

## Elephants on Clothes: A Study in Tracing the Journey of Elephants through Textile Motifs

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**Abstract:** The elephant is a very important ecological and cultural entity in the Indian subcontinent. It is also an important part of our religion, belief system and folklore. It has certain characters and symbolism attached to it and is recreated in multiple ways in artworks. The Indian textile industry is as ancient as the first civilizations here and is a good marker to study customs and beliefs. Each state has its own distinct textile with its motifs and patterns. The animalistic motifs on these handicrafts can be used not only to document and geotag the textile but also to establish ancestry of its creators, to understand prevalence of certain animals in given areas. In this study a correlation is being made to link the use of elephant motif in areas where these animals were either present in the past, or are still present or their creators came from areas where they formed part of their conscious memory.

**Keywords:** Elephant, Population, Motifs, Textile

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## The Elephant in India

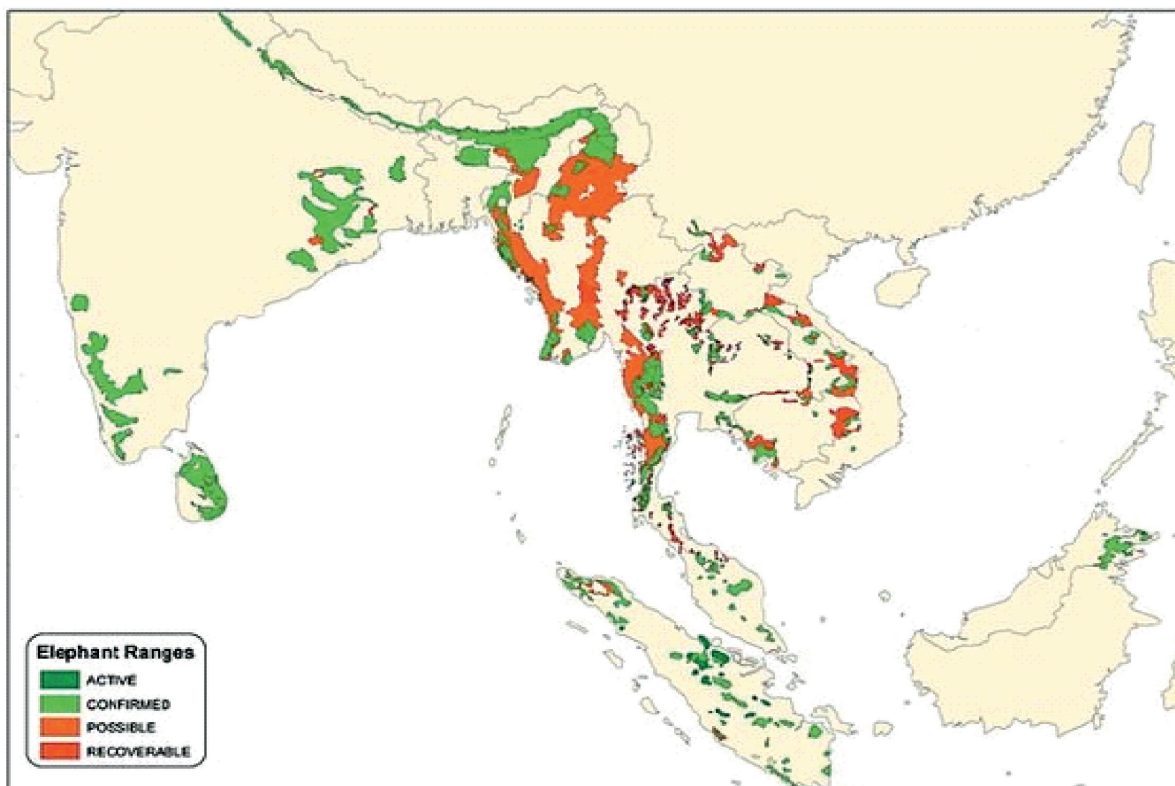
India has been known as the land of the elephants and a home to these gentle giants since the last 3.6m.y.a. They have a continuous registered presence since the Pliocene, with at least one species always being present. Asia has also seen possibly the evolution of at least one of its ancestors, *Stegodon insignis* *Ganesa*, which may have been indigenous to this land. A derivative of *Elephas ekorensis* – *Elephas recki* complex is thought to have colonized Asia and given rise to *Elephas planifrons* and *Elephas* (Maglio, 1973; Nanda, 2002). Another derivative of *E. recki*, *E. namadicus*, subsequently colonized Asia, late in the Early Pleistocene, and displaced the previous species from their home ranges. However, *E. namadicus* went extinct in the Late Pleistocene and *E. hysudricus* appears to

have given rise to *E. maximus*, the Asian elephant, in southern Asia *ca.* 0.25 Mya (Maglio 1973; Van den Bergh et al. 1996; Vidya 2015). The Indian subcontinent provided the right environment to these animals and in the past they had inhabited nearly the entire subcontinent with fossil evidence coming from the multiple and widespread localities of Siwaliks in the north, Piram Island in the west (Patnaik & Prasad 2016) and the Narmada Valley (Lydekker 1880, 1882, 1884 a-b; Pilgrim 1905; Khatri 1966; Maglio 1973; Badam 1979; Nanda 2008; Patnaik et al 2009; Lister et al 2013) and many other such localities. They were basically present in regions which shows their complete absence in the present day context. Also today India is home to one of the only species of the family Elephantidae - *Elephas maximus indicus*.

## Elephant Distribution and Demography

### Present Distribution

This mega herbivore was once prevalent in the Indian Subcontinent but at present it has disappeared from nearly 95% of its historical ranges and is now found discontinuously in Bhutan, Bangladesh, Cambodia, China, India, Kalimantan, Laos, Malaysia, Myanmar, Nepal, Sabah, Sri Lanka, Sumatra, Thailand, and Vietnam (Map 1.) (Santiapillai & Jackson 1990; Sukumar 2003).



