THE DA BUT CULTURE IN THE STONE AGE OF VIET NAM

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In Viet Nam, the post-Hoa Binh cultural period was marked by the spread of archaeological cultures over the coastal plains. These cultures were characterized by small areal extents and local colours, so that the cultural picture of this period became complicated and different between areas. The interpretation of the origins of these post-Hoa Binh cultures poses great problems for archaeology.

However, an event of great significance which occurred in this period was the movement of a portion of the inhabitants from the inland Hoa Binh cave sites to settle on the coastal plains. In this new environment the economic patterns changed gradually. As a result, a new kind of cultural entity was formed. One of these is termed the Da But culture.

Knowledge of this culture began in 1926-1927 with the excavation of the French scholar Étienne Patte at the Da But site (Vinh Loc district, Thanh Hoa province). This site is located in the plains abutting the mountains about 40 km from the present sea coast. It is a mollusc shell-midden, mostly *Corbicula*, with some *Placuna placenta*, *Meretrix*, and *Arca*. All of these species lived in the coastal river mouth. They are the remains of food deposited in a large midden 50 m long, 32 m wide and 5 m high. Patte found at the site many remains of human activities, such as traces of cooking fires, burials, stone tools, pottery and animal bones. Typical of this site are edge-ground pebble axes similar to Bac Son axes.

Unlike the Bac Son culture, however, this complex of stone tools was associated with pottery with coarse mat-impressed designs. The burials were placed in squatting positions and identified at the time as being of Melanesian physical type (Patte 1932). Observing the postures of many of the skeletons Patte maintained that they had been bound into position before burial. In many graves were found goods including axes, ochre, ear-rings of drilled shells and pottery vessels similar to those uncovered in the cultural layers. Patte's early discoveries are of great significance for our awareness of the Da But culture, but he was mistaken in considering Da But as merely a site of the Bac Son (i.e. Hoa Binh) culture.

NEW WORK AT DA BUT

From 1960 onwards Vietnamese archaeologists began to study the Da But site further, excavating a 50 m² area. The collected materials permitted recognition of many special characteristics of the Da But culture when compared with the Hoa Binh-Bac Son culture. At the Da But site the pebble tools, short axes, almond-shaped chipped axes and edge-ground axes are similar to Hoa Binh-Bac Son implements, but there are also some small axes with flat heels and extensive traces of polish on both sides. These are quite different from the Bac Son edge-ground axes. Polished stone tools are the most numerous stone artefacts at Da But. The abundant potsherds (2000 per 50 m²), are coarse, thick and tempered with laterite grit. Vessel mouths have tall, flat rims and bodies are egg-shaped, 40-50 cm in diameter. Vessel exteriors bear mat-impressed designs all over. Generally, the Da But pottery is characterized by its coarseness, but its forms and materials vary very little. Therefore, it is easy to distinguish Da But pottery from other prehistoric pottery in Viet Nam.

In recent years, a few potsherds of Da But type have been found in other contemporary sites, for instance in the lower layer of the Cai Beo site on the island of Cat Ba, Hai Phong City, in the Go Lap Bac site, and in the Con Dat site of the Quynh Van culture of Nghe Tinh province. Possibly, this is evidence of relations between the cultures of the post-Hoa Binh period in the coastal plains. In the mountains, some sherds of Da But pottery have also been discovered in some Hoa Binh caves located on the borders of the distribution of the Da But culture, expecially the caves of Hang Dang, Con Moong and Xom Trai. Some archaeologists hold that these sherds may be considered the precursors of the Da But pottery, but it should be noted that the potsherds found in these Hoa Binh caves usually come from disturbed layers, sometimes with shouldered axes of the Metal Age. Moreover, they are very few in number.

Some shell samples collected from different depths of the Da But site have been radiocarbon dated as follows:

60 cm depth: 5,710±60 BP (Bln 3507)

70 cm depth: 6,095±60 BP (Bln 3510)

80 cm depth: 6,390±60 BP (Bln 3508)

120 cm depth: 6,430±50 BP (Bln 3510/I) and 6,460±60 BP (Bln 3510/II)

These dates were run by the Radiocarbon Laboratory in Berlin in 1971 and 1986. The total depth of the Da But cultural layers is 5 m and pottery was found throughout. Both the pottery and the site can therefore be dated from 6500 to 6000 BP.

THE DA BUT DOMESTIC FAUNA

Patte found a specimen of a dog leg-bone in the site and suggested that it possibly belonged to a dingo. Among the bones collected in 1971 there are six teeth of

domesticated bovid (Bibos sp.) (Vu The Long 1979). At Con Co Ngua, another site of the Da But culture, many bones and teeth of domesticated bovids, buffalo (Bubalus bubalis) and pig (Sus scrofa) have also been found (Vu The Long 1980). Repeated discoveries have left no doubt about the practice of animal domestication by the Da But population.

