

Copper Hoards ताम्र निधियाँ



Dr. Anil Kumar

Professor

**Ancient Indian History and Archaeology
University of Lucknow**

anilkumararch@gmail.com

Kumar_anil@lkouniv.ac.in

- A copper harpoon was Tiny anthropomorphs of the size of 4-10 cm were worshiped all over northern India.
- This type of weapons and implements have been founded in Uttar Pradesh, Haryana, Madhya Pradesh, Rajasthan, Maharashtra, Uttarakhand, Bihar, Jharkhand, Bengal, Odisha, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, particularly in the Ganga-Doab region.
- Firstly, came into being and comprehensive survey of these weapons by V.A. Smith in 1905.
- Later on Hiranand Shastri discovered some more weapons, including the famous antennae sword from Bithur, Bulandshahar and Hardoi.
- Some scholars like Heine-Geldern, S. Piggott, B.B. Lal, Beongard-Lavin and Deopic, Lohuizende Leeuw, S.P. Gupta, Y.D. Sharma, D.P. Agrawal, Paul Yule, D.P. Sharma and many others have made important contributions to the understanding of the problem of the copper-Hoard.
- **R.Heine - Geldern** first wrote his views in his paper on the “Archaeological Traces of the Vedic Aryan” and followed up a year later “New light on the Aryan Migration to India” in both of which he recognized the Aryans as the Introducers of the copper implements in India.
- **B.B. Lal** in his paper on “Further copper Hoards from the Gengatic Basin and a review of the problem”, pointed out the obvious anomaly between the specialized object of apparent western inspiration and those from the Ganga plains.
- A large number of sites from, where various types of weapons and implements made up of copper, have been found.
- Some specialists or archaeologists divide them in three parts, **war and hunting, agriculture and household implements**.
- These weapons and implements have been found from various areas of India.
- In the **first category** war and hunting weapons are arrowheads, Swords, Antennae sword, hook swords, spearheads, Lance head, Parasu, Harpoon, double axe, hooked spear etc.
- **Second category** agricultural implements are including axe, flat axe, shouldered axe, Lugged souldred axe, celt, bar celt or bar axe, chisel axe, socketed axe, wood chisel or Khurpi (spud), etc.
- In **third category**, household implements are Knife, Razor, Ring, Anthropomorphic and fish hook etc.
- discovered from **Bithur** in Kanpur district in 1822; since then, more than one thousand copper objects have been found in different region of India, mostly in Hoard.
- Mostly the copper objects have been found in hoards therefore they are known as **Copper Hoards**.

- The largest reserve was found from **Gungeria in Madhya Pradesh**. It comprises 424 pieces of copper objects and 102 thin sheets of silver. The main objects were various kinds of celts, harpoons, antennae swords, rings, and **anthropomorphs**.
- The harpoons, antennae swords and anthropomorphs were confined to Uttar Pradesh.
- Whereas various kinds of celts/axes, rings and other objects are found from diverse geographical areas of Rajasthan, Gujarat, Madhya Pradesh, Bihar, Orissa, West Bengal, and Maharashtra.
- The Scientific analysis of these copper objects show that these are generally made of pure copper although very insignificant quantities of alloys have also been noticed. They were made in open or closed molds.
- The **Khetri copper mines** (Rajasthan) and the **hilly regions of Almora District** in Uttarakhand were considered to be the source of metal for these copper hoards.
- The Copper Hoards consists of weapons, tools, and the objects of worship.
- The harpoons and antennae swords were used as weapons while various kinds of Celts and axes may have been used as tools. Bar Celts seem to have been used for mining ores.
- The anthropomorphs were possibly the objects of worship. They were weighing quite a few kilos and measuring up to 45 cm in length and 43 cm in width.

