

CC-1/GE-1: HISTORY OF INDIA FROM EARLIEST TIMES UP TO 300 CE

IV. THE VEDIC PERIOD: POLITY, SOCIETY, ECONOMY AND RELIGION, IRON AGE WITH REFERENCE TO PGW AND MEGALITHS.

NOTE-2

IRON AGE WITH REFERENCE TO PGW AND MEGALITHS.

All over the world, the iron age comes after the copper-bronze age. The evidence of iron lumps, pieces, or artefacts from chalcolithic levels at sites such as Lothal, Mohenjodaro, Pirak, Allahdino, Ahar, and Gufkral indicates that certain chalcolithic communities were familiar with iron and were able to smelt it from the ores. Iron may have initially been extracted accidentally in the copper-smelting furnace when sufficiently high temperatures were attained, if there was iron oxide in the copper ore, or if a haematite flux was used to smelt these ores. But this represented an initial, experimental stage. The large-scale use of iron and the achievement of technical finesse in iron working was something that happened gradually and at a later stage.

The 'Iron Age' in India denotes the period between the first general appearance of iron as a smelted metal and the beginning of early historic period. The actual chronology of this 'Age' varies but falls between the early part of the second and roughly the second quarter of the 1st millennium BCE.

Copper ores are not as widely available as iron ores, and it is possible that a shrinking of trade networks may have given an impetus towards the increasing

replacement of copper with iron. This was especially so once the requisite technological knowledge of iron smelting and working had been achieved, and people realized the superiority of iron over copper and bronze in terms of hardness and durability.

Evidence from later Vedic texts (cited in earlier sections in this chapter) suggests familiarity with iron and the use of iron in agriculture in the Indo-Gangetic divide and upper Ganga valley in c. 1000–500 BCE. The evidence from archaeology gives more detailed and specific evidence for the beginning of iron technology and the beginning of the iron age in various parts of the subcontinent.

At least six early iron-using centres can be identified in the subcontinent: Baluchistan and the north-west; the Indo-Gangetic divide and the upper Ganga valley; Rajasthan; eastern India; Malwa and central India; Vidarbha and the Deccan; and South India. All these centres are located in or near iron ore resources and all of them have given evidence of pre-industrial smelting.

SOUTH INDIAN MEGALITHS

In Vidarbha, Maharashtra and the region further to the south up to the tip of Indian peninsula, which is also a rich iron-ore bearing area of the subcontinent, the Iron Age is dominated by a megalithic burial complex.

The word ‘megalith’ comes from two Greek words, megas meaning great or big and lithos meaning stone. Megaliths include different kinds of monuments that have one thing in common—they are made of large, roughly dressed slabs of stone. In the Indian subcontinent, they occur in the far south, the Deccan plateau, the Vindhyan and Aravalli ranges, and the north-west. The practice of making megaliths continues among certain tribal communities of India such as the Khasis of Assam and the Mundas of Chotanagpur.

The term megalithic culture refers to the cultural remains found in the megaliths and from the habitation sites associated with them.

The three basic types of megaliths are the chamber tombs, unchambered tombs, and megaliths not connected with burials (Sundara, 1975: 331–40). The chamber tombs usually consist of a chamber (the size and shape of which may vary) composed of two or four vertical slabs of stone (known as orthostats), topped by a horizontal capstone. If the chamber is underground, it is known as a cist. If it is partly underground, it is known as a dolmenoid cist. If it is fully above the ground, it is known as a dolmen. The chamber tombs include the topikals (literally, ‘hat stones’) and kudaikals (literally, ‘umbrella stones’), which are found in Kerala and Karnataka.

The unchambered burials are of three types—pit burials, urn burials, and sarcophagus burials. In pit burials, the funerary remains are buried in a pit. If a pit burial is marked by a circle of large stones, it is known as a pit circle. If it has a heap of large stones piled on top, it is known as a cairn. If both a stone circle and piled-up stones are present, the burial is known as a cairn stone circle. A pit burial marked by a single large standing stone slab is called a menhir. A sarcophagus burial consists of a terracotta trough (often with legs and lid) containing the funerary remains. Urn burials consist of funerary remains placed in a large pot or urn, the mouth of which is sometimes covered by a stone slab. Urn and sarcophagus burials are often included among megalithic burials, even if they are not marked by stones, as are burials in rock-cut caves. Not all megaliths are connected with burials. Some of them consist of alignments of large stones arranged in a geometric pattern. Although such monuments seem to be related to the megalithic tradition, their precise function and significance is not always clear.

The megaliths of peninsular India, on the other hand, are generally associated with iron.

Iron objects of various types—vessels, javelin heads, sword blades, arrowheads, spearheads, a horseshoe, and fishhook—have been found in cairn burial sites in Baluchistan such as Damba Koh, Jiwanri, Gatti, Nasirabad, Zangian, Mughal Ghundai, and Bishezard.

