

Archaeological Discoveries of 200BC Coastal Settlement in Pulau Kelumpang, Matang, Perak

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Abstract: Archaeological research in Pulau Kelumpang, Matang, Perak carried out by I.H.N Evans since 1928 has led to the rediscovery of the proto-historic sites. Evans conducted 2 months of excavation in 1932 and discovered human skulls, beads and blue glass. Evans suggested that the archaeological finds from Tanjung Rawa belonged to a single early Indian settlement dating to the 6th century AD even though the finds ranged from carnelian Pallava seal to Chinese or Siamese celadon. In 1955, G. de G. Sieveking conducted the second excavation in Kuala Selinsing. He recovered a remarkable total of >3000 glasses and polished stone beads from an 18 inch layer. Sieveking suggested that the beads were mixed with pottery of various periods and the decorated pottery from his excavations was of Indian origin. Sieveking observations of the stratigraphy led him to suggest that three phases of occupation could be recognized in the history of the site. The first was the proto-Malay or proto-Indonesian phase associated with stoneware, boat burials and opaque glass beads. The second phase was associated with decorated coarse stoneware which was associated with Indian wares. The celadons were from the surface and represented the third phase. H.G. Quaritch Wales suggested that the site from Kuala Selinsing belonged to the Hinduized Indonesian settlers who lived there during the 6-12th centuries AD. Lamb in his reconstruction of the evolution of various types of port on the Malay Peninsula suggested that Kuala Selinsing was a “subsidiary entreport” and both Lamb and Peacock saw Kuala Selinsing as contemporary with the earliest Indianized entreports on the Peninsula. In 1987, Nik Hassan Shuhaimi conducted a new excavation in Pulau Kelumpang and successfully unearthed eleven burials, house post, wooden rice mortar, earthenware, stone artefacts, food remains, glass and stone beads, ear rings and organic materials. Based on the C¹⁴ dates, the site is believed to be inhabited between 200BC-1000AD. The settlement acted as a feeder point for the main entreport in the Bujang Valley. Nik Hassan Shuhaimi also suggested that the maritime people of Kuala Selinsing were not Hindu but were still ideologically in the pre-Indianized stage. The latest excavation was conducted from May to August this year, led by Nik Hassan Shuhaimi and it successfully unearthed five burials and other artefacts such as house posts, earthenware, beads, stone artefacts, food remains and organic materials. The main objectives of the excavation are firstly to conduct DNA analysis on the human skeletons that have been found during the excavation and secondly to get more archaeological data systematically from the excavation sites.

Key words: Pulau Kelumpang, subsidiary entreport, maritime community, house posts, DNA

INTRODUCTION

The location of Pulau Kelumpang is hidden deep within the wetlands of the Matang Forest Reserve, 12 km Northwest of Kuala Sepetang. The shortest route is via Kampong Selinsing and the next best starting point is Kuala Gula. Pulau Kelumpang archaeological sites are known to the local woodcutters and fishermen as Pulau Buluh (Bamboo Island) or Pulau Kulit Kerang (Shell Island). However, they

are not separate Islands but rather high mounds on Pulau Kelumpang, an island in Kuala Selinsing.

Evans (1932) made the first archaeological excavation comprising of 2 mounds (Kelumpang 1 and 7), located about 600-700 m from the mouth of the Selinsing River. Later, aerial photographs indicated further sites. This was confirmed by a field survey in 1988, led by Shuhaimi *et al.* (1990) which revealed five more mounds (Kelumpang 2-6), about 1 km away from the original site.

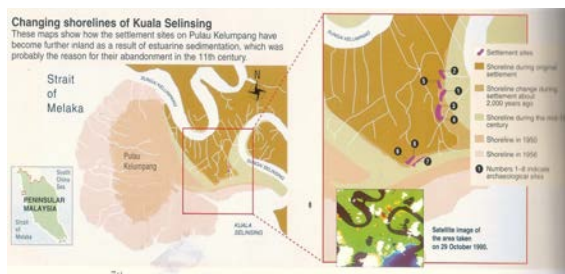


Fig. 1: Location of Pulau Kelumpang, Perak

The mounds vary in size and the longest mound is Kelumpang 6 at about 280 m which consists of earth and shell remains, the result of accumulated household refuse cast out from the original pile dwellings. The settlements on Pulau Kelumpang were probably built over the soft mudflats on the fringe of the mangrove forest. Houses of wood and thatch were placed on stilts. The mounds of earth and shell were the result of the accumulation of refuse cast out from these dwellings. During and after the settlement, the mangrove forest has crept seaward with the advance of the land due to constant deposit of detritus by the Selinsing and Kelumpang Rivers and this forest completely surrounds the sites (Fig. 1).

