



Sample
Handout

**History Optional
Total Enrichment
Program 2021**

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HISTORIOGRAPHY ON DOMESTICATION OF ANIMALS AND PLANTS

WHAT IS THE DEBATE ABOUT?

- Why and how the domestication of plant and animal started?
- What were the factors responsible for the domestication of plant and animal?

Perspective of V. Gordon Childe - Environmental changes were responsible for domestication

- One of the earliest attempts to find answer to the question of why did some groups of people start domesticating animals and plants despite thousands and thousands of years of hunting and gathering, was made by V. Gordon Childe, who suggested that environmental changes at the end of the Pleistocene were the impetus towards food production.
- Childe argued that about 10,000 years ago, the climate in parts of West Asia became drier due to a northward shift of the summer rains.
- This desiccation (i.e., drying up) led to a concentration of people, plants, and animals close to water resources such as rivers and oases.
- This enforced closeness eventually led to new relationships of dependence between humans, plants, and animals, resulting in domestication.
- **Limitation of Childe's theory:**
 - Childe's theory was questioned by **Robert J. Braidwood**, who rejected the focus on environmental change as the crucial factor leading to agriculture.
 - He pointed out that environmental changes had occurred within the Pleistocene as well and had not led to agriculture.

Perspective of Braidwood - Domestication was experiment conducted by humans in Nuclear zone:

- **Braidwood** argued that domestication took place in certain nuclear zones, which supported a variety of wild plants and animals that had the potential for domestication.
- In such areas, domestication was the natural outcome of human experimentation and people getting to know their environment better.
- **Limitation of Braidwood's theory:**
 - This theory does not really explain the pressures or incentives that may have led to domestication.
 - There is ethnographic evidence of many hunting-gathering communities who know their environment very well and are even aware of agriculture, but do not see the point of practising it themselves.
 - There have to be good reasons for a community to radically change its way of life.
 - Braidwood's theory was rejected by **Lewis R. Binford** (1968) on the grounds that it could not be archaeologically tested, and that there are some specific, concrete factors that can explain the beginnings of agriculture.

Perspectives of Lewis R. Binford - Demographic stress was responsible for domestication:

- Binford asserted that ethnographic evidence indicates that in areas where environment and population have remained constant, a stable balance between the human population and food resources is achieved and people do not have to look for new sources or strategies of getting food.
- Such groups in fact tend to live at food consumption levels far below the resource potential of their environment.

- Two factors can upset the balance between people and food:
 - Stress produced by environmental change or
 - Stress produced by demographic (population) growth.
- Binford identified two kinds of demographic stress—
 - **Internal demographic stress**, which occurs when the number of people within a community increase; and
 - **External demographic stress**, caused by immigration into an area by people from another area.
- In the context of the origins of agriculture, Binford emphasized external demographic stress.
- He argued that at the end of the Pleistocene era, as a result of a rise in sea levels, people living along the coasts migrated to less populated inland areas.
- This upset the people–food equilibrium in inland areas and gave an impetus to the search for new strategies to increase food supplies.
- **Limitation of Binford theory:**
 - Evidence of a migration of people from the world’s sea coasts to inland areas at the end of the Pleistocene is lacking.
 - Internal demographic stress may have been a factor in upsetting the people– food balance in some areas, but it does not make sense to talk about ‘over-population’ and ‘food crisis’ in times when human communities were small and resources abundant.

Perspective of Kent Flannery - Negative and Positive Feedback mechanism was responsible for domestication:

- **Kent Flannery** (1969) shifted the focus from the search for an event that might have led to the beginnings of food production **to the process of food production** itself and the adaptive advantages of plant and animal domestication over foraging and hunting.
- He distinguished **two types of food procurement systems—negative and positive feedback food procurement systems**
- **Negative feedback food procurement systems** involve a balanced exploitation and use of various food resources within an area and discourage any change.
- **Positive feedback systems** are those in which the productivity of resources actually increases as a result of human interference and exploitation.
- This hypothesis explains why people found agriculture more advantageous than food gathering.
- **Limitation of this theory:**
 - This hypothesis does not explain why the initial experiments in domestication were made in the first place.