Evidence of iron have been found from Pirak in the Kachi plain of Baluchistan. The Gandhara Grave culture in the North-West Frontier Province of Pakistan have also given evidence of iron which has been dated to around 1 millennium BCE. Iron object have been found at c. 1000 BCE megalithic levels at Gufkral in Kashmir.

PAINTED GREY WARE CULTURE

Painted Grey Ware was first identified at Ahichchhatra (in Bareilly district) in the 1940s, but its full significance was understood only after excavations at Hastinapur were carried out by B. B. Lal in 1954–55.

Painted Grey Ware (PGW) is a very fine, smooth, and even-coloured pottery, with a thin fabric. Its shades range from a soft silvery grey to a strong battleship grey. It was made out of wellworked, very high quality clay. Designs, mostly simple geometric patterns, were painted on in black.

PGW has a very extensive distribution, stretching from the Himalayan foothills to the Malwa plateau in central India, and from the Bahawalpur region of Pakistan to Kaushambi near Allahabad in Uttar Pradesh.

The main concentration of sites are, however, in the Indo-Gangetic divide, Sutlej basin, and upper Ganga plains. The dates of the PGW culture range from c. 1100 to c. 500/400 BCE, and the sites in the north-west are probably earlier than those in the Ganga valley. Important evidence of the PGW material culture is available from excavated sites such as Hastinapur, Alamgirpur, Ahichchhatra, Allahpur, Mathura, Kampil, Noh, Jodhpura, Bhagwanpura, Jakhera, Kaushambi, and Shravasti.

Structural remains at PGW levels consist mainly of wattle-and-daub and mud huts.

The PGW sites indicate a subsistence base that included the cultivation of rice, wheat, and barley. People were growing two crops a year. Animal husbandry was also practised. PGW sites have yielded bones of cattle, sheep, and pigs, many of them charred and bearing cut marks. Fish bones and fishhooks indicate fishing. Horse bones have been found at Hastinapur. Most of the artefacts found at PGW levels seem to be connected with war or hunting—arrowheads, spearheads, blades, daggers, and lances.

Sites such as Noh, Jakher, Ahar -all from Rajasthan have yielded evidence of iron.

Recent evidence suggests the beginning of iron technology in the middle Ganga valley in the early and mid-2nd millennium BC. Important sites in this region includes- Dadupur, Malhar, Raja Nal Ka Tila, Koldihwa, Narhan etc.

In Bihar and Bengal, the earliest iron artefacts appear in a BRW context at sites such as Chirand, Sonpur, Taradih, Bahiri, Mahisdal, and Bharatpur, and can be placed in the first quarter of the 1st millennium BCE.

In Central India, iron is found at BRW levels at sites such as Nagda on the banks of the Chambal and Eran on the banks of the Bina river and also at Nagda. There are a number of iron-bearing megalithic sites in Madhya Pradesh. The important ones include Dhanora, Sonabhir, Karhibhandari, Chirachori, Majagahan, Kabrahata, Sorara, Sankanpalli, Timmelwada, Handaguda, and Nelakanker.

The earliest iron artefacts in the Deccan occur at BRW levels, and many of them are associated with megaliths. Several megalithic burials and associated habitational deposits in Maharashtra have yielded iron objects. Important sites include Takalghat-Khapa, Naikund, Mahurjhari, Bhagimohari, Borgaon,

Ranjala, Pimpalsuti, and Junapan. . The iron artefacts included ladles, nails, dagger blades, arrowheads, knives, chisels, spikes, axes, double-edged adzes, blades, bars/rods, fishhooks, horse bits, bangles, tridents, a spearhead, sword, and cauldron.

In South India, the earliest iron objects appear in the overlap between the neolithic and megalithic phases. Megaliths are widely distributed in South India. In Tamil Nadu, the sites include Adichanallur, Amritamangalam, Kunnattur, Sanur, Vasudevanallur, Tenkasi, Korkai, Kayal, Kalugumalai, Perumalmai, Pudukkotai, Tirukkampuliyar, and Odugat-tur. Important sites in Kerala include Pulimattu, Tengakkal, Cenkotta, Muthukar, Peria Kanal, Machad, Pazhayannur, and Mangadu. Among the important megalithic sites in Karnataka are Brahmagiri, Maski, Hanamsagar, Terdal-Halingali, T. Narsipur, and Hallur.

Iron objects generally outnumber objects made of other metals at megalithic sites. The large volume and variety of iron artefacts—utensils, weapons (arrowheads, spearheads, swords, knives, etc.), carpentry tools (axes, chisels, adzes), and agricultural implements (sickles, hoes, coulter—the vertical blade fixed in front of a ploughshare)—indicate the metal's widespread use in everyday life. Other more elaborate objects found in burials may have had ritualistic functions.

With the help of Iron tools and implements like axes forests were clear and more areas were brought under agriculture. Use of iron implements for agricultural purpose generated agricultural surplus which in turn brought certain changes and developments in the social and economic life of the people and these development over a period of time paved way for the second urbanization in the Indian subcontinent.

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FURTHER READING

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