Weapons and Implements of Copper Hoards

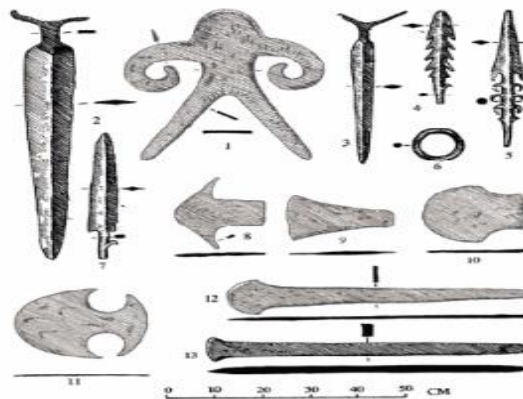


Fig. 19. Copper hoard objects: 1, anthropomorphic figure—Shahrampur; 2, 3, antennae sword—Panchgarh; 4, 5, harpoons respectively from Sarthauli and Bahari; 6, ring—Panchi; 7, hooded spearhead—Sarthauli; 8, handle (parana)—Sarthauli; 9, celt—Gungeria; 10, shouldered celt—Dumra; 11, double-edged axe—Bhagra Pir; 12, 13, bar-celts—Gungeria.

Extent

- Copper hoard weapons and implements were found at different places like Bithur, Fatehgarh, Bisauli, Parihar, Sarthauli, Manpur, Bahadrad, Nasirpur, Baharia, Saipai, Rajpur Prasu, Shahabad, Shaharanpur, Unao, Amroha, Sitapur, Etawah, Kiratpur etc. (U.P.), Khurdi, Ganeshwar, Padaliya, Noh etc. (Rajasthan), Hansi, Rewari, Dadri, Ambala, Bhiwani, Jind, Narnaund, Jhajjar (Haryana), Gungeria, Pondi, Tamani (Madhya Pradesh), Bugunda, Kausalya (Bihar), Saguni, Palamau, Manbhum, Ranchi, Hami, Nankom, Bassia, Biru, Kamdara, Kera, Haru Chowra Drah (Jharkhand), Tamajuri, Kalgara (Bengal) Mayurbhanj, Deneria, Bhagrapi, Kaushalya (Odisha), Modhera, Mehsana, Kansana (Gujarat), Kallur (Karnatak) Moongalaar tea Estate (Kerala), Shavinipatt (Tamilnadu) etc.
- Copper hoard has a large geographical area from Shalozan in North-West Pakistan to Kallur(Karnataka).
- Latest research showed Tamil nadu, Shavinipatt in southernest place and Bhagrapi (Odisha) in the east to Khurdi (Rajasthan) in the west.

Distribution

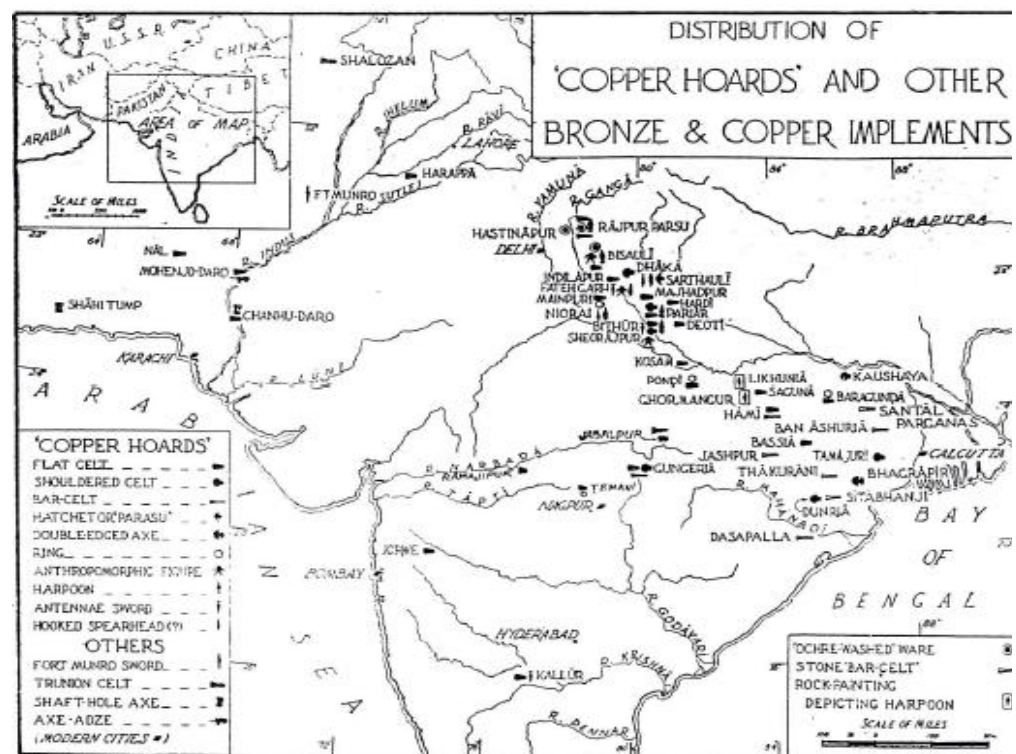
- The copper Hoards have a very wide distribution, mostly in North India.
- The entire area can be divided into **three different zones** on the basis of the typology of artifacts that have been found in the hoards:

Zone A comprises Bengal, Bihar and Odisha. This zone is characterized by the occurrence of flat celts, shouldered celt, bar celt and double axe.

Zone B includes the Uttar Pradesh and Haryana and the characteristics by the Anthropomorphs, Antennae swords, hooked swords and Harpoon. This zone includes implements of Zone A like flat celt, shouldered celt and bar celts.

Zone C comprises Rajasthan where only flat celts and bar celt have been found.

- Some scholars are of the opinion that copper objects from other regions, such as those from the North-Western parts of the sub continent, should also be taken as belonging to the copper Hoard culture.



Chronology

- The Chronology of copper Hoards is not clear because none of them has so far been found associated with any habitation deposit in a stratified dig.
- V.A. Smith dated weapons and implements of copper hoard to c. 2000 BC., S. Piggot and Y.D. Sharma keep them between 1750 to 1000 B.C., B.B. Lal assigns them the date of C. 1200 B.C., Gordon suggests C. 800 B.C. and H.D. Sankalia has given C. 1500 B.C. as their date.
- However, on the basis of the stylistic comparison and circumstantial evidence, these can be assigned to post Harappan Period.
- The copper hoard and Chalcolithic culture existed side by side during the period from circa 1700 BC to 1000 BC.
- These discoveries come to light accidentally but on the basis of circumstantial evidence they have been associated with Ochre Coloured Pottery (OCP) which is founded in western U.P., Haryana and Rajasthan.
- In absence of any C-14 date, copper hoard cannot be precisely dated.

- On the basis of available TL date, the OCP sites in the central upper Ganga valley have been broadly placed in the date bracket of C. 2000 BC – 1300 BC.
- Except Ganeshwar in Rajasthan, the copper hoard dates may be kept circa 1700 BC to 1200 BC.

Origin and Development

- **The origin and development of copper hoard is the biggest problem.**
- S.P. Gupta has attempted to trace the evolutionary stage of copper hoard by an exhaustive study.
- According to him copper hoard area **divided into three provinces:**
- On this basis their provenances, **zone A** comprised the Bihar region which probably was the origin of copper hoards.
- **Zone B** Ganga–Yamuna doab where we come across such specialized type weapons and implements as barbed harpoon, spearhead with mid-rib and anthropomorphs.
- Zone B indicates more advanced form of manufacturing techniques including casting, forging, filling etc.
- Zone B suggests that perhaps these were locally produced in the Ganga-Yamuna valley.
- It shows the migration of weapon and implements 'Zone A' to 'Zone B'.
- Both zones as suggested by S.P. Gupta, correspond to two successive stage of development of this industry, both in time and space.
- It is clear that copper hoard originated in Jharkhand where the ore is also available.
- In the beginning, celt and ring were made and then new specialized items such as swords, Harpoons, spearheads and anthropomorphs were fashioned.
- Swords and spearheads are weapons of war and they were necessary for the people to fight with outsiders of the region (Aryan's) who were on their eastward march in the Ganga Valley.
- S P Gupta's view is that actual migration of people from Zone A and Zone B must have taken place.
- Some Scholar's suggest that the copper shouldered celt and bar celt of 'Zone A' have been copied from similar stone tools of the neolithic phase which also proves that 'Zone A' was the original home of this industry where the weapons and implements followed the stone age culture.