PREVIOUS EXCAVATIONS AND RESEARCH AT KUALA SELINSING

The earliest archaeological research in the Pulau Kelumpang area began nearly 90 years ago under (Evans, 1932). Following several short visits from 1927 onwards which were prompted by BWF Barnard's report in May 1924 to the Federated Malay States Museums of the discovery of skulls, beads and blue glass, 2 months of excavation was carried out in 1932 (Evans, 1932). Evans suggested that the archaeological finds from Tanjung Rawa belonged to a single early Indian settlement dating to the 6th century AD even though the finds ranged from a carnelian Pallava seal to Chinese or Siamese celadons.

In April 1955, G. de Sieveking conducted a second excavation at Kuala Selinsing alongside Evans' cutting. His aim was to determine the stratigraphy of the site and thus, establish the relationships of the artefacts found during Evans excavations. He recovered a remarkable total of >3000 glasses and polished stone beads from an eighteen-inch layer. Based on the evidence of the published photographs, the trenches he dug, like those of Evans were quite extensive. He suggested that the beads found had been mixed with pottery shards from various periods of which among the pottery were coarse modern undecorated pottery that presumably had been produced by the local people who settled in this area based on the

survey carried out in 1910-1916 at the Port Weld estuary area. However, it is difficult to assent to this statement based on the new data obtained from the present research at the site.

Sieveking's observations of the stratigraphy were quite generalized. He found that between 1 and 2 ft below the surface, the nature of the deposit changed from broken shells to a suspension of whole *Cardium* shells in mangrove mud. This second layer, according to Sieveking was between two and four feet thick. He considered the decorated pottery from this excavation to have been of Indian origin and between 4 and 4.5 ft in depth, he found several shards similar to those found with the Pontian boat. His third layer lay between 5 and 6 ft below the surface and below the water table; it contained large compact banks of *Cardium* shell, three dug canoes, skeletal remains and burial goods such as beads and potteries.

Sieveking's observation of the stratigraphy led him to suggest that three phases of occupation could be recognized in the history of the site. The first was the proto-Malay or proto-Indonesian phase associated with stoneware, boat burials and opaque glass beads similar to those found in cist graves in Perak. The second phase was associated with the decorated coarse stoneware which was associated with Indian wares. The Pontian type of pottery was associated with the final phase of the first period. The celadons were from the surface and represented the third phase. Sieveking also believed that some of the beads were actually manufactured in Tanjung Rawa (Sieveking, 1955).

Another scholar to comment on the finds from Kuala Selinsing was Quaritch (1940). His opinion was that the site belonged to Hinduized Indonesian settlers who lived there during the 6-12th centuries AD. Lamb (1964) in his reconstruction of the evolution of various types of ports on the Malay Peninsula suggested that Kuala Selinsing was a 'subsidiary entrepot'. Peacock (1979) believed that the chronology of the site was still obscure in view of the complications caused by the fluctuating water table and suggested that Sieveking's stratigraphic observation be treated with caution. Both Peacock and Lamb saw Kuala Selinsing as contemporary with the earliest Indianized entreports on the Peninsula (Peacock, 1979). Lamb stated that among the roles of the Selinsing settlement was the collection of hinterland products for trade (Lamb, 1964). Such products could have included ingots of tin and forest goods.

In 1987 and 1989, Hassan (1991) conducted a new archaeological excavation in Pulau Kelumpang (Hassan, 1991). Preliminary observations indicate that the site as a whole was continuously settled. There were seven to

eight culture layers or occupation at Kelumpang 1, 2 and 5 whereas at Kelumpang 3, 4, 6 and 7 the stratigraphy suggest that there were only four to five. The evidence from the archaeological finds also suggests that links were maintained between Kuala Selinsing and the Indianized settlements in the Bujang Valley. The discovery of glazed ware in Kelumpang 1, 4, 5 and 6 and especially the blue glazed Iran/Iraq Middle Eastern ware found at site 6, established that these links probably occurred between the sixth and 10th centuries AD. At this time, the main settlement in the Bujang Valley was located in the Kampung Sungai Mas area (Hassan, 1991).

