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Foreword

The idea for *The Past*, the inaugural international journal of the Department of Archaeology of Sri Lanka, was conceived out of the need to unify the disciplines investigating the past together with a pan-regional perspective. Archaeology is just one side of the coin, one of many perhaps that look back into humanity's past with scientific and philosophical leanings. Engaging away from the prejudice of nation-state, ethnicity and religion, the inquiries into the past explore but a common or shared past, where modern boundaries bear no meaning. In this line of thinking, it was decided to dedicate a space for research focusing on the regional, specifically that of South Asia, where a shared cultural heritage bounds all the countries within it. It is hoped that this platform would be a space to discuss all such leanings, from archaeological explorations, to historical inquiries, to art-historical discussions and notions of tangible and intangible heritage and their uses. All of these in a space where there is no distinction between the junior or the senior, nor between the freelancer or the university lecturer, but where only scientific rigour is foremost.

Editors

Evolution of Cascade or Networked Small Tanks Systems in Sri Lanka and its Sustainable Water Management

Chandana Rohana Withanachchi

Introduction

The main reason for the formation of organized settlements in the plains and Dry zone of Sri Lanka was the small-scale rural tanks constructed using the region's landscape to overcome water scarcity and environmental challenges. Initially evolving into micro-irrigation structures, these tanks were systematically interconnected formed into network tank systems. These networked tank systems are considered an identity factor of Dry zone irrigation water management in Sri Lanka. This paper focuses on the origins and evolution of these networked tank systems, commonly referred to as Cascade by scholars. It explores their contribution to dry zone microbial management sustainability in Sri Lanka.

Objective

The primary purpose of presenting this paper is to discuss the origin and evolution of networked tank systems based on rural tanks that can be considered as the heart of the dry zone of Sri Lanka. Although much research has been done on these rural tanks in various fields, little attention has been paid to their origin and evolution. The intention here is to cover that gap to some extent.

Discussion

Sustainability of networked tank systems

The dry climate associated with this region has directly impacted the settlement of the area and the socio-economic process. It can seem that the contribution of these networked tank systems to the development

of a sustainable agro-economic model based on paddy cultivation has been more significant than that of the large scale irrigation industry. It has been able to meet the climate challenge in this region successfully.

The construction of small tanks in the Dry zone of Sri Lanka begins as a result of the ancients' understanding of the landscape suitability for irrigation in the area. An examination of the identifiable archaeological evidence in this regard reveals that the phenomenon dates back to the Proto-Historic Period (1000 B.C. – 100 A.D.) in Sri Lanka. Rainwater from the country's Dry zone has been collected and used since ancient times by these small network tank systems, which still operate as the leading water supply network of the region (Withanachchi, 2017).

After the dry season is the country's primary rainy season, the period between September and December is when these small networked tank systems become more active. In ancient times, these networked tanks began to function by adding rainwater that had filtered somehow (Geekiyanage, Pushpakumara, 2013: 94). At present, these tanks filled with water flowing through various fields for a short time as the tanks associated with have cleared during settlement.

There are various theories as to the origin of these networked tank systems. It is generally accepted that these tanks were created and developed during the Anuradhapura period (300 BC – 900 AD).

However, our research shows that their origins date back to the fourth century B.C.

The Kok Ebe megalithic burial site is an Iron Age site located on the banks of the Yan Oya (Oya means River) in the Anuradhapura District, which was excavated by a team including the author, where Carbon 14 dates were obtained (Withanachchi, 2017; Withanachchi, C.R., Mendis 2017). The RUSL/KA/EX01/2016 sample from this excavation dates back to 790 BC, and the RUSL/KA/EX03/2016 sample dates to 770 BC (Withanachchi, C.R., Mendis 2017). Assuming that the leadership and workforce found in the prehistoric megalithic culture of Sri Lanka are the same groups, it seems that a simple connection can be made to the small tanks associated with these excavation dates. Accordingly, it can be assumed that the construction of the small tanks related to this area dates back to the 8th century B.C. One of the samples excavated at this site in RUSL/KA/EX01/2016 confirms that this settlement process continued according to Order 50 (ibid) of the year 50 AD. In comparison, the design of small tanks is likely to continue to develop. It may have contributed to the emergence of network systems associated with these tanks.

Further, in collaboration with the author, another research team obtained an absolute chronology of silt deposits by drilling the beds of several tanks in the Rotawewa cascade system near Kahatagasdigiliya, Anuradhapura District in the year 2010/2011 (Schütt et al. 2013: 51-68). Accordingly, regulations for silt deposits in those tanks have received up to 8095 ± 63 , 3398 ± 34 , 7908 ± 92 , 2985 ± 66 , 7364 ± 46 , 1085 ± 53 today (*ibid*). Most of these dates belong to the prehistoric cultural periods of the country. The assumption that can be

made based on this information is that it gives an idea of the terrestrial fossils formed naturally during the Holocene. Natural habitats such as landslides may have gradually become tanks during human intervention.

Some documents state that in ancient Sri Lanka, there were more than 30,000 rural tanks (Mendis 2003). At present, there are about 10,000 small tanks in use in the Dry zone of Sri Lanka and (Vitharana, 2000), with a large number broken up and abandoned. Most of the water from the remaining small tanks is used primarily for agriculture but is less regularly used at present. Decades ago, the water in small tanks were widely used for daily activities, but at present have been reduced due to wells and other water supply schemes.

At present, 1,166 cascade or networked tank systems have identified in the Dry zone of Sri Lanka, with 457 of them located in the Anuradhapura District of the North Central Province alone. (Vitharana, 2000). These tank systems can be grouped as small, medium and large scale tanks, with some networked tank systems connecting up with a large-scale tank.

These networked tank systems seem to reflect the traditional knowledge of the micro-irrigation industry in the country, where the gradual development with experienced gained is explicit. Experience from the environment in particular, can be seen to have directly influenced the emergence of these irrigation schemes. The ability to establish these tanks to suit each ecosystem is a testament to the ancient people's skill; as it is evident from the ancients' ability to gradually transform the small tank into a large tank and a medium scale tank.

Focusing on the natural activities that led to the formation of the network of tank systems, it appears that the environmental and climatic problems in the Dry zone of the country may have been fundamental. Examining the river valleys' present ecological conditions such as the Deduru Oya, Mee Oya, Kala Oya, and Malwathu Ova confirms some river valleys in the Dry zone of Sri Lanka have felt this situation more severely. Among these are the lack of adequate rainfall, the scarcity of water sources, the high level of evaporation, the high temperature, the dry nature of the environment, the strong dry winds and the inadequacy of water in natural waterways. Apart from the dry conditions that arise based on such conditions, many factors, including landscaping and soil distribution, may have contributed to the Dry zone settlement in Sri Lanka from an early stage agriculture in its suitability for (Withanachchi, 2018).

The ancient people's feelings about the dry nature of the Dry zone may have existed in various forms. It is clear that the ancients' diversity of technology to minimize that condition and build life dates back to the earliest times. They seem to have adapted to society's primary economic process which has always been built on an agriculturebased on paddy cultivation. Overcoming the challenge posed by the dry and arid nature, measures have been taken to introduce artificial irrigation systems in the region. To meet the water shortage, the ancients used the Dry zone's geophysical location to prepare the primary water bodies at the beginning, store the water in them, and utilize it when needed.

The formation of networked tank systems in the Dry zone of Sri Lanka is mainly due to the lowland areas with contour

diversity that naturally occur in the plains. In practice, such places are called *pathas* (natural water holes). Rainwater collects in low-lying areas associated with an undulating terrain in the natural plains, or low-lying areas associated with not-so-high natural rock ridges, or at the foot of a large rock plateau, creating natural pools. Such natural sites were utilized for water collection since the beginning of the Proto-Historic Period.

Before constructing the tank, the early historical people who lived Anuradhapura may have built at first a small tank and used it. Commenting on the Early Historical Period, Seneviratne (1984) points out that the people who lived during that period may have built tanks with hand-made dams using the low-lying lands where natural water features met. The Deeghapashana (Long rocky ridge, Pre Cambrian stone ridge -The landscape formed with this continuous range from prehistoric to proto historic times was a decisive factor in settlement of the area around the ancient city Anuradhapura), which runs through the ancient city of Anuradhapura, is somewhat elevated. Part of the North-West is situated on a rocky outcrop, creating a variety of contours. It makes low-lying areas where water naturally collects.

The chronicles mention the conversion of the natural plateaus in Anuradhapura into tanks. The oldest tanks in Anuradhapura, Abaya Wewa (tank) (Basawakkulama Wewa) and Gamini Wewa (Bulankulama Wewa), can be identified as the first tanks built based on such a landscape. Accordingly, the small tanks that were the basis for creating the network tank system were developed based on natural water bodies.

Although there are not many small tanks in chronological sources, contemporary inscriptions can uncover much information. It is conceivable that these small tanks may have made a direct contribution to the later development of networked tank systems. Accordingly, the widespread use traditional knowledge can be identified through this. It is clear that even in the present day, where large scale irrigation industries are active, the central water supply system in the Dry zone rural societies is the network of tanks based on the small tank and the large tank. It may be because the installation of those irrigation systems is well suited to the utility.

The Yan Oya valley is an example of this. Most small, large and medium scale tanks associated with this valley belong to any networked tank system. About 80 such cascade tank systems can be identified in the Yan Oya valley (Vitharana, 2000). Focusing on the distribution of networked rural small tanks in the valley, it is clear that it had developed to find a sustainable solution to the prolonged drought that lasts from May to about the end of September each year. It is a well-known fact that the water in the Yan Ova vicinity is not sufficient for use in such times. Accordingly, although farming was not done during this period, it was essential to find solutions for this valley's people's other water needs. This background may have contributed to the development of networked tank systems in the valley.

As shown by Panabokke (2009), the ancients used advanced iron tools to excavate upto 1.5m to 2m of the dry rock layer of the natural lowlands in the Dry zone. The small natural water holes associated with the Dry zone may have been converted into tanks. Groundwater levels rise due to the constant circulation of surface water during

the maintenance of network tank systems over a long period. It completely changed the environment in those areas. By the middle of the Anuradhapura period, when these networked irrigation systems were in good working order, the period's milder wet climates may have been better than they are today in the country's Dry zone. However, due to proper maintenance, many networked small tank systems' efficiency gradually deteriorated. As a result, people were increasingly turning to groundwater, which in turn depleted the groundwater resources (Withanachchi, 2017). It affected vegetation of the region and the long-term crop growth, resulting in the formation of nature in the terrestrial environment.

Sustainable management of natural resources is essential, especially for striking a balance between urban and rural areas (Senavirathna, 1996). Contemporary inscriptions confirm that the sustainable management of natural resources was better done in ancient Sri Lankan society than at present. Inscriptional evidence shows that the iron industry and the gem industry had spread to various parts of the island. From the chronicles, it is clear that the political authorities took steps to manage the Dry zone's water and natural resources in a balanced manner up to to the Polonnaruwa period. It enabled the large scale irrigation industries built from the Inter-zone to the Dry zone to ensure fair access to water resources in all areas. By the middle of the Anuradhapura period (600 AD – 900 AD), an organized programme was underway to divert water from the valleys with more water to the valleys with less water by building inter-valley connections.

It is conceivable that the contribution of these large-scale irrigation schemes to the nutrition of networked small tank systems may have been significant. Although it does not apply to all networked tank systems, this activity is high in networked mini-tank systems associated with large-scale tanks that can supply water to small tanks and where natural waterways have completely activated due to large-scale irrigation. May exist. Small networked tank systems adjacent to the extensive irrigation canals, especially in the Deduru Oya, Kala Oya and Malwathu Oya valleys, may have been activated in this manner. Such networked small tank systems supply water through active irrigation canals in the Mahaweli movement found in several farming areas in the Mahaweli movement.

The collected water through small tank systems contributed to all water-related activities in the rural society. If small tanks had not been built in ancient times in the Dry Lanka, zone ecosystem of Sri environment associated with those areas would still be very dry today. With the construction of small tanks and over time, they become networked systems, thereby improving water security and efficiency. Due to this network of tank systems, it is possible to build an aquatic ecosystem in the country's Dry zone. It can seem that this situation has contributed significantly to the formation of organized human settlement in this region. It has led to the activation of micro-watersheds in dry regional landscapes. These small tank systems, mainly based on small waterways activated by the northeast monsoon rains and based on natural landslides, have been active in the past and in the present, in stabilizing the rural settlements in the Dry zone of the country and developing their sustainable livelihoods.

When closely examining these small networked tanks, it is clear that they weren't built at one point in history. The country's

Early Historical Period has been identified as the initial stage of these tanks (Withanachchi, 2017), and they have been subjected to various levels before. Some tanks may have been abandoned during specific periods, during which time other tanks may have been built at different locations. Nevertheless, over time, the tank has become an active part of its integration with the ecosystem (Madduma Bandara and etal., 2010).

About 18,500 of the 22,000 tanks and reservoirs in the Dry zone cover about 2/3 of the island's total land area. Of these, about 12,000 small tanks have been destroyed or abandoned. The remaining small tanks feed 185,000 hectares, which is about 35% of the cultivable land area. These tanks' size contributes 20% directly to national rice production (Awusadahami, 2010). It can be possible that in ancient times there was a maximum of activity here.

One of the main distinguishing features of the small tanks in the country is that it has been established with great care for the natural environment as it is part of nature itself (*ibid*). One of the main reasons why this system has existed for more than two thousand years in the course of climate change, and political and social change from prehistoric times to the present, is that it has been a part of nature itself.

When we look at the traditional ecosystem associated with the old Cascade tanks in Sri Lanka and other structures related to the tank, it is clear that most of them are fully established in the vicinity of these small tanks in the past and, to some extent, can be seen in the setting of individual tanks today. The landscape is being updated and continues to change. However, with the rapid destruction of the

ecosystem associated with these tanks in the current settlement process, it is questionable as to what extent these small networked tank systems will achieve the right results that the ancients had hoped for. An excellent example of this is the adverse effects of the absence of many small tanks today, such as the *Isweti*, *PotaWeti* and *Kattakaduwa*, which in ancient times were located near the surface of a small tank.

Due to the *Iswati* (soil ridges) associated with the tanks found in the Cascade tank system and the small bushy environment in the Tawalla (upper inundation area; floods during rain and drained off during drought) area, accumulation of sand, silt and other contaminants in the tank is minimized; its name is perahana (filter). Due to the leachate at the bottom of the tank wall, the surface water is free from heavy metals. It can be obtained for cultivation by leaking the rust-like impurities at the tank's bottom. However, due to the establishment of settlements in the tank's upper *Thavalla* area, the water containing the above effluents enter the tank directly. Because of the removal of Kattakaduwa (interceptor) and the preparation of paddy lands up to that point, it is possible to identify many instances of crop failure due to the infiltration of rust and various heavy metals into the paddy fields, which had been deposited at the bottom of the tank (Dharmasena, 1994; 2010).

Small tank systems indeed protect groundwater levels. Even today, the ecosystems associated with such tanks are fertile and vital due to the groundwater protection provided by the environment for vegetation and long-term crop cultivation. It is clear that wherever these tank systems' activity has been broken down, the landscape

takes on a dry, rough shape due to the shallow groundwater level in that area. Accordingly, the circulation of water associated with these tank systems is one reason why the Dry zone aquatic civilization's vitality remains more robust than it is today.

The guardians of these tanks formed in the country's Dry zone ecosystem were the villagers (Ausadahami, 2015). From the Anuradhapura period onwards, these tanks connected with the country's ancient society was a formal mechanism designed to maintain their benefit. Vapi Hamika, Vavi Hamika (IC. vol. I: Nos. 1122, 1130, 1132, 1151, 1153, 1200, 1217-8, 1225, 1250) mentioned in Late Brahmi inscriptions was the legal officer who carried out that function. He was probably an aristocrat who was appointed to the post from the village. reveal Some inscriptions that some Parumakas and Gamikas acted as Vapi Hamikas (ibid).

Small tank systems and single tanks were the lifeblood of the ancient rural society. It was also active during the Kandyan Kingdom and the subsequent British rule in the Dry zone. Among the various measures taken on Governor Robert Brownrig's instructions to suppress the popular uprising known as the 1818 rebellion, which began in the Uva-Wellassa region (which includes part of the Dry zone), there are reports of the need to destroy irrigation canals, tanks and canals (Marshall, 1846: 187-88; Wimalananda, 1970). Colonel Campbell reports on the actions taken to control the power of the people of Wellassa; which were the cutting down of coconut trees, demolishing of large canals and bunds abandonement of paddy (Campbell, 1843). He noted that the bunds were essential for water retention and that they could take years to repair. These reports show that the destruction of irrigation canals, including small tanks in the lowland Dry zone, had dampened their activity. It is understandable how strongly they have associated with people's lives. Evidence of a large number of small tanks that were destroyed can now be seem in the area. It is clear that the current dry nature of the Wellassa area, which represents the area of Bibila in Monaragala District, results from the destruction of these irrigation canals.

Most of the major irrigation systems in the Dry zone of Sri Lanka may have declined after the abandonment of the Kingdom of Anuradhapura in 1017 AD and the fall of the Kingdom of Polonnaruwa in 1236 AD. However, there are no reports of small tanks and associated systems being destroyed or abandoned. Large irrigation canals have gradually degraded due to the breakdown of existing mechanisms, but small tanks have survived due to the rural people's ability to maintain them. Thus, it is clear that small tanks and their associated systems have continued to exist from the beginning. They are sustainable due to their small size, simple technology, and ability to be maintained in small groups. Sri Lanka's Dry zone networked tank systems are deeply linked to these regions' socio-economic and environmental processes. Accordingly, these small tanks have been the main contributor to the continuation of the contemporary sustainable development built up with the ancient socio-economic process. The result of agriculture and the development of all society sectors build a tolerant mindset and integrity in the people's resulting selfsufficient economic process. Evidence from contemporary inscriptions confirm that the people who lived in the periphery areas, who contributed to maintaining a large capital

such as Anuradhapura, primarily formed the economic process based on these small tanks.

King Parakramabahu I (1153-1186 AD) had renovated 2376 small tanks of Polonnaruwa according to the chronicles. It is clear that in the present, the majority of the people in the Dry zone live in these small tank-based rural areas. Due to their contribution to the country's development, the tanks have rehabilitated, and the people's living standards have maintained.

Although the kingdom of Anuradhapura collapsed during various periods of political turmoil, with the capital being destroyed on several occasions, no evidence points to the collapse of rural societies. The main reason for this seems to be the small tank systems developed in rural areas. It enabled rural people to continue their livelihood activities with access to water.

Conclusion

The main objective was to investigate the social and environmental factors that are fundamental to the sustainability of many small rural tanks and associated network tank systems found in the Dry zone of Sri Lanka. Based on field studies and data from various sources, this study confirms that small tanks in the country are a sustainable solution to water scarcity. It is clear that these small tanks' construction further secured their stability due to the utilization of natural landforms found mainly in the dry plains. The technical ability of the ancient people in selecting such sites is also significant. With these small tanks' gradual development, their functionality has become more active as they have become networked tank systems.

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Reconstructing history through open air museum – a case study in Óbidos, Portugal

Mahua Chakrabarti

Abstract

Museums are usually considered the unique institutions for cultural "production". From their initiation, as time went on, it was realized that these institutions have to change the approach towards realities. New concepts were created to enable museums to go beyond the limits of a building and collections. The open-air museum at Skansen was established in 1891, and the concept spread promptly (Carr: 2015). Many historically important buildings with their neighborhoods were introduced to the public as museums as early as the first half of the nineteenth century. In the sixties of the twentieth century, the increasing concern for natural environment became very strong, which was a big challenge for traditional museums. New idea of museum practices was created to justify interrelationships between the natural environment and people, to express that "people are part of nature, not apart from it". The article discusses a living history museum at Óbidos situated on a hill rising out of an agricultural plain, which is one of Portugal's picturesque marvels.

Key words: Musealization, open air museum, living history museum, Óbidos.

Introduction

Museums are generally considered the unique institutions for cultural "production" but unfortunately, mostly secluded from daily life and turned their sights exclusively into the past. However, up to the seventies of twentieth century, they transformed to be petrified looks into the past, which has had nothing to do with present times, even less with the future. Then, the change happened: museum experts realized that their institutions have to change the approach towards realities and start taking into consideration the lives of real, living people, or their significance in society would be fading away. Professionals started to focus their notions and actions towards the public and its interests thus becoming important tourist attractions.

In 1960s, the increasing concern for natural environment became very strong, which was a big challenge for traditional museums. A radical review of the role of all museums in response to the other public concerns was much required. The movement demanded that museums be more responsive to the needs of society and to step beyond a comfort zone demarcated by building and collection (Davis, 1996, 9). New paradigms were created to enable museums to go beyond the limits of a building and collections. In this changing vista, a museum is no longer a building crowded with objects and looked after by curators; it is a means for documentation, preservation, interpretation of the cultural heritage beyond the geographical boundary (Barr, 2000). Van Mensch describes the process of conserving, documenting and interpreting objects or specimens as 'musealization', the selection and removal of an object from its original context and its transfer to a museum involving a change in meaning (or actual identity) for that object (Van Mensch, 1993, 57-62).

It may, however, be noted that *in-situ* preservation is also musealization Broadwater & Nutley, 2009). As soon as a site is accepted and chosen, it obtains, through musealization, new meaning. New conservation, of restoration reconstruction is carried out; more facets of meaning are applied and cannot be avoided (Jun et al. 2012). New ideas of museum practices were created iustify to interrelationships the between natural environment and people, to express that "people are part of nature, not apart from it". The fundamental differences between traditional museums and open-air museums through following apparent equations:

Museum = building + collections + public + (Experts)

Open air museums = territory + history + population + (memory)

Originating from a cultural intent, the open-air museum has also an economic aspect; revitalization of the neighbouring craft industry, promotion of region, and revival of the creative aptitude. Open-air museums were set up comparatively later than majority of "classic" museums. In an open-air museum, its exhibitions are more appealing to the people. During last few museums decades, open-air carefully reflected and revolved their own missions to organize the work, which is going to change them into perpetual living spaces through revitalizing varied replication of real life from different times. Open-air museums are also varied. Each museum is special, being a means to the lifestyle, traditions, fostering culture and the history of a particular region or country. Open-air museums are "scientific collections in the open air of various types of structures, which as constructional and functional entities. illustrate settlement patterns, dwellings, economy and technology" (Shehata & Mostafa: 2017). Open-air museums are also similar. Telling and offering in three dimensions and scale 1:1, and with an effective capability to extend many visitors and different target groups.

The first open-air museum of the world was a Scandinavian invention with Skansen in Stockholm, which was opened in 1891, and the concept was broadly accepted. Many historically important buildings with their neighbourhoods were opened to the public as museums as early as the first half of the nineteenth century. Mention may be made of the palace of Versailles in France and George Washington's estate Mount Vernon. The idea of the previously wellestablished indoor type of museum was further expanded. With the purpose of collecting and displaying whole buildings, outdoors would have been the appropriate place. "Exotic" pavilions, "antique" temples, "ancient ruins" and "peasant cottages" were the prototypes of open-air museums to be found in the eighteenth-century landscape parks. Afterward, at the international exhibitions of the mid- to late nineteenth century, some actual or constructed peasant cottages were displayed which also inspired the establishment of the open-air museums.

During the subsequent two decades, notable open-air museums were established, for example, Norsk Folkemuseum in Oslo, Kulturen in Lund, Frilandsmuseet in Lyngby, Maihaugen in Lillehammer, and Den Gamle By in Aarhus. In 1918, in Arnhem, the Nederland Openluchtmuseum established as the first open air museum outside the Nordic countries. Moreover, in the second and third decades of the twentieth century in some European countries and in USA, the open-air museums further gained prominence. However, it was only after the Second World War that open air museums

became a real universal trend. Presently, there are open-air museums in nearly all of Europe, in North America, Japan, Australia and other countries.

Living history museums are a form of open-air museum where interpreters, in period costume, represent period life of a past era. The interpreters perform as if they are really living in a unique time and place, and carry out daily domestic tasks, crafts and occupations. The objective is to show older ways of life and recreations to modern audiences. Everyday jobs might include cooking on an open fire, churning butter, spinning wool and weaving, and farming by means of old equipment. There are traditional artisans as well in many living museums, namely cooper, blacksmith, potter, sawmill worker, printer, miller, general store keeper and doctor at work.

Since the earliest establishment of the open-air museums in the nineteenth century, their main task is the teaching of the history of daily livelihood of the people from all parts of society. The main objective of this type of museum is undoubtedly educational but at the same time it serves commercial purposes as well. As per ICOM definition adopted in 1957, "It is a collection of historic objects that is open to the public, includes examples of pre-industrial architecture of a popular style (rural and urban housing, workshops and accessory buildings from the pre-industrial era), and includes architectural masterpieces such as mansions, churches or historic buildings from the industrial age" (Angotti: 1982).

Discussion

Now let us look at Óbidos in Portuga 1, which may be taken as living history museum. The name 'Óbidos' derives from the Latin word 'Oppidum' coming to mean 'walled city'. Located on a hill rising out of an agricultural plain, Óbidos is one of Portugal's picturesque marvels. Óbidos was renovated after massive destruction in the 1755 earthquake. Presently it is beautifully preserved and has existed almost unchanged for centuries. This old town comprises urban focusing architecture on landscapes, buildings and people. It is far more than just a historical museum; with its beautiful environment, it attracts tourists from all over the world. Arriving at the museum, one enters a unique world: the countryside of historic Portugal. There are narrow paved painted. streets along with white bougainvillea-cladded houses, which end to the enclosed interior. One can be easily transported back in time, walking along the gravel roads and visiting the fully furnished residences of the people of the past.

An overview of Óbidos

The town was established by the Celts around 300 BCE and for the next 1500 years, it was occupied by a sequence of Romans, Visigoths, and Moors. January 11th, the day Afonso Henriques, Portugal's first king, captured Óbidos back from the Moors, is still observed as a municipal holiday. Óbidos still carries the title of *Mui Nobre e Sempre Leal* (Very Noble and Always Loyal), awarded in recognition of its loyalty to King Sancho II in 1246. Afterwards, King Afonso gave Óbidos to his bride as a wedding gift. Since then, it continued to be a part of the dowry of every Portuguese queen until 1834.



Figure 1. Óbidos town (Photograph courtesy: online – Lacobrigo, 2014)

The city is also notable for several more historical events. The marriage of two children Prince Afonso V and Isabel (10 and 8 years old respectively) happened in 1441 CE in the Igreja de Santa Maria. Dona Leonor, wife of King João II, one of Portugal's most honored queens, came to live in Óbidos to mourn the death of her son. Prince Afonso, who was killed in a horseriding accident at the age of sixteen. It was also from the ramparts of Óbidos that the first shots in the Battle of Roliça during the French Invasions were fired in 1808, leading to Napoleon's first defeat in the Peninsular War. The first meeting of the revolutionaries who organized the famous Carnation

Revolution and overthrew Portugal's dictatorship also took place in Óbidos.

Architecture of Óbidos

In Óbidos, we can notice various architectural wonders. Buildings of Óbidos outstanding examples Gothic, are of Renaissance and Baroque architecture. Among them, the first is the aqueduct located in the southeast of Porta da Vila, the main entrance to the town of Óbidos. The aqueduct was built in the sixteenth century in order to supply water to the town. This was financed by Queen Catherine, wife to João III, and it is of a length of three kilometers.



Figure 2. The Aqueduct (Photograph courtesy: obidosportugaltourism.com)





Figure 3. Porta da Villa (Photograph courtesy: obidosportugaltourism.com)

The main doorway to the town of Óbidos is called *Porta da Villa* and was constructed in the eighteenth-century. The interior of this double gate is decorated with blue tiles. It leads immediately into *Rua Direita*, the main street. One can notice an

inscription "A Virgem Nossa Senhora foi concebida sem pecado original" on the top of this colossal entrance.

The Castle of Óbidos is another important monument, which is Roman in origin. It was built upon a mound and, afterward, protected under the Arab rule. In 1148 CE, it was conquered by the Christians. Subsequently, it was renovated expanded in different times. In the sixteenth century, During the reign of Manuel I, the castle was converted into a palace. Since 1950, the castle is maintained as the luxurious Pousada Castillo de Óbidos. The castle still preserves superb architectural elements such as the entrance archway, the manueline style windows, and the open-air aljibe discovered in 1931 next to the homage tower (VxMag, 2019).

Several other interesting example of architecture can be found in Óbidos, such as the Nossa Senhora do Carmo Chapel, the Santa Maria Church (probably built during the Visigoth occupation period and later transformed into a mosque during the Moorish occupation period), the São Martinho Chapel, the Misericórdia Church, and the Municipal Museum. Inside there survives the chapel-sanctuary of Nossa Senhora da Piedade, patron virgin of the town. It consists of a baroque balcony and decorated with blue and white tiles datable around 1740 and 1750, depicting tales of the Passion of Christ. The history of the renaissance church, the Igreja de Santa Maria, is equally interesting, where Prince Afonso V, married his cousin at the age ten, when she was eight years old. The walls of the church are adorned with seventeenth century tiles. The tile-decoration consists of a fine example of renaissance tombs and paintings by the artist Josefa d'Óbidos.

In front of the Igreja de Santa Maria church there is a stone pillory (The Pelourinho em Óbidos). It was dedicated to the local fishermen of Óbidos by Queen Leonor in 1492, for finding out the body of her son

Afonso after he died in 1491.



Figure 4. Castle of Óbidos (Photograph courtesy: pixabay.com)



Figure 5. Igreja de Santa Maria (Photograph courtesy: online- Paulo Juntas, 2007)



Figure 6. Pelourinho em Óbidos (Photograph courtesy: online-Paulo Juntas, 2007)

The Misericordia Church is a medieval church, that was renovated after the earthquake of 1755. Apart from the gothic façade, few remains of the original building are found namely the golden altar (1690-1705), and the tower with spiral stairs. Rua Direita is the main street that leads from the town gate to the main square (Praça de Santa Maria). By the sides of the Rua Direita, there are small craft shops, bars and restaurants.

