

Original Article

Preserving the Past: A Unified Digital Database for India's Heritage

Nagappa R. Umarane

Lecturer, Department of History K.L.E. Society's Degree College Ankali

Email: umaranen@gmail.com

Manuscript ID:

JRD -2026-180229

ISSN: 2230-9578

Volume 18

Issue 2(V)

Pp.123-129

February 2026

Submitted: 18 Jan. 2026

Revised: 28 Jan. 2026

Accepted: 10 Feb. 2026

Published: 28 Feb. 2026

Abstract

India possesses one of the world's richest repositories of tangible cultural heritage, encompassing monuments, archaeological sites, and antiquities that span from prehistoric settlements to the colonial period. This vast legacy reflects the country's diverse historical, artistic, architectural, and cultural traditions. However, documentation of this heritage has historically remained fragmented across institutions such as the Archaeological Survey of India (ASI), State Archaeology Departments, museums, and the Indian National Trust for Art and Cultural Heritage (INTACH). The absence of a centralized and standardized database has posed significant challenges for research, conservation planning, policy formulation, and heritage management. "Preserving the Past: A Unified Digital Database for India's Heritage" examines the need for an integrated and systematic documentation framework to safeguard the nation's cultural assets. In response to these challenges, the National Mission on Monuments and Antiquities (NMMA) was established to create a comprehensive national inventory of built heritage, sites, and antiquities. By developing standardized recording formats, implementing digitization processes, and conducting training and capacity-building programs, NMMA aims to bridge institutional gaps and ensure uniformity in heritage documentation across the country.

The initiative not only facilitates academic research and informed conservation strategies but also strengthens legal protection and public awareness. A unified digital repository enhances accessibility, transparency, and collaboration among stakeholders, including government agencies, scholars, and local communities. Furthermore, digitization serves as a preventive conservation measure by creating permanent records that can assist in restoration efforts and disaster management. By consolidating scattered records into a structured national database, NMMA represents a critical step toward sustainable heritage preservation. The mission underscores the importance of technology-driven documentation in safeguarding India's tangible cultural legacy for future generations while promoting responsible stewardship in an increasingly digital era.

Key words: Ancient monument, Indian art & architecture, Harrapan architecture, National Mission on Monuments Antiquities (NMMA) Established in **2007**, the NMMA is responsible for the **digitization** and **documentation** of India's built heritage and antiquities. It has made significant progress in compiling national registers for monuments and antiquities.

Introduction

India is one of the largest repositories of tangible heritage, with monuments, sites, and antiquities spanning from prehistoric times to the colonial era. While various organizations like the ASI, State Archaeology Departments, and INTACH have documented parts of this heritage, much remains scattered or undocumented. The absence of a unified database makes research, conservation, and management challenging. To address this, the **National Mission on Monuments and Antiquities (NMMA)** was launched to systematically document and digitize built heritage, sites, and antiquities. Through standardized documentation, training programs, and public awareness, NMMA aims to create a comprehensive national database, ensuring the preservation of India's rich cultural legacy.



Quick Response Code:



Website:

<https://jrdrvb.org/>



Creative Commons (CC BY-NC-SA 4.0)

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License, which allows others to remix, tweak, and build upon the work noncommercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Address for correspondence:

Nagappa R. Umarane, Lecturer, Department of History K.L.E. Society's Degree College Ankali

How to cite this article:

Nagappa R. Umarane, (2026) Preserving the Past: A Unified Digital Database for India's Heritage. Journal of Research & Development, 18(2(V)), 123-129.

Objectives

- Documenting and creating a national database of built heritage, monuments, and antiquities for better management and research.
- Ensuring uniform documentation of antiquities across central, state, private institutions, and universities.
- Raising awareness about cultural heritage preservation.
- Providing training and capacity building for state departments, local bodies, museums, NGOs, and universities.
- Enhancing collaboration between the Archaeological Survey of India (ASI), state departments, and other stakeholders.
- Publication and Research

As per the AMASR Act 1958, the following are the definitions of ancient monuments:

"Ancient monument" means any structure, erection, or monument, or any tumulus or place of internment, or any cave, rock sculpture, inscription, or monolith, which is of historical, archaeological, or artistic interest and which has been in existence for not less than one hundred years, and includes:

Indian Art & Architecture

At times it becomes very important to be reminded that we are that civilization which has spanned at least 4,500 years and which has left its impact on nearly everything in our lives and society. There are 26 UNESCO World Heritage Sites in India. This is less than six other countries. Is this not a tangible proof of the creative genius of this ancient land, people, and also of the gifts bestowed on it by nature? Be it the Bhimbetka's pre historic rock art at one end or the innumerable palaces, mosques, temples, gurudwaras, churches or tombs and sprawling cities and solemn stupas on the other hand. Across the length and breadth of the country one can find many beautiful buildings. Some are monuments, palaces, temples, churches, mosques and memorials. Many of them had their foundation before Christ and many after the coming of Christ. Many generations have been a part of this architecture which stands mighty and lofty reminding us of that glorious past which has been ours. This is because art and architecture forms an important part of Indian culture. Many distinctive features that we find in the architecture today developed throughout the long period of Indian history. The earliest and most remarkable evidence of Indian architecture is found in the cities of the Harappan Civilization which boast of a unique town planning. In the post Harappan period architectural styles have been classified as Hindu, Buddhist and Jain. The medieval period saw the synthesis of Persian and indigenous styles of architecture. Thereafter the colonial period brought the influence of Western architectural forms to India. Thus Indian architecture is a synthesis of indigenous styles and external influences which has lent it a unique characteristic of its own. Culture comprises a plurality of discourses. Architectural forms are the most visible discourses of past civilizations. Indian civilization presents a very rich and diversified architectural tradition.

Architecture:

Meaning, Form and Context In common parlance, architecture is a study of forms: about plans, designs, motifs and how they have evolved over time. But built spaces are a medium to study societies as well. Architectural spaces, both sacred and secular have a functional aspect, in the sense that they fulfil the need for what they were created. A temple or a mosque is a house of worship and a king's tomb or a palace has royal connotations, a commemorative edifice proclaims what it is meant to, and houses are built to protect people and communities. Through these physical types, we get to know the technical knowhow of the times, the processes of their creation, patterns of patronage, and a given society's metaphysical system as the architectural forms draw upon contemporary cultural and philosophical discourses. Power and authority are as much reflected in these built spaces as are notions of aestheticism that are otherwise embodied in contemporary literature.

Architecture is also a medium to study society because built spaces delineate communities, give them a sense of belonging and a cultural identity. Architectural forms become spaces where various identities and groups are formed, in which some are included, while 'others' are not. Often these spaces become sites of contestations, conflicts, state formation, assimilation and exclusion - generating multiple meanings. They are lived spaces with firm social moorings. At the same time, monuments, even religious structures have multilayered histories and not belong to one monolithic community or compact power structures. They are always shared spaces where different individuals and communities come together to create it. They have multiple affiliations. Architectural forms therefore, are not just a study of forms, the pure exotica, but they are a part of a larger social cultural history. Religion, in all time and space has always been a major propeller of architectural creations as of other artistic activity.

In the Indian context, from the Buddhist stupa and chaitya to the Hindu temple, and then to the Muslim mosque or the Christian church, religion has stimulated all art. However, this is not to mean that the Buddhist chaitya gave way to the Hindu temple to be replaced by the Muslim mosque and so on. There is no takeover of one style from another, nor is there any 'high' point or 'low' ebb. Present scholarship rejects the notion of a Gupta 'classical age' and postGupta centuries to be one of decadence. As a matter of fact, some of the finest temples were constructed in the post-Gupta period, as testimonies to India's fine architectural tradition. Both sacred and secular architecture instead, manifests a continuous process of adaptation and transformation across different regions and communities and is as much inclusive of local forms as of forms that came from beyond the borders. Overlap and interaction is the key to

understand Indian architecture. And since there is no linear development in Indian architecture, the discipline being a multiple discourse, we need to move away from the primacy of one region, period, dynasty or patronage. This would then also mean that we need to move away from the factor of 'influence' and instead lay stress on the processes behind the architectural endeavours, which are multilayered, with multiple meanings and paradigm shifts.