**Map 1: Modern Distribution of Asian Elephant**

Source: The Elephants of Khao Yai National Park

The widespread presence of the Asian elephant was as recent as 6000 years ago, historical documents have also recorded this and have further given instructions in their management. For example the Arthashastra written by Kautilya (c. 300 BCE – 300 CE) mentions presence of elephants in eight forests termed as *Gajavanas*, these *Gajavanas* were found in places like Saurashtra from where

today we see a complete absence of elephants (Trautmann 1982; Baskaran et al .2011). Elephants find mention in even the memoirs of Mughal emperors from the 16<sup>th</sup> and 17<sup>th</sup> centuries. According to these writings, the elephants were once extensively present in the regions of southern Uttar Pradesh, Madhya Pradesh, Chhattisgarh, presently they are absent from these areas except Chhattisgarh where recolonization programmes have been initiated for this animal. Eventually because of habitat destruction via developing agriculture, increasing urbanisation, building of roadways and highways, disturbance and obstacles in home ranges have limited their presence to the Foothills of Himalayas, Southern India and Eastern parts of the country (Ali 1927; Sukumar 2011; Baskaran et al .2011). Their relationship with man is a longstanding one where they have been used and employed sometimes and prayed to at other. They had been used as beasts of burden, used in clearing forests and aiding agricultural spread, used as war machines in battles. In fact Indian military in the past was known for its use of elephants and boasted of an entire elephant corps. It used them to basically shock and awe (Glover 1944; Raza 2012). They have been also used for entertainment in arenas during the Mughal period. They were symbols of royal personage and were even regarded as a status symbol (Sohoni 2017). Today their use is limited to the tourism industry and as temple elephants particularly in Kerala (Cheeran 2012). The elephant for its memory, prowess, and formidable power has been imbibed in the Hindu mythology and considered as the god of wisdom and knowledge, it has been revered as Lord Ganesa, who is considered to be the remover of obstacles and is always prayed to first in the pantheon of the Hindu deities, (Dwyer 2015). Pilgrimages are also made in its name in the state of Maharashtra where it is the main deity (Dhavalikar 1991).

### *Dwindling Numbers*

The elephant is a keystone specie and has the ability to influence the ecology of a place and also maintain its stability and diversity (Terborgh 1988; Corlett 1998; Western 1989; Cerling et al. 2009;.) They can turn forests into grasslands, can help in pollination and long distance spread of seeds via dung (Laws 1970; Short 1981; Lieberman et al.1987; Kitamura et al. 2007; Blake et al. 2009 ; Dudley 2000; Jothish 2013). They are the gardeners of the forests and can change even landscapes. In folklore they are thought to be the harbingers of monsoons. For all its veneration and importance today its numbers are dwindling and has found its way on the International Union for Conservation of Nature (IUCN) red list as an endangered species (A1cd) (IUCN 1996) (Appendix I) (CITES) and is also nationally listed under Schedule 1 of the Indian Wildlife (Protection) Act, 1972. Habitat loss due to increasing land use is one of the premier causes for loss in biodiversity. Elephants particularly the Asian elephant inhabits varied and diverse environments, most of these preferred biomes have been touched by human activities, reduction in the quality of these biomes would not only affect the elephant but several other co-dependent species (Venkataraman et al. 2002; De Silva et al . 2020).

A number of traits makes them vulnerable to climate change as well, including a declining and fixed population, disease susceptibility, limited dispersal rate which again is restrictive to their ranges, slow reproductive rates and reduced genetic variations due to declining bull elephants (Purvis et al. 2000; Cardillo et al.2005; de Silva & Leimgruber (2019). Though being a generalist feeder they do get affected with invasive plant species and are reluctant to incorporate them in their diets. Due to such factors and many more the elephant today exists in pockets around the country restricted by highways, state boundaries, river valleys and urban landscapes. Over the years elephant populations have projected a declining trend. In 2003 the wild populations of Asian elephants was estimated to be in the range 41,410 to 52,345, these numbers were revised again in 2010 to somewhere between 39000 to 45000, thus marking a significant decrease in the worldwide Asian elephant population, presently

India is home to a maximum of these numbers and hold nearly 60 % of the total species (Bisht 2002; Baskaran et al 2011). Today the elephants in India are restricted to protected areas and parks, within these regions only small insular groups of this animal exist (Karanth et al. 2010; Forrer 2017).

### *Population Dynamics in Elephants*

Elephants have a well-developed society, wherein each member is fully aware of their roles and duties. Population studies would require knowledge of age profile of various members in a group, survival of members in various age groups, average reproduction ages, interbirth interval duration (Gough and Kerley 2006) for Addo elephants (Georgiadis et al. 1994; Sukumar & Santiapillai 1996; Bist 2002; Wittemyer et al. 2013; Gray et al. 2014; Fritz 2017). In demographic studies it is important to understand the diversity within the population, this variation in diversity and density is dependent on factors like the survival rates, migrations. One problem which are common to most demographic studies is that it is near impossible to detect and monitor species in near pristine perfect natural environment, as a result biases are created in the final results. These biases are generated due to imperfect specie detection, inadequate spatial sampling, spatiotemporal variation in detecting probability lead to incorrect population estimation thus potentially affecting their conservation and management (Williams et al. 2002; Goswami et al. 2019). These issues are not only limited to large populations, low density and smaller population groups are also difficult to monitor because of practical and on ground challenges (Jathanna et al. 2015; Elliot & Gopaldaswamy 2017; Lopez et al. 2018; Goswami et al. 2019). Some commonly used methods in elephant demographic studies are : Total count method, dung encounter rates, direct observation, telemetry location. Besides these field methods statistical approaches have also been used, comparing summaries, correlations, multivariate analyses and using presence only modelling (Oliver 1978; Burnham et al 1980; Varman et al. 1995; Baskaran & Desai 2000; Williams et al 2002; ; Kumaraguru et al.2010; Karanth et al. 2010; Yackulic et al 2013; Jathanna et al. 2015; Hedges 2016; Forrer 2017).