WEAPONS OF WAR AND HUNT

- A large number of copper hoard weapons have been found from different places in India. These are mostly reported unearthed region and a few number occurred with OCP composition and a very few reported Harappan sites.

Arrowhead

- R C Agrawal's exploration and excavations at Ganeshwar and its vicinity in 1979 yielded a rich collection of copper weapons and implements. Arrowheads (400) were found there's.
- Some arrowheads are without holes and tang.
- These simple arrowheads have a superficial resemblance to several Harappan examples.
- The original wooden shafts have been overlapped the arrowheads and was glued.
- Extant arrowheads have appeared in stratified contexts only at Bagor and Ganeshwar in Rajasthan and further Navdatoli in South.
- The use of arrowheads was fishing and hunting.

Sword

- Numerous swords have been tracked down in different parts of India, particularly Ganga-Yamuna doab.
 - Archaeologists divide them into three category specimens which differ in their size, shape, particularly the length.
 - There are **three types** of sword: a. Antennae, b. Hooked and c. Simple
- a. **Antennae Sword** : The antennae hilted swords are called so because they have antennae like bifurcation at the hilt-end and are mostly found from the Ganga-Yamuna doab with exception of Modhera (Mehsana) in Gujarat and Kallur in Karnataka.



Antennae sword

- D.P. Agrawal thinks that the antennae swords could have been used for killing or wounding big game and writes that they are cast with the antennae as one piece and have long blade with short hilt, a sharp median ridge and their length varies between 42 cm to 75 cm.
- The Antennae hilted swords are of two types:**
- Type I** : It is comparatively bigger in size and its length ranges between 56.9 cm – 76.6 cm and weight ranges between 1238 – 2380 grams. These have long broad and leaf-shaped blade with midrib. Mostly this type of Antennae swords occurred in middle Ganga-Yamuna doab.
- Type – II** :
- Its length ranges between 40.5 – 47.5 cm and its average weight is 458.87 grams. It has a shorter leaf-shaped blade with more distinct midrib but a shorter grip about 4 cm long. These type antennae swords were occurred mostly in upper Ganga- Yamuna doab, Haryana, Gujarat, Maharastra, Karnataka, Kerala, Tamil Nadu and Rajasthan.
- The type II swords are of three sub type, i.e. type IIa, Low angle Antennae (10-20 cm), type IIb – high angle antennae (30-45 cm) and type IIc middle angle antennae (20-30 cm).

b. Hooked Sword

- Hooked swords are like antennae swords except that in place of antennae there is a forked hook on the stem.
- So far fifteen hooked swords have been reported from Shahabad, Kanpur, Unnao, Saharanpur, Nasirpur, Niorai, Manpur, Beharia, Bahadrabad, Saipai, Sarthauli etc. sites, in western Uttar Pradesh.
- Hooked swords range in length between 43.6 – 47.0 cm.
- It has a sharply profiled midrib and highly concave side in section with a hook bent toward middle of the grip.

- The hooked sword has a hook and its surface is smoother and well finished.



Hooked Sword

c. Simple Sword

- These consist of a long blade and a tang. The length varies 30-50 cm.
- The blade has a prominent mid rib having both cutting edges sharp.
- The tip of sword is pointed sharp.

Spearhead

- These are reported from Shahabad, Kanpur, Nasirpur, Khera, Madanpur, Saipai, Unnao, Sarthauli and Sheorajpur in Uttar Pradesh.
- All these weapons are more than 28 inches long and, in spite of their long blades, these should be taken to be spearhead and not the swords.
- It appears that spear was used by copper hoard people for hand to hand fight and throwing for hunting.
- These spearheads have midrib, prominent a wooden long shaft fitted in the tang for hand projecting by hand.
- These blades are of two types- leaf shaped and pointed.



