BARK-CLOTH AND BARK-CLOTH BEATER FROM THE INDONESIAN ARCHIPELAGO

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Abstrak. KULIT KAYU DAN PEMUKUL KULIT KAYU DARI KEPULAUAN INDONESIA. Temuan arkeologis pakaian kulit kayu di Indonesia sangat terbatas, hanya menyisakan alat pemukulnya saja. Hal itu berbeda dengan temuan arkeologi di wilayah lainnya di Asia. Selain temuan alat pemukul kulit kayu, data arkeologi sisa pakaian kulit kayunya juga ditemukan seperti di Cina, Taiwan, Thailand, dan Malaysia. Meskipun demikian, data etnografi tentang pembuatan pakaian kulit kayu di beberapa pulau di Indonesia masih dapat diinventarisasi. Beberapa museum di Eropa mengoleksi beberapa contoh pakaian kulit kayu yang berornamen. Belakangan ini fungsi dari hasil produksi kulit kayu tersebut digunakan sebagai cindera mata, misalnya sebagai hiasan dinding. Keberadaan pakaian kulit kayu tersebut tampaknya berkaitan erat dengan identitas suatu masyarakat. Oleh karena itu, tulisan ini berusaha untuk melihat kembali keberadaan alat pemukul kulit kayu dari situs arkeologi di Indonesia dan membandingkannya dengan temuan lain di Asia dan dengan data etnografi. Data dikumpulkan dari publikasi yang membahas dan berkaitan dengan pemukul kulit kayu, juga dari hasil penelitian Balai Arkeologi Banjarmasin. Dari hasil pemaparan dan perbandingan keberadaan pemukul kulit kayu di Indonesia dan di Asia diharapkan dapat diusulkan pengembangan penelitian lebih lanjut terhadap keberadaan artefak jenis ini.

Kata kunci: pemukul kulit kayu, pakaian kulit kayu, arkeologi, etnografi, identitas masyarakat

Abstract. Archaeological remains of bark-cloths in the Indonesian Archipelago are few and leaving us only bark-cloth beaters. On the other hand, remains of bark-cloth can still be found in association with bark-cloth beaters in China, Taiwan, Thailand, and Malaysia. Nevertheless, a number of villages in Indonesia are still producing bark-cloth; hence the inventory and documentation of such ethnographic data can still be carried out. Many museums in Europe collect ornamented bark-cloths. Today, the productions of bark-cloths in the Indonesian Archipelago are intended as souvenirs, for instance, wall ornament. Apparently, the existence of bark-cloths in the past is closely related to the identity of a society. Thus, this article discusses the remains of bark-cloth beaters found in Indonesia in comparison to that of in other Asian countries and their ethnographic data. Information on bark-cloth beaters were collected from publications and archaeological research reports of Balai Arkeologi Banjarmasin (Centre for Archaeology, Banjarmasin). The outcome of the discussion was intended to motivate further comprehensive research on bark-cloth beaters.

Keywords: bark-cloth beaters, bark-cloth, archaeology, ethnography, community identity

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A. Introduction

Bark-cloth or tapa is a cloth made of inner fiber of tree bark by pounding the fiber with stone beater. Therefore, this cloth is different with woven cloth. Bark cloth not only has been made in Asia and Pacific but also in America (North and South America) and Africa. The origin of bark cloth in Southeast Asia and Pacific was suggested from southeastern China which is associated with Austronesia language speaking people; however, it is assumed that the oldest cloth in the Southeast Asia region is not made of bark (Howard 2006, 1). Such assumption is based on the ethnographic data derived from the inhabitants in Andaman Islands and New Guinea who still wear cloth from leaves and twines (Howard 2006, 3). Nevertheless, the archaeological evidence of such cloth does not exist anymore.

The dissimilar condition occurs in bark cloth. Archaeological evidence of these clothes was found at burial site in Thailand and Sarawak (Malaysia). Meanwhile, in the Indonesian archipelago, the evidence of bark cloth does not exist except the beater tools. By this situation, this article tries to show up and compare the beater tools by the ethnographic data. Therefore, it will be obtained some recommendation regarding with what kind of archaeological research can be done by these limited data.