### *Integrating Animals into Art*

Animals have been an important source of inspiration in all forms of art. By this understanding and studying various arts we can get a sense of the human animal interactions and how man envisaged his place in the environment. According to Bleakley(2000) through art, animals emerge into three realms of human experience: biological which forms the literal realm, psychological which forms the imaginative realm and the conceptual which forms the symbolic realm. People in the past have used animals to express themselves and their world, besides being part of our material wealth, animals also form an integral part of our spiritual well-being and belief system. It is because of this close association that animals have formed an important part and have deeply embedded themselves into our arts. Besides incorporating animals in their natural forms, certain animals were also fantasied and developed as hybrids of humans and animals to be worshipped or feared. These fantastical beings have also been incorporated into various art forms (Gilbert 2002). Animals manifest into various art forms such as ceramics, wall paintings, stone sculptures, wooden furniture, architectures in stone right from seventh millennium B.C. The natural environment and animals were engaged with the human society at times in a beneficial symbiotic role and also of adversarial role, this duality in their interaction was reflected in iconography in ceramics and other art forms, as in the pottery of the Neolithic period in Anatolia (7000 BCE.) (Gunter 2002). Even in Egypt animals have been captured and projected onto their art forms as seen on the petroglyphs of the rock faces of the western and eastern deserts (W. M. Davis 1979; 1984; Hoffman 1991: 233-39; Otto and Buschendorf- Otto 1993; Houlihan

2002). Depiction of animals in arts is well documented and studied in the Indian subcontinent as well. According to Kanitkar (2005) animals have changed little in their biology however our attitude and perception of them has been continuously changing, this perception would also invariably affect their representation in art. In India animals are commonly depicted and associated with religion and often represent a certain value and trait. They are also depicted as mounts of various deities in Hinduism for example. , Lion or tiger is the mount of goddess Durga, swan is the mount of goddess Saraswati. This combination of the animal and deity became a motif on its own and subsequently was worshipped through artforms like music, paintings and sculptures etc. Not only in religion but animals form an important part of our culture and economy. They are incorporated into our handicrafts, textiles, toys, sculptures and many such modern artforms. They form the central theme in folk paintings such as Madhubani, Pichwai paintings etc. Wooden toys from Sawantwadi in Maharashtra are well known for their animal figurines. Marble sculptures of elephants from Agra are a popular with the tourists who visit the Taj Mahal. Innumerable such examples are found which display the successful integration of animals into Indian art forms.

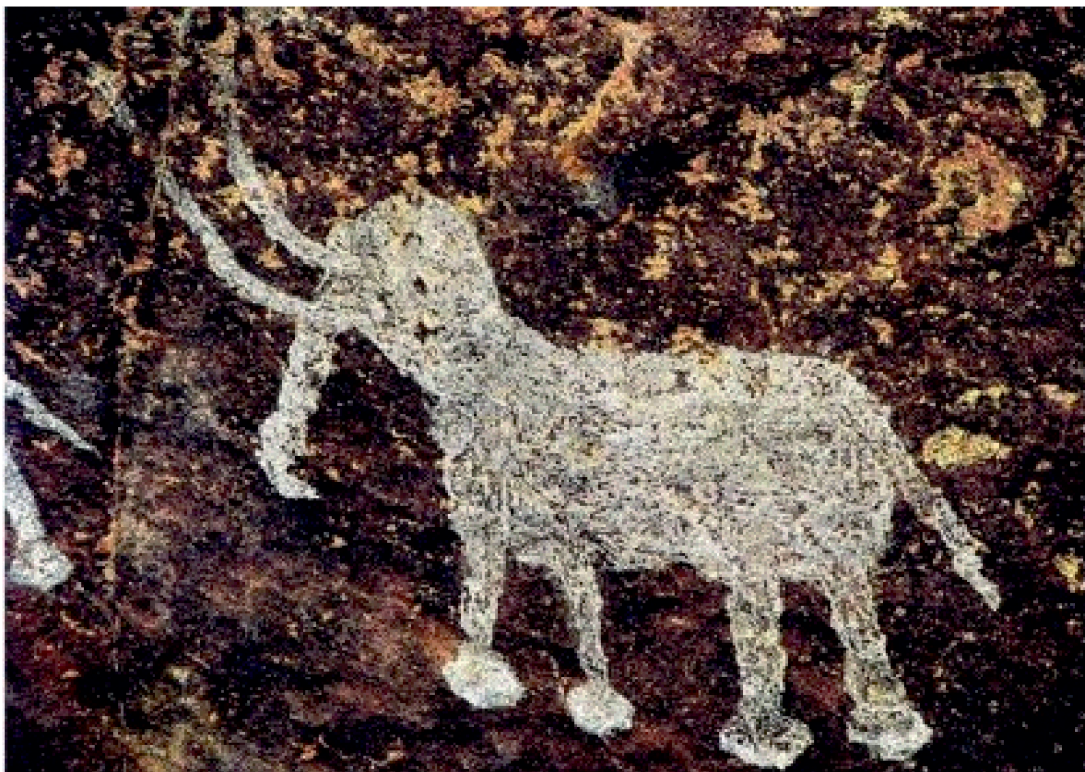
### Elephants in Rock Art

Rock art is a global phenomenon and its antiquity has been well established in different regions. In Australia the petroglyphs have been successfully dated to 45000 years (Nobbs & Dorn 1988; Dorn et al 1992; Bednarik 1992b; Bednarik 1993), in Europe the age has been assigned to upper palaeolithic period (Bednarik 1992 a; 1994 b; Bednarik 1993) and in Africa even earlier evidences have been reported (Beaumont 1992; Bednarik 1993). Rock art is significant as it represents one of the earliest expressions of what the man saw and the visual panorama. The information and inferences from rock art has proven to be a database on its own accord and has given first hand direct information on the societal norms, beliefs, rituals, tools, subsistence and contemporary flora and fauna of the time. An interesting way to gauge the cultural antiquity of the Elephant is by studying rock art. Out of the wide choice of fauna available for depiction, elephants have been well represented. From the earliest encounters, these animals have held a considerable sway over mankind and hence their portrayal is not only expected but natural (Praveen 2016). Elephants have been portrayed in different poses, postures and stances for example sometimes they are shown with their trunks and tails extended, the trunk and tail is also raised to convey anger and aggression, while the variation in depiction of trunks is also indicative of different greeting styles amongst the animal (Pearce 2009; Praveen 2016).