Recent findings - Conclusion:

- Recent studies have suggested that the **key may in fact lie in environmental change**, although not the sort suggested many years ago by Childe.
- In many parts of the world, the **Holocene** was marked by the onset of a milder, warmer, wetter climate. Such changes may have led to an expansion of the natural habitat area of wild cereals that had the potential for domestication.
- Perhaps it was not an environmental crisis but **amelioration that was responsible for the beginnings of domestication.**
- Given the variety in ecology and resources in the various centres of early plant and animal domestication, it is very much possible that different factors may have been involved in different parts of the world.

HISTORY OPTONAL TEST SERIES – MODEL ANSWER

1. Mesolithic rock cut architecture of India not only reflects the cultural life of the times but also a fine aesthetic sense comparable to modern painting. Critically evaluate this comment.

APPROACH:

Introduction:

- Give overview of Mesolithic architecture i.e. where it has been found, number of sites, name of significant sites etc.

Body:

- Explain how Mesolithic rock cut architecture represents cultural life.
- Explain how Mesolithic rock cut architecture represents a fine aesthetic sense comparable to modern painting

Conclusion:

- Conclude with remarking that Mesolithic art though developed in contemporary times, was just a beginning of rich tradition of art in India.

Prehistoric period which is ranging from Paleolithic to Harappan period marks the beginning of the artistic history in India. Within this era, the Mesolithic rock cut architecture saw the first use and modifications of the early caves, a fact manifested by archaeological evidences. The specific feature of the Mesolithic rock cut architecture is the paintings on rock and rock engravings (petroglyphs) done in rock shelters or natural caves.

In India over 150 Mesolithic rock art sites have been found. These rock art sites are concentrated in Central India. These sites can be found at Bhimbetka, Lakhajuar, Kharwar, Jaora and Kathotia in Madhya Pradesh. Further some are also found in Sundargarh and Sambalpur districts of Orissa, Ezhuthu cave of Kerala, Sohaghat of Uttar Pradesh etc. These paintings depict the life as well as culture in mesolithic ages and show striking thematic similarities across the country.

Mesolithic art reflects the Cultural Life of the times in the following ways:-

- **Significance of Animals:** Animals predominate in Mesolithic art. Some representations also indicate animals as the part of hunting rituals. For instance ***Painting of Mythical Boar at Bhimbetka***. The Mesolithic people gave so much significance to animals because they played a crucial role in the subsistence economy.
- **Hunting Activities:** The Mesolithic art also depicted both the organization as well as tools used in the hunt. Some scenes of hunters hunting singly or in groups, sometimes wearing masks and head dresses crowned with antlers and horns. ***The instruments used in hunting scenes were also depicted***. For example some men carry sticks, spears, bows and arrows, or slings. Whereas some men are also depicted unarmed. Another painting of hunter with basket/net filled with animals at **Jaora** has also been found.

- **Material culture and dressing:** Mesolithic art also indicates the ornaments and the dresses Mesolithic people wore. The hunting paintings reflected ornaments such as necklaces, bangles, wrist bands, elbow bands, and knee bands with tassels. Some men wear loincloths, probably made of leaves, animal skin, or pieces of tree bark. Men wear their hair loose, women braided.
- **Idea of Differentiation based upon status:** Mesolithic art shows that some figures are broad and decorated with geometric designs, and from their attitude seem to represent men of authority.
- **Rituals of the age: Masked dancers** (referred to by prehistorians as 'dancing sorcerers') may represent ritual specialists. Hand, fist, and finger prints are also found, similar to those that people make on their houses these days on auspicious occasions.
- **Division of labor based upon gender:** The Bhimbetka paintings reflect a division of labor on the basis of gender. Men hunt and women are shown gathering and preparing food, for instance grinding food on querns. For instance women have been depicted feeding a pig and preparing food in a painting at Kathotia.
- **Depiction of Dance:** Some paintings depict the dance activities as well. In a painting at Lakhajoar, dancers convey a sense of rhythmic movement occasionally they lose their balance and fall.
- **Domestication of Animals:** Paintings at Bhimbetka depict that hunters are sometimes accompanied by the dogs.

Along with this the Mesolithic sites paintings depict social life, sexual activity, child birth, rearing of children and burial ceremony. *This makes it clear that Mesolithic man had developed an aesthetic sense, since most of the painting depicted the nature around the men.* Depiction of emotions, unity and harmony are prime features of aesthetic arts.