Spearhead

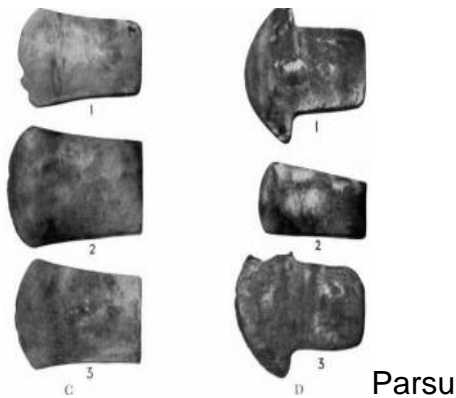
Harpoon

- Harpoons are similar in shape to those copper hoards occur among bone implements of Upper paleolithic phase.
- Similarly the multi barbed mesolithic horn harpoons mentioned by Gorden, 1958, cannot have anything to do with the copper hoard ones.
- Numerous Harpoons have been reported in different parts of India like Shahabad, Bisauli, Bithur, Amroha, Sitapur, Rajpur, Nasirpur, Beheria, Niorai, Prior, Saipai (U.P.), Narnaund in Haryana and Bhadla in Punjab.
- A miscellaneous Harpoon discovered from Bandarkala in U.P. has measuring 31.7 cm Length, 9.6 cm breadth, 2.4 cm thickness and 885 gm. It is triple headed, with midrib, two hole both side for the attached wooden shaft.



Parasu or Hatchet

- Parasu (Length 7.6 – 16.5 cm.) are classified as type II of 'double axes' by Yule. But the contrast between the two types is so striking that it has to be diagnosed as a completely independent type.
- They have in plan two bilaterally diametrical cutting edges, one at each end of the bow shaped blade.
- Invariably the cutting edges are broader than the middle of the blade and are usually convex.
- The wooden handle will be set in the middle.
- A single Parasu has been found in the copper hoard assemblage from Sarthauli, Uttar Pradesh.
- It has measurement 17.29 cm in length, 22 cm in breadth and edge is not sharp.
- The Hammer marks are visible on bits surface.



Disc

- Disc with a plain surface and chisel marks on its periphery bears a thick coat of green patina measurement 7.5 cm Dia. x 0.4 cm thickness and 160 gram weight.
- It has been reported from Orai in Bundel Khand region, U P.
- Similarly a disc or scale-pan occurred from Rewari in Haryana measurement of it 5.6 cm (Diameter) and 0.08 cm thickness hammered from sheet copper.
- It is unique in the sense that no such weapon has ever been found.

- The solitary disc with its blunt edge appears to represent an unfinished object.
- Although we are not aware of the exact function of this disc.
- It is developed into a Chakra (wheel) the famous weapon of Lord Vishnu.

Double Axe

- Double axes are of rare occurrence in copper hoards, ten specimens have been reported at Bhagrapir in Odisha.
- The double axe motif was quite common in west Asia in prehistoric times and probably it had religious affiliation.
- It also occurs on Indian Chalcolithic pottery where it is depicted as opposed triangles.
- Double Axes have also been described as battle axe.
- The specimens from Bhagrapir are quite large and heavy, about 40 cm wide and their edges are about 1 to 3 cm thick and it is doubtful whether they could have even been effectively used as axes.
- They are made by cutting away almost circular pieces from the sides of an oval sheet.
- Copper double axes have also been occurred in India from other culture levels. The double axes might have been hafted in the middle for effective cutting, which were used in war, and hunting the big animals.
- It is also used to clear the forest preparing fields for farming.



Double axe

AGRICULTURAL IMPLEMENTS

- A large number of copper hoard agricultural implements have been reported at different areas in India. Under this category may be included various types of axes, bar axe and *Khurpi*.
- It is generally admitted that axes were being commonly used by agricultural people for forest clearance with a view to preparing fields.

Axe: Different types of axes were found in India from different regions. All axes types were divided on the basis of their shapes, sizes and edges. Mainly three types are available of copper hoard axes like **flat axe**, **shouldered axe** and **bar celt**.