Figure 7. Rua Direita (Photograph courtesy: obidosportugaltourism.com)

Local market

Along the main street there are the traditional shops for selling local crafts, foods and liqueurs, comprising the famous local alcoholic drink *Ginja*, made from local

cherries and served in a cup made of chocolate. A wide range of local products is on sale – traditional ceramics, modern glass, wicker baskets, miniature windmills and handmade embroidery.



Figure 8. Local market (Photograph courtesy: obidosportugaltourism.com)

Participations of the visitors:

Several events take place every year in Óbidos. In summer, the town reverts to the medieval fair of Óbidos. This gives one an opportunity to understand what life was like in Portugal during the Middle Ages. One can go

back to an era of medieval street markets, traditional foods, music, theatre and knight tournaments and battles.



Figure 9. Visitors enjoying hose-chariot riding.

Other programmes are the Holy Week Festivities (recreating the steps on the

Way of the Cross), the Ancient Music Festival in October, the International Chocolate festival in November and the Christmas Festival in December. The International Chocolate Festival in November, Óbidos is celebrated by creating fabulous chocolate sculptures.

Conclusion

Óbidos is undeniably a place where memories are evoked and preserved, which may help to explain the existence of Folio -Óbidos International Literature Festival. During this festival. conferences and meetings with national and international writers, workshops, cinema and music, are organized in different locations in town. This event is part of the Óbidos Vila Literária cultural initiative. Óbidos is as an allembracing work of art created, damaged and rebuilt throughout many centuries. This historical Portuguese town is like an open museum, where pages of history are and were written and a medieval environment always makes one feel like time has stopped.

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Household Archaeology: Theoretical Perspective and its Significance of Application in Asia

Astha Dibyopama and Anura Manatunga

Abstract

Wilk and Rathje (1982) stressed the importance of households as essential building blocks in the reconstruction of past societies. Household Archaeology is one of the sub-branches of archaeology connected with the spatial analysis of ancient households to distinguish the patterns and regularities through detailed, vertical and horizontal mapping of the dwelling and remains found within it. This paper will deal with the key theoretical principles of Household Archaeology and also give emphasis on its significance of application in Asia, specifically in countries like India and Sri Lanka where it is rare in practice, when it comes to core Household Archaeology studies.

Introduction

Richard Wilk and William Rathje introduced "Household the term Archaeology" in their research article on a seminal issue of American Behavioral The definition of household Scientist. archaeology can be outlined in several ways. Firstly, it is a subdivision of the settlement archaeology specialized in the study of spatial patterning at the household level, secondly, it deals with the reconstruction of social archaeology, through the study of the household and household-based behaviors and relationships. There are two types of definitions of 'Household'. Within the anthropological concept, Household deals with social formations that engage in some combination of production, distribution, transmission, co-residence and social as well physical reproduction which is responsible for the constant creation and recreation of societies (Wilk and Rathje, 1982). Definition of Household within the archaeological framework, is a co-residential group that used occupation surface, features and artefact and dwelling referring to one or more structures and includes, indoor and outdoor spaces (Nash, 2009). To form a holistic picture of Household archaeology, we should

take into consideration both concepts of anthropological household. as archaeological. Moreover, the focus should be on contextualized studies of material culture recovered from the ancient households which could be extremely advantageous to reconstruct the day to day lifestyle of ancient people. The chief aim of this paper is to discuss the key theoretical principles of Household Archaeology and to give emphasis on its significance of application in Asia, specifically in countries like India and Sri Lanka where research associated with core Household Archaeology is unusual in practice.

Sources to Study Household Archaeology

Most of the Household Archaeology has been approached by using a methodology that incorporates architectural analysis and investigation of installations or features (hearths or *tandurs* are very common). Attempts are also made to identify rooms or possible locations of activities with the help of material culture, recovered from the ancient households in different locations of houses. This branch of archaeology is benefited by ethnoarchaeology to identify

similarities in domestic practice in modern villages and is also helpful in correlation with contemporary data with the archaeological record. The availability of written documents associated with the archaeology of classical, medieval, post medieval and colonial worlds frequently provides the researchers full information for the investigation of household behavior.

Important Research in Household Archaeology

The development of household archeology as a subfield has mainly derived from the extensive work of archaeologists researching in Europe, Americas and in Mesoamerica in particular, where researchers studied several aspects of household's material culture from later prehistoric periods, pre-Roman Britain, Classic Mayan, Greek, Roman, colonial Australia and the Recently, Americas. an abundance of archaeological research associated with theory, method and practice of Household Archaeology have been carried out in the Middle East and adjoining regions too. Some important researches carried out in the field of household archaeology by scholars are discussed below.

As already mentioned, Richard Wilk and William Rathje introduced the term as the first article well wrote on the hypothetical aspects of Household Archaeology. This was based ethnography as well as archaeological studies. They stressed the importance of the study of the Household of ancient societies as the key to understand or reconstruct the theory of change in household organization. They further emphasized on the great potential of Household Archaeology to contribute to bridging the gap between the theory of cultural change and evolution and practical archaeology. They have discussed in detail about the three important elements

of the household; 1) Social, 2) Material, and 3) Behavioral (Wilk and Rathje, 1982).

Penelope M. Allison, a scholar from the University of Sydney, Australia conducted research on Roman art and material culture in a domestic context and household archaeology of colonial and postcolonial Australia. Allison discovered that the false impression of textual comparison and assumptions about the task division in explanation of Pompeian household material culture are repeatedly the reason for any invisibility of the activities of 'subordinate' members of the household (Allison, 1999).

Research by B. A. Ault has stressed the importance of cross-cultural studies and comparative methodologies to strengthen our perception of archaeological assemblages. Ethnography and ethno-history are crucial tools for exploring the potential for household composition and activities from the prehistoric past (Blanton: 1994).

Andrew Wallace-Hadrill in his book Houses and Society in Pompeii Herculaneum present fresh insights into Roman social life. Prosperous Romans lavished resources on shaping the ambiance of their houses to impress crowds of visitors. The fashions they set were taken up and imitated by ordinary citizens. This exposes misconceptions derived from contemporary culture, which shows the close interconnection of spheres: public and private, family and outsiders, work and leisure. Moreover, he has discussed the organization of space and the use of decoration to identify social structure encounters between owner and visitor, man and woman, master and slave (Wallace-Hadrill, 1994).

A household is a place where we can see the major visibility of women and uses of material culture. Further, it demonstrates that production and consumption activities are not divided along strict gender lines, even in a nineteenth-century, largely European, society (Costin, 1996). The book by Philippe Ariès and Georges Duby, titled A History of Private Life, draws on masculinist perspectives classify private to life associated with family, households, social status, women, children and slaves. The household is being made up of elements which 'serve' the master. Private life has always been a matter of public speculation (Philippe Ariès and Georges Duby, 1992).

Most recent work on household archaeology in the Near East and Southwest Asia is conducted on the analyses of architectural forms, domestic economies. The combined approach of household archaeology as well as written documents or pieces of literature associated with particular culture have helped throw enormous light on the composition families and daily lives of peoples living in this region. Further, it provides scope to do the comparative studies as well as examine the authenticity of the information provided by texts. The majority of work on various of household archaeology are aspects conducted at the sites like Ain Ghazal, Çatalhöyük, Çayönü, Tell Mudhhur, Mesopotamia and Southern Levant. Their work is in addition focused on highlighting the relationship between social crowding and the construction of physical boundaries as well as the life-histories of individual house structures and the development of a concept of "home" (Bradely J. and Catherine Parker, 2012).

Various Aspects of Household Archaeology

Micro-archaeological techniques - Detailed analysis of smaller parts of archaeological sites and the meticulous collection and examination of small finds. For example, faunal, botanical, and soil samples with their

actual finds spots enables scholars to reconstruct ancient peoples' activities.

Interaction within ancient households -Household archaeology has advanced techniques and is increasingly recognized as a valuable means to detect specific features within architecture. The complexity and diversity of the roles of households as social and productive units in the wider community can be better understood, if one tries to reconstruct the interaction within the ancient household. Furthermore. household archaeology is useful to identify the spatial status, gender and age relationships in the organization household or within structures of households.

Social change and material culture - The households could serve as linking agents between theories of community transformation and its association with variation in material culture, which is a key theory on which the discipline of household archaeology is at present mainly based. The choice of a specific house form and layout, the disposition of cultic facilities and the application of certain customs are integral aspects of household archaeology that reveal information about the inhabitants.

Social structures physical layout of the household - The social structures can often be deduced from the physical layout of the household. For e.g. Nuclear family structure is mostly represented in small evenly spaced residential structures. The internal layout of a site can be strongly influenced by kinship and marriage considerations. Social status is also an important determinant of the physical layout of the house, both within a single settlement and the local level. Rich people tend to have more prestige items housed in a larger dwelling. Their households may be enlarged substantially by the larger number of relatives, followers, servants and/or slaves who are part of their status.

Functions of room's in ancient household -Room functions can be detected by means of specific installations, room inventories and evidence of particular activities such as refuse disposal or cooking (Kent, 1987). Structural analysis can give evidence about access restrictions, hierarchy, or different spheres within a house (Hillier and Hanson, 1984). Household archaeology which can use material remains to contribute to our knowledge of household behavior in the past as well the artefactual remains of the activity area, room size and other architectural features are better indicators of room function within the ancient household. A common characteristic of households is activity areas and spatial zones within a household that show evidence of several regular and repeated activities, such as food processing preparation, tool manufacture/maintenance. Food storage, craft production, refuse dumping, religious/ceremonial, etc. Analyses activity areas help the archaeologist to reconstruct day to day activities around a household.

Link between the environment and social organization - Household archaeology provides the link between the environment and social organization, i.e. how many people need to live together under certain environmental conditions. This data is important because this tells us about how the inhabitants were exploiting environment. A simple structure usually means that they are dependent upon either seasonal resources or domesticated animals. complex permanent settlement More structure shows us that these people either had very rich wild resources or practiced some form of agriculture. This is important because the sedentary culture has more social complexity than mobile culture.

Subsistence economy of a household - A variety of approaches incorporating the economic models of the domestic mode of

production like production of food and specific crafts can reflect in the subsistence economy of a household. Ethnoarchaeological data can clarify the use of a specific space or artefact assemblage.

Household Archaeology and Settlement Archaeology - Household structures can tell us about population size, 10m - 2 people. Settlement size and density tell us about the population density which in turn, tells us about the carrying capacity of the environment. Households can also tell us about the permanence of the settlement. Mobile hunter/gatherer if they construct shelter will usually invest little effort and will be simply constructed with material at hand. Regional centers may come to be considered more desirable living centers due to trading or market area, or as political allies. As they grow larger, they become capable of mustering larger work, production and or military forces, all of which will enhance their regional status even more.

Ritual and symbolism in household behavior - Routine activities often have their own symbolic qualities and ritual activities can be part of everyday routine. Such symbolism is inherent in the archaeological record of households. Different aspects of households include various places of ritual activities in the depositional processes of material culture within a dwelling. 'Ritual abandonment processes' can often play a large part in enriching floor assemblages and can complicate more processual readings of abandonment processes.

Household Archaeology and Gender

Household Archaeology could contribute to the archaeology of gender studies by providing an additional point of access to the complex and dynamic nature of households. Gender is a symbolic system that structures social and economic relations

within the household and the larger community.

Family households - House is the locus of food preparation. Consumption and storage items dominated family households. Historically, a presumed gendered binary exists associating men with the "public" sphere and women with the "private" sphere. According to Conkey and Spector (1984) the role of gender is a principle which structures human activity and culture.

Male-dominated household - All male-related assemblage could be dominated whether it is personal belongings or any other male-specific items and alcohol items etc. at the male-dominated household.

House with Red doors - Female-specific items dominated the House with Red doors (brothel) sites. The kind of pattern delineation attempted in these studies is more useful than observing the presence or absence of individual artefact linked with a particular gender. The artefact patterns within the household can indicate clear and meaningful ways in which gender structure within household has visible archaeological evidence.

Significance of Application of Household Archaeology in Asia

Wilk and Rathje (1982) attempt to isolate household archaeology as a separate sub-branch of archaeology which deals with ancient household activities as a productive unit, responsible for the constant creation and recreation of societies. The Household Archaeology concept argues that households could serve as linking agents between theories of social change and material culture. Recently practitioners of household archaeology in the Near East developed a variety of innovative analytical techniques including micro debris analysis, micro stratigraphy, soil characterization and digital

visualization. These methods are capable of giving extraordinary access to the residue of activities carried out by members of the ancient household, for example analyses of the floors of ancient houses. This ranges from plastered surfaces to trampled dirt floors. From the analysis of the floor plaster and evidence of maintenance such as, if the floors was replastered, patched or swept can be identified. The debris that becomes embedded in the floors indicates the type of room and activity that took place. Thus, application of micro scale approaches like using soil micro morphology to investigate the construction and use of domestic space and can be highly rewarding. Household archaeology has transformed into a variety of approaches incorporating economic models of the domestic mode of production and various Marxist ideas pertaining to social inequality, ideology and power, spaces, feminist anthropology and gendered places. Therefore, after looking into details about the various theoretical aspects of household archaeology, it is possible to recognize that this branch of archaeology could be very important to conduct the research on various subfields of household archaeology by the researchers from the countries of India and Sri Lanka.

Discussion and Conclusion

Archaeology Household places emphasis on the spatial patterning of structures and contextual study of artefacts to throw light on ancient household organization. It investigates relationships between archaeology, text and ethnography. Household Archaeology is one of the very vital archaeological approaches, which is more frequently in practice in regions like America, Mesoamerica and recently emerging in the regions of Near East and Southwest Asia. There are advanced types of archaeological research going on in Asian

countries such as India and Sri Lanka. However, focused work on the various aspects of household archaeology is rare in practice in both countries. Both India and Sri Lanka have a very rich cultural history as well as a glorious past. Therefore

reconstructing the magnificent past of both countries with the help of archaeological/anthropological study of ancient households has plenty of potential to contribute much to the archaeology of Asian countries.



Figure 1. General view of Modern Potter's household from Rajasthan India (Authors, n.d.)



Figure 2. Handmade, Unbaked Ganesha idol from Potter's house Rajasthan (Authors, n.d.)

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A Benign Buddhist Architectural Approach Towards Unfinished Nasik Cave in Nasik, Maharashtra, India

Akash D. Gedam

Abstract

Nasik was one of the most important centers of Hinayana Buddhism in north-west Maharashtra. The group of twenty-four caves, locally known as Pandu Lena, though few in numbers, is nevertheless of great importance for the study of the early rock-cut architecture in Western India. This is mainly because of the fact that some of the caves are most complete and contain numerous epigraphically records of the Western Kshatrapas and the Satavahanas which enables us to date them precisely. Nasik therefore can be said to provide a datum for the reconstruction of a precise chronology for the earlier phase of rock-cut architecture. The details of the development of the site have been detailed by many researches in this field. Therefore, we aim to confine ourselves to only one cave-XVII in that order.

Nasik Cave-XVII

This is one of the most important caves (fig.2) from the standpoint of the present study. It consists of a verandah, a large rectangular hall, four cells on the right and two unfinished cells and a long recessed bench on the left. There is another chamber in the back wall which was in all probability intended as the stupa shrine as the inscriptional evidence would suggest. But unfortunately, except for the verandah at the front, it is mostly unfinished. If complete, this would have been the earliest and the most perfect specimen of a quadrangular chaitya-cum-vihara which is typified by the later Ajanta examples.

The cave is situated to the right of the *Chaitya Cave-XVIII* which is earlier and the only apsidal chaitya at the site. A flight of steps on the right leads to *Cave-XVII* which, being an unfinished excavation has not received the attention it merits. The verandah (19.4m wide,1.9m deep and 3.07m high) has two pillars and two pilasters which have a stepped or pyramidal base with a *ghata* over

it, an octagonal shaft, a bell capital, and a, *amlaka* in the box above which is a stepped member crowned by animal capitals. The animals are all elephants on which are riding couples in the Karla tradition. A colossal sculpture with a lion's body and a human head, the sphinxes, is installed at the entrance of the cave, probably to protect the cave from outsider's impurities and natural calamities (*Cave No. X*).

Above this, on the architrave is the typical *vedika* rail pattern. However, even this too does not seem to have been finished because its lengths are not equal to that of the width of the verandah. A rectangular cell has been carved out at the right end of the verandah. The large hall has a doorway (3m high and 1.47m wide) with a square window on side (1.1 sq.m.) and there is yet another door on the extreme left which may have been carved later. The hall is rectangular (12.80m deep and 8.20m wide) and has four cells in the right wall of which the first and the last are square shaped whereas the two central ones are rectangular. On the left is a

long recessed bench in the middle and a cell each at either end, both of which are unfinished. It is likely that there would have been four corresponding cells on this side too, however, they could not be excavated due to a lack of space; they would have destroyed the right wall of the chitya *Cave-XVII* on the left. Hence the idea of cells had to be given up and instead a long recesses bench was carved out.

In the back wall is a rectangular chamber (4.40mX2.20m) which may have been intended as a shrine (fig.3). But what is most remarkable is that it has a vestibule formed by two pillars and two pilasters which have remained unfinished below the abacus. They have no bases, but have animal capitals on stepped members and their shafts are square shaped. This is by far the earliest example of and *antarala* in the western Indian rock-cut cave temples.

A most important feature of this cave is the inscription (fig. 5) between the small door and window of the back wall of the verandah, which records the below epigraph:

"Sidham otarahasa Dantamitiyakasa Yonakasa Dhammadevaputasa Idagnidatasa dhammatamana ima lenam pavateTiramnhumhi khanitam abhamtaram lenasa chetiya-gharo pomdhiyo cha- matapi taro udisa(I)ima lenam karitan savabudhapujaya chitudisasa bhikhusamghasa niyatitam sa ha putena dhammarakhitena(II)" (Script -Bramhi, Language- Prakrut)

Success! The righteous Yavana Indragnidatta, son of Dharmadeva. native of northern country (and) inhabitant ofDantamitri, caused this cave to be excavated on Mount Trirashmi(Triranhu) and inside the cave a chaityagriha and (three) cisterns, for the sake of his parents. This cave, caused to be made for the worship of all Buddhas, has been made over to the community of monks from the four points of horizon (by him), together with his son Dharmarakshita (Dhammarakhita)" (EI, VIII, pp.90-91)

This cave, which consisted both of a (residence of lenam monks) and chaityagriha (chaitya shrine) and a cistern, was the gift of one Indragnidatta, son of Dhammadeva, a Yavana, resident Dattamitri (Demetrias). According to some scholars, among wealthy Indian merchants who were Greek citizens, a resident of Dattamitri has been identified with Dametrias, supposed to be named after Demetrius, the Indo-Greek ruler. It was given to the monks of all quarters for accruing the merit of his parents. Thus there is clear Epigraphical evidence to show that this cave, which consisted of a chaitya and a vihara, would have been, if complete, the earliest excavation of its kind.

The cave appears to be an ill-fated excavation in spite of the munificent donation of a Yavana. Firstly, when the work began the verandah was completed and the Epigraphical record was incised. Then it was perhaps realized that the hall would have been too narrow and hence the width of the verandah was extended. This is why the

entrance doorway is not in alignment with the flight of steps. Later it was noticed that no cells could be carved in the left wall because of the adjoining chaitya of *Cave-XVIII*. In the meantime, the work continued inwards and the *antarala* pillars and the pilasters were carved out. But it is not known why the shrine chamber was not completed. It may perhaps be due to the unsettled political conditions then prevalent or for want of funds.

A good number of Yavanas probably came to Western India in the wake of the Kshatrapa invasion in the first decade of the second century A.D. There is no doubt that some of them were here right from a very early period from the days of Asoka, but there was a marked influx in the latter half of the first and the second century A.D. as is evident from their donations at Karla, Nasik and Junnar. A wealthy merchant's house, probably of a Yavana, unearthed at Kolhapur also belongs to the same period. They must have established themselves well in the first second century when quarter of the conquered Nahapana had western Maharashtra. There should be little doubt that most of them continued to stay here even after Nahapana was defeated by Gautamiputra Satakarni in 124 A.D. On the basis of stylistic similarities between Caves-XVII and Cave-X at Nasik, the former can be dated to about 120 A.D. just following the latter which was completed during the period of Nahapana's supremacy. But soon after the Satavahanas established their sovereignty and during this transitional period Cave XVII could not be completed probably because of unsettled political conditions.

It will thus be clear that *cave XVII* marks an important stage in the development of rock-cut architecture of Western India.

Although not finished, it was intended as a chaitya-cum-vihara as the epigraph explicitly states. It is likely that some Yavana artists were also working at sites like Nasik as the occurrence of classical motifs would suggest. But so far as cave-XVII is concerned, it is likely that the donor *Indragnidatta*, a Yavana from Demetrias, would have desired to have a chaitya-cum-vihara at Nasik, the like of which already existed in his native country. This would lead us to the problem of the origin of quadrangular, flat-roofed chaityagrihas. It may be noted in this connection that of the stupa shrine types, quadrangular was the most popular in Gandhara and the earliest occurrence of the quadrangular stupa shrine types with an antechamber is found in the Griha-stupa A13 of the Kalwan monastery of Taxila. The combination of a stupa shrine with the vihara was present in Gandhara even in the latter half of the first century A.D. and the credit of its introduction in Maharashtra has to be given to *Indragnidatta*, the Yavana donor of Cave-XVII.

Conclusion

The above discussion was about the evidence of an attempt to combine chaitya and vihara which is seen for the first time at Nasik. The beginning of the second century A.D. marks an important phase in the development of rock-cut chaityas. This was the period of the Kshtrapa supremacy over the whole of Western India; they had conquered some of the Satavahana territories and were slowly getting naturalized in their adopted land. The Kshatrapas themselves of foreign origin and brought in their trail peoples of different nationalities such as the Persians and Parthians whereas Greeks and Romans were already here. These people patronized Buddhism as is evident from their records in Western Indian cave temples. Some of the foreign elements in decorative motifs such as those at Nasik and Junnar can be credited to them. To a certain extent, these donors of foreign nationalities appear to be responsible for introducing changes in the layout of the earlier chaityas. The best example of this is Nasik *cave- XVII* which marks the first attempt at combining a chaitya shrine and a

vihara, which later cen be seen in the Mahayana Viharas as at Ajanta (India). Unfortunately, the cave is unfinished but we can nevertheless form a fair idea of the final shape it would have taken if completed. It is also not without significance that the cave was the gift of one *Indragnidatta* a Yavana, who hailed from *Dantamiti* (Demeterias) in the Sind or Gandhara region.



Figure 01: General View, Nasik Caves (Author, n.d.)

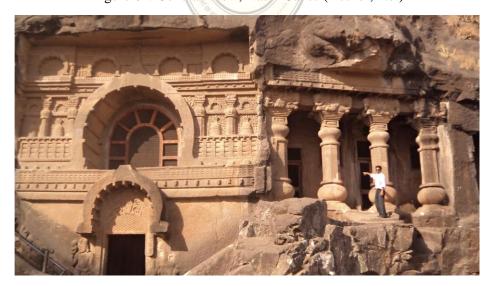


Figure 02: Cave No.XVII (Right side) (Author, n.d.)

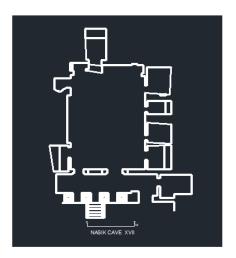


Figure 03: Plan of Cave No. 17 (Author, n.d.) (Author, n.d.)



Figure 04: Inscription at Passage



Figure 05: Inscription at Passage (Author, n.d.)

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Understanding Ancient Heritage of Krimila: An Early Medieval Adhisthana under Shrinagar Bhukti

Tanmoy Mondal

Abstract

The Munger inscription of king Devapala, a ruler under the Pala dynasty of Bengal and Bihar, apprised with the fact that once in the early medieval period the southern part of the present Bihar region was known as Shrinagara bhukti. Furthermore, this bhukti was also divided into three adhisthanas -Rajagriha visaya, Gaya visaya and Krimila visaya respectively. This work attempts to understand the ancient heritage of Krimila region, through archaeological evidence, from a holistic perspective. Earlier researchers who worked on the archaeology of Krimila concentrated on inscriptions, sculptures and the study of isolated sites. This work aims to understand the pattern of settlements in their geographical and cultural contexts through an analysis of earlier recorded sites and independent fieldwork in the Kiul river valley. Here, an effort has been made to record the archaeological remains, scattered in the river basin area, systematically which provides a complete picture of the ancient settlement on this river valley. This study helps us to understand the historical development of the present Bihar region, in a broader sense of entire eastern India.

Keywords: Settlement, Habitation, Sculpture, Early Medieval, Krimila, Archaeology.

Introduction

In the year 1780, the Munger inscription of the king *Devapala* (in his 33rd regnal year), was discovered from Munger District of Bihar. Although it was first published in 1788, it was re-edited frequently in 1892, 1913 and 1925-26. However, the decipherment of the inscription has brought a new idea on the Pala administration of early medieval Eastern India. According to this inscription, the present south Bihar region was once known as Shrinagara bhukti in the early medieval period. Furthermore, the inscription also addressed that this Srinagara bhukti was divided into three adhisthanas -Rajagriha visaya, Gaya visaya and Krimila respectively (Map.1). Certainly, Rajagriha and Gaya visaya were the present Rajgir and Gaya respectively identification of Krimila visaya was still curious for scholars. The mystery on the

identification of Krimila visaya was solved after a long time, when D. C. Sircar visited Rajaona, Chawki and Balgudar, 1 the three villages in south Bihar of present Lakhisarai District in 1950. During his visit, he discovered three such inscriptions, where are mentioned the word Krimila visaya. Based on these inscriptions, he identified that the village Balgudar was the centre of the Krimila Visaya.² References of Krimila visaya have also been found in some other inscriptions too. The earliest epigraphic record in this concern belongs to the Gupta period. Two Nalanda seals of Samudragupta are significant³ in this regard. inscriptions not only mention the word

¹ Also pronounced as Valgudar.

² Chhabra, B.Ch.(Editor), Epigraphia Indica, Vol.XXVIII, Part VI, Delhi, 1953, pp.137-45.

³ Sastri, Hirananda, Nalanda and its Epigraphic Material, Memory of Archaeological Survey of India, No.66, pp.53-54,

Krimila but also designated it as visaya. Besides this, it has also mentioned a name Kavala, a village under this visaya. There has also been found the reference of Krimila visaya in Bihar inscription.⁴ Furthermore, the Naulagarh image inscription (reported from the present Begusarai District, Bihar) issued on the 24th regnal year of Pala king Vigrahapala, has mentioned about this Krimila Visaya.⁵ Accordingly, all these recorded inscriptional sources are addressing the great historical importance of this Visaya. Hence in the present study, an attempt has been made to understand the ancient heritage of early medieval Krimila region, where specific importance has been given on the different aspects of human settlement, like the geographical context, connectivity and cultural assimilation etc.

Geomorphology

The research area belongs to the Lakhisarai District of Bihar. The district has a diverse geographical landscape. Based on these diversities, the district is divided into three major geomorphic units:

- 1. Rocky upland of Surjagarha block
- 2. Older alluvia or marginal alluvial plain
- 3. Younger alluvial in the northern part of the district

The present research area belongs to the part of this Older alluvial. Most of the area of the district is comprised of this alluvial plain. The sediments of this part have been deposited by the rivers Ganga and Kiul. The thickness of this deposition is limited; hence it is also known as a marginal alluvial plain. The thickness of this alluvium

⁴ Choudhary, Select Inscriptions of Bihar, p. 22.

deposit near the Ashok Dham temple at Rajaona-Chowki village is about 123m but has reduced considerably in the southeastern parts up to 15-20m.⁶ However, except this, some small hillocks like Lalpahari, Kalapahari, Bichhewye etc. are standing here and there within the alluvial plain.

Critic of the previous work

This region has become a point of attraction for many archaeologists, historians and antiquarians for a long time. Followed by Buchanan, Beglar (surveyed the whole 1871-72), and in Cunningham (surveyed the area first in 1871 and later in 1879–80), later D. C. Sirkar. B. K. Jamuar, Frederick M. Asher, S. Huntington, D.K. Chakrabarty, Anil Kumar, R. K. Chattopadhaya, etc., many recent scholars are also working in this region to uncover the far-flung history of the region. Unfortunately, many of them concentrated either on the study of sculpture, architecture and iconographic importance of this area; or on the nature of the settlements, i.e., urban or rural. On several occasions, scholars have visited only one site and given only a description over that particular site; although, the previous works on this area have brought into light the importance of major archaeological sites like Valgudar, Rajaona, Chowki, Jainagar etc. However, very recently archaeological excavations have been conducted on two major sites of this region, Lalpahari and Uren. The excavation reports of these two sites certainly would enrich the history of this region in future. Yet, so far no attempt has been made to study this area in a holistic

⁵ Sahai Bhagwant, The Inscription of Bihar ,Ramananda Vidya Bhawan ,p.96.

⁶ District Survey Report of Lakhisarai (Stone Mineral), As per Notification no. S.O.3611 (E) New Delhi, the 25th, July, 2018 of Ministry of Environment Forest and Climate Change, Government of India,p.11.

manner, where an archaeological site should understood in the context of be contemporary existing settlements. Still, attempt also has not been made to study a massive archaeological site about surrounding small habitational settlements. Although the previous research works show that this Krimila region⁷, broadly the lower Kiul flood plain region, has some extensive archaeological sites, many of these have multi-chronological character.

