

Lingnan and Southeast Asia in Prehistory

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For too long, the prehistory of China and Southeast Asia have been divorced: Chang [1986] hardly mentions the latter, and I have been admonished in reverse [Bronson 1989]. Southeast Asia has no fixed boundary, and in a recent consideration of its Bronze Age, I have included Lingnan and Yunnan, both areas which share climatic and cultural variables with the Mekong, Red and Chao Phraya catchments [Higham 1995]. In trying to come to grips with the archaeology of Lingnan and Yunnan, areas in which most source material is in Chinese, I have been struck by a number of sequences and similarities with events to the south and in this paper, I offer some of these in the hope that we can bring the two areas to the altar and seal a long-term relationship. I will cover two themes: the origin and spread of rice cultivation and the relationship between the Bronze Age of Southeast Asia and that of the *zhongyuan*.

The Origins and Spread of Rice Cultivation

My understanding of this process has been turned on its head over the past year. When Renfrew [1987] published his controversial synthesis to account for the spread of Indo-European languages, he literally required that consideration be given to similar events in other parts of the world. In Southeast Asia, the link between agricultural origins and the distribution of Austronesian (AN) languages has been debated for years through the writings of Bellwood [1985, 1989, 1991, 1992, 1993],

Blust [1976, 1985, 1993] and Meacham [1983, 1985, 1991]. But little consideration has been given to the situation on the mainland. My view, which I held until a year ago, was that the distinction between Austro-Asiatic (AA) and Austro-Tai (AT) languages provided the basis for at least a dual origin, one in the Yangzi Valley, the other in tropical Southeast Asia. But when Blust [1993] and Reid [1993] announced that they had identified and agreed upon morphemes which linked AA and AN languages supportive of Schmidt's [1906] Austric phylum, the situation changed. Blust [1993] proceeded to review the archaeological implications, suggesting that the proto AA languages reached Southeast Asia with the expansion of rice agriculturists via the main river systems. Thus Munda languages would have reached India by the Brahmaputra, Khmer and Mon languages were brought by intrusive groups by the Mekong and Chao Phraya systems and Vietnamese through the passage afforded by the Red River. He suggested that agriculture would have begun in the upper Yangzi River.

I am in general agreement with this overview, but not with some details. The archaeological evidence indicates that the transition to rice cultivation within sedentary communities took place in the marshlands surrounding Lake Dongting. At Pengtoushan, we find the establishment of a village which anticipates a pattern durable

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to the present: groups of houses, a cemetery and much evidence for the use of rice. As yet, we have no definitive statement on whether the rice came from a wild or cultivated variety, but its abundance stresses ready availability in a site dated, probably, somewhere within the period 7500-6500 BC. From 5000 BC, rice was being cultivated within a burgeoning number of villages ascribed to the Daxi, Majiabing and Hemudu cultures.

The third millennium BC appears to have seen this expansionary trend reach Southeast Asia. At Shixia, we encounter clear cultural links with the Yangzi Valley in a site dated to about 2800, in association with rice remains. The Red River Valley sustained, from the mid third millennium BC, many communities ascribed to the Phung Nguyen Culture. In Yunnan, Baiyancun and the rather later site of Dadunzi illustrate the same trend, while the Chao Phraya Valley was evidently settled by rice cultivators at least by the later third millennium BC, at Non Pa Wai [Pigott 1992], Ban Kao [Sorensen and Hatting 1967] and Khok Phanom Di [Higham and Thosarat 1994a]. In India, the same period saw rice cultivation at Koldihewa and Khairadih [Glover and Higham 1994]. It is important to note the cognates for rice and aspects of its use and cultivation which are shared between Munda and other AA languages to the east [Zide and Zide 1976].

I am, therefore, proposing a framework which saw rice cultivation beginning in the Yangzi Valley in the seventh millennium BC, and through a process of expansionary settlement, reaching Southeast Asia by the third millennium. This triggers a series of related issues which I will address. The first is the status of the cultures which already

occupied our area. These are divided into two main groups: the inland mobile foraging groups usually called Hoabinhian, and the coastal settlements, many of which were probably occupied for lengthy periods of time. The latter are usually described in Lingnan as early and middle Neolithic, and in Vietnam, the term Neolithic is usually ascribed them. Naturally, the appropriateness of this term varies with one's definition. In my view, it implies agriculture and stock raising of some form. Chinese and Vietnamese colleagues rather recognise the presence of pottery and ground stone implements. As I understand the presently available biological evidence from these sites, there are no data which indicate that rice was grown. Indeed, the location of the sites, the abundance of fish and shellfish remains and the presence of pottery vessels and inhumation cemeteries suggest to me that we are dealing with groups of affluent coastal foragers not dissimilar to those found at the same period on the shores of Japan.