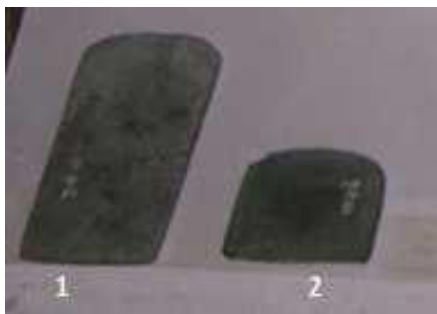
Axe

Flat Axe or Celt :

- More than three hundred specimens of this type have been recorded from numerous places of India.
- These axes have broad splayed out edge, sides converging concavely from the blade edge of rounded or rectangular butt end.
- These are traced from Shahabad, Kanpur, Haswa, Unnao, Amroha, Sitapur, Shaharanpur, Lakhnow, Hardoi, Nasirpur (Pl.3.29) Bithur (Pl.3.30), Handi (U.P.) ChotaNagpur (Jharkhand), Khurdi, Padaliya, Ganeshwar, Elena (Rajasthan), Hansi, Rewari, Bhiwani, Narnaund, Dadri, Pauli (Haryana), Balpur, Gungeria, Pondi, Kelsi (M.P.), Bandua, Bartola, Dargama, Hami (Jharkhand), Kellur (Karnataka) etc.
- This was the most common implement.

These axe or celt have been divided into four sub-types:

- a) Long flat celt of irregular variety having edge as broad as the butt end. Length approximately 23 cms.**
- (b) Triangular flat axe or celt with straight cutting edge length 10.5 cm.**
- (c) Triangular flat celt or axe with crescent cutting edge, length 16.5 cm.**
- (d) Oval flat axe or celt with rounded cutting edge and butt end, length 14 cms.**



Shouldered Axe

- On the basis of their shouldered, these implement known as shouldered axe.
- This has circular working edge with shouldered along with straight and butt end.
- Shouldered axes of copper hoard have been reported from Shahabad, Kanpur, Unnao, Hardoi, Bahadrabad, Balua, Bithur, Dhaka, Gandhali, Madanapur, Manpur, Pariar, Nakarahiya, Nasirpur (U.P.), Dadri, Mitathal, Rewari (Haryana), Gungeria (M.P.), Andheri, Bordagaon, Kaharbari, Kaushaya, Kera, Kotabarty (Jharkhand), Chadsai (Bihar) Chatla, Kulghera, Bhaktabandh (West Bengal) etc.



Shouldered Axe

Bar-Axe or Bar Celt

- A bar-axe consists of nearly parallel-sided bar, the length ranges from 1 feet 6 inches to 2 feet and breath 4 to 6 cm.
- It has a rectangular section, flat bottom and convex upper side.
- The cutting-edge, usually crescentic is obtained by bevelling the upper side only.
- Scholars have observed that most of these features have also characterized the stone celts from the hilly tracts of Southern Bihar, West Bengal, and Northern Odisha.
- There is, therefore, good reason to believe that the copper bar-celts developed from their prototypes in stone in course of time when metal began to replace stone.
- The Gungeria bar celts are from 30 to 60 cm long, and probably prototype from Chanhudaro 25 cm to 33 cm length.
- Besides to Gungeria, Shahabad, Hami, Chhota Nagpur, Kamdhara and Narnaund are those sites where occurred various bar celts.



Chisel

- Copper chisel has sharp convex working edge with the use masks.
- The butt end is flat, thick and straight.
- Both side edges are concave, straight and taper towards its butt end.
- It has been found from Sitapur, Shahabad, Shaharanpur, Kanpur, Nasirpur in Uttar Pradesh and Rewari in Haryana.
- Chisel of Kanpur is a pointed thick weapon.
- It has four flat-sides and the cross-section is square. Its butt end is rectangular and thick.
- Chisel were used for mining ore.
- Some chisels are much smaller than bar and bar celt.
- A Chisel of Bithur has measures 14.5 length, 3.5 cm wide, 1.2 cm thickness and 300 gram weight.
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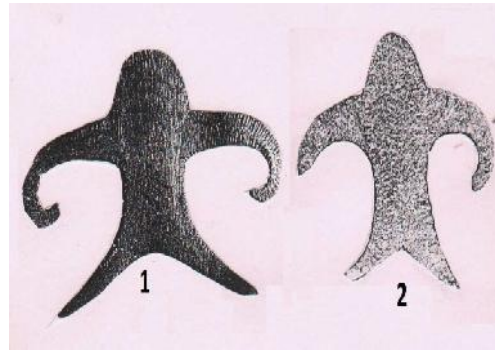
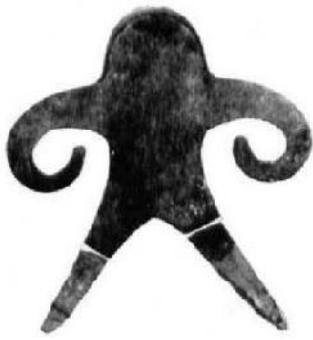


