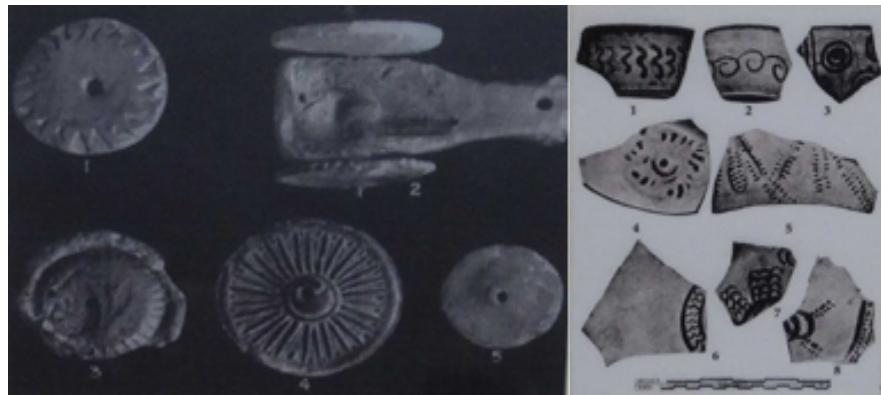
This Hastinapura has been traced to a town in the Meerut district, on the banks of the river Ganga. The *Mahabharata* text too describes Hastinapura as a city by the banks of the Ganga.

## ***Archaeological Finds***

Two mounds, Ulta Khera and Raghunathji were excavated in 1920s and various artifacts recovered from there.



Mounds at Hastinapura

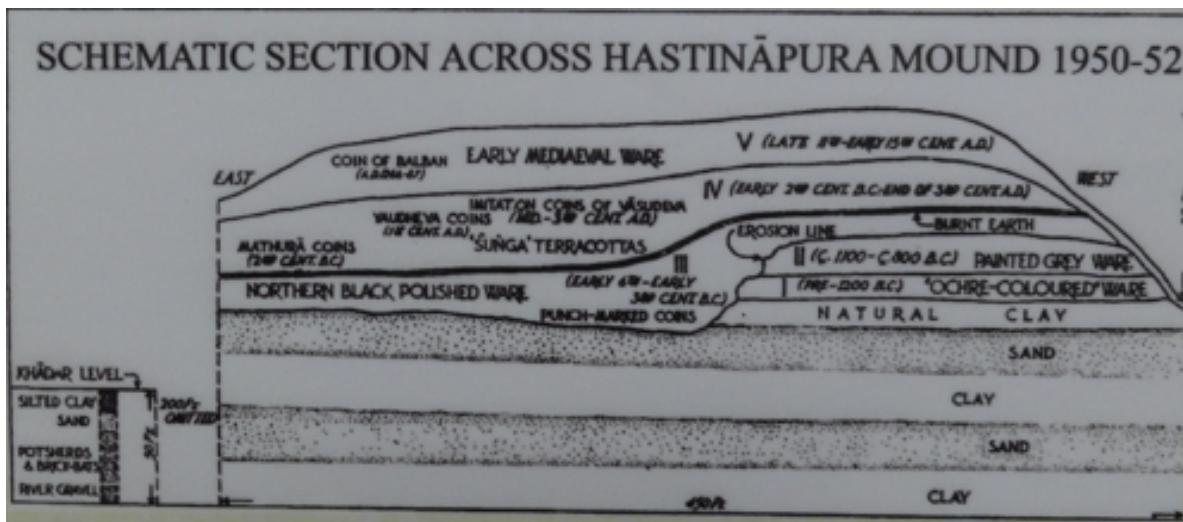


Artifacts recovered from Hastinapura

A find that pins this city down as Hastinapura is an excavation in 1950 - 52 by Prof.B.B.Lal, the renowned archaeologist of India. This excavation revealed layers in the soil that showed various periods of settlement with breaks in between. At one layer at the bottom, there was evidence of riverine soil from the Ganga, pointing to a flood that must have occurred then.



Photo of Excavation pointing to the riverine soil layer



Cross Section with description of the different layers

### *Puranic Record*

Nichakshu was a king, post the *Mahabharata* period. He lived six generations after Janamejaya, the great grandson of Arjuna, the *Pandava*.



The *Matsya Purana* and the *Vayu Purana* state that during the period of Nichakshu's rule, there was a great flood in the Ganga which washed over much of Hastinapura, necessitating him to shift the capital to Kausambi, further downstream and near the banks of the Yamuna.



*Gangayapahrte tasmin, nagare nagasahvaye Tyaktva  
Nichakshur-nagaram Kausambyam sa nivatsyati ||*

Matsya Purana : 50, 57, 65, 66, 78 - 79  
Vayu Purana : 99, 249b, 250, 256 - 58

- "When the city of Nagasahvaya Hastinapura  
was carried away by the Ganga,  
Nichakshu abandoned it and went Kausambi."

*Mahabharata* Verse describing the flood at Hastinapura  
Literary statement fully corroborates archaeological evidence

## *Finding Dates from the Finds*

Excavations at Hastinapura show evidence of massive destruction of Painted Grey Ware (PGW) on account of flood in nearby Ganga. Painted Grey Ware is a variety of pottery made of very fine refined clay that is unique to these regions and these periods. These pottery have distinct stylized black coloured paintings on them and therefore were termed by archaeologists as Painted Grey Ware.



[Painted Grey Ware \(PGW\) finds from Hastinapura mound](#)

Prof. B.B.Lal, in his article “Did the Painted Grey Ware continue upto the Mauryan period”, in Purattatva, vol 9, the Bulletin of Indian Archaeological Society, in the year 1977, brings out a very vital observation -

*“The Radio Carbon dating of the Painted Grey Ware from Hastinapura, resulted in dates such as 720 BCE, 600 BCE and 400 BCE with a MASCA correction of plus or minus 125 years. But the snag is that, as the laboratory itself states, almost all the samples were contaminated by rootlets. Hence their values get negated.”*

He further brings to light that the Ochre Coloured Pottery (OCP) from the same region of Hastinapura, Jhinjhana, Nasirpur, Atranjikhera, Lal Quila however can be dated to 2650 BCE to 2000 BCE based on Thermoluminescence technique.

Going back to the *Puranic* data, we find that Nichakshu lived about 10 generations after the *Pandava*. Assuming an average period of 25 to 30

years for a new generation to arrive, Nichakshu probably lived 250 to 300 years after *Mahabharata*. As *Mahabharata* occurred around 3000 BCE, Nichakshu having ruled 250 to 300 years later, fits in with the date of 2650 BCE for the OCP artifacts.

The statement from the *Purana*, tallies with the archaeological find of a flood layer, both in site and date.

For those still not satisfied with these evidences, Prof. B.B.Lal quips “*archaeology cannot provide evidence of Lord Krishna having spilled the butter pot*”.

## KURU JANGALA KINGDOM

The Kuru Jangala kingdom came to be divided into Indraprastha for the *Pandava* and Hastinapura for the *Kaurava*.

Kuru Jangala was named after their ancestor Kuru. *Jangala* means a slightly arid region – probably more like a rain shadow region, but certainly not a desert. It was called Kuru Jangala as this arid region was cultivated and made inhabitable by the King Kuru.

After 5000 years, the topography of the land still shows the Khandavaprastha region to be a sugarcane belt and the eastern region or the Hastinapura area continues to be an area of somewhat lesser rainfall. Even after 5000 years of elapsed history, we see these distinct geographical, topographical and vegetative features continuing through the times.

What exactness we see here, not just in names chosen for the lands, but also in its history!

# Kurukshetra - The Land of Battles

Kurukshetra on the banks of the erstwhile flowing Sarasvati River, was witness to the fierce battle that once was fought in its lap. This Kurukshetra of *Mahabharata* period is traced to the Kurukshetra district of today, north west of New Delhi, in the state of Haryana.

As one goes around this city, from one historic spot to another, one gets a feeling that this city is trying to tell us something.



Kurukshetra town and Brahma Sarovar at Kurukshetra

## ON A WAR TRAIL

Kurukshetra was the battleground where the Great War was fought between the *Pandava* and the *Kaurava* armies. It was the land cultivated by King Kuru, the ancestor of the *Pandava* and *Kaurava* and hence got its name Kurukshetra. *Kshetra* means place.

The *Mahabharata* text describes this region Kurukshetra vividly as the region bound by the rivers Sarasvati and Drishadvati.

*Dakshinena sarasvatya uttarena drishadvatim*

*Ye vasanti kurukshetre te vasanti trivishtupe*

-Mahabharata III. 81. 175

## THE WAR THEATRE

For a battle of this size, with such a large army, a large war theatre is essential for the battle to take place.

### *Riverscape and Forestscape*

The area of the war theatre was between the then flowing rivers, Sarasvati and Drishadvati.



#### Kurukshtera battle field region

In this region, there were a few groves, forests and rivers. Some of the prominent ones mentioned in the *Mahabharata* text being,



#### *Places identifiable today*

Most of these rivers, forest locations, villages and towns of this region are identifiable today in the same Kurukshetra region. Their present names, though morphed in the elapsed time of 5100 years, still bear resemblance to the names in the *Mahabharata* days.

In village after village, the local lore speaks of the part their village had played in this major war - a continuity that can be seen on ground, to this day.

#### *Bhor Saidan – a Camping Site*

Bhor Saidan, is a village on the outskirts of present day Kurukshetra city. It is a site where a fair amount of excavations have been undertaken. These

excavations reveal this village to have been located on the banks of the river Sarasvati.



Bhor Saidan, Sarasvati River bed



At Bhor Saidan site, studying the layers of silt deposited by the Sarasvati

- Author D.K. Hari with Dr.Rajesh Purohit, Curator, Krishna Museum, Kurukshetra, who has done extensive work on tracing Sarasvati River

Based on descriptions in the *Mahabharata* legend, this archaeological site has been traced to the camping site of the Kaurava hero, Bhurishrava.

### ***Jyotisar***



Sculpture of Krishna giving ***Gita Upadesha*** at Jyotisar and ***Gita Upadesha Sthal*** – Plaque identifying this spot as the location where the ***Gita*** was delivered

*Jyoti* means light, enlightenment. *Sara* means essence.

Jyotisar is a village on the outskirts of the present day city of Kurukshetra. This village has been traced to the location where Krishna delivered the *Bhagavad Gita* - an essence of the workings of the Universe and how to live a purposeful and objective life.



*Sarovar, Lake at Jyotisar*

This Jyotisar Lake is now used as a backdrop for a sound and light show produced and conducted by the Archaeological Survey of India, narrating the events of the Kurukshetra war.

### ***Bheeshma Ghat***

Not far from Kurukshetra is the place traced as the location where Bheeshma lay on his bed of arrows after being wounded in the battle.



Bheeshma **Kund** at Bheeshma **Ghat**,  
where Bheeshma lay on his bed of arrows



Bana Ganga – the water tank identified with the water fountain  
created by Arjuna piercing the ground with his arrow



Bheeshma statue at Bheeshma **Ghat**

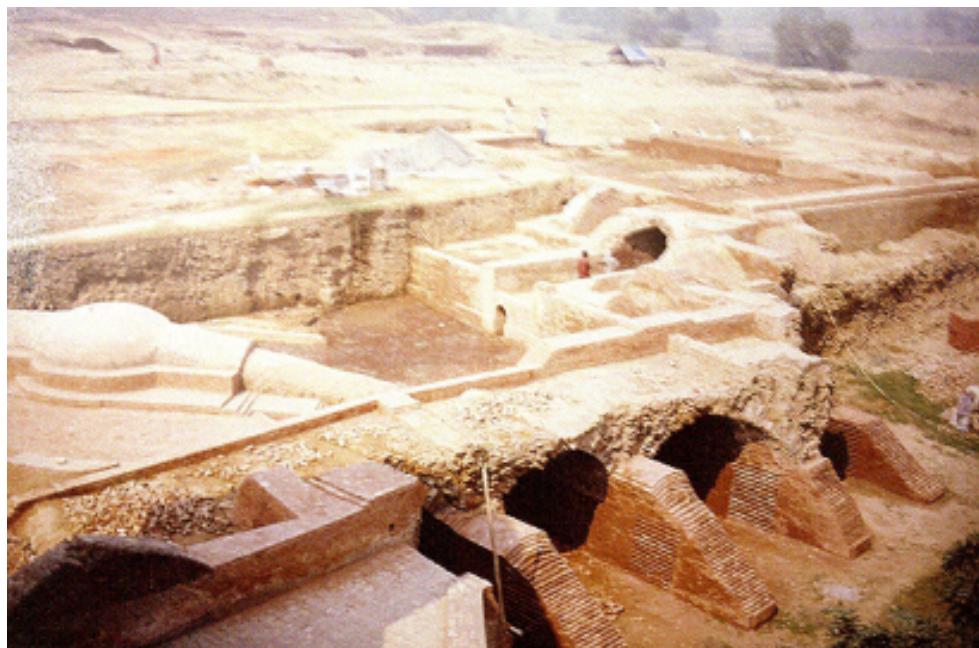
## **Sthaneshwar**

King Harshavardhana who ruled these parts around 600 CE, had a palace at Sthaneshwar, by the banks of the Sarasvati. The city of Sthaneshwar was part of the region of Kurukshetra and various kings have ruled from there. This region of Kurkshetra has been well identified and known since 3000 BCE to date.



Sthaneshwar city of Harshavardhana by Sarasvati River

- artist impression



Excavation at Sthaneshwar today

## *Kurukshestra Today*



Krishna Museum, Kurukshetra

Today one of the landmarks at Kurukshetra to remind us of Krishna and His presence there over 5000 years ago is a well maintained museum, the Krishna Museum, setup by the Archaeological Survey of India.

Archaeological Survey of India's choice of this city as the location for a Krishna Museum and choice of Jyotisar for a sound and light show on the war and *Gita Upadesha*, go to emphasize that by their research they have identified this city of Kurukshetra as "the Kurukshetra" of yore and Jyotisar as the location where *Bhagavad Gita* was delivered.

It will be to our advantage to see what we can learn from Kurukshetra, as it has been referred to as "Dharmakshetra" from *Mahabharata* times itself, meaning "a land where righteousness and duty eventually prevailed".

## THE FIERCE WAR

The Kurukshetra war even by today's standards sends shivers down the spine for the scale of the war, the destruction wrought about and the fierceness with which it was fought.

Based on the count and details of the battalions provided in the text, it comes to light that it was a major war in which over 47 lakh people took

part. *Lakh* is an Indian unit for counting and 1 *lakh* stands for one hundred thousand, 100,000. So, 4.7 Million people fought this bloody battle at Kurukshetra.

## NUMBERS INVOLVED IN KURUKSHETRA BATTLE

The Kurukshetra battle between the *Pandava* and *Kaurava* army can be rightfully termed as one the greatest and bloodiest battles of the ancient world.

The range of weaponry used in this battle is indeed amazing. The number of people involved in this 18 day battle and those who died at the end of it, are shocking.



*Akshohini* of Kurukshetra War

NUMBER OF PEOPLE FOUGHT	
Infantry	19,68,300
Cavalry	11,80,980
Elephants 2 persons on top	7,87,320
Chariot 2 persons on top	7,87,320
Total persons	<u>47,23,920</u>

The number of people who took part in the battle

	Horses - Cavalry	11,80,980
	Chariot <small>2 horse per rath</small>	7,87,320
	Total Horses	<u>19,68,300</u>
	Elephants	3,93,660

Animals used in the War

The *Mahabharata* text has detailed descriptions of various *Asthra*, weapons used in the Kurukshetra war.



Wide Range of Weaponry - *Asthra* used in the Battle

In all these descriptions, the *Asthra* appear to be some very advanced weaponry.

**So, does all this imply that the Kurukshetra war of the *Mahabharata* period could have actually been a much bigger war using advanced weapons and arsenal?**

## **WERE NUCLEAR ARSENAL USED DURING THE WAR?**

The answer to this question that perplexes many of us, can perhaps be found in the following pointers.

