New Data For Studying The Early Coastline In The Jambi Area

by E. Edwards McKinnon

Three things happened in Jambi in the late summer of 1982 which are of interest to students of the history of the former Sumatran polity of Srivijaya. These are, in chronological order, the discovery in August of a bronze dipalaksmi image at the village of Koto Kandis on the Sungei Niur¹, the north-westerly branch of the lower Batang Hari; the visit of participants in the SPAFA Consultative Workshop on Environmental and Archaeological Studies on Srivijaya to Jambi and Muara Jambi in September²; and, also in September as a direct outcome of the Workshop, the discovery of a previously unrecorded archaeological site at Muara Kumpeh Hilir (Suak Kandis). A report on the Workshop was published in the SPAFA Digest 2, in October 1982.

In my "Brief Note on Muara Kumpeh Hilir: an Early Port Site on the Batang Hari? (Edwards McKinnon 1982), I suggested that, although the discoveries of the

The author has a Ph.D. in Art History from Cornell University. He has done a lot of research in Indonesia. bronze at Koto Kandis and the identification of a twelfth to fourteenth century site at Muara Kumpeh Hilir are of interest in themselves, these discoveries have a much greater significance. They call for a reassessment and, probably rejection, of Obdeyn's "gulf" theory and of his historical reconstruction of the ancient map of Sumatra which suggests that the coastline of Jambi and South Sumatra has changed considerably over the past fifteen hundred years (Obdeyn 1941, 1942a, b). Both Professor Wolters (Wolters 1979) and Dr. P-Y. Manguin (Manguin 1982) have published reconsiderations of the historical geography of the Palembang coast taking into account geomorphic data. At time of writing I do not, unfortunately, have access to the latest geomorphic data relating to the lower reaches of the Batang Hari, though I understand that geologists surveying alluvial gold-bearing deposits in the Batang Hari drainage basin have suggested that the last major geological changes in the area took place perhaps 7,000 years ago (Toh 1975). I am looking forward to being able to see the results of more recent geological research and how this may relate to the problem of early habitation in the lower reaches of the Batang Hari.

Historical sources indicate that the lower Batang Hari was of considerable political and economic importance during late "Srivijayan" times (Wolters 1966). Historical data are now being confirmed by archaeological evidence.

Muara Jambi

After Schnitger's pioneering survey of the Muara Jambi area of 1936 (Schnitger 1973) and a visit by archaeologists in 1954 (Soekmono 1955), the Indonesian National Institute for Archaeology and the Directorate for the Protection and Development of Historical and Archaeological Heritage are at present carrying out a programme of survey, excavation and restoration at the Muara Jambi site. No less than forty brickbuilt monuments have been identified in an area covering some 1,000 hectares on the north bank of the Batang Hari. There are also the remains of brick-built structures on the southern bank, one of which at Kemingking Dalam has been partially excavated. The recoveries of statuary, ceramic sherds, and other artifacts during the excavations indicate a wide range of external cultural and commercial contacts, notably with Java, Thailand, Vietnam, India and China (Nazir 1978, 1981)³ The Muara Jambi site is perhaps the most extensive and most important in Sumatra (Edwards McKinnon and Dermawan 1981). The sheer size of this site raises expectations that other, though perhaps less spectacular, archaeological evidence awaits discovery in the vicinity. This expectation is not unfounded, as evinced by the recognition of early sites at Muara Kumpeh Hilir and latterly at Koto Kandis.

Muara Kumpeh Hilir (Suak Kandis)

The discovery of twelfth to fourteenth century sherds and other archaeological debris at Muara Kumpeh Hilir some 50 km. below Muara Jambi in September 1982 was due to a fortuitous combination of circumstances. The long dry season of 1982, with a lower than normal volume of water in the river, together with low tide resulted in the exposure of sherd material in the river bank at exactly the time Abu Ridho of the Museum Nasional, Dr. P–Y. Manguin, and myself who were attending the



SPAFA Workshop, arrived at Suak Kandis⁴. When, on the following day Abu Ridho and Tomi of *PUSPAN* returned to the site, they were obliged to wait for some time before the state of the tide revealed the sherd-bearing deposit. Had we been a few hours earlier or The Batang Kumpeh at Muara Kumpeh Hilir: this section is canalized and joins the Batang Kumpeh proper with the Batang Hari.

later, we would have been unlikely to have seen any trace of former settlement. Adam, who visited the lower Batang Hari to seek, unsuccessfully, for signs of "Hindu" occupation as long ago as 1921, concluded that if any such traces did exist they were presumably buried under the mud (Adam 1921). This is precisely what has happened.