All the mounds at Kuala Selinsing are scattered with shells of *Anadara granosa*. Amongst them were also found bones, shards, stones artefacts, metal and beads; the excavations produced similar materials and the most numerous artefacts are beads. Most beads found in Kuala Selinsing were made from semi-precious gemstones. Analyses by Dr. Tan TeongHing (Tan and Samsuddin, 1990) of thirteen beads from Kelumpang 1 indicate that the materials used included beryl, sodalite, moldavite, plasma, jasper, aventurine, quartz cat's eye and analcima. Although much of the lapidary work was rather crude, the beads were cut, ground and polished. Many of these gemstones, apart from jasper are not found in the Malay Peninsula. Beryl, plasma, aventurine and sodalite have been mined for centuries in India, particularly in Karnataka, Rajasthan and Kashmir and Iran and Iraq are well known for producing sodalite and aventurine while the Chinese used plasma and aventurine as jade substitutes. The excavation also unearthed beads of agate, carnelian and cork crystal though these were not as common as the other types of gemstone mentioned.

It is not possible to say at the moment what is the percentage of glass beads in comparison with those of the gemstones. There are, however, a few prominent types the most striking being a yellow spheroidal bead recovered from Kelumpang 4 at a depth of about 140 cm. A stripped glass bead was also recovered in Kelumpang 6. Beads made from fishbones have also been recovered from all the sites and shell beads of spherical, disc and lozenge shapes are also quite common. In one trench at Kelumpang 1, there was a single find of 102 shell of *Cypraea moneta*, each with its top removed for threading on a string. These could be the money cowries also mentioned by Evans. The spherical and lozenge types of shell bead were probably made from *Tridacna* while the disc types could have been made from *Celenaestudinarca*.

Additionally, a number of bracelets cut from the spires of *Trochus niloticus* shell were also found, together

with unfinished specimens. A few bracelets were probably made from *Tridacrasquamosa* as suggested by Evans (1928). Several spoons made from shell of the oyster *Crassostrea gigas* were also found in Kelumpang 1 and 6.

Artefacts of metal, including ear-pendants made from tin, like those illustrated by Evans (1932) were also unearthed. Some were found in association with burials at Kelumpang 1 and 5. Tin rings were recovered, but it is also possible that some were made of lead as suggested by Evans for Tanjong Rawa (Evans, 1932). However, more tests need to be conducted to identify conclusively the material of which these artefacts were made of. A few badly corroded bronze objects have also been found, together with iron slag.

Objects of horn, bone and ivory have also been found, including a possible but unfinished knife handle made from deer horn from Kelumpang 6. Bone points some possibly identifiable as hair-pins have been found in association with the burials, particularly near the skulls.

Pebbles stone of various shapes and sizes must be classified as artefacts in view of the fact that they were specially brought to the settlement. According to preliminary analysis (Tan and Samsudin, 1990), these pebbles most probably came from the sedimentary Semanggol Formation in Perak, north of Taiping and east of Pulau Kelumpang. Another provenance of rock artefacts could have been the Bujang Valley. The most common of these stone artefacts are slabs with numerous deep and parallel grooves which could have been used for finishing shell bracelets as suggested by Evans. Large numbers of sharpened stones were found as well as pestle-like specimens. It is quite common to find unshaped stones with burials, laid either beside the bodies or over their middle parts.

Several types of earthenware pottery shards have been recovered from all the mounds of Pulau Kelumpang. Altogether, four whole pots were recovered during the excavations, three being from the burials. Among the prominent kinds of incised decoration are chevron wave and scroll patterns but there are many linear, geometric and punctuated design as well. Impressed shards are common with surface pattern including cord, net, mat and basket marking and carved linear, crossed and curvilinear designs. Grooves occur around the necks of many vessels. However, most vessels were plain. It is uncertain whether the wares were hand made. Fabrics are generally quite coarse with colours ranging from buff to orange via various shades of brown. Various forms of lids and spouts were also found.

Imported glazed wares are rare and seem to date not later than the 10th century AD. This assumption is based

specifically on the dark-green-glazed shards found in Kelumpang 6 which might have come from Iran or Iraq. These shards have a very fine white paste and thick blue shiny glaze covers both the interiors and exteriors. Similar shards have been found in Sungai Mas in Bujang Valley and at Takuapa in Southern Thailand. Other shards which have grey colour appear to be of the Yueh type of stoneware. However, none of the celadon types mentioned by Evans (1932) were found in the new excavations.

Some of the shells obtained during the 1988 and 1989 excavations have been identified by Davidson from the Department of Zoology, Universiti Kebangsaan Malaysia and by Mrs. Solene Morris from the British Museum. These are altogether 25 identifiable species. The commonest is the bivalve *Andaragranosa*. Other species such as *Pkacuna placenta*, *Meretrix* and *Geloina* were eaten but less often. These food molluscs were mostly obtained from the mudflats around the site whereas the thick-shelled gastropods used for ornaments were probably imported from rocky shore environments. The excavations produced few mangrove species (Davidson, 1990).