B. Bark cloth and its beater in Southeast Asia

The earliest archaeological evidence of stone bark-cloth beater is from the southeast coast of China which is dated back more than 6,000 years (Cameron 2006, 65). These artifacts were associated with stone tools such as adzes, axes, and grinding-stones. The stone bark-cloth beaters from China have different shapes, sizes, and pattern carved on the surface (Cameron 2006, 65-66). These artifacts also occured at archaeological sites

in the Southeast Asia, such as Vietnam, Cambodia, Laos, Malaysia, Thailand, and in Insular Southeast Asia, but not only made of stone but also clay (pottery beater). Based on the archaeological evidence, there are eight types of stone beater (see figure 1; Cameron 2006, 67-70). Type I, is the simplest shape without any worked on surface. It is therefore difficult to distinguish between its function as beater for food or bark-cloth. Type II, has horned protuberances and appears in Taiwan and the Insular Southeast Asia. Type III, has elongated oval pebbles with grooves carved on one side of the surface. This type is deemed as the early modification of basic ponders. Type IV, is rounded from flatten stone with grooves carved on one face. Type V, has rectangular shape with longitudinal grooves that intersect at right angel. These beaters are made of stone and pottery. Type VI, has grooves in the upper and haft in the lower end. Type VII, is attached to a wooden or rattan handle, while Type VIII is a stone chopper with grooved surface on its rounded base.

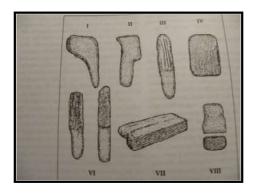


Figure 1. Prehistoric stone bark beaters from Southeast Asia (source: Cameron 2006, 66)

The archaeological remains of bark-cloth were found from burial site in Thailand and Sarawak (Malaysia). Shroud of bark cloth were found in Khok Phanom Di from 28 burial contained all sexes and ages of 154 burial

found in Khok Phanom Di from 28 burials which contained all sexes and ages out of 154 burials recovered during excavation (Cameron 2006, 71; Howard 2006, 84). Meanwhile in Ban Kao which is also a burial site, baked-clay beaters were found among the grave goods (Howard 2006, 84). Other fragments of bark-cloth from Malaysia were found in burial site of Gua Sireh, and Lubang Angin as mortuary shroud (Cameron 2006, 72).

C. Bark cloth beater in the Indonesian Archipelago

1. Bark cloth beater from the past

Based on the archaeological evidence, there is no bark-cloth found during excavation in Indonesia. However, some bark stonebeaters have been found in some archaeological sites such as in the province of West Kalimantan¹ (Ampah and Nanga Balang) and Central Sulawesi (Kalumpang, Minanga Sipakka, Langkoka, and Poso). According to Soejono (1984, 170-1), stone bark-beater which has assosiated with other finds, such as potshard and polished-adze, emerged during agriculture period in the chronological framework of Indonesian Prehistory. There are two types of stone barkbeater from Central Sulawesi i.e. stone beater with the length of 20 cm which has shaft; and other type is 10 cm in length without a shaft. Commonly, the shaft of the first type is added by rattan. Meanwhile, the stone beater from Kalimantan has different shape. The stone beaters have carvings of geometrical motifs (line and square) on one surface. The beaters from Kalimantan were found in settlement sites, while from Sulawesi were found inside and outside of kalamba (stone burial) during excavation in 1976 (Soejono 1984, 193-4). So far, based on the archaeological research

carried out by Balai Arkeologi Banjarmasin, stone bark-beaters from Kalimantan were found in two sites, Nanga Balang (West Kalimantan) and Muara Joloi I (Central Kalimantan; Kusmartono, 2006; Oktrivia, 2010).

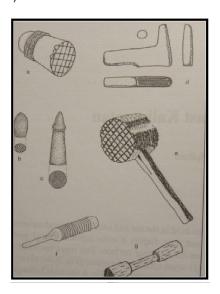


Figure 2. Stone bark beaters from Kalimantan; a-c stone beaters from prehistoric sites, e-g wooden beaters from museum collections (source: Sellato 2006, 154)

In comparison to the beater typology from Southeast Asia, beaters from Kalimantan can be included in type VIII. These bark beaters, however, still have different style and form, as can be seen in figure three and four.

