Symbols represent the earliest records of man's urge for self expression. Art and religion constitute a significant factor in civilization. The material and spiritual aspects of a culture are represented in the artistic and religious manifestation. The significance of symbology in Indian art depicts human beings and their environs in specific framework of time and space in the context of an edifying story, sacred myth, legend, etc. However, symbols also play a role as a language.

While studying TC discs, I came across many designs related to early Indian symbols which were mostly found on punch-marked coins. Some of these designs/motifs may be seen in the folk and tribal arts of India even today. Perhaps it is due to some innate power within the motifs which makes them immortal to the ravages of time. In this research paper I have tried to compare the signs found on TC disc with the symbols found on punch-marked coins. Surprisingly, most of the signs are similar and in some cases, their technologies are also similar.

It is historically well known that a considerable quantity of TC discs have been generally found during the excavations at PGW & NBPW sites. Regarding the occurrence of TC discs in the Ganga-Yamuna doab, I have taken only Jakheura and Atranjikhera site for my present study. Total number of disc found on the above mentioned sites are as follows:

1- Atranjikhera (PGW & NBPW) 565
2- Jakhera (PGW & NBPW) 1,290

The present study of TC discs was undertaken to understand its pattern of designs, motifs, symbols and other traditional use, if any, within a cultural period and its transition from one culture to another. I have also made an attempt to focus on its variations in shape, size and weight. To show their significance and probable purpose of the object, I have categorised the study of TC discs into following two divisions:

1- Origin, technique, shape, size and weight
2- Designs, motifs and symbols

The TC discs, a small and common item, generally reported from the PGW and NBPW sites, have not received the attention they deserve. They are casually described as minor objects like amulets, beads, bangles, toys, tools and other small objects of daily use. However, such objects also help us in perception of our past. By studying these small implements historians/archaeologists have tried to arrive at some inference regarding the society beings and the stage of the life. Through the frequency and quality of these artefacts we are also able to conceive the affluence of the society. At most of the sites TC discs occur in a very large number such as Allahpur¹, Ayodhya², Bateswara³, Jajmau⁴, Masaon⁵, Nagda⁶, Noh⁷,
Origin
Atranjikhera and Jakhera have not yielded any terracotta disc in period I (OCP) and period II (Black and red were). However, tradition of using pottery discs was prevalent in the period I at Atranjikhera and in period II at Atranjikhera and Jakhera, both. The tradition of making pottery disc possibly starts from the OCP period but their use could not be determined. They are fairly good in numbers at both the sites. They were usually made by chipping off pot sherds. As far as the tradition of making TC discs is concerned, probably it started from the proto PG level at (Pd. IIIA) Jakhera and continued in the following periods IIIIB and IV, characterised by PGW and NBPW, respectively. At Atranjikhera it started from PGW level.

Shape/Colour
Generally, discs are flat and circular objects made of well-fired clay. Here it is worth-while to mention that a few unbaked TC discs and squarish TC discs were also unearthed from the stratified layer of the Jakhera excavations.

It is interesting to note that diameters of discs collected at Jakhera varied from 2.00 cm to 6.50 with almost a uniform increase of 0.25 cms. in ascending order in PGW and NBP phases. The disc, varied from 0.25 cms. to 3 cms in thickness. Here it is worthwhile to mention that the disc having the diameter of 3 cms., 3.25 cms and 3.5 cms. were most popular sizes at both the sites. However, 0.75 cms. thickness of the discs was also much popular. At Atrrajikhera the tradition of using terracotta discs continued in Period IV with all the characteristic features of the preceding period. A new size, 5.5 cms. diameter, was, however, introduced, which raised the number of groups from 13 to 14.

The TC discs, in general, have medium to fine fabric and are found in red, grey and black colour. Some of them are treated with fine red lustrous slip. Most of them are well baked and only a few show signs of ill-firing. However, in Jakhera unfinished and unbaked TC discs have also been found. The majority of the TC discs are wheel or mould, made but hand-made disc, have also been found at Jakhera.

Technique
Unlike the pottery disc, TC discs are fashioned intentionally for use and are exclusively decorated by making incised designs on both the surfaces. The designs are executed preferably on the edges along the periphery but are also seen on the centre and even scattered all over the surface. One remarkable thing from the Jakhera is that some of the discs have thin as well as thick groove around the thickness, according to the size of discs.