My colleague Rachanie Thosarat and I have recently spent three years investigating this issue as part of our Bang Pakong Valley research project in Central Thailand [Higham and Thosarat 1994b]. Essentially, we have two contrasting sites. Nong Nor is a small shell midden site formerly located on the edge of or near the shore of a marine embayment, occupied about 2450 BC. There is abundant evidence for the local manufacture of pottery vessels. Fish hooks were made of bone, and the subsistence involved not only fishing, but also shellfish collection and the hunting of marine mammals. We found one human burial which probably belongs to this phase of occupation (the site was later disturbed by a bronze age cemetery), and the male was

interred, as in similar coastal sites in Vietnam, in an upright crouched posture. Despite the preservation of wood, charcoal, shellfish and small landsnails, our wet sieving and examination of pottery tempers has failed to yield any evidence for the presence of rice.

Khok Phanom Di lies 14 km to the north. It was formerly located on an estuary, and was occupied between 2000-1500 BC. In contrast to Nong Nor, abundant rice remains from a cultivated variety have been recovered, together with the remains of the domestic dog. The inhabitants maintained a well-ordered cemetery for almost 20 generations, and there was clearly much local manufacture of pottery and exchange of exotic goods. It would be straight forward to contrast a group of affluent coastal foragers, represented at Nong Nor, with an intrusive groups of rice cultivators at Khok Phanom Di. But the situation was probably much more complex. In his examination of the material culture of Nong Nor, O'Reilly [1994] has identified many parallels between these two sites, expressed in the form and decoration of the pottery vessels, the form of the adzes and details of both manufacture and shape of bone artefacts. Such is the bond between the two assemblages that at least one alternative hypothesis should be considered, namely that the complex coastal foragers came to adopt rice cultivation either through contact with intrusive groups, or through a local transition.

Whichever is ultimately supported by further research, I propose that the term Neolithic to describe such sites as Nong Nor, the coastal settlements of the Da But, Quynh Van and Cai Beo cultures of Bac Bo, no less than the occupants of Chung Hom

Wan, Yung Long and the many related sites on the Lingnan mainland, is inappropriate. As Li Guo [1994] has suggested, these communities were involved in broadly based foraging with a marine orientation. Again, Zhu Feisu [1984] has adroitly pointed out that rice cultivation was an innovation slow to establish itself in coastal Lingnan. We need another term for these groups, and I prefer to conceive of them as affluent coastal foragers. I extend this notion across the Taiwan Strait to the Fengbitou culture, and suggest that this group was also orientated to coastal fishing and collecting, with agriculture reaching the island probably in the third millennium BC. Naturally, the moment that excavations in such sites have the good fortune, or employ the correct recovery techniques, to encounter the remains of rice, I will modify my views. At present, however, I prefer to base my interpretations on the available evidence.

The Bronze Age

No subject in our region has generated as much heat and so little light as the dating and the significance of the Southeast Asian Bronze Age. It is worth recalling the words of Muhly as he attempted to penetrate the fog which surrounds this issue: "In all corners of the Bronze Age world - China, Mesopotamia, Anatolia, the Aegean and central Europe, we find the introduction of bronze technology associated with a complex of social, political and economic developments that mark the 'rise of the state'. Only in Southeast Asia, especially in Thailand and Vietnam, do these developments seem to be missing" [Muhly 1988:16].

White [1982:48] spoke along similar lines when she wrote that metal working

began in: "Simple village contexts that derived their subsistence from hunting and gathering and simple cultivation... no urban, state or military stimulus from within or outside the region is in evidence. No complex, stratified social organization appears to have been the cause or consequence of the development of metal technology".

This notion of an independent origin of the Bronze Age is rooted in claims for bronze casting in the third or even the fourth millennium BC which issued from the excavators of two sites, Non Nok Tha and Ban Chiang [Solheim 1968, 1972, Bayard 1971, 1980, Gorman and Charoenwongsa 1976]. As a research associate involved in the analysis of material from both these sites, I do not exclude myself from the list of those proposing early contexts, though in my case I can excuse myself to a certain extent on the grounds of my then ignorance of the area's prehistory [Higham 1972].

As research has progressed, so we have gained a clearer idea of the chronological context. In 1983, I indicated my unease with the stratigraphic security of the dated charcoal [Higham 1983]. In the case of Non Nok Tha, this has been confirmed, in my view, by the series of AMS dates obtained on the basis of rice used to temper pottery vessels. These point to a relatively brief use of the site between about 1300-1000 BC rather than the millennia suggested by the excavators. A similar programme of dating has been initiated for the site of Ban Chiang. Above all else, however, we now have available determinations from many more sites, and these are beginning to crystallize into a coherent pattern. The three dates from the initial use of Non Pa Wai as locale for smelting and casting are 1690-1225, 1450-