In the Indian subcontinent rock art has been reported from multiple sites but here the mention is made only of those with elephants on them. Starting with the rock art from the Central Indian context from the Pachmari hill ranges. These ranges are located in the present day state of Madhya Pradesh and house many important rock art sites. The rock art sites from this region were first reported by D.H. Gordon and H.G. Hunter following which Hunter carried out extensive excavations from 1932 till 1935. Based on the material evidence and rock art styles and depictions he dated the rock art of this region to be of Mesolithic and later periods (Khare 1984; Pathak 1991). In other rock art sites of Central India besides Pachmarhi such as Bhimbetka and Adamgrah the oldest paintings are those of larger wild animals in red ochre, grey or white pigments (Chakraverty 2009). Besides rock paintings Bhimbetka and Darki Chattan in the Chambal River Basin has yielded petroglyphs, these have been dated to lower Palaeolithic strata according to archaeological excavations, making them the oldest in the world and even pre dating to the Rock art in Europe (Kumar et al. 2005; Kumar 2006; Bednarik et al .2005). When dating and affixing the antiquity of Rock Art we have to keep in mind the Taphonomic principle which states that “The Antiquity and existence of Rock Art are directly related to the elements

of its survival” (Bednarik 1994). Out of all the documented sites from the Pachmarhi hills, Bhimbetka is the most famous and has also been placed in the UNESCO world heritage list in 2003. Here also Elephants have been depicted (Fig 1) . A total of sixty one images of elephants have been depicted, only eleven have been associated with pre historic periods, thirty six have riders on them, indicating to a developing social hierarchy and the remaining belong to the later periods (Pathak 2014).

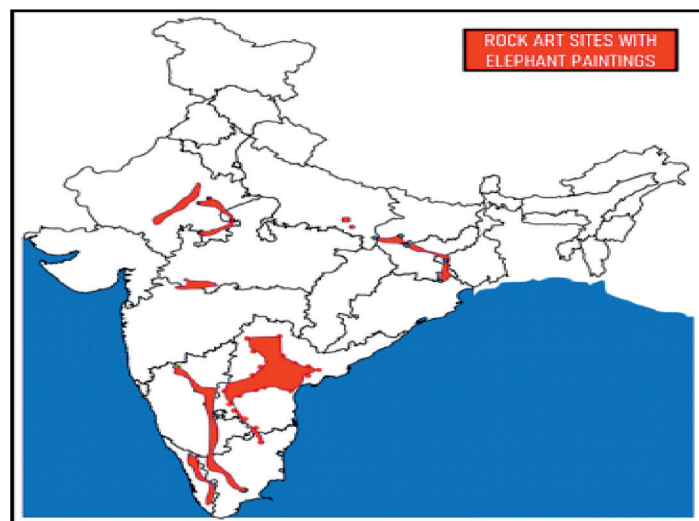
Next after the Pachmari hill complex, Karnataka has some of the richest and extensive Rock Art sites (Gordon et al. 1995; Raymond et al. 1994-1995; Paddayya 1976; Sundara 1968, 1974, 1978, 1994, 2006, 2009; Mohana 2013, 2015, 2018). The first conclusive evidence of rock art from this area was given by Fawcett in 1892 from the Bellary region (Fawcett 1892; Mohana 2018). The Raichur district comprising of Benekal forests and Piklihal regions along with Badami district are important areas for Rock Art, a majority of the Rock Art in Karnataka has been reported from the Krishna Tungabhadra River Valley (Agarwal 2005). Allchin (1960) identified three groups of paintings in Piklihal, the grouping was made on the basis of colour and pigment of paintings done in white, red ochre and the a combination of red on white background. These paintings also depicted the elephant along with other animals like bulls, lizards, sheep, snakes with stylized trees and human figures yielding swords (Allchin 1960). The Malaprabha basin is also home to many Rock Art sites, which have been studied since 1974 by various researchers (Wakankar and Brooks 1976; Mathpal and Neumayer 1981; Neumayer 1993; Sundara 1994, 2006; Mohana 2017). The sites are dated approximately to be of Late Stone age period. Naturalistic depictions of elephant with the local wildlife is found in these regions (Mohana 2017). Elephant figures have again been reported from the Chhotanagpur hills and some areas of Jharkhand, these paintings are naturalistic in their style and along with elephants encompasses other animals such as tigers, horses, dogs, deer, boars, bison, monkeys, humped bull (Prasad 2006). Andhra Pradesh has also yielded some Rock Artsites, here also



**Fig 1: Representative Image for reference of an elephant in Rock art at Bhimbetka  
(Image Courtesy Indian Heritage sites)**

elephants have been depicted and have been dated to the Historical Period. The paintings of historical period show stratification of society and rich display of religious symbols along with personages, shamans and inscriptions. Elephants from this period is generally depicted as a mount for warriors or local leader (Chandramouli 2002). Villupuran district in Tamil Nadu is known for rock art, the shelters are located in hilly terrains of the Eastern Ghats, Western Ghats and in the Nilgiris hills. The sites have yielded paintings belonging to Mesolithic Period, Neolithic, Iron Age and the Early Historical Period. The subjects matter of Tamil Nadu rock art also depicts elephant besides other animals like deer, buffalo, wild boar, tiger, horse, fish, cow and calf, rhinoceros, goat, man riding horse & cattle bird, an archer, human figure with weapons, star, hand prints, floral designs, fowl, ladder, monkeys and mongoose (Sridhar 2005).