Mesolithic art depicted Aesthetic Sense in Comparison to modern paintings in following manner:

- **Diversity of colors: Sixteen colours or shades** can be identified, with white and light red used most often. This kind of diversity of colours can be compared to modern paintings whereby multiple uses of colours can be seen.
- **Variety of paintings:** Some paintings are **monochrome**, while others are **polychrome** which shows the developed sense of art of prehistoric times.
- **Presence of both abstract and realistic paintings:** While some of the animal figures are rather abstract, many of them are very **realistic**. Animals are sometimes shown in outline; in other instances their bodies are decorated with designs. A few paintings are in the '**x-ray style**', showing the inner organs, including fetuses in the womb of female animals.
- **Product of imagination:** There are also fantastic animals—the famous Bhimbetka 'boar' which has the body of a boar, but a snout like a rhinoceros, the underlip of an elephant, and the horns of a buffalo.
- **Coexistence of paintings with engravings:** An interesting feature of the rock art of Orissa is the co-existence of paintings and engravings in the same shelter. Also, the art is mostly **non-figurative, with an emphasis on abstract patterns and decorative designs, both geometric and non-geometric**.
- **Enigmatic painting:** An **abstract painting** has been found in a rock shelter at Jaora (MP) which reflects a view of the world consisting of air, earth, and fire.
- **Depiction of youthfulness:** Children are painted running, jumping and playing. Community dances provide a common theme.
- Though animals were painted in a **naturalistic style**, humans were depicted only in a **stylistic manner**. Mesolithic paintings at Bhimbetka and other sites also depict men and women, young and old. **Male figures** often look like **matchsticks**; **women** are sometimes given **fuller forms**.

All this shows that prehistoric art of the Mesolithic rock cut architecture reflected understanding of nature and reflected appreciation of beauty and artistic taste, **just like that of modern paintings.**

Due to these qualities of the Mesolithic art, there has been a growing interest in the exploration of the new sites. The work of **Vishnu Wakankar on Central India** prehistoric art sheds light on various qualities of the Mesolithic art. Further, the same significance has also been given by **Jean Clottes, French Prehistorian to the Mesolithic art.**

VALUE ADDITION BOX:

Representative Historians:

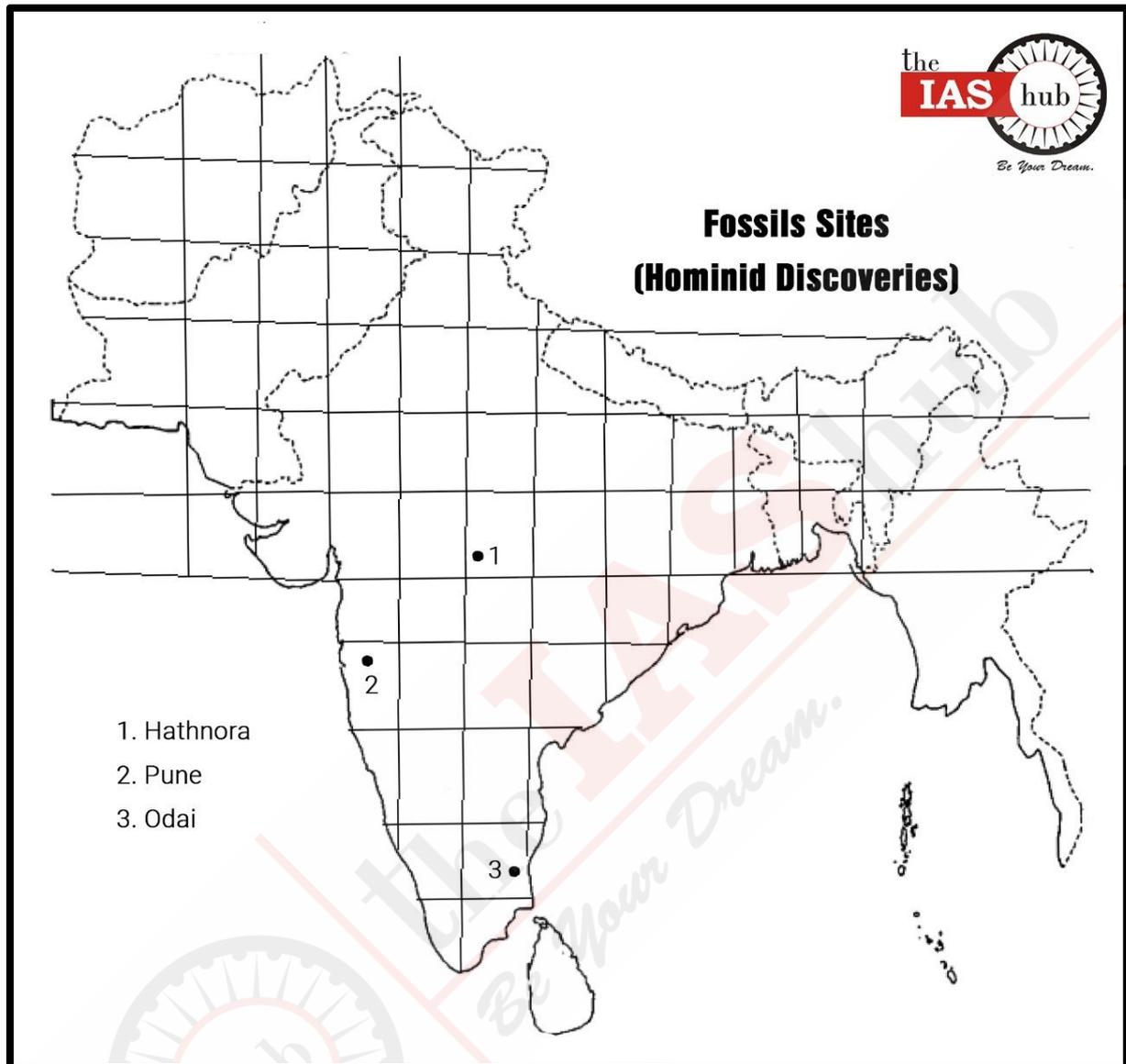
- **Vishnu Wakankar:** Also known as Pitamah of Indian rock art school & discovered the Bhimbetka site in 1957.
- **Jean Clottes:** According to him Mesolithic represents the fame that Indian rock art had just started to achieve.