1136 and 1270-800 BC [Natapintu 1991]. As far as I am aware, these date the same context and thus fall within the same period as the AMS dates from Non Nok Tha. One date, never enough to warrant confidence, has been obtained from the smelting and casting site of Phu Lon (1750-1425 BC). The list of other sites with series of dates is lengthening: we can turn to Ban Na Di, Nong Nor, Thanh Den and Kwo Lo Wan for Bronze Age sites falling between 1300-500 BC [Higham and Kijngam 1984, Higham and Thosarat 1994b, Anon 1991, Meacham 1993]. Equally encouraging are the results of dates which indicate that the terminal Neolithic continued to 1500 BC and beyond. A brief conference paper is insufficient to develop this review of the dates, but I have argued elsewhere that there is vanishingly little evidence known to me which could place the Bronze Age in Southeast Asia significantly earlier than 1300-1500 BC. If it should eventuate, my hypothesis developed below will be modified or rejected.

I will now turn to the late Neolithic and Bronze Age of Lingnan and Bac Bo, regions pivotal to our understanding of the context within which bronze casting took root in Southeast Asia.

The Fubin Culture

The sites ascribed to this culture contribute much to our understanding of the late Neolithic in Lingnan because the presence in graves of exotic stone artefacts allow us to relate the sites to the late Shang and early Western Zhou, that is a couple of centuries either side of 1100 BC. They follow the later Neolithic sites which cluster in the valley of the Hanjiang and the adjacent coastal plain with a preferred location on low hills. Pottery vessels

predominate among the grave goods, and there is also a new range of highly sophisticated stone weapons and ornaments. Among the former, the *ge* halberd is most informative, because it provides parallels with related weapons from the *zhongyuan*. Jade rings are also found, and to judge from the variation in the size of the grave and the quantity of offerings among the 22 interments at Wanglang, these late Neolithic communities displayed an element of social ranking. This same tendency was noted at Tazaijinshan, where the richest and largest grave also occupied the summit of the hill. This particular grave, number 1 among the 16 excavated, involved considerable energy: it measures 4.2 by 2.9 m, and the base is 3.6 m deep. It is also one of eight equipped with a ledge running round the basal part. Ceramic vessels predominate among the 36 grave goods, and there are also three *ge* halberds, but while contemporary with the vigorous and long-established Shang bronze tradition, no grave at the site has yielded any bronze artefacts. There is some doubt over the context of a bronze *ge* halberd from the nearby site of Dingdapushan, but in the other Fubin sites, we find the same situation: ceramics and fine stone artefacts but no metal.

The Phung Nguyen Culture

A thousand kilometres to the southwest, we meet the delta of the Red River and the Phung Nguyen culture. As with the Fubin sites and Shixia, this represents a marked departure from the earlier pattern of settlement. Sites are located on slightly elevated terrain commanding stream valleys above the confluence of the Red and Black rivers. There are three phases, based on changes in pottery typology, which Ha Van Tan [1991] has described as dating between the end of the third millennium BC and

about 1500 BC. The earliest, Go Bong phase, is characterised by pottery decorated with burnished areas interspersed with incised bands filled with fine impressions. Spirals and 'S' motifs were popular. This technique was modified by the second phase, the decoration being more formally applied but still retaining the spirals and 'S' motif. The infilled bands became less popular with the final phase and incised decoration now took the form of straight or wavy lines. Only 11 late sites of the 52 examined contained bronze, and no recognizable metal artefacts have been found. The fragments were, however, made of a tin bronze.

Excavations at Phung Nguyen covered 3960m², and despite this extensive area opened, no bronze was encountered. The rich material culture included over a thousand adzes or adze fragments. Most were quadrangular in cross-section and rectangular in form, but there were also four shouldered specimens and stepped adzes have been found which recall South Chinese forms. Stone bracelets were particularly abundant at Phung Nguyen, the 540 specimens being divisible into eight types [Nguyen Ba Khoach 1980]. There are also a few stone arrowheads and a bone harpoon.

The degree of skill associated with the manufacture of stone jewellery is particularly clearly seen at the late Phung Nguyen culture site of Trang Kenh [Nguyen Kim Dung 1990]. There is an element of uncertainty over the cultural status of this site, Nguyen Kim Dung describing it as belonging to the bronze age. No metal has been uncovered, however, and the pottery relates to the late Phung Nguyen styles. At this juncture, it is recalled that some sites of

this phase have revealed a few fragments of bronze, and Trang Kenh is interpreted here as one belonging culturally to the terminal Neolithic. Located near the coast at Hai Phong, excavations have revealed a wide range of nephrite ornaments, including bracelets and beads, as well as the chisels, drill points, saws and grinding stones used in their manufacture. The radiocarbon dates accord well with the received dating of the Phung Nguyen culture, the pooled mean for the four dates being 1679-1514 BC.