Study area

It has been described above that the Krimila region had great importance as a geopolitical unit in the ancient past, specifically post-Gupta period. in the Ancient literature and epigraphic evidence have profusely mentioned about this region, vet there is no direct evidence regarding the area or boundary of this adhisthana. The lacuna of this knowledge can only be fulfilled through the proper analytical study of existing archaeological remains in this area. In this research, the main concentration has been demonstrated on Lakhisarai town and its adjoining area. The shape of this study area is triangular and bounded by the left bank of Kiul River and the right bank of river Harohar.

Study of Archaeological Sites: Explorations in Lower Kiul Basin

Lakhisarai and its adjoining region are singularly important to understand the

⁷ It's always been considered a difficult task for a historian to make a proper idea of an ancient administrative unit, particularly in a plain landscape like lower Ganga valley, which has a more or less the same physiographic character. Still no literary

evidence has been found which can address us about the boundary of *Krimila Visaya*. On the basis of inscriptions and other archaeological evidences, it has been argued that *Krimila visaya* was located in lower Kiul basin, although its boundary yet to be fixed.

gradual progress of human history in the Ganga valley region as well as Indian history. This region is located at the confluence of Ganga, Haruhar and Kiul Rivers, which has made the region adequately fertile and helps to bring its status in the scale of civilization, for a long time. However, this present study has highlighted some major sites of this area, among which are few sites newly reported by a survey of the researcher (Table No.1).

Rajaona and Chowki

Rajaona and Chowki⁸ two modern villages of Lakhisarai District, which now have been incorporated within the Lakhisarai municipality. It is 4.5 km south from Luckeesarai station. Both of these villages are located on one massive archaeological mound of post- Gupta period. Many earlier scholars have mentioned these two villages as two different archaeological sites. But based on the observation, it can be argued that it's a massive mound of an ancient settlement over which these two modern villages is existing.⁹ The site is located around 4km away from the river Kiul and around the same distance from river Harohar. The landscape in the catchment area of the site is more or less plain, where the site is located 2/3 meters elevated land from its surrounding area. Interestingly, is that from the literary evidence we get some hints that the remains of human settlement, existing in these villages, with much earlier origins. According to Cunningham, Rajaona is none other than the 'Lo-in-ni-lo' of Xuanzang's account.

⁸ Scholars also have pronounced these villages as Rajauna and Chawki.

⁹ It is personal observation of the researcher.



Figure 1. Horizontal view of the mound from the northern side of the village Chowki



Figure 2. Architectural and sculptural fragments scattered in Rajaona and Chowki

Once, when *Xuanzang* visited this place he saw a Buddhist monastery and *stupa* erected by Asoka in the third century BC; although the visible material remains on the surface of this mound belong to the Post Gupta period in its characteristic features. A large number of sculptural as well as architectural fragments are scattered in different parts of the villages. Besides these, there is a modern Shiva temple, Ashok Dham in the western side of this village. In the museum of this temple, more than 150

sculpture and architectural fragments have been kept for exhibition.¹⁰ Interesting thing is that most of these have been found either in the temple complex at the time of building the present temple or have been reported in or around these two villages.

Rahugarh

On the western side of Rajaoun-Chowki there is another habitational mound

¹⁰ The researcher has personally visited this museum.

of Post Gupta or early medieval period. It's not a different settlement from Rajaona-Cwoki, but it belongs to a part of the massive Rajaona-Chowki habitation, in the same landscape. On the western side of this mound, there is a massive structural deposition, where brick robbery is very active since a long time. Same as the

Rajaona-Chowki, the people of the locality have collected a large number of architectural and sculptural fragments during their agricultural activity. People believe that a large number of antique objects are hidden in this mound and speak of different stories associated with this mound. However, from

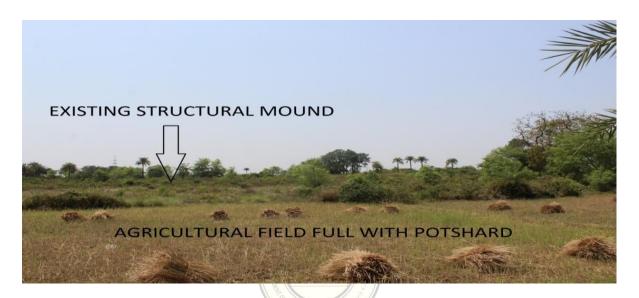


Figure 3. Mound at Rahugarh

the surface of the mound, coarse redware, grey ware, black ware etc. has been reported, which is very similar in fabric and style with the Rajaona-Chowki mound.

Gangta

In the 3km west of Rajaona-Chowki is a village called Gangta. Architectural and sculptural fragments of the early medieval period have also been reported from this village in a secondary context. The village doesn't have any habitational deposition or an archaeological mound. The settlement of this village is the most recent one, yet on the

eastern side of the village is a gigantic pond, known as 'Bahan-Bigha Talab'. This pond has a much older relationship with Rajaona-Chowki and Rahugarh. It seems that this area once acted as the periphery catchment area of the Rajaona-Chowki and Rahugarh habitation. However, on the western side of this pond, there is a Shiva temple where a large number of architectural and sculptural fragments has been gathered by the local people. The people have collected most of these sculptures from in and around the Rahugarh mound.







Figure 4. Sculpture from left: Mother with child (partly broken in the upper part), Pedestal of Surya image, Buddha (head is broken) Scale: 20 cm

Balgudar

One kilometer north of the Rajaona-Chowki settlement, the village Balgudar is another well-known archaeological site of the early medieval period. The site is located on the south bank of the river Harohar, a tributary of Kiul River. It was a massive settlement of early medieval India, where still there exist a huge structural mound on the south of this settlement. From this mound has also been collected a large number of architectural and sculptural fragments. The sculptures are mainly either associated with Brahmanical or Buddhist religion. All these sculptural remains have been kept in Balgudar Shiva temple, Balgudar Kalisthan, Balgudar-near the river bank and few of these are in private houses of the villagers.

Lakhisarai

This site is located at a walkable distance of about 2.5 km east from Rajaona-Chowki settlement. The entire mound of this site has been occupied by the expansion of Lakhisarai Township and is now very difficult to trace its archaeological mound. Architectural and sculptural fragments of this site are kept in three places-Bisahori sthan, Shri Lakhsmi Narayan Mandir and Pipar per tala. All these sculptures are associated with

either Brahamanical or Buddhist pantheon. The iconographic style and the features of sculpture of this site are similar to the Rajaona-Chowki settlement, a site of the early medieval period.

Sabikpur

It is located 5 km north from Rajaona-Chowki on the right bank of Harohar River. Being very close to the Harohar flood zone the village has Architectural undulating surface. sculptural fragments have also been found from this village in a secondary context. The villagers state that all local these architectural and sculptural fragments have been found beneath a tree, which was probably once a temple complex. No archaeological mound in or around this village has been reported. It seems that due to some religious importance, villagers had collected and gathered these sculptural fragments from the surrounding area. However, based on the style and features these sculptural fragments are very close to Balgudar, Rajaona-Chowki and Lakhisarai.

Damodarpur

Another place where architectural and sculptural fragments have been found is

Damodarpur, which is under Sabikpur Panchayet. This village is also situated on the right bank of the river Harohar, around 6 km north of Rajaona-Chowki village. This village has undulating surface due to its location, at the very active flood zone of Harohar River. Architectural fragments and sculptural fragments of the early medieval period have been reported from the Shiva

temple and Damodarpur-Musahar area. No archaeological mound or any sign of ancient habitation has been traced in this village. The people of the village collect the sculptural fragments and use them for religious purpose.





Figure 5. Balgudar mound (Upper); Dancing Shiva on the



Figure 6. Lakhisarai - Gargoyle (Left), Architectural fragments (Middle), Dasavatar panel (Right) Scale: 20 cm



Figure 7. Dambodarpur- *Chatur Mukha linga, Uma Maheswar* and Some unidentified broken part of sculptures and architectural fragments. Scale: 20 c

Neri

This village is located at 4 km southwest of Rajaona-Chowki. It has a habitational deposit of the early medieval period. Unfortunately, the site is badly disturbed as an electric powerhouse has been made on the top of this mound. On the other hand, a pond has been dug on the northern side of the mound. From the surface of the mound black ware, redware and black slipped ware have been reported from the southeastern corner of the mound.



Figure 8. Exposed brick wall in the eastern side (Above), Existing mound from the eastern side (Below)

Jainagar

In the southeastern corner around 6km distance from Rajaona-Chowki, there is located the well-known archaeological site area Jaianagar. This is presently integrated the Lakhisarai part of municipality. Physiographically the site is located between two small hillocks Kalipahari in the north and Lalipahari in the south respectively. On the other hand, river, Kiul is flowing just in the eastern side of this mound. It's a habitational mound of the early medieval period but unfortunately, most of the area of this mound has been occupied by the modern settlement. Local people believed that once this area was known as 'Hatbari'. This place was first visited by Buchanan and followed by Beglar, Cunninghum and later on many Indian scholars have worked on this site. Cunninghum mentioned this mound as the mound of an ancient market. In the southern side, on the Lalipahari hillock, there is an archaeological mound, where recently an excavation of a Buddhist monastery was conducted by Visva-Bharati University and Bihar Heritage Development Society. However, Jainagar has a very significant role in early medieval history. The existence of large mound and epigraphical record found from this area address this fact.

Hasanpur

In the southern side of Jaynagar, just after the Lalpahari hillock, there is a place called Hasanpur. This site is very close to the river Kiul, which has a large habitational deposition of the early medieval period. A channel of Kiul River has passed from south to north direction in the middle of this mound and created a natural section of the mound. From these sections of the river, an approximately one-meter layer of cultural deposition is prominent. The deposition has largely red ware, red slipped ware and grey ware ceramics. Close to this mound, there is a Shiva temple where a large number of architectural and sculptural fragments have been kept as laid by the local people. All these sculptures belong to the 10th to 11th century A.D.



Figure 9. Sculptural fragments near the mound (Above), Huge stone slabs on the mound (Below)

Hasanpur Dira

In the east of Hasanpur mound just on the opposite side of the old river bed of Kiul, there is also a mound of the early medieval period, locally known as Hasanpur Dira. The villagers informed that, around 100 years before, the people of Hasanpur village used to live on this mound. After that, the villagers had migrated to the present Hasanpur area. The size of this mound is decreasing rapidly, due to the action of the river. In the cutting section of the river, the hanging potshards are visible. Hence, in the present context, it is very difficult to make an assumption on the size of this settlement, yet it's certain that within a few years the rest of the mound can vanish. However, on the surface of the existing mound, evidence of coarse redware, red slipware and blackware ceramic have been found.

Kali Pahari

There is another habitational mound at 500 meters northeast of Kalipahari. The area is known as Kalipahari, belonging to the Lakhisarai municipality. Here the mound is disturbed largely because of building construction and a modern road, which has passed through the middle of the mound. The road has divided the mound into two parts, northern and southern respectively. From this mound various types of redware ceramic have been reported.

Pathla

It's a village, located around 10 km south of Rajaona-Chowki. From this village many sculptural fragments of the early medieval period have been reported in a secondary context. It's not a habitational site. The sculpturea have been collected by the villagers from different nearby villages,

which are preserved in a Shiva temple, of the locality.

Bilouri

This village is located at a distance around 11 km south of Rajaona-Chowki settlement and 7 km west from Jainagar settlement. It has a habitational mound of the early medieval period. The mound area is locally known as 'kachhahari' as they believe that in early days the King used to give his judgment from this place. Sculptural and architectural fragments associated with this mound have been recorded from three different areas of the village, i.e., Suphal Brahamin ka sthan, Paschim Tola Shiv Mandir, Kalisthan.





Figure 10. Bilouri - Face of Vishnu, Shiva ling and some architectural fragments Scale: 20 cm

Jhulana-Biharaora

These are two adjacent villages of Damodarpur Gram Panchayet, located 9.8 km south of Rajaona-Chowki. Both of these villages are now exiting on an archaeological mound of the early medieval period. The people of this area, have occupied a portion of the mound for house building and in the

rest of the area they had made into agricultural fields. However sculptural and architectural fragments have been reported from four different areas of the villages, i.e., Shiva temple near the pond, Shiva Temple near the road, Garbhua Sthan, Dibal baba ka sthan.





Figure 11. Jhulana-Biharaora - An early medieval Gargoyle attached with a modern Shiva temple (Above), Heap of sculptures and architectures (Below)

Aure

The village Aure coming under Ramgarh Chowk block has another occupied habitational site of the early medieval period in this area. This village is located 13 km south from Rajaona-Chowki by road. The modern village, which exists on this mound is around 200 years old. According to the villagers, once this area was known as 'Dhatri-sthal' but due to the presence of a

large number of 'Aura' tree, a type of wild plant, the village became well-known later as Aure. However, a large number of architectural and sculptural fragments have been reported from Shri Ram Mandir and nearby area of this village. All the sculptures of this site are associated with Buddhism and could be dated 9th to 11th century AD.



Figure 12. Aure- Singhanad with broken head (Left); Unidentified Buddhist male figure (Right) Scale: 20 cm

Argument and Conclusion

In the present research, an extensive exploration has been conducted understand the ancient heritage of the region. This area belongs to the lower basin of the river Ganga and has a very fertile plain landscape. A major part of the south Bihar plain and also some parts of Jharakhand use to connect with the trading route of the Ganga River through this area. In the political point of view, this area also has great importance too for its strategic location. From the Gupta period onwards this area has been considered as an administrative unit. We have a reference for this area in the

Gupta inscription. In this regard, two Nalanda seals of Samudragupta are significant, where we find the mention of this *Krimila-visaya*.¹¹

This exploration has revealed a cluster of archaeological sites in this area. A large number of sculptures and architectural fragments, which have been reported from these sites, undoubtedly are the postmark of the ancient heritage of the area. The major sites of this area are Rajaona-Chowki,

¹¹ Nalanda and its Epigraphic Material, Sastri, Hirananda, p.53-54, Memory of Archaeological Survey of India, No.66.

Balgudar and Jainagar. The ancient name of Balgudar Rajaona-Chowki and was Krimila.¹² Therefore a part of Krimila (Balgudar) was situated on the bank of river Harohar and another portion of the Krimila (Rajaona-Chowki) was situated in between the river Kimikālā ¹³ and Hrohar¹⁴. It is also interesting to know that the present Jainagar area, under the Lakhisarai municipality, was known as Champa¹⁵ in ancient times. Both of these places had great significance in the early medieval period. Krimila was the centre of early medieval adhisthana. At the same time, there was a Buddhist monastery in Champa. Inscription reported from this place indicating that the monastery had enough dominance in the locality and society. 16 A large number of the finest sculptures have been reported from this locality through the various explorations of scholars, indicating the significance of this part.

From *Krimila* area, on the other hand, has reported a large number of sculptures and architectural parts, both Hindu and Buddhist pantheon. Once, *Xuanzang* the

famous Chinese pilgrim of the 7th century had visited this area. He had seen Buddhist monastery and an *Ashokan Stupa* here.¹⁷ The present survey has recognized that the numbers of sculptures associated with

Buddhism is less than the Hindu pantheon and most of these sculptures have been reported from the eastern side of the site. The Balgudar also have both sculptures of Hindu and a Buddhist pantheon, yet here too the limited sculptures are Buddhist. On the other hand, in Lakhisarai, large numbers of sculptures are associated with Buddhism. In Bilouri all the sculptural fragments are related to Hindusim; wherein Aure all the sculptures are related with Buddhism. In the case of Jhulana-Bhiruara except for two or three fragmented pieces, the rest are related to Hinduism. Hence, it can be argued that both the people of the Hindu and Buddhist communities were living together in this area

¹² 'Three Inscriptions from Valgudar', D.C. Sircar, Epigraphia Indica, Vol-XXVIII, No-28, New Delhi, 1950,pp.137-145.

¹³ The Anguttara Nikāya ,Part IV ,E.Hardy(Edited),London,1899,P.354.

¹⁴ The ancient name of the river Harohar is still unknown.

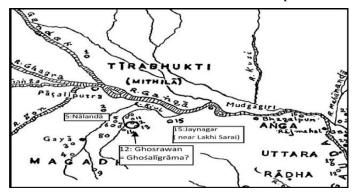
Dynastic History Of Bengal, Abdul Momin Chowdhury, Dacca ,1967.p.280.

¹⁶ The Translation of Jainagar Image Inscription:

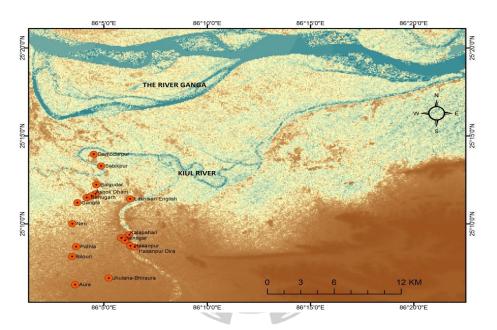
[&]quot;May there be success. On the 3rd day of *Caitra* in the 35th year of the feet of *Palapāla*, the illustrious lord of *Guda*, here at the illustrious city of *Champā*, the (goddess) *Bhaṭṭārikā PurneśVari* (or *PurnyeśVarī*) (continued)...is installed by *Ūtakva*. Whatever merit is here let it go to the communities of *Siddhas* and the congression of *Śramaṇas* as well as to the relatives (of *Ūtakva*) who are bound by the fetters of (worldly existence)."

⁻⁻⁻⁻⁻ *Dynastic* History of Bengal, Abdul Momin Chowdhury, Dacca, 1967.p. 280.

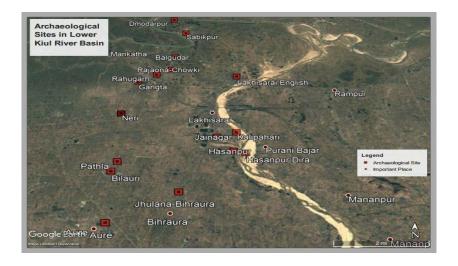
¹⁷ Archaeological Survey of India Report, 1871-72, Vol III, Alexander Cunningham, Culcutta, 1873, p.153.



Map.1 After, Chowddhury (1967), 'Dynastic History of Bengal'. Here in this Map Jaynagar (Jainagar) and its surrounding area have been identified as *Krimila*, yet its actual geographical boundary is unknown.



Map 2. The River Ganga and it's Tributary River Kiul: Archaeological Sites in Red colour.



Ma 3. Representing the Close view of the Archaeological Sites in Google Earth.

Table No.1 Archaeological sites in Lower Kiul Basin

Sl.	Archaeological	Coordinates	Time Period	Remark
No	Site			
1	Rajaona-Chawki	Lat. 25° 11' 41" N	Early Medieval	ASI Report, 1871-72, Vol III
		Long. 86° 04' 15.64" E		
2	Rahugarh	Lat. 25° 11' 27.49" N	Early Medieval	Kumar, A.(2011).
		Long. 86° 04' 46" E		
3	Gangta	Lat. 25° 11' 9.87" N	Early Medieval	Newly Reported
		Long. 86° 03' 49.96" E		
4	Balgudar	Lat. ° 12' 20" N	Early Medieval	Epigraphia Indica, Vol-XXVIII,
		Long. 86° 04' 43" E		No-28,1950
5	Lakhisarai English	Lat. 25° 11' 31.23" N	Early Medieval	Kumar, A.(2011).
		Long. 86° 06' 2.84" E		
6	Sabikpur	Lat. 25° 11' 36.44" N	Early Medieval	Newly Reported
		Long. 86° 04' 36.29" E		
7	Damodarour	Lat. 25° 14' 0.24" N	Early Medieval	Newly Reported
		Long. 86° 04' 27.34" E		
8	Neri	Lat. 25° 10' 0.21" N	Early Medieval	Kumar, A.(2011).
		Long. 86° 03' 28.88" E		
9	Jainagar	Lat. 25° 9' 11.32" N	Early Medieval	ASI Report, 1871-72, Vol III
		Long. 86° 05' 46.98" E		
10	Hasanpur	Lat. 25° 08' 47.76" N	Early Medieval	Kumar, A.(2011).
		Long. 86° 06' 14.36" E	363	
11	Hasanpur Dira	Lat. 25° 8' 45.65" N	Early Medieval	Newly Reported
		Long. 86° 06' 19.55" E	juite	
12	Kalipahari	Lat. 25° 9' 7.44" N	Early Medieval	Newly Reported
		Long. 86° 06′ 17.09″ E		
13	Pathla	Lat. 25° 8' 56" N	Early Medieval	Newly Reported
		Long. 86° 04' 58" E	50) (1)	
14	Bilouri	Lat. 25° 8' 6.12" N	Early Medieval	Newly Reported
		Long. 86° 03' 27.96" E	-	
15	Jhulana-Bhiraura	Lat. 25° 7' 31.12" N	Early Medieval	Newly Reported
		Long. 86° 04' 58.95" E	-	
16	Aure	Lat. 25° 7' 18.62" N	Early Medieval	Newly Reported
		Long. 86° 02' 56.32" E	•	

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Tirthankara Nemi: History and Tradition

Brijesh Rawat

Nemi twenty-second is the Tirthankara of the Jaina religion with different names being Neminath. Arishtanemi, and Rathnemi. 18 Plenty of source materials related to the antiquity of Nemi from Brahmanical, Jaina and Buddhist religious literary works can be found. Yet, due to the lack of requisite research work in this context, the historicity is still not accepted.

Samudravijay, the father of Nemi was the ruler of *Shauripur* i.e. modern Bateshvar. His mother's name was Shiva. The name of the younger brother of Samudravijay was Vasudeva. The son named Arishtanemi of Samudravijay became the twenty-second *Tirthankara*. Vasudeva had two sons Balrama and Krishna. Thus, Arishtanemi was the paternal cousin of Krishna. ¹⁹

In this paper, special references are made of the account of associated contexts from Vedic literature, poetic compositions and other Brahmanical compositions. Along with this, the facts mentioned in Jaina and Buddhist religious works have also been described and incorporated appropriately and in the proper place. To explore the antiquity of Nemi, based on the historicity of Krishna, the hero of *Mahabharata*, the first basis that has been made is the mutual relationship between the Nemi and Krishna. Besides, analytical studies of the characters like Nemi, Kaalnemi, and Arishtasura have also been made. An evaluation of the other

descriptions in context with the words like *Arishta* have also been discussed. Based on the said facts, a humble effort has been made to provide ancient literary evidence along with the depiction of Balrama and Krishna along with the ancient sculptures of *Tirthankara* Nemi.

Several years ago, scholars had doubts about the authenticity of the historicity of Krishna, but now he has been accepted as an eminent historical person. Many facts have been provided by the scholars to prove the authenticity of Krishna²⁰ but no special discrimination have been offered related to Arishtanemi. While in the Brahmanas Literature Nemi has been referred to as the younger paternal cousin of Krishna. It would not be inappropriate to make it clear that the description of *Yaduvansha*.

Probably, it has two reasons²¹ first, it is not possible for us to analyse as regards our present knowledge that what is the motive behind the Jaina texts mentioning a gap of the long interval between the two *Tirthankaras*? Thus, it is not appropriate to ignore (to cause out of sight) the life story of Nemi mentioned in Jaina texts which are based on *Prakrit* literature. Second, the authors of Brahamanas have utilized the traditional knowledge only up to the level which is necessary to ascertain Krishna as a god. There are various historical facts

¹⁹ Ghosh, A., 'Jaina Kala Evam Sthapatya', part-1, New Delhi, 1975, p.18

¹⁸ Uttaradhayanasutra, 22, 132

²⁰ Gaur, R. C., 'Vedic Chronology Studies in India, Archaeology and Ancient India', Part -1, p.265

²¹ Diwan, P.C., Annual Report of the Bhandarkar Research Institute, Poona, Vol-23, p.122

described in Jaina texts which we do not find in Brahamana texts.

There is a comprehensive description of yaduvansha in the later Vedic literature, where the description of Arishtanemi has also been available at various places. It would not be inappropriate to make it clear that the description of yaduvansha in Brahamana texts is not similar, there is a varied disparity. In the chronology, the genealogy of yaduvansha as mentioned in first Brahamana texts is being given. The genealogy of yaduvansha as mentioned in Brahamana Harivansha Purana is as follows.

Chirakasyabhavanaputrahpruthurvirpruthur ev cha!

Ashvagreevoashvavaahushchasupashvakaga veshnau!!

Arishtanemishvaschasudharmadharmbhruvr atha!

Suvahurbahubaahushchashravishthaashrava nestriyauh!!²²

That is, Maharaja Yuddha had five sons equivalent to divine prince namely Sahastrada, Payoda, Kroshta, Neel and Ajik. Kroshta had two sons with his wife queen Maadri named Yuddhajit and Devmidhush. Yuddhajit had two sons namely Vrishni and Andhak. The two sons of Vrishni were Swafalka and Chitraka. Swafalka had a son namely Akrura. Chitraka had twelve sons and two daughters. The names of twelve sons were Pruthu, Vipruthu, Ashvagreeva, Ashvabahu, Supaashravaka, Gaveshana, Arishtanemi, Ashva. Sudharma. Dharmabhoota, Subahu and Baahu and the name of two daughters were Shravishtha and Shravana. It is noteworthy that the name of one of the sons of Chitraka 'Arishtanemi' has been specified.

Purana²³ Harivansha In the genealogical tradition of Sri Krishna is as follows- the description up to Kroshta is as above. Yet, there is a change in the successional tradition like the second son of Kroshta namely Devmidush had son Shoor, Shoor had ten sons and five daughters. The names of ten sons are - Vasudeva, Devabhaga, Devashrava, Anavrishti. Kanvak. Vatsavaan. Grijim, Shyaam, Shameek and Gandush.

In *Harivansha Purana*²⁴ another dynastic tradition is as follows- Haryashva was born in Ikshavaku dynasty. Yadu originated from Queen Madhumti. Yadu had five sons –Muchkund, Madhav, Saras, Harit, and Parthiv. From Yadu's second son Madhav was born Satyavat, Satyavat from Bheem was born, Bheem had Andhak as his son, Andhak had Rewat, from Rewat was born Vishvagarbha. Vishvagarbha had three wives from whom he had four sons- Vasu, Vabhru, Sushena and Samaaksh. From Vasu, Vasudeva was born and from Vasudeva Krishna was born.

²² Harivansha Purana, parva-1, 34, 15, 16

²³ Ibid, 34,12-23

²⁴ Ibid, 2, 37-38

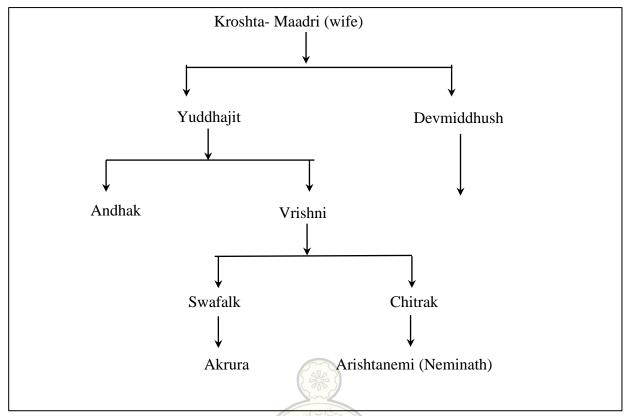


Figure 1. The genealogy of Kroshta or Vrishni from Brahmana Harivansha Purana.

Similarly like Harivansha Purana in Mahabharata²⁵ also we find two traditions of Yaduvanshi's. From first tradition we have from Buddha, Pururav, from Pururav, Aayu, from Aayu, Nahush, from Nahush Yayaati was born, from Yayaati, Yadu, from Yadu, Kroshta, from Kroshta, Brijinavaan, from him Ushangu, from Ushangu Chitraratha, the youngest son of Chitrarath was Shoor, from Shoor was born Vasudeva and from Vasudeva was born from armed Shri Krishna. According to the second tradition, yadu was born from queen Devayani²⁶, the wife of king Yayaati. Under this genealogy Devmeedha was born. From Devmeedha was born Shoora, from Shoor was born shauri Vasudeva.

Like this, it is apparent that there are various views available relating to the

heritage of Yadu dynasty from *Brahamanas* and *Puranas*. Probably, the long interval had covered the Yaduvansha tradition into the mist of oblivion.

On the other side, Jain tradition had only one genealogy. The *digambara* and *shwetambara* spiritual preceptors had their uninterrupted tradition. Thus, we find similarity and association in both the sects as regards the genealogy of Yaduvansha. According to Jaina Tradition, the lineage of yaduvanshi is as follows.

According to *Uttradhayayan sutra* there was an ardent king named Yadu in Harivansha. From him began the Yadu dynasty. Narpati was born from Yadu, who had two sons- Shoor and Suveer. Suveer began to rule over Mathura. Shoor established a city named *shauriapur* in Kushaddya country where he started ruling.

²⁵Mahabharata, Anushashanparva,147, 27-32

²⁶ Ibid, Dronaparva, 144, 6-7

Shoor had son Andhakvrishni and Suveer had Bhojakvrishni. Andhakvrishni had ten Samudravijay, Akshobhya, sons-Stimitsaagar, Himvaan, Vijay, Achal, Dhaaran, Pooran, Abhichandra and Vasudeva. Two daughters were also born from him named Kunti and Madri. Samudravijay had Nemi or Arishtanemi as son who was the twenty-second Tirthankara. Vasudeva had Balrama and Krishna as his sons. Like this. the relationship between Krishna and Arishtanemi can be made distinct.²⁷ Purana also gives a vivid description of Arishtanemi. There is mention of Jinna Nemi at Rewet Mountain (Girnar) in *Prabhas Purana* where is referred to as the objective on the path of salvation.

RevatadrauJinauNemiryugaadirvimlachale!

RishinnamaashramaadevMuktimaargasthak aarnam!!²⁸

In Skandhapurana Shiva and Nemi are referred to as one. The description in this text is- a dwarfish in the last phase of his birth carried out ascetic practice i.e. meditation. As a result of this Shiva appeared before him. Shiva was on padmasana. He was of dark colour and dighambara. That dwarf gave the name Neminath to that Shiva. This Neminath will be the destroyer of all evils in this terrible era (Karikaal). One will procure the fruit of millions of sacrifices by watching his appearance and mere touching him.

