The Significance of the Boat Motifs on Bronze Drums and its Relationship with the Socio-Culture of the People of the Late Prehistoric Period

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Abstract: This study attempts to describe the bronze drums found in several locations in Southeast Asia. Bronze drum is a type of object that is believed to have been produced by the people of the late prehistoric period. Objects made of bronze are comprised of several metals such as iron (Fe), tin (Sn) and lead (Pb) but copper is the primary metal component. The uniqueness of the bronze drums is in the attractive displays of motifs and decorative patterns especially on the tympanum and the body of the bronze drums. By using the method of literature review and typology on several bronze drums found in Southeast Asia, it was found that several types of decorative motifs are displayed on the bronze drums. Among the motifs displayed are the star motif, the triangle motif, the saw tooth (zig-zag) motif, the tangential circle motif, the stairs motif and a few others. However, one of the motifs that is no less interesting is the boat motif which is displayed particularly on the bronze drums’ body. Based on observation, it was found that the appearance of the boat motif is not the same between one bronze drum to another. The results of the study also show that there are a few underlying aspects behind the displays of boat motifs on the bronze drums. The manifestation behind the boat motifs is the phenomenon of the life of the people of the late prehistoric period and its relationship with the activities of maritime and trade, elements of rituals and beliefs, regatta, creativity, intellect and many others.

Key words: Bronze drum, prehistoric, proto-historic, tympanum, motif

INTRODUCTION

The prehistoric period refers to the phenomenon of the period of human’s past existence that is before the invention of writing systems. The period covered the span of time since, the existence of the first human and it ended when writing was introduced about 3,000 years ago. As humans at the time were still very primitive in their lifestyle, there were hence no written records that was left behind which could be used to serve as a reference. The prehistoric period covers a long period of time and it consists of people that practised the palaeolithic, mesolithic (Hoabinh), neolithic and metal culture.

Apart from the primitive and nomadic patterns of life, in general the people of the palaeolithic, mesolithic (Hoabinh) and neolithic period used stone tools in their daily activities. Nevertheless, their pattern of life was changing and becoming more developed in accordance with the passage of time whether from the aspects of technology, settlement patterns, daily activities or organisational life.

The late prehistoric period on the other hand refers to the culture of the people who appeared during the metal age and also the subsequent periods. In terms of the period or periodisation, the late prehistoric period is also said as the period of time that often overlapped with the culture of the proto-historic period or early history. However, what is even more interesting is the life of the people during the metal age who increasingly used less stone tools; contrastingly, their tools’ technology was more oriented toward tools made out of bronze and iron. Even though, agricultural activities were still practised at the same time they were also exploring new activities such as maritime and trade activities and they had a network of relationships with other communities that were outside of their area or their region. The impact was that the daily life of the people was more advanced and open and they practised traditions or beliefs. This depiction can be seen from several perspectives based on the discoveries of objects made of bronze and iron. Hence, the people of the late prehistoric period not only changed the pattern of life of their society, they also left a new cultural form that was clearly very different from the previous society.

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**Bronze drums in the life of the people of the late prehistoric period:** Bronze drums are a type of artefact that is important which are relics of the people of the metal age.

Based on the results of the laboratory analysis that was carried out by a number of archaeological researchers, it was found that the bronze drums were made of a combination of a few types of metals. Typically, the two main metal components were copper and tin. However, sometimes several other elements were also used to produce the bronze drums such as lead, zinc, iron and nickel.

The combination of a few of these metal components resulted in the bronze drums having high-quality and characteristically lasting longer up to hundreds of years old.

The impact from the intellectual accomplishments of humans that were increasingly growing had also led the bronze drums to experience transformations, particularly in terms of their shape, motif variations and function. This phenomenon had resulted in the growing interest on the bronze drum that it was recreated in new forms by several communities in Southeast Asia to suit their daily life. Hence, bronze drums were not only found in Vietnam and China, they were also found in Thailand, Laos, Cambodia, Myanmar, Malaysia and Indonesia. Among the tribes that have used and are still using the bronze drums are the communities of Miao, Liao, Lolo and Yuch in Yunnan, Kweichow and Kwangsi, Muong in the Tongkin area, Lamet and Khmu communities in Laos, Lawa in Thailand and also the Karen and Shan communities in Burma (Heng, 2002). The shape of the bronze drums is as shown in Fig. 1.