Rock art was first reported from Kerala by Fawcett in the year 1901 at Edakkal where petroglyphs were found. However interest and momentum in rock art research increased in this state after 1974 when S.P Thampi made discoveries in the regions of Ezuthala, Attala, Kulukkala sites in the Maraiyur regions (Thampi 1974, 1984; Darsana 2011; Kurian 2012; Praveen 2016), since then many sites and localities are being actively reported. Elephants are very important cultural and religious symbols in Kerala and have a deep rooted association and relationship with man. Ezhuthu Guha a painted shelter is well known for its large human figures has elephant depictions along with other local fauna (Mathpal 1998). Elephants are also found in the Eddakal rock shelters (Kumar 2014; Praveen 2016). At Ezuthala Elephants have been shown as mounts and in naturalistic style (Thampi 1976; Das 2014; Praveen 2016). At Ezuthalamadi Elephants have been shown as mounts carrying weapon yielding warriors in white pigment. At Kodanthoorkud a Petroglyph of an elephant is carved on the bedrock within the village (Praveen 2016). To summarize there is clear evidence of elephants being depicted from the earliest known rock shelters and sites therefore attesting to the fact that their artistic rendition in the Indian subcontinent is quite old and forms an important part of our understanding. (Kurian & Benny 2011). In 1974, S.P. Thampi made some discoveries; they are Ezhuthala, Attala and Kulukkala sites in the Maraiyur region of Idukki District (Thampi 1974 and 1984; Darsana 2011; Kurian 2011). Later on, many discoveries were done in the region by a number of persons and they brought to light many sites. Other petroglyph sites reported in the same period are from Tenmalai, Kollam District (Rajendran 1985) and Pandavanparaat Ancode in Thiruvananthapuram district (Gurukkal and Varrier 1999). Refer to Map 2 for an idea about the spread of rock art localities with elephant depiction.



Map 2: Rock Art Localities with Elephant Paintings (Modified from Google Images)

## Textiles & Motifs

India is one of the few countries which showcases a continuity of traditions and heritage from its distant and antique past encompassing its living heritage and customs today. It is particularly rich in terms of its textile industry with each state and region having its own distinct textile. Indian textile industry is amongst the oldest in the world, particularly the cotton industry. The cultivation of cotton, thread extraction and dyeing techniques have been dated to the Indus Valley Civilization to nearly 2500 BC and to even Mehargarh. World over India was renowned for the quality and variety of textiles, so much so that in ancient Greece and Babylon 'India' was synonymous for 'Cotton'. Besides cotton Indians wore garments made out of silk, wool, hemp, flax and animal skins (Gillow & Barnard 2002; Gusain, 2014). Specific words were such as *Ksauma*, *Kauseya*, *avikayoh*, *karpasa* were used to refer to garments made of linen, silk, wool and cotton (William et al. 1921; Keith, 1995; Berriable, 1995; Saundararajan, 2002). Cotton has also found mention in Rig Veda and Manusmrit and multiple such texts (Gandhi 1930). Even Hindu epics like the Ramayana and the Mahabharat have described the garments and textiles made up of cotton, linen, and silk. Buddhist also mention these processes (Kumar 2016). The Ajanta paintings in this respect provide a detailed guide to the type and variety in the Indian textiles, techniques like resist dyeing, tie and dye, ikat and brocade weaving. Broadly three main types of techniques have been identified and categorized as such, namely: 1) loom-weaving and decorating (2) resist-dyed work, which includes tying and dyeing, as well as painting and printing processes (3) embroidery (Kumar 2016). The diversity and variety in climates and eco zones have resulted in cultivation of a large number of natural fibres. Various regions around the country have developed their own local textiles based on the climate, condition and need. Artisans and workers over the years have developed an expertise in processing and production of different kinds of textiles from the same raw material, they have further incorporated distinctive prints, embroideries and weaves to developing a plethora of styles and motifs. India's textiles have played an important role in its cultural identity in the past and continues to do so even today. In the past global trade networks and markets were formed on the basis of Indian textiles and fabrics and they continue to do so today as well.

## Motif

A motif can be explained as the most basic unit of design, it is the smallest unit of any given pattern, it helps in the design composition. Motifs are repeated to create a specific pattern, these patterns are further repeated to form a design, most commonly motifs are made from geometrical shapes or a combination of geometric shapes. They are broadly categorized into four types: Geometric, Natural, Abstract, Stylized. This study focuses on the natural elephant motifs. Natural motifs are made inspired by nature and the environment around. They depict animals, flowers, human interaction with nature. These motifs are known as novelty patterns and are rare as compared to the other stylized motifs (Azmat & Hadi 2018). A wide range of motifs have been identified to be indigenous to India. Some were developed from objects which were in daily use whereas other were made on a stylized abstract format. Some important and common natural motifs are : The Kalash motif, The Peacock, The Parrot, The Elephant, The lotus and The mango. The earliest of these motifs were developed using the embroidery (Yarwood 2011). The Kalash motif, thought to be a particularly important and auspicious motif, is regarded as the holy ceremonial jar and is central to all rituals and ceremonies in Hinduism. It is represented as Purna Kumbha and represents the womb with its fertilizing waters. This motif is widespread and is seen on the carvings on sculptures and paintings. With time craftsmen started using it as motif in the enrichment of textiles through weaving, embroidery or printing (Veenu et al. 2016).