BhavasyapaschimebhagevaamnentapahKrita m!

²⁸ Prabhaas Purana, 8/19

Tanaivetapsakrishtahshivahpratyakshataam gatah!!

Padmasanahsamaaseeenahshyaammurtidigh ambarah!

NeminatahShivothaivamnaamchakresyaVaa manah!!

Kalikaalemahaghoresarvapapanaashak!

Darshanaatsparshnadevkotiyajnafalapradah 11²⁹

It is known here that Shiva has been referred to as *Padmaseen*, of dark colour and *digambhara*. He has been given the name Neminath. In Jaina Sculptural tradition these three — dark colour, *padmaseen* and *dighambara* are found along with other characteristics and symbols. These are the characteristics of the Jaina sculptures. It is worth noticing that Shiva is called as Neminath, which has great importance in the assimilation of Neminath.

Brahamana Puranas do not accept any relationship between *shauripur* and Yadus which is a very important fact in the incorporation of Arishtanemi. Yet, in Mahabharata at two places *Shoorah Shaurijaneshvarah* verse has come in which Shri Krishna has been referred to as *Shauri*. *Ashokastarannstarahsurah*

Shaurirjaneshvarah!

KaalneminihaVeerahShoorahShaurirjaneshv arah!!³⁰

²⁷Jaina, Balbhadra, 'Jaina Dharma ka Itihaas', part-1 Delhi, 1978, p.327; Ghosh, A., ibid, p.18

²⁹Skandha Purana, Prabhaas khand, 9/12

³⁰Mahabharata, Anushashanparva, 149,50,42

Bateshvara is situated about seventy-two kilometers to the east of Agra, the ancient name of which is *shauripur*. As per Jaina tradition, it is the birthplace of Nemi. This was the capital city of Andhakvrishni branch of Yadus. At this place, Arishtanemi and the father of Krishna used to reside. *Brahaman Harivansha Purana* refers to Sri Krishna as *shauri*. The womb and birth of Nemi at *shauripur* was considered auspicious.

Vasudevaaccha Devkyaamjaye Shaurirmahaayasha!³¹

Six months before the Neminath's descent from heaven until fifteen months after the birth the gods poured down gems at King Samudravijay's palace on the order of Indra.

JinasyaNemisvidivavataratahpurvaishsshma spurrasra Surai!

Pravartitatajnanavadhigrihehiranyavrishtip uruhutshashanaat!!³²

Through this account, it is known that Yadus had a relation with *shauripur*. In this way, *Harivansha Purana* like *Mahabharata* also establishes a relationship between *shauripur* and Yadus. There is a description of Neminath's birth in *Tiloyapannanatti* work that Jinendra Nemi was born through Shivadevi and father Samudravijay on the thirteen days of *vaishakha shuklapaksha* of *chitra nakshatra*. These accounts authenticate the Jaina belief that Shri Krisna and Nemi were the residents' ode *shauripur*.

Sauripurammijadosivadeviyesamdyavijayan

Vaaisaahterasiyesidaaye Chinta Sunnemijinno!!³³

Nemi has been mentioned Buddhist text Lankavatara³⁴ like other works. It describes that, like one object has many names, so Buddha too has many names Tathagata, Swayambhu, like-Naayak, Vinayak, Parinaayak, Buddha, Rishi, Brahamana. Vrishabha. Ishvara. Visnu. Pradhan, Kapil, Bhaskar and Arishtanemi etc.

In the early texts of Puranas also Arishtanemi has also been described at places. Arishtanemi various has been mentioned in various hymns of ancient Rigvedic³⁵sacred verses. Similarly, Yajurveda also mentions-

Om raksharaksha Arishtanemi swaahah!

Vaamdevshaantayarthamupvidhiyatsosmaak am Arishtanemi swahah!!

Swastinahindrovriddhashravahaswastinahpu shavishvavedaaha!!

Swastinastaakshyonarishtanemihswastinohb rihaspatirdadhaatu!!³⁶

Moreover, *Tirthankara* Nemi, the 22nd *Tirthankara* had a cousin in Lord Krishna. He was betrothed to Rajimati,

³¹ Harivansha Purana, 1, 35/7

³² Harivansha Purana, 1, 46/10

³³Tiloyapannaati, 9/19

³⁴Lankavatara, Tritiya parivartan, 428

³⁵Rigveda, 1.180.10;10.178.1 and 10.10

³⁶ Yajurveda, 25,19

daughter of Ugrasena and sister of Kansa but did not marry her for some reasons. He renounced the world and attained omniscience. Rajimati also renounced the world and attained omniscience. Rajimati also renounced the world and was appointed the head of nuns.37 The Antagadadasao is known as the eight anga of svetambara canon. The stories narrated are those of the 'end-winners', meaning the persons who died either attaining liberation with death or being assured of it at the time of death. The fourth division contains the story of Krishna and his meeting with Aristanemi. Under this persuasion his queen headed by Padmavati, and the two wives of prince Samba became nuns, studied the eleven angas, observed religious practices, and then passed away obtaining the final salvation. 38

In this context the explanations about the opinions of some scholars are indispensable. One is the exposition by Dr Fuhrer³⁹ that the twenty-second *tirthankara* Neminath has been considered as a historic person. Mr Barwe⁴⁰ also accepts the fact that Arishtanemi was the brother of Sri Krishna and was the twenty-second *Tirthankara* of Jainism and was also the contemporary of Sri Krishna.

As regards the historicity of Neminath, the explanation of the Chinese traveller Hieun-t-sang is also of great importance. He visited 'Simhapur' and after travelling has written that here is a place near the *stupa* of King Asoka was the preceptor of *shwetambara* hypocrites had attained

bodhisattva. This episode is also indicated by a stone inscription, near which the remains of shwetambara Jaina temple⁴¹ has been found in which there is a reference that the people who visit this place to severe meditation and are always sincere in their religion....their characteristics are according to their level. Elders are called bhikshu and younger's are called shramanetara.⁴²

The description by Hieun-t-sang of the wearer of white striped gown and temples of God probably were the temples of thirteen *Tirthankara* Vimal a twenty second *Tirthankara* Nemi which were established by the *shramana* and *shravaka* of *shwetambara* sect. This has also been corroborated by the Jina Prabhu Suri's description. like - Simhapur is a great pilgrim site of lingabhidha Sri Neminatha and Shri Vimalnatha. In Simhapur the great pilgrim site of lingabhidha Shri Neminath.

From the above description, it is clear that there should have been many Jaina temples and *stupa* as described by Hieun-t-Sang as well. It is a matter of research that when and by whom these temples were destroyed. These temples have also been mentioned by Jina Prabhu Suri⁴⁵ who died around 1390 A.D. Hence it is proved that these temples existed till 14th century A.D. and was a great place of pilgrimage.

The meaning of *lingabhidha* as described by Jina Prabhu Suri is 'pilgrim

³⁷ Kapadia, H.R., The Jaina religion and Literature, Vol. I. Lahore 1944, p.24-25

³⁸ Law, B. C., Some Jaina Canonical Sutra, Bombay Brach Royal Asiatic Society, Bombay,1949, p.51-52

³⁹Epigraphica Indica, part II, p. 206, 206-7

⁴⁰ Bhagvatgeeta, Appendix, 322

⁴¹ Duggad, Hiralal, ' Madhya Asia aur Punjab Mein Jain Dharma', Delhi, 1978, p.21

⁴² Buddhist Research of the Western World, Vol-1, p.143, 145

⁴³ Suri, Jinaprabhu, Vividhateerthakalpa, Sindhi Jain Vidyapitha, p.84

⁴⁴ Suri, Jinaprabhu, Ibid, p.85-86

⁴⁵ Prabhavak, Jina Shashan, 'Jina Prabhu Tatha Unka Sahitya', p.61

area constructed by Indra'. So this place might have been popularly known as constructed by God (Devnirmit). This clearly shows that the pilgrim site was so old that its construction time must not have been known.⁴⁶

Taking inspiration, Wheeler and Stine tried to find these Jaina temples. The remains of these temples have been found at a village named Murti⁴⁷ which is two miles away from Kataksha [near to kuchh].

Probably, the village might have derived its name because of the ruins of the Jaina temples having Jaina sculptures. Through the contemporary excavations held here, Jaina sculptures, stones of the remains of Jaina temples and Jaina *stupa* have been found in plenty which were carried to Lahore on twenty-six camels and were kept in the museums.⁴⁸

This archaeological source is an important fact in proving the authenticity of Nemi. Through this, this fact also comes to light that at Mathura besides Jaina *stupa* constructed by God there were other Jaina *stupa* and Jaina temples.

The place Aring⁴⁹ which is related to Arishtanemi has also been mentioned, the ruins of which are situated between Govardhana and Mathura. There is a tradition of holding an animal fair at Bateshwar which is being carried out from ancient times. Probably, this tradition of holding animal fair might have been because

of Nemi's love for animals and can be related to his historicity?

Besides, the above mentioned descriptions, mention has also been made in other contexts in *Balmiki Ramayana*, *Mahabharata* and *Harivansha Purana*, the analysis of which is of immense importance.

In *Ramayana*, 50 there is mentioned King Nimi. Both King Nimi and Vashishtha relinquished their body (died) by cursing each other. King Nimi had invited sage Vashishtha for a long drawn sacrifice, but Vashishtha went for performing the sacrifice for Indra and told Nimi to wait for him. Nimi instead invited Rishi Gautam and performed the sacrifice. Knowing this Vashishtha cursed him to relinquish his body. So did the King Nemi and they both died. *Mahabharata*⁵¹ the description of King Nemi is as follows- King Nimi was the ruler of an old country called Videh. He stayed in Yamraj association and used to worship the son of Sun Yamraj.⁵² Brahamans were given states by him.⁵³ He had never eaten flesh.⁵⁴ In an episode of the same text, Nimi has been mentioned as a sage who was born in Atrikul and was the son of Dattatreya.⁵⁵

There is mention of Kaalnemi in *Mahabharata*⁵⁶ who is a powerful demon who took birth as Kansa on this earth. *Harivansha Purana*⁵⁷ also describes in detail about the great demon Kaalnemi and his fight along with its consequences. As per the description in a fight between God and

⁴⁶ Suri, Jinaprabhu, Ibid, Sindhi Jain Vidyapitha, p.84

⁴⁷Stine has mentioned the modern name of Simhapur i.e. 'Murti'Gaon.

⁴⁸ Duggad, Hiralal, Ibid, p.23

⁴⁹ Growse, F.S., 'Mathura Memoir', Delhi, 1882, p.483

⁵⁰ Valmiki Ramayana, Uttarakand, 56.16.17

⁵¹Mahabharata, Adiparva, 1/234

⁵² Ibid, Sabhaparva, 8/9

⁵³ Ibid. Anushashanparva, 115/65

⁵⁴ Ibid, 115/67

⁵⁵ Ibid, 91/5

⁵⁶ Ibid, 67/67

⁵⁷ Harivansha Purana, 47.3-7

demons, demons were defeated by god, and were in despair, only then did Kaalnemi meet the demons and the demons that were in a state of dejection appointed Kaalnemi as their general. They then fought the gods in which Kaalnemi was victorious. He contained all the powers in himself and started ruling. In the course of time, he was slain by Vishnu.

In Mahabharata,⁵⁸ there is mention of another demon with the name Arishta. He assumed the form of a bull and used to hurt animals. Krishna had killed him to save these animals. In this same epic, there is the description of Arishtanemi in great detail. Vinta had six sons of which one was named Arishtanemi.⁵⁹ Other brothers were Taaksharya, Garunna, Varunna, Aarunni and Varunni. It is worth noticing that he had lectures related given to salvation (moksha). 60 Another name of Sage Kashyapa was Arishtanemi.⁶¹ Of the many kings sitting on the assembly of Yamraj, there was a king called Arishtanemi.⁶² During the exile of Pandavas (agyatvaas) Sahdeva had his maiden name as Arishtanemi in Viratnagar.⁶³ Sahadeva went to the king of Viratnagar as a milkman during the period of the exile of the Pandavas. Sahdeva introduced himself to the King Virat with a serious expression- "Great king! I am a Vaishya, my name is Arishtanemi. Great King! I used to count and look after the cows at Kurvansha paragon Pandavas". Besides, this Krishna too had a name Arishtanemi.64 According to this while appraising Bhagavata, Dhritarastra mentions one name of Sri Krishna as

Arishtanemi. 'Arishta'⁶⁵, 'Arishtasena'⁶⁶, 'Arishtanema'⁶⁷and Arishtanemi have been found at different places in a different context.

In *Harivanshsa Purana*⁶⁸ also there is a vivid description of a demon called Arishtanemi. In the various attempts for killing Krishna by Kansa, there was one representative who tried to kill Krishna who was Vrishbhasur whose other name was Arishta, who used to destroy cows. In the same text one, another Arishtasur has also been described. He was the son of Bali, he was as brilliant as god and was in the army of Kaalnemi.

As a consequence, it should be known, that one name of Arishtanemi was Neminath. In the course of time, *Nath* word into vogue because came of Nath community. Probably, taking inspiration from this all the Nath word was added to the name of every Tirthankara. This is very subsequent. Hence, the word Nimi described in Ramayana and Mahabharata might be the consequent word of Nemi. It is worth noticing that the Nirvana of Arishtanemi took place at Girnar Mountain. In Jaina text, Nirvana is also referred to as Sallekhana (dehtyaag i.e. relinquishing the body or death). In the course of time, it is quite possible that in this context along with Nimi the account of sage Vashishtha must have been added. The description of King Nemi of Videh in Mahabharata is worth noticing in the context that he had never eaten flesh in his life. It is also worth mentioning that Arishtanemi did not get married because of his love for animals. He is different from other Tirthankaras because he had very

⁵⁸Mahabharata, Sabhaparva, 38/29/80

⁵⁹ Ibid, Adiparva, 65/40

⁶⁰ Ibid. Shantiparva, 288/5-46

⁶¹ Ibid, 208/8

⁶² Ibid, Sabhaparva, 8/9

⁶³ Ibid, Viratparva, 10/5

⁶⁴ Ibid, Uddyogparva,71/5

⁶⁵ Ibid, Adiparva, 6/83

⁶⁶ Ibid, Shalyaparva,6/3

⁶⁷Ibid, Vanaparva,184/8

⁶⁸Harivansha Purana, 2.21.7,4.12

strongly abolished the killing of animals. Thus prohibiting himself from eating flesh and renouncing the kingdom indicates towards Nemi because Nemi the son of the King of shauripur Samudravijaya was the successor for the throne, but he left the kingdom to become an ascetic and started roaming in search of knowledge. Thus it seems that all these accounts being closely in accord with Nemi, depicts the life event of him. But some other events have been enclosed with it with some changes. In another context also Nemi is referred to as Maharshi. To divide the eminence of sages the posts were designed. The most prominent posts were of Brahmarshi or Devarshi following this was the place of Maharshi. But in Jainism Tirthankaras were the greatest. Thus it is appropriate to associate this similarity with Nemi.

In Mahabharata and Harivansha Purana, there is a detailed description of the demon Kaalnemi. Since the other name of Nemi so it is not Arishtanemi was associate him with inappropriate to Tirthankar Nemi. Nemi and Krishna were paternal cousins but both followed different religions. Nemi followed Jainism, while Krishna followed Brahmanism. These different religious paths had made Nemi as Kaalnemi. Since the contemporary era was a period of development and propagation of the religions, so definitely in both the religions there must have been a great competition. During the contemporary period, Jainism was led by Arishtanemi and Brahmanism was led by Krishna. This period was the period of religious turmoil. The followers of both these religions must have had bitter opinions regarding each other's religion. Since Brahmanism had spread far and wide so the followers of it were more dominant. Under this sequence for the

honour, prestige and propagation of Brahmanism, the follower of Hinduism might have declared Nemi as demon Kaalnemi?

In *Mahabharata* Kansa is also referred to as Kaalnemi, this might be because like Kansa, Neminath too would have been an opponent of Krishna. Neminath because of religious reasons and Kansa because of political and personal reasons. Nemi to prove religious supremacy while Kansa to establish his succession to the throne were the opponent and enemy of Krishna. Because of the strong hostility Kansa might have been referred to as Kaalnemi.

As Harivanshsa Purana. per Kaalnemi contained all the powers within himself and started ruling. According to Jaina tradition since the auspicious birth of Tirthankara till the Nirvana, Indra along with other gods was regarded as the servants Tirthankaras. This indicates tirthankaras were considered supreme than gods. By the statement of Harivansha Purana 'by containing all the powers of a god in him started ruling' might mean Nemi, because Tirthankaras were supreme than gods and gods were considered as their servants and Tirthankaras were already propagating their religion. These vested powers can be seen here.

Arishtasur and Kansa mentioned in *Mahabharata* and *Harivansha Purana*have been placed under the same category. Kansa was the enemy of Krishna. Here it seems that Arishtanemi has been presented as Arishtasur. By the destruction of *Govansha* by Arishtasur it might mean that Arishtanemi being the *Tirthankara* the ordinary masses might have started accepting the Jaina religion. Because of this, followers of

Brahmanism might have faced opposition. As a consequence to deliver harm to Brahmanism, Arishtanemi might have been given the name as Arishtasur.

Arishta, Arishtasen, Arishtanema and Arishtanemi all these nouns have been found at different places in Mahabharata in different contexts. Only Arishtanemi has been used at five places for five great men like Vinta's son Arishtanemi, the other name of sage Kashyap, the name of the king who used to sit in the assembly of Yamraj, The maiden name of Sahdeva and the name of Krishna. From these references, it is clear that the contemporary world was influenced by the tirthankara, Arishtanemi the word Arishta or Arishtanemi spread at the level of common masses and became popular, and people of all the religions accepted this word as it had a good meaning.

But, the question arises that why the word Arishta that had good meaning, was taken into consideration as Arishtasur meaning in a bad sense? In my opinion, when Brahmanism was being harmed by the religion of Tirthankara Arishtanemi, the followers of Brahmanism might have made this word in a negative sense.⁶⁹ Because in Shrimadbhagwata⁷⁰ and Vishnupurana⁷¹ the word Arishtatva corroborates with the tendency of inauspicious behaviour. This whole verse⁷² nourished from the division Arishtam ashubhamakshemam or yasmat has been presented considering it to be sacred or holy. In Panini's Grammar, it has been proved by Rish (hinsayaam)+ ktahgnagya combination too. This word has been stored in dictionary in both the sense auspicious and inauspicious.⁷³ Here also in 'Arishte Shubhashubhe' ityamarah settles with the compatibility of the meaning auspicious and inauspicious word⁷⁴.

It is possible that this word in the beginning, might have had an auspicious meaning, but in the course of time, the auspicious meaning 'rishta' in context with the antonym 'rishta'shebhaashubhaaveshuitmarah became an inauspicious meaning.

From the said text the genealogy of Arishtanemi and in his sculptures ⁷⁷the depiction of Krishna and Balram (*haldhar*) proves the relationships between Krishna and Nemi. Hence, along with Krishna, Nemi too should be considered a historic person.

D uring the Kushana period at Mathura and during the medieval period at Deogarh (Pl.1,2) and at Khajuraho there is the depiction of Balram and Krishna as attendants of Nemi. During Kushana period, for the recognition of Nemi, the only symbol was the depiction of the sculptures of Balram and Krishna, which helps in proving the antiquity of Nemi and keeping him as a contemporary of Krishna.

⁶⁹ In course of time the word 'Devanpiya' word was used for 'moorkha' in Sanskrit, but its use in Pali literature was in good sense.

⁷⁰Bhagawat Purana 10:36, 1-16

⁷¹Vishnu Purana, 5:14

⁷²Panini, Ashtadhyayi, 22,24

⁷³ Tripathi, Shiv Sagar, 'Ramayana aur Mahabharata Ka Shabdik Vivechana', Jaipur, footnote, 1986, p.121

Aapte, p.50 III, Tripathi, Shiv Sagar, Ibid, p.121
 Tandya Maha Brahamana, Chaukhamba Sanskrit Series, Banaras, Part-1,2, 1935, 12.5.2

⁷⁶ Tripathi, Shiv Sagar, Ibid, p.121

All sculptures of Nemi belonging to that of Kushana period that has been obtained from Mathura has the depiction of Balram and Krishna.

J.S. Nigam of the Northern Circle of conducted a Survey small-scale the excavation at Batesvara in the year 1974, with a view to ascertain the stratigraphical position of the black and redware and its relationship with the Painted Grey Ware and later culture in the eastern part of Braja region. Two trenches one arch on the Fort and the Mata mound were laid out. The excavation revealed four periods. Period I is represented by the Painted Grey Ware, black and redware black slipped, pale red-lipped and redwares. Black-and-red and blackslipped wares are represented by the vases, and the redware by vase and squat type of dish -on-stand. Other finds include terracotta discs, marble, bangle, vase -shaped beads, flesh-rubber, hopscotches on pottery, stone ball, beads of semi-precious stone, bone points, and fragments of copper and iron objects. One of the samples from the deposits of this period has been dated to 5130 <u>+ 240</u> and 5280<u>+ 240</u> by C-14 method.

Period II is marked the introduction of the Northern Black Polished Ware and thick grey ware etc. The period is dated to 2520 + 160 and floor –levels and floor –

levels (2590±160), based on Radiocarbon test.

Period III is represented by dull red, and red –slipped ware, besides a few sherds of the Red Polished Ware etc. This period is dated to first to sixth century A.D.

Period IV is represented by red and thick grey-black ware. Available shapes include bowls, basins, *handis* and vases etc.

Six structural remains were exposed, of which two are floors and others are walls built of reused bricks and incomplete. The period is assignable to Rajput-Sultanate times.

Brahaman texts like *Rigveda*, *Yajurveda*, *Ramayana*, *Mahabharata*, *Skanda Purana*, *Harivansha Purana*; Jain texts *Tilloyapannati*; Buddhist texts *Lankavatara*; accounts of Hieun-t-sang, and works by learned scholars, the description of Nemi in various literary works and archaeological evidences all these throw light on the fact that the antiquity of Arishtanemi or Nemi cannot be denied and that he was the paternal cousin brother of the great hero of *Mahabharata* i.e. the Krishna.

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Oral Traditions in Kashmir: Heritage towards a New Paradigm

Madhulika Singh

Abstract

The paper attempts to explicate that the heritage is not simply a set of objects or imaginaries but a processes of making claims about one's past and present, and it seeks to express a localized distinct identity and history both at the level of nation, region or neighborhood. It will also highlight the heritage trajectory from national to local to tradition and intangible practices and thinking. The term oral intangible heritage stands for many things: it marks folklore, poetry, sayings, myths, stories, songs, dances, music, customs, festivals, theatres and diverse representational categories, expressing the authentic voice of the people. When arguing about oral traditions in Kashmir as heritage, we discover the region's history in all its complexities and intricacies with all its complications and contradictions, as a direct channel for justifying regionally bounded and historically rooted practices. As the process of development sometimes destroys the social fabric and community cohesion, the utilization of culture will enhance the cultural resource base of a region. It could be seen as a tool for resistance and reassertion of its cultural ethno- identities and status. The emergence of intangible cultural heritage as an overarching instrumental designation by the World Heritage convention puts its overall aim- a function in the life of the community. Additionally, Kashmir's oral tradition existed largely within a variety of oral performance genres like regional theatrical bhand performences, Daastan Goh, Ladishahs, telling of folk tales, the sayings and verses of mystic poets etc. These forms acted as agencies which not only entertained the community through constant recitation and circulation of the events through characters from both local and universal contexts from the past but also brought to life the everyday narratives of Kashmir society. This allowed the people to become part of and participate in the tradition that shaped their idea of Kashmir as unique distinctive region. These forms of oral tradition are deeply embedded in the kashmiri geographical universe, alongside providing a concrete example for everyday co-existence in Kashmir. It also responded to the hegemony of urbanization, industrialization, mechanization and revived, reasserted region's pride, nourished the image of purity of native exotic culture.

Keywords: Intangible Heritage, Oral Tradition, Folklore, Bhand Pather, Dastan Goi, Ladi shah, Shared myth

Introduction

In viewing heritage through its role in the crystallization of the consciousness of nation state, Benedict Anderson's famous work "Imagined Community" reiterated how shared myths, legends and traditions

contribute to national imagination and creation of national identity. Heritage is not only a nomenclature for monumental sights but a process of valuing social cultural knowledge through which the region can celebrate its power of ability to convey values. In the first half of the 20th century,

academic field of oral traditions and folklore studies institutionalized folklore, music dance, theatrics, traditions and other representational forms as intangible cultural heritage. These were considered to contain residues of lost glories that could be drawn on for reconstituting the past.⁷⁸

The oral traditions in Kashmir have remained unsurpassed by any other region. Termed as popular archives and the oldest of all archives, it is most neglected and considered less scholarly as in many parts of the world. Forms of oral discourse present as in all societies, consists of the whole corpse of poetries, folklore, songs, chants, stories, myths, riddles, legends, proverbs and prayers ballads and theatrics.

Objectives of the study

- 1. To understand and develop more inclusive, socially conscious public history of the region by preserving full richness and value of cultural heritage.
- 2. To recover, and amplify the plaintive voices drowned in the din of a statist historiography through exploring the oral traditions.
- 3. The use of oral traditions in preserving the cultural heritage of the region
 - 4. To place the lived experiences at the centre of the narrative of the region by simultaneously supplementing and challenging the established accounts.
 - 5. Evaluating the role of different forms such as *laddi shah*, *DastanGoh and Bhand* performers in shaping the shared public memories.

6. Analysis of oral traditions as carriers of social and political messages in the public sphere.

Methodology

- 1. Extensive field visits to the region for collection of diverse forms of oral traditions- prevalent in the region like myths, stories, folklores, sayings of mystics etc.
- 2. Personal interviews with a wide range of people connected with regional theatre, performers *of laddi shah and Dastan goh* through structured and non -structured ways.
- 3. Applying techniques and methods in conducting and writing oral accounts.
- 4.Examining and analyzing the historical cultural, sociological, psychological and mythological foundations of storytelling and other prevalent forms of oral traditions for complex and nuanced understanding of the worldview of the region.
- 5. Searching for corroboration, checking and analyzing shared memories against other more conventional source materials.

The privileged discourse of the modern times has been the documentary evidences as the discourse of the experts in diverse spheres. However, in addition to the narratives of the state and those to be found in institutional collections of private papers, historians are now using Orality--- available narratives of storytellers and balladeers, folklorists; providing new perspectives and opening up fresh fields of enquiry in to the past. It recognized the processes evolving interplay of multiple factors, tackling all

Anderson Benedict , Imagined Communities : Reflections on the Origins and Spread of Nationalism , London, Newyork , 2006.

aspects of contemporary human life of any region.⁷⁹

These folk archives and narratives are, however difficult to date and use. They do not give us any simple, direct access to the authentic voice of subaltern groups. They are in this respect no different from other sources for the historians. They too need to be read and analyzed, for they too are sought through with cross-fertilization of ideas, through contradictory naturalizing characteristics, but nevertheless can provide a significant support to historical research in understanding the cultural heritage.

Additionally, the language of elite classes mixed with folk forms and lower class motifs, tribal rites, customs, religiosity, usages and myths, tend to assimilate and further transform them through the pull of parallel traditions. Hence, instead of treating them as unmediated carriers of objective truths to recover the traces from the edge, historians need cautious approaches in recovering and representing the authentic voices. However, the search for or use of unofficial popular sources, poses a different kind of historical practice.⁸⁰

As Orality had different status, if written, words would become inefficacious, lose their power and force. Socrates described writing as inhuman which takes away the dynamism of words; old dynamism would lose their force when we resort to

written verbalization. He was of the opinion that written texts are not capable of answering the questions. Verbalization performs a different kind of function for posterity, has the power to present an entirely new perspective whereby future generations can interpret it freely.⁸¹

Authorship of the whole corpus of oral traditions- songs, folklore, stories, and riddles emerged from collective initiativesthat all classes of people have contributed in constructing and creating these traditionsthe officiating persons, the poor farmer, the learned and literates, physicians, and barbers. Hence, tradition is important and not the person who created these ideas. They were only a part of the process of producing the oral narratives which represent the first-hand testimony of all shades of lived experiences of the people, thereby revealing the inside stories of more nuanced and complex account of those marginalized in the conventional historiography and challenging dominant narratives hagiographers and critics alike.82

In this context, the forms of oral traditions are not fossilized but constantly changing with the need of the contemporary situation. Different lines were added to the songs, as people sit and talk and recapitulate on ideas, incorporate new lines, leading to collective authorship and making orality a prime mover of dialectics of these ideas, thereby enriching the heritage of society.

Alessandro Portelli in his seminal work "The order has been carried out", has crafted an eloquent multi-voice oral history

⁷⁹ Paula Hamilton and Linda Shopes (ed.), *Oral History and Public Memories*, Temple University Press, Philadelphia, 2008

Valerie J. Janesich, *Oral History for the Quantitative Researcher, choreographing the Story,* The Guilford Press, Newyork., 2010., Lori Ann Carner, *Oral Tradition, Oral History ,and Voices,* article in The Oral History Review, 2016, vol. 43 No -2 Pp 263 -5.

Vinay Kumar Srivastava , Experiences of Fieldwork and Writing ,Serial publisher , 2015.