**Boat motifs on bronze drums:** Motifs are something which is made the basis or pattern of a work of art, such as paintings, sculptures and others. Motifs are the epitome of creativity of a person and it is worked on either through drawings or carvings in the form of an object’s image. Typically, a motif is chosen to be made the decorative pattern for an object or thing because of its attractive, unique natural characteristics that are beautiful to look at. Additionally, the motifs selected are also deemed to have nostalgic effects (sentimental value) to the person, tribe or community whether in the form of plants, flowers, moon, stars and animals on land, birds flying in the sky or over the sea and many others.

Indeed, there are also motifs used that are in the form of images or objects that were rarely found or seldom given due attention that it created admiration for their unique characteristics.

![Fig. 1: Heger I type of bronze drum (Vietnam): a) Bronze drum without frog motif-bronze; b) Bronzed drum with frog motif (Thorng, 1990)](image)

In addition, the motifs used are also said to represent characters or symbols that are strong, violent, protective, represented scent or fragrance that is refreshing, divine elements, peace and so on. Among the examples of motifs displayed on the bronze drums are the star motifs, triangle motifs, stair motifs, tangential circle motifs, spiral motifs, animal motifs, human motifs, boat motifs and many others (Jusoh et al., 2012). Examples of the decorative motifs that are displayed on the tympanum of the bronze drums are as shown in Fig. 2.

One of the motifs that was no less popular and was found on bronze drums is the boat motif. This motif is easily recognised and it is often displayed either on the tympanum or the body of the bronze drums. In terms of its form or physical structure, the boat motif is displayed with typical characteristics or physical attributes of a boat. It has the head part (bow) that is decorated or engraved, the stern and has ears to show that it is moving on water. Apart from that based on observations, it was found that the boat motif has its own unique artistic elements. This is because typically, together with the boat motif we can also detect a few other motifs, among them are the motif.
Fig. 2: The appearance of the decorative motifs on the bronze drum’s tympanum (Thong, 1990)

of humans with various activities, drum objects, weapons, oars and several other motifs. An example of the design of the boat motif displayed on the bronze drums is as shown in Fig. 3.

**Hoang Ha bronze drum:** One of the bronze drums that displayed the boat motif as its decorative pattern is the Hoang Ha bronze drum. This object was discovered in 1937 at a location named Hoang Ha, Phu Xuyen, Ha Son Binh Province, Vietnam (Thong, 1990). If viewed in terms of its physical appearance, the Hoang Ha bronze drum is still in perfect condition and is now on display at the National History Museum, Hanoi, Vietnam. The diameter of the Hoang Ha drum’s tympanum is 79 cm and the drum’s body height is about 61.5 cm (Thong, 1990) (Fig. 4).

Based on observations made on the boat motif of the Hoang Ha (Vietnam) drum, it was found that it can be interpreted from several perspectives. For example in terms of its form, it is quite interesting because there are artistic elements, especially in the bow (head) and tail areas of the boat. The bow area of the boat is decorated with patterns that are quite difficult to identify; however in the tail or stern area of the boat, it is quite clear that the pattern almost resembles the head of a bird. This is based on the decorative motif in the shape of a bird’s head with relatively large eyes while its beak was found to be in a position of looking upwards. This boat motif is a bit curved in its shape and also includes a bronze drum located under a platform. It can be said that most of the cargo in the boat motif of Hoang Ha bronze drum is made up of humans (Fig. 5).