Dr. Robert J. Oppenheimer, the nuclear physicist of America, responsible for the development of the first Atomic Bomb in the modern world, while witnessing the first nuclear test explosion in 1945, in New Mexico Desert quoted the verse 11.32 of the *Bhagavad Gita* as,

*"I am become death, destroyer of the world".*

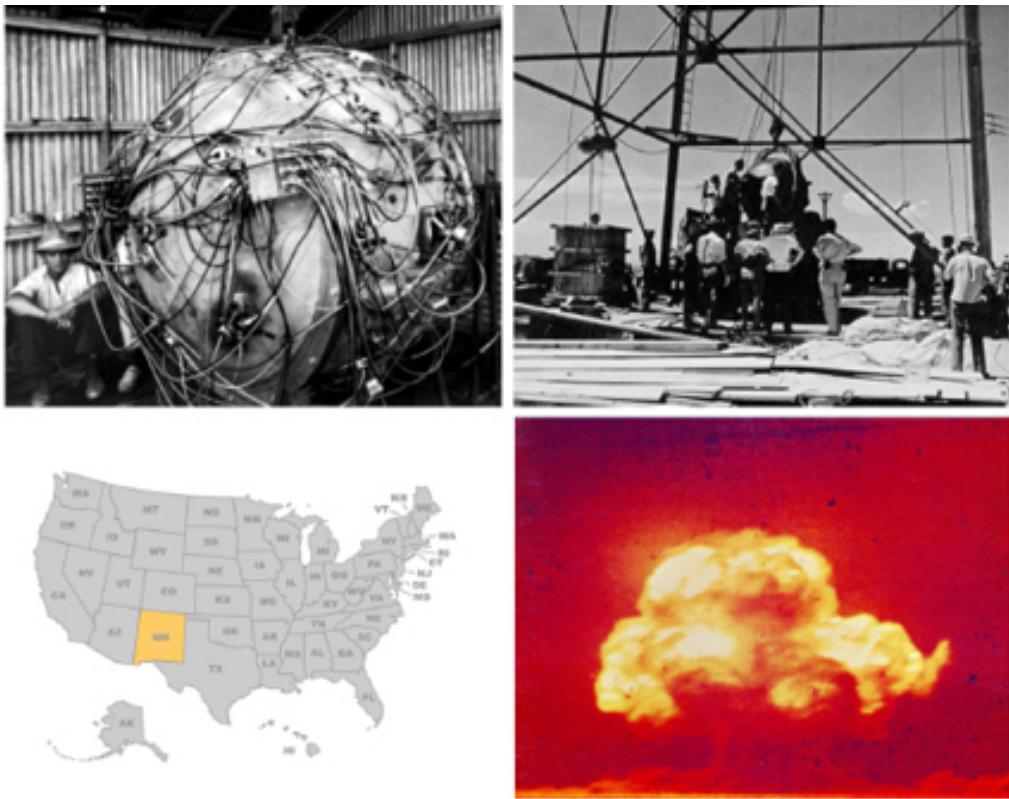
श्रीभगवान्‌वाच

कालोऽस्मि लोकक्षयकृत् प्रवृद्धो लोकान् समाहर्तुमिह प्रवृत्तः ।  
अहतेऽपि त्वां न भविष्यन्ति सर्वे येऽवस्थिताः प्रत्यनीकेषु योधाः ॥३२॥

“The Supreme Lord said: I am time, the mighty destroyer of the world, out to destroy all mankind. Even without your participation all the warriors standing arrayed in the opposing armies shall cease to exist.” (*Bhagavad Gita* - chapter 11 verse 32)



Dr. Robert J. Oppenheimer



The Manhattan Project, Trinity Explosion at New Mexico - world's first nuclear explosion - Photos courtesy US National Archives and Record Administration and Los Alamos National Laboratories

The discourse – *Bhagavad Gita* got the Kurukshetra war of *Mahabharata* underway and this particular phrase which Dr.Oppenheimer quoted, speaks of the power to destroy.

Dr. J. Robert Oppenheimer, director of the Manhattan Project, the first nuclear test explosion, learned *Samskrt* in 1933 and read the *Bhagavad Gita* in the original. He has cited it as one of the most influential books to shape his philosophy of life.

The quoting of the *Bhagavad Gita* verse by Dr.Oppenheimer does not seem to be a one off statement. There are pointers that make one wonder whether Dr.Oppenheimer was quoting the *Gita* at the moment of the first nuclear test explosion of the modern world, from a philosophical perspective or whether he was perhaps quoting it to imply some other connection or similarity.

Dr. Oppenheimer conveys a plausible connection, when he articulates his view on the nuclear capability of an ancient civilization.

Shortly after the Manhattan Project, Dr.Oppenheimer, addressed the students of the Rochester University. Here one of the students asked him a pointed question as to whether his experiment was the first nuclear explosion of the world. He responded thoughtfully as

*“Well .... Yes, in modern times of course ... ”.*

This cautious, measured response of Dr. Oppenheimer, which has been recorded for posterity, makes one wonder if Dr.Oppenheimer believed that in an earlier civilization, there could have been nuclear capability.

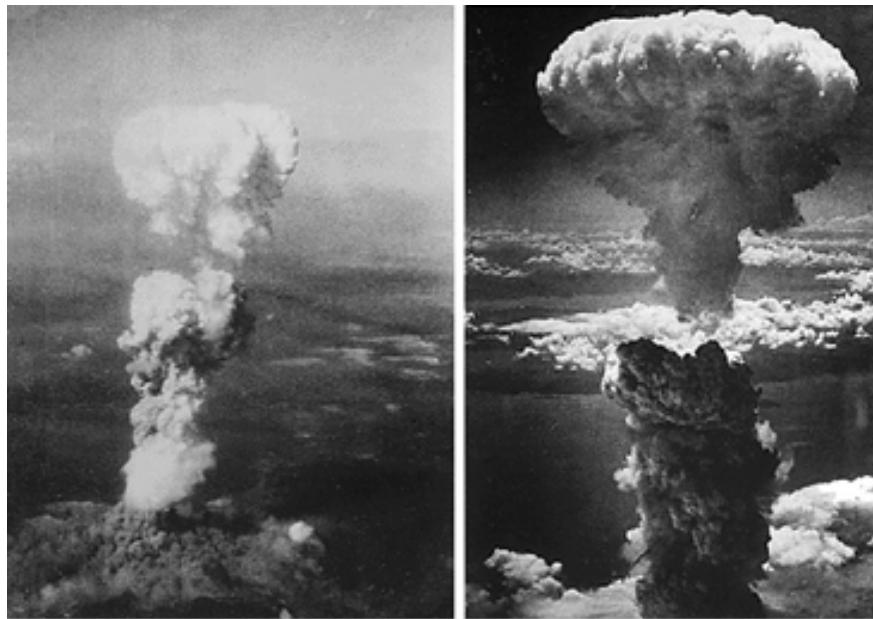
By earlier quoting the *Bhagavad Gita* during the test explosion, was he perhaps pointing to the Indian civilization as having had that capability?

This thought is further substantiated by the vivid descriptions of the *Asthra* and their capabilities.

The texts describe the special manner in which these *Asthra* were invoked, the number, the colours, the shapes, the rapid speed of individual discharges from each *Asthra*, the extent of destruction they had caused as well as the awe in which they were held, when compared to the regular bow and arrow. All these make them appear to be special weapons of mass destruction, beyond our comprehension today.

### **Were they based on nuclear technology or something even beyond?**

The dropping of the atomic bomb on Nagasaki and Hiroshima during World War II are the nuclear bombings we have encountered in the modern world till date. Until then, descriptions of such bombs and their destruction were unheard of and would have been passed off as a figment of imagination.



Atomic bombing of Hiroshima and Nagasaki  
Photos courtesy US National Archives and Records Administration

It is to be noted from the account in the texts, that not everyone who took part in the war had the *Asthra*. The common soldier used only *Shasthra*.

*Asthra* are defined as those that were ejected from a holder. They had to be launched and inflicted damage some distance away. From this definition, *Asthra* seems to be equatable with the missiles of today.

*Shashtra* are defined as those weapons that were handheld such as mace, sword, spears, bows and arrows etc.



#### *Shastra*

Very few persons seemed to have had *Asthra* - notable amongst them, on the *Pandava* side, Arjuna had such *asthra* and on the *Kaurava* side, Karna had them.

Both Arjuna and Karna are described in the text as level headed warriors with great will power, patience, tolerance and sagacity. They had obtained these *asthra*, only after great penance and austerities.

## **GROUND PROOF OF AN ATOMIC WAR?**

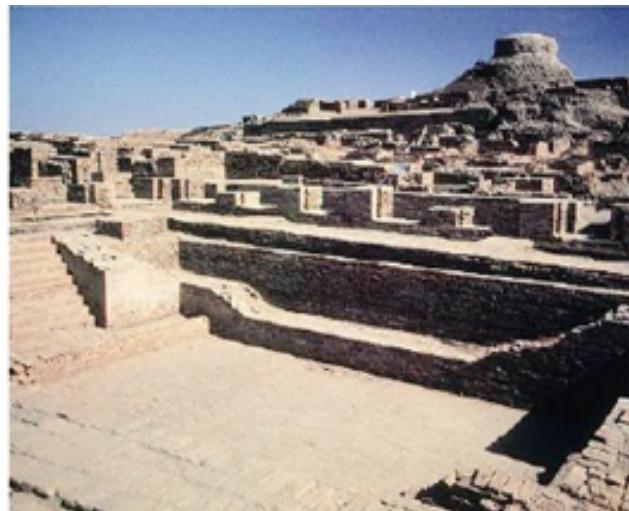
All pointers so far, make us ponder if really a limited nuclear war was fought at the Kurukshetra battle. Many have commented for and against on this aspect.

But all studies seem to have halted at a superficial level, leaving this as a still unanswered question.

Two European researchers David Davenport and Ettore Vincenti, seem to have done some ground work in and around Mohenjodaro. Not many

details can be found of their work or its acceptance, but their findings seem to be very interesting and plausible, warranting further attention.

In one of their excavation sites, they claim to have found evidences that suggest that the ancient town may have been ruined by a powerful blast. They found big strata of clay and green glass crystallized, fused or melted at its identified epicenter and bricks around this epicenter were melted on one side, characteristic of an explosion.



Ruined town

Not much ground research has been done to validate these statements of the *Mahabharata* text or that of these two research scholars.

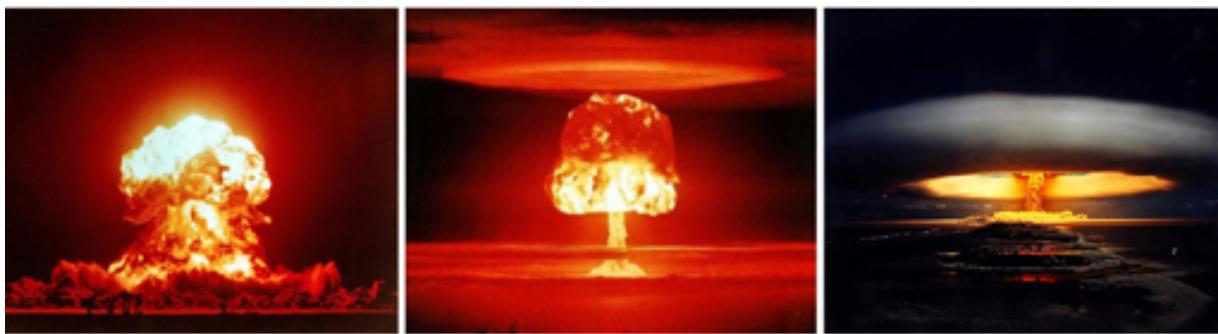
The services of IAEA (Indian Atomic Energy Agency), the National Physical Laboratory and similar such research institutions with expertise in nuclear sciences and other intradisciplinary subjects, may have to be enlisted to check for remnant signs of any nuclear explosion in the Kurukshetra war theatre.

## SOME POINTS TO PONDER

In parallel, the texts if studied seriously can yield a wealth of information on the weaponry, army formations and other details of the Kurukshetra war to give us better insights into this war and the fallout of the war.

If it does turn out to be a major war fought with all those advanced technologies, then it is indeed a wake up call for all of us, in this age of nuclear armaments, to study and understand this war and draw lessons from it.

First, it will be a shot in the arm for the nuclear disarmament and global peace program. Especially since the current generation seems to be slowly forgetting the long lasting impact and sufferings of the people post the bomb droppings at Hiroshima and Nagasaki, not having seen it first hand.



Nuclear Tests of the Modern World

Second, it brings up an intriguing thought!

There seems to be a big lesson and reminder in store for all of us, on how large scale destruction can affect not only the present but future generations of a civilization.

If mankind was indeed in possession of such advanced technology during the Kurukshetra war days, 5000 years ago, then obviously he seems to have lost it during that war or soon after and has had to make a fresh start in terms of technology to reach where we are today.

## **KURUKSHETRA, A REPEATED BATTLEGROUND**

Another interesting fact about Kurukshetra emerges as we study history across time.

Kurukshetra lies in the plains between the fertile Punjab on the west and the Yamuna-Gangetic plains on the east. Hence, these plains have been an

ideal battleground through the times.

### ***Kurukshetra War***

In the negotiations between the *Kaurava* and the *Pandava*, Kurukshetra was selected as the site for their clash, the great battle, the Kurukshetra war. This was a choice made in 3100 BCE.

A town close to the present day district of Kurukshetra is Panipat, which is part of the Haryana state. This Panipat traces its name and fame to the Panipat or Panduprastha of the *Mahabharata* period, along with Vyagprastha or Baghpur, Sonepat or Sonipat, Tilpath and Indrapath which became Indraprastha. This Panipat, which was a part of the Kurukshetra then, has had a bloody history ever since.

### ***First Battle of Panipat***

In 1526 CE, when the Mughal chieftain Babar attacked the plains of India, Ibrahim Lodhi, the then Sultan of Delhi, decided to put up defence in the plains of Panipat, the same plains of the Kurukshetra region. Babar won this battle and with that began the Mughal rule in India. This is termed in history as the first battle of Panipat.

### ***Second Battle of Panipat***

Panipat became the battleground once again in 1556 CE when King Hem Chandra Vikramaditya, popularly known as Hemu, who had taken over Delhi after the death of Sher Shah Suri who had in turn defeated Mughal ruler Humayun. Hemu clashed with Humayun's son, Akbar who was returning to win back Delhi. Hemu was killed in this battle and Delhi went back into the hands of the Mughals. This is known in history as the second battle of Panipat.

### ***Third Battle of Panipat***

In 1761 CE, there was yet another battle fought at Panipat when the Marathas who had gained control over much of central and northern India, all the way upto Lahore, Peshawar, Multan and Kashmir, from the Mughals clashed with the Durranis of Afghanistan there. The Durranis had come to support the Mughals in response to their plea to halt the threat from the Marathas. The Marathas lost this battle when the Nawab of

Awadh joined the Durranis and with this started the slow decline of the Maratha rule over most of India and paved the way for the entry of the British at a later date. This battle went down in history as the third battle of Panipat.

### ***Same Plains, Same Battlefield***

Even after about 5000 years, the plains were the same, the battlefield was the same too.

In the times of the *Mahabharata*, Kurukshetra was an important town. Through elapse of time, in 1500s, the bigger town was Panipat in the same plains and the battles fought there came to be called the Battle of Panipat by historians.

From all these crucial battles of India, for Delhi or Indraprastha to be precise, Panipat or Kurukshetra has been the default choice as the battleground. From a study of the terrain of India, we see that this region would have been the ideal battleground due to its proximity to large rivers such as the Sarasvati and the Drishadvati and due to it being the first plains one would encounter coming from the north, northwest.

Both terrain and territory also pin Kurukshetra of today to the Kurukshetra of the *Mahabharata* period.

# Many More Cities and Sites Awaited

We find that the region around Delhi, the capital of India today, had also been Indraprastha and Hastinapura, the capitals of the *Pandava* and *Kaurava* respectively during the *Mahabharata* period. Around Delhi, we also find towns and cities bearing connect with the towns described in the *Mahabharata*. They bear names that bear significance to events that were described to have taken place in those towns. They are also located in the same direction, same region, at the same distance as they should have been based on descriptions in the *Mahabharata* text.

## Is this just a mere coincidence?

### *Gurgaon*

The bustling new suburb of Delhi, Gurgaon, is connected with Gurugrama, the village (*grama*) of the Guru Dronacharya, who had his training academy there, during the *Mahabharata* times. This name Gurugrama has now become Gurgaon.

### *Karnal*

Karnal is the place where Karna camped in the outskirts of the Kurukshetra war theatre waiting for his chance to join the battle. Karna had refused to fight under the commander-in-chief Bheeshma on certain differences of opinion. This area and the lake there by which Karna camped gets its name Karnal, from Karna.

## FOOTPRINTS ALL OVER INDIA AND AROUND

The sites that have been correlated with present day geography are not limited to North West part of India alone.

## **Panchala Desa**

The Panchala kingdom was to the east of Hastinapura. It is from Panchala that Panchali, also called Draupadi, who later married the five *Pandava* princes, came from.

Since she came from Panchala, she was called Panchali. As she was the daughter of King Drupada of Panchala, she was also called Draupadi. Her given name was Krishnaa for she was dark in complexion.

It is here, in this Panchala *Desa*, in the court of Drupada, in the archery competition, that Arjuna won the hand of Draupadi.

Today, this area has been identified with the districts of Bareilly and Farrukhabad in Uttar Pradesh state. Some of the sites excavated in this region include Kampilya and Ahichchhatra, in the towns called Kampil and Ahichchhatra respectively even today.

They were first identified as regions of the Panchala *Desa* of *Mahabharata* times by Sir Alexander Cunningham between 1860 and 1870s based on the discovery of an ancient fort and the tallying of their location and description with that in the *Mahabharata* text. Since then various archaeologists have taken up excavations there and ancient monuments are being unearthed.

Ahichchhatra has been identified as the capital of the northern part of Panchala which was given away to Dronacharya by King Drupada based on an agreement they had entered into when young. The name *Ahichchhatra* means a snake canopy.

Kampilya has been identified as the capital of the Southern part of Panchala which was ruled by King Drupada.

These two capitals and regions of Panchala *Desa* are separated by the flowing Ganga River.



Panchala Kingdom



Tank called Draupadi Kund, excavated at Kampil  
- Kampilya of Panchala in Mahabharata times

### *Anga Desa*

*Anga Desa*, the kingdom given to Karna by Duryodhana has been identified with the region of South Bihar. It was an extension of the Hastinapura kingdom. Being far flung but still a part, it was called *Anga* which means a part.

### *Naga Kingdom*

Arjuna, in his travels, went far east to the land of the Naga and the land of the jewel Mani, where he married the Naga princess Uloopi and begot their son Iravan. Even today the Naga tribals of India's far eastern region, namely Nagaland, Manipur in the Khasi-Gharo hills, trace their ancestry to this *Mahabharata* period and beyond.

### *Swargarohini Mountains*

In the north, nestled among the Himalaya, is the pilgrim town of Badrinath. This town is an easy point of reference for the Swargarohini mountains, as beyond this town, lies this range from where the *Pandava*

along with their wife Draupadi, renounced their lives, 36 years after the *Mahabharata* War.



Path to Swargarohini



Badrinath and Swargarohini range

*Swarga* denotes heaven and *arohana* means to climb. Literally translated, *Swargarohini* means the place from where the *Pandava* ascended to *Swarga*.

## ***Mana, where the Mahabharata was composed***

Close to Badrinath is a village called Mana. Mana is the last village on the Indian side of the border between India and Tibet.

In this Mana village is Vyasa *Gufa*, the cave of Vyasa. *Gufa* means cave. This cave could be a remnant from the *Mahabharata* era. This cave continues to be venerated by many visitors to this day.