No architectural type is a self contained category with a monolithic identity. Monuments need to be analysed in relation to their own historical and ideological contexts. And finally, this would also mean, that architecture is not just a study of forms – of icons or decorative motifs, of spatial and scientific technical production or of even the pure functional - but is a part of a larger history of culture, society and politics.

Perception of India's Architectural Tradition:

Historiography The history of Indian architecture, as a systematic study, was first taken up in British India. Several influential writers, from 1874 - 1927, set the future trends of scholarship. Most viewpoints that were current till recently, were influenced by the writings that appeared from mid 19th century onwards. From Henry Cole's publication of the catalogue of the Indian collection at the then, South Kensington Museum (1874) to Ananda Kentish Coomaraswamy's classic, History of Indian and Indonesian art (1927), several issues regarding Indian art and architecture were debated and frameworks, largely derived from western methodologies, were put forward. ParthaMitter divides these writings and their approaches into two broad groups: archaeological and transcendental.

To the first group, classical European art was the exemplar of perfect taste against which all Indian art and architecture was to be judged. This is easily discerned in the writings of its major protagonists: Henry Cole, R. Orme, H. Colebrooke, James Fergusson, Vincent Smith and George Birdwood. This approach did much to further formulate the orientalist canon, seen in James Mill's History of British India, written in 9 volumes (1817-20), where the principal orientalist vision received its first classic articulation. Rediscovery of India's cultural past in these colonial writings was founded on the premise that to control the present better, you need to know the past of the ruled better.

Primacy of religion and race were crucial in understanding Indian architecture for this approach. Buddhism, Hinduism and Islam were the markers of Indian cultural identity. In this paradigm, Vedic and Buddhist periods were periods of pristine purity, while medieval Hinduism coincided with decay as evidenced from overtly decorative temples. The debate concerning Aryan versus Dravidian centred on Buddhist art being alone worthy of appreciation as it was Aryan and influenced by Graeco-Bactrian antiquity. In some writings, Islamic art too was superior and rational because it came from outside and Islam did not have the constraints of the Hindu caste system. Central to this construct is the foreign origin of Gandhara, as it was influenced by Greek art.

The second group was concerned with characterizing Indian art as transcendental and can be called nationalist in its approach. The writings of these art historians, led by Ernest Binfield Havell and Ananda Kentish Coomaraswamy centred on Indian art embodying an idea, an inner world of beauty that has an intrinsic meaning. Based on classical norms of Neoplatonist doctrines, this approach read all Indian art as spiritual. The spirituality of Indian art was underlined when Coomaraswamy informed that nature was transcendental and existed on a metaphysical plane in the artist's mind, which was then externalized and represented in material art form in his work.

Even the architectural form of the dome, to Coomaraswamy, was a work of imagination and not one of technicality. However, Coomaraswamy too, like the other writers, took refuge in western thought and knowledge of Platonism to explain Indian art. Again, although, Coomaraswamy was right in assessing the role of religion in Indian art, but when it came to explaining the precise relation between art and religion or the nature of Indian art, he took recourse to collective metaphysical generalizations. The problem with this approach is that it does not show how the meaning is derived, or how to read meaning in a form by virtue of its intrinsic properties.

Much of writing today explains the exact nature of this relationship in more concrete and individual ways, rather than in generalized collective notions. Indian art and architecture has to be studied in specific religious, cultural, political and social contexts. Different endeavours and forms have to be assessed from their own specific contemporary positions. With this backdrop of what 'architecture' should mean and by drawing from recent writings, we shall try to unveil some architectural forms and their meanings from India's cultural past. This happened was a special technique of vision, the practice of yoga, known to the traditional Indian artists. Even the architectural form of the dome, to Coomaraswamy, was a work of imagination and not one of technicality. However, Coomaraswamy too, like the other writers, took refuge in western thought and knowledge of Platonism to explain Indian art. Again, although, Coomaraswamy was right in assessing the role of religion in Indian art, but when it came to explaining the precise relation between art and religion or the nature of Indian art, he took recourse to collective metaphysical generalizations.

The problem with this approach is that it does not show how the meaning is derived, or how to read meaning in a form by virtue of its intrinsic properties. Much of writing today explains the exact nature of this relationship in more concrete and individual ways, rather than in generalized collective notions. Indian art and architecture has to be studied in specific religious, cultural, political and social contexts. Different endeavours and forms have to be assessed from their own specific contemporary positions. With this backdrop of what 'architecture' should mean and by drawing from recent writings, we shall try to unveil some architectural forms and their meanings from India's cultural past.