Although no burials were found at Phung Nguyen, Hoang Xuan Chinh [1968] has uncovered twelve at Lung Hoa. These had been excavated up to 5.2 m into the ground and were provided, as at the wealthy Fubin sites, with ledges. The offerings in two graves included stone bracelets, beads, earrings, adzes and pottery vessels, but others only contained pots and adzes. The excavators have suggested that this may reflect differential social ranking, although a larger sample would be necessary to examine this issue further. A stone *ge* halberd from burial 9 is a form which can be paralleled in the Fubin sites, such as Tazaijinshan and Yuanguang, as well as at Sanxingdui in Sichuan. The occupants of Sanxingdui were in contact with the later Shang sites of the Huanghe Valley, where there are jade and bronze examples of this type of halberd. Murowchik (1989) has argued that the presence of such similar artefacts at the same period is most unlikely to result from independent development, and favours exchange contact to explain the presence of the Lung Hoa example. This is not the only example of contact between the Phung Nguyen culture and Shang China. Ha Van Tan [1993] has described a series of jade *yazhang* knives of a singular form from Phung Nguyen and Xom Ren. These are

precisely matched in the Zhujiang Delta area, at Erlitou and later Shang sites and must surely represent imports from the Huanghe Valley. The dating of the latter sites fits well with the available radiocarbon dates from Bac Bo. Such exchange with the contemporary Neolithic sites of Lingnan, which reached ultimately to Sanxingdui and Anyang, could also have introduced knowledge of the properties of copper and tin.

The Phung Nguyen culture probably became established within the period 2500-2000 BC, and available radiocarbon dates suggest that its late phase was developing into its successor, the Dong Dau phase, from about 1500 BC. Ha Van Tan [1980] has identified parallels in material culture between the Phung Nguyen and the coastal Hoa Loc and Ha Long cultures, both of which succeeded the earlier Quynh Van and Bau Tro cultures on the littoral of the Gulf of Bac Bo. He has ascribed these to exchange contacts.

By the middle of the second millennium BC, we can recognise a series of regional settlement concentrations from the Hanjiang to the Red River deltas which have a number of features in common. While there remained a distinct coastal orientation, there was also a preference for the establishment of small villages in the inland river valleys. These communities cultivated rice and maintained domestic stock. They also included skilled workers of clay and stone. The former employed enclosed kilns and their fine wares were fired under controlled conditions at high temperatures. The latter made tools and ornaments of high quality, some of which were used as mortuary offerings. The burial technique, extended inhumation, saw a

considerable expenditure of energy in the provision of deep graves equipped with ledges, and containing impressive sets of grave goods. These sites have in common a further variable of critical importance. They include jade artefacts which have their closest parallels in later Shang contexts to the north. There can be no doubt that coastal and riverine exchange placed these late Neolithic communities in touch with one of the most sophisticated bronze traditions in the ancient world.

That bronzes travelled the same routes is clearly evident in the recovery of stray finds, the distribution of which again stresses the importance of riverine communication. Perhaps significantly, one of the earliest specimens, a *yu* vessel ascribed on the basis of its dragon design to a later Shang context, has been found at Xing'an, almost literally on the watershed between the Xiangjiang which flows north to Lake Dongting, and the Fuyishui, which flows south to the Xijiang [Liang Jingjin 1978]. The same dragon design was identified on a halberd from Xinjie, located in the same part of northeastern Guangxi [GXBWG 1984], while Allard [1995] had noted that the *nao* bell from nearby Zhongshan has close parallels in Hunan. Both these last finds date to the Western Zhou period. Further downstream, at Matitang, a stray lei vessel incorporating dragon designs has been recovered, a vessel virtually identical to one from Wushi, on a small tributary of the Yujiang [GXBWG 1984].

The location of Xing'an and Xinjie indicates the most likely exchange route for a marked concentration of early exotic bronzes in Yujiang valley below Nanning. It may not be coincidental that the bronzes are found in the same general area as the late

Neolithic caches of stone spades. The preferred import was the *yong* bell, found at Mei'ershan, Tongmen, Luxu and Dabeimiao [Liang Jingjin 1978, GXBWG 1984]. Further specimens were found in the same general area, the period involved covering the Western Zhou and Spring and Autumn periods.

The pivotal location of Shixia, however, should not be overlooked, and indeed the upper layers, likewise belonging to the Western Zhou and Spring and Autumn periods, have yielded a significant range of bronzes including a short sword or dagger, an axe, awls and scrapers. Again, *yong* bells were popular in central Guangdong to the south, sets of three and seven respectively coming from Meicun and Sanwucun in the Dongjiang Valley [Xu Hengbin 1984].