⁸² Chitralekha Jutsi, Kashmir's Contested Pasts, Oxford University Press ,pp 245-6

of the massacre by Nazi occupational force in Rome. He elaborates that the purpose of oral traditions in history is not only to illustrate and add piquancy to an already established narrative but to interrogate and challenge and to repudiate the narratives. It is not the rejection of political history, the story of nation and wars, but re-examination of profoundly important moments which give voice to those who lived through that memory and meaning moment. Their illuminate the history and identity of a nation's popular belief which has been distorted by conservative political forces.⁸³

China for example has built the heritage with national concept of characteristics. The China Folklore Society has sought to build folklore with Chinese characters, engaged for representational purpose and transform it into ethnic and national symbols. Finland, in 1830, founded one of the oldest folklore archives and translated all terminologies used in folklore and ethnological studies. Further, discourse of Japan for relevance of intangible heritage owes much to the Nara Document on Authenticity, 1994, which became the important turning point in the evolution of heritage discourse.

In comparison, Estonia represents different aspect of the usages and significance of folklore heritage. William Thomas coined the English term 'folklore' in mid-1800 for the collected remnants of the past. Traditional performances and practices had been referred to as popular antiquities. England folklore indicated survivals in a civilized society. The Fascist regime in Italy actively supported folklore research with the aim of consolidating national unity. However, sometimes they do also carry deliberate negative implications leading to transformation of cultural misuse and expressions. Yet the commercial and political abuse had been part of disciplinary self- reflection for decades besides its tacit commoditization.84

Oral Traditions within the context of Kashmir, is most innovative in embracing first-hand testimony. As an alternative to the official narratives which are far from marginal or subaltern in the regions public life, if welded together, they would evolve the commonsense belief of the community. Oral sources in the first place concerns itself with personnel and private feelings and stories that have operated below the level of attention of most of the historians, cultural institutions and official medias' over concern with narrow definition of what constitute the "fact."85

However, to fill the gaps in historical construction of the region, stories function as tools that allow us to reconstruct, to explore the relation between the material facts and personal subjectivity and to perceive the multiple ways of elaboration by interrogating ourselves on how and why these beliefs commonsense took place, its meanings and usages. This is where the specific reliability of oral sources arises even when they do not tell the events as they have occurred but overall meaning remained intact.

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⁸³ Alessandro Portelli, *The order has been carried Out*, Macmillan, 2003.

Kristin Kuutma, From Foklore to Intangible Heritage, Article in William Logan, UlrichKockel, and Maired Nic Craith(ed.), A companion to Heritage Studies, Weley Blackwell, 2016, West Sussex, Uk.Pp45-52

⁸⁵ Chitralekha Jutsi op. cit. p 246

Exploring the significance of Kashmir's narrative tradition in multiple languages – are the stories about origin of the land from lake Satisar on which Goddess Parvati sailed in a pleasure boat from her mountain home on *Harmukh*, the tale of sage Kashyap, the demon jalodbhava who resided in the lake and the efforts of the God in draining the water of the lake to oust the demon. Further, stories about its sacred spring, its inhabitants, Sufi mystics and Rishis, its rulers and their policies, characteristic features of its people, origin of place names etc. were the popular and shared imagination in nineteenth century Kashmir.

These stories were part of the narratives that gave it a picturesque graphic quality and became a hall mark of the distinctive unique Kashmiri historicity Thus Kashmiri oral through centuries. traditions present voice to the idea Kashmir as a sacred space – a paradise on the earth. Moreover, it reflects in some way mutual relationship between textual and oral narrative traditions prevalent in Kashmiri, Sanskrit and Persian language texts.⁸⁶

Although the version of the stories changed with the changing public experiences, the inner essence of the events of oral traditions somehow in broader terms corroborated with the textual narratives. For example, stories from Kalhan's Rajtarangini still narrated in the region, were taken both from Kashmir's oral and written tales. In the mid-11th century AD, Somedev, a court poet of Raja Anatadev collected more than 350 stories circulating in Kashmir and assembled them in the famous text Katha Sarit Sager

which became a model in content and style for Kalhan's *Rajtarangini*.87

The origin of Islam in Kashmir occupied an equally important place in the Kashmiri popular traditions. The region was converted to Islam seven hundred years ago by the saint Bulbul Shah from Baghdad, who drew Kashmir into the larger geography of the Islamic world. Oral traditions recounted the rule of early Mughal rulers, especially that of Akbar and Jahangir as largely benevolent, of practicing religious tolerance and freedom, known for construction of splendid gardens and one of continuous pageant of pleasure.

Further, oral traditions celebrated the sagacity of rulers who fostered political and spiritual accommodation between religious communities in the region. In this context, the laudatory descriptions on the one hand about Sultan Zian ul- Abidin (1418- 70), known as *Budshah* (great king) by his subjects and on the other hand, the forced Islamaization, temple breaking activities as well as persecution of Brahmans by his father Sultan Sikander has been narrated in great detail. 88

Oral traditions described the period after Sultan Zian- ul Abidin as one of chaos. Kashmir during Chak rule in the stories identified as shias, was unable to found a stable peaceful dynasty largely due to their intolerant policies, persecution of subjects of other sects/faiths (Hindus and Sunnis), despite being described as brave warriors.

Serebryakov, A Few Thoughts On Katha Sarit Sagara, translated by Tawnay vol-1, 1968. See Chitralekaha Jutsi Op.Cit.p 241.

⁸⁸ M.Ishaq Khan, Kashmir's Transition to Islam, The Role of Muslim Rishis, Manohar, 2002; S.L.Sadhu, Folk Tales from Kasmir, Asia Publishing House, 1962.

The elaborate record of sufferings of Kashmiris under Afghans (1752-1819) and Sikhs rule (1819-46) were preserved in the oral tradition, making the Mughal period appear more enlightened in comparison. The of Afghan governors. tyrannies their imposition of exorbitant taxes, indiscriminate torturing of subjects of other religious faiths, the rape of their daughters, had a large repertoire of stories devoted to them. A couplet recited about their activities captures the level of apprehension inspired by Afghan rule: "O heart there is all fear and dread in this city /prepare for the journey; disorder is dominant in this city." Further, stories of natural calamities and other disasters- floods, earthquakes, epidemics created by the ruthless policies of Afghan and Sikh governors, are the themes of the verses, emerged as a powerful trope within the oral narratives.89

stories from Further, these fifteenth century onwards, supplemented and translated within regional contexts in Persian narratives, emerged with different versions. These stories were told and retold which disseminated a general idea of history in the Lawrence, public space. Walter the Settlement Commissioner of Kashmir has penned down his experiences in his book Valley of Kashmir about how even the uneducated villagers had acquired general idea of history of the region through oral traditions which provided them the means to experience their regional space and engage with the past. While discharging his duties as revenue commissioner, he relied largely on oral traditions, the inseparable part of Kashmir cultural heritage to understand the complexity of the revenue system,

pattern of crop cultivation, system of land tenure, method of assessment, rent collection, employment and the rampant corruption etc.⁹⁰

Additionally, Kashmir's oral tradition existed largely within a variety of oral performance genre like regional theatrical bhand performers, Daastan Goh, Ladishahs, telling of folk tales, the sayings and verses of mystic poets. These forms acted as agencies which not only entertained the community through constant recitation and circulation of the events through characters from both local and universal contexts from the past but also brought to life the everyday narratives of Kashmir society. Despite discrepancies within accounts in oral traditions and oral histories, they do not represent interpretive problems. Quite contrary, even conflicting stories served as opportunities to uncover deeper meanings.⁹¹

J.H. Knowles, a missionary in Kashmir, collected folktales narrated from a diverse class section of society—the poor farmer, the officiating governor, barber, physicians, which are adaptive tales that could be applied to a variety of contexts. 92

Dastan goh as a long established Kashmiri tradition of storytelling and recitation, reflect the enactment of the past. The travelling performers of this genre also cemented their links with religious institutions of sufi pirs and khanqahs and retained their position as purveyors of

⁸⁹ Farooq Fayaz, *Folklore and the History of Kashmir*, Nunaposh Publications, 2001, Srinager.

⁹⁰ Walter Lawrence, *The Valley of Kashmir*, Jammu, Kashmir Kitab Ghar, (1895), 1996.

⁹¹ Chitralekha Jutsi op. cit. p 247.

⁹² J H Knowles, *Kashmiri Folk Tales*, Islamabad, National Institute of Folk Heritage, 1981(1881)

historical cultural heritage archive of the past.⁹³

Further, besides Dastan Goh, there existed a variety of other categories of such performers, like Ladishah and Bhands (the regional theatre performers) as an art of the masses. The most significant themes of Ladishah is its rendition about the intense common suffering of the community in the past such as the impact of famine on the lives of ordinary kashmiris, the event of shortage of salt caused by the Indo- Pak war over between 1947-49, commonly Kashmir known as noon drag (famine of salt) due to Pakistan control over certain parts of Kashmir. In fact Ladishah disseminated the memory of past calamities and presented the distressing impact on the landscape.

Further in this context, Kashmir theatrical performers *Bhands* communicated the sufferings of the common public during the reign of *Afghans*, *Sikhs and the Dogras*. The contemporary political issues, events, prevalence of corruption, political vandalism, aspirations of the commoners, performed in the public space, created alternative ways of circulating and monitoring the happenings at the political, social and religious sphere by harnessing its past.⁹⁴

Additionally, Ladi Shah and Dastan Goi as other effective oral forms of storytelling remained instrumental in communicating the insight of the past in simple straightforward manner and empowered them to understand the contemporary social, political, economic and cultural surroundings. Ladishah's

rendition of these events allowed people to be aware of their historical and contemporary misfortunes and miseries. In fact, the form of *ladishah* seemed to play a significant role in Kashmiri society's' memory of past calamities, their impact on people and their landscape. Thus, storytellers and other performers formed a vital bridge between the textual historical repertoire and the people. Thus making storytelling and performances a vibrant part of Kashmiri public sphere. ⁹⁵

This is one form of art which is beyond the boundaries of language just like music. The story telling was firmly entrenched in the routine practices of life, such as harvesting, weaving and was integral part of earning a livelihood for both the performers and their audiences. Performers drew their patronage not from the state, but from ordinary people.

Moreover, the act of recounting stories was also considered as spiritual and part of God's larger plan as the power to remember and recount hundreds of stories was bequeathed to every story teller by God. This also reminds of the importance of Sufism and its shrines in the production and circulation of oral narratives of Kashmir's past, in common shared public space and consumed by a wide section of society. Thus ordinary people of the region could participate in the oral narratives even though could not read textual narratives themselves.⁹⁶

However, there was no wider conflict between the oral and textual narratives and both productions of public and literary formation, provide valuable insight and constantly continued to inform each other,

^{93.} Nile Green , Migrant Sufis and Sacred Space in South Asian Islam , Contemporary South Asia , 2003, , 12 , (4) pp 493-509

Ohitralekha Jutsi op. cit. p p 265, Farooq Fayaz, op.cit Pp 60-1

⁹⁵ Ibid, P 266.

⁹⁶ Ibid

playing a vital role, not for presenting an objective picture of the past but in broader understanding of contemporary situations in the absence of professionalization of history in the late 19th and early 20th centuries. This has also in some way reinforced oral culture in carrying political messages in the public sphere. Though the region was less impacted by colonialism compared to the rest of British India, even then communication and dissemination of political ideas of the past was widely circulated in the public sphere in Kashmir due to the co-existence of oral and textual narratives as overlapping sources. However, the understanding was certainly political, but did not necessarily directly engage with forms of political power such as the state, although it did satirize its power and tyranny.⁹⁷

The public memory sustained through performances, songs, and ballads do exact provide chronological time historical narratives. For required by example, the popular mystics, Lal Ded and Nand Rishi, as historic figures, though linked to a particular period within the particular socio-political context, when functioned in a realm of collective construction and shared sources, allowed to transcend time and space. The real objective is to capture the souls' essence. They are not only evidence about the past but windows on ways the past is culturally constituted and discussed heritage.

Thus, combination of literacy and memory shares knowledge, insight through past and draws the contours of community, gender and locales in much more inclusive way. Furthermore, the adaptation of stories across time periods, linguistic boundaries, and genres illustrate their ability to serve multiple purposes for different audiences. Their retelling provided a forum for diverse groups of people to interact with the long narrative tradition and through it to play a role in shaping the idea of Kashmir by commemorating the land's heritage.⁹⁸

Multiple types of Kashmiri verses kept the people in touch with their long narrative tradition in Sanskrit and Persian while allowing them to participate in understanding their contemporary moment in the context of the past. The same stories circulate in new forms which retained their identity and heritage.

Till the late 19th century in Kashmir, the court patronage of Persian followed by Urdu, developed as a language with poetics was more inclined towards the orality. Further, the Persian historical narratives were not always constructed by court historians and scholars but were connected to Sufi religious orders and their *khankas* as mentioned earlier. ⁹⁹

The blended approach of intertwining of oral with textual narratives reflected the diverse perspectives of the society. The repertoire included the origin of the land, the bond and negotiation between the spiritual and secular authority, rulers and their policies towards their subjects, life and practices of mysticism by Sufi saints like *Sayyiad Ali Hamdani* or *vakhs of LalDed* and *Nand Rishi*, with different versions in oral narratives since the 15th century in the public sphere. These were constantly circulated, long before they were recognized as

⁹⁷ Triloki Nath Raina , An Anthology of Modern Kashmiri verse ,(,1930-1960), Poona ,Sangam Press, Pp11-84

⁹⁸ A Hand Book of Jammu and Kashmir Academy of Art, Culture and Languages ,undated, Pp 3-7

⁹⁹ Chitralekha Jutsi op. cit.Pp. 267-8

indigenous historical personalities in region's historiographical traditions. Oral poetries have left behind recognizable footprints in these silent texts and opened up dialogue with multi- disciplines encoding what we call Anthropology, Folklore, and others. ¹⁰⁰

This also widened the scope of oral tradition in shaping regional history and explains in parts, how the performers of various kinds, despite belonging to socially marginalized groups retained their position as purveyors of historical memory, and sometimes even conveyers of politically subversive messages in Kashmir. Prose and verse narratives, proverbs and riddles, handed down from generations further incorporated supplemented and with contemporary insights have become the hallmark of unique historicity of the region. Orientalist Aurel Stain, linguists George Grigersion and J. H. Knowels had attempted to explore this vibrant tradition in vernacular Kashmiri language, paralleling Kashmir's multilingual rich textual traditions, as a vital emerging conduit between oral and textual narratives. 101

However, in post-independence era, attitude and approach towards this unique composite historical cultural heritage repertoire had a paradigm shift which has marginalized it to the peripheries. However, the vernacular poetries in the modern phase by *Gulam Ahmed Mehjoor*, Abdul *Ahad Aazad, Zinda Kaul, and Dina Nath Nadim* played a significant role in shaping the ideas

that defined Kashmir public space and celebrated the region and its people. Further, it could contribute in retrieving the traumatic past by making use of personal accounts of Kashmir during1947 from all perspectives and vantage points, breaking away from established narratives devised in support of one or the other particular groups. ¹⁰²

Conclusion

The significance of the study in the context of modern times is tremendous as the paper has been planned in the framework of regional study that has become the thrust area of discussion and research. The pragmatic and theoretical concern of the work is to develop broader understanding of society-and its social purpose. To understand the complex and many-sided nature of reality, production of the past requires the insights and inclusive understanding of the diverse voices and perspectives nurtured traditions. It is through oral highly instrumental in grounding and manifestation of cultural ethno- identity. Hence, in terms of creating awareness for the conservation and preservation of the regional heritage, this study is both socially relevant applicable.

¹⁰⁰ Ibid

 ¹⁰¹ Ibid; George Griersion , The Language of the Maha -Naya - Prakasa :An Examination of Kashmiri as written in Fifteenth centaury, Memoires of the Asiatic Society of Bengal. X1 (2):73-9

¹⁰² Suvir Kaul, past and Present, in the Challenge of Kashmir, Social Research, 78,(1), 173-202.

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Revisiting A. K. Coomaraswamy's contribution to the study of Indian and Sri Lankan art

Vipul Tiwari

Abstract

The Modern Indian and Sri Lankan art historiography began with the advent of Europeans with their colonial perception of natives past. The art historiography observes a significant change in the approach, treatment, technique and volume of historical literature. In the 18th century CE, romantics and semi-academic prologue in the form of travelers' references was the prime cause that gave birth to the unique comprehensive consciousness in the West about the Oriental civilizations. The turning point was the nineteenth century when serious scholarly interests marked the systematic study of Oriental cultures and art.

Keywords: Philosophia Perennis, Oriental, Commercialism, Imperialism, Historiography, Occidental Industrialism, Pre-industrial Civilization

Introduction

To have a comprehensive understanding of the historiography of Oriental art in totality, one should study the dialectic in hermeneutical enquiry concerning the art historiography chronologically. These phases reflect the various schools of art historiography and ideologies in modern times such Orientalism, Imperialism, Nationalism, Marxism, etc. In the present research paper, the author has briefly endeavoured to analyze contribution Ananda the of Kentish Coomaraswamy (1877-1947) to the study of Indian and Sri Lankan art. He was not only a profound Orientalist scholar, a pioneer historian of Indian and Sri Lankan art, a great interpreter, but also an idealist man, the one who heartily urged the Indians and Sri Lankans to be conscious of their glorious heritage.

Early Life and Parentage

Ananda Kentish Coomaraswamy was born in Colombo, Sri Lanka on August 22nd, 1877.¹ His Father, Sir Mutu Coomaraswamy, was a Ceylonese of Tamil origin and his mother, Elizabeth Clay Beeby, was an English woman of a rich Kent family that had engaged in the "Indian trade" and the civil service and knew India and Ceylon quite well. The family was Tamil in origin and might have originally come from the Indian subcontinent as connections here maintained with a temple in Allahabad. They belonged to the "Velella" caste, which has been called the "fifth" caste in Sri Lanka. The family name "COOMARASWAMY" derives from the Hindu deity Skanda Kumara to whom a temple exists in Sri Lanka at Kataragama.²

Sir Mutu was a distinguished personality of his age. He was a member of the British parliament and in 1874 he was knighted by Queen Victoria. He was also the first Hindu to be called to the English bar and became the first Asian accredited for the practice of law in Great Britain. Being Hindu by birth, he had great regard for Buddhism and he also translated the Buddhist texts. Unfortunately, Coomaraswamy was hardly about two years of age, when his father died on May 4th, 1879 due to Bright's disease. After the death of his father, his mother never returned to Sri

Lanka nor did she married again. Lady Coomaraswamy had a positive attitude towards the cultures of India and Sri Lanka. She played an important role in shaping the future of young Coomaraswamy by giving him a composite outlook and holistic understanding of the East. Perhaps it seems that initially his vision about East was shaped by his mother. Lady Coomaraswamy lived a long life and died on October 4th, 1939 at the advanced age of eighty-eight.

Coomaraswamy's academic career was outstanding and his interest in science and geology was remarkable. He passed B.Sc. (first-class honours) in Botany and Geology from the University of London in 1900. On June 19th, 1902 Coomaraswamy married Ethel Mary. In 1903, Coomaraswamy was selected for Fellow of University College. Because of his findings, the authorities in England and Ceylon formed the Mineralogical Survey of Ceylon (modern Sri Lanka). From 1903 to 1906 Coomaraswamy was appointed as the first Director of the Mineralogical Survey of Ceylon where he discovered two minerals Serendibite and Thorianite. The latter being radioactive led to his association with Madam Curie and he became the first Ceylonese to receive a Doctorate in Science from London University in 1906.4

Coomaraswamy and Sri Lanka

During his stay in Sri Lanka from 1903 to 1906, he was attracted towards social activities and began an in-depth study of the indigenous arts and crafts of Sri Lanka. In his study, his wife Ethel Mairet, who was a good photographer and is well known for her writings on weaving, played an important role. She introduced Coomaraswamy to the works of Ruskin and William Morris. The latter remained a strong

influence on his life and provided him with a better understanding of craftsmanship. These early years were an eye opener for Coomaraswamy where he saw the destructive impact of Imperialism, Colonialism and Occidental Industrialism on art, culture and tradition of Sri Lanka.

Sri Lanka, a land of his forefathers, ultimately proved a turning point in his life. It seems that his geologist profession could not provide him satisfaction and meaning to his life. In addition, gradually his passion and inner instinct for art-historical studies motivated him to give up his mineralogist career. The real cause of Coomaraswamy's transformation from a geologist to an art-historian was his love towards his motherland.

In 1904, like the life of Buddha, a small incident shook the inner self of Coomaraswamy. A Ceylonese converts to a foreign religion and a foreign dress, which appeared quite unnatural and misunderstood filled his heart with grief and pathos.⁵ The degeneration of national character, culture, individuality and art point towards its root cause i.e. the new Commercialism of the West. Perhaps this event proved an immediate cause and the process of transformation of geologist into art-historian began. As we know that History repeats itself is not gainsay. With time, like his father, Coomaraswamy became the champion of the native art, handicraft and the culture in which they were deeply rooted. He started an encyclopedic study of the arts, architecture and crafts of Sri Lanka as they existed before the colonial rule. His approach was a mixture of sentiments and extensive training in the scientific method. This effort later resulted in the form of his first important work the "Medieval Sinhalese Art," which was published in 1908.

It could be observed that at this point of life, the strength of his professional commitment weakens and he started dreaming about the social and cultural reforms in Sri Lanka. He slowly and steady gave up his geologist profession and acquainted with the great eastern heritage. Coomaraswamy's first writing on Sri Lanka art "An Open Letter to the Kandyan Chief" was published in the year 1905, which reflected his grave concern over the Industrial Revolution and the neglect of artistic tradition in the Kandyan society. His letters and pamphlets were welcomed by the intellectuals in Sri Lanka and ultimately yielded a result. He started the Kandyan Association and Ceylon Social Reform Society (1905-1909) for the preservation and promotion of the arts and culture of Sri Lanka. The other objectives of the society were to initiate reform in social customs among Sri Lanka to discourage the futile imitation of unsuitable western habits and customs. He also edited the "Ceylon National Review". Coomaraswamy also felt the heat of the Swadeshi Movement in India which was the immediate outcome of the partition of Bengal and the wave of strong cultural nationalism. It appears that this atmosphere of reaction and unrest motivated Coomaraswamy to struggle for the oppressed art and cultures of Sri Lanka.

After the year 1905, his life became multi-dimensional. After his final report for the Mineralogical Survey and on the completion of his appointment as Director of the Mineralogical Survey in 1906, Coomaraswamy went to India for a three month short tour.⁶ The values of Traditional and Pre-industrial civilization of Sri Lanka

had left a deep impact on his life forever. He was against the Anglicization of the East and unintentional destruction of national culture by the British in Sri Lanka.⁷

The years in Sri Lanka completely changed the attitude and outlook of Coomaraswamy. His inclination towards Hinduism and Buddhism increased and it could be traced in his statement: "Religion is not in the East, as it is in the West, a formula or a doctrine, but a way of looking at life, and includes all life, so that there is no division into sacred and profane", which was published in "The Ceylon National Review" (1908), p. 244.

Coomaraswamy's Journey Towards Indian Art

After his return to England from Sri Lanka in 1907, Coomaraswamy extensively travelled in India. It was probably during this voyage that he became formally a Hindu in Lahore. Coomaraswamy felt that Sri Lankan response was not enough to revolutionize society by large and as a result he shifted his focus towards India. Although he continued to write articles for 'Ceylon National Review' his departure proved final from Sri Lanka. Most probably during the period between 1907- 1910 his interest gradually turned towards India which is reflected from his pamphlets "The Deeper meaning of the struggle."

The year 1908 was memorable for Coomaraswamy because of three exceptional events: First, he published his first outstanding work "Mediaeval Sinhalese Art"; Second, he travelled to Copenhagen to participate in the Fifteenth International Oriental Congress and read his brilliant paper on the burning topic of the day— "The Influence of Greece on Indian Art"; and

third, he addressed the Third International Congress for the History of Religion held in England on the topic— "The Relation of Art and Religion in India". The same year he also prepared a pamphlet on the "Aims of Indian art".

During the period between1909 to 1913, he again made frequent visits to India. His Essays in "National Idealism" published in Sri Lanka in 1909 that consists mainly of articles that had already appeared in India. The political and social scenario of India during this period was of great chaos and unrest. The partition of Bengal resulted in the Swadeshi and Boycott movements which were at their height and nationalism was spreading in its various forms. ¹⁰ In Calcutta, Coomaraswamy was guest of the Tagore's at their family home, Jorasanko. ¹¹

In 1910, the Indian Society of Oriental Art provided milieu for Coomaraswamy to explore his opportunities giving him the responsibility of organizing an exhibition of Indian art at Allahabad. During the search for Exhibits, Coomaraswamy travelled with him and had written a letter to their London friend Mr. Ashbee which discloses her admiration about the culture and taste of Indian people. This letter also reveals the future plan of Coomaraswamy that he wanted to set up a National Museum and his desire to settle in Banaras. 12 But this did not actualize and Mrs. Coomaraswamy returned to England when Coomaraswamy decided to stay for long and consequently their marriage broke up. It that appears during these years Coomaraswamy was struggling to settle himself in Indian in its planned way. This might be the reason why he did not wish to stay within the Tagore circle. Perhaps he wished to do so, on his own.

Coomaraswamy published "Art and Swadeshi" at Madras in 1911 which reflected him as a harbinger of Indian nationalism. However, his outlook was not parochial or chauvinistic rather the work underlines a appeal. universal In August Coomaraswamy published his work "Thirty songs from the Punjab and Kashmir." In the year 1913, his "Art and Craft of India and Ceylon" and "Myths of the Hindus and Buddhist" also appeared. "Visvakarma" the series of published photographs on Indian art were appearing at intervals during the period 1912-14. In 1914, Coomaraswamy published a monograph on Ceylonese bronzes. In the light of the above account, it appears that before his next pioneering works "Rajput Painting" and "The Gospel of Buddhism" in 1916 Coomaraswamy slowly, steadily studies, and absorbs completely understand the various aspects of Indian art and culture. We witnessed his traditionalist and nationalist approach that has scientific blending towards the problem and its response.

Another serious episode happened in his life during the First World War, which made him self-exiled from his home country England. In 1917, he was asked to join the British Army and he refused it because that India was not an independent nation. This led to his being exiled from the British commonwealth. In great distress, he left England with a thought to settle in India permanently as it was his long desire but unfortunately India was unable to provide him shelter and a respectable place to work.

From the letter of his wife to Ashbee it is quite clear that the scheme of a National Museum was cultivating in his mind. ¹⁴ During his tours in India, he had acquired

good examples of India sculpture and painting. He did his utmost to give his extremely rich art collection to the people of India, provided a National Museum of Indian art would be constructed at India's spiritual capital Varanasi. He tried also to become a professor of Indian Art and Culture Banaras Hindu University. But it is sad to mention that both wishes were unfulfilled. No Indian came forward to accept the offer.

The publication of the "Rajput Painting" marked a turning point in life and career of Coomaraswamy. It attracted Dr Denman W. Ross (the Boston Museum's leading Patron) who decided to purchase the collection of Coomaraswamy and invited him to become the curator of newly created Indian section, the first of its kind in America. Coomaraswamy against his wish accepted the proposal because he had no choice and left. The Trustee of the Boston Museum of Fine Arts appointed him Curator of the Asian Collection, a post that he held until his death in 1947.

Hardly Within ten years of his stay in America, we perceive an enormous change in his works. There is a great difference between the author of "Rajput Painting" (1916) and the author of "History of Indian and Indonesian Art" (1927).romanticism and the voice of protest against industrialism were gradually ceased and his writings became quite erudite and impartial. Perhaps this may be the result of his acceptance of the museum's needs as his own. His writings attracted scholarly interest and put Indian art in the news for a long time.

After the publication of his historical work "History of Indian and Indonesia Art" (1927), we observe a remarkable change in

his writing pattern. The inner transformation during the early decades in America was then perceived in his works of 1932 and thereafter. The philosophical metaphysical nature of his work is the speciality of the last phase of his writing career which covers the period from 1932-47 (till death) and this period has been considered the best period of Coomaraswamy. In 1934, he published his collection of essays "The Transformation of Nature in Art," which marked his permanent and scholarly interest in the entire scholastic tradition from its origins in St. Augustine to its Zenith in the Thirteenth Century.

His interest in metaphysics and religion independent of art is revealed by "A New Approach to the Vedas: An Essay in Translation and Exegesis" (1933). In this regard, his letter dated June 15th, 1939 written to his friend Dr Herman Goetz, (a well-known German art historian) reveals what Coomaraswamy himself thought about his transformation. He wrote that: "You connect my change of interest from art to metaphysics with age and no doubt that is in a measure true, though I would perhaps rather say "maturity" than "age". However, I would also like to explain that this was also a natural and necessary development arising from my former work in which the iconographic interest prevails. I was no longer satisfied with a merely descriptive iconography and had to be able to explain the reason of the forms; and for this, it was necessary to go back to the Vedas and metaphysics in general, for there lies the seminal reasons of iconographic development. I could not, of course, be satisfied with merely "sociological" explanations since the forms of the traditional societies themselves can only be explained metaphysically."17 Yet, in spite of metaphysical and theological bent in his later writings, Coomaraswamy remained an extremely close and meticulous thinker of art, iconography, and myth throughout his life.