Harappan Period The excavations at Harappa and Mohenjodaro and several other sites of the Indus Valley Civilisation revealed the existence of a very modern urban civilisation with expert town planning and engineering skills. The very

advanced drainage system along with well planned roads and houses show that a sophisticated and highly evolved culture existed in India before the coming of the Aryans. The sites of the Indus Valley Civilization were excavated under the Archaeological Survey of India established by the British. The Harappan people had constructed mainly three types of buildings-dwelling houses pillared halls and public baths. Main features of Harappan remains are:

1. The settlements could be traced as far back as third millennium BC. Some important settlements were excavated on the banks of the river Indus particularly at the bends that provided water, easy means of transportation of produce and other goods and also some protection by way of natural barriers of the river . 2. All the sites consisted of walled cities which provided security to the people. The cities had a rectangular grid pattern of layout with roads that cut each other at right angles. The Indus Valley people used standardised burnt mud-bricks as building material.
3. There is evidence of building of big dimensions which perhaps were public buildings, administrative or business centres, pillared halls and courtyards, There is no evidence of temples. Public buildings include granaries which were used to store grains which give an idea of an organised collection and distribution system.
4. Along with large public buildings, there is evidence of small one roomed constructions that appear to be working peoples quarters.
5. The Harappan people were great engineers as is evident from the public bath that was discovered at Mohenjodaro. The 'Great Bath' as it is called, is still functional and there is no leakage or cracks in the construction. The existence of what appears to be a public bathing place shows the importance of ritualistic bathing and cleanliness in this culture. It is significant that most of the houses had private wells and bathrooms.
6. At some sites a dominant citadal was excavated in the western part containing the public buildings including the granaries. This can perhaps be treated as evidence of some kind of political authority ruling over the cities.
7. There is evidence also of fortifications with gateways enclosing the walled city which shows that there may have been a fear of being attacked. Lothal, a site in Gujarat also has the remains of a dockyard proving that trade flourished in those times by sea.

Another remarkable feature was the existence of a well planned drainage system in the residential parts of the city. Small drains from the houses were connected to larger ones along the sides of the main roads. The drains were covered and loose covers were provided for the purpose of cleaning them. The planning of the residential houses were also meticulous. Evidence of stairs shows houses were often double storied. Doors were in the side lanes to prevent dust from entering the houses

The most important features of Harappan architecture are their superior town planning skills and cities that have been built on a clear geometric pattern or grid layout. Roads cut each other at right angles and were very well laid out. As the Indus Valley settlements were located on the banks of the river, they were often destroyed by major floods. In spite of this calamity, the Indus Valley people built fresh settlements on the same sites. Thus, layers upon layers of settlements and buildings were found during the excavations. The decline and final destruction of the Indus Valley Civilization, sometime around the second millennium BC remains a mystery to this day.

The Harappans had the knowledge and skill of sculpting and craft. The world's first bronze sculpture of a dancing girl has been found in Mohenjodaro. A terracotta figure of a male in a yogic posture has also been excavated. Beautiful personal ornaments, soft stone seals with a pictorial script and images of humped bulls, Pashupati unicorn have also been excavated. The Vedic Aryans who came next, lived in houses built of wood, bamboo and reeds; the Aryan culture was largely a rural one and thus one finds few examples of grand buildings.

This was because Aryans used perishable material like wood for the construction of royal palaces which have been completely destroyed over time. The most important feature of the Vedic period was the making of fire altars which soon became an important and integral part of the social and religious life of the people even today. In many Hindu homes and especially in their marriages, these fire altars play an important role even today. Soon courtyard and mandaps were build with altars for worship of fire which was the most important feature of architecture.