Additionally, it was found that all the human figure motifs on the boat wear a type of ornament on their head. Fig. 3: The appearance of a boat motif (Higham, 2002)

Fig. 4: The tympanum of the Hoang Ha (Vietnam) bronze drum (Thong, 1990)

Fig. 5: The boat motif on the Hoang Ha (Vietnam) bronze drum (Thong, 1990)

The decorative pattern on their head is in vertical form. Most likely, the motif used a type of bird feather, such as those which are the traditional practice of the people in Borneo (Kemper, 1988). However, there is also a human figure on the boat that does not wear any ornament on the head and appears to be holding a bow or an arrow in his hand. The human figure appears to be standing on a deck in the shape of a platform on the boat as if he is observing (monitoring) toward the rear. Among those who wear the ornament on their head, there is one who acted as the oarsman in the rear or tail of the boat. Meanwhile, the motifs of the other human figures are positioned in the front part of the deck or platform, one is sitting facing the front and appears as if he is holding something in his hand. Two of his other companions seem
to be standing and holding a flag or banner in their hands while one is positioned in the front (bow of the boat). This human figure motif also appears to be standing and is positioned quite close to the bow of the boat. He was also found to be wearing a type of decorative pattern on his head similar to his companions.

**Ngoc Lu I bronze drum:** Besides the Hoang Ha bronze drum, another bronze drum that also displayed the boat motif is the Ngoc Lu I bronze drum. This object was discovered in 1893 in a location known as Nhu Trac, Ly Nhan, Province of Ha Nam Ninh, Vietnam (Thong, 1990). The physical structure of the Ngoc Lu I drum is still in perfect condition and this artefact is currently being exhibited at the National History Museum, Hanoi, Vietnam. The diameter of the Ngoc Lu I drum’s tympanum measures 79 cm with a height of about 63 cm (Thong, 1990) (Fig. 6).

When compared with the boat motif of the Hoang Ha (Vietnam) drum, the boat motif of the Ngoc Lu bronze drum is almost similar in its shape. However, its shape is slightly more curved and the decorative pattern in its tail area is quite attractive. The decorative pattern on the head part of the boat’s stern or tail also resembles the head of a bird that is looking upwards. Meanwhile, the bow or the head area of the boat also displays engraved decoration which most likely represents the head of a bird. The only differentiating aspect is the boat motif of the Ngoc Lu drum has two oarsmen, namely one in the bow and one in the stern or tail of the boat. It also contains quite a lot of cargo, namely a bronze drum, a dog and a platform in the middle of the boat. The position of the boat motifs displayed on the Ngoc Lu bronze drum is as shown in Fig. 7.

The human figure motif on this boat is quite clear, namely a total of four altogether while two more are not quite clear and blurry (Fig. 8). It is just that these two can be identified simply based on the decorative pattern on their head in which one appears to be standing and the other holding oars in the bow area of the boat. All the human figure motifs wear ornaments on their head except for one who is on the deck or platform that is holding a bow and looking toward the rear. Under the deck or platform, there is a bronze drum and a type of object that is difficult to identify.

**Laos bronze drums:** Apart from the Hoang Ha and the Ngoc Lu I bronze drums, another drum that also displays the boat motif is the Laos drum. This drum artefact was found in Laos and is currently being displayed in Hanoi Museum, Vietnam. Complete data for the Laos bronze drum failed to be acquired, either in terms of the location where it was found, date of discovery, method of discovery of this object that is whether it was unintentionally discovered or the result of an excavation. The same goes for the physical structure of this object which is difficult to obtain, particularly in the aspect of its diameter, height or others (Fig. 9).

Based on observation, it was found that the shape of Laos drum’s boat motif is different from the boat motifs of the Hoang Ha and Ngoc Lu’s bronze drums. The boat motif on this drum is very long and the decorative patterns in its bow and tail (stern) are quite simple. There are thirteen human figures on this boat and all of them wear a type of ornament on their respective head (Kempers, 1988). Eight of them are sitting and each is
holding something in their hand either oars, weapons or other tools while the remaining five appear to be standing with various actions performed whether rowing or getting ready to carry out other activities.

If observed carefully, it can be seen that the Laos boat motif is totally different from the boat motifs of the Hoang Ha and the Ngoc Lu drum. This is because the boat motif on the Laos bronze drum does not carry other tools whether bronze drums, animals or a platform on the boat. The boat motif of this bronze drum only accommodates a certain number of human figures, each performing various actions. All of them appear as if they are going to a certain destination for important purposes, such as fighting or being involved in the sports of boat racing.