The discs were made of well-levigated clay and fired under oxidising conditions, giving them a bright red, grey and black surface. The marks are made on discs just prior to firing. All the signs were incised or stamped on the surface of the discs before firing and most probably when the discs were ready, they were dried before setting in the kiln. Many marks were produced by sharp engraving tools made of wood, or other material and numerous other categories were made by the finger nail. Sometimes two different tools were used to obtain a
mark. In these cases, the sign had perhaps a different significance as compared to a similar sign produced with a single tool. Before making a disc the loose soil/clay appears to have been well levigated, since, we hardly see any crack mark on the discs. They are so hard and intact that even today one can not break them by hand easily.

Designs/Motifs
It is worth mentioning that the marks/signs were mostly executed on both the sides. Sometime thumb impression is also seen, though some plain discs have also been found. The plain discs found in Jakhera in PGW period were 3% of the total number, while in NBPW it was 2% of the total. Similar is the case with Atranjikhera excavation wherein the PGW plain discs were 5% of the total and in NBPW the number was 4% of the total. It shows that making of symbols or using any decoration pattern on TC discs were the essential parts and had some purpose or objective. It was not merely a decoration.
The disc have also been classified according to their decoration patterns. They can be classified under two groups:
1- Plain discs
2- Discs having decoration or symbols
In the earlier indigenous coinage also an extensive use of symbols and other devices are found. The punch marked coins, which are the earliest in the numismatic series, constitute a rich repertoire of symbols. Theobald, who first closely examined these coins, has classified them into six groups, viz. 1. Human figure; 2. Implements, arms and the stupa or chaitya, bow and arrow etc., 3. Animals; 4. Trees or their branches and fruits; 5. Symbols connected with solar, planetary or saivite worship and 6. Miscellaneous and unknown objects.

Surya
The Sun is the most dominant deity, described as 'all creating and all seeing' and the Lord of all creations. It was given the highest veneration in the process of dedication to the natural forces and elements because of it's beneficial effect in the form of warmth and energy. In India, Surya is the principal cult deity amongst the five chief cults of Brahminic religion.
A site of north India, Rajghat, has yielded several TC discs. Here the Sun is mainly found on fifteen TC discs. It is shown with curved rays, emanating from a centre. On one disc the symbols is found on both the sides, where the radiating curved rays are shown in broken lines. Stylized depiction of the symbol of the Sun is noticed on discs from Prahladpur. Here the Sun is represented by curved rays without any regular circles. The TC discs from Sravasti represent two varieties of the Sun symbols. The first and more frequent starts from a common point but with curved rays is rarely provided with small circle or a circular gap in the centre. The second variety shows radiating small rays but without a circle. We find an interesting representation of the sun with curved radiating lines emanating from a common point and on the reverse of the same disc a large form of the sun in the centre with identical nine smaller suns depicted all around.
Chakra
The Chakra, i.e. wheel, is considered to be one of the most popular symbols of ancient Indian art and tradition. We find deep meaning of the chakra in the ancient Indian literature. Chakra symbolizes creation and is known as Brahma-Chakra. It also stands for the Sun or time and is known as Kala Chakra. Chakra has also been identified with the supreme moral order in the form of Dhram-Chakra and Sudrashan Chakra.
The symbol of Chakra in various forms has also been widely used on early Indian coinage. It was equally used on punch-marked, tribal and local coins. On these coins, there are no limitations on the number of spokes. We find more variations of wheel on coins, as compared to the sculptures and other objects.

Swastika
The Swastika, the sacred and mystic symbol, is one of the most ancient auspicious motifs of mankind found more or less all over the world, continuing even up to present day. The symbol consists of a cross of equal arms but at the end of the arms there is a line drawn at right angle on the same relative side showing a common rotary direction in relation to the centre. Like the Chakra, Swastika is also interpreted as a symbol of sun.
The Swastika symbol has been interpreted in several ways. It is also a sacred symbol of benediction, blessings of long life, fortune and good luck. In Indian context, Swastika encompasses all the ancient religions of the Vedic, Buddhist and Jain. The Swastika was also regarded as an auspicious sign in the Harappan period, as provided by the discovery of a significant seal bearing the symbol. Excavations at Prahladpur and Rupar have yielded TC discs incised with Svastika marks. The examples from Prahladpur (late phase) show both clockwise and anti-clockwise Svastika with rounded arms. The discs from Masaon bear incised marks of trident, Swastika, circles, radiating lines from one central point. TC discs from Noh have incised and scalloped margins.22
Some scholars opine that these discs served as gaming counter.23 But the decorated symbols representing the Sun, the moon (crescent), the Stars, Chariot and other motifs depicting two eye-like design intersecting each other, arrows etc. may suggest that these had some religious significance. The arrows and chariot invariably are items of the Aryan life, having religious sanctity. However, these discs, with sharp symbols on them, apparently do not favour the idea of their being used as gaming counters, lest the symbols might be rubbed off during constant handling. Could then they be used as votive or ritualistic objects?24 The numbers of pecked marks or circles on them may be indicative of some auspicious numbers denoting heavenly bodies etc.
Money begins with man since Primitive man, primitive money progressive man, progressive money. Therefore, from time immemorable money has had different forms; from berry, bone to bonds from stone to sterling and from disca to dollar. The natural setup of man and of community condition shape and form money, coin or currency. Currency trade and commerce are inseparable, may be a barter or banking economy. Money is associated with life and practices of ancient communities. These tools of production, actual produce and religious practices, have played a formative role in shaping the money.
Here I am enumerating few points in support of considering TC disc as the non-metallic coins i.e. the token money. They are as follows:-