2. Bark cloth and its beater from the present

Recently, the making of bark-cloth is almost extinct in the Indonesian archipelago. Nevertheless, the ornamented bark-cloth is still made in West Papua, but as souvenir (art painting) not as wearable cloth. Meanwhile, some bark-cloths from the Indonesian Archipelago have been collected at

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¹ See figure 2

Rijkmuseum voor Volkenkunde Museum, Museum of Ethnology Rotterdam and Troppenmuseum in the Netherlands. These bark-cloths are from Kalimantan, Sulawesi, Seram, Halmahera, and West Papua (Kooijman 1963, 2-119). Every island present different type of cloths and ornaments. Barkcloths from Kalimantan originated from the people who lived in the north-western part of Kalimantan. The Kenyah people is the name of the society who dwelt in longhouses in the upperstream of Kayan River. The shape of bark-cloth from Kenyah people is poncho² completed by ornament of two motifs, the human figure and dragon monster with two heads namely asu. These motifs are the characteristic of Kenyah art which is also painted and carved on the wooden wall of the longhouse, shields and bamboo containers. Some scholars suggest the poncho with Kenyah ornament is linked with the ritual of head hunting (Kooijman 1963, 8-15).

Meanwhile, bark-cloth from Sulawesi exists among the Torajan people who live in the middle part of Sulawesi. There are various types of bark-cloth from Toraja, siga (headcloths for men), abe and ambulea (poncho), sarongs (rectangular bark-cloth folded double, worn by men and women), lemba or karaba (tightly-fitting jacket worn by women), fuyashawl (long rectangular shawl), tali bonto and betel-bags. These different shapes of barkcloths have various ornaments, especially the siga. Siga³ is colourful and ornamented by various designs such as diamond, swaztika, human and animal figure and sun symbols. Scholars also suggest that ornamented patterns of siga have relation with the ritual of head hunting and social status of a society (Kooijman 1936, 16-28). Other shapes of bark-cloth from Toraja have also various motifs of geometrical design, human and animal figure, and sun symbols however, with different styles compared to the *siga*.



Plate 1. Stone bark-beaters from Nanga Balang (source: Kusmartono's documentation)



Plate 2. Stone bark beaters from Nanga Balang (source: Kusmartono's documentation)

² A long strip of bark-cloth with a hole in the middle for inserting the head, the two parts cover the breast and back of wearer (Kooijman 1963, 8).

³ See plate 1.

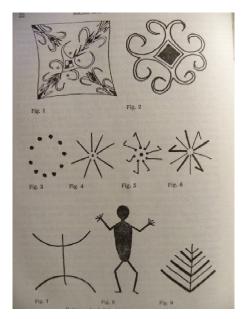


Figure 3. Design of *siga* from Toraja (sun symbols and human figure) (source:

Kooijman 1963, 22)

Bark-cloth from Seram only consists of *lawani* (pubic belts)⁴ which has a long ribbon shape. This cloth was worn by both man and woman. For common everyday clothings, men and women wore undecorated pubic belts, however, during festivity, men were ornamented bark-cloth. The *lawani* is ornamented by concentric circle, which is called *lawani walai* (*lawani* ring), *lawani matai* (*lawani* eye), *manue matai* (bird's eye) and *toule* (Kooijman 1963, 33). The spiral design is a religious symbol of death and fertility in Seram. Scholars suggest that this ornamented pubic belts is linked with the sun and head hunting ritual (Kooijman 1963, 31-46).

Not far from Seram island, there is the Halmahera island, which also has ornamented bark cloth. Those two islands

belong to the province of Maluku. Bark-cloths from Halmahera consist of saya (head-cloth worn by sister or daughter of deceased man during mortuary festivity), baro or gado (women's shirt), kotangu (tightly-fitting jacket with short sleeves), pisa and sabeba (long strips bark-cloth for man), o sòné ma sasawo (ornamented ribbon of bark cloth for ritual purpose) (Kooijman 1963, 46). The design of ornamented bark-cloth is geometrical patterns such as straight line, square, rectangular, curve and zigzag. There is also a swastika motif on baro cloth which represents the sun. Apparently, such ornamented bark-cloth is related to social status of the owner which is shown during marriage and war party. Subsequently, bark-cloth from West Papua contains of similar design with that of from the east of Indonesia (Sulawesi and Maluku)

Moreover, based on some ethnographic data from Sulawesi (Toraja), we can regocnize the technique of bark cloth production as well as the technique of ornamentation. Raven (1932) had observed bark-cloth-making in Central Celebes (Central Sulawesi). He reported that the production of bark-cloth occurred in several districts such as Bada. Besoa, Napoe and Koelawi. Apparently, the Koelawi people make more and better barkcloth than the others. Therefore, the observation was conducted in the Koelawi district. The source of bark-cloth was from waringan tree (a species of Ficus), which is called as *Noenoe* by Koelawi people. This tree is found in the jungle. Commonly, men cut down the waringan tree, whereas women slash its branches for firewood. After peeling the outer surface of the bark, the inner fiber of the bark is boiled and soaked in a stream or brook