Vyasa *Gufa*

This Vyasa *Gufa* is close to a river which flows by this Mana village which to this day is referred as Sarasvati River. There is a river flow there even to this day.



Sarasvati River at Mana

### ***Footprints in Afghanistan - Gandhara***

Gandhara *Desa* is where Gandhari, the wife of *Raja Dhristarashtra* and the mother of the *Kaurava* came from.

Gandhara has been identified as Khandahar which is in present day Afghanistan.

This place lies on the trade route between the ancient Indians and Persian-Farsi civilization. The trade route was then called Uttarapatha, the northern path. This implies that there must have been another trade route to the south.



Trade Route between ancient Indian and Persian civilizations

The primary regions of the Gandhara kingdom then were

- the present SWAT valley, then known as *Suvastu* in *Samskrta* (*Rig Veda* 8.19.37),
- the present day region of Peshawar valley, then known as Purushapura and
- Takshasila, the suburb of Islamabad, the present day capital of Pakistan

Prince Shakuni from this Gandhara kingdom, the brother of Gandhari, was one of the key counsellors for Duryodhana the eldest *Kaurava*.

### ***Footprints in Pakistan – Takshasila and Katasraj***

## Takshasila

The Takshasila city of erstwhile Gandhara now lies in Pakistan. It has been a University town since those times. The Takshasila universities were finally destroyed by the Huns in 455 BCE.



Ruins at Takshasila after the fire of 455 BCE  
Takshasila today

From *Mahabharata* times to 455 BCE, i.e., for over 2500 years, Takshasila had flourished as a University town. Takshasila was also situated along this trade route and had attracted foreign students from all over.

After independence, the archaeologists of Pakistan along with a range of international archaeologists have excavated many a towns of this ancient Gandhara kingdom and have come out with telling artifacts of those times.

These, along with the *Mahabharata* text and findings of the Indian archaeologists from the sites in India could help piece together the details of not just Gandhara but of the whole *Mahabharata* period.

## Katasraj



When the five Pandava brothers were in exile, they spent time roaming in the forests. One day, the youngest of the five, Sahadeva was asked to bring water from the lake nearby. When he did not return, Nakula the next in line was sent. When he too did not return, it was Arjuna's turn to find out what had happened and then Bhima went in search of his other brothers when Arjuna the great warrior too did not return. Finally, when Bhima too did not return, Yudhishtira set out in search of his brothers. Near the lake he encountered the bodies of his brothers lying still on the ground. About to scoop some water to revive them, he was stopped in the act by a Yaksha.

The Yaksha told Yudhishtira how he had rendered his brothers still as they had not answered his questions but had wanted to fetch water from the lake that he was guarding. He posed a challenge to Yudhishtira saying that if he answered his questions correctly, his brothers would be revived and he could take water from that lake.

A volley of questions and answers followed between the Yaksha and Yudhishtira. In the end, satisfied with Yudhishtira's answers, the Yaksha restored the four Pandava brothers back to consciousness and blessing them all, permitted them to drink water from the lake.



*Yakshaprashna*



The tirade of questions and the intelligent answers from Yudhishtira form a section called the *Yaksha Prashna* in the *Mahabharata* epic.

*Ahanyahani bhutani gacchantiha yamalayam  
Seshah sthavaramicchanti kimasharyam-atah param.*

Day after day, an unending series of living beings repair to the abode of death. Those that remain behind behave as if they were eternal. What is more marvellous than this ?

Yudhishtira's answer to one of the questions posed by the *Yaksha*

The Katasraj temple and the adjoining lake in Chakwal district of Punjab province in Pakistan are identified and revered as the location where the *Yaksha Prashna* event took place 5100 years ago. Based on descriptions in the *Mahabharata*, the *Pandava* have been traced to have spent substantial period of time around Katasraj.



Katasraj Temple ruins and the adjoining lake

The name Katasraj is regarded to be the morphed form of Katakshraj. *Kataksha* means a benign look. It comes from the word “*Kat*” meaning rain and “*Aksha*” meaning eyes. *Kataksha* is thus eyes that shower grace.

The place where the *Yaksha* showered his benevolence on the *Pandava* thus came to be called Katakshraj, Katasraj and is home to an ancient Shiva temple.

Al Biruni, the Persian chronicler who visited India around 1032 CE, documents in his work “*Kitab-ul-Hind*” that he spent time in Katas learning *Samskrta*, science and *Vedic* traditions. This implies that even till 1000 years ago this site was revered and treated as a knowledge centre.

Archaeological Survey of Pakistan recognizes this as a site belonging to the *Mahabharata* period and has recently sought World Heritage status for this site to restore it.

### ***Tracing Footprints to Sri Lanka Too***

When the *Pandava* were in exile, Sahadeva and his nephew, Ghatotkacha, the son of Bhima, travelled all the way down upto Rameshwaram, with Ghatotkacha opting to walk over the *Nala Setu* bridge into Lanka to meet his distant cousins, the *Rakshasa* kings who were descendants of Ravana and Vibhishana. More on this is given in our book “**Ramayana In Lanka**”.

### *A Widespread Trail*

We see that right from Gandhara in the west, Swargarohini mountains in the snow clad Himalaya in the north, Manipur in the east and Rameshwaram in the south, the sites of the *Mahabharata* period can be traced all over the land.

It is not just a single stray find but multitude of finds across the land. All these places, their locations, their legends, their archaeology and their mention in texts, corroborate, leading us to the conclusion that these were the same sites mentioned in the *Mahabharata* and they have had a continuity of memory and tradition for over 5100 years.

## **STEPS AHEAD FOR ARCHAEOLOGY**

Archaeology has not penetrated into the depths of these regions yet.

**One is left wondering what might be revealed from these regions when exhaustive archaeological excavations are conducted there and what is the story they will tell?**

This correlation, in plethora of sites, between the *Mahabharata* period to the present day geography, with the continuity of distinct legends of over 5100 years for each of these distinct places, hits us stark in our face, which we just cannot ignore.

It is not one or two stray incidents but a multitude of them.

Many archaeologists of the Archaeological Survey of India (ASI) during colonial period and post independence as well as international archaeologists have all played their part in identifying a few places and they have all come up with clinching evidences for each of these places.

But many of their reports are yet to find their way into public domain, create public awareness of the significance of the find and its implications.

What has been lacking is a comprehensive effort to link each of these places cogently to the stories of the period, customs of the place, artifacts excavated from that region and to document them under one cohesive project to trace the history of India and the *Mahabharata*. Such an effort will,

- help bring out the significance of these places from an archaeological perspective and set the stage for a systematic study of India and its history through the ages,
- create varied opportunities for tourism, education, careers in archaeology, history, traditional knowledge and many more.

This list of places is endless. What we have mentioned here is just a sampling.

Going about this should be a focused, separate effort that needs to be undertaken with the joint collaboration of

- traditional epic specialists familiar with the geography mentioned in the *Mahabharata* text and other *Purana*,
- archaeological experts,
- new and advanced technologies such as satellite mapping as used in the case of studying Ayodhya and
- research collators who can systematically coordinate amongst the teams and collate all their findings to present the complete picture and a wholistic analysis.

# Marine Archaeology in Dwaraka

Many underwater explorations have been carried out in the last 50 years to establish the identity of the submerged Dwaraka. Indian archaeologists such as the notable Dr. S.R.Rao, have conducted marine archaeology expeditions of the Dwaraka coast in the Arabian sea. In fact Dr.S.R.Rao had conducted 12 extensive underwater search expeditions between the years 1983 and 1990 to place before the world incontrovertible evidence of a pre-historic settlement on the sea bed.

## FIRST MARINE EXPEDITION AT DWARAKA

The first of these expeditions were carried out in 1963 by the eminent Professor H.D. Sankalia, Department of Archaeology of Deccan College, Pune and the Government of Gujarat.

Professor Hashmukh Dhirajlal Sankalia is truly considered the pioneer in this field in trying to establish the existence of submerged Dwaraka.



Prof. H.D. Sankalia and Deccan College, Pune

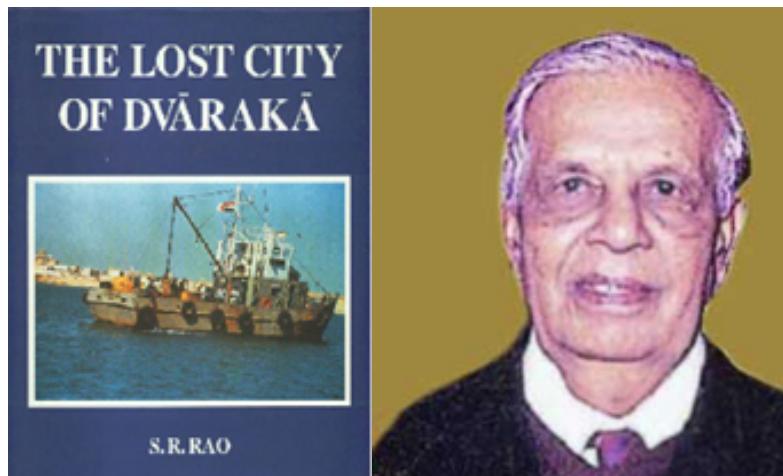
## SECOND MARINE EXPEDITION

Starting from 1979, Dr. S.R. Rao initiated the second round of marine excavation which went on for about 20 years.

For this consistent effort, Dr. S.R. Rao has been called the father of Marine Archaeology in India. These were done in collaboration with the National Institute of Oceanography. More than 12 expeditions were undertaken between the years 1983 to 1990.

Dr. S.R. Rao, in his book, “**The Lost City of Dwaraka**”, published in 1999, writes about his undersea finds.

*“The discovery is an important landmark in the history of India. It has set to rest the doubts expressed by historians about the historicity of Mahabharata and the very existence of Dwarka city.”*



Dr. S. R. Rao

## LIMITING FACTORS

While there was no dearth of energy, enthusiasm, expertise and evidence, there was a dearth of something else. It was funds.

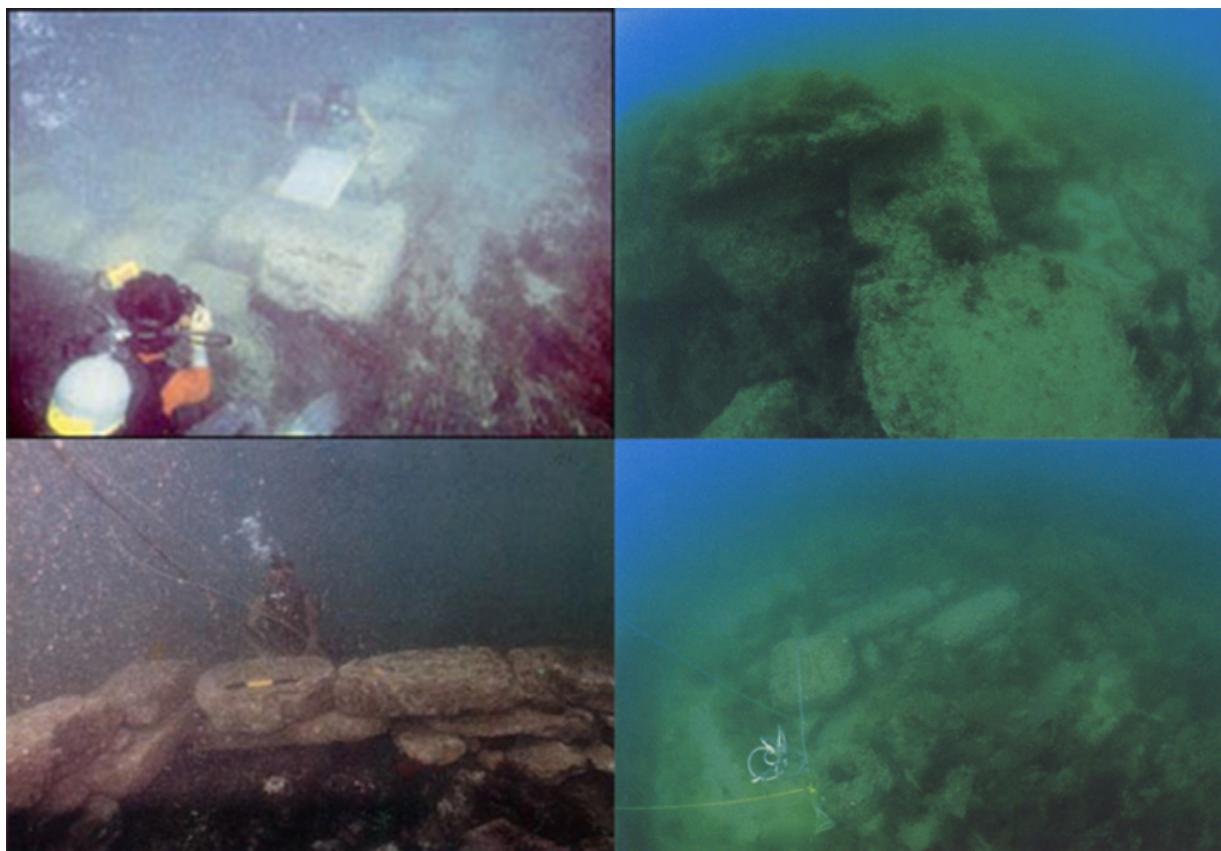
Sadly, for each of these expeditions, the team had funds that could take them through only for about 20 days of exploration. Funding was a major limiting factor. The team was faced with other constraints too, such as lack of advanced boating and undersea exploration equipment as well as the impediments thrown in by Nature.

Exploration could be done only during non-monsoon seasons as this region experiences severe rains during monsoon. Also due to the undersea currents prevalent in that region, the waters there are always muddy, bringing down underwater visibility considerably.

Despite these constraints, these expeditions have thrown up incontrovertible evidence of a very ancient civilization submerged under the sea.

### ***No Recognition Still***

For this stupendous effort, Dr. Shikaripur Ranganath Rao has been acknowledged internationally, but his effort is yet to get its due recognition in India.



## **THIRD MARINE EXPEDITION**

The third and ongoing round of expedition, which started in January 2007, has been initiated by the Archaeological Survey of India.

The National Institute of Oceanography's marine archaeological excavations off the coast of Dwaraka had thrown up a large number of randomly scattered stone structures, semi circular, rectangular or square in shape. The structures were found at depths ranging from 6 metres in the intertidal zone i.e., the area in the foreshore, where the floor is exposed during low tide and gets covered with sea water during high tide i.e., the area between tide marks. A number of stone anchors were also unearthed, which suggested that Dwaraka had been a busy port.

All this, according to Mr. Alok Tripathi, Superintendent, Underwater Archaeology Wing of Archaeological Survey of India, spurred on this third expedition.

In his words,

*"To study the antiquity of the site in a holistic manner, excavations are being conducted simultaneously both on land close to the Dwarakadhish Temple and undersea, so that finds from both the places can be correlated and analyzed scientifically."*

He further goes on to state,

*"This is a significant project as this will be first time that the ASI will go in for land, shore and undersea operations here.*

*So far, The National Institute of Oceanography – Goa, has been carrying out extensive research into Dwaraka's history but it has limited itself to undersea excavations.'*

This is indeed a very welcome development although late by 40 years.

This comprehensive approach of parallel excavations on land, shore and sea, should give us a wholistic understanding of the architectural and engineering achievements of the people of ancient Dwaraka and the times of Krishna.

The Indian Navy has also been requested by the ASI to join them in this third expedition and help in the deep sea exploration.

To quote ASI,

*“The site earmarked for undersea excavation covers a span of 500 square kms from the shoreline.*

*The excavation will be conducted to a depth of 315 metres.*

*This will be a time consuming process.*

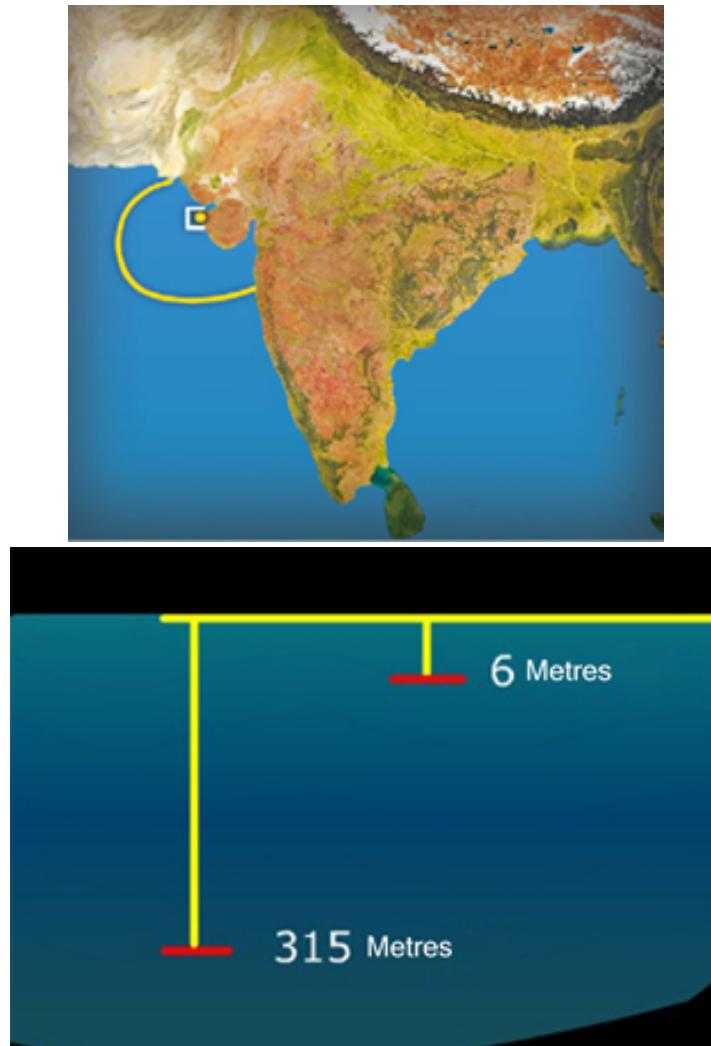
*Initial results will dictate how much time will be required for conclusive research.”*

It is heartening to note the seriousness of ASI evident in its involving the Indian Navy.