We also find references of Gurukuls and Hermitages. Unfortunately no structure of the Vedic period remains to be seen. Their contribution to the architectural history is the use of wood along with brick and stone for building their houses. In the 6th century B.C. India entered a significant phase of her history. There arose two new religions - Jainism and Buddhism and even the Vedic religion underwent a change. Almost simultaneously larger states sprang up which further provided for a new type of architecture. From this period i.e. the expansion of Magadha into an empire, the development of architecture received further impetus. From now it was possible to trace Indian architecture in an almost unbroken sequence. Emergence of Buddhism and Jainism helped in the development of early architectural style. The Buddhist Stupas were built at places where Buddha's remains were preserved and at the major sites where important events in Buddha's life took place. Stupas were built of huge mounds of mud, enclosed in carefully burnt small standard bricks.

One was built at his birthplace Lumbini; the second at Gaya where he attained enlightenment under the Bodhi Tree, the third at Sarnath where he gave his first sermon and the fourth at Kushinagar where he passed away attaining Mahaparinirvana at the age of eighty. Buddha's burial mounds and places of major events in his life became important landmarks of the significant architectural buildings in the country. These became important sites for Buddha's order of monks and nuns - the sangha. Monasteries (viharas), and centres of preaching, teaching and learning came up at such

places. Congregational halls (chaitya) for teaching and interaction between the common people and the monks were also built up. From now on religion began to influence architecture. While Buddhists and Jains began to build stupas, Viharas and Chaityas, the first temple building activity started during the Gupta rule.

Cave architecture

The development of cave architecture is another unique feature and marks an important phase in the history of Indian architecture. More than thousand caves have been excavated between second century BC and tenth century AD. Famous among these were Ajanta and Ellora caves of Maharashtra, and Udaygiri cave of Orissa. These caves hold Buddhist viharas, chaityas as well as mandapas and pillared temples of Hindu gods and goddesses. Temples were hewn out of huge rocks. The earliest rock-cut temples were excavated in western Deccan in the early years of the Christian era. The chaitya at Karle with fine high halls and polished decorative wall is a remarkable example of rock-cut architecture. The Kailash temple at Ellora built by the Rashtrakutas and the ratha temples of Mahabalipuram built by the Pallavas are other examples of rock-cut temples. Most probably the stability and permanence of rocks attracted the patrons of art and builders who decorated these temples with beautiful sculptures.

The Temple Buddhism was the earliest Indian religion to require large communal spaces for worship. This led to three types of architectural forms: the stupa, the vihara and the chaitya. Many religious Buddhist shrines came up between the 1st century BCE - 1st century CE. Stupa, originally the focus of a popular cult of the dead, is a large burial mound containing a relic of the Buddha. The Temple Buddhism was the earliest Indian religion to require large communal spaces for worship. This led to three types of architectural forms: the stupa, the vihara and the chaitya. Many religious Buddhist shrines came up between the 1st century BCE - 1st century CE. Stupa, originally the focus of a popular cult of the dead, is a large burial mound containing a relic of the Buddha.

Along with stupa architecture, a novel cave architecture or rock-cut architecture too developed in most parts. Most of Hinayana Buddhist rock-cut prayer halls/chapels (chaitya) and monasteries (viharas) came up in the Deccan region (120 BCE – 400 CE), along ancient trade routes that had excellent quality of rock. The best known are Karle (50 - 70 CE) and Ajanta (cave 9 and 10 in the c.2nd century BCE). Again after a gap of some 250 years, innumerable shrines and monasteries were cut into hills and rocks where Buddhist, Jain and Hindu monks could live and pray. Archaeological data suggests that both the Buddhist chaitya and the Hindu rock-cut temple were contemporaneous in the 3rd - 1st century BCE. Some of the finest examples can be seen in western Deccan from the 5th century CE to almost for over 300 years. To this latter phase belongs the Kailashnath temple at Ellora caves (760 CE), built under the patronage of the Rashtrakutas (753 - 982 CE), to be followed by the rock-cut temples of Elephanta (c.500-760 CE). Rock-cut shrines were emerging elsewhere south of the Deccan as well.