Chisel

Household Implements

Anthropomorph

- A numerous anthropomorphs have been reported from Bisauli, Saipai (PI.3.45.2), Medarpur, *Chandausi*, Nurpur, Mathura, Kiratpur, Etawah, Kanpur, Fatehgarh, Amroha, Dariabad, Madanpur (U.P.), Ambala (Haryana), Manbhumi(Bihar) and Lothal (Gujarat).
- The most distinctive and enigmatic type is the antropomorphic figure.
- In the most cases the head portion of this human like figure is thicked by hammering from the top, hind limbs are plain and arms are generally incurved and sharpened externally.
- They appear to have been cut from a plain sheet.
- Since these heavy implements look like human figures, they are often identified as ritualistic object.
- It is controversial issue that anthropomorphics are throwing weapon and ritualistic object.
- Their length varies from 23 to 30 cm and breadth between 30 and 43 cm and average weight is 5 kg.



Anthropomorph

Ring

- Rings are made of Bending a circular rod till the ends meet.
- The rings were discovered along the copper hoard from the localities of the Mainpuri, Bahadrabad, Aulbani Kiratpur, Bargoan (U.P.), Bhadla (Punjab), Rewari, Pauli, Mitathal (Haryana), Gungeria, Pondi (M.P.), Bargunda (Jharkhand), Agavibani (W. Bengal).
- Two rings of this collection were made of thick copper wire.
- First copper wire was made by solid cast method in the form of rings.
- Copper ring is known in India since Ganeshwar (2800 BC).
- Rings associated with the copper hoard have been reported from Bhagrapi (Odisha).
- D.P. Agrawal suggests that the only criterion for the ring characterizing the copper hoards could be their standard weight.



Rings

HOMOGENEITY AMONG DIFFERENT REGION

- ❖ If different types of weapons and implements of copper hoards plotted on Indian map, two thoughts stand out prominently: (i) some are universal in their geographical distribution, and (ii) Regional differences are seen in weapons and implement assemblages.
- Zone A (Eastern Area):** In this zone, main tool types like flat axe, shouldered axes, bar axes, weed chisels, chisels, and rings have been found.
 - Zone B (Western Area):** In this zone, there are special weapons, viz. antennae swords, hooked spear, harpoon, and anthropomorphic, have been found.
 - Zone X (Chalcolithic):** About a dozen excavated sites from Rajasthan, Malwa region, Gujarat, Deccan plateau and other have produced such copper and low-grade bronze weapons and implements in small number.

RELATIONSHIPS OF COPPER HOARDS AND OTHER CULTURES

There are some relations between copper hoard and late Harappans, OCP and Aryan appear that these cultures claim to authorship of copper hoard.

Relationship of Copper Hoard and Late Harappan:

- Stuart Piggott tried to associate copper hoards implements with the Harappan migrants.
- He writes **“It would be tempting to associate this movement with something more than trade, and see it the colonization of the Ganga Basin by migrants and displaced persons from Punjab and Indus Valley during the time of the breakup of the Harappa empire and the coming of Aryan from the west.”**
- The typological analysis of Harappan copper objects and those of copper hoards gives completely different pictures.
- The flat celt are the only common link between the two.
- The distinctive Harappan types are razors, arrowheads, barbed fish hooks, and curved blades, whereas copper hoards are distinguished by harpoons, antennae swords and anthropomorphs.
- The metal analysis of Harappan implements shows that tin was alloyed in copper from 1 to 23%, whereas in copper hoards, arsenic was alloyed from 0.13% to 7.84%.