Another common motif is that of a Peacock, and also the National Bird of India. It is also one of the oldest motifs and has been found on the Indus Valley pottery (Mughal 1990.) Buddhist sculptures, artefacts from the Gupta period and Mughal miniatures, peacock inspired designs have been found in art from different ages. The peacock is thought to be the symbol of immortality, courtship and fertility. In mythology it is depicted as the mount of Goddess Saraswati and is mentioned in Rig and Atharva Veda. The peacock has been represented and selected as the principle motif in embroidery of many states, Phulkari of Punjab, Kathiawar & Kutch mirror work, Patola from Odisha all incorporate the peacock motif (Kaur & Gupta 2016; Veenu et al. 2016).. The lotus motif is also quite popular. It is regarded as the symbol of eternal order of the union of earth, water and sky, it represents the power of life. The flower is represented with both its opening and closing petals indicating the ups and downs of life and the revamping of one's characteristics. Its petals also represent the multiplicity of the universe. There are various forms of lotus motifs like *astadal padma* – eight petal motif – to the *satadal* – hundred petal motif. According to Garbhopnishad, an ovary has been compared with a lotus. It also symbolises prosperity and material wealth, associated closely with the Indian goddess Lakshmi. In Buddhism also lotus is important as Buddha has been depicted seated on a lotus, Padmapani translated to 'lotus in hand' is an important Bodhisattva. In Indian textiles, lotus is used in varied forms as a motif (Chatterjee 2017; Kapila 2017). In textiles it is commonly found on the Chamba rumal of Himachal Pradesh, Phulkari of Punjab, Kasuti of Karnataka, Kantha of Bengal, Picchvais of Nathdwara or Gujarat embroidery as well as Ikats and Painthani (Veenu et al. 2016). The traditional motifs and designs are not only venerated but have a deep symbolic meaning. They are influenced by the culture, environment, activities and requirements of the people. Indian artisans have created worldclass motifs, patterns which represent an exclusivity in style, colours and format. Motifs like lotus, conch shells, fish and elephants represent the religious philosophy of the people and they are integrally associated with concept of bringing good-luck, health and prosperity.

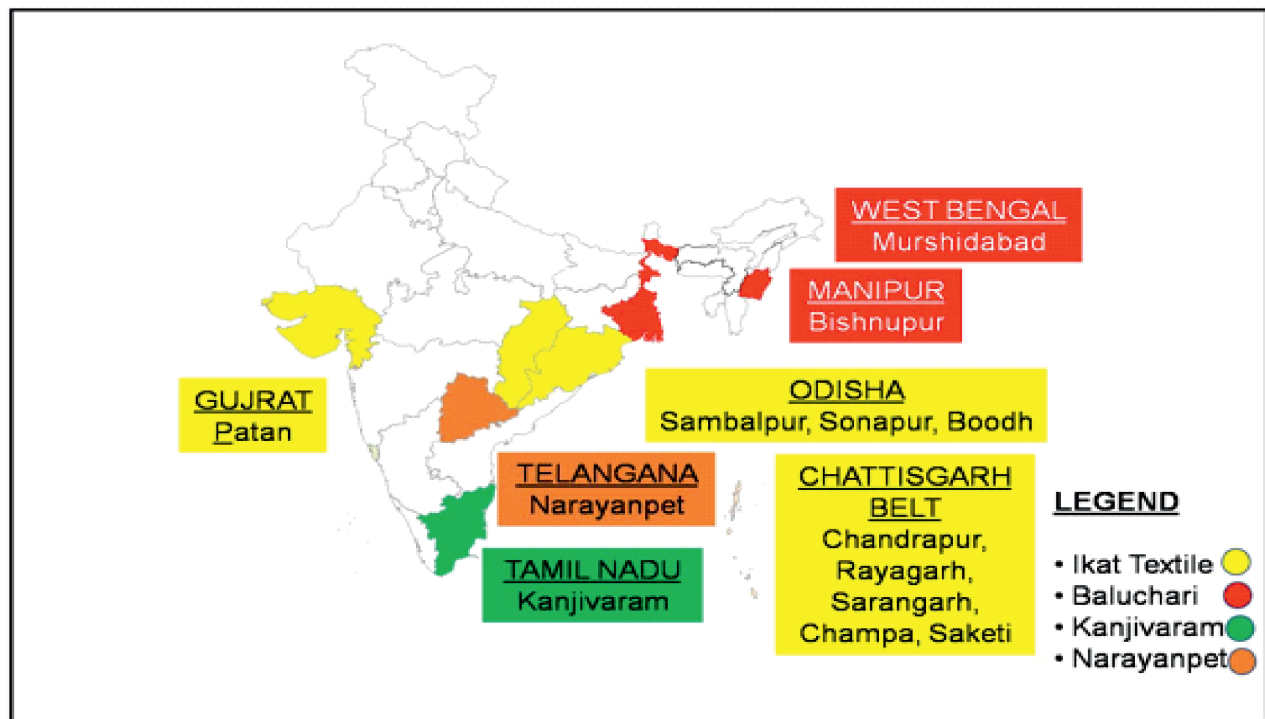
### The Elephant Motif

Besides rock art the earliest iconographic representations of the Asian elephant has been documented from the Indus valley period, Elephants were depicted on the seals discovered at Mohen jo daro, Harappa and Chanhudaro (Hasmukh 1978; Tagliatesta 2015). Not all seals gave a stylized depiction,



**Fig 2 :** Some common elephant motifs, **A:** Double weave Ikat weave Heidi & Helmut Neumann Collection, Switzerland, **B** Wall Hanging, 20<sup>th</sup> Century: "The Fabric of India" at Victoria & Albert Museum, London.