Meanwhile free-standing shrines or structural temples started to develop as well. The earliest were small structures of brick and wood as the one that exists at Bairat, near Jaipur (c.250 BCE). Early structural temples of stone are found in the hilly tracts of Madhya Pradesh, on the southern fringes of the Gupta Empire (350 – 500 CE). They belong to the late Gupta period (c.400 CE). The area is rich in stone, unlike northern Madhya Pradesh, where most temples would have been of brick and hence have perished. But even among the stone shrines, less than a score remain, and none has an intact superstructure. These early Gupta temples are flat roofed small structures with ornate pillars. Like the elegant flat roofed Sanchi temple with a pillared porch and a walled sanctum, resembling a Greek shrine, is one of the earliest. But the Gupta Vishnu temple at Deogarh (c.500 CE) near Jhansi has a small tower on the sanctum. The Bhitargaon temple near Kanpur, the sole survivor among many brick temples too, has a definite curvilinear spire.

These simple structures, in the early medieval period, from the 6th - 13th century CE, began to expand, horizontally and vertically. This period in Indian history is marked by great temple building activity. The shrines, dedicated to various deities from the Hindu/Jain pantheon were a product of Bhakti or devotional Hinduism, the characteristic ideology of the early medieval centuries. Down the years, these temples became more institutionalized. Like around the 7th century CE, there was a significant change in the nature of the temple in peninsular India, as its organization became more complex. Rich donations of land, cash and other riches were made to these shrines that became the hub of social and economic activities. They were great craft and cultural centres and fostered many traditional performing arts. Many of them, as tirthas (pilgrimage 217 centres) were located on trade routes, which in turn led to urbanization in early Medieval South India. Each region experimented and responded in its own local way and the temple forms with what we are familiar today emerged more definitive. Three distinctive styles, often overlapping, can be discerned, confirming that there was no all India uniform style.

The Hindu temple is the enshrined deity's house (devalaya), and his or her palace (prasada), where the priests cater to his or her daily needs. The temple is a holy site (tirtha) where the devotees come to perform the circumambulation (pradakshina) to earn religious merit. The heart of the temple is the garbhagriha (literally, the 'embryo chamber'), the sanctum sanctorum, where one is meant to feel the presence of the deity. The installation rituals of Hindu deities go back to the late Gupta text, the Brihatsamhita. The development of the Agamas, ritual texts, and especially the Pancharatra (tantric) system in the 5th century CE, led to elaborate temple rituals with metaphysical interpretations. These worship ritual texts, went hand in hand with the rise of Tantricism, a major movement that challenged Bhakti. Gradually, more functional buildings were added to the basic structure. These were the pillared halls

(mandapa), the added portico (ardhmandapa), a connecting vestibule (antara) to the sanctum sanctorum, and surmounting the garbhagriha, the spire (shikhara).

Regional variations led to Hindu temples being broadly classified into the northern type (Nagara), belonging to the area between the Himalayas and the Vindhyas and the southern type (Dravida), falling in the region between river Krishna to Kanyakumari. A third one, taking the features of both these types is the Vesara, located between the Vindhyas and the Krishna. However, these are at times only arbitrary classifications as Nagara temples are found in Kurnool district in Andhra Pradesh and Dravida can be seen at Ellora in the Deccan. The distinction rests on the shape of the tower, the ground plan and the elevation. The Nagara tower (shikhara) has a curvilinear slope with a fluted disc (amalaka) at the pinnacle. The Dravida tower (vimana) is pyramidal, follows a dome and cornice pattern with diminishing stories (tala), and is crowned by a square, polygonal or a round dome.

The Nagara elevation consists of a series of projections (rathas) and recesses, whereas the walls of the Dravidian type are relieved by enshrined images in recesses at regular intervals. In south India, temples are enclosed within enclosure walls having gate towers (gopuras), marking the entrances. The Vesara or the Chalukyan (also called the Karnataka - Dravida tradition) is the mixed type, located in the Deccan region. The Chalukyan, actually speaking has the same source of inspiration as the Dravidian, the earliest examples being at Aihole, Badami and Pattadakal in the Bijapur district in Karnataka. Aihole alone has as many as 70 temples. Temples in the regions of Bengal, Kashmir and Kerala evolved their own local variation, while subscribing to either of the styles.

The most striking feature of the Hindu temple is the profuse use of ornamentation on its surface. This ranges from narrative stone reliefs to depiction of figural, floral, animal, geometrical and other foliated designs. In the northern variation, the repetitive motif of the gavaksa (arch shaped 218 window), derived from the Buddhist chaitya, is transmuted into intricate honeycomb patterns, creating a rich lace like surface texture. The South used variation on the gavaksa known as kuta, nasi, panjara or the sala (barrel-vaulted chaitya). The north was ingenious in the use of shikhara and the amalaka. These repetitive motifs follow clear geometrical rules and are conceived three dimensionally.