The most interesting finds recovered from the excavations by Nik Hassan Shuhaimi came from the lowest waterlogged levels. These earliest levels contain materials discarded from the pile dwellings into the tidal shallow beneath. Preservation of organic remains is generally good. In Kelumpang 1, 2 and 5, coconut shells, bottle gourds, segment of split bamboo, area nuts and charred kindling left from cooking fires were unearthed. Additionally, it was discovered that the teeth of two adults buried in Kelumpang were stained by betel chewing.

Working in these lower waterlogged layers in Kelumpang 2, 5 and 6, the excavators also unearthed sections the hull of adzed and sewn planks, stumps of house posts and fragments of what appears to have been the dugout canoe. Another interesting find was a perfectly preserved mat, presumably made from bamboo, together with pieces of *Pandanus* matting. Some traces of matting were found impressed on wood.

Thick lenses of brownish peat sandwiched between layers of waterlogged mud contained bones of various types of animals and presumably made from bamboo, together with pieces of *Pandanus* matting. Some traces of matting were found impressed on wood. Thick lenses of brownish peat sandwiched between layers of waterlogged mud contained bones of various types of animals and hundred of rice husks. If botanical analysis confirms this preliminary observation, then these peaty layers may contain the earliest physical evidence of rice so far to be

found in the Malay Peninsula. In Kelumpang 6, the rice husks came to light when digging at a depth of 100 cm. It is not surprising, therefore that at Kelumpang 5; the excavators unearthed a very exciting artefact in the form of wooden rice mortar, hollowed out of a tree trunk and still in good condition.

The excavations by Nik Hassan Shuhaimi have also unearthed eleven burials but none so far have been found in canoes. The burials came from three levels, the youngest from about 40-50 cm below the surface, the next group from about 80 cm and the oldest from about 160 cm. Five of these burials were found in Kelumpang 1 four in Kelumpang 5 and one each from Kelumpang 3 and 4. Those from Kelumpang 3 and 4 were under the water table.

The skeletons from the upper burials were much more damaged in contrast to those found in the lower levels which were seemingly fully extended. Some of the burials had grave goods comprising of beads, pottery, stone ornaments and food. A child burial in Kelumpang 1 had two pots placed at its head, one apparently a food container and the other a water jug. Normally, the burial pots were placed at the head but sometimes broken pottery was also scattered over the body. The graves appear to have been shallow.

Shuhaimi *et al.* (2003, 1990) suggested that the maritime people of Kuala Selinsing were not Hindu as has been suggested by Evans (1932). The Pallava seal and the gold ring with Vishnu on Garuda are insufficient evidence to suggest that the people were followers of the Hindu religion. All other evidence, especially the burials practices, points to animism as the main belief system. Presumably, the Pallava seal and the ring represented or signified the manifestation of chieftainship. Even though the settlement was in contact with the indianized population of the Bujang Valley, the people of Kuala Selinsing were still ideologically of a pre-Indianized stage.

It is also apparent that the settlement did not come to a violent end. This assumption is based on the fact that the dead were probably buried, even during the latest phase. Economic and geographical factors must have influenced the people to move to another area when the site was finally abandoned.

From the radiocarbon dates available, so far from Kelumpang 1, it is possible to suggest that the settlement was in use between 200 BC and about AD 1000. The people were seafarers based on to the presence of the bones of deep sea fish at the sites. Contact with an inland rice-growing people also took place as evidenced by the many rice husks. A final observation is that the first settlers on Kelumpang Island were metal-using people

who were at the same stage of cultural development as the makers of the cist graves in ChangkatMenteri and other sites in Perak. Most probably these two groups were in contact with each other.

Archaeological excavation that has been done in 2008 has excavated six trenches (2×2m) which four of the trenches were located in Kelumpang 1 while another two trenches are located at Kelumpang 2. A lot of beads were found during the excavation and these beads were made from glass. These beads also known as monochrome glass bead or Indo-Pacific bead. Polychrome glass bead was also found in Pulau Kelumpang but not many of these beads of this type were found. These beads were originated from India or Middle East but there are also beads that were locally made (Hassan, 1991). Evans has suggested that the monochrome glass beads were made locally and some of the beads were brought from India. The beads that were made locally were those of a deep blue translucent glass of which rough pieces are fairly common (Evans, 1928). The excavation did not discover any raw materials used for making the beads and it is likely that the common dark red and orange opaque beads were not made in Peninsular Malaysia. The dark red and opaque orange beads were normally found in depth of 135-160 cm from the surface. Compositional analysis of the monochrome glass beads will be undertaken to prove whether the beads were locally made or otherwise.