Apart from the above mentioned works "Jaina Art" (1914), "Buddha and the Gospel of Buddhism" (1916), "Raiput Painting" (1916), "The Mirror of Gesture" (1917), "The dance of Shiva" (1918), "Introduction to Indian Art" (1923), "The Origin of the Buddha Image" (1927), "Yaksas" (1928), "Elements of Buddhist Iconography" (1935), "Why Exhibits Works of Art?" (1943), "Figures of Speech or Figures of Thought" (1946), etc. were other important works of Coomaraswamy on Indian art, on which his unsurpassable scholarship rests. The last work published during his existence was "Time and Eternity" in 1947. His early works reflect the voice of Ruskin, William Morris Roger Fry, and Tagore etc. Similarly, his later works and reveal the shadow of philosophical writers like Rene Guenon, scholastic writers like Etienne Gilson and Jacques Maritain and others.¹⁸

Significance of Mediaeval Sinhalese Art

The of true journey Coomaraswamy's writing career as an arthistorian started with "Mediaeval Sinhalese Art" (an encyclopaedic study of the plight of the traditional industries in Sri Lanka) published in 1908. The work reflects the influence of William Morris and Birdwood on the author. In the work, most of the photographic illustrations were prepared by Coomaraswamy's first wife Ethel Marry. The work is divided into XVII Chapters. It is a testimony of the work and the life of craftsman in the feudal society like that of

Early Medieval Europe. In the words of Coomaraswamy, "It deals, not with a period of great attainment in fine art, but with a beautiful and dignified scheme of peasant decoration, based upon the tradition of Indian art and craft. Sinhalese art is essentially Indian but possesses this special interest that it is in many ways of an earlier character, and more truly Hindu-though Buddhist in intention, than any Indian art surviving on the mainland so late as the beginning of the nineteenth century." 19

In the very first paragraph of the work, Coomaraswamy reveals that the Sri Lankan culture is inseparable from India. This reminds us that once Coomaraswamy wrote that the more he knew Sri Lankan's culture, the more inseparable from Indian did it appear. Indian culture without Sri Lankan was incomplete, for many ways Sri Lankan was a perfect window through which to gaze on India's past than any that could be found in India itself. He also stated that there was scarcely any part of Sinhalese life or religion or art, which was quite comprehensible without reference to India.²⁰

He further states in the foreword: "Mediaeval Sinhalese Art was the art of a people whom husbandry was the most honourable of all occupations, amongst whom the landless man was a nobody, and whose ploughmen spoke as elegantly as courtiers. It was religious art, and so a popular art. It was also essentially a national art; the craftsmen, forming an integral part of the Civil Services, were rewarded with grants of State land, no less than soldiers or husbandmen. It was the art of the people whose kings were 'one with the religion and the people,'- perhaps the most significant phrase in the whole of that magnificent chronicle, the Mahavamasa.²¹.

This work is written for the Sri Lankan people, as a memorial of a period that at present they are not willing to understand. Secondly, it is for those in East West who are interested in reorganization of life, and especially of the arts and crafts under modern conditions. In Coomaraswamy's perception interaction of Sri Lanka and India with the West proved unhealthy and fatal to the arts and culture of both nations. The direct causes of this adverse influence has been the destruction of the organization of the state-craftsmen, following upon the British occupation and the subsequent systematic neglect by the British of local architectural traditions. Again, the decline of the arts was the result of Commercialism under which the work of European machines and machine-like men had in the East driven the village weaver from his loom, the craftsman from his tools, the ploughman from his song, and had divorced art from labour.²² According to Coomaraswamy, the problem is not how to abolish machinery, but how to regulate it otherwise, humanity will in the future have to face a complete alienation of art from labour.²³ Perhaps, in this second decade of the twenty-first century, we are facing more less the same situation. the Contemporary World, true creative art is vanishing from our day-to-day life. Perhaps, the traditional view of Coomaraswamy is progressive in nature when he stated that "too conclusive reliance on traditional practice" has led to a mental stagnation which deprives Indian as well as Sri Lankan art of its former vitality.²⁴

It appears that the foreword of the work represents the vistas of ideas, objectives, aims and quality of Coomaraswamy's Perception and understanding of art. We can trace the roots

almost all of his ideas and the fundamental standard of art. It is of interest to record few: his lifelong admiration for the arts, crafts and cultures of mediaeval feudal society of Europe; his love of ancient Indian and Sri Lankan art and culture; contention that Sri Lankan art essentially Indian; his idea of religious art, popular art and stereotyped fine art; his concept of the intrinsic value of art is great and modern imitative art; his concerns for "educated" Sri Lankan and Indian, who do not understand and respect their art and cultural achievements; his life motive to educate the West about the true art and cultural heritage of East and thus to act as an intellectual bridge through which the East and the West could meet; his passion for Blake's poetry, (which he often quoted); his obedience for William Morris' teaching (perhaps his first teacher)²⁵ and Ruskin's dictum which he followed throughout his life; his contention that the direct and indirect influence of contact with the West has been fatal to the art of Sri Lankan and India; his concerns for the Commercialism that it absolutely forbids a union of art with labour, competition between machine and handwork its results and consequences; his anxiety for the growth of irreligion, lack of metaphysic, growth of materialistic culture and aim of art in the modern world; and last but not the least his commitment and love for the tradition and Philosophia Perennis. In this respect, Coomaraswamy's "Mediaeval Sinhalese Art" is an ocean of his thoughts and ideas.

In my personal opinion, "Mediaeval Sinhalese Art" is a masterpiece which I hold Coomaraswamy's best work which made a valuable methodological contribution to the study of Sri Lankan and Indian art history. He traced the elements which have built up

the tradition of Sri Lankan arts and crafts which existed in the late mediaeval times. Coomaraswamy argues that the elements which accompanied and followed the art of Asokan Buddhist mission exerted a wide influence on the tradition of Mediaeval Sri Lankan art. And that the culture of art was not Buddhist in the sense of being non-Hindu but rather ought to be called Early Indian.²⁶ He further explains that for Hindu art proper one must visit Sri Lanka because Mediaeval and Modern Sri Lankan art is essentially India art. Coomaraswamy illustrates lotus rosette of Barahat sculpture to show its parallel in mediaeval Sinhalese work and argues that many motifs in Sri Lankan art directly comparable with those characteristics at Barahat.

While explaining the archaic motifs Lankan in Mediaeval Sri Coomaraswamy questioned the origin of most of these forms which appears the Early Mediterranean in aspect. At this instance, Coomaraswamy challenged the supremacy of Greek art in the sense that Greek art is not 'the origin and source of all ancients' arts and culture. Perhaps it is the most important contribution of Coomaraswamy that he systematically and logically questioned and refuted one of the classical pre-supposition that the Greek art and culture was the epicentre of all archaic art forms and motifs. He also propounded the theory of Indo-Aryan or Early Asiatic or Indo-European art and region, which was a common source for both East and West. It seems that this

conception revolutionizes the change in vision, paradigm and perspective to study, evaluate, analyze and observe Oriental art in general and Indian and Sri Lankan art in particular.

Conclusive Remarks

Being an idealist, Coomaraswamy realistic in his assessment of Eastern and Western values. His works were pathfinder that laid the foundations of a new approach to Asian art delineating the significance of Philosophia Perennis, which was the Lingua Franca of all cultures before confusion the of tongues arise. Coomaraswamy studied Indian and Sri Lankan art in the context of its culture, religion and philosophy with compassionate perennial and comprehensive touch that ultimately resulted in the form of a bridge that connects the East and the West. In other words, it could be mentioned that Coomaraswamy upholds the view that religions and cultures differ only in the outward form. Therefore, he tried to discover those principles common to all cultures and religions to understand the higher and everlasting truths about life. To regard Coomaraswamy as a mere art- historian will be an incomplete and imperfect assessment. To sum up, Coomaraswamy's contribution to the studies of Indian and Sri Lankan art is not only pioneering but also remarkable and profound. His work is of contemporary relevance and validity for the East and the West.

Endnotes

- 1. Biographical data concerning Coomaraswamy's family and his life is largely drawn from: P.S. Sastri, Ananda K. Coomaraswamy; Roger Lipsey, Coomaraswamy. Part 3: His Life and Work; Moni Bagchee, Ananad Coomaraswamy: A study; Durai Raja Singham, Remembering and Remembering Again and Again; Rama P. Coomaraswamy (ed.), The Essential Ananda K. Coomaraswamy; Mukandi Lal, Kalaguru Ananda Coomaraswamy; R. Raphael, Ananda Coomaraswamy & Moore, Alvin, Jr. and Rama Poonambulam Coomaraswamy (ed.), Selected Letters of Ananda K. Coomaraswamy.
- 2. Coomaraswamy, RamaP.(ed.), The Essential AnandaK. Coomaraswamy, p. 2.
- 3. Bagchee, Moni., Ananda Coomaraswamy: A Study, p. 38.
- 4. Lipsey, Roger., Coomaraswamy. Part 3: His Life and Work, p. 11.
- 5. Ibid, pp. 11-13.
- 6. Ibid, p. 29.
- 7. Coomaraswamy, Rama P.(ed.), The Essential Ananda K. Coomaraswamy, pp. 3-4.
- 8. Ibid, p. 4.
- 9. Lipsey, Roger., Coomaraswamy. Part 3: His Life and Work, p. 53.
- 10. Chandra, Bipin., Indian's Struggle for Independence, pp. 134-145.
- 11. Bagchee, Moni., Ananda Coomaraswamy: A Study, p. 49.
- 12. Moore, Alvin, Jr. and Rama Poonambulam Coomaraswamy (ed.), Selected Letters of Ananda K. Coomaraswamy. pp. 431-433.
- 13. Lipsey, Roger., Coomaraswamy. Part 3: His Life and Work, p. 122.
- 14. Bagchee, Moni., Ananda Coomaraswamy: A Study, pp. 51, 125.
- 15. Lipsey, Roger., Coomaraswamy. Part 3: His Life and Work, p. 125.
- 16. Moore, Alvin, Jr. and Rama Poonambulam Coomaraswamy (ed.), Selected Letters of Ananda K. Coomaraswamy. pp. 334-335.
- 17. Lipsey, Roger., Coomaraswamy. Part 3: His Life and Work, memories of the Person' by Eric Schroeder, pp. 283-292.
- 18. These writers have been discussed in the chapter II and III of my thesis title- "A.K. Coomaraswamy: The Perception of Indian Art," which is approved for the degree of Doctor of Philosophy by Banaras Hindu University.
- 19. Coomaraswamy, Ananda., K., Mediaeval Sinhalese Art, p. v.
- 20. Bagchee, Moni., Anand Coomaraswamy: A study, pp. 47-48.
- 21. Coomaraswamy, Ananda, K., Mediaeval Sinhalese Art, p. v.
- 22. Ibid, p.vi.
- 23. Ibid, pp. viii-ix.
- 24. Ibid, p. ix.
- 25. Ibid, pp.vi, 15 & 48.
- 26. Ibid, p. 250.

Ancient crucible-steel production of Sri Lanka: Special reference to *Yodhawewa* archaeological findings

W.M.T.B Wijepala, S. M. Young, and H. Ishiga

Abstract

The main objective of this study was to examine the archaeological evidence related to the Steel production of the Yodhawewa archaeological research and to discuss their significance in the South Asian context. An archaeological survey and two excavation pits were carried out in the first quarter of 2018 near the Yodhawewa outer canal and were the primary data file, and this investigation was conducted mainly based on the slags, crucible fragments, and crucible-shaped furnace discovered. The site's stratification confirms that there were two main cultural layers throughout the entire area, and the lower layer confirms (by Carbon14 dating) that metallurgical activities, including crucible-steel production, date back to the c. 8-10 centuries AD. Lightweight (glass typed) slags and crucible fragments were indicators of crucible-steel production, while the other types of slag provide instances of other metalwork in the area. In addition to explaining the use context of the steel production by the crucible-typed furnace, it also interprets the furnace design's technical background. Here was the first identification of a crucible-typed steel furnace operating in Sri Lanka using the Bellow method and the first discovery of a steel furnace in the North-western dry zone of Sri Lanka.

Keywords: Crucible, Crucible type furnace, Metalwork, Steel, Yodhawewa,

Introduction

The historical framework for the discussion of the Yodhawewa discoveries are based on the chronology of Sri Lankan culture, which are defined in three main periods: Early Historic (500 BC-300 AD), Middle Historic (300 AD-1250 AD), and Late Historic (1250 AD-1815 AD), based on archaeological evidence and radioactive carbon dates (Deraniyagala, 1992). interpreting these archaeological finds, it should be kept in mind that Mannar was its main feeding port apart from Anuradhapura being the first established kingdom of ancient Sri Lanka.

This research focuses on slag, crucibles, and furnace fragments, which guide steel (wootz) production, a significant technology product reflected on the Yodhawewa site near the ancient Mannar port city. The aim was to acquire enough samples to identify the usecontext of the crucible-steel productionrelated artefacts scattered throughout the Yodhawewa site and compare them with contemporary and homogeneous factors of archaeological similar sites. Before contextualizing the metal findings Yodhawewa, herewith summarize a few studies of ancient crucible-steel production and research history in the Asian context.

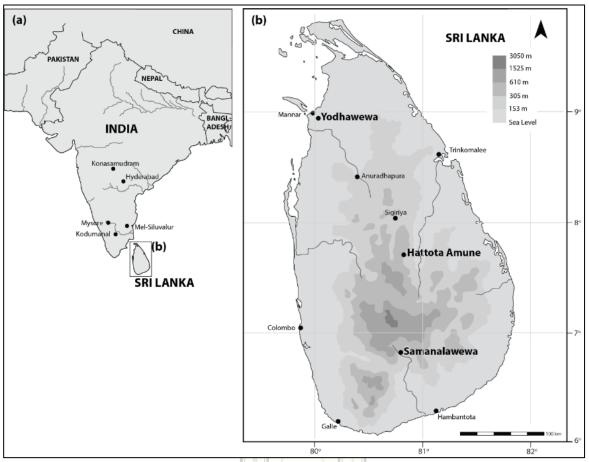


Figure 1. Maps are showing the major Crucible-steel sites in South Asia (a). Major Crucible-steel sites of ancient South India (b). Archaeological sites of crucible-steel production in ancient Sri Lanka

Steel is a high-quality metal prepared by further refining iron extracted from iron ore. The invention of metal and individuals' innovative skills to use the metal made a significant difference and may have been motivated by primary hunting, agriculture, irrigation, and architecture in the prehistoric world. Prehistoric man, who identified the properties of native metals (copper, gold) from the Chalcolithic period (6000 BC), entered the Iron Age (1200 BC), passing through the Bronze Age (3000 BC), revealing the revolution of the world and the production of steel at its peak (Tylecote, 2002; Srinivasan and Ranganathan, 2004).

Prakash provides a clear explanation of the fact that steel production has taken place in South India in three modes, namely, (a) Carburization of wrought iron and melting, (b) Decarburization of cast iron, (c) Process of confusion. The crucible-steel method discussed here is the same carburization method used in the South Indian region (2014: 402-404). The primary function of crucible-steel production is to absorb a significant percentage of carbon on preprepared iron, and the result of which is a carbon (high, medium, or low) steel ingot with slag less than the original bloom (Feuerbach, 2002). Significant steel evidence from the Kodumanal (Fig. 1a) Archaeological Site (in Tamil Nadu) indicates that the type of high carbon

crucible-steel dates back to about 300 BC (Feuerbach. 2002: Srinivasan and Ranganathan, 2004). For making the worldfamous Indian wootz steel in Hyderabad (Fig. 1a) and in South India during the Early Historic period, crucibles technology has also been used. According to Prakash (2014), only Indian blacksmiths knew the technical standards for producing these crucible-steels in that period. Observing the long research history, Juleff (1990) points out three hubs of Indian crucible-steel production: Hyderabad, 1a), Mysore (Fig. and Tamil Nadu. Feuerbach (2002) also points out that there are four types of South Asian crucible-steel: (a) South Indian Processes, (b) Hyderabad Process, (c) "Schwarz" Process, (d) Pseudo-Wootz process. Here Sri Lankan cruciblesteel was described as another place where the South Indian process was used.

These explanations confirm that the Sri Lankan crucible-steel also had a significant identity in considering South Ouoting Bronson (1986), Asian steel. Srinivasan (1994), and Juleff (1990) point out that Muslim writers such as Jabir-Ibn-Hayyar (8° AD), al-Biruni (11° AD) reported that Indian and Sri Lankan steel was used to make steel swords in many regions of the world. Especially al-Kindi (9^c AD), in his "Qualities of Swords" book, pays great attention to the superior Sri Lankan (Serandib) Steel (Juleff, 1996). Accordingly, it is clear from the above statements that the demand for Sri Lankan steel was the same as for Indian Steel to produce sharp steel weapons such as swords in the Middle Historic Period. The International Merv Project (1992-2000) conducted long-term research on crucible-steel production in the Merv oasis region (Turkmenistan) of Central Asia. However, the materials and techniques

associated with the crucible-steel process in South Asia (Indian and Sri Lankan wootz) and those used in Central Asia (wootz = pulad) were significantly different (Feuerbach, 2002; Srinivasan and Ranganathan, 2004; Woźniak, 2011).

Juleff (1990,1996) and Solangaraarachchi (2011) have provided detailed notes on the research history of iron and steel production in ancient Sri Lanka, citing the research and the reports of Knox (1681), Davy (1821), al-Kindi (the 1850s), Ondaatje (1854), Tennant (1859), Baker Coomaraswamy (1908), Parker (1909), Hadfield (1912), and Cooray (1967). Following this research, Juleff (1996, 2015) described the iron extraction Samanalawewa (Fig. 1b) area of the Ratnapura District, based on the seasonal monsoon winds (she described this method as- wind-powered west-facing technology) and focused on the ancient high carbon crucible-steel production in the villages as Mawalgaha and Kosgama. Apart from this, research carried out in the Hattota-Amune (Fig. 1b) area in 1996 has also been able to find archaeological facts of the production of crucible-steel dating back to the c. 6th-12th centuries AD (Juleff, 2015).

Location and Setting

The study area was located in the 'Yodhawewa' village of Mannar District on the North-Western coast of Sri Lanka and 12 km away from the ancient Mannar port-city. The geolocational setting of the site was between 08°53'29" N - 080°02'52" E. The Yodhawewa Sanctuary bounded the archaeological site from the East, the Giant's tank from the South, and the canal and

agricultural lands from the North and West (Fig. 2). Giant's tank is one of the largest reservoirs in Sri Lanka (covering a 7.75 sq.

km area); the archeological site was located on the right bank of the outer canal connected to its spill.

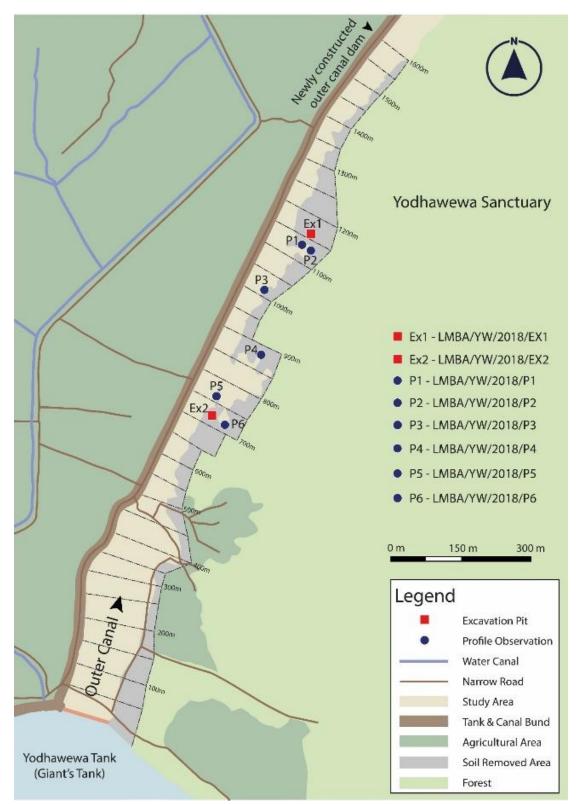


Figure 2. *Yodhawewa* study area (artifacts related to Crucible-steel production were spread around the Ex2 area

The Yodhawewa archaeological site is located on the Miocene Limestone layer (Cooray and Katupotha, 1991), and the climate belongs to the North-Western Drysemi-arid zone. Accordingly, dry climates are typical; however, floods are reported occasionally. The dehydrating South-West monsoon winds prevail from April to August in this area. Grasslands and shrubs with thorny bushes are prominent vegetation (Pemadasa, 1984) around the archaeological study area.

Materials and Methods

Survey

Scattered surface artefacts due to the Yodhawewa canal reconstruction outer project were identified during a surface field visit at the end of 2017. Accordingly, a further archaeological study was done in March 2018 with the Director-General of Archeology Sri Department's approval. The rapid archaeological survey was conducted on an area along the outer canal for 1600m, which was divided into 32 sampling units in an interval of 50m (Fig. 2). Detailed field notes were prepared according to the landscape changes, the artefacts distribution pattern's specifics, and the cultural and natural formation contexts. Ultimately, no measure was taken to collect all the artefacts; significant collection maintained the site's wide image. Therefore, the samples were collected only to view the nature of cultural contents. phases and Although many artefacts were found in the canal during the survey, they were most likely surfaced during the outer canal reconstruction project. If not, they must have been displaced during periods when the outer canal was active by the excess water. Through the exploration,

six profiles were observed to clarify the archaeological site's stratification. The surface survey revealed a significant amount of dark green and blue glass slag from the 700-750 sampling unit, and further investigation identified it as a crucible-steel furnace site.

Excavations

Two excavations were carried out under the codes of LMBA/YW/2018/01 (Ex-01) and LMBA/YW/2018/02 (Ex-02) at the Yodhawewa premises. The first excavation pit, located between 1150-1200 m sampling area, gave the area's stratigraphic chronology prototypes. The second excavation was done in the site, located 700-750 m away from the Yodhawewa spill (Fig. 2). Both excavations were carried out in the vertical method, were recorded using the Harris matrix method (Harris, 1997), and all other parameters of the pits were controlled in an equal manner based on the Archaeological Site Manual (1994). This article focuses on the second excavation (Ex-02), which provides unique information on crucible-steel production in the Yodhawewa area. The charcoal collected from Ex-02 was submitted for dating (via the Accelerator Mass Spectroscopy [AMS] method - Beta Analysis Laboratory, USA) and the results obtained are presented in table 1. The slag, crucible, and furnace unearthed at the site revealed the site's identity, and the Yodhawewa research was rich with an extensive collection of artefacts that exhibit cultural relations within the domestic and international. All the artefacts collected from the Yodhawewa site were classified and stored in the Archaeological Laboratory of the Rajarata University of Sri Lanka.

Sample No	Context	C14 date b.p.	Calibrated date range
Beta - 517842	12	$1880 \pm 30 \text{ BP}$	66-222 AD
Beta - 517342	4A	1520 ± 30 BP	428-609 AD
Beta - 517843	4C	1190 ± 30 BP	722-945 AD
Beta - 517844	4D	1220 ± 30 BP	730-887 AD
Beta - 517343	4D	1220 ± 30 BP	730-887 AD

Table 1. Radiocarbon dates of *Yodhawewa* Ex-02

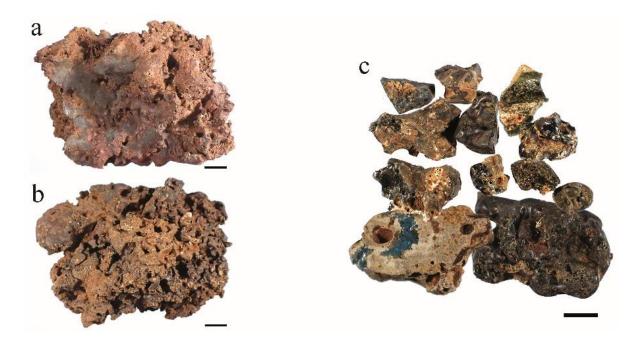


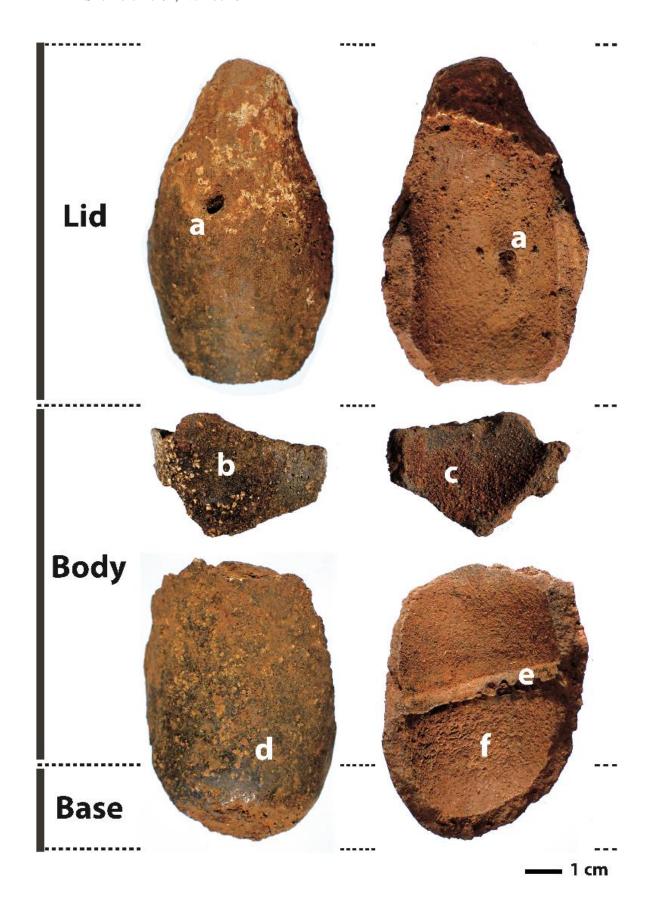
Figure 3. Slags related to the Iron extraction and Crucible-steel production collected from the *Yodhawewa* archaeological exploration (a) & (b) Top and bottom side - Slag cake related to the iron extraction (c). Glass type slags related to the Crucible-steel production.

Results and Discussion

Stratification and Dating

Six profile observations and two excavations illustrated the study area's general stratigraphic formation, consisting of five main layers on the Reddish Brown Earth. The anthropogenic provenances were

noticed from the whole area as two layers deposited between the upper and lower natural layers. The four main layers of Ex-2 were identified from top to bottom, respectively: context 1, 2, 4, and 21, out of a total of 24 contexts. Mainly floods caused by monsoon rains have eroded the surface soil of the Ex-2 premises.



Context 2 was divided into two units as 2A and 2B, as well as Context 4 (3rd main layer), which was divided into five units (top to bottom) in a sequence (as 4A, 4B, 4C, 4D, and 4E) for recording purposes. The lower part of the crucible type furnace, the most crucial discovery found in the second excavation, is described here as context 5.

Five charcoal samples collected from three different contexts were dated (Tale 1). Three dates from the contexts 4C and 4D confirmed the c. 8th century AD, while the context-12 unearthed, the accumulation dates back to the c. 1st century AD. Furthermore, the charcoal sample obtained from the central furnace's vicinity (context 5) has been confirmed to belong to the c.5th - 6th century AD. Context 12 was an assemblage containing slags, pottery pieces, and crucible fragments that stretched from the beginning to end of the bottom cultural layer (context 4). The bottom level of context-12 represents the excavation's ending level (context-4E), and Beta - 517842 can be interpreted as an accurate dating determination of the context. However, the 4A sample (Beta - 517342) inverted in terms of the stratigraphic sequence. The excavation team considered the possible causes of the inversion, such as occasional flooding, post-production activities, incorrect labeling of the samples, or misidentification of the sample. In general, the data provided by the charcoal samples collected by 4C and 4D contexts provide the most reliable dating notes in the relevant premises. According to the datings, it is clear that the Yodhawewa premises were in continuous or intermittent use as a place of metal production from the 1st - 8th centuries AD.

Slags and Crucible Fragments

considerable amount of slag scattered throughout the Yodhawewa premises suggests a well-established and long-active metal factory in the Northern part of Sri Lanka. It was found that both metal extraction and steel making were done in the same place. The presence of a large number of tap slag, a few broken tuyere pieces, and slightly larger slag cakes confirms that smelting activity took place at this location and that the slag-rich iron was produced directly by smelting iron locally (Fig. 3a-b). However, no materials or specific features have been observed related to the row iron extraction furnace's construction. Morphologically, the slags were dominated by large and irregular plano-convex cakes and fragments thereof. The survey revealed the most significant slag in the 700-750 sampling unit (Fig. 2). Another feature of the slag found in that region was that it contained many glass fragments, or by nature, they were glassy (Fig. 3c). The glass slag formed on the steel ingot in the heated crucible can be found as glassy slag in steel production premises.

The crucibles can be pointed out as an artefact collection (n=480) that focused on how Yodhawewa Metal manufactures may have produced Steel during the metal production (Table 2). Two main parts of the crucible were identified as the crucibles and the lids. However, it was impossible to detect a complete crucible or lid that was not damaged, and crucible rim was also rare. The crucibles here have fragmented into different parts: rim, body, base, and lid (Fig. 4). Usually, an elongated tube shape with rounded base crucible fragments approximately 4cm - 6.5cm in the inner diameter and thin-walled (c.3-6 mm). When considering crucibles' morphological characteristics, the external surfaces were entirely dark green or blue (mixed) with slightly coarse but uniform-textured glassy fabric vitrification (Fig. 4b,d). Such features can also be seen on the crucible lid's outer lower part, but the non-vitrified upper part seems dark white (Fig. 4).

The crucible's inner middle or lower region shows glass fins with a melting line (Fig. 4e); it may have been the liquid slag charge edge formed when the Steel ingot was formed—bottom of that smelting line, visible some honey-comb pattern (Fig. 4f) in the crucibles. Crucible lids appear in the Yodhawewa assemblages with a unique shape and all the lids examined show evidence of having been pierced with one or more small perforations (Fig. 4a). However, not a single crucible Ingot was found on the Yodhawewa site. The metal bubbles emitted during the liquid charge explosion in the crucible were also seen depositing in the crucible upper part (Fig. 4c).

The fourth context of the Ex-02 revealed the most significant crucible and lid fragments (n = 99) on this site, while most of the furnace wall parts (n = 56) were revealed in context-02. The fourth layer is more likely to represent the space produced by the crucible-steel, and the second layer may express the period of its demise. A total of 32 pieces of metal fragments were found during the second excavation pit (Table 2), and they were in a fragile state of decay. Among those iron fragments may have been pieces of iron used to make Steel.