## POTENTIAL IN THE DEEP

The range of area of about 500 square kms and to a depth of over 300 metres, is a wide spread area indeed and will need meticulous planning and execution. If done thoroughly, the possibility of finding artifacts capable of shaking the bedrock of present day, limited view of Indian history, is immense.

One waits with bated breath to see what is going to surface from this third expedition.



The range of search in the sea

This third round of excavation has been warranted because the first two rounds of excavation have clearly revealed beyond any doubt, the submerged city of Dwaraka, which was the town of Krishna.

This combined team survey is now needed, all the more, as marine archaeology is growing out of its infancy.

If the teams of Prof.H.D.Sankalia and Dr.S.R.Rao could unearth so many artifacts with the basic equipment of those bygone decades, then the advances made in diving and marine archaeology should be leveraged when such a potent archaeological wonder is just a dive away.

Today remote sensing equipments are available for studying from space, earth based structures, both on ground and below the sea. It was photographs from satellites that have shown us the dry bed of the once flowing Sarasvati River. The same satellites are capable of giving us photographs of the submerged ruins under the sea, for a more pin pointed marine exploration.

Better quality submarines are now available to conduct better underwater searches.

More advanced sonar equipments are also available.

Underwater photography equipment has substantially improved in terms of resolution and water proofing technology.

All these advanced equipment and techniques need to now be used to solve the mystery of Dwaraka.

The names of cities that have flourished in this region can be gathered from the excavations of marine archaeologists, traditional archaeologists, traditional lore and history as,

- Kushasthali
- Shankhodara
- Antaradvipa
- Varidurga
- Bet Dwaraka
- Dwaraka

This region has had many cities which seem to have been devoured by sea incursions at various points in time, some prior, some during Krishna's lifetime and some others, later.

So, even if one city is found now, there is a high probability that we could find the other cities too underwater, at different levels, in different places, in the same vicinity.

## SISTER CITY OF DWARAKA?

Sections of a long and linear retainer dyke wall, well inside the sea, off the Konkan coast, between Velneshwar and Shrivardhan, have been identified. It is an undersea, manmade wall that is 24 kilometres long. Based on the fluctuations in the sea level, this wall has been estimated to have been built 8000 years ago, around 6000 BCE by a civilization that lived along the coast and wanted to keep off the advancing sea.



Undersea wall near Shrivardhan along Konkan coast

Similarly, in Gulf of Cambay, on the west coast of India, remnants of a city that went underwater have been found. The submerged city has been dated to 10,000 to 12,000 years ago.

With such a wealth of archaeological sites just along the coast, it is sad that one does not see sufficient interest in these sites nor sufficient diving expeditions to get more data on these civilizations.



Gulf of Cambay

On the potential boost of these underwater finds on anthropology, history, culture, ecology and more importantly on tourism and economy, anything said will only be an understatement.

# Dwaraka – The Underwater Museum

## **KUSHASTHALI BEFORE DWARAKA**

Dwaraka, prior to the arrival of Krishna and His people, was a smaller town by the name Kushasthali. Kushasthali was a coastal settlement, occupied and fortified by Krishna and the *Yadava*, initially. Later, the new town Dwaraka was built by them at the mouth of the river Gomati, a distributary of the river Sarasvati.



Location of Kushasthali, Dwaraka

**Why did Krishna choose the Kushasthali region for establishing Dwaraka?**

**Why did Balarama and Krishna, after leaving Vrindavan, trudge across the land, all the way up to the edge of the land, near the sea, to establish the new town of Dwaraka?**

**WHY ALL THE WAY TO DWARAKA?**

The fact that Krishna and Balarama had to go all the way to Dwaraka to set up a new town, probably means that they did not find any other uninhabited, conducive stretch of land in between.

This suggests one of the two possibilities -

- that 5000 years ago, the land between Mathura to Dwaraka, was either already well occupied
  - or
- that it was barren and unfit for settlements.

### *A Populous Regions Then*

We have already seen how the Sarasvati River was flowing all the way across Punjab, Haryana, Rajasthan and Gujarat to join the sea in the coast of Gujarat. Thus this stretch of land between Mathura and Dwaraka, could by no stretch of imagination, have been barren.

Given that civilizations thrive on the banks of a river, this belt was a well populated, prosperous land.

That this entire stretch of land was populous and prosperous is now brought out by the fact that between Mathura and the Dwaraka region there were over 2600 towns which have been archaeologically excavated in the last couple of decades. Of these 2000 have been found flanking both the banks along the path of the erstwhile Sarasvati River.

This indicates that during that time the land was populous and populated.



The region from Mathura to Dwaraka with over 2600 Nagarā

## **EARLIER NAMES AND FORMS OF DWARAKA**

### ***Varidurga***

This region in the Harivamsa text is also referred to as Varidurga which was probably one of Dwaraka's earlier names. The word *durg* means "fort". This place was called Varidurga because of the topography of the place that defended it well. It had a hill on one side and sea on all other sides. This would have made it stoutly defendable and difficult for the army of Jarasandha to attack.

### ***Anataradvipa***

*Anatara* means "middle, inter", *Dvipa* is "an island". This area was like an intermediary island in the sea and hence was able to defend itself. This area also met the navigational needs of the *Yadava* then.

### ***Dronimukha***

*Droni* means a vessel, a tub, trough, basin, valley and *mukha* means mouth, entry/exit, front. *Dronimukha* thus implies entry/exit to a river basin. Ancient texts such as *Brihatkatha Kalpa Sutra* recommend setting up of sea ports preferably at a place where the river joins the sea.



The Gomati River in Dwaraka joining the sea

This place was beside the river Gomati situated at the place where the river Gomati flowed into Sindhu Sagar, Arabian Sea. This *Dronimukha* shape gave this place the advantage of easy access to the hinterland upstream of the river.

The river also supplied abundant drinking water through the year. The *Dronimukha* entrance to the land from the sea served as a gateway, *dwara* to the port.

It is probably because of all these reasons that Krishna chose to go literally to the land's end, to establish His kingdom.

## CHOSEN BY CHOICE

From this, it appears quite clear to us that it was not that Balarama, Krishna and the migrating *Yadava* people just took up any place to build their new capital, but seem to have scouted around for the best possible

location to meet their security as well as living and trading needs for the next few decades and more.

**Next question would then be - any land at the estuary of a river, where the river joins the sea would have been a premium land qualifying for an inland seaport. How did Krishna then manage to secure the land at Kushasthali, which was by the sea?**

## A FATHER-IN-LAW'S GIFT?

Kushasthali was in the kingdom of King Raivatha, the father of Revathi, the wife of Balarama.

By virtue of being the elder brother to Krishna, Balarama had the right to be coronated as the king of the new kingdom to be established by Krishna, Balarama and the *Yadava*.

So being, it would have been but natural for the father-in-law, King Raivata or Maharaja Kakudmi as he was also known, to invite his son-in-law, Balarama and offer him, his brother Krishna and the *Yadava* clan, the coastal area of his kingdom, to set up their new town and build avenues for livelihood through maritime trade.

This new town Dwaraka, developed and flourished as a port city.



The Raivatka Hills

Recent excavations have revealed the older town Kushasthali as well as the new town Dwaraka and its major port.

To this day, there is a hill called Raivataka in Saurashtra, close to Dwaraka, as a reminder to the kingdom of King Raivatha.

### ***Kusha Grass - For Research***

The area called Kushasthali, was a thicket of *Kusha* grass from which it got its name *Kushasthali*, meaning place with *Kusha*.

The *Kusha* grass is one of the varieties of the *Darbha* grass.



***Kusha* Grass**

*Darbha* is a generic name for a species of grass known for its medicinal properties and use in various scientific applications of those times.

*Darbha* is a grass which is used widely in India in various rituals. It is considered to be a purifier and used to ward off ill effects of radiation during a solar eclipse even to this day.

The other varieties include *Viswamitra*, *Munja* and so on.

The various properties and possible usages of this *Darbha* grass can literally provide fodder for some great research, be it for medicinal or other purposes.

## THE SUBMERGED DWARAKA - RECLAIMED LAND

The area, around seven metres below sea level, along the coast of the present day city of Dwaraka, is a veritable underwater museum as this is where the submerged Dwaraka lies. Boulders from the foundations of the city wall lie here. It was a wall, which had kept the sea at bay, from the very land, which had been reclaimed from the sea at Krishna's instance.



Dwaraka underwater excavation photos

## *Dykes*



Dyke being built in Netherlands

In present day terms such walls that keep the sea off and protect the town or city, are called dykes, the likes of which can be found in Netherlands. Dykes are artificial, huge bunds constructed near the sea to prevent the sea from entering the low lying land.

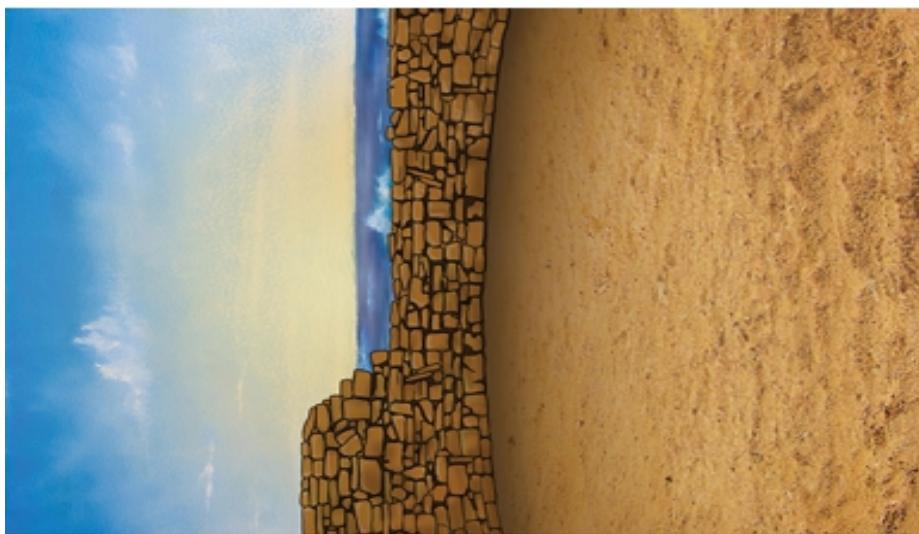
Our legend states that, Krishna, when He started constructing Dwaraka city, requested *Samudra Deva*, the Divinity of the Sea, to withdraw a little and provide Him land for building His city. In accordance with Krishna's wishes *Samudra Deva* yielded and gave 12 *yojana* (a measure) of land.

Marine archaeological expeditions show a retainer wall in submerged Dwaraka.

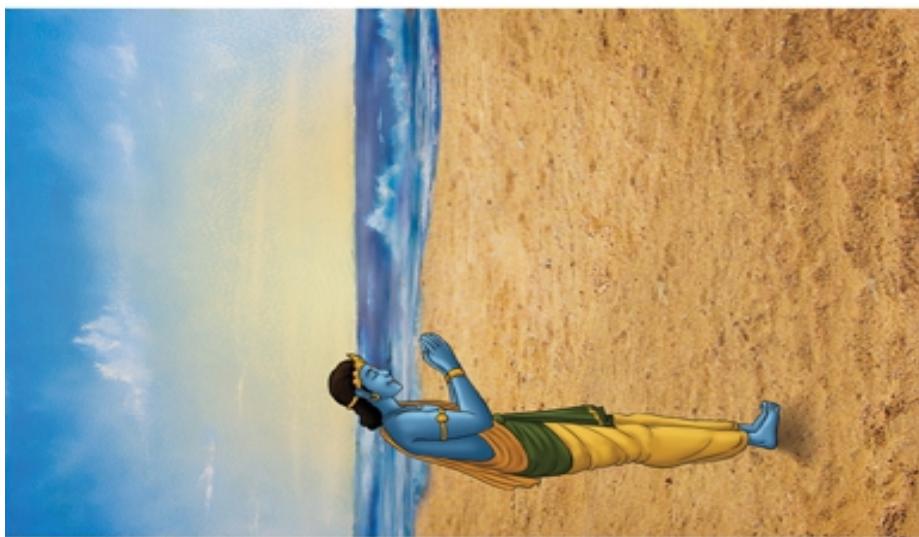
From the underwater finds and from present day practice of building dykes, we are able to surmise that the legend was describing in an allegorical manner, how Krishna and His men built a retainer wall, a dyke and reclaimed land from the sea before they started constructing Dwaraka.



Remanants of Retainer wall at Dwaraka



Retainer wall built to keep the sea at bay, land reclaimed from the sea

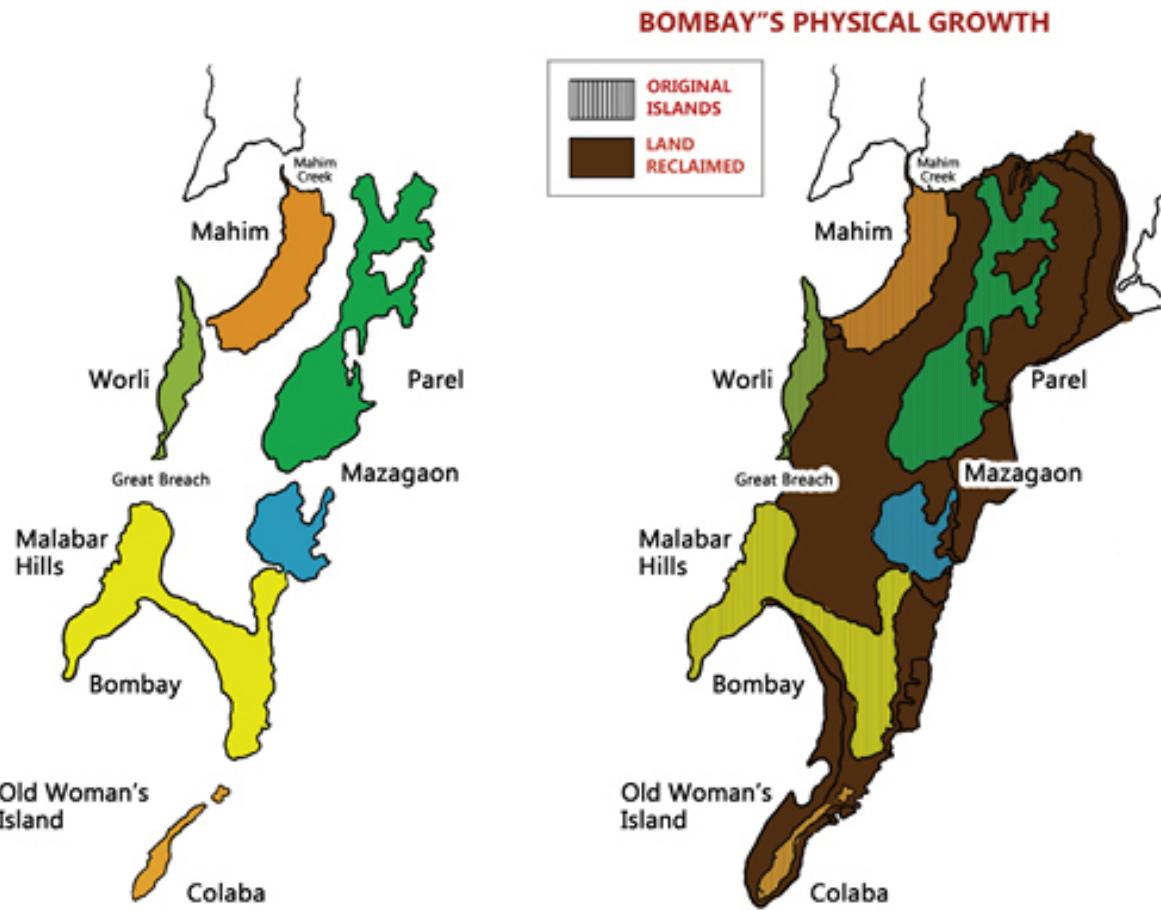


Samudra Deva yielding 12 yojana, measures of land



Krishna requesting Samudra Deva – an illustration

Obtaining land from the sea by pushing it back using retainer walls or dykes and land fills, in modern scientific parlance is called “reclamation of land”. A fitting example of such reclamation is the reclamation of land from sea to form the city of Mumbai from seven different islands.



Reclamation of Mumbai

So, what the legend was saying is not something far fetched or a fantasy. It is perhaps our limited ability to visualize their figure of speech.

Krishna had reclaimed land from the sea and built His Dwaraka. After Krishna's times, the sea reclaimed the land back from Dwaraka.

## DWARAKA CITY PLAN – WHERE TEXT MATCHES FIND



*Vishwakarma*

The reclamation and building of the city of Dwaraka was carried out by legendary architect Vishwakarma, at the behest of Krishna.

We see many points of convergence between the description of the city in the text and the reality underwater in the submerged Dwaraka.

The text describing the plan of Dwaraka city as designed by Vishwakarma clearly states that,

1. The Sea Divinity yielded land, i.e., land was reclaimed from the sea.

**Today, undersea, we see a retainer wall in the submerged Dwaraka, from marine archaeology.**

2. City was planned and built on the banks of the Gomati River.

**On land, the river by name Gomati, albeit running dry today, still exists along the present day Dwaraka.**

3. The Dwaraka city was built and well organized in six sectors - residential, commercial, public area, palaces, industrial and ship building dockyard.