Relationship of Copper Hoard and OCP

- At Hastinapur, the OCP assemblage underlies the painted grey ware deposited.
- Most of the settlements located in the alluvial plain, are very small in size and the habitation deposit varies between 0.60 and 1.50 metre.
- The OCP sites spread mainly to Ganga Doab, whereas the copper hoards are largely concentrated in east Rajasthan, Haryana, Ganga Doab and Chota Nagpur.
- It is quite interesting that a number of OCP sites, e.g. Bahadabad, Narsipur, Lal Qila, Jhinhana, Saipai, Nandalpura, Jodhpura and other have also yielded copper hoard and scholar have attempted to associate the copper hoard with the OCP.
- Similarity with copper hoard before the excavation at Saipai, Copper hoards were never found in a stratigraphic context.
- A harpoon and hooked spear were found with OCP from Saipai.
- At copper hoard sites such as Bahadabad, Nasirpur, Rajpur Parasu, Baheria, Kiratpur and Bisauli have found OCP.
- Some celts, a harpoon and hooked spear have been tracked down with OCP from Nasirpur.
- A copper ring was seen at Bargaon with OCP. Considering this evidence, B B Lal associated copper hoard with OCP which was obtained from Hastinapur,
- It is known that OCP stratigraphic composition is not thick perhaps OCP users were not habitual in the same place for long time.

Relationship between Copper Hoards and Aryan

- On the basis of typological analysis of copper hoards celts and axes from Harappa and Mohenjodaro and similar objects found in Egypt, Sardinia, Britain, Isles, Greece and Transcaucasia, Heine-Geldern propounded that the copper hoard belong to Aryan who came to India some time between 1200-1000 B.C.
- He has also tried to establish the cultural interrelation between Persia, Transcaucasia, Northern Caucasus, South Russia and India during that period.

In his opinion these tools bear foreign influence and also reflect a period of cultural fusion. Some scholars have regarded copper-hoards to Vedic Aryan.

They are cited *Maruts* as the atmospheric god's of vedic period.

- They were referred to as *Marutam ganah* (bond of the maruts) always in plural.
- The Satapatha Brahmana refers to forty-nine maruts whereas in the Jaimini Brahmana forty maruts are mentioned.
- All these descriptions mention that the maruts have been found in groups.
- Similar is the case with the copper hoard anthropomorphs.
- The maruts were the original inhabitants of the Indus-Ravi basin who might have had some deep-rooted relation either genetically or culturally with the Harappans of the region.
- By the time they reached the Ganga-Yamuna Doab, which is contemporaneous to the period of the Yajurveda, the maruts started worshipping the anthropomorphic figure.

Relationship between Copper Hoards and Native Tribes

- B.B. Lal assigned this ceramic tradition and copper hoards to the people who inhabited the *doab* before the arrival of Aryans.
- The area of the copper hoard distribution is at present, as known to have been occupied by Austro-Asiatic speaking Mundas, Santhal and other tribes belonging to the proto-australoid group of the Indian population which probably migrated to India from Southeast Asia.
- The Austro-Asiatic languages spoken in Burma and by *Khasis* in North-eastern India would provide a clue to the route which the Mundas had taken on their migration to eastern and central India.
- It is also possible that eastern Austronesian tribes forefathers of Mon Khmer and linguistically associated with the Mundas, (Bongard Levin) independently developed the use of metal.
- Recent research shows that in Thailand the use of bronze started in 4th millennium B.C.
- The North-eastern India considered as an integral part of South-East Asia is considered as an integral part of Southeast Asia during Neolithic phase.
- So in all probability Mundas who migrated to India with the knowledge of metallurgy some time between 3000-2000 BC were the authors of these hoards (Makkhan, Lal).
- In Vedic literature also we find references about the Aryan encountering with certain native tribes whom they called Nishads, having short stature and the flat nose.
- Most probably these native tribes were Mundas and other Australoid tribes.

All the above theories related to copper hoard authorship are not perfect. Scholars have criticised them as sufficient evidences have not come to light and the accuracy is not convincing the authorship problem of copper hoard which is even today a controversial issue in the Indian archaeology.

Consulted texts/Suggested Readings:

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