These stray finds and the upper context at Shixia point unequivocally to a vigorous exchange network linking Lingnan with the Yangzi Valley and ultimately, with the *Zhongyuan*. Yuanlongpo, a most important cemetery in the Yujiang Valley northeast of Nanning, provides us with glimpse of the role bronze played in mortuary rituals in the early centuries of the first millennium BC [Allard 1995 GXBWG 1988]. Unfortunately, the excavation report does not provide the detailed information from each of the 350 burials uncovered, but it is still possible to obtain some valuable results. The mortuary ritual involved inhumation in individual graves, some of which were provided with a ledge or a side chamber. A wide variety of grave goods was encountered, about 10% being bronzes. Already, these provide a portent of the warfare which was to dominate later bronze assemblages in this region: the items include spearheads, axes, arrowheads, and

daggers or short swords. A ritual or festive element is also seen in the vessels, at least two of which were probably exotic, and there are also bells and knives. The division between imported and local bronzes is facilitated by the recovery of some 12 stone bivalve moulds, some of which were broken probably as part of the mortuary ritual. These were intended for casting *yue* and *fu* axes, *dun* (the tubular cover at the end of a spear), and arrowheads. Many jade ornaments were also found as mortuary offerings, and fragments of lacquer indicate some elaboration in the manufacture of coffins. Allard [1995], when summarising this site, has stressed the likelihood that there was some form of social hierarchy, for burial 147 was not only one of only 16 equipped with ledge, but it also included a probably exotic *you* bronze vessel. It is not, however, possible to probe further and seek evidence for or against the presence of ascribed rank rather than achieved status through personal endeavour.

The period which saw the arrival of exotic bronzes from the *zhongyuan* and the middle reaches of the Yangzi saw, in the context of the late Neolithic, the beginnings of a local tradition in casting which involved the production in bronze of a limited range of artefacts long since rendered in stone or bone. These comprise arrowheads, axes, fishhooks and spearheads. This regionally distinct tradition, which developed in Lingnan in the context of imported late Shang bronzes, has long been recognised. Thus the conjunction between hard geometric pottery and bronze in Hong Kong sites was noted during the 1930's, for Finn [1958] discovered 6 axes during his excavations on Lamma Island 4 of which were socketed and cast in a bivalve mould. He stressed their affinities with axes found

in Vietnam, Laos and Cambodia, noting in particular similarities with those from Samrong Sen. Fishhooks, leaf-shaped knives and arrowheads matching those from Sham Wan have also been found at Man Kok Tsui on the southeast coast of Lantao Island [Watt 1968], but one of the best-known bronze assemblages comes from Tai Wan, about 1.5 km north of Sham Wan. Finn [1936] has described two socketed spearheads from this site, as well as a socketed axe, both of which he compared to similar examples from Bac Bo. One of the spearheads, for example, had the same two slots on the socket as are regular features on examples found to the south.

In 1937, Schofield excavated at Shek Pik on Lantao Island. Although not in stratigraphic contexts, he found 6 bivalve sandstone moulds for casting socketed axes, 3 having clear parallels with those from Vietnam and Thailand. The hard geometric layer at the site also furnished a few bronze items. The 1971 excavation at Sham Wan encountered bronze fishhooks and arrowheads, the alloy including about 10% of tin. More recent excavations have clarified the chronology of the Bronze Age in this coastal region [Meacham 1993]. There are three determinations from Kwo Lo Wan and one each from Lung Kwu Sheung Tan and Sha Po Tsuen. They suggest the establishment of bronze casting by 1300-1000 BC. Research at Kwo Lo Wan has also added considerably to our knowledge, because burials were identified and the cultural context, dated by three radiocarbon dates between 1300-1000 BC [Meacham 1994]. Two of the eight burials, which were orientated on a north to south axis, contained bivalve sandstone moulds for casting socketed axes. Other offerings include hard and soft geometric vessels,

slotted stone rings of marble and agate, and two bronze projectile points.

Similar material has been found on the mainland nearby. Maglioni [1975] named his Bronze Age phase after the site of Polau, which he discovered in 1940. Several of his sites, examined on surface surveys rather than through excavation, revealed bronze artefacts and evidence for local casting. At Gebui, for example, he recovered the mould for casting a socketed axe. Two further moulds were found at Polau. Ng Fa yielded a bronze bodkin and socketed axe, a socketed spearhead and a chisel.

The Early Bronze Age in Bac Bo

Exactly the same sequence and chronological framework has been identified in the lower Red River valley. The first bronzes were found in contexts which were receiving exotic northern jades. A few pieces of bronze have been found in some late Phung Nguyen sites, but the following phase, named after the site of Dong Dau, saw a virtually identical range of bronzes and the same casting technology to those found in the Zhujiang Delta area. There is a reasonable corpus of radiocarbon dates for the Dong Dau phase. Most come from Thanh Den, a site with a relatively shallow stratigraphy, and evidence for casting in the form of moulds and melting furnaces. Two of the dates from Thanh Den seem aberrant [Anon 1990], particularly when compared with those available from the later Phung Nguyen contexts. The remaining 11 suggest that bronze working was established within the period 1500-1000 BC, a context which corresponds well with the available dates for virtually the same industry in Hong Kong.