Moulie bronze drum: The Moulie drum was found in the state of Mu’o’ng in Indo-China and was exhibited in the Exposition Universelle in Paris, France. This artefact was once reported missing but was found again after a few years and currently it is exhibited in Musee Guimet, Paris (Loewenstein, 1956). The form of the boat motif on the Moulie drum is a bit different from the boat motifs displayed on the Hoang Ha drum, Ngoc Lu drum or the Laos drum. The shape of the boat motif on Moulie drum appears to be a bit more horizontal and not curved as those of the boat motifs displayed on the other drums. The bow of the boat motif on the Moulie drum is also decorated with patterns that are almost similar with the boat motifs of the Hoang Ha and Ngoc Lu drums. The only difference is the motif in its tail part (stern) which resembles the head of a bird with a sharp beak and does not show big eyeballs as the decorative pattern (Fig. 10).

However, the boat motif of the Moulie drum clearly contains human figures only and there are no other objects or tools unlike those displayed in the boat motifs of the other bronze drums. It was found that a total of seven human figures are on this boat and all of them wear ornaments on their head in the shape of eyeballs and bird’s beak (Kempers, 1988). Based on observation, it was found that one human figure is rowing in the rear area, one is holding a flag or banner while the rest are sitting facing forward. Based on observation, it was found that the human figures on the boat motif of the Moulie bronze drum appear as if they are participating in the sports of a boat race. This is because all the human figures on the boat wear ornaments on their head and it is not shown clearly if they are holding weapon in their hands.

Bronze drum of kg Batu Buruk II, terenganu: One of the bronze drums found in Malaysia that also displays the boat motif is the Kampung Batu Buruk II bronze drum. The bronze drum of Kampung Batu Buruk II is the pair to the bronze drum of Kampung Batu Buruk I which was found in 1964. In terms of its size, the Kampung Batu Buruk II drum is bigger than the Kampung Batu Buruk I drum. The diameter of the Kampung Batu Buruk II bronze drum measures about 72.05 cm, however data concerning the measurement of its height is so far unavailable (Peacock, 1965). This is because the discovery of the Kampung Batu Buruk II bronze drum happened unintentionally, hence there is no complete information obtained in connection to this object (Fig. 11).

The appearance of the Kampung Batu Buruk II boat motif does not differ much from the boat motifs of Hoang Ha drum, Ngoc Lu drum and Moulie drum. The only thing that distinguishes the boat motif on this drum is in the head part (bow) which is rather bent up slightly upwards compared to the bronze drums found in the Indo-China area. However, it seems quite difficult to determine the actual number of human motifs on the boat of this drum because its drawing is abstract in nature. In truth, this is what distinguishes the character or human motif of Kampung Batu Buruk II drum with the bronze drums of Hoang Ha, Ngoc Lu and Moulie. The boat motif displayed on the Kampung Batu Buruk II bronze drum is on the body part (waist) of the drum (Fig. 12).

If examined carefully in fact, it can be detected that there are motifs of a human figure holding an oar and most probably two human figures holding flags or banners on this bronze drum’s boat motif. In addition, the head of the boat that is somewhat bent also differentiates Kampung Batu Buruk II bronze drum’s boat motif with the boat motifs on the other bronze. This kind of motif is quite unique and different altogether from the boat motifs of Hoang Ha, Ngoc Lu and Moulie bronze drums (Fig. 13).
Maritime activities: Undeniably, the real manifestation of the boat motif is related to the maritime activities that existed during the late prehistoric period. Maritime activities refer to the depiction of human activities that are related to maritime or oceanic activities. This is because apart from the boat motifs if examined there are in fact a few motifs of the human figures on the boat doing a few specific activities. Among the activities performed by the display of human images on the boat motifs are of several human figures that are holding weapons, human figures who wear ornaments on their head, human figures beating drums, human figures holding musical instruments and human figures who are dancing. This shows that the function of a boat had become important because it was the driving force for every societal activity, particularly in the late prehistoric period. In addition, within the coastal communities involved with trade activities either to obtain raw materials from remote areas or to obtain imported goods that was brought by the outside traders, the boat was required as the main medium of transportation.