Due to the high sulfide and slag content of the extracted cast iron, the blacksmiths focused on producing Steel out of the need to use them effectively, as they could not be satisfactorily cast or worked into any functional shape (Craddock and Meeks, 1987). Strengthening by adding carbon to wrought iron is known as the cementation process or carburization, and the second step described as decarburization is to remove carbon from cast iron (Srinivasan and Ranganathan, 2004). Crucibles can be pointed out as a tool that plays a significant role in producing ancient steel through the carburization method.

Yodhawewa crucibles show similar characteristics with the Mawalgaha and Hattota-Amune steel production sites' crucibles of the Samanalawewa region of Sri Lanka (Juleff, 1996, 2015). When comparing crucibles in both places of Yodhawewa and Mawalgaha, (a) dark blue/green glass verifications entire external surface, (b) elongated tube shape rounded base, (c) quite rough texture and, (d) very dark brown/black fabric can be seen. Although the crucible's exterior color and texture of the Hattota-Amune were similar to those of the other two locations' crucibles, the other quantitative factors were not the same. In general, when the crucible is elongated, the contents are more comfortable to smelt and easier to Gilmour handle (Erb-Satullo, Khakhutaishvili, 2015). The lining of glass slags and the honey-comb pattern of the inner crucibles bottom part would have been occupied by molten charge and solid ingot of some steel crucibles in South and Central Asia (Feuerbach, 2002; Srinivasan and Ranganathan, 2004; Srinivasan et al., 2009). These features have also been found in the Yodhawewa crucible. Crucible lids (different to the Mawalgaha) shape were discovered from the Yodhawewa assemblage, and inevitably at least one small perforation could be seen connecting inside to outside. Some inclusions like rusty deposits occur in Yodhawewa and south Indian steel crucible

lids, suggesting that the molten metal had splashed to a height (Srinivasan, 1997).

Crucible Furnace

The lower half of the crucible-typed furnace (context 5) was the most significant monumental discovery from Ex-02 (Fig. 5). The furnace wall shows that the burned clay pieces (Fig. 5a,b), which fit nicely into a circular shape (Fig. 5c), have been added and bonded with clay mortar. The wall thickness was 8-12 cm, and there was a separate daub plaster (1-1.5cm) inside (Fig. 5a,b). It may be a thermal insulating inner coat. The furnace's internal filling (context confirmed a natural filling (29 cm depth) that occurred after the manufacturing period. Inout connected small hole ($\emptyset = 2.5$ cm) was visible (Fig. 5b) through the west side of the furnace wall (13 cm below the inner surface).

Solangaraarachchi (2011), quoting Coomaraswamy (1908) and Davy (1821), points out that the steelmaking furnaces were smaller than the iron ore smelting furnaces and were built at ground level. According to the description, this type of furnace was semi-circular and was made of a low clay wall that rose about six inches above the

ground. After considering the above statements and the practical functionality, it was decided that the name "Crucible-shapedwas more suitable for the Furnace" Yodhawewa furnace. In terms of practicality, this kind of operation, which takes a lot of time and effort, cannot be assumed to have taken place in anticipation of a single steel ingot. Inevitably, since several ingots were needed at once, the furnace's mouth should be prepared more openly so that several crucibles could be handled simultaneously and wood charcoal could be fed into the furnace as needed. Accordingly, it can be assumed that this furnace came to the use context after passing several stages.

- (a) Crucible shaped furnace made on the ground using clay pieces
- (b) Firing the air-dried crucible furnace structure Open firing on the ground
- (c) Making the functional Furnace wall (daub) in a pit
- (d) Finish with an inner plaster coat on the top half of the furnace
- (e) Secondary firing after complete furnace preparation
- (f) Functional step for crucible-steel making

Collected Area	Slags	Crucible Fragments	Furnace wall Fragments	Metal Objects or Fragments	Earthen ware Fragments	Other artifacts	Total
Ex-01	32	26	1	27	2110	67	2263
Ex-02	6226	326	193	32	1217	24	8018
Profiles 1-6	188	65	47	ND	1152	6	1458
Survey	368	63	10	12	1634	191	2278
Total	6814	480	251	71	6113	288	14017

Table 2. Total artifacts density (by two excavations, six profiles, and survey) of the *Yodhawewa* archaeological site in 2018. Beads, Glass fragments, Lithic artifacts, Floral and Faunal remains are represented as Other artifacts (all artifacts countered >1cm in size)

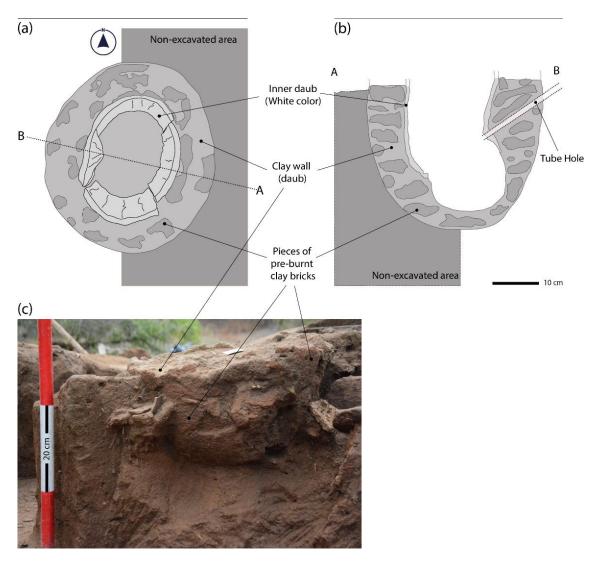


Figure 5. *Yodhawewa* furnace structure [context-5] of the Ex-2 (a). Plan of the dominant crucible furnace (b). Section drawing A-B (c). West face photograph of the furnace [scale: 10cm to a-b, 20cm to c]

The furnace was not a finish made of separately prepared bricks or pieces of bricks. Since the furnace wall's shape represents a spherical shape, it is clear that the furnace was designed in a completely separate location (Fig. 6a). In this time, space should also be saved for the air intake pipe leading out of the furnace wall. The clay pieces on the furnace outside the wall were also very well burned, which was a reason to interpret that the clay structure had been burned before the furnace was installed at the working site (Fig. 6b). A wall made of unglazed clay is a condition that can be expected to crack during drying as well as firing (Fig. 6c). For making the functional furnace wall (daub), burnt clay pieces' assembly in a suitable pit has been done with a specially prepared clay mortar. Straw-like plant parts may be added during the preparation of this clay mortar to withstand the furnace surface's compression and during combustion. dispersion was revealed that the upper part of the remaining furnace was covered with a plaster coat (daub) about 1-2 cm thick and that on several occasions, several coatings were applied on top of each other. This fact is an excellent example of that the same furnace has been used for long-term steelmaking. Most often, this layer act as a thermal insulation coat (Parr and Boyd, 2002; Weisshaar, Schenk and Wijeyapala, 2001) and maybe reapplied to cover the damage caused by the wall during the long-term firing (scientific studies of the furnace daubs will be carried out in the future).

The furnace wall should be raised slightly (about 15-20 cm) to the above ground level (Solangaraarachchi, 2011), then lightly air-dried and fired a second before actual usage. Using the charcoal and ballow method, the furnace may have been activated

like the actual furnace for this second fire (Fig. 6d). Juleff (1996) has followed a similar approach in her section on experimental archeology in *Samanalawewa*. Eventually, the furnace was used for long-term use for crucible-steel production. Coomaraswamy (1962) points out that about six crucibles were active in a Steel furnace like this at once. Chronology has also confirmed that the only furnace designed in this manner has been in use for a very long time, especially in the *Yodhawewa* premises.

Conclusion

The Yodhawewa ancient settlement stands out as one of the leading archeological sites in the northern region of Sri Lanka, with production environment prioritizes crucible-steel making. Carbon dating confirms that the Yodhawewa production site has been used continuously or intermittently for a long time, from the c. 1st century AD to the c. 9th century AD. Here, the bottom layer, one of the two main cultural layers of the premises, from three samples and 95% stability, confirms that the premises belong between 8-10 centuries AD. As described by Jabir-Ibn-Hayyar (8^c AD), al-Biruni (11° AD), and al-Kindi (9° AD), Yodhawewa must have been one of Sri Lanka's (Serandib) purest steelmaking sites exported to various regions of the world for making swords.

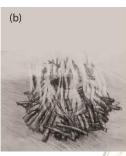
Slag and crucible fragments confirm that the main product of the *Yodhawewa* semi-industrial settlement was crucible-steel. They are physically and technically more similar to the *Samanalawewa - Mawalgaha* crucibles and somewhat similar to the *Hattota-Amune* crucibles. Besides, slag provides evidence that iron-ore extraction produced raw iron in the relevant premises.

Crucible fragments assemblage were critical factors that confirmed the steel production in the Metal history of the *Yodhawewa* site.

Although furnace evidence providing iron extraction information was rare in this area, the lower part of a crucible-shaped furnace used to make steel was remarkable. Although the furnace was slightly damaged at the time of its discovery, it remained at a level that would give an idea of a crust-shaped steel furnace's structural design. Accordingly, there was sufficient evidence to

define a crucible-type furnace's use context after five construction stages. Although not a single steel ingot was found during the *Yodhawewa* research-2018, the archaeological debris's depositional pattern in the 700-750 m sampling unit confirms that area's long-term production environment. In addition to domestic use, it can be assumed that the *Yodhawewa* steelmakers also played a significant role in meeting the world's demand for high-carbon Steel during the 8th - 10th century AD period.





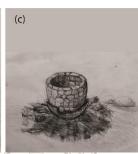




Figure 6. Steps to make a crucible-shaped steel furnace until activated (a). Crucible-shaped furnace made on the ground using clay pieces. They may use a rounded fragmented earthenware base for making the rounded crucible base (b). Open firing the Crucible Furnace structure on the ground (c). Cracked furnace structure after the open firing process (d). Furnace activated by the bellow method after re-built furnace fragments in a pit (Drawn by Nalin Jayarathna).

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INDIA – XUANZANG'S PERSPECTIVE

BRIJESHWARI RUKWAL

Xuanzang, the Chinese traveller and monk visited India during the reign of Emperor Harshavardhana. He stayed in India for about sixteen years. There, he learnt the Sanskrit language to study the original texts of Buddhism. When he went back to China along with the idols and images of the Lord Buddha, he also took copies of several original Buddhist texts. There he, with the help of many other scholars of then China, translated these copies of original Buddhist texts into Chinese, so that the original Dhamma teachings should be easily available to the followers of Buddhism in China. At the instance of the Chinese Emperor, he also wrote a detailed description of then India. He lot about wrote the emperor Harshavardhana in whose reign he had visited India. He wrote a detailed account of his visit to India such as the places he visited, the important events he witnessed, the famous or noteworthy people he met, the rulers he met and about the customs, traditions, socio economic scenario of that time, the strange things he faced, the new traditions he saw, the things to appreciated and even the things he did not like at all. The name of his travelogue is 'Si-Yu-Ki' or the 'RECORD OF WESTERN COUNTRIES'.

His description of India in his travelogue 'Si-YU-Ki' has been accepted as the most reliable and best available historic source of knowing the economic, social, political and administrative cultural, condition of the then India. However, his description of India is not entirely dependable as at several places it seems biased, may be because Xuanzang wanted to

use his description of India as a medium to glorify Buddhism. Also he wrote a lot in his travel account about king Harshavardhana, and many times it seems that Xuanzang had not much interest in writing any other characteristics of the king other than his affection and great affinity towards Buddhism. These facts clearly show that Xuanzang's main motive behind writing the travel account of India was to glorify Buddhism.

Hiuen tsang or Xuanzang was born in Chenhe village, Goushi Town. He was the youngest of the four children of Chen Hui. Father of Vuanzang, Chen Hui was a conservative orthodox Confucian. Along with his siblings, Xuanzang received his early education from his father. He learned the classical and canonical works of orthodox Confucianism. Although Xuanzang was born in an orthodox Confucian family, he had a great interest in Buddhism and in becoming a Buddhist monk like his elder brother. He lived with his elder brother for five years at Jingtu Monastry in Luoyang. During this period he learnt various early Buddhist schools along with the Mahayana. Later he went to Chengdu Sichuan in the south with his brother and for next two to three years they studied there about Abhidharma-kosa Sastra. Xuanzang took the Buddhist orders at the age of thirteen and got his name changed from Hiuen Tsang to monastic name Xuanzang. At the age of twenty he was fully ordained as a Buddhist monk. The young monk travelled extensively across whole China in thirst of real knowledge of Buddhism especially the Vijanavada school. Then finally he decided to visit India; 'The

holy land of Lord Buddha' to study the original Buddhist texts because he found many discrepancies and contradictions in the Buddhist Texts available in China. He knew that to visit India and to understand the original Dhamma teachings given by Buddha one must have a sound knowledge of Indian languages, especially Sanskrit. So he left his brother and went back to Chang'an to study foreign languages, particularly the languages of India. There he started learning Sanskrit. He also showed his affinity towards the Yogacara school of Buddhism.ⁱⁱ

In 627 AD, Tang Dynasty of China and the Gokturks were at war and the emperor of Tang Dynasty had prohibited foreign travels for every Chinese. But somehow Xuanzang managed to secretly cross the borders of the Empire via Liangzhou and Qinghai in 629 AD. He travelled across the mighty Gobi Desert to Hami, then Tian Shan to the west. He met the king of Turpan in 630AD. The king was a follower of Buddhism, he became pleased when he came to know the purpose of Xuanzang's journey to India, the cradle of Buddhism. He provided the traveller with all essential things for the upcoming journey towards India. The work of Xuanzang 'Si-Yu-Ki' mentions the hottest mountains in China, the Flaming Mountains which are located in Turpan. In certain places, Xuanzang even had to face robbers. He reached the non-Mahayana Monastries of Kulha.He crossed Central Asia consisting of Kyrgystan, Tashkent, Samarkandin Uzbekistan. He then crossed a mountain range between Central, South ana East Asia; 'The Pamir'. Then he reached the Amu Darya river in Afghanistan. Further he reached Termez where he met over a thousand Buddhist monks. In Afghanistan he saw several Buddhist sites and Viharas. In his book 'Si-Yu-Ki' Xuanzang has mentioned a

vihara called Nava Vihara, which was situated in Afghanistan. About this Vihara he says 'Westernmost Vihara of the World'. In this Vihara he met a monk Dharma Simha and also encountered over 3,000 non-Mahayana monks including Prajnakara, the monk with whom Xuanzang studied early Buddhist scriptures. In Afghanistan only he got the significant text of Mahavibsha, which he translated into Chinese. In the company of monk Prajnakara; Xuanzang visited Central Afghanistan and saw several Mahayana Monastries and two large Buddhas of Bamyan made by cutting the rockface. Furthur he went to Kabul where he saw over six thousand monks living in over a hundred Monasteries. Those monks were mostly followers of Mahayana Buddhism. iii

In 630 AD Xuanzang visited the Gandhara which is now a part of Pakistan and Afghanistan. In Gandhara, Xuanzang met the first Jains and Hindus of his journey towards India. When he left Adinapur at present known as Jalalabad in Afghanistan, he saw tens of Stupas, then he crossed Khyber Pass and reached Purushpura, which is now known as Peshawar in Pakistan. Purushapura was the capital of Gandhara. In Purushapura he saw the Kanishka Stupa. By crossing Swat velley he then reached Uddayana, there he saw 1400 years old monasteries which were occupied previously by almost 18,000 monks.^{iv}

Resuming his journey he crossed the Indus River and reached Taxila. There he found most of the monasteries and Viharas were ruined due to the wars among the local rulers. Xuanzang visited Kashmir in 631AD, and came across almost one hundred monasteries occupied by about five thousand monks. Xuanzang also went to Lahore and then Matipura at present known as Mandawar near Bijnor in Uttar Pradesh, India. At

Matipura Monastry Xuanzang studied under Mitrasena.^v

Other places he visited in India include Jalandhar in Punjab, Bairat in Uttar Rajasthan, Mathura in Pradesh. Mathura, during this time, despite being a Hinduism-dominated place had over two thousand Buddhist monks of Both Hinayana and Mahayana. He spent almost five years at Nalanda, the great centre of learning at that time in the state of Bihar. At Nalanda, he studied Sanskrit, Grammer, Logic and the Yogacara School of Buddhism. Venerable Silabhadra; the expert on Yogacara met Xuanzang at Nalanda University. He was the personal teacher of Xuanzang at Nalanda University. From Nalanda he travelled towards Bengal, there too he found several monasteries with thousands of Monks studying both the Hinayana and Mahayana Schools of Buddhism. Furthur he travelled towards Andhra Pradesh, at that time known as Andheradesa. He visited the viharas at Amravati and Nagarjunkonda. He studied Abhidharma Pitaka texts at Amravati. He resumed his travels further and went to Kanchi, the capital of Palvas. Kanchi was a centre of Buddhism. Before returning to Nalanda, he went to various other places like Nasik, Malva, Ajanta, Multan, etc. Assamese king Bhaskarvarman invited Xuanzang to the kingdom of Kamarupa; at present known as Guwahati.vi

At the request of **Emperor** Harshavardhana, Xuanzang went back to attend a great Buddhist assembly at Kannauj. That assembly was attended by many kings of neighbouring kingdoms and common people of different faiths like Bhramins Jains and Buddhist monks. In his 'Si-Yu-Ki', Xuanzang writes that Emperor Harshavardhana also invited him to Kumbh Mela in Prayag, where he witnessed the

Emperor's generosity for his people. Before starting his journey back to China, Emperor Harshavardhana organized a grand farewell. He reached back China after almost sixteen years. Xuanzang then retired to a Monastery and devoted all his time and energy to translate the original Buddhist texts into Chinese until his last breath.

The central aim of Xuanzang's visit to India was to gain original unedited knowledge of Dhamma and to get copies of original Buddhist texts from the birthplace of Buddha i.e. India. It was the chief reason why he came to India even when he had not got a permission to visit 'The Holy Land of Lord' from the Chinese ruler. As he did not get an official permission by the Emperor to visit India; he secretly crossed the borders of China in 629AD. He crossed Gobi Desert and many mighty mountains and rivers to reach India. He came to India by taking land route. While travelling towards India he visited several places in Central Asia; Samarkand; Kashagar and Balkha before reaching Afghanistan. At various places on his way towards 'The Holy Land of Buddha' i. e. India he found the followers of various faiths like worshippers of God Sun, followers of Buddha and various other religions and cults as well. He also found monasteries and Stupas in many places.

He reached Taxila, the great centre of learning; from Afghanistan via Peshawar. It took him about one full year to reach India from China. He then stayed and travelled across India for almost fifteen years. From Taxila he went to Kashmir and various other places in India such as Mathura Kannauj, Sravsti, Ayodhya, Kapilvastu, Kushinagra,Sarnath, Vaishali, Patliputra, Rajagraha, Bodh Gaya and Nalanda.

He then stayed and studied at the University of Nalanda for about five years. He devoted his time to learn Sanskrit language and the original Dhamma texts. He also visited South India as well. He proceeded to Bengal as far as Kochi. The ruler of Kamarupa, Bhaskar Varman received him with great honour. And from there only he was invited to the court of Emperor Harshavardhana. To honour Xuanzang, Harshavardhana called upon a religious assembly at Kannauj. Hieun Tsang was honoured by presiding over that religious assembly. After this he also participated in another religious assembly called Harshavardhana only at Prayag. He returned to China in 644 AD. He travelled to China following the same land route followed earlier while travelling towards India. Along with him he took many idols and images of the Lord Buddha, and copies of various were found in more than one variety. original Buddhist texts.viii

Although he had not got the official permission to visit India by the then Chinese Emperor, when he reached back China he was received with great honour and respect by the Chinese emperor. And at the instance if the Emperor only he then wrote the detailed description of India which is called 'Si-Yu-Ki'.

In his travel account 'Si-Yu-Ki' Xuanzang described the socio-economic. political, and administrative status of the then India. He also writes about the city life of then India. He writes about the construction of houses and the media used for building of the houses. He writes that the houses were built up of various media; wood, bricks and dung was used to build up the houses in India. He writes that the streets in the cities of India were mostly circular but dirty. Many old cities were getting deteriorated and were being converted to ruins while many new ones were being formed simultaneously.

He further writes that Prayag was an important city. The ancient cities of Sravasti and Kapilvastu, greatly connected to the life of the Lord Buddha were losing their importance, while Vallabhi and Nalanda were developing and emerging as great centres of Buddhist learning. Also the importance of Patliputra was being lost instead Kannauj was getting famous. He described Kannauj as a very beautiful city.

He also gave the description about the clothes and the material used to make the cloths in India. He wrote that the Indians used Silk, Cotton and Wool for their clothing and these materials were of various types. For instance, silk of several types was found in India and similarly the cotton and wool too

About the people of India, he writes that they were kind and lovers of education, literature, fine arts, native culture and morality. Hiuen Tsang writes that Indians received education between nine and thirty years of age and at several times a few Indians like to seek education and even also receive education, all their lives. The education was mostly provided orally and was of religious nature. Although many Sanskrit texts have been written up to that time, the script of the texts was Devanagari and the language was Sanskrit. The most important means of providing education was debates and discussions. This method also helped in establishing superiority over rivals in knowledge.

Xuanzang appreciated the Emperor Harshavaradhana for his administrative work very much. He marked out Emperor as a laborious king who travelled far and wide for the well-being of his people and frequently contacted his people personally. He says Harshavardhana was a king of masses. He was always ready to look after their welfare and well-being, he himself supervised his administration. According to the writings of Hieun Tsang, Harshavardhana used to spend the three fourth of his state income for religious purposes. He wrote about the kingdom of Harshavaradhana, that it was well developed and well governed. The kingdom never faced revolts of any kind. The cases of law breaking too were very few. The delinquent were given physical punishments and were tortured as well to extract the truth from them, while the punishments for the informers or the spy were of high intensity, they were either given death sentence or were turned out of the kingdom. The intensity of the punishment was based on the intensity of the crime. He further writes that the taxation process was very praiseworthy; there was no heavy burden of taxes on the masses. The common man was free from the oppression of the Government servants. Thus the subjects of the king were very happy. Also the records of all the administrative activities were kept by the state. However Xuanzang that travelling from one place to another was not much safe during that time.

The primary source of the state income was land revenue which was never more than one sixth of the total produce. He further stated that the state income was divided into four parts by the Emperor Harshavardhana. The first part was meant for the administrative routine of the state, the second one of it was meant to meet the expanses of scholars of the kingdom, the third one was given to the employees of the government, and the fourth one was meant for charity; that was distributed among the Brahmins and Buddhist monks.

In his travel account Xuanzang describes the strength of Harshavardhan's army. He wrote that the army consisted of various types; there were 60,000 war elephants in the army. Along with it 50,000 strong cavalry chariots and one lakh strong infantry were also part of Harshavardhana's army. He writes that **Emperor** Harshavaradhana was a great follower of the Buddha and a devotee of Buddhism. Also he was a great patron of Buddhism. Further he says that in comparison toBuddhism. Hinduism was more popular all over India at that time.

Xuanzang wrote about the social condition of then India in a very detailed manner. He says that the caste system was too rigid all over India but there was no mention of PURDAH-SYSTEM for women in India at that time. Women were free to get education. However the SATI-PRATHA was there. Still the common masses were very simple, honest and truth loving. They used simple clothing and most of them avoided meat and even onions and garlic were excluded from the usual diet. Liquor was also prohibited. The moral values were given more importance in the society and in personal life too. The houses of common people were made up of mud, dung, stone and wood. The richer class lived in much comfortable houses having a lot of facilities to make life easy, their houses were much comfortable, they dressed well, enjoyed the services of servants and lived a life of luxury. In some places, bricks were used to build houses. Although there was some economic difference between the higher rich class and the common people, still everyone observed high morality.

The Chinese traveller also gave a detailed description of the economic condition of India at that time. He elaborated

and explained it by giving examples; such as he has given a long list of horticulture and agricultural products of India whose demand was very high in foreign countries. This demand for Indian commodities strengthened the international trade and created many trade relations of Indian kingdoms with several foreign countries. He wrote that India produced the best quality cotton, wool and silk at that time. And the garments too were made up using these materials in India. He praises the incredible quality of ivory and pearls produced in India. He writes that the Indians produced the high quality pearls and other gems and precious stones also were found in India. Also the artisans of India praiseworthy; there were expert goldsmiths, silversmiths, diamond setter etc. who prepared all types of jewellery and ornaments. These ornaments and jewellery were used by the common people of the kingdom and were exported outside as well. In Hieun Tsang's words the expert Artisans of India were the backbone of the prosperous economic status of India at that time. India had good trade relations with foreign countries and there were flourishing cityports on its sea coast on its East and West. The things exported from India consisted chiefly of silk, sandalwood, cloth, pearls, ivory, medicinal herbs, spices etc., and from the foreign countries the commodities of import were high breed horses, gold and silver. He defines India as a rich and prospering country.

In his travelogue 'Si-Yu-Ki' the Chinese traveller wrote about the religious status of India also. He says that Brahmanism i. e. Hinduism, Buddhism and Jainism were the popular religions at that time. There was no intolerance among the followers of various religions. No one was forced to follow any particular faith or religion. People

were even free to change their religions voluntarily. Although Hieun Tsang does not clearly say anywhere that Buddhism was declining in India at that time, yet his description of cities of India clearly shows that Buddhism was on decline and Hinduism was progressing. At one place he has written that the cities of importance in Buddhism like Sravasti and Kapilvastu were losing their importance. This indirectly means that at that time much importance was not given to the cities and monuments related to Buddhism. He also wrote about the religious assemblies organized by the Emperor Harshavardhana at Prayag (Allahabad), and Kannauj.

Thus Xuanzang has given a detailed illustration of India. He has discussed political, social, economic, religious, and administrative status of India during the time of his visit. Such a detailed description of India has not been given by any other Chinese traveller or pilgrim. India as described in his travelogue helps us to create an image of the socio-economic, political and administrative as well as Cultural religious situation of India and helps us in making conclusions and assessments of conditions of India during the reign of Emperor Harshavardhana. However most of the historians do not accept his account as totally dependable to make conclusions about that period as he wrote with a positive favour of Buddhism glorifying it. That is why the information and descriptions provided by the Chinese monk and traveller Xuanzang need to be corroborated and checked with the help of the facts given in the other contemporary sources of history.

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Heritage as Soft Power: Examining the Indian Experience Renu Keer

Abstract: Power has dominantly been a central phenomenon of international politics, aiming to foster respective states' national interests and survival. Traditionally, military power, consisting of army personnel and weapons, has dominated world affairs and has been considered effective in serving the national interest. However, in the contemporary globalised world, soft power and heritage have become equally essential diplomacy tools for states' politics as hard power has been in an anarchic world, struggling for their survival and power maximisation. Furthermore, it promotes intercultural dialogue, which is undeniably essential to impede the multiple threats posed by non-state actors and Islamic fundamentalists in the existing world order- the anarchy. In the 21^{st} century, the role of soft power has widened a lot, and states are least interested in opting for war. India's soft power is full of and a product of her values of secularism, diversity and multiculturalism, tolerance, inclusiveness, and cross-fertilisation of cultures. Such Indian values and beliefs have become more relevant than ever before in a world of globalisation. It helps the Indian state and diplomacy foster its force to connect and build relations with the rest of the world. This article looks into the notion of soft power, specifically, how it has emerged and transformed the concept of diplomacy, looking at the linkage between soft power and heritage. Also, it seeks to examine the significant efforts taken by India to project soft power and looks at some significant features of Indian foreign policy, discussing how soft power might or might not be serving its national interest and international image worldwide.

Key Words: Heritage, Soft Power, India's Foreign Policy, and Diplomacy.

This would not be wrong to say that the concept of power has always been a central and predominant phenomenon of international politics that significantly shapes global affairs. Arguably, it seems to have played a major and critical role in making foreign policy to attain the national interest of a state, precisely, struggling to maintain its security and survival. What explains the states' behaviour scientifically systematically in a world of danger and instability is 'realism' 103 which revolves around

the concept of power itself, and have been a dominant theory of international relations since the end of the Second World War in

which views wars as an essential and inevitable condition of the international system. They assert

that wars can be avoided for a short period but cannot be fully eradicated from the world order.

Apart from Hans J. Morgenthau, other realist

scholars such as E.H. Carr, Reinhold Niebuhr, and Thucydides emphasised the 'ubiquity of power'

and Pavehouse and Goldstein 2019).

and the competitive nature of politics among nations. This is the reason that they have always and been cynical of the idea that there is no room for morality and ethics in international politics since every state is driven by its own national interest and bound to maintain its security and survival, which primarily and significantly depends on its power. Given that, realists explain international relations in terms of 'power' wherein states are constantly indulged in conflicts and wars in order to maximise their power (Baylis and Smith 2011,

¹⁰³ Realism is one of the major theories of international relations. It emerged as the dominant theory of international relations with the outbreak of the Second World War in 1939,

1945. Hans J. Morgenthau- the chief proponent of theoryargues that international politics is a constant struggle for power (Morgenthau 1945). He defined it as the ability to control others' minds and actions; and get things done the way one (nations) intends to (Morgenthau 1945). According to realists, "the ability of states to use material resources to get others to do what they otherwise would not (Barnett 2005). In general, power is the production, through social relations, of efforts that shape actors' capacities to determine their circumstances and fate ((Barnett 2005). Traditionally, it has been explained and assessed in easily quantifiable 'hard' terms, and it has been recon in the context of military and economic power (Morgenthau 1945). Apparently, 'hard power' is deployed in the form of coercion, using force, the threat of force, economic sanctions, or inducements of payment. The fact is that the role of power has marked a distinct increase in civilisation's advance (Ahmed and Fatmi 1971, pp. 10).