Dong Dau is located just north of the

Red River 35 km east of Phung Nguyen. It covers about 3 ha and has a cultural stratigraphy between 5 and 6 m deep. Its basal layer contains late Phung Nguyen pottery, but thereafter the assemblage developed into the Dong Dau culture. Sites are distributed in the same general area as Phung Nguyen settlements. While the pottery continued to be incised with a series of curvilinear lines originating in the Phung Nguyen repertoire and the stone adzes and points continued from local prototypes, there was a flowering of the local bronze industry. Dong Dau and Thanh Den have provided sandstone moulds. Artefacts made from a tin-copper alloy included axes, chisels and arrowheads, socketed spears and fishhooks. The analysis of a sample of 22 Dong Dau bronzes has revealed an alloy similar to that in use in Northeast Thailand at the same juncture in that no lead was employed. Tin levels, however, appear to have been rather high with values varying between 6.8-28% and averaging 11%. The same alloy was used for the axes, spearheads, points, fishhooks and the bracelet analysed, but 3 arrowheads were made from a most unusual alloy comprising copper and between 2.9-6.5% antimony with no tin [Trinh Sinh 1990]. Small clay-lined furnaces have been found at Dong Dau and Thanh Den, which were probably used for melting copper and tin before casting.

Ha Van Phung [1993] has identified three phases of the succeeding Go Mun culture, largely on the basis of the rim typology, the earliest being represented in the upper layers at Dong Dau. Go Mun itself, where the second and third phases are present, is located just above the strategic confluence of the Red and Black rivers [Ha Van Phung and Nguyen Duy Ti 1982]. Excavated between 1961-71, its particular

interest lies in the fact that, unusually, bronzes have been found in non-mortuary contexts. Moreover, the excavations covered various parts of the site, and therefore provide a spatial dimension to the location of bronzes.

The excavation covered 1500m², and the squares were spread over the central and southern parts of the site. But all yielded a similar variety of bronzes, and finds from one of the 1965 squares revealed a considerable density of bronze finds within a stratigraphic build-up which barely exceeded a metre in depth. Although stone adzes and bracelets remained abundant, the assemblage from Go Mun reveals a marked proliferation in the range and the function of bronzes. These can be considered in four distinct categories: decorative, utilitarian, ritual and for use in conflict.

Bracelets were cast, but only 3 were encountered, a marked contrast to their predominance in bronze assemblages from the mortuary contexts west of the Truong Son Range. It is most significant to find bronze being employed in agriculture and industry. The Go Mun sample includes a sickle and 5 socketed hammers. There are also fishhooks, awls, chisels, axes and knives. 2 fragments of bowls of some sort and a human figurine may reflect a nascent interest in applying bronze to ritual activity, while the presence of a socketed bronze spearhead and arrowheads suggests the presence of conflict. Trinh Sinh [1990] had reported on the results of a spectrographic analysis of five Go Mun bronzes, and has found that, as with the Dong Dau material, a tin bronze was used in casting axes and spearheads, while one arrowhead lacked tin, but included 2.1% of antimony. Split stone earrings are also found in Go Mun contexts,

of a form paralleled in earlier Phung Nguyen and Dong Dau sites [Ha Van Phung 1993].

West of the Truong Son Cordillera, we encounter a virtually identical bronze industry in terms of the casting procedures, the alloys used and the artefacts produced. As has been mentioned, the pattern of dates also matches that from Lingnan and Bac Bo. We find that cemeteries contain very few bronzes, with bangles predominating. No particular status has been found to attach to those with bronze grave goods. Metal, indeed, found its place alongside other exotic items, including marble, slate and marine shell in the range of mortuary offerings. We have to await almost a millennium before social elites began to employ bronzes to indicate their elevated social standing, a pause which is to be found in virtually all known instances where bronze casting was introduced into the repertoire.

There are at least two alternative hypothesis to account for the adoption of metallurgy in Southeast Asia. The first identifies Lingnan and Bac Bo as critical areas, for here the first local castings were made in the context of exchange with the *zhongyuan* and the sophisticated Bronze Age communities of the Yangzi Valley. This transfer and adoption of such a technological innovation has recently been considered in some detail by Pacey [1990]. His conclusion, that "the achievements of one society stimulated people elsewhere to make different but related inventions" may well apply. When knowledge of the properties of copper and tin reached Lingnan during the late Neolithic, it would be absurd to expect to find local people interested in casting Shang wine vessels.