The emergence of these trade activities was increasingly significant, especially after the emergence of several early polities in Southeast Asia. For example as late as the early centuries AD until the 14th century AD, there were old kingdoms in the Mainland Southeast Asia and the Malay Archipelago. In the 2nd century AD until the 6th century AD, there were two large kingdoms in Vietnam and Funan in Cambodia. Between the two kingdoms, it was found that the Funan Kingdom was the most dominant power. In the Malay Archipelago from the 7-11th century, there was the Sriwijaya Kingdom that appeared after the collapse of the Funan Kingdom (Jusoh et al., 2012). Among the trade goods supplied particularly in the Malay world were forest products, such as sandalwood and aloeswood, spices, pearls, ivory, birds' nests and many others.

In addition, there is also clear evidence that shows the occurrence of trade activities between Mainland Southeast Asia, namely Vietnam and Cambodia with the Malay Peninsula and Archipelago of Southeast Asia at least since the 2nd century AD. For example according to Linh-han (1951), the spread of the Bronze-Iron culture in the Malay Peninsula was through the Funan kingdom between the 3rd BC till the 1st century AD. Clearly, the use of boats or ships as the main medium of transportation had boosted the development of trade activities in this region. Therefore, indirectly the use of boat motifs as one of the decorative motifs on the bronze drums has enabled us to get the depiction that the people of the Late Prehistoric Period were also involved with maritime activities apart from carrying out agricultural activities.

THE RELATIONSHIP BETWEEN DECORATIVE MOTIFS AND THE PEOPLE OF THE LATE PREHISTORIC PERIOD

From the perspective of archaeology, the boat motifs displayed on the bronze drums unveil us to several interpretations. This can be viewed from several perspectives among them are the following:
Ritual and burial elements: The boat motifs displayed on the bronze drums in truth not only symbolise the existence of transportation or maritime activities. In fact, it is also associated as a kind of transportation particularly to bring the spirits of the deceased to the afterlife. For example according to Kemper's (1988), the ships pictured on the kettle drums may have had different functions; just a mere ship or being a symbol of death, of totality, of holy life. This phenomenon shows that the people of the Late Prehistoric Period had already had burial practices or traditions in their socio-culture. Such a phenomenon is also said to occur in the Malay world. For example with reference to the moke and pejeng drum found in Indonesia, Soekmono (1973) stated that the function of the boat that can be found on the object is associated with the concept of burial. The boat motifs do not refer to symbols of sailing or travelling but depict the boat of corpses, namely the boat that brings the spirits of the dead from this world to the hereafter. The spirits were sent with all the rites and ceremonies.

Similarly too is the opinion presented by Eiji (2002) who stated that according to the drums found by excavation, it is no doubt that many drums except some examples were used as ceremonial goods and then were buried as funeral goods in the tombs after the owner's death. Meanwhile, Victor Goloubew and Duy Anh claimed that based on the bird motifs found on the head of the long boat, it is a manifestation to the aspect of the beliefs of the Dayak community in Borneo. The Dayak community has a belief that the long boat can be used to carry the souls or spirits of the dead to heaven (Xiao Cong, 1998). In Niah Cave (Sarawak), remains of an ancient boat were also found together with other archaeological relics including human skeletons. In fact, what is more interesting is the discovery of boat paintings using haematite in the Niah Cave, Sarawak. This discovery is very important and is seen as having interconnection with the spirit boats that were placed nearby. These paintings tried to portray the departure of the dead person's soul to the next world using boats. Hence, the phenomenon clearly shows that boats in the life of the people of the Late Prehistoric Period seem to be closely related to the tradition of burials.

There are also some archaeological researchers who have put forward the view that the boat motifs displayed on the bronze drums are related to the ritual elements. The reality is that the elements in the form of beliefs and rituals had begun to grow and also influenced the everyday life in particular the people of the Late Prehistoric Period. For example, they believe that after a person dies, it is the beginning of life in another world that is more eternal and sacred. Indeed, there is opinion that mentioned the drawings of the boat pictures are associated with ritualistic elements and even death.

Boats as a means of transportation: The boat motifs are manifestation of innovation in the transportation system of the people of the Late Prehistoric Period. According to Nik Hassan Shuhaimi Nik Abdul Rahman, the creation of the boat started to take place with the availability of the metal axe around 3,000 years ago. This is because before the advent of the boat in particular during the Palaeolithic period, humans had to use animals such as elephants, horses or cows to go to a destination. Apart from taking a long time, the use of animals as transport is limited in terms of the capacity of goods. In addition, the use of animals as transport is also confined to the land areas only.