Miksic, in reviewing the problem of changes in sea level and coastal sites in Southeast Asia generally, has remarked upon the difficulty of locating such sites (Miksic 1978). Indeed, personal experience in Sumatra has shown that it is often only soil disturbance created by ditch construction or seasonal cultivation that affords the observer any opportunity of sighting traces of earlier occupation or cultural remains. The normally lush vegetation or sticky, inhospitable mud are bound to envelop and conceal everything. The one major exception to this is provided by river banks, where the scouring action of



The Lower Batang Hari

currents or tides may expose cultural remains imbedded in the soil and where the roots of recently fallen trees may, sometimes, expose buried remains before they are inexorably re-covered by a rank growth of grasses and creepers. The effectiveness of surveys and exploratory visits can be optimised by timing them to coincide with the duration of the local digging or planting season, or at such times when ditching is normally taken in hand.

In these circumstances local knowledge is useful. At Muara Kumpeh Hilir I was impressed by the villagers' observation that ancient postsherds, which they referred to as beling kuno, were exposed by low water at Tanjung Palancu at the mouth of the Batang Kum-Enquiries made at Suak peh. Kandis, three or four hundred metres upstream of the Muara, revealed that villagers were familiar with several locations in the area where sherds were to be found. Abu Ridho and Tomi were able to observe a number of additional locations on the north bank of the Batang Hari opposite Muara Kumpeh Hilir where late Sung and Yuan period Chinese sherds were exposed at low water.

In recent years extensive *pasang* surut irrigation channels for wet rice cultivation⁵ have been constructed in the area between the Kuala Niur and the Kuala Berbak, the two mouths of the Batang Hari. The existence of channels such as these should create excellent opportunities for surface observations in the area of Simpang and Koto Kandis.

Koto Kandis

The village of Koto Kandis, a single row of wooden houses thatched with *atap*, stretches for about 1½ km. along the northern bank of the Batang Hari. It is situated some 116 km. below the modern city of Jambi and is 90 km. downstream of Muara Jambi. It is about 29 km. above the village of



Koto Kandis, on the Kualo Niur. X, findspot of the Dipalaksmi.

Muara Sabak which is itself some 12 km, from the sea.

Immediately downstream of Koto Kandis, a narrow channel, the Sungai Semurnai Dalam, links the main channel of the Kuala Niur with the sea coast. Villagers indicate that the coast can be reached through this channel by small *prahu* in less than a day. Mangrove is much more in evidence along the banks of the Kuala Niur below Koto Kandis than it is above the settlement.

As in the case of cultural remains at Muara Kumpeh Hilir (Suak Kandis), there is little surface indication that Koto Kandis is an ancient site⁶, unless one happens to land at low water. Other than a few sherds of late Sung or Yuan Chinese stoneware recently exposed following the construction of a walkway along the river bank, it is unlikely that any evidence of earlier cultural remains was exposed on the surface in the village itself. At low water, however, a profusion of sherd material can be seen littering the foreshore for a distance of up to 11/2 km. or more, from the upstream side of the Sungai Semurnai Dalam

to a point where the bank is again covered by mangrove, some distance beyond, the Sungei Limbungan and a ditch known as Parit Tiga. On the landward side of the settlement, the remains of an earthern rampart known locally as the Jalan Koto is marked by a line of banana and other fruit trees.

The reason for the lack of sherd material on the surface is immediately apparent on examination of the river bank. A metrethick layer of sticky alluvium overlies the sherd bearing-stratum, a layer of greyish sand which is exposed at low tide.

The sherd material, much of it well-preserved despite the wet conditions, appears to date mainly from the thirteenth or fourteenth centuries. Fine quality *Ch'ing pai*, grey-glazed stoneware and Fukien whiteware are much in evidence⁷

The foreshore in the vicinity of the point where the dipalaksmi was discovered about 100 m. south of the confluence of the Sungei Limbungan and the Kuala Niur has vielded numerous small fragments of gold leaf, gold wire and scrap. Some 25 m. behind the river bank, fragments of waferlike bricks are to be found in a lime tree garden. A large brick measuring 30 X 18 X 7 cm. from this spot has been taken to the Museum in Jambi⁸. A number of beads, including those of carnelian and other semi-precious stones, have been found in this area.

The Dipalaksmi from Koto Kandis

The bronze *dipalaksmi*, discovered by chance by children playing on the river bank, is of considerable interest in itself. It is in the form of a female image standing 35 cm. in height bearing a spouted lamp in her left hand and a lotus blossom in her right. She wears Cola style dress, is bare breasted, and has a heavy necklace with a pendant suspended upon her chest. Hooded serpents rise from either side of her neck. Her hair is drawn back in the form of a sanggul or bun. She wears an ornamental waistband and has heavy, plain anklets on each leg.