Rather, they copied in bronze the artefacts they desired, and which had long been rendered in stone or shell. So we find small axes, bangles, arrowheads and fishhooks. The second alternative is that indeed, there was a local and independent transition to copper and tin smelting and alloying in Southeast Asia, belonging to the later third or early second millennium BC, and that the two traditions, by a remarkable coincidence, reached Lingnan at about the same time. I prefer to follow the course of Occam's razor and adopt the former, but should further excavation and new dates push the Bronze Age of Southeast Asia beyond the earliest evidence for casting in the *zhongyuan*, then of course reevaluation will be necessary.

Abbreviation

GXBWG: Museum of the Guangxi Zhuang Autonomous Region

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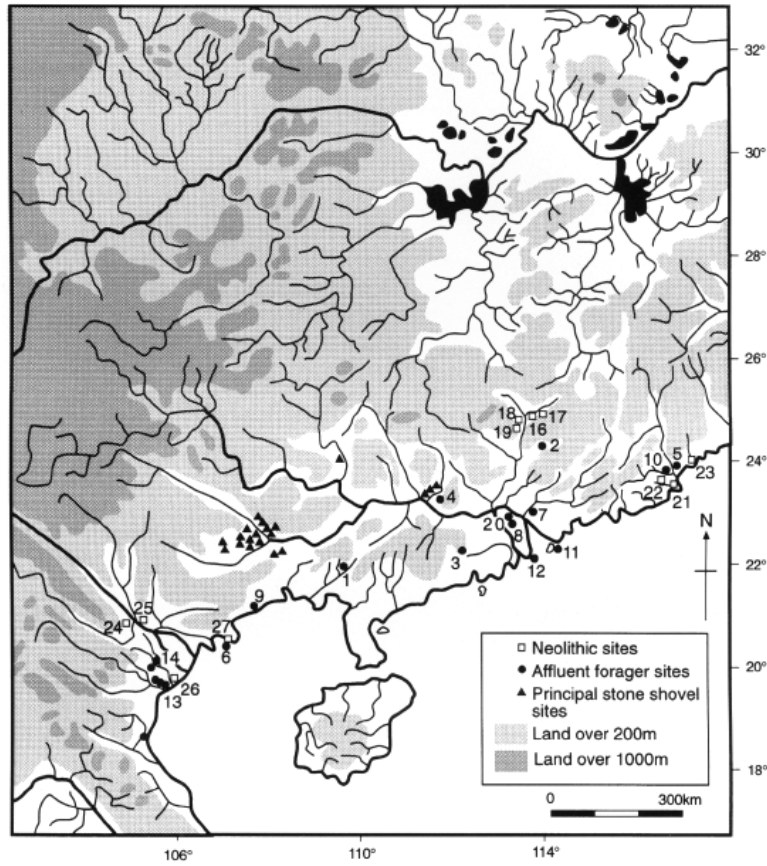


Fig.1 sites of affluent foragers and the Neolithic in Lingnan and Bac Bo.
新石器時代遺址

- | | | |
|----------------------------|---------------------------------------------------------|--------------------------------|
| 1. Lingshan | 11. Chung Hom Wan, Chek Lap Kok,
Yung Long, Sham Wan | 20. Hedang |
| 2. Wengyuan | 12. Hac Sa Wan | 21. Zuoxuangongshan |
| 3. Yangchun | 13. Da But, Con Co Ngua, Go Trung | 22. Futoubu |
| 4. Huangyangdong | 14. Xom Trai, Con Moong | 23. Dingdapushan, Tazaijinshan |
| 5. Shiweishan, Chenqiaocun | 15. Quynh Van | 24. Go Bong, Phung Nguyen |
| 6. Cai Beo | 16. Shixia | 25. Lung Hoa |
| 7. Wangfu'an | 17. Xingcun | 26. Hoa Loc |
| 8. Xiqiaoshan | 18. Chuangbanling, Liling | 27. Ha Long |
| 9. Dongxing | 19. Nianyuzhuan Culture | |
| 10. Chao'an | | |