DA BUT IN ITS REGIONAL CONTEXT

Since the work at Da But many similar sites, such as Ban Thuy, Lang Cong, Con Co Ngua and Go Trung, have been found scattered along both banks of the River Ma, from the inland edge of the plains to the coast of Thanh Hoa province. The sites occupy an area about 40 km long and it is evident that Da But itself served as a major center. Go Trung is located on the coast of Hau Loc district and was excavated in 1977 over an area of 170 m² (Bui Vinh and Nguyen Khae Su 1977). 50,000 sherds of pottery similar to the Da But pottery were recovered, together with edge-ground axes identical to those of Da But. However, many axes distinctive to this site have small sizes, trapezoidal shapes, and are made of slate. They have ellipsoidal cross-sections and are polished on all sides, similar to axes from late Neolithic sites in Viet Nam. We have also found many pestles and mortars, fish-net sinkers and possible spindle whorls at the Go Trung site.

The radiocarbon date for Go Trung is 4700±50 BP (Bln 2090) This date suggests that the Da But culture lasted for about 1700 years, from Da But to Go Trung. A site which perhaps occupies an intermediate chronological position is Con Co Ngua in Ha Trung district, investigated in 1979-1980 (Bui Vinh 1980). This site lies half-way between Da But and Go Trung on an area of slightly elevated land about 30 km inland. It occupies an area of about 2,000 m² and has two cultural layers. The lower belongs to the Da But culture proper, having many burials in flexed positions, pottery with coarse mat impressed designs and edge-ground axes. However, the upper layer produced axes with all sides polished, net-sinkers and tools of wheel shape similar to those of Go Trung. The axes have oval cross sections and are polished on both faces, but without removing all traces of flake scars. The large number of axes of this type, as well as the appearance of small numbers of spindle whorls and net sinkers, suggests that the upper layer of Con Co Ngua occupies an intermediate chronological position between Da But and Go Trung.

The Da But culture can be divided into 3 successive stages of development: Da But, Con Co Ngua upper layer, and Go Trung. The Da But stage began with the occupation at Da But, Ban Thuy and the lower layer of Con Co Ngua, between some time prior to 6460 BP and about 6000 BP. This stage is characterized by kitchen middens of estuarine molluscs and pollen of salt-marsh plants such as *Atriplex* and *Suaeda* (Nguyen Dich Dy, Dinh Van Thuan and Tran Dat 1980). The cultural picture of this stage is an obvious continuation of the Hoa Binh culture, being characterised by edge-ground axes, short axes and almond-shaped axes, but with the addition of some new types of tools and particularly polishing techniques. Pottery with mat-impressed designs and animal domestication may have first appeared in this stage.

The Con Co Ngua (upper layer) stage probably started at about 5500 BP. The culture of this stage is closely related to that of the Da But stage but there were great changes in

the natural environment. No mollusc shells and no salt-marsh plant pollens were found, thus indicating that the sea had receded by this time. Therefore the people of Con Co Ngua were forced to strengthen their economy by the improvement of their tools. In this stage, besides the appearance of new types of tool such as net-sinkers, tools of wheel shape, awls and chisels, there are also large numbers of axes with extensive polishing and curved bodies which are considered to have served as hoes. Animal domestication in this stage is an obvious continuation from the earlier stage, with cattle and the addition of buffaloes and pigs.

In Con Co Ngua we also excavated a large necropolis of more than 100 skeletons of Australo-Melanesian physical type (Nguyen Lan Chuong, Nguyen Kim Thuy and Vo Hung 1980). Besides the squatting position some skeletons were now laid out in extended or crouched postures.

Finally, the Go Trung stage began at about 5000 BP. The most distinctive characteristic of this stage is the expansion of settlement along the coast to increase the yield from fishing: net-sinkers and remains of sea fish were discovered in abundance at Go Trung. There is no direct evidence for agriculture, but axes with all-over polish, pottery objects, pestles and mortars have been cited as evidence for major economic changes during this stage. At present, many Vietnamese archaeologists perceive the development of the Da But culture as a specific tradition of post-Hoa Binh cultural evolution on the coastal plains of Thanh Hoa province. Apart from this tradition there are others, but the significance of the Da But tradition lies in the fact that it offers a picture of inherent and authentic cultural changes of the Neolithic after the period of the Hoa Binh culture in Vietnam. "Inherent" because this tradition originated from the Hoa Binh culture itself, and "authentic" because its achievements had significance as a typical pattern of culture after the "prelude" of the Neolithic Revolution in Vietnam (Ha Van Tan 1976).

The finds from the Da But cultural sites may be summarized as follows:

The Da But pottery with mat-impressed designs actually existed prior to 6500 BP.

The axes with all sides polished, trapezoidal shapes and oval cross-sections developed from the edge ground axes about 5500 BP (in the upper layer of Con Co Ngua).

Domesticated animals included cattle, buffalo and pig (the evidence for dog is not reliable).

Agricultural development is manifested in axes having curved bodies with all sides polished (hoes), large pots, pestles and mortars.

Fishing with net-sinkers took place in the river and the sea, hence the manufacture of fiber, the weaving of fishing nets, and the development of means of sea travel at about 5500 BP.

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