**The archaeological excavation indicates that the submerged Dwaraka was a fortified township with six different sectors with an enclosure for each of the sectors.**

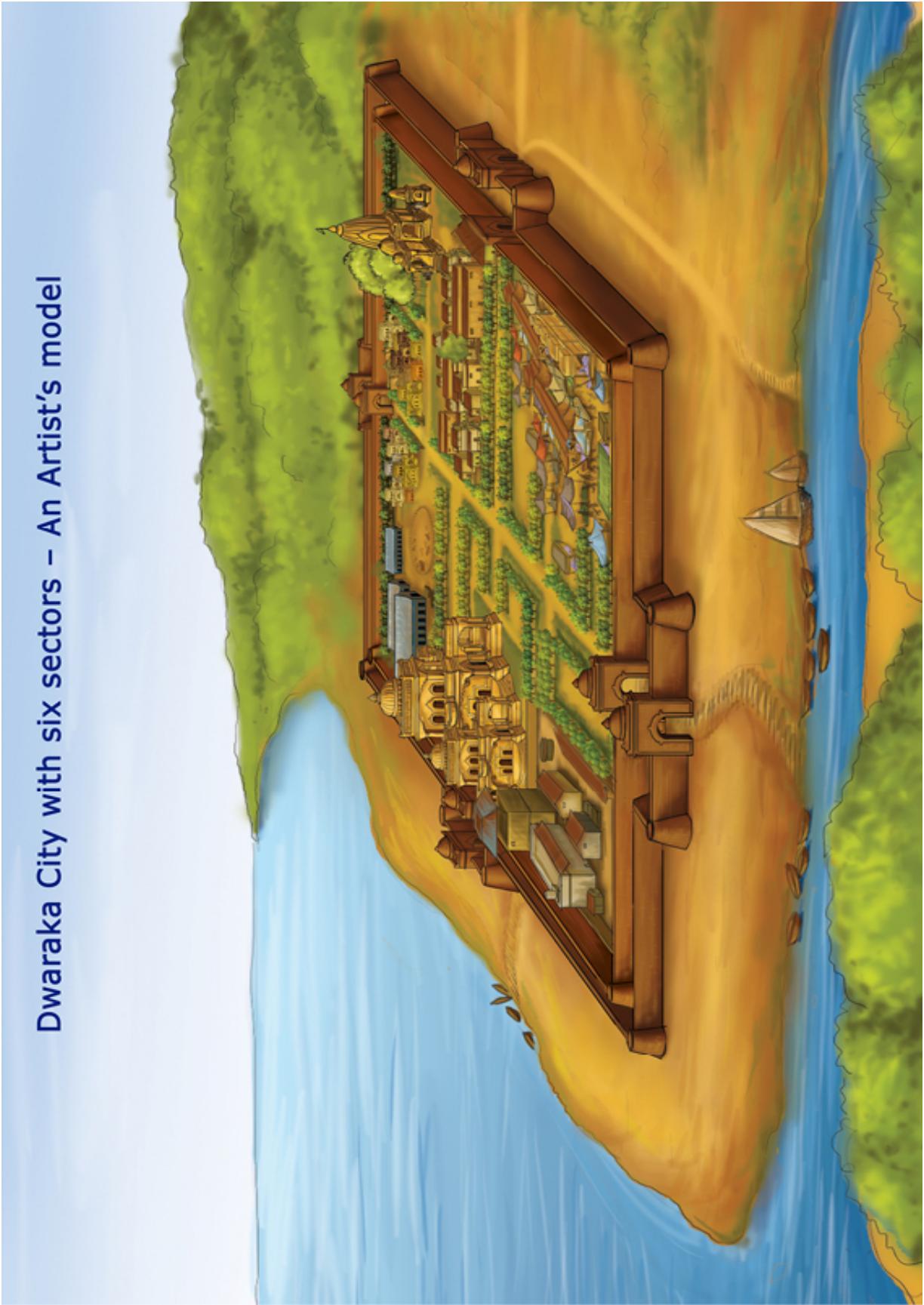
4. Wide roads were constructed to link these sectors.

**In the archaeological survey, two major roads were found and they were about 18 metres wide each.**

5. The text states that Dwaraka was a busy harbour.

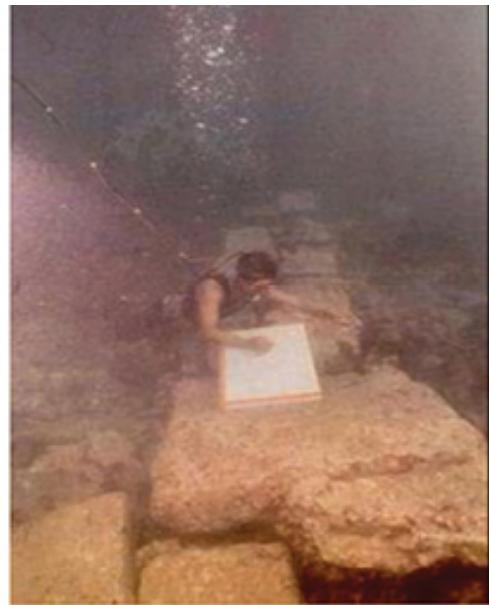
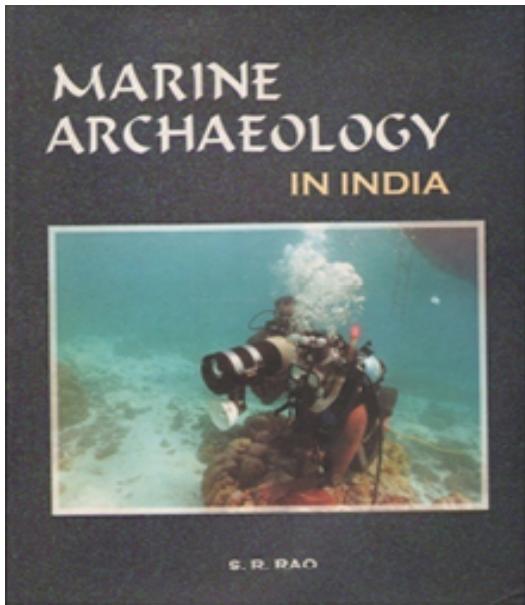
**When we look at the submerged archaeological remains, the anchors and artifacts found give enough evidence of a busy harbour.**

Dwaraka City with six sectors – An Artist's model



## ***Raja Marga***

The word *Marga* means “path, road” and *Raja Marga* is a King’s path, a wide road. In Harivamsa text, there is a mention of four *Raja Marga* and also a *prahara*. A *prahara* is a periphery path around the town. These can be roughly identified in the ruins under water.



Long Wall



Partly dislodged wall



A Fallen Wall



Two walls of a small house in the submerged Dwaraka ruins  
Courtesy – Marine Archaeology in India, Dr.S.R.Rao



# Dwaraka – Anchored by Anchors

## DESIGN OF DWARAKA HARBOUR

The structures and the large stone anchors lying under the sea at Dwaraka are seen as indicative of large ships being anchored out at sea, while smaller boats carried men and cargo up the river.

The complementary proof comes from the observation of Dr. S.R.Rao that Dwaraka harbour provides the earliest clear evidence of modifying natural rock to serve the needs of a harbour. The people of Dwaraka had innovated the technique of cutting through natural rock and using it to serve the purposes of a harbour such as berthing, very early, around 5000 years ago as evidenced in the neighbouring port of Lothal too.

Two rock-cut slipways of varying width extending from the beach to the intertidal zone were discovered in Dwaraka, which in the opinion of Dr. S.R.Rao, “*could have been designed for launching boats of different sizes.*”

What we see here in the Dwaraka harbour can be summarised as,

1. earliest evidence of a harbour that was created by modifying natural rock
2. pathways capable of accommodating only smaller boats from the mouth of the river to the sea
3. heavy anchors in the seabed that could have been used only by large ocean going ships.

This could only mean that the Dwaraka harbour was so designed that large ships would berth at the sea and smaller cargo ships or boats would ferry the goods between the ship and the shore.

A well thought out design indeed for a city and harbour of yore!

## AN ANCHORING PROOF

A key proof for the innovative nature of the sea farers of Dwaraka lies in the anchors found in the seabed there.

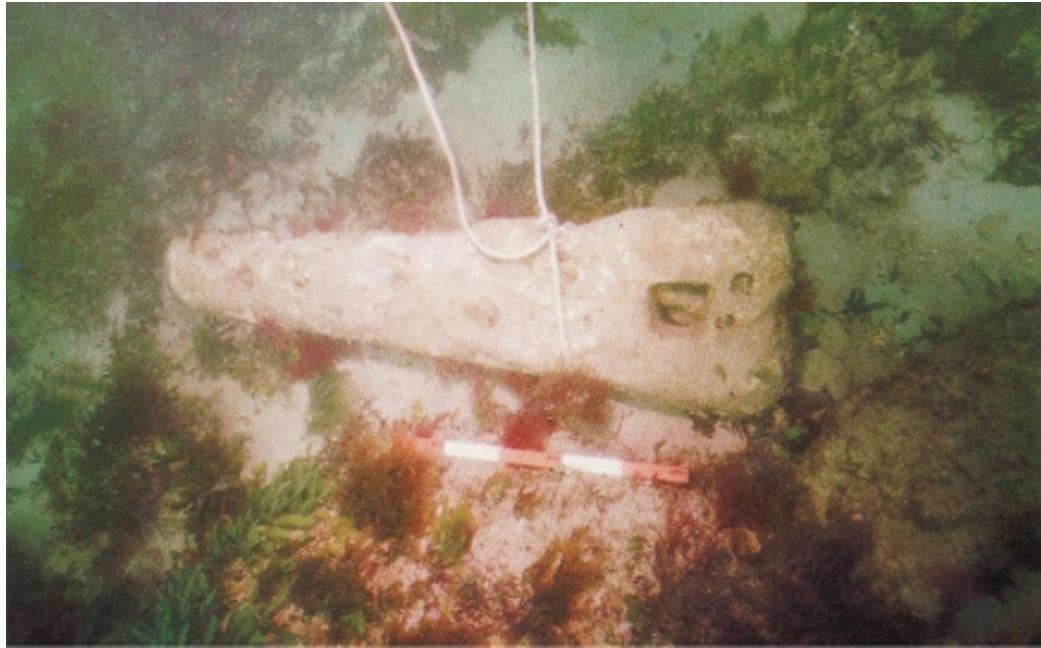
A startling find is that of more than 60 triangular and prismatic anchors with 3 holes on the seabed at Dwaraka.



Circular



Rectangular and Triangular



Prismatic and Traingular stone anchors of Dwaraka  
Courtesy – Marine Archaeology in India, Dr.S.R.Rao

A study of the anchors found on the seabed by Prof.S.R.Rao and team, reveals how the navigators of Dwaraka had learnt from experience, how to design anchors that can steady the vessel in rough weather. They had graduated from single holed anchors which tended to drag on the seabed in rough weather to three holed anchors, to which could be fixed arms that would go and secure the anchor firmly in the seabed thus preventing the vessel from being dragged during storms.

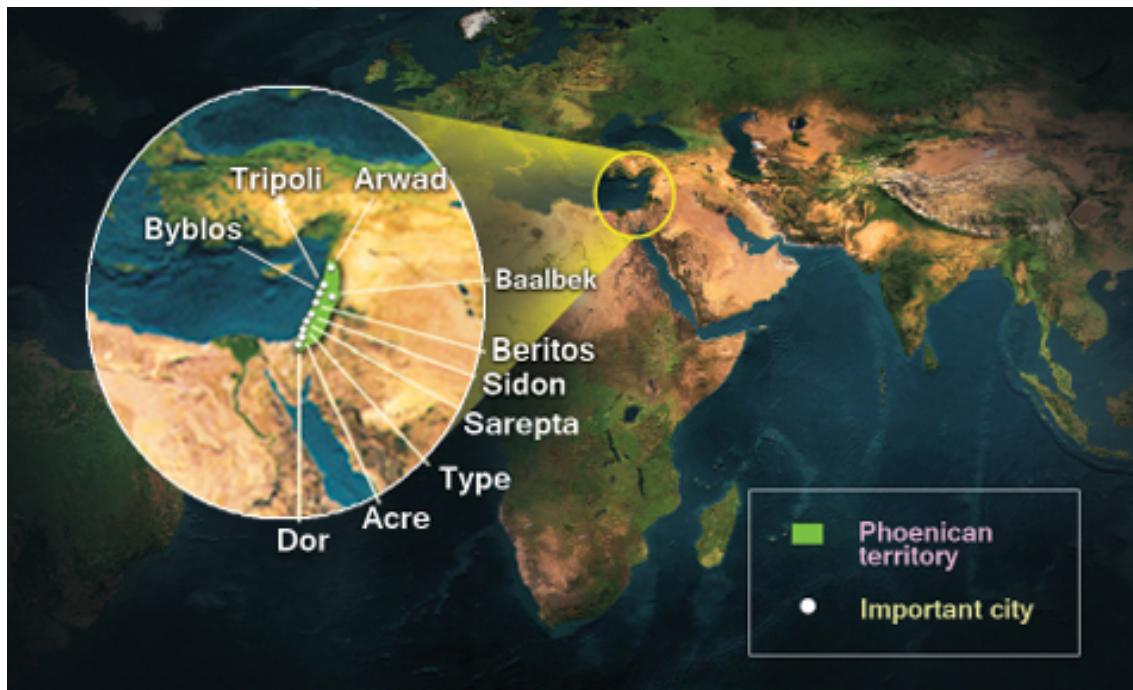
The prismatic anchors of Dwaraka were uniquely identifiable because of a rectangular hole at the bottom. Experts opine that this was to fix metal shaft, while wooden shafts were used in the other holes.

There were many anchors, weighing between 120-150 kilograms each. The biggest one weighed about 572 kilograms.

## TIES WITH THE WEST

The design of such three holed anchors seems to have found its way to Cyprus and Syria as evidenced by the find of similar anchors there dating to 14<sup>th</sup> – 15<sup>th</sup> century BCE.

Interestingly the design and technique of building harbours followed at Dwaraka seems to have travelled to Phoenicia too as the Phoenician harbours built around 900 BCE seem to have been built using the same design and technique.



Phoenician ports

More on the Dwaraka – Phoenicia ties are discussed in our work “[Harikrishna to Herakles – An Indo Greek Connection](#)” in the Bharath Gyan Series.

This implies that this region of Dwaraka has had continued ties with foreign lands through the millennia and has been a preferred port, a harbour, a gateway from the seas, for people across many millennia. Therefore, the people of Dwaraka, despite losing the city to the seas everytime, rebuilt it and continued trading as before.

There could not have been a more apt name than *Dwaraka*, *Dvarika* or gateway, for this city.

This is further corroborated by recent finds which show Dwaraka to have been a trading centre.

## DWARAKA - A TRADE GATEWAY

We are seeing that Dwaraka was built as a gateway for trade. First and foremost, it is obvious from the name. Secondly there is evidence of a good harbour built at Dwaraka, the purpose of which seems to have been for trade.

Thirdly, Dwaraka had a flourishing hinterland that produced goods for trade.

### ***Food Trade***

Archaeological finds show that trade seems to have taken place in foods and other products. For both these commodities, there is the need for a hinterland. Huge farmlands for agriculture produce and a series of industrial centers manufacturing other products served as the hinterland for Dwaraka.

### ***Distributaries of the Sarasvati River***

The Sarasvati River was then draining into the sea through the Saurashtra Peninsula near Somnath. A distributary called the Gomati River, flowed westwards across the Saurashtra peninsula and drained into the sea near Dwaraka. Another network of distributaries flowed through the Kutch Peninsula.

### ***Agriculture Hinterland***

This network of the distributaries of the Sarasvati River through the Saurashtra and Kutch Peninsula made both these peninsulas fertile. Thus they formed a vast hinterland for agriculture produce that was shared with the locals and excess was exported to the far off lands through the port of Dwaraka.



The distributaries of the Sarasvati River flowing through Saurashtra and Kutch peninsula making the land fertile

### *An Industrial Hinterland*

In the last few decades many of the archaeological sites of the Harappan period that existed along these distributaries of the Sarasvati River are being excavated one after another. What the archaeologists are seeing in each of these excavation sites are distinct remains of products that were manufactured there.

### *Shikarpur*

For example, in Shikarpur they have excavated finished Chert blades. The excavations here reveal raw materials as well as products in different stages of production.



Chert Blades

### *Bagasra*

Another location is Bagasra. This place seems to have been a production center for glass beads and shell bangles.



Glass beads



Bronze statue of woman wearing shell bangles 5000 years ago and Kutchi woman of today wearing shell bangles from shoulder to wrist

Like these, there were a series of settlements all along the distributaries at an average gap of 20-25 kms apart. These series of settlements “functioned as an integral component of an economic system organized at a regional level.” This is the opinion expressed by the team of archaeologists of M.S.University, Vadodara under the leadership of Dr. K.Krishnan, the head of the department, who carried out these excavations.

These industrial products were exported from the dockyards of the Lothal port in eastern Saurashtra and Dwaraka which was farther to the west.

### ***Region Around Dwaraka***

The occurrence of proto-historic pottery on land in this region also suggests there were smaller towns between Dwaraka and Kushastali in ancient times.

When Dr. S.R. Rao surveyed this region he opined,

*“With a large port town of Dwaraka, a shipyard in Bet Dwaraka and three other satellite towns at Aramda, Varwala and Nagewsar, the concept of the city state of Darukavana or Dwaravati must have been given a concrete shape. If all these settlements are taken as one unit, Darukavana extended over 45 km from north to south and at least 25 km from east to west approximating to eight yojanas, if not more.”*

This clearly suggests that Dwaraka was not just a port city, but also had a vibrant and vast hinterland, so essential for a city to thrive.

### ***Khirsara***

Excavations in Khirsara village in western Kutch reveal a “major industrial hub” and “trading centre” that had flourished around 2600 BCE.



Location of Khirsara



Khirsara excavation site revealing central citadel and warehouses  
An industrial hub and trading centre of 2600 BCE

The excavation of Khirsara as an industrial hub and trading port of 2600 BCE substantiates that a port at Dwaraka, just across, on the Gulf of Kutch, just a couple of centuries earlier, was also a reality and that such industrial hubs abounded all through that region during those times.