Buddhism and the Indo-Greek in India

It is necessary to deal with the coming of Buddhism in India as a turning point in the world of art and culture, philosophy and religion. More than all other religious faiths, the Greco-Indian 353 approach to the new dawn across Asia and Europe was mainly due to the Buddhism during the centuries under discussion here

It is believed that Buddha never intended to set up a new religion and he never looked on his doctrine as distinct from the popular cults of the time. However questionable this view may be, his simpler followers raised his status almost to divinity during his lifetime, and after his death, worshipped him through his symbols-the stupa, recalling his parinirvana and the Bodhitree, recalling his enlightenment. According to tradition, disciples and the neighbouring rulers divided his ashes, and the recipients built stupas over them. In the third century BC, Ashoka uncovered the ashes from their original resting places and dispersed those, creating stupas all over India. The carvings on the stupas of Bharhut and Sanchi, crafted in the second and third centuries BC, show crowds of adoring worshippers leaning down towards the symbol of the Buddha. Indeed, in all the Buddhist sculpture of the period, there is no show of the Buddha himself, but displayed by such emblems as a wheel, an empty throne, a pair of footprints or a pipal tree.

Rise of the Gandhara art

The Gandhara Schools of art and sculpture in the lower Kabul Valley and the upper Indus around Peshawar and Mathura, both of which flourished under the Kushan kings, vie for the honour of producing the first images of the Buddha. Most Indian authorities, however, believe that the Buddha image originated at Mathura, south of Delhi. Around the time of Menander's death in 140 BC, the Central Asian Kushans overran Bactria and ended Greek rule there. Around 80 BC, the Sakas, diverted by their Parthian cousins from Iran, moved into Gandhara and other parts of Pakistan and Western India. Eventually an Indo-Parthian dynasty succeeded in taking control of Gandhara. The Parthians continued to support Greek artistic traditions. The Kushan period is considered the golden period of Gandhara. Gandharan art flourished and produced some of the best pieces of Indian sculpture. The Gandhara civilization peaked during the reign of the great Kushan King Kanishka (AD 128-151). The cities of Taxila (Takshasila) at Sirsukh and Peshawar flourished. Peshawar became the capital of a great empire stretching from Bengal, the easternmost province of India to Central Asia.

Kanishka was a great patron of the Buddhist faith; Buddhism spread farther from Central Asia to the Far East, where his empire met the Han Empire of China. Gandhara became a holy land of Buddhism and attracted Chinese pilgrims to see monuments associated with many Jataka tales. In Gandhara, Mahāyāna Buddhism flourished and Buddha was represented in human form. Under the Kushans new Buddhists stupas were built and old ones were enlarged. Huge statues of the Buddha were erected in monasteries and carved into the hillsides. Kanishka also built a great tower to a height of 400 feet at Peshawar. This tower was reported by Faxian (Fa-hsien), Songyun (Sung-yun) and Xuanzang (Hsuan-tsang). This structure was destroyed and rebuilt many times until it was at last destroyed by Mahmud of Ghazni in the 11th century AD.

The earliest Hellenistic statues of the Buddha portray him in a style reminiscent of a king. Demetrius may have been deified, and the first Hellenistic statues of the Buddha we know may be representations of the idealized Greek king, princely, yet friendly, protective and open to Indian culture. As they often incorporated more Buddhist

elements, they became central to the Buddhist movement, and influenced the image of the Buddha in Greco-Buddhist art. In Gandharan art, the Buddha is often shown under the protection of the Greek god Herakles, standing with his club (and later a diamond rod) resting over his arm. This unusual representation of Herakles is the same as the one on the back of Demetrius' coins, and it is exclusively associated to him (and his son Euthydemus II), seen only on the back of his coins.