The introduction of the boat indirectly became a platform for a new form of transport to facilitate humans getting to destinations that were difficult to reach by land transport like going to islands, rivers, lakes or oceans. This statement is in line with the general opinion of many Chinese researchers who believed that the drawings of the long boats on the bronze drums have connections with the meaning of fishing activities or fisherman's work, boat racing activities or offering ceremonies or rituals to the river spirits (Xiao Cong, 1998). By using the boat, humans can perform many other life activities such as catching fish, trade, hunting, migration or exploring new areas that were difficult to reach via land routes. Therefore, the boat motifs displayed on the bronze drums are a depiction or a phenomenon about the society's innovation in the transportation system and also activities of the maritime society.

Regatta: The boat motifs displayed on the bronze drums also present interpretations related to boat racing event or regatta. Typically, this sport was conducted once a year and it was held on a large scale; in fact it was sort of like a tradition that was nurtured and inherited. Certainly this sports event was very popular especially among the communities near the coast, bay or the mouth of a large river. Due to the fact that this sport was participated by a few teams that may represent different clans or tribes, the boats would, hence be decorated with various carved patterns or specific motifs. Ordinarily, each team consisted of a few participants such as a person looking after the bow at the rear (tail) and a few oarsmen. This phenomenon clearly shows the people in the Southeast Asia Region had already knew about the sport of boat racing and in fact, it is one of the traditional sports that
has been inherited even until the present day. Boat racing as a team sport typically becomes the highlighted event and the most exciting one.

Hence in discussing this matter, a Chinese archaeologist, Feng Hanji has linked the long boat motifs as a symbol of a long boat racing competition that is very popular in small rivers and also in the Dian Lake located in Southern China (Xiaorong, 1998). This opinion was later supported by a few researchers from Vietnam who also stated that the boat motifs symbolise a boat race by the ancient Viet community, in particular when celebrating certain festivals or rain asking ceremony (Xiaorong, 1998). Therefore, it is indeed clear that regatta or boat racing is a tradition that is festive that it is immortalised as one of the decorative motifs on the bronze drum.

**Intellectual achievement:** The drawing of the boat motif indirectly is the manifestation of the intellectual achievement of the people of the Late Prehistoric Period. This is because to produce a bronze drum would require an individual who has the expertise, particularly in a few aspects. As an example, a person needs to know the type of metal or the basic material that is suitable which is metal, particularly from the aspect of its weaknesses and strengths. This is because the melting point of each metal is not the same; for example, the melting point of tin is 231.9°C, the melting point of iron is 1535.0°C, the melting point of copper is 1085.0°C and the melting point of lead is 327.5°C.

In addition, the process for smelting the metal needed someone with great knowledge which is required in controlling the temperature or fire in the kiln. It does not stop there as they also need to be knowledgeable in the methods of making the moulds to produce the bronze drums. Apart from that a craftsman who wants to produce carvings to be made the decorative patterns on the bronze drums also need to be knowledgeable in terms of the measurement to ensure the motifs created would be balanced, attractive and harmonious.

**CONCLUSION**

The boat motifs displayed on the bronze drums are clearly an indication of the intellectual achievements especially of the people of the Late Prehistoric period. The boat motifs can be said as quite difficult to produce compared to the other motifs that are simpler such as the stairs motif, the triangle motif, the dotted circle motif or many others. This is because the boat motifs also display human figure motifs with the various activities performed that indicate they have a close connection to be understood. The combination of the boat motifs and human figure motifs indirectly is a manifestation of the socio-culture and the daily life activities performed in particular by the people of the Late Prehistoric period.

However, what is implied behind the boat motifs is the innovative and creative nature of the community that upheld it which can be viewed from several aspects. For example, their creativity in producing the boat motif as the decorative pattern also projects the implied element. This is because the production of the bronze drums indirectly also took into consideration several other aspects such as the types of tools used, the material, work specialisation, commitment and many others.

**REFERENCES**