⁴ The long ribbon is wound around the waist and pulled through between the legs to cover the genitals (Kooijman 1963, 30).

to loosen the fibers and wash away the sap. This process takes three or four days. The next step is pounding and beating the pulpy mass. The bark fiber is placed on a wooden plank and beaten with grooved wooden instrument. The final stage of beating is done by stone instrument with coarse ridge then continued by finer ones.

There are various shapes of bark beater tools⁵ i.e. wooden beaters consist of *palu kayu*, *parondo*, and *pongko*; meanwhile stone beaters (*batu ike*) contain of *batu ike tinahi*, *batu ike hore*, *batu ike pogea*, *batu ike bengko*, *batu ike pampii*, *batu ike popapu* (figure 4).



Figure 4. Stone bark beaters with rattan handle from Central Sulawesi (source: Kooijman 1963, plate XVI)

D. Bark cloth and its beater in comparison

Based on the archaeological data both from Southeast Asia regions and the Indonesia Archipelago, I assume that the bark-cloth

beater has different shapes but its function is similar which is to beat tree bark. The existence of this tools represents the people in this area were acquainted with cloth production. Therefore, it also can be assumed that these societies had worn bark cloths.

Unfortunately, archaeological remains of this kind of cloth are very limited. It is caused by the charactestic of the bark which is not durable and easily damaged. Although the climate in Southeast Asia is not conducive to preserve organic fibers, some archaeological evidence can be found in the burial sites. It seems that the bark-cloth has function as mortuary shroud for wrapping the decease. Unfortunetly, the distinct shape of bark-cloths cannot be recognized or maybe the bark-cloth did not have any shape like common jacket or others. Apparently, the decease who was wrapped in bark-shroud showed that barkcloth has important role regarding to mortuary ceremony. Other interpretation that can be infered is that the decease deserved to get the special treatments compared with others who were not cover by shroud of bark-cloth. If we consider that the shroud becomes a part of grave goods maybe the later interpretation can be accepted. Hence, social status may influence the choice of grave goods.

Beaters were also found in burial sites. It seems that this tool function also as grave goods. Then a question arised: what is the previous function of this tool, was it used to beat bark or not? One of the beater (type VIII) is known as thunderbolts (*batu prahit*) by some traditional groups in Kalimantan. They keep this beater as a charm (Cameron 2006, 70 cited from Harrisson 1949, 596-601). Such discovery lead to the understanding that there

⁵ see plate 2

are beaters which are not used to produce bark-cloth. The beater is only made for charm and maybe also used as grave goods. Nevertheless, the real bark beater can also be used as grave goods. Apparently, further investigation on the used-wear analysis should be conducted to determine whether the beater was utilized as grave goods or as tool to beat bark.

The existence of bark-cloth beaters closely relates with to cloth wore in daily life. However, once again, only archaeological remains of beaters tools which were found in the settlement site which did not relate to burial activities. Comparatively, the ethnographic data from recent society⁶ is useful for obtaining a clear picture about the shape and type of bark-cloth. Although several ethnics in the Indonesian Archipelago have changed bark-cloths with more modern fabric.

The Indonesian Archipelago is located in the equator, therefore there are two types of weather, dry and rain (wet). Actually, people who live in the equator do not need to wear any cloth. Therefore, it is not surprising that the bark-cloths founded in several island consist of limited shape such as long strip bark cloth, head cloth, poncho, jacket, and sarong. The cloths do not cover all body, commonly only the genitalia is covered. The cloths for daily activities are different with cloths for ritual purposes. The ornamented bark-cloths are especially used for ceremonial activities. The designs of ornamented bark-cloths are various and consist of different symbols. Based on interpretation by scholars the motifs of sun which occurs on the head-clothes from Toraja, the poncho from Kalimantan, the pubic belts from Seram, is linked with head hunting activity. Other symbols from ornamented bark-cloth also relate to social status of the owner. It seems that wearing ornamented bark-cloth represents the identity of the people.