Mathura art

Mathura, 145 km south of Delhi, is by tradition the birthplace of Krishna, one of the two chief deities in Hindu religion. Mathura is also famous as one of the first two centres of production for images of the Buddha, the other being Gandhara. Human images of the Buddha began to appear at about the same time in both centres in the 1st Century AD but can be distinguished from one another as the Gandharan images are very clearly Greco-Roman in inspiration with the Buddha wearing wavy locks tucked up into a chignon and heavier toga-like robes. The Buddha figurines produced in Mathura more closely resemble some of the older Indian male fertility gods and have shorter, curlier hair and lighter, more translucent robes. Mathuran art and culture reached its zenith under the Kushan dynasty which had Mathura as one of their capitals, the other being Purushapura (Peshawar).

The Mathura images are related to the earlier yaksa (male nature deity) figures, a likeness mostly evident in the colossal standing Buddha images of the early Kushan period. The sculptors worked for centuries in the speckled, red sandstone of the locality and the pieces carried far and wide. In these, and in the more representative seated Buddhas, the overall effect is one of enormous energy. The shoulders are broad, the chest swells, and the legs are firmly planted with feet spaced apart. Other characteristics are the shaven head; the usnisa (knob on the top of the head) indicated by a tiered spiral; a round smiling face; the right arm raised in abhaya-mudra (gesture of reassurance); the left arm akimbo or resting on the thigh; the drapery closely moulding the body and arranged in folds over the left arm, leaving the right shoulder bare; and the presence of the lion throne rather than the lotus throne. Later, the hair began to be treated as a series of short flat spirals lying close to the head, the type that came to be the standard representation throughout the Buddhist world.

The female figures at Mathura, carved in high relief on the pillars and gateways of both Buddhist and Jaina monuments, are truly sensuous in their appeal. These richly bejeweled ladies, ample of hip and slender of waist, standing suggestively, are reminiscent of the dancing girls of the Indus Valley. Their gay, impulsive sensuality in the backdrop of a resurgent doctrine of piety and renunciation is an example of the remarkable tolerance of the ancient Indian outlook on life, which did not find such display of art and culture improper. These delightful nude or semi-nude figures are shown in a variety of toilet scenes or in association with trees, indicating their continuance of the yakṣī (female nature deity) tradition seen also at other Buddhist sites, such as Bharhut and Sanchi. As auspicious emblems of fertility and abundance they commanded a popular appeal that persisted with the rise of Buddhism.

Conclusion

There were strong Indo-Roman trade relations during the first two centuries of the Common Era. The 3rd century, however, was the demise of the Indo-Roman trade. The replacement of Greece by the Roman Empire as the administrator of the Mediterranean basin led to the strengthening of direct maritime trade with the east and the elimination of the taxes extracted previously by the middlemen of various land based trading routes. Strabo's mention of the vast increase in trade following the Roman annexation of Egypt indicates that monsoon was known and manipulated for trade in his time. By the time of Augustus up to 120 ships were setting sail every year from Myos Hormos to India. So much gold was used for this trade, and apparently recycled by the Kushana Empire (Kushans) for their own coinage, that Pliny the Elder complained about the drain of specie to India.

Reference

1. Chakravarti, Ranabir: Merchants, Merchandise & Merchantmen, in: Prakash, Om (ed.): The Trading World of the Indian Ocean, 1500-1800 (History of Science, Philosophy and Culture 362 in Indian Civilization, ed. by D.P. Chattopadhyaya, vol. III, 7), Pearson, Delhi, 2012, pp. 53- 116.
2. Chaudhuri, Kirti N.: Trade and Civilisation in the Indian Ocean, CUP, Cambridge, 1985.
3. Malekandathil, Pius: Maritime India: Trade, Religion and Polity in the Indian Ocean, Primus Books, Delhi, 2010.
4. McPherson, Kenneth: The early Maritime Trade of the Indian Ocean, in: ib.: The Indian Ocean: A History of People and The Sea, OUP, 1993, pp. 16-75.
5. Christie, J.W., 1995, State formation In early Maritime Southeast Asia, BTLV
6. Christie, J.W., 1999, The Banigrama in the Indian Ocean and the Java sea during the early Asian trade boom, Communauté's maritimes de l'ocean indien, Brepols
7. Cultural heritage in India & Indian history K.N.A
8. Ancient Indian History K.N.A
9. Cultural heritage in India Dr. M.S Krishnamurthy
10. Google connectivity Internet information