Key Words/Points:

- Polychrome, Monochrome and Engraved Paintings
- Schemes of Hunting, Domesticated animals and women performing chores
- Mystical Boar at Bhimbetka
- Masked dancers
- X Ray style paintings

HISTORY PRECISION MAPPING PROGRAM

FOSSIL SITES – HOMINID DISCOVERIES



Hathnora	
Geographical Marker	<ul style="list-style-type: none"> It is located on the northern bank of the Narmada River, in Sehore district, Madhya Pradesh.
Timeline	<ul style="list-style-type: none"> Estimated dates of these finds range between 0.5 to 0.2 mya.
Type of site	<ul style="list-style-type: none"> Pre Historic site
Historical Significance	
Material Discovery	<ul style="list-style-type: none"> 'Narmada skull' i.e. the fossilised skull of Homo erectus has been discovered. It belongs to a woman of about 30 years of age. Discovered by Arun Sonakia. A Hominid Clavicle (Collar Bone) has also been found, along with some fossils of vertebrates and some Acheulian tools. Animal Fossils are also found.
 <p>Side view of Narmada Skull</p>	

Pune	
Geographical Marker	<ul style="list-style-type: none"> It is located on the bank of the Mula-Mutha river in Pune district, Maharashtra
Type of site	<ul style="list-style-type: none"> Pre Historic site
Historical Significance	
Material Discovery	<ul style="list-style-type: none"> Two human mandibles of an adult male and female Homo sapiens found. Tools belong to middle Palaeolithic period discovered. Discovered by H. D. Sankalia and S. N. Rajaguru.
 <p>Representative picture of Mandible Fossil.</p>	

Odai	
Geographical Location	<ul style="list-style-type: none"> It is located in the Villupuram district of Tamil Nadu
Type of site	<ul style="list-style-type: none"> Pre Historic site
Timeline	<ul style="list-style-type: none"> The age of fossilised baby skull is 1.66 lakh years old.
Historical Significance	
Material Discovery	<ul style="list-style-type: none"> Fossilised Human Baby Skull found from the Ferricrete at Odai. Human evolutionary stage the Odai human fossil, named "Laterite Baby" belongs to the Homo sapiens (archaic). It is the Second Oldest human fossil, next to the Narmada fossil, from India. It is the first ever discovered human fossil within the ferricrete. Microliths and Upper Palaeolithic tools also discovered.
 <p>Fossil view within Ferricrete layer.</p>	