and some seals gave a very actual and true rendering of this animal (Joshi and Parpola 1987: II, 133; M – 1159; Tagliatesta 2015). Being a natural motif the elephants motifs were inspired by the nature and the interaction of this animal with its environment. From time immemorial it has formed an important motif in the designs and patterns of Indian Art. The elephant called *Yanai*, *Gaja*, *Hathi*, and *Āne* among other names, is one of the most common motifs on Indian textiles (Mallika 2018). It is well represented in all the major religions which have dominated the country from time to time; Hinduism, Buddhism and Jainism. The elephant has some worthy characters like humility despite size, ability to command respect, large ears indicative of being good listeners, broad foreheads a sign of wisdom and tolerance and calm nature, because of these attributes the elephants have a deep rooted significance in our culture and mythology. It signifies the virtues of power, wealth, prosperity, nobility. In Buddhism each part of the elephant embodies a set Buddhist principle. The elephant is associated with royalty and is the common mount for kings and emperor in India. The elephant is used to portray scenes of battle and military expeditions and royal processions. A large number of carvings of elephants have been found on the walls of caves, temples, and even monasteries. This may also be indicative of their common occurrence and man's close association with it on a day to day basis (Rebecca 2017; Verman 2016). As a result of its importance and representation, the elephant motif has been depicted in textiles of many states of South, Gujarat, Assam, Telangana (Map 3). Now a days the motif has even been simplified and stylized abstract forms are used.



MAP 3: Areas Where Elephant motifs are most common (Modified from Google Images)

The best way to study authentic motifs today are on the indigenous garments like sarees. It is one of the oldest garments of unstitched cloth. The Saree itself is akin to canvas on which the artisan and weaver realises her or her designs (Patil 2012). A Saree or Sari is basically unstitched cloth of 5-9m in length. It is draped by women and this draping style differs from place to place. It is also one of the oldest garments still in use today and can be dated to Indus Valley Civilization. The word "Sari" is derived from the Sanskrit and the Prakrit (pre-Sanskrit language) root, "Sati", which means, "strip

of fabric". Interestingly, the Buddhist and Jain works particularly the Jataka tales describe a women's apparel, called the "Sattika, which could well have been similar to the present-day saree ( Selvan A). Due to its long history, use and also sanctity it becomes the textile of choice as the traditional sarees would strictly follow set patterns and designs to maintain their authenticity and value. The temple sarees from the Southern states have elephant as a major motif on them. This can be seen in the Konrad work from Tamil Nadu, Narayanpet sarees which depict elephants upon golden borders along the edges. The most famous textile work from the south- the Kanjeevaram sarees also feature elephant motifs on their body. Elephants are part of Kanchipuram's treasures of legacies and stories and have been an inspiration to weavers for centuries. At times the elephants are depicted in an uninterrupted army marching in harmony along the borders, at other times as if spread all over, each in quiet thought and sometimes dignifying a narrative with poise and majesty (Mallika 2018).

The elephant motif is particularly important in the Ikat work (Fig 2). The term Ikat is derived from the Malayan word 'Mangikat' which means bind, knot or wound around. Ikat textiles have been reported since 4<sup>th</sup> century B.C as 'patalika" (Mehta 1961; Mohanty & Krishna 1974; Behera et al.

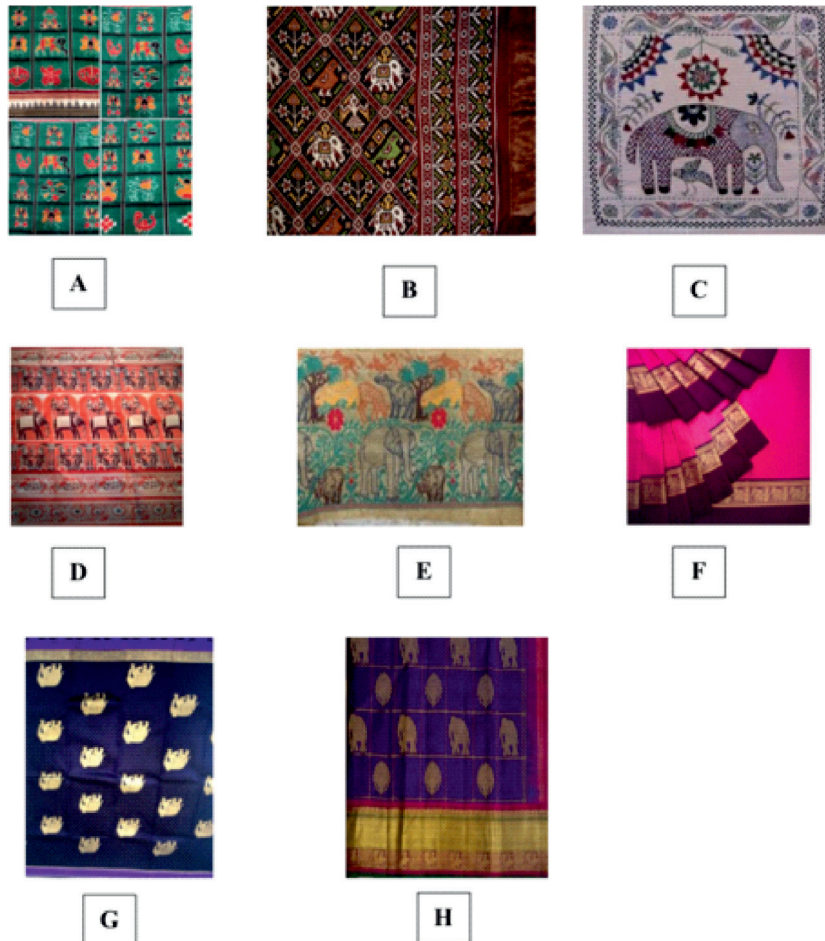


Fig 3: **A:** Nabhakothi from Orissa Courtesy Vijayalaxmi Chhabra, **B :** Patola Double weave Saree <http://www.dsource.in/resource/patola-saree-weaving-patan> , **C:** Kantha work from Bihar Liverpool Metropolitan Cathedral, **D:** Baluchari Courtesy Dola Mukherjee, **E:** Embroidery on Muga Silk, Assam Directorate of Handlooms & Textiles Guwahati, **F:** Narayanpet Border, Courtesy Muslin Trails **G:** Kanjeevaram Silk Saree Courtesy Google Images , **H:** Gadwal Silk Courtesy Sarangi