A lot of pottery shards have also been recovered from the excavations. Several pots are from the burial. The decorations of the pottery are similar to the pottery excavated earlier by Nik Hassan Shuhaimi in 1988-1989. Among the decorations are the wave chevron and scroll patterns, including the linear, geometric and a lot of pottery shards have also been recovered from the excavations. Several pots are from the burial. The decorations of the pottery are similar to the pottery excavated earlier by Nik Hassan Shuhaimi in 1988-1989. Among the decorations are the wave chevron and scroll patterns, including the linear, geometric and punctuated designs as well. Surface pattern includes cord, net, mat and basket marking and carved linear, crossed and curvilinear designs. Most vessels were plain and some of the pottery had grooves around the necks of the vessels.

The shells recovered from the excavation were almost similar to the shells obtained during the 1988-1989 excavation. The most common is the bivalve *Andaragranosa*. Other species such as *Pkacuna placenta*, *Meretrix* and *Geloina* were eaten but less often. These food molluscs were mostly obtained from the mudflats around the site whereas the thick-shelled gastropods that were used for ornaments were probably imported from rocky shore environments (Fig. 2 and 3).



Fig. 2: Pottery found in the archaeological trench



Fig. 3: Pottery found in good condition in the archaeological trench

Table 1: Radio-carbon dating of charcoal associated with skeletons and culture layers

Sample data	Associated with	Conventional radiocarbon age
Beta 249797	Skeleton 2	1450±40 BP
Beta 249798	Skeleton 5	1810±40 BP
Beta 249799	Skeleton 1	1650±40 BP
Beta 249801	Layer 235-240 cm	1760±40 BP
Beta 249802	Layer 40-45 cm	1380±40 BP
Beta 249804	Skeleton 3	1460±40 BP

Previous excavations have unearthed five human skeletons or burials. All these skeletons have been found at different depths. Four human skeletons were found in Kelumpang 1 while the fifth was found in Kelumpang 2. Some of the skeletons were found with pottery placed at the head and foot. The pottery functioned as goods that can be used by the dead in the other world. The skeleton from the upper burials were much more damaged in contrast to those found in the lower levels which were seemingly fully extended.

Charcoal samples associated with the skeletons have been sent for C¹⁴ Dating (Table 1). The result showed that



Fig. 4: Human skeleton recovered from the archaeological trench associated with the pottery



Fig. 5: Human skeletons recovered from Pulau Kelumpang

the upper burials are dated 1450 ± 40 - 1460 ± 40 BP. Skeletons found in the lower level dated from 1810 ± 40 - 1700 ± 40 BP. It appears as if the oldest skeletons are from 120 AD. The C^{14} Dating showed that Pulau Kelumpang was inhabited continuously by maritime people since the early century. Based on C^{14} Dating that was done earlier by Nik Hassan Shuhaimi, the settlement was in use between 200 BC and about 1500 AD. The extended burial practised by the people in Pulau Kelumpang showed that the community in Pulau Kelumpang still practiced animism as the main belief system (Fig. 4 and 5).

CONCLUSION

The latest excavations carried out in Pulau Kelumpang were done to obtain accurate dating of the site using radiocarbon analysis. Radiocarbon analysis that was carried out showed that Pulau Kelumpang had

been used as a settlement since the beginning of the first century or more accurately 120 AD based on radiocarbon dating. The people in Pulau Kelumpang still practiced animism as the main belief based on burial practices even though they made contact with the inhabitants of Bujang Valley. Based on the large numbers of pottery shards and monochrome glass beads found, it can be suggested that the people of Pulau Kelumpang made their own pottery and beads; however, this statement must be proven through scientific analysis.

The maritime people of Pulau Kelumpang were in contact with the people of Bujang Valley since the beginning of the century. The Forestry Department of Perak in their statement has mentioned that the bamboo tree found in Pulau Kelumpang originated from Kedah. This indicates that trade had occurred between Pulau Kelumpang and the Bujang Valley. The people were seafarers based on the presence of bones of deep sea fish at the site. Besides working as fishermen, the people that lived here were pottery and bead makers and international traders. Based on the bones recovered from the excavation, the diet consumed by the people of this society was sea fishery products and forest animals. Pulau Kelumpang also acted as a feeder port while Bujang Valley functioned as an entrepot.

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