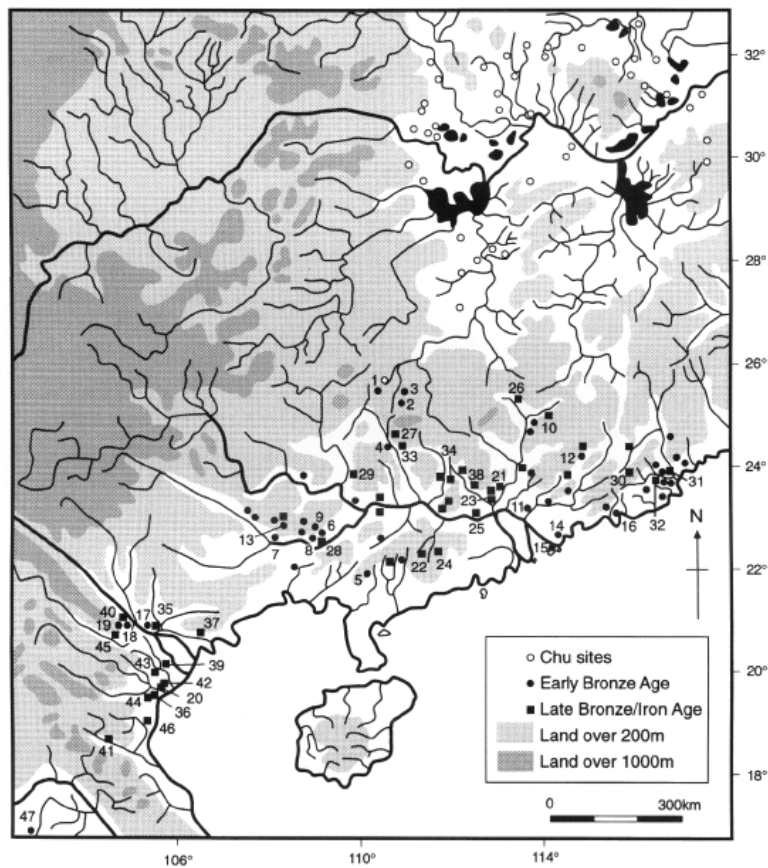


Fig. 2 Bronze Age sites in Southeast Asia and Chu centres.
青銅時代遺址

- | | | | |
|--------------|------------------------------------------------|---------------------|----------------------------|
| 1. Xing'an | 13. Yuanlongpo | 24. Beifushan | 36. Dong Son |
| 2. Xinjie | 14. Lamma Island | 25. Beilingsongshan | 37. Viet Khe |
| 3. Zhongshan | 15. Tai Wan, Shek Pik,
Sham Wan, Kwo Lo Wan | 26. Dagongpingcun | 38. tonggugang |
| 4. Matitang | 16. Polau, Gebui, Ng Fa | 27. Yangjia | 39. Chau Can, Xuan La |
| 5. Wushi | 17. Dong Dau | 28. Weipocun | 40. Lang Ca |
| 6. Meishan | 18. Thanh Den | 29. Xia'neicao | 41. Lang Vac |
| 7. Tongmen | 19. Go Mun | 30. Bayushan | 42. Ngoc Lu |
| 8. Luxu | 20. Quy Chu | 31. Miantouling | 43. Hoang Ha, Song Da |
| 9. Dabeimiao | 21. Matougang | 32. Goushipushan | 44. Quang Xuang, Nong Cong |
| 10. Shixia | 22. Nammendong | 33. Yinshanling | 45. Ban Thom |
| 11. Meicun | 23. Niaodanshan | 34. Liyangdun | 46. Dong Hieu |
| 12. Sanwucun | | 35. Co Loa | 47. Ban Chiang, Ban Na Di |

嶺南及東南亞地區的史前文化

C. F. W. Higham

【摘要】

本文目的有二：其一是通過稻作耕種的起源和流播找出其向南拓展的軌跡，其次是探索青銅時代東南亞地區和中原的關係。

農業的起源和流播與語系的分佈有著密切的關係。從考古和語言研究所得，相信稻作文化約在公元前7000年發源於長江中游的沼澤地帶，隨原始奧亞語系民族沿著主要的江河系統向南移而逐漸向東南傳播。布拉馬河、湄公河、湄南河及紅河等在稻作文化傳播方面扮演著重要的角色。至公元前3000年左右，稻作耕種已普遍在這些江河流域發展起來，由越南至東印度這段東南亞地區亦同時步進新石器時代。

在稻作耕種傳入之前，印支半島的文化大致分兩類。一類是以和平民族為代表的內陸文化，另一類是以較富裕的沿海聚落為代表的濱海文化。嶺南地區和越南的考古學者普遍認為後者已進入新石器時代。然而，本文作者卻認為缺乏農耕證據的文化遺存，如泰國的Nong

Nor，越南北部Da Bu，Quynh Van及Cai Beo，香港的春坎灣及湧浪，以至很多嶺南地區的其他遺存等，都不能稱作新石器文化。

一直以來，有關東南亞地區青銅文化的年代和意義，眾說紛紜，莫衷一是。據屬於嶺南地區新石器晚期文化的浮濱遺存顯示，商末周初之際，此地與中原已有交往，出土的玉器、陶器及石製兵器異常精美，但除頂大埔山發現有銅戈外，其他浮濱類型遺存均未見任何金屬製品出土。據越南北部各遺址顯示，此地於商及周初已經與中原有直接或經嶺南地區的間接交往，稍後於公元前1500-1000年間建立的鑄銅工藝亦係循這些接觸而得以傳入。

從石峽及嶺南地區一些零散出土的西周及春秋時期銅器顯示，中原文化當是沿著江河的流域向東南推展。整體來說，嶺南及東南亞地區的青銅文化開始自公元前1300-1000年間，以雙面合範法鑄造各種斧、箭頭、槍頭，和以失蠟法鑄成銅鑄。