## *A prosperous Dwaraka*

Thus Dwaraka seems to have had a rich, developed hinterland both in terms of agriculture and industrial produce.

The stories and events of the times of Krishna point to a prosperous state of affairs and the archaeological excavations of today also tell us a similar story.

Dwaraka was a flagship port and a prosperous trading gateway to India from the western seas.

Dwaraka is the port city where Krishna lived with his *Yadava* clan.

The term ‘Dwaraka’ is a variation of *dvarika* which means “gateway”. *Dvar* is used for “gate” or “door” even today in Hindi and many other languages.

So, the gateway to India during Krishna’s times, was the city of Dwaraka. This was probably, pretty much like how Bombay or now Mumbai, is the commercial gateway of modern India.



Present day location of Dwaraka, India



Gateway of India, Mumbai

## **OTHER ARTIFACTS HAULED UP FROM THE SEA BED**

Other archaeological artifacts recovered from the sea-bed include:

- a low footed stool of basalt stone, finely polished, found along with brass arches
- a pestle of granite and a grinder cum pounder of dolerite
- two single-holed spheroid stone objects, use unclear
- iron nails, brass objects
- few bronze nails
- a copper bell

- a highly corroded small copper vessel similar to the *lotta*, used nowadays
- objects made of brass which contained zinc, similar to those found in Lothal.

The significant metallurgical finds from the seabed at Dwaraka include bronze bells, brass arches, bars and other parts of miniature chariots or wagons.

All the artifacts that were recovered from the sea during the second set of expeditions, are currently at the National Institute of Oceanography in Goa.



Copper Lota and Bronze bell from underwater



Brass Arches of miniature chariots and Lower part of chariot, Axle of vehicle passed through the hole

## A RIVETING POINT

From the holes in the arches, it is presumed that these holes were used to hold a canopy for the chariot. Based on these holes, archaeologists conclude that the metallurgists of Dwaraka were capable of riveting.

Since the metallurgists of Lothal, another harbour site on the banks of the Sarasvati, have been found to be capable of riveting in 2300 BCE, one can safely extrapolate that they as well as their neighbours in Dwaraka too would have been capable of driving rivets into metal bars 5000 years ago or the period of *Mahabharata* and Krishna as we have seen so far.

This conclusion rivets the textual descriptions of use of metal weapons during the Kurukshetra war and the discovery of copper, zinc, lead and iron in the artifacts hauled from Dwaraka seabed, to a period of 4500 to 5000 years ago.

## A TEMPLE FOUNDATION?

An archaeologically significant find by the team was a lunate shaped moonstone known as *Chandrasila* in the *Shilpa Sastra* texts. This stone, as well as a beam, were found underwater in the vicinity suggesting that there existed a temple in those times.



*Chandrasila*, circular stone structure exposed during low tide

We have such evidences of temples and temple worship both in stone and in text right from the times of Rama and Ravana, more than 7000 years ago.

We have discussed about temples connected with Ravana in our book “**Ramayana in Lanka**” in the Bharath Gyan Series. Hard evidence in the form of the base of a *Linga* was discovered under the foundations of the Ayodhya temple. Details of this have been discussed in our book, “**Ayodhya – War and Peace**”.

Let us look at this event from the lifetime of Krishna.



Rukmini was the beautiful daughter of Bheeshmaka, the king of Vidharba and the sister of Rukmi. Rukmini cherished a secret love for Krishna and hoped to marry Him. However in the meanwhile, her brother, arranged for her marriage with the Magadha King Sishupala.

Sishupala was brought up in the court of King Jarasandha. Jarasandha was an arch enemy of Krishna and Balarama for having killed his son-in-law, the cruel King Kamsa. Sishupala was also the cousin of Krishna but was jealous of Krishna and used every pretext to insult Krishna and shower abuse on Him. Sishupala was an arrogant and much abhorred person but in the interest of securing an ally for their kingdom, Prince Rukmi forcibly convinced King Bheeshmaka and , arranged for the marriage of his sister Rukmini with Sishupala.

When Rukmini came to know of her impending marriage to Sishupala, she sent word to Krishna beseeching Him to come and abduct her. She vowed to end her life if He did not do so.

Her plea did not go unanswered. In accordance with Rukmini's plan, when she came to visit the temple prior to her wedding, Krishna came with Balarama and His army, abducted her, defeated Rukmi and Sishupala and their combined armies and sped with Rukmini to Dwaraka, where He married her.



Krishna eloping with Rukmini



The pair, Krishna and Rukmini and their elopement, followed by their wedding, has been handed down from generation to generation as one of

the much talked about marriages across millennia. They have been deified as one of the divine couples in the Indian pantheon of Gods and Heroes.

This story is however important to us for bringing to light another interesting aspect.

As per the textual description, Rukmini's plan was to come out of the palace using the ruse of visiting the temple to pray and have Krishna carry her away during this visit, when she would be free of the guards who normally escorted.

This story along with the find of the Chandrasila corroborate that temples and temple worship were an accepted norm even during the days of Krishna Himself, more than 5100 years ago.

## MUL DWARAKA

After advising His people to move away from Dwaraka, Krishna too went down south to Prabhas Patan.

As He was moving through the forest, He lay down to rest. A hunter, Jara, roaming in the forests, in search of a hunt, saw Krishna's foot and mistaking the tender sole to be the pink mouth of a deer, shot an arrow at His foot, only to realize his folly too late.

This arrow served as a ruse, a cause for Krishna to depart from this earth.



Krishna, shot at by a hunter

Mul Dwaraka, off the present day port of Veraval in Gujarat, is an ancient town renowned as being the place from where Krishna departed from this earth.

The region of Mul Dwaraka is also known by its ancient name, Prabhas Patan.

There is a temple called Bhalka temple to commemorate this event of Krishna's departure from earth due to the arrow shot by a hunter.



Bhalka temple

A reclining statue of Krishna at Bhalka Tirth temple signifies the spot where Krishna was shot at, by the hunter.



Bahalka temple Idol

The very name *Bhalka* is derived from the Gujarati word *Bhall* meaning “arrow”.

### ***Triveni Sangam***

Krishna then went to the banks of the confluence of the rivers Hiranya, Kapila and Sarasvati and departed for His heavenly abode.

This confluence called the Prabhas Patan Triveni Sangam is where these three rivers join before emptying out into the sea.

Dehotsarg, at this Triveni Ghat, was the site of Krishna's cremation.



Triveni Sangam - Somnath

An interesting side point to note is the name of the rivers in the Triveni Sangam. They seem to denote colours. *Hiranya* means “golden hued” while *Kapila* means “reddish brown”. It points to some rationale behind their naming.

Al-Biruni too in his chronicles has referred to this region as where Krishna, in His earthly form, spent His last few days on earth.

Somanth was originally erected on the coast,  
a little less than 3 miles west of the  
mouth of the river Sarsuti,  
east of the golden fortress Baroi,  
which had appeared as a dwelling - place for  
Vasudeva, not far from the place  
where he and his family were killed.

Al-Biruni's quote

This place Mul Dwaraka, is on the Southern Saurashtra coast, quite far from Dwaraka, which is on the Western Saurashtra coast line.

While Mul Dwaraka is around 250 kilometres away from Dwaraka, this location is also an equally old, inhabited area.

This area is called Kodinar, from where atleast two Harappan age towns, Kanjetar and Kaj, have been discovered now with artifacts.

The pot shards that have been excavated in this area suggest that this coastline had bustling trade with the Arabian coast, not just in the times of Krishna, but much later also.



Medieval lighthouse at Mul Dwaraka and Ancient Anchor found in Saurashtra coast

Look at the convergence here. On ground, we find that

- the location of Mul Dwaraka is to the south of Dwaraka,
- it is close to the ancient town of Prabhas Patan,
- local traditions there, venerate it as the place where Krishna left this earth.

This tallies with the texts which describe that

- Krishna read ominous signs that danger was about to befall Dwaraka
- He advised His people to move out of Dwaraka in all directions
- He asked one of the groups to specifically move down south to Prabhas Patan.

It is probable that Krishna too moved towards Prabhas Patan with His people and while there, came the end of His time on this planet.

## SUMMING UP - ARCHAEOLOGICAL EVIDENCES TALLY

Archaeologically, there are thus, substantial evidences to categorically show that

- the city Dwaraka as mentioned in the epic *Mahabharata* and other allied texts, did exist around the place, where another city by the same name exists today,
- this ancient, historic city of Dwaraka was led by the popular leader Krishna.

Obviously, archaeology is the conventional form to understand historical events. In this case, substantial evidences from other sources are also available.

What is more pertinent is that, the archaeological evidences tally very clearly with the factual details mentioned in the ancient texts. This further goes to prove that we are talking about one and the same civilization and that the texts, the regions described in the texts and the personages described in the texts are therefore historical.

**So, undeniably, from the archaeology at Dwaraka, Krishna is a part of the history of India!**

# A Seal From the Seas

## THE 3 HEADED ANIMAL *MUDRA* OF DWARAKA

As per texts, after Krishna and His people moved and settled down in Dwaraka, every citizen of Dwaraka was given a *mudra*.

Jarasandha was the king of Magadha. The region known as Patna city today was part of this Magadha kingdom. In the times of the Maurya kings, this city was the capital of the kingdom and was known as Pataliputra. In the times of Aryabhatta, it was known as Kusumapura and in the times of Buddha, the capital was Rajgir, which exists even today near Patna.

Jarasandha was the father-in-law of Krishna's uncle, the tyrannical Kamsa, whom Krishna had killed in Mathura. Post this slaying of Kamsa, Jarasandha, kept waging wars on Mathura, since Krishna was living in Mathura. However, each time, the army of Mathura, under the leadership of Krishna and Balarama, managed to ward off Jarasandha's attacks.

Finally, to avoid these wars and the heavy price the people of Mathura were having to pay for Krishna living in Mathura, Krishna decided to move away from Mathura. He, Balarama and their clan of *Yadava* moved down south and settled in Dwaraka.

Yet, there was a constant threat of Jarasandha's people picking up old feuds and attacking Dwaraka too. The administrators of Dwaraka feared that the forces of Jarasandha may infiltrate into Dwaraka and attack Dwaraka.

So they introduced a unique *mudra*, seal, as a mark of identity for the legal residents of Dwaraka.

It was a seal, with a three headed animal. It was a form of identification to establish that the bearers of this seal were the citizens of Dwaraka. This was needed to differentiate the citizens of Dwaraka who had migrated along with Krishna, from the infiltrators who kept coming to Dwaraka, from the ranks of their enemy Jarasandha.



Mudra, Seal with a citizen - a painting

## A FIND THAT TURNS HEADS

Among the objects recovered from the sea-bed, during the marine excavations from Dwaraka, was a distinctive, unique seal of a three headed

animal, measuring 18 mm x 20 mm with the images of a bull, a unicorn and a goat engraved on it.



Three headed animal clay seal, *Mudra* found in Dwaraka ruins undersea

This find establishes the submerged Dwaraka's connection with the Dwaraka of the *Mahabharata*. It confirms that the three headed animal seal, as mentioned in the texts, was not a product of imagination of the author but an account of a fact.

Dr. S.R. Rao, when he saw the seal remarked,

*"the seal does corroborate the reference made in the ancient text, the Harivamsa, that every citizen of Dwaraka should carry a mudra as a mark of identification and none without a seal should enter it."*

As this seal from Dwaraka is similar to other Indus Valley seals, in art, shape, dimension, method of making etc., this seal must belong to the same period of around 3000 BCE like the Indus Valley seals.

This fact helps us to date the period of Dwaraka also, through the motif of this seal, to be around 3000 BCE.

Here, the ancient text corroborates with the present day archaeological findings, as this seal has not been found in any other part of India, but in the region of Dwaraka, where the text says it was indeed distributed among the citizens.

This excavation of the *Mudra* finding corroborates not just

1. the authenticity of the ancient text,
2. but also the authenticity of its contents

It is a clear archaeological proof, as clear as we can get.

# Demystifying The Indus Seals

## THE CHALLENGE

Since the finding of the Indus valley sites of Harappa, Mohenjodaro and many more since then, archaeologists, historians and people at large have been trying to make sense of the epigraphs and glyphs in the seals that have been excavated at these sites.

Deciphering this script proved to be an enigma for the last 150 years and more. Many attempts proved futile, making it one of the last scripts of the ancient world yet to be deciphered.

**It created a question in the minds of some, whether the images in these seals were really a linguistic script or were they just drawings from those times?**

In the ongoing debate, it came to be concluded by majority researchers that it had to be a linguistic script indeed.

## SOLVING THE MYSTERY OF THE EGYPTIAN HIEROGLYPHS

The deciphering of the Egyptian hieroglyphs was made possible because of the discovery of the Rosetta stone.

When Greek Egyptologists in the 17<sup>th</sup> and 18<sup>th</sup> century had a newfound interest in the archaic history of Egypt, they were befuddled by the hieroglyph script that they found all over the ancient sites of Egypt – the pyramids, temples and sarcophagi. While they could see that these symbols were trying to tell them something, they could not decipher them.

It was when the army of Napoleonic Bonaparte invaded Egypt in 1798 CE, that the stumbling block was removed.

Napoleonic's army found a stone inscription at a place called Rosetta, Rashid in Egypt. This stone inscription, carved in 196 BCE, turned out to be the key to decipher the ancient Egyptian hieroglyphs. For, in this inscription which is now popularly called as the Rosetta Stone, a message was inscribed repeatedly, one below the other, in two languages – Egyptian and Greek.

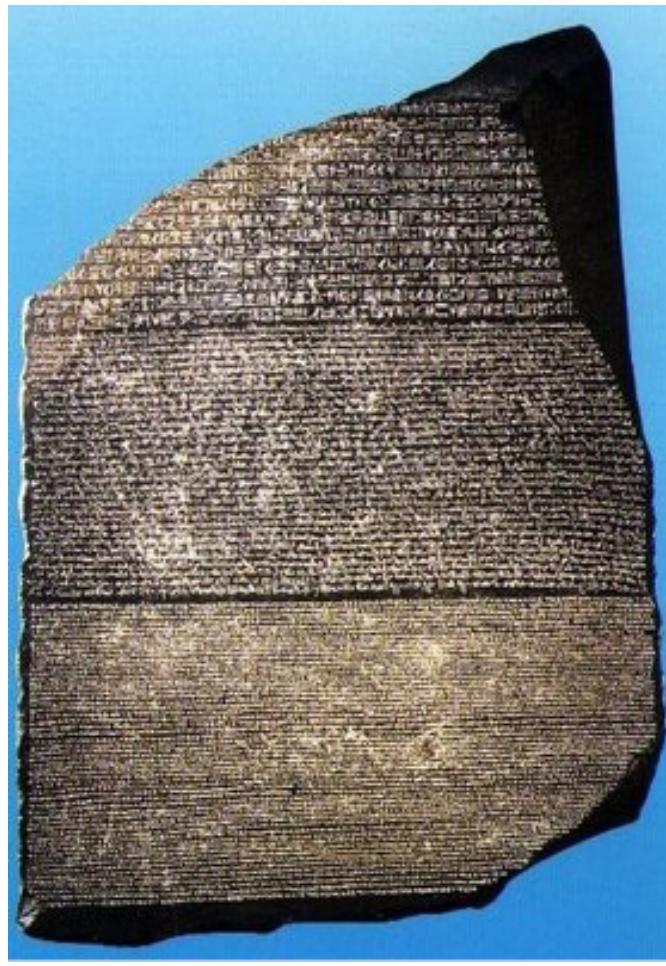


Invading soldiers of Napoleonic Bonaparte who identified the stone at Rosetta, Rashid, Egypt



Rosetta, Rashid in Egypt, Africa

The inscription was written using three scripts



Rosetta stone

1. Ancient Egyptian hieroglyphs, the script used for religious and important documents
2. Ancient Egyptian demotic script, the common script of the land of Egypt
3. Ancient Greek, the script used by the Greeks who were ruling Egypt then

It was deciphered by the Frenchman, Jean-François Champollion in 1822 CE, as he was well versed in both ancient Greek and Coptic.

He could thus easily match one on one, the phrases, the meaning and the flow of language in the message inscribed in ancient Greek script, with the same text inscribed using the demotic script in Coptic and from thereon got a handle on how to read the ancient Egyptian hieroglyphs.

Soon the writings on the inner walls of the pyramids, the walls of the temples and those on the sarcophagi and other artifacts started speaking of the glories of their times, their Pharoahs and their kingdoms of Upper and Lower Egypt.



Hieroglyphs on Egyptian temples

Unfortunately, in the case of the Indus script, no such Rosetta Stone has been discovered yet. This is the stumbling block in the deciphering of the Indus script.

## **DECIPHERING THE INDUS SCRIPT**

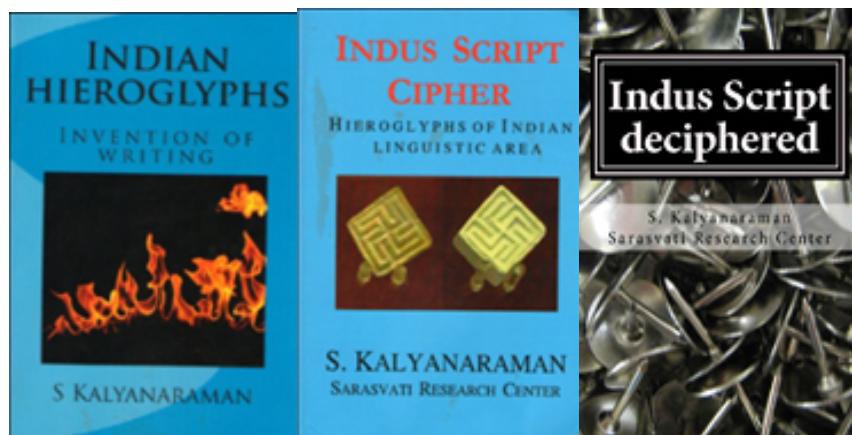
Dr. S. Kalyanaraman, a researcher who has done pioneering work on the Sindhu-Sarasvati civilization i.e., Indus Valley civilization, has done further original research on this script by examining close to 4000 epigraphs with glyphs found in the Sarasvati River Basin sites.