Nevertheless, in the present globalised and cosmopolitan international society, the notion of power has embraced a new connotation and transformed itself from 'hard' to 'soft'. It is believed that if the next World War occurs, it would definitely, be a nuclear war that would devastate the entire humanity and humankind. Therefore, accomplishing peace and cooperation among sovereign states is indispensable, however certainly, a difficult

task to do, since every state is governed and motivated by its national interest and seeks to maximise its power, even at the cost of others' lives. Hence, the international community cannot afford to endure 'hard power' but cannot compromise or sacrifice its national interest either. In this context, soft power can be quite an expedient instrument to serve states' national interests and elude wars. There is a little question whether soft power has also become as dominant as hard power in international politics. Given this, the next section examines the concept of 'soft power' and its emergence in international politics. The paper also seeks to examine why nations have been emphasising soft power in their pursuit of diplomacy and how it fosters cooperation and harmony in a world full of competition and conflicts.

Conceptual Understanding of Soft Power

The current international politics is not merely a struggle for power- which is mainly associated with hard power- as acclaimed by realists; but also, to win the hearts and minds of the international community via diplomacy and enticement in order to foster national interest (Nye Jr. 2008). Therefore, the current overdependence on hard power alone cannot achieve the path to success and establish peace and harmony in the world, promoting cooperation in an anarchic 104

¹⁰⁴ Anarchy simply means lack of a central and supreme government, which leads to a complete disorder in the system. Realists describe

world (Nye Jr. 2008). UNESCO¹⁰⁵ also believes that hard power cannot alone achieve peace. Hence, generating soft power has become a need of the hour and an important component of foreign policy globally (Maini 2016)¹⁰⁶. It would not be inappropriate to say that in present times, soft power has emerged as a strong piece of equipment to serve the national interest, which is complimented by heritage of a state. In fact, both of them have become significantly important tool of diplomacy for States and to great extent it reduces the role of hard power. Interestingly, it promotes helps establish inter-cultural dialogues among various states, which grapple crucial to with the challenges imposed by non-State actors and Islamic fundamentalists.

Although 'soft power' is regarded as an essential tool of foreign policy, there is no one definition which can fully encapsulate the meaning of such a 'debated term'. The architecture of the concept of soft power-Joseph Nye¹⁰⁷- defined it as 'the ability to affect others to obtain the outcomes a nation intends through attraction rather than

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international order as anarchic where there is no supreme power to regulate the behaviour of independent and sovereign states, seeing it as the prominent cause behind conflicts and wars.

tools/11_Info%20Sheet_Soft%20Power.pdf ¹⁰⁷ Joseph S. Nye Jr. is an American Scholar and a frequent policy maker who coined the term 'soft power' in 1990 (Malone, 2011 pp. 35).

coercion or payment' (Nye 2008 and Tharoor 2012). The British Historian, Niall Ferguson, describes 'soft power' as 'non- traditional forces such as cultural and commercial good' (Srinivas). Soft power rests on a country's culture, values, and policies (Nye 2008). In contrast to the coercive nature of hard power, soft power involves the use of positive attraction, and persuasion to achieve foreign policy objectives. It shuns the traditional foreign policy tools of 'carrot and stick', instead, it seeks to achieve control and power by building networks, communicating compelling narratives, establishing international rules, drawing on the resources that makes a country naturally attractive to the world. Thus, if this is a valid proposition, then the defining feature of soft power is that it is non-coercive, where there is no use and room for military weapons. Nye (2008) argues that if a state can make its power statues legitimate in the eyes of other nations, there would be less possibility of facing resistance from other nations. If the dominant power of culture and ideology are more attractive, other countries would follow it. The German editor Josef Joffe once argued that American soft power has even been larger than its economic and military assets (Nye 2008). However, in the recent years, particularly after the invasion of Iraq, the American soft power has declined (Nye Jr. 2008). Therefore, states need to promote

¹⁰⁵ UNESCO is the United National Educational, Scientific and Cultural Organization that seeks to build peace through international cooperation in Education, the Sciences and Culture. Available at https://en.unesco.org/about-us/introducing-unesco

¹⁰⁶Available at http://www.unesco.org/culture/culture-sector-knowledge-management-

their heritage and culture as their 'soft power' instruments.

Nye (2004) argues that soft power arises from attractiveness of a country's culture, political ideas, and policies. He further suggests that when a country's policies are seen as legitimate in the eyes of other states, their soft power is enhanced. However, it is not just about the image, public relations, and ephemeral popularity of a country; in fact, it is a form of power that amounts to obtain the desired goals without and fraction and conflict. He also elaborated the key role of the civil society in generating US' soft power 'from Hollywood to Harvard' (Malone, 2011, pp. 35). Nye believes that the conventional meaning of power is losing its emphasis on military force, and the factors of technology, education, and economic growth becoming more significant (Nye 1990, 154). To elaborate, he initially set out three primary sources of soft power namely, culture, ideology, and foreign policy. Endorsing Nye's idea, Ramchandran (2015) also asserts that soft power can relatively be less exorbitant or an innocuous instrument to get others to do what one (nation) intends in comparison to military coercion or financial inducements. However, it might be a slow process to attain results but an effective one. 108

Heritage as Soft Power

The very idea of heritage cannot be confined to museums, monuments and natural sights only. It would be a narrow interpretation of the notion of 'heritage'. In a broader sense, it also includes ideas, values, identity, and culture of a nation- worldwide, through which it attracts other nations to join hands and follow it. UNESCO defines heritage as 'legacy heridated from the past, what we live with today, and what we pass on to posterity. It further suggests that cultural and natural heritage are both irreplaceable sources of life and inspiration, therefore, it encourages international cooperation in the conservation of it and provide emergency assistance for World Heritage site in immediate danger' 109. In contemporary global politics, soft power and heritage have emerged as important tools of diplomacy for states as hard power, promoting intercultural dialogue, which is essential to counter the multiple challenges to the existing world order posed by non-state actors.

India's Heritage and Soft Power Policy

It is no wonder that India has fascinated the world since the very beginning of Indian civilisation via its culture, values, and spiritual beliefs. Apparently, Indian

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https://www.futurelearn.com/courses/sustainabili ty-society-and-you/0/steps/4653 http://whc.unesco.org/en/about/

¹⁰⁸ https://thediplomat.com/2015/05/indias-soft-power-potential/

culture has emerged as a tool of attraction, which amounts to connecting and building relations, whereby reconciling the ruptures created by historical politics (Mukharjee 2018). History demonstrates that India has been a melting pot for an innumerable religions, number of communities, languages, cultures and practices over centuries, and has been incredibly active in offering humanitarian aid and shelter to refugees (Srinivas 2019, pp. 81 and Ahmad 2019). It would not be an exaggeration to say that India is the only country in the world that embraces such an extraordinary abundance of ethnic groups, multiple languages, climate, religions and culturalbeliefs and diversity of economic conditions, colours, and living standards, which sometimes amounts to contradictions and conflicts amongst the civilians, yet holds it 'united in diversity' (Tharoor 2012). Its inclusive cultural and civilisation heritage across the millennia demonstrates its values of secularism. inclusiveness tolerance, and crossfertilisation serve to its national interest and contribute to international peace and harmony more than ever before in today's world, facing global issues such as terrorism (Mukharjee 2018).

It would not be wrong to say that India's soft power is not a recent phenomenon. India has been projecting its soft power for centuries and giving greater importance to it in the past two decades (Srinivas 2019, 81 and Maini 2016). Nevertheless, it is only under the Modi regime that India has started playing its soft power cards more efficiently and systematically; though it laid down the foundation from the very beginning of the independence of India (Maini 2016). Looking back to its independence in August 1947, India started building relations with global as well as regional power. In order to build and promote relations with international actors and Indian diaspora, the Indian government established institutions, two namely, Indian Council for Cultural Relation (ICCR) in the year of 1950, and Indian Council for World affairs (ICA) in the year of 1943 (Srinivas 2019, 81). The objective of ICCR was to participate in and implement policies and programmes relating to India's foreign cultural relations and to foster cultural exchange with other countries and people (Srinivas 2019, 82). In 2006, India did set up a public diplomacy division within the Ministry of External Affairs and expanded the Indian Council for Cultural Relations (ICCR) worldwide (Ramchandran 2015). Also, the Government of India has been trying to promote its social, political, and cultural values abroad under the Ministry for Overseas Indians and Ministry of Tourism, which is 'incredible behind the India' campaign (Ramchandran 2015). Moreover, International Co-operation Division is one of the important divisions of the Ministry of Tourism, which engages in various consultations and negotiations with other countries to sign agreements¹¹⁰. In fact, there are some other foreign policy initiatives such as the Look East Policy (Act East), the Connect Central Asia Policy, developing strategic aid and trade partnership in Africa, which Government of India is running to boost its soft power (Ramchandran 2015). In addition, India has ceaselessly enhanced its soft power potential to project its national power in the region by conducting mega disaster-relief operations during the 2004 tsunami to effectuate the world's largest civil evacuation during Operation Rahat, (Khanna and Moorthy 2017).

Looking back to the pre-independence era, many prominent Indian personalities such as Mahatama Gandhi, Jawaharalal Nehru, Swami Vivekanand, and Dr. Ambedkar played a remarkable role in spreading Indian values and ideas, particularly, culture and image around the world, which significantly amounted in developing India's soft power. Ancient cultural values such as non-violence feature prominently in the preferred national image, and non-violent preferences for global peace and cooperation (Pethiyagoda 2014)¹¹¹. In fact, Nehru's concept of 'Unity in diversity'

conceptualises the soft power nature of the Indian nation¹¹². India's traditionally cultural values and beliefs such as pluralism, multiculturalism, brotherhood, and tolerance have substantially encouraged the idea of 'live and let live' which has significantly reflected in 'peaceful coexistence' Nehru's policy, distancing itself from forceful humanitarian intervention. Apparently, the cultural preference for non-violence helps explain India's relative restraint in conflict, despite provocations. Nuclear weapons are seen largely as a status symbol and consideration of their actual use has been shunned 113.

It is not astonishing that India's soft power assets and its principles attract the leader of many global countries even today itself. For instance, on the occasion of Mahatma Gandhi's 150th birth anniversary on October 2, 2018, former President of US-Barack Obama, observed that Gandhi is a rare gift to the world (Srinivas 2019, pp. 82). principles like 'non-violence and 'Ahimsa' continue to inspire millions across the globe, which include Dalai Lama, Martin Luther King Junior and Barack Obama (Srinivas 2019, The Indian Express 2018 and Pande 2020). Interestingly, through political and ethnic heritage, India has popularised Gandhi's non-Jawaharlal Nehru's violence and non-

¹¹⁰ Available at http://tourism.gov.in/international-cooperation

¹¹¹ Available at https://www.lowyinstitute.org/the-interpreter/identity-and-values-indian-foreign-policy-modis-cultural-toolkit

¹¹² Available at https://www.lowyinstitute.org/the-interpreter/identity-and-values-indian-foreign-policy-modis-cultural-toolkit

¹¹³ Available at https://www.lowyinstitute.org/the-interpreter/identity-and-values-indian-foreign-policy-modis-cultural-toolkit

alignment which can still be considered soft power asset of Indian foreign policy (Maini 2016). Moreover, India has benefitted from its democratic image, followed the first democratic election in 1952, and since then, witnessing free and fair elections at regular intervals (Pande 2020). Unlike many developing countries that went through domestic turmoil and autocratic or military rule, India consistently remained a democracy which undoubtedly, attracted the world towards it and contributed to its image and soft power per se (Pande 2020). importantly, India's moral stature and image as a democracy are the reason why most countries around the world have welcomed India playing a larger role not only in its region but also in the global arena (Pande 2020). Surprisingly, being a post-colonial country, India has been able to sustain democracy, avoid military rule, and protect its territory with little social strife has undoubtedly attracted the world (Pande 2020). Apart from its cultural and civilizational richness, its independent judiciary and media, dynamic civil society, and the remarkable struggle for human rights since independence all make it attractive to the international community (Malone 2011, pp. 35). It is important to acknowledge that India's soft image made the world perceive India as a kind and gentle player in international politics (Pande 2020). It is worth noting that India has had an incredible variety and wealth of soft power resources, including spiritualism, yoga, movies and television soaps, classical and popular dance and music, plural society, and cuisine have all attracted people across the world (Ramchandran 2015). Yoga and Ayurveda have laid the foundation for promoting the soft power of Indian foreign policy today (Srinivas 2019, pp. 81). Adding to cultural heritage, India's the celebrated the International Day of Yoga on June 21st 2015, for the first time. In 2015, on the Indian Prime Minister's appeal, cosponsored by an unprecedented countries-the United **Nations** General Assembly (UNGA) declared June 21st, the International Yoga Day. Since then, the day has been celebrated with mass voga practice across the world. The interesting part is that it is not just by overseas Indians and staff of Indian embassies but by people of other nationalities as well (Maini 2016). It undeniably reflected yoga's immense popularity worldwide, underscoring richness as soft а power resource (Ramchandran 2015)¹¹⁴.

Likewise, Bollywood; the popular film industry of India, laid the foundation for promoting the importance of India's Soft Power in its foreign policy objectives. For instance, Amir Khan went to China to promote his movie PK as his earlier movie, '3 Idiots' was quite successful, particularly amongst the youth of China. Also,

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¹¹⁴ https://thediplomat.com/2015/05/indias-soft-power-potential/

movies such as 'Kal Ho Na Ho', 'Kabhi Khushi Kabhi Gham' are purely based on the lives of the Indian diaspora and they attracted a more diasporic audience, making them feel that India is concerned about them. Besides this, Bollywood annual film award ceremonies are sometimes held in Europe, the Middle East, and America; and many of Bollywood programmes such as audio release function, and movies are shot in different global cities to attract the Indian diaspora, which can be seen as some of the quintessential examples of promoting Indian foreign policy by means of its soft power.

Modi and Indian Diaspora: Cultural Diplomacy and Soft Power

C. Raja Mohan argued that India could always count itself among the few nations with strong cards in the arena of soft power, asserting that India's biggest 'instrument' of soft power has been its diaspora (Mohan 2003 and Malone, 2011, pp. 35)¹¹⁵. More than 25 million members of the Indian diaspora are scattered around the world, which include more than 3 million Indian origin diaspora in the United States (Srinivas 2019). So, ever since Prime Minister Narendra Modi came into power, he has emphasised the role of Indian diaspora in Indian Foreign Policy

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making because he had realised the importance of the diaspora in his development strategy (Srinivas 2019). It is not an exaggeration to say that Prime Minister Modi has played a vital role in projecting the Indian culture worldwide and making it a Soft Power. He addressed the diaspora in the United States, the United Kingdom, Canada, and Singapore; and has had a less noticeable interaction with Indian workers in the Middle Eastern countries, the United Arab Emirates, Saudi Arabia and Qatar (Maini 2016). Prime Minister Modi made a total of 49 foreign trips by May 2017 to woo the Indian diaspora. In almost every meeting during his foreign visits, he urged the Indian diaspora to be a part of Indian development by investing in the Indian economy, donating to various programmes, and participating in Indian rural development as well. In fact, the Indian diaspora played a key role in the UN marking International Yoga Day on June 21 every year. What relatively is little known about the International Yoga Day that India moved in General Assembly in the 2014 was co-sponsored year by unprecedented 170 countries, which itself was a result and reflection of India's Soft Power (Ramchandran 2015)¹¹⁶.

In 2015, former Indian foreign minister's spokesperson Syed Akbarudin said that India's soft power diplomacy now goes beyond books, culture, and cinema. The Narendra

¹¹⁵ C. Raja Mohan is an Indian academic, leading columnist, and foreign policy analyst, and serves as the Director of the Institute of South Asian Studies, National University of Singapore.

¹¹⁶ Available at

https://thediplomat.com/2015/05/indias-soft-power-potential/

Modi government has made soft power an important tool in its foreign policy (Maini 2016). He focused primarily on Ayurveda, Yoga, and Buddhism, besides reaching out proactively to the Indian diaspora (Maini 2016). Moreover, under his regime, there is a constant substantial focus on cultural identity which seems to convert to hyper-nationalism and can be a part of India's enormous potential in the field of soft power. Like his predecessors, Prime Minister Modi also followed India's 'no first use' (NFU) nuclear policy and declared that it is a reflection of the country's cultural heritage- the idea of 'brotherhood' and 'peaceful co- existence'.

It is quite evident that cultural identity and values such as pluralism, tolerance, and liberal democracy play a vital role in relations with the US too. Correspondingly, as its cultural influence expands, India draws ever closer to becoming a leading player in world politics. It would be fair to say that India's cultural and spiritual heritage has played an extremely vital role in constructing relations with other regions; and Buddhist and Hindu influences have helped India build strong links with South East Asia (Maini 2016). India's soft power policy indeed empowers India to play a significantly decisive role to resolve issues such as global warming and terrorism faced by the South Asian countries.

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Use of Surface Decoration Techniques to Enrich the Traditional Earthenware Products in Sri Lanka

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Ceramic is a natural material formed with the combination of the elements clay, water, air, fire, and space. Earth means clay, which is flexible when mixed with water, and gets hardened by the effect of air and that shape will be made permanent by the effect of fire. The product volume will also be created as a result of the way of handling the space. These are the basic steps of making clayware objects. Sentence (2004) explained the use of four types of basic elements for clay product manufacturing; "We are enthralled by the magic of a craft that involves all four of the elements: earth mixed with water cooked in a fire and coloured by the presence or absence of air. It feels as though while moulding the clay to our will, we could almost breathe life into it". Manufacturing of clay cooking pots has a long history which dates back to prehistoric times. "Clay, water, and fire over 10,000 years ago the world's first ceramic combined these ingredients to produce one of the most significant innovations in all of human history the clay cooking pots" (Skibo, J.M., Walker, W.H., & Nielsen, A.E., 1995). It is believed that clay cooking pots have a good

origination and conceited history. It is a known fact that Sri Lanka has a great history in the Ceramic Industry. It is a wonderful craft created by people and goes back five thousand years ago. "The study vessel shape can be forming the standpoint of function, aesthetics, or taxonomy has the appeal of human interest, the purpose of vessels tell something of the activities and customs of the product who used them" (Anna, 1980, p.26). It is believed that ceramic is one of the facts which says about society and it also reveals the behaviours of the people who used it in that particular society.

Decoration of art is an optimal medium to promote or enhance their ideas to society. In the beginning, surface decorations were in the primary stage, and the only purposes were to fulfil their requirements and products' function. Surface decoration is adding something more attractive and embellishing the object. It is important to do the surface decoration in the product's outer surface rather than in the inner surface of the product.





Figure 1. Kotte Rajamaha Viharaya

The pottery industry was established as an occupation in several places around Sri Lanka villages like Ranchamadama in Rathnapura, Dorawaka Kanda in Kegalle is famous for clay products. The earliest painted clay vessels can be found from the Embilipitiya area.

"The excavations at a village called Uda Ranchamadam near Embilipitiya, an ancient settlement site situated 3,000feet above sea level have uncovered sherds of a painted pot, which through carbon 14dating has been placed at 1120BC, making it the oldest pot found in Sri Lanka so far" (Amarasinghe U.,2010). Pottery painting has been evident from the time of proto-history. It was not only the design, but the name of the owner was also curved to the pottery surface. Such was found from the Thissamaharama area and there was an inscription written in early Brahmin script on this pot. It evidences the early treatment. Decorated surface potteryware enhanced the social lifestyle and the craftmanship at that time.

This research is trying to accomplish "how these design features of ceramic products will be affected by the product and human interaction". From a designer's perspective, it is important to know and understand the different types of decoration methods and surface appearances that will be affected by the product personality as an important factor of a product. People tried to make new utensils by doing experiments and using different types of materials. It was a case of trial and error. Natural resources could not fulfil their daily requirements. For example, they needed storage facilities to gather and prepare food. Clay was identified as a material to create utensils and objects. Initially, people used less sophisticated pots to cater to their needs. "Vedda makes very rough pots" (Seligman, C.G., Seligman, B.Z., 1993). These pots have a small unfinished orifice, the special thing of it is they used a loop to hang the pots. These were used to collect honey. They used simple decorations to make the product attractive. Although clay was the main natural and simple material on the earth, it was developed in various ways by people. According to the firing temperature and firing time, clay body composition can be categorized into five types. These are Terracottaware, Earthenware, Porcelain Bone china and Stoneware (Thakashima, 2004). Again, earthenware can be divided into two categories. These are low-temperature earthenware and high-temperature earthenware. Earthenware is one development stage of terracotta. Low-temperature earthenware is fired at around 750°C - 850°C. This type can be identified by the colour of the clay body and strength. It looks like a red/brown color. This research is based on a variety of surface treatment in low-temperature earthenware products and the involvement of surfaces for product functionality.

By following the written evidence and excavations we can believe that pottery is one of the oldest human arts practised throughout the whole world. Sri Lanka is famous for the traditional pottery industry that comes down to the present day from generation to generation from the prehistorical era. There is some evidence that even in the prehistoric times potters had turned out quality products for society and paid more attention to turn out smoother products. "A large urn series with a thick body and massive rims. The thickness of the large series was about 20mm and that of the rim was 35mm whilst that of the smaller series was 6mm and that of the rim was 15mm." (Wijesekara, 1965) Similarly, excavations upon "Abhayagiriya Stupa" have proved there were high-temperature kiln for firing and suitable clay pottery had been in use and coloured roof tiles had been used for the monasteries (T.G.Kulathunga). The theory of Mr Deraniyagala has categorised the clay vessels into various types, according to colour

and technology. "Black and redware, redware, fine ware, light redware, red-painted ware, yellow-painted ware, decorated ware, and ware"(The paper of "DEWENA", buff Athirekaya", "Badhada 2003.09.03) has proven that there had been various kinds of varieties of clay products were in Sri Lanka. According to the written facts, the presence of the feudal system had affected the product variation. M.B. Ariyapala explained the society's hierarchical order, its social system mechanism and how the "Rajakaariya" system evolved whereby each group of people in the society were engaged in various tasks that were defined to each caste of people were the reasons for this variation (M.B.Ariyapala, 1968). Also, Mr Ariyapala emphasized the king's potter community which was called "Badahelypanguwa" which consisted of supplying proprietor with all the requisite earthenware for his house. The following temple paintings depict the usage of pottery products.

Figure 04 and figure 05 present another version of the royal kitchen scene of the Kandyan era. According to the hierarchal value of the Royal cuisine, potters used the best quality products for the King. The Colombo / Kandy National Museums' pottery collection shows the consumer-based social valued product sector of Sri Lanka. They express consumer's value, emotional pleasure and satisfaction (Yu, Analysis on Emotional

Design of Daily ceramic products, 2015) more at the same time they value functions and quality



Figure 2. Embossing, Engraving techniques and slip painting techniques, Kandy National museum, Sri Lanka

Analysis of the Emotional design of daily ceramic products, Dehua Yu talked about the temperature difference between users and objects, the humanized design method makes people interact with products by body language. The "Gas Kalaya/ Muttiya" is one of the best examples of express Dehua Yu's opinion about human product interaction based on function.



Figure 3. Gas Muttiya

The potter uses decoration on clay vessels to add aesthetic beauty to them. Apart from

that, another purpose of decoration is to identify the service done by the pottery easily. For example, the *Gas Muttiya* (Figure 3) which is used for toddy tapping in the toddy industry can be identified. In the toddy industry, the pottery surface is decorated by using the deep engraving method. It is easy to grip well when it is decorated with deep engraving in simple lines. Also, the user can get a beautiful interface by using this method. By decoration works it is helpful to enhance the form and shape of the pottery. The basic elements that a potter is concerned about are the shape and form of the function of the clay product.

Product functionality and product usage are considered in this classification. Food and culinary practices, including food storage and preparation began from the beginning with the Neolithic period (Simpson, 2016). Depending on the household structure and features kitchen space was filled with objects, greater equipment, utensils and changed the division of labour (S.Seneviratne, 2016). According to the functionality of the products, domestic earthenware is categorised as processing, transport, and storage (P.M. Rice, 1987). Also, Coomaraswamy mentioned three types of clay product categorization such as domesticware, architectural ware, and ritual ware. Shape, form, stability, decoration, and ergonomics are the most important key factors which played a huge character in manufacturing earthenware utensils. These factors directly affected the quality and functionality of domestic clay utensils in the past.

From ancient times to the present, human beings have used pottery in their daily activities to make their lives simple and easy. "Decoration" can be shown as a special element that is combined with pottery from the past. Even though the customers expect decorative pottery at present, there is a shortage of manufacturing. The interface of any product affects the first impression of a customer to buy it. The interface could be an internal view or an external view. Ceramic products for daily use which reflect and satisfy people emotional needs gradually stand out in the designing field (Wang Hao, Xiong Jingjing).

Surface decoration gives more attractive effects to the products before handling. Sometimes it gets more attraction before knowing its functionality. Pinching, Engobing, Engraving, Stamping, Springing, and painting are the main decoration techniques used in pottery decoration in Sri Lanka.

Pinching

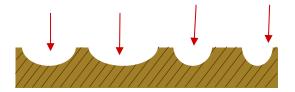


Figure 4. Clay Body

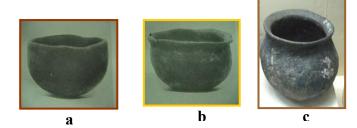


Figure 5. Use of pinching method (a, b, c) - "Veddas" Clay pots

Source: (Seligmann, 1993,

Pinching Method

Pinching is a primitive method used to elaborate on their idea simply on the clay surface. It is designed by the fingers without using any tool. It can be identified as a starting point to manufacture threedimensional forms to achieve more functionality. It can be done during the leather hard stage. The full processes are done manually, because of that it has a unique and traditional identity. By the way, it can be identified as one type of decoration method as well as a simple manufacturing method.

Engobing Method

Engobing is the method that uses the same clay body/ or mixing colouring elements to decorate the surface.



Figure 6. Section of the Vessel



Figure 5. Used as a decoration / finishing

It was made out of liquid form and applied to the leather-hard product, it can be called a slip painting. Simple decorated patterns were drawn on the leather hard product is rotated on the wheel. Its gives quality finishing durability to the surface layer. The importance is slip should be created out of the same clay type which was used for the object.

Dry Clay + Water + Natural cloured /Pigments = Coloured Slip

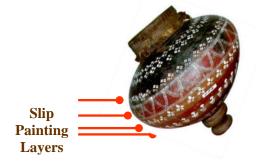


Figure 7. *Bummediya* (Rathnapura National Museum)

Body Colour Red = Laterite (Guru) White = Keoline (Sudu Matti) Black = Graphite (Miniran) Red, white and black were commonly used for the engobing technique. Not only that, it can be used oxides to get the different types of colour rangers.



Figure 7. Oxide Slip Decoration

Ferric Oxide (Red colour)
Cobalt Oxide (Blue colour)
Nickel Oxide (Black colour)
Chromium Oxide (Green colour)

Oxide + Same Clay body + Water

Engraving Method

Scraping or grooving the leather hard clay layer is engraving. It is mainly used to decorate the outer surface of the product, but rarely it is also used as an inside decoration. It is depended on the functional value and usage of the object and it can be identified as a development stage of engobe method.

Engraving - Leather Hard Body

Engraving – on the Engobe Body

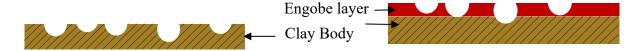


Figure 8. Section of the Vessel Body



Figure 9. "Bummediya" - Kandy Museum

The combing method is one of the special techniques in engraving method, "Combing is a very simple technique could be applied with a snapped lath wood". Engraving tools can be identified as sharp pointed tools and flat tools. Steel and wooden used as tool materials. "Grooving decoration scratched into the surface of the vessel with a hand tool of same soft variations in the shape and size of the tool and the preserve applied will affect this appearance of the surface decoration".

(De Silva & Dissanayake, 2008, p.15)



"Serving Bowl"
(Bivagama



"Gaskalaya" (Colombo Museum Collection)

Figure 11. Decorative Pot – Engraving Method Use for Functional Purposes

Stamping Method

Stamping decorations are done in leather hard earthenware body. It presses one of the designs into the leather-hard clay body. Carving the desired decoration on a piece of wood and stamping it in the leather hard clay surface. "Small metal stamps fitted to a handle, depicting floral, geometric of animal patterns are press stamped over the surface of the vessel when it is in leather hard condition. It has created beautiful patterns on the vessel surface" (De Silva & Dissanayake, 2008, p.15)

Embossed used in Traditional Clay Vessels





Figure 12. "Kalagediya" from – near Balangoda (Decorated with Bo -leaves and rosettes) - Kandy museum collection

Source (Coomaraswamy, 1979, p.227)

Springing Method

Springing is adding a variety of attachments to the clay products. Springing is used to give an extraordinary appearance to the object. Most of the products are not in simple shapes and forms, it depends on the functional value of the products. It was made separately cast and connected it to the leather-hard body with slip. Casting is a development of the springing technique. It is used to create difficult shapes by using moulds. Most of the springing

objects were ritual ware because most of the ritual ware was too decorated and beautiful compared to present ritual objects.



Figure 14. Tissamaharama- Sadagiriya



Figure 15.Spouted Vessel-Colombo museum collection

Painting Method

The painting was a development stage of all surface decoration methods. Colour application is mainly depending on the body colour. 'Makulu meti' is used as a base code before starting the decoration. But in this method, the body is entirely decorated with colour application. Line and symmetrical decorations were done by using a wheel and others were free handwork.

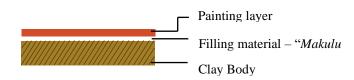


Figure 15. Section of the Painting layer

Background, - dark or light solid colours. "Plapethi, "Nelum mala", "Arimbuwa", "Gal binduwa"





Figure 16. A Water Pot (Colombo Museum Collection)

In terms of the traditional decoration methods, painting can be identified as a development stage of all techniques. History of the pottery tradition in Sri Lanka had a great history when compared to the other countries. Surface decorations are guided to product usage, and they give cultural content, express social background, people's satisfaction, and how they celebrate their life throughout the products.



Figure 17. A Musical Instrument (Colombo Museum Collection)

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