Other aspect derived from ethnographic data of bark-cloth from some ethnics in the Indonesian Archipelago is the production processes of bark-cloth. We can learn how people find the source of bark from certain trees and further treatments after words until the bark-cloth is ornamented. Technology of bark-cloth production is important to recognize the type of tool to make it and its result. From the Koelawi people, it is suggested that several steps bark-cloth making were done by beating of different types of beaters onto the bark to produce better bark-cloth. It is believed that different tools will produce different type or shape of bark-cloth. Therefore, it seems that an experiment is necessary to test the assumption that certain beater tool (from stone, baked clay and wood) will produce certain type of bark-cloth. Further research based on ethnoarchaeology is necessary to obtain much information especially the relationship between the technology, styles, and symbols of bark-cloth that may represent the social status of people.

E. Prospect of archaeological research of bark-beaters in the future

Archeology is strongly related to material culture. This statement is bassed on the aim of archeology to reconstruct the historic culture based on the artifacts. There are two main concerns in material culture studies, firstly, concerning artifact, its function technology and adaptive importance; secondly, concerning its social and cultural meaning (roles as sign, metaphor, and symbol) (Olsen 2003, 90). According to Olsen, it is

⁶ collected from anthropological studies and museums

important not only to make description on how subject or society created the object or things, but also need to pay more attention how objects construct the subjects. It seems that this opinion is also supported by Kopytoff. He mentions in his article that things or artifacts are read as goods or commodities (1990, 64). Commodities are certain things and rights to things which are produced, exist and can be seen to circulate through the economic system as they are being exchanged for other things (Kopytoff 1990, 64). Therefore, similar objects may be treated as a commodity at one time by one person and as something else by another. In other words, the same objects can also be treated not as a commodity. Moreover, Kopytoff also suggests that magical power is attributed to commodities after they are produced. objects consist of value. Objects have its story or biography, how the objects can influence the owner and vice versa. Therefore, in making a complete description of an object, one questions should ask the same as asking a person, including the relationship between objects and people. "Biography" of objects may concentrate on its position in the owner-family's economy, the history of its ownership to the society's class structure or in the sociology of the family's kin relations (Kopytoff 1990, 68). In a small-scale society, social identity are relatively stable and only changes by cultural rules, whilst in the complex societies is more diverse.

It is apparent that during the engagement with material culture archaeologist faces some obstacles caused not only by uncompleted artifacts, but also the people who used these material cultures who are extinct. Therefore, getting the whole story of certain artifact is not an easy work, especially artifact from the prehistoric period. Some interpretations should be made by archaeologist for

understanding the meaning behind the material culture. It seems that comparative study based on ethnographic data can be done to elucidate the certain artifact. According to Larick (1991, 326), based on his research on blacksmiths society of East Africa, some ability to transform contemporary forms of social constitution into method for interpreting social pattern and the coevolution symbolic and utilitarian tech-nologies can be offered by ethnoarchaeological data. Larick found that symbols reflect the relation of power within varied social fields; the significance of symbols may be grasped without appealing to understanding the cultural meaning of forms and the integrated analyses of production where the use of material symbols give complementary information (Larick 1991, 326-327). Larick supports the argumentation that in one side archaeology is a multidiscipline. but in the other hand he also admits that archaeologist cannot escape from subjective interpretations.

Based on the above explanation, there are some points which can be inferred for further research on bark-cloths and its beaters. The existence of archaeological data found in some part of Indonesian Archipelago especially, the beaters from prehistoric period should be used as an indication that people in the past had known and worn bark cloth, even though the remains of bark-cloths are not found during the researches so far. By comparing ethnographic data of bark-cloths with some ornaments of rock art paintings from the prehistoric period, we may obtain some new information for further interpretations: what kind of motifs which may exist in the past? Beside that, we may also know the meaning behind such ornament. Additionally, the function anf typology of the bark beaters is also interesting to be studied.

F. Conclusion

Bark-cloth from the Indonesian Archipelago and Southeast Asia is one of important material culture which still need more attention due to its existence among the people in the past. Based on the above explanation, such as other material cultures, bark-cloth bears the identity aspect of its people. Although this article is only a preliminary study, we can know that

based on the observation of the beater and bark-cloth, it can provide a clear picture on how people in the past as subject had tried to produce an object (bark-cloth) and in reverse the object may influence the subject by its symbols and make it as an identity. Apparently, further investigation is needed to achieve the whole identification of bark-cloth and its beater.

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