Bronze lamps and dipalaksmi in particular were commonly presented as gifts to Hindu temples by devotees. The Koto Kandis image would appear to be no exception to this practice. It is in late Cola style and probably dates from the late thirteenth or fourteenth centuries9. Whether it was cast locally or brought from South India cannot be ascertained¹⁰, but its presence at Koto Kandis suggests a very close association between the lower Batang Hari and Tamilnadu in the period between the Cola raids of the early eleventh century and the destruction of settlements in this area in the late fourteenth century.

The Batang Kumpeh

Another consideration with a bearing upon the historical geography of the lower Batang Hari and the dating of settlement in the area below modern Jambi is the circumstance that the upper reaches of the Batang Kumpeh between Muara Kumpeh Hulu and about as far as Penarikan¹¹ appear to have been canalised¹². When exactly this work took place is not clear. There are, however, indications that it could have been prior to the twelfth century. On a brief visit to Solok Sakean on this part of the waterway in 1978, I came across sherds of early Sung period (late tenth or eleventh century) Chinese stoneware on the west bank of this channel,

Aerial photographs indicate that the Batang Hari has changed course just below Muara Kumpeh Hulu. The main channel or a branch of the river may once have flowed more or less along the alignment of the present Batang Kumpeh. A possible explanation is that the canal may have been dug to connect settlements in the Batang Kumpeh area with the main stream of the Batang Hari or it may have served some other purpose, such as helping to alleviate flooding lower down. In effect, the Batang Kumpeh channel bypasses the Muara Jambi site which is itself intersected by a series of artificial channels¹³

Conclusion

The outcome of this new evidence is that Obdeyn's picture of a large gulf reaching inland as far as Jambi and Palembang in historical times is without foundation. The coastline of Jambi, like that of Palembang, appears to have changed relatively little since late Srivijayan times and, in all probability, very little during the past fifteen hundred years. Sites such as Koto Kandis and Muara Kumpeh Hilir were already occupied by about the twelfth century and possibly much earlier¹⁴

It is interesting to note also, that in addition to Muara Jambi, other Sumatran coastal sites appear to have come to an end about the same time. To my knowledge, sites such as Pulau Kompei in Aru Bay, Kota Cina near Medan, the Panei/Barumun complex (not strictly coastal but also affected about the same time), Muara Kumpeh Hilir and Koto Kandis all seem to have been deserted or have been destroyed in the late fourteenth century. One wonders whether this might not be related to the expansion of Majapahit interests into the Selat Melaka about this time¹⁵

Both Muara Kumpeh Hilir and Koto Kandis occupy strategic points in a network of riverine communication and neighbourhood associations. Further survey and research of the lower Batang Hari area should reveal the extent and duration of early settlement there. One cannot disregard the fact that upstream is the major archaeological site of Muara Jambi, associated with the ancient toponym Melayu,



Obedyn's reconstruction of the Palembang and Jambi Coastline in the earliest historical times and the Middle Ages. It has misled a generation of scholars. Recent assessment of the situation indicates relatively little change during historical times. and known to be involved in ancient maritime trade from at least the eleventh until the fourteenth centuries.

Acknowledgement

I would like to express my appreciation to Professor O.W. Wolters for discussing an earlier draft of this paper and for several helpful suggestions.

Footnotes

- 1 The recovery of the bronze was reported in Kompas, 13 August 1982. It is now in the small museum at the office of the Department of Education and Culture in Jambi.
- 2 I am indebted to the Organizing Committee of the Workshop and to the Indonesian National Institute of Archaeology for the privilege of being able to participate in the Workshop in Palembang and Jambi last September.
- 3 Test pits excavated at Muara Jambi in September 1982 revealed numerous sherds of Chinese stoneware dating from the tenth or eleventh centuries up until the fourteenth century.
- 4 Information on tides in the Batang Hari is given in the Eastern Archipelago Pilot. Volume IV (1927), London: H.M.S.O.p. 165 which I quote, in extenso: 'The tides in Kuala Niur are mixed, diurnal and semi-diurnal, rise at spring varies from 2.1 to 3.7 m, and neaps from 0.2 to 0.7 m. The times of high and low water average about 1 hour for each 16 km upstream, but are naturally influenced by the water level of the upper river and the height of the tide. With low water level in the river (when the tide gauge at Jambie shows less than zero)

the .max/oum rise at Jambie due to the tide is...0,3 to 0.6 m., at Sekombong... 1.5 m., at Muara Kompe IIir...1.9 m., at Simpang ...2,3 m. and at Muara Sabak... 3,7 m.