Dr. S. Kalyanaraman

Shedding all baggage of colonial thought and history and looking at them afresh, led him to a breakthrough in deciphering the seals.

This decipherment is as significant as the decipherment of the Egyptian script, post the discovery of the Rosetta stone. Coming without a Rosetta stone to assist its deciphering, this decoding speaks volumes of his painstaking study carried out over 20 years. The outcome of his research is available in his published works.



The book, Indian Hieroglyphs, Indus Script Cipher and Indus Script Deciphered

This book, a product of 20 years of research, along with his earlier books, expresses to us,

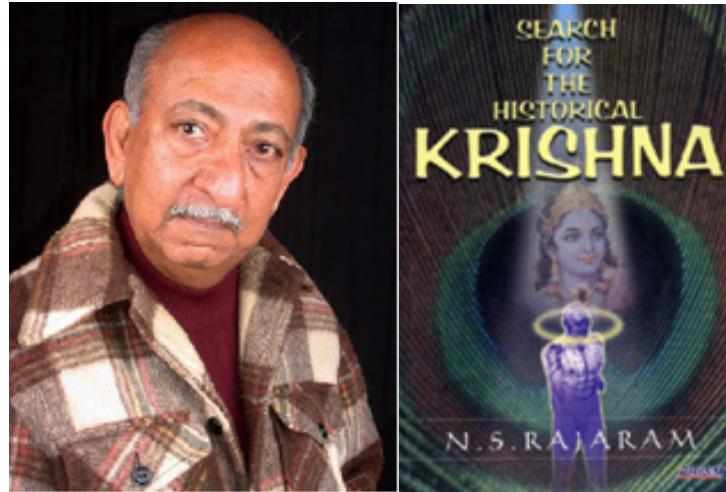
- that the main vocation of the Sindhu-Sarasvati people was metallurgy, they being expert metal smiths,
- that written language was probably started by this civilization,
- that a range of metals were mined by them, for metallurgy to have flourished and
- how this led to trade, which in turn created prosperity, which in turn created a knowledge society.

While Indus Valley script is a name assigned just because the seals were discovered in the Indus Valley sites, Dr. Kalyanaraman refers to this script as *Mlecchita Vikalpa*, a more apt name, which comes from the very language itself. Mlechha was a language of communication for some of the people in and around the Indus Valley and *Vikalpa* means art, forms that are symbolic of words, that which represent words – a very apt word to denote glyphs.

Given this recent breakthrough of decipherment of the Indus script, which had foxed the leading archaeologists and historians of the world for the last 100 years and more, the next logical step in understanding the history of India and thereby, the ancient world history, would be to look for signs of historical personages of those times and region, such as Krishna, in these glyphs.

## **SEARCHING FOR KRISHNA IN THE HARAPPAN SEALS**

Dr.Navratna.S. Rajaram, is a mathematician and scientist, who has done a lot of original work on the civilization that flourished in north-west India. In his book, “**Search for the Historical Krishna**”, he writes that some of the seals excavated from the Harappan sites bear the names of people and places contemporaneous to Krishna.



Dr. Navratna. S. Rajaram and The book - Search for Historical Krishna



Harappan seals

The script on the seals have been deciphered by him to be these names.

- Paila – Veda Vyasa’s pupil
- Akrura – Krishna’s friend
- Vrishni – Krishna’s clan

- Yadu – Krishna's ancestor
- Sritirtha – an older name for Dwaraka

He reads another seal as “*Murari Vrishni anga*” meaning “*Murari* of the *Vrishnis*” and yet another as “*Vrishni varpa*” implying “Krishna has a beautiful body”.

Dr.Rajaram finds the word “*Vrishni*” appearing numerous times on the Harappan seals.

The word *Vrishni*, as we have seen in the beginning of this book, is the name of the clan into which Krishna was born.

*Murari* is also a name given to Krishna, for having vanquished Mura, the *Asura*.

If this is so, then it further corroborates the distinct link between archaeological finds and literary records, which the traditional historians have been looking for.

Further research potential lies here.

## TO DISCERN THE DISTINCTION

### *Disconnect between Harappa and Mahabharata*

**Many wonder,**

**“why is the script found at the Harappan ruins, which formed part of the Sindhu-Sarasvati civilization, not similar to the *Brahmi* or other known ancient scripts? Also how does it link with the times of *Mahabharata* and Krishna?”**

Many have used this as an excuse to further disassociate the region where the *Mahabharata* events took place, from the Harappan region and brand *Mahabharata* as a mythology.

To understand this situation, we must first learn to discern the distinction between spoken language and written script.

### *Script Vs Spoken*

A language comprises of two distinct facets – the spoken sound and the written script.

The spoken sounds of a language can be written using different scripts.

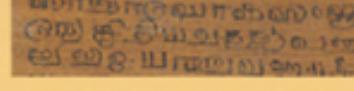
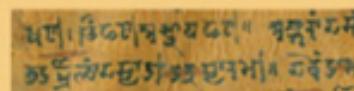
The language spoken during *Mahabharata* times was very similar to the present *Samskr*t language. It was then referred to as *Vak*, “that which is spoken”. Much later it came to be called *Bhasha*, “the language” and it is only around 700 CE that it came to be commonly referred to as *Samskr*t, “the refined one”.

It is only because the language of *Mahabharata*, *Veda* and other ancient texts is similar to the *Samskr*t language spoken today that one is able to understand them.

During the *Mahabharata* times, there was also in use, a language called *Prakrt*, meaning the naturally spoken language and *Mlechcha*, the language of the *Meluha*, common man and the industry. *Mlechcha* in *Prakrt* language means that which is ungrammatical, based mainly on jargons. It was a language used in industry, by those involved in industry and craft to communicate in brief. These cryptic jargons of their metallurgy industry, trade and farming, are what has been found in the Indus Valley seals according to the research of Dr.S.Kalyanaraman.

While each language is expressed using a specific script, it is also a common norm to write popular languages in scripts familiar to a populace. Thus *Samskr*t texts even to this day can be found written in various scripts such as *Grantha* - an ancient script popular in southern parts of India, *Sharada* – the script popular in Kashmir, *Devanagari* and vernacular scripts such as Kannada, Malayalam, Gujarati etc.

## Some Scripts of India

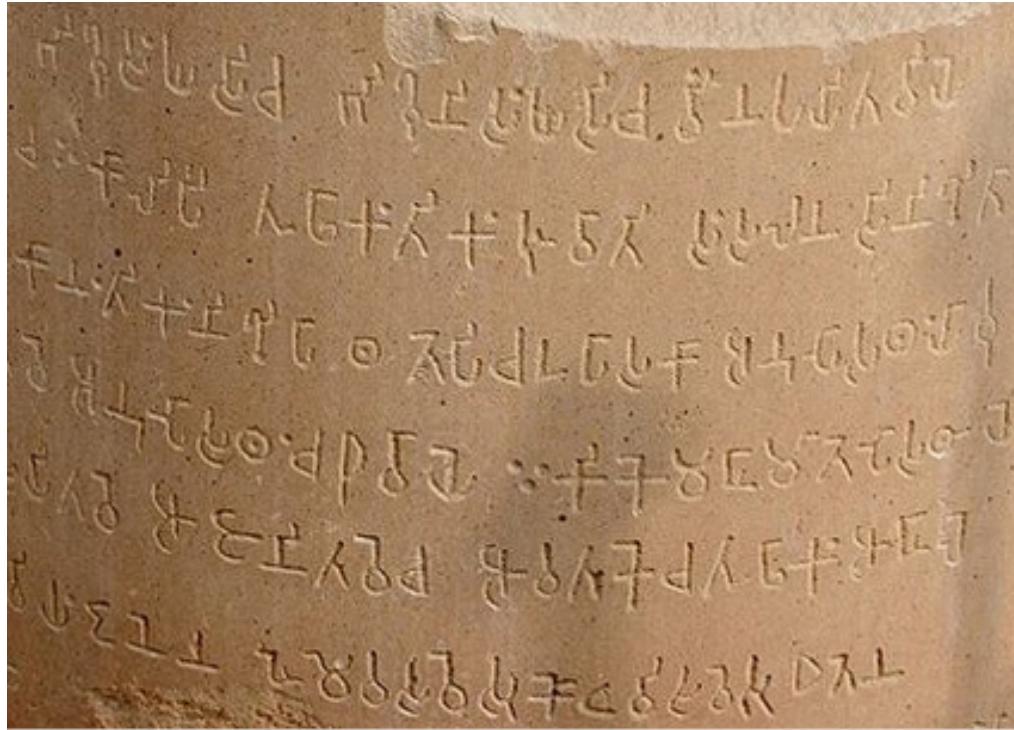
<b>Grantha</b>	-	
<b>Sharada</b>	-	
<b>Devanagari</b>	-	<b>हिन्दी भाषा</b>
<b>Kannada</b>	-	<b>ಕನ್ನಡ भाष्य</b>
<b>Tamil</b>	-	<b>தமிழ் மொழி</b>
<b>Bengali</b>	-	<b>বাংলা ভাষা</b>
<b>Gujarati</b>	-	<b>ગુજરાતી ભાષા</b>

Grantha, Sharada, Devanagari, Kannada, Malayalam, Gujarati scripts

When people think of ancient scripts, they immediately think only of *Brahmi*. There have been many scripts prior to *Brahmi* too. The hieroglyphs of Harappa and Mohenjodaro are one of the precursor scripts of this civilization.

*Brahmi* is the name of the script that was used in North India about 2000 years ago. The edicts of Ashoka are in such a script.

*Brahmi* was not the script that was used few thousand years prior to that time, i.e., in 3000 BCE.



Brahmi Script

Coming back to the *Mahabharata* text, the spoken sounds of the language and their meanings do not seem to have changed from then to now. However, during various periods of time in between, this text has been written in scripts popular for those times and for that populace.

Thus even though the *Mahabharata* text has come down to us, in reality, the script in which it was originally written, was not the *Devanagari* script that we are today used to reading it in. The *Devanagari* script came into practice in rather recent times.

### **Straight Vs Curved**



Harappan Seal

It also needs to be borne in mind that the script used in seals is normally very cryptic and pictorial to express what needs to be said in brief.

In contrast, prose and poetry have a more flowing style.

Scripts evolve depending upon the material used to write on. For example, in the case of inscribing on a palm leaf, it would be difficult to use scripts with straight lines and dots, as they would tear the leaf. Hence the script perforce would need to have more curves to prevent the leaf from tearing.



Writing on palm leaf with a nail

Another example is the Morse code. The script in Morse code is full of dashes and dots to enable easy transmission of the message electronically.

A • -	J • ---	S • • •
B - • • •	K - • -	T -
C - • - •	L • - • •	U • • -
D - • •	M --	V • • • -
E •	N - •	W • - -
F • • - •	O ---	X - • • -
G --- •	P • - - •	Y - • - -
H • • • •	Q --- • -	Z - - • •
I • •	R • - - •	

It is on grounds such as these, that scripts evolve.

### ***Realistic and Pragmatic***

Palm leaves, on an average have a life of 200 to 400 years depending upon the care taken for storage. To expect the palm leaf manuscripts of *Mahabharata* period to have survived through 5000 years, for us to view the script now is unrealistic.

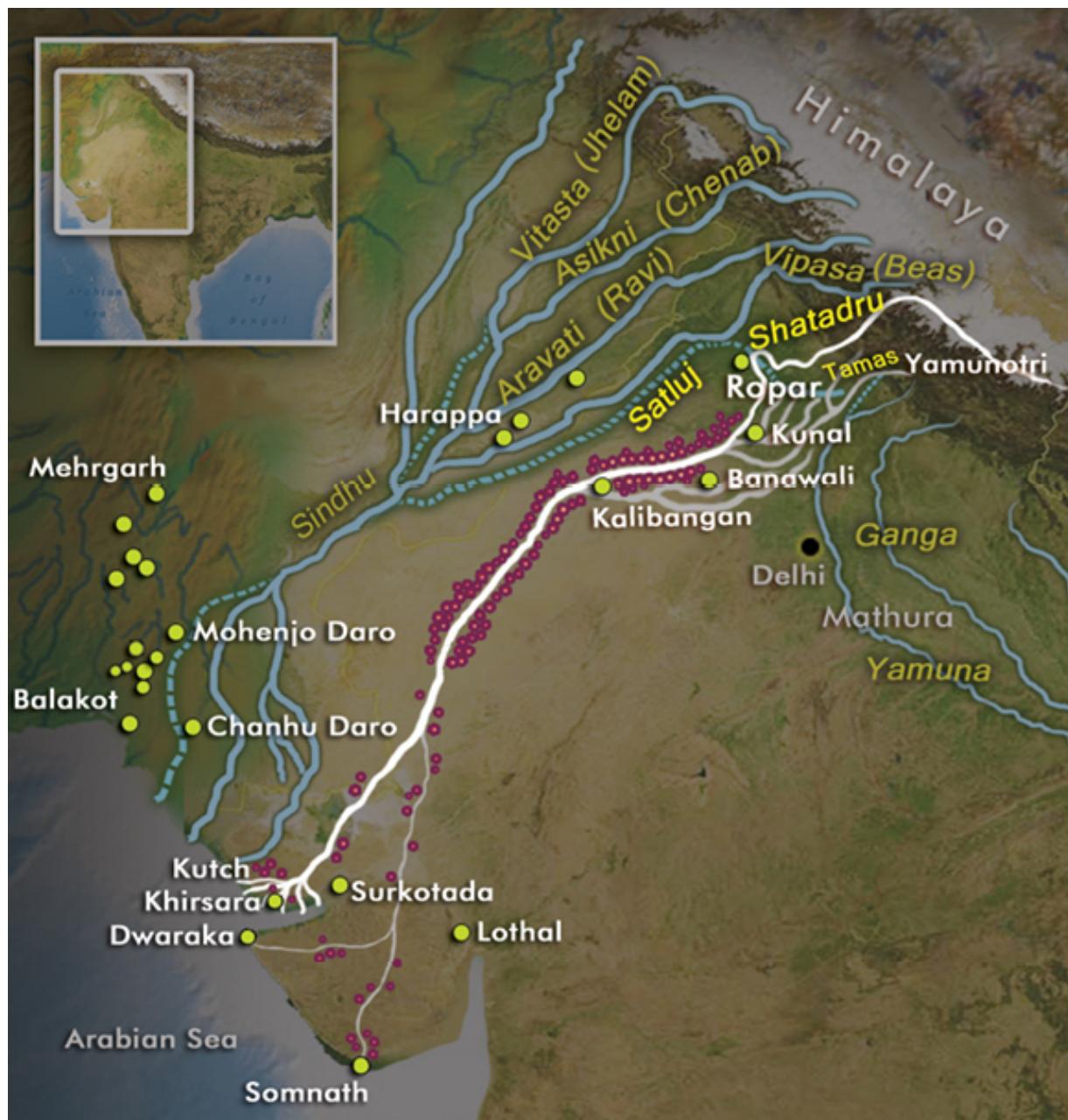
To take the fonts available in the seals as the entire gamut of the script of the language then, would also not be pragmatic.

The script, fonts on seals can only be indicative.

What the script was on the palm leaf then, may never be known to us. Now what we have for sure is the *Vak*, the oral language.

## A Paradox

Archaeological excavations done over the last one hundred years have established that an advanced civilization had flourished in the north-western part of India, about 5000 years ago, along the banks of the rivers Sindhu and the then flowing Sarasvati.



Over 2600 archaeological sites identified

The remnants of this civilization are available to us now, as the sites of Harappa, Mohenjodaro, Dholavira, Kalibanga, Rakhigarhi, Banawali, Lothal and over 2600 other such extensive sites.

These sites convey to us beyond doubt, the extent and sophistication of the planning used in the excavated towns. They confirm that a very evolved civilization had lived in the northwest parts of India about 5000 years ago.



Mohenjodaro City - Only 10% of this city has been excavated

These sites extend in geographic spread from present day Afghanistan, to Pakistan, to Kashmir, to Bihar/Nepal, to southern Gujarat.



Geographical spread of the civilization in North-West India,

These finds have thrown open a paradox.

## THE IRONY

1. On the one hand, we have over 2600 archaeological sites in a particular belt, the north-western region around India, which date to around 5000 years ago. Colonial mindset historians do not recognize any literature to be available for such an extensive civilization.

2. On the other hand, we have with us, the most voluminous literature of the ancient world, comprising of the *Veda*, the *Upanishad*, the *Vedanga*, the *Purana*, the two *Itihasa* - *Ramayana* and *Mahabharata*. Many of these, themselves, mention that they were compiled, composed, in the north western region of India and the locations mentioned are traceable to places among the above 2600 archaeological sites that have now been identified along the banks of the Sindhu and the then flowing Sarasvati Rivers. Also it has now been proven with a higher degree of certainty, through a variety of methods, that these literature were compiled, composed about 5000 years ago. Yet they are branded as mythological texts.

**The geography is the same, the timeframe is the same, the hills and rivers are the same. But still these texts and these archaeological sites have not been correlated with each other by historians with a colonial mindset.**

**The huge body of *Vedic* and epic literature are not recognized in history.**

When we say “not recognized in history”, the period of the work, the geography of the work and the lineage of the work is not brought forth in the current history books of the land. But the literature, called *Veda*, *Purana* and *Itihasa* does exist in reality. It has been passed on from generation to generation, without a break for more than a few millennia.