1- that the characteristics feature of the punch-marked coins are their various symbols. Majority of the TC discs also bear similar or identical impressions or symbols. These symbols, like those on coins are generally found on both the sides on the discs.

2- that the sizes of the discs are generally small and always circular, possibly because small and circular objects are easy to handle and carry.

3- that we have the tradition of Pottery disc making even in the OCP period.

4- that the tradition of making TC discs begins from PGW period and continues till the NBP period. After this period it declines, when the punch-marked coins made their appearance.

5- that punch-marked coins and their symbols did not came suddenly into existence. Before taking their shapes as punch-marked coins, there must have been a primitive stage. Why not terracotta disc? 

6- that the concept of currency is associated with particular value to the object /coin, which may not be the actual value of the object. TC disc with specific symbols (Governance) may be a demonstrative example of the earliest form of coinage in India. For example, the market value of paper currency is on account of the figures, and other motifs such as the Ashokan pillar, etc. printed on it. Otherwise, it is simply a piece of paper.

7- that the punching technique has been used in making TC discs. The idea of punching on metal coins appears to have been taken from it.

8- that in some TC discs there is a hole while in other there is cavity. The hole in TC discs appear to have reduced their easy to carry and store. Even in the early fifties Indian coins had big holes in the centre.

9- that during the PGW period no coinage system seems to have evolved. No excavation reveals a single coin thus confirming the simple barter system. Essential commodities were obviously exchanged. Thus, TC disc may be used as token money, a symbol of exchange, a pre-urbanised culture without coinage?

10- that the majority of the symbols found on punch-marked coins are identical to those found on TC disc. They are as follows:-

a. Human figure  
b. the Sun  
c. the Moon (Crescent)  
d. the Mountain (Chaitya)  
e. the Swastika  
f. the Chakra (four,-six,-eight,-or multi- armed)  
g. the Star  
h. Triratna / Nandi pada  
i. Tree ?  
j. Arrow  
k. Fish  
l. Eye or leaf design  
m. Circles / Checker / square/ rectangle and other geometrical lines etc.

11-"Some small objects are significant to prove contacts of these people with those of the other sites. The ghat-shaped beads occur from Rupar and Sardargarh in the west to Chirand and Sonpur in the east. Even at the sites of the eastern Ganga Valley, where PGW is not found, occurrence of this type of bead has been noted. Almost similar types of bone points and discs have also been found at all these sites".25
Thus, although no large-scale commerce is testified to, a trade of restricted kind with the neighbouring places is well attested. This shows that though the PGW society was basically a village-based one, it had certain advanced technical knowledge like iron, copper and glass manufacturing and art of terracotta objects, like beads, discs etc.

12-that circle and crescent are the main features of the early Indian coinage.
13-that the availability of several identical discs of a particular type testifies my theory
14-that varieties in symbol and gradation in size indicate that TC disc were probably manufactured by an institution or a local body.
15-that if it is a ritualistic object, why did it not continue further?
16-In the last, if it is not a coin or a token of money, what else it could be?

Thus we see that the process of advancement of culture and technology had started during the PGW phase. With a favourable atmosphere and availability of abundant iron ores in Bihar, the culture sprang up fast during the succeeding NBP phase and with growing need for sophisticated trade, a system of coinage was introduced. Guilds began to come to existence, when trade routes connected big centres with each other.

Here, I would like to mention emphases that it is quite possible that the symbols on punch-marked coins may have been derived from the long tradition of the disc having marks on them. Majority of the symbols found on the TC discs are generally identical or tally to a great extent with those depicted on punch marked coins. The symbols commonly found on both are the Sun, the Moon (crescent) the Star, circle, the Swastika, the Chakra, fire-altar, tree, fish, mountains, dotted line, triratna and other geometrical lines etc. As demonstrated by the discs collected from the Jakhera site. The hypothesis, however, is too tentative and merely a suggestion.

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