2019). It is practiced in the states of Gujrat, Rajasthan, Andhra Pradesh, and Odisha. The most famous textile showcasing Ikat work is the Patan patola saree of Gujrat. It is a double weave Ikat and employs both warp and weft. The elephant motif is intermingled with geometric patterns and stripes. Warp and weft technique is used in Pochampally Ikat for the same. The Patan patola work from Gujarat has the elephant as a major representative motif in Nari Papat Kunjar design, Rattan Chok Bhatdesign (Bühler & Eberhard 1979; Sonee; Ranjan & Ranjan 2007; Mohan 2019). Another textile which showcases the elephant motif is the Baluchari silks from Murshidabad in West Bengal. This textile was patronized by the nawabs and the aristocracy but however lost favour once the Nawab culture fell. It was revived again in 1956 by Shri Subho Tagore and Smt Kamla Devi and today is a symbol of artistic language of West Bengal. The textile is produced by highly skilled weavers who employ the draw boy loom. Presently this industry is located at Bishnupur (Sen & Chakarborty). The famous Banarasi silk sarees boast of the 'shikargarh motif' which is basically an elephant carrying a hunter (Singh 2008). Another popular saree is the Gadwal Saree from Gadwal district of Telangana. The saree has been inspired by a cotton field, the body is woven separately and later interlocked with silk borders and pallu. The elephant motif is commonly placed within the geometric designs in the saree (Fig 3) (Mallika 2018)

## Discussion

Nowadays multiple approaches are being employed to study populations and spread of elephants. These studies range from simple documentation of sightings and tracking to more advanced methods of molecular and genetic assessment, generating models for representing spatial distribution (Georgiadis et al. 1994; Gray et al. 2011; Kumara et al. 2012; Gray et al. 2014; Alamgir et al. 2015). In this paper a simple proxy is being prescribed by basically studying traditional motifs on textiles indigenous to a particular place and assessing importance and prevalence of the animal. It's a mere exercise to look at demography differently. Also since elephants have such a deep rooted cultural connect it is interesting to correlate their natural occurrences along with some cultural symbols. A common observation while studying the place of origin of the motifs was that the animalistic motifs like the peacock, hansa and elephant etc. directly reflected their presence in their surroundings. One can also argue that these are quite common and are widespread, but the same cannot be said for motifs like the conch, which is generally found in the localities of the coastal areas. Of note are the rock art representations of the elephant, if we look at this data carefully we can clearly see the most number of depictions of the animal are in areas where active populations resided in the past or continue to do so in the present. In early rock art they are depicted in the hunting scenes and in the repertoire of the local fauna that man encountered from time to time. They remain in the background during the Neolithic where the cattle formed the centre stage of the paintings and elephants retreated to the safety of the forests. In the historical period the paintings of the elephant again features and is shown as being used as mounts in war and other religious processions. Over the years many researchers like Allchin (1960, 1963), Bhatt (1983), Fawcett 1901, Foote 1916, Ghosh 1932, Gordon & Allchin 1955, Mathpal 1990b, Sundara (1974, 1984, 1985, 1987, 1994, 1996), Thampi 1996, Wakankar (1975, 1985, 1987) have worked on rock art in India to understand and provide a correct interpretation to them.

The elephant is mostly depicted on the textiles of Gujrat, Odisha and the Southern States. (Map 3). In Gujarat it is crafted on their patola textiles and in Odisha it is part of the Nabhakoti design. Similarly the elephant motif is also a specialized and a localized design which is of a regional character. In the above maps (Map 1, Map 2, Map 3) we can clearly see that this design was developed and is still predominantly being crafted in areas where elephants were and are still found. The elephant motif is traditionally more common in the textiles of south where it is depicted not only in their other artworks such as bronze work,

sculpture, dolls, pottery. The states of south India even today hold wild as well as captive elephants and are also home to the elephant national reserves. It is here that the highest number of Asian elephant *Elephas maximus indicus* is found in the wild, therefore it becomes only natural that elephants have found a widespread representations in the artworks of these regions. Besides motifs occurring in places of active elephant populations, these designs are also found in areas where there are no elephants today, possibly indicating towards past presence of this animal or a cultural reverence by the designers. For example the original weavers of the Patola had interacted with elephants and incorporated them in their weaves, and they continued to represent them even when they migrated to different locations. In the artworks of Rajasthan where 'Hathi' 'Ghoda' pair is expressed in multiple art forms, whether it be paintings, terracotta, jewellery etc. An explanation to this is could be that Rajputana made ample use of these both in their armies and culture. Where the elephant was a symbol of royalty and prestige and the horse an indispensable part of their armies as the cavalry unit. If we look further to the east, the elephant commonly called as 'Raja', is a common feature on their textiles, be it the famous Naga shawls or the Muga silk Mekhela Chador. They are frequently depicted on the borders of the textiles in the form of embroidered rows generally in the combination of red and white. Of note is that like the South even this region has an active elephant population and has close human animal interaction.

In this study a simple observation has been developed into an idea that elephant motifs are common and native to places with elephants. It is a very preliminary and nascent and has the scope to be further developed in the form of proper categorization of different kinds of elephant motifs be it on textiles or on other art forms the communities which are involved in developing those, why certain design motifs are used in a particular way. Further study can also help in identifying tribal communities which use elephant motifs and interacting with them to understand the importance of this animal to them. The ethnographic knowledge can be used to add to the pre-existing knowledge about the elephants in the land.

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