When the water in the river is high (with the gauge at Jambie showing 4.6 m. [and more] the tide only causes a rise of 0.3 m. at Muara Kompe, Ilir, of 0.9 m. at Simpang Tua and practically none at all at Muara Sabak...

The water level of the river in the various months of the year is very irregular; the lowest is from June to September, and the highest from December to April, although there are sometimes very low levels during the latter months....

The stream attains a maximum rate of 2% knots as far up as Muara Kompe Ilir, and 4 knots at Jambie during floods, but not more than 2% knots in ordinary circumstances."

- 5.Pasang-surut: a system used extensively by Bugis immigrants to South Sumatra and Jambi which makes use of the ebb and flow of the tide in the lower reaches of river.
- 6 The name Kandis happens to be mentioned in the Nagarakertagama as a toponym in Sumatra in the year 1365. It is listed along with Kahwas, Mangkabwa, Siyak, Rekan, Kampur and Pane in Canto 13, Stanza 1 (Pigeaud 1960; 3, 16). Pigeaud notes "Kandis: Kandis a tributary of the Kwantan, near Koto Tua (according to Westenenk)" (Pigeaud 1960; 4, 30).
- 7 I visited Koto Kandis on a trip down the Batang Hari together with Pak M. Nazir and Dr. Tim Babcock on 18th June 1983. We made a collection of sherds from the foreshore which are now in the care of Pak Nazir at the Museum in Jambi. A full analysis of the different

types and varieties of ceramic material is still to be undertaken.

- 8 Given to Pak M. Nazir by the Kepala Kampung, Pak Jahari Uyup.
- 9 I am indebted to M. Jacques Dumarcay for discussing the dating and stylistic affinities of the image. Liebert notes: *dipalaksmi* (attribute) name of a lamp consisting of a tray for one wick, carried in hands by Laksmi the Genius of lamps (standing) — cast in bronze in one piece and often placed in shrines as a votive gift. The name derives from Tamil: *deva danam*: gifts to gods and *vilakku*. lamp (Liebert 1976, 81).
- 10 On another South Indian style votive image from Northeast Sumatra, see: K.A. Nilakanta Sastri (Sastri 1936).
- 11 Penarikan : from *tarik* to pull or haul, thus a portage.
- 12 I am indebted to Derek Holmes for dis cussing the topography of the Batang Kumpeh area and for confirming my suspicions that the upper end of the channel has indeed been canalised.
- 13 The names of waterways such as Parit Sekapung, the Parit Joho which links the east and west ends of the site and the Terusan which links the Sungei Amburan Jalo with the Sungei Berebang and Dano Lamo all imply human interference. Parit: a ditch or trench. Terusan: a canal cut to connect two rivers or avoid a long river bend (Wilkinson 1959, 1214).
- 14 It is interesting to note that a toponym Kompei or Kumpeh was known in Chinese sources as early as the seventh century (Wolters 1967, Edwards McKinnon and Sinar 1981).
- 15 Professor Wolters has noted that early Ming sailing direction ignored Jambi. The inference is that Jambi was no longer of any importance by the early fifteenth century (Wolters 1975, 35).

In late August 1984, I had the privilege of accompanying Drs Bambang Budi Utomo (Tomi) of the Pusat Penelitian Arkeologi Nasional, Jakarta, Professor O.W. Wolters of Cornell and Nigel Wolters on a speedboat trip down the Batang Hari from Jambi as far as Kampung Laut on the Batang Hari estuary and to the Batang Tungkal, From Kuala Tungkal, we spent a day travelling upstream as far as Taman Rajo, a little below Pangkalan Dagang about three hours above Kuala Tungkal.

As long ago as 1937, Schnit-

Postscript

ger illustrated a bronze Aksobhya figure, then in a private collection, said to have come from Tungkol¹, north of Jambi. I assume that this is, in fact, Kuala Tungkal as no other village of this name in Sumatra fits this description. If this is correct, this discovery would suggest that further archaeological investigation are in order in the area of Kuala Tungkal which may, in turn, indicate the permanence of this coastline in late Srivijayan times.

At Taman Rajo, we saw a fortified village site where an

assortment of fifteenth to sixteenth century ceramic sherds had been discovered together with other artifacts including an iron cannon. The sherds comprised mainly Chinese blue and white wares, Vietnamese and Thai Sawankhalok ware, together with fragments. of local earthenware.

Enroute to Taman Rajo, we passed one or two villages situated in the lower, swampy course of the Tungkal. At Kampung Kelagian where we met the first signs of

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