**How can such a copious literature come down to us without a clear history attached to it?**

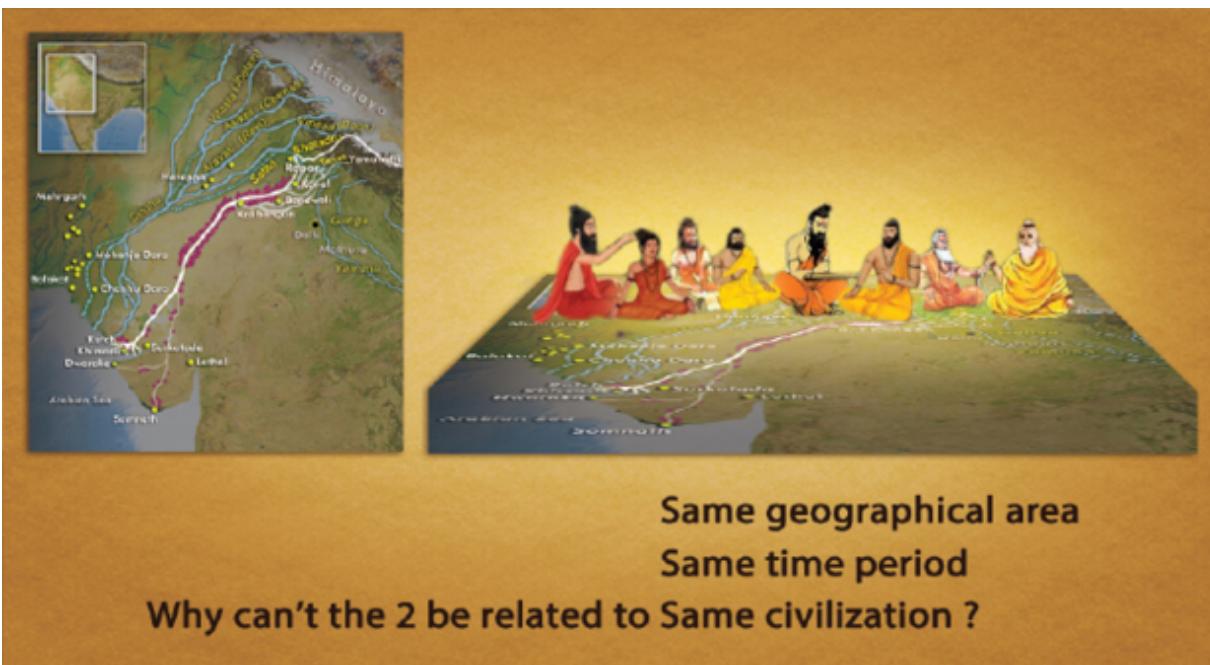
So here we have a queer case of ‘literature without history’ and ‘a history without literature’.

**Isn’t this a paradox?**

**Is this possible or is it just a case of deliberately ignoring what the literature or the civilization or both, have to say?**



No feet on the Ground, Seated in Air  
Literature and Archaeology of same period, but disconnected



Fixing geographical location of **Rishi** composers

### **Frawley's Paradox**

This paradox has been observed by quite a few researchers on India.

David Frawley, a research scholar on India, brought it to stark attention with the catchy phrase,

*“history without literature and literature without history.”*

Since then, this has been referred to as Frawley's Paradox.



David Frawley

## A STATE OF SCEPTICISM

The Indus Valley period and the *Vedic, Mahabharata* period of Indian history have thus been shrouded under scepticism.

While Mohenjodaro and Harappa are accepted as Indus Valley civilization sites and this civilization is dated to go back to 3000 BCE and beyond, it still is not widely accepted that this civilization was also connected with the *Vedic* civilization, which flourished on the banks of the Sindhu - Sarasvati Rivers and produced the *Vedic* literature around the same period.

As an extension of this, there prevails a reservation in accepting that the Indus Valley civilization could have been connected with the people of the *Mahabharata* period too as this period overlaps with the period when the *Vedic* civilization flourished.

The script of the Indus Valley civilization being more glyph like and uninterpretable for long, it reinforced the belief of sceptics that this

civilization could not have had any connection with the *Vedic* culture which had produced the *Vedic* literature. This further reduced the *Vedic* and *Puranic* civilization to a state of myth without an anchor to ground them in reality.

## TYING LOOSE ENDS

If we tie pieces of archaeological evidences together with what literature has to say, we find the paradox vanishing.

Amongst the many archaeological artifacts discovered, there are two finds which when placed alongside literary texts, tangibly bridge the historically and archaeologically accepted Indus Valley civilization with the reduced to myth *Vedic*, *Puranic* and *Itihaasic* culture of the *Mahabharata* period.

1. One is the find of the three headed seal undersea at Dwaraka matching with
  - a. the description of the three headed seal given to the people of Dwaraka in the *Mahabharata* text and
  - b. the other seals of the Indus Valley in design and form.

This speaks of a contemporary connect between the historically accepted Indus Valley civilization and the people of Dwaraka or the *Mahabharata* civilization.

2. The other is the find of the steatite dated around 2600 BCE from Mohenjodaro, depicting a young boy uprooting two trees and human figures emerging from them, which matches with the story of Damodara Krishna as retold in the *Purana* on Krishna.

This speaks of a contemporary connect between the historically accepted Indus Valley civilization and the stories of Krishna known to the *Mahabharata* civilization.

This links together

1. the historically and archaeologically accepted Indus Valley civilization,

2. the reduced to myth *Vedic* civilization and
3. the *Puranic* and *Itihaasic* literature of the *Mahabharata* civilization.

**Not only does it bring history and literature together, it anchors them firmly to the ground with geography and archaeology too!**

**We see that both the archaeological remains and the *Vedic* literary remains belong to the same period and the same civilization.**

The *Veda* were composed on the various archaeological sites along the banks of the Sarasvati. They were subsequently compiled by Veda Vyasa who was also the author of the *Mahabharata*. This highlights the geographical spread and link between

- the *Vedic*,
- the *Mahabharata* and
- the Sindhu - Sarasvati or Indus Valley civilizations.

## **CONTIGUOUS CONTEMPORANEOUS CIVILIZATION**

It was a contiguous, contemporaneous civilization.

The land was contiguous – same geography.

The story and events were common – same history.

Time was contemporaneous – same period in history.

Hence they belonged to one and the same civilization.

Krishna was part of this civilization.

# Epilogue

## KRISHNA, A TIMELESS PERSONAGE

There have been many a great men born in different parts of this world, in different civilizations, through time at different times.

Of all these, the personage of Krishna is unique. His timing is also unique.

The story of the personage of Krishna has survived the ravages of time. He has not just been eulogized but has been an inspiration for a whole civilization, through the land, through the times.

## UNCOVERING TRUE HISTORY

We have been able to arrive at dates for Krishna's lifetime using an integrated approach that looks for a convergence between sciences, tradition and history, as such a convergence points to the truth.

In **Volume 1 – Dating of Krishna**, we have seen that Krishna was born on 27<sup>th</sup> July, 3112 BCE and He gave the *Bhagavad Gita* on 22<sup>nd</sup> November, 3067 BCE, which means Krishna was 45 years old at the time of the war.

In this volume, we have learnt that the Indus Valley civilization in the North Western part of India, the *Mahabharata* civilization and the *Vedic* civilization were all one, dateable to around 3000 BCE and signs of Krishna can be traced amidst this civilization. We have also seen how the historicity of Krishna as well as the geographical places still bearing the same names, as those during Krishna's times emerges from the legends, practices and artifacts from those places.

In **Volume 3 - Facets of Krishna**, we will find how, much of the mystery and controversy surrounding Krishna are a myth. We will also see the rationale in the events surrounding the life of Krishna and get a glimpse into how historicity need not preclude divinity.

## ***New Vistas***

Up until now, dating in history meant finding the time period using only archaeology or information from excavation sites.

New vistas are now being opened up as the dating of the past events, history, can now be done using archaeo-astronomy, undersea exploration, oceanography - sea level rise, information on precession - axial tilt, spin of earth and so on.

To a historian of the earlier epoch, with a set mind on how to go about history, it is all quite a spin.

But to a new age student,

- who is comfortable with technology,
  - who wants to verify, cross verify everything with current technology,
  - one who understands interdisciplinary approach,
  - who wants to know the truth,
  - one who wants to look beyond pre-set ideologies,
- these new vistas give a new meaning to history.

## ***Interesting History***

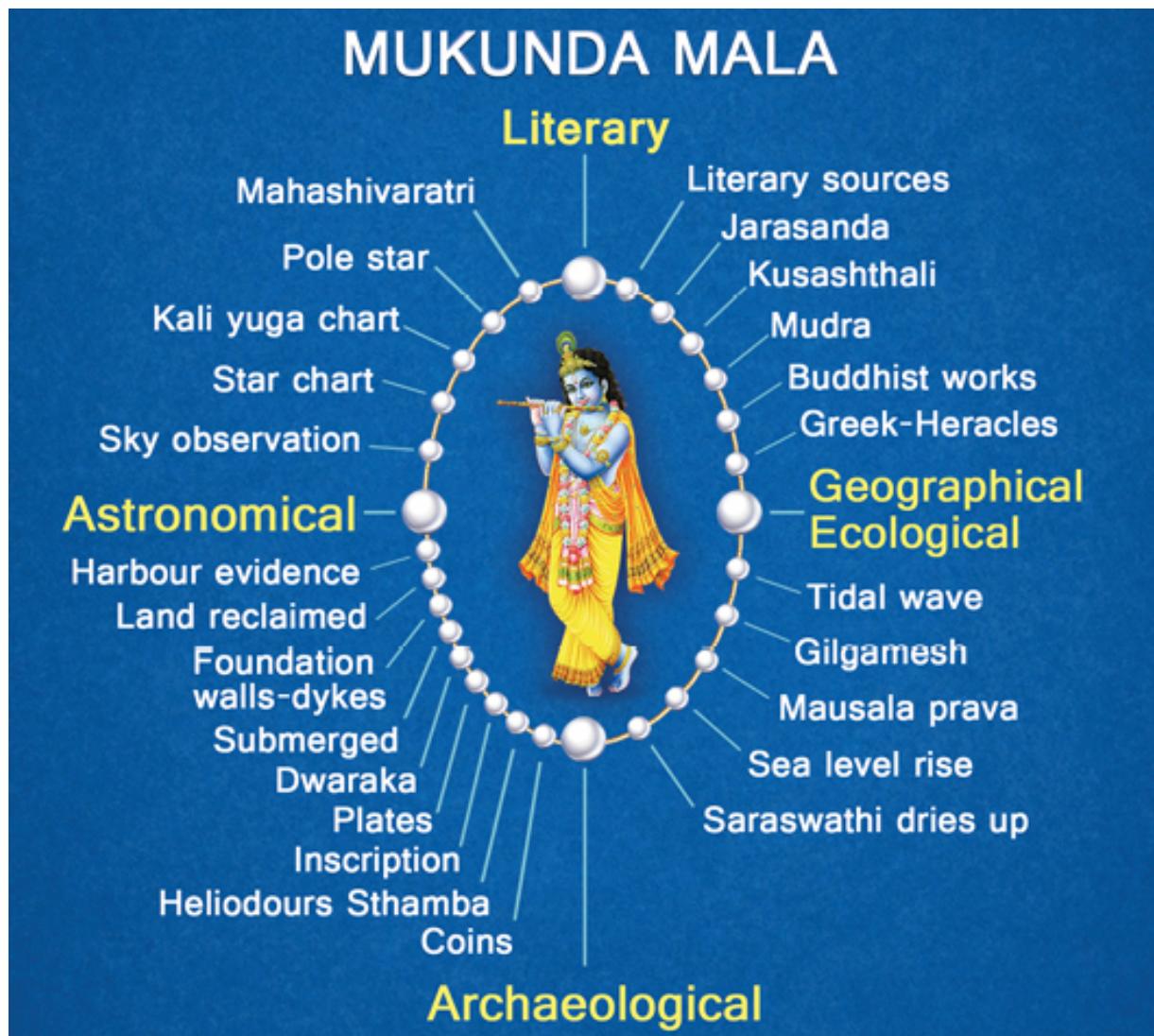
History no longer is a dull and drab subject but is something that is

- full of life,
- full of sciences,
- full of technologies,
- full of adventure,
- full of wholistic knowledge,
- full of tradition,
- full of humanity.

## ***Stringing History***

To such an inquiring mind, separate and disparate pieces of information such as,

- the archaeological evidences at Dwaraka,
  - the geographical evidences from *Braj Bhumi* region,
  - the natural melting of ice caps and sea level rise,
  - the depth at which lay the underwater ruins at Dwaraka,
  - the ecological factors seen in the geographical arc from Indian Ocean to Central Asia,
  - the drying up of the Sarasvati River due to tectonic movements and
  - the fact that the Archaeo-Astronomy dates tally with all the above,
- seem like individual pearls falling into place and stringing themselves up as a *mala*, necklace, garland. They form a *Mukunda Mala*. Mukunda is another name by which Krishna is known.



## ALL IN ALL, HISTORICAL

History is a mind bender.

A historian decides how the world perceives the past and thus shapes the thoughts, ideas and actions of the man of tomorrow.

From this compilation, we get a new and true perspective on the history of India.

We see that it is not only Krishna who is historical.

- Vrindavan is historical.

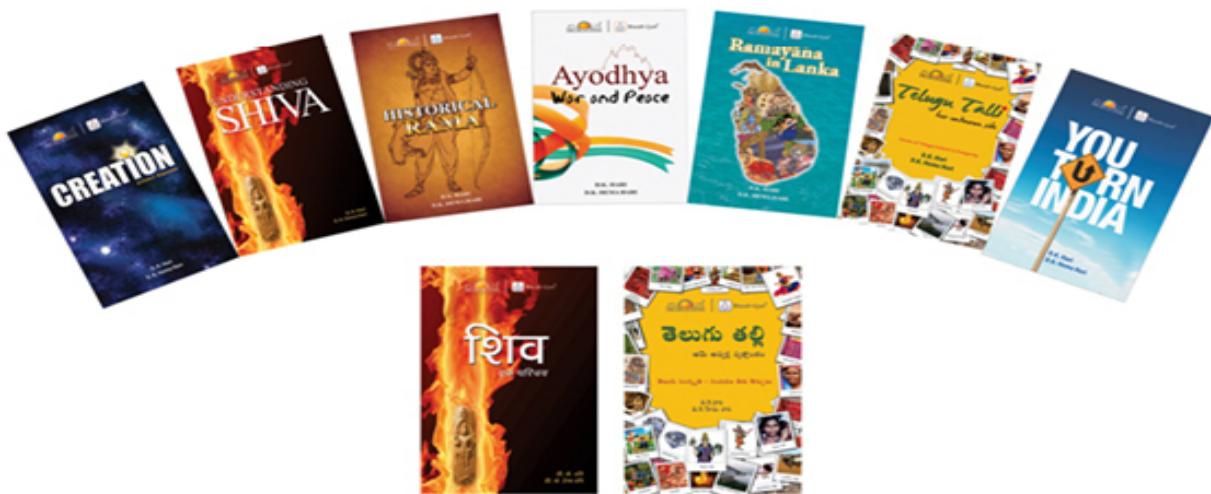
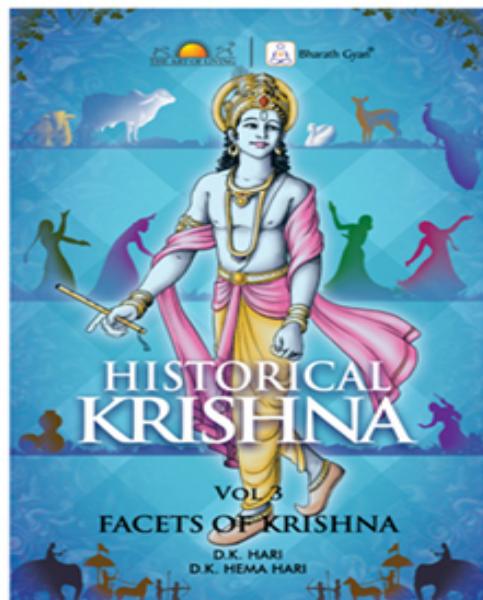
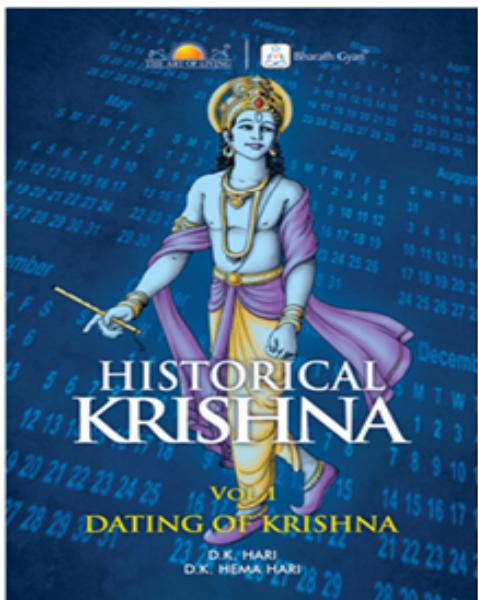
- Mathura is historical.
- Dwaraka is historical.
- Govardhan Giri hills are historical.
- Kurukshetra is historical.
- Sarasvati River is historical.
- Balarama is historical.
- Pandava Princes are historical.
- Veda Vyasa is historical.

The historicity of Krishna also establishes and brings forth the historicity of the times, the land and its people.

*When History meets Tradition and  
Tradition meets Science and  
Science meets Nature,  
Can we advance as truly mature peoples.*



## Books



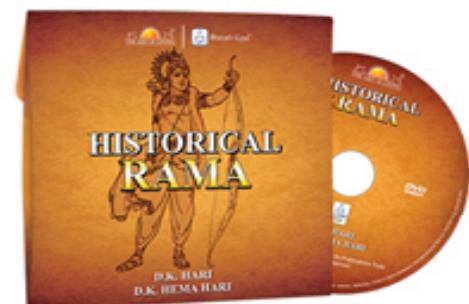
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