## A STUDY OF BOAT-SHAPED COFFINS FROM DONGSON SITES IN VIETNAM

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#### ABSTRACT

Boat-shaped coffins have been found at archaeological sites throughout Mainland and Island Southeast Asia. The greatest concentration occurs in Vietnam, in Metal Age sites attributed to the Dong Son culture (500 BC-AD 300). At a conference on boat-shaped coffins at the History Museum in Hanoi in 1983, Vietnamese scholars proposed that these distinctive wooden coffins contained the remains of the ancient Viet. This paper discusses a recent study of boat-shaped coffins from several Dong Son sites that gives some new insights into the groups who buried their dead in this unusual way during the late prehistoric period in Vietnam.

To date, 171 boat-shaped coffins have been recovered from 44 different waterlogged archaeological sites in Vietnam. Table 1 shows their distribution. Although boat-shaped coffins occur in Dong Son sites, not all Dong Son sites have produced them. Most examples are confined to the alluvial lowlands of the provinces of Quang Ninh, Hai Phong, Hai Duong, Hung Yen, Hanoi, Ha Tay and Ha Nam. The greatest concentration of boat-shaped coffins comes from the lowlands of Ha Tay Province at Ung Hoa and Phu Xuyen, and at Duy Tien in Ha Nam Province. The Ha Tay and Ha Nam sites are located between the Hong (Red) and Tich rivers, with the Nhue River running between them.

All of the boat-shaped coffin sites are strategically located in close proximity to water; either rivers, small streams or the sea. In the northeast, coffins were located near the Thai Binh River and its tributaries. The coffins from La Doi were located at the confluence of the Kinh Thay and Thai Binh rivers. Those from Viet Khe and Trai Son were close to the Han River and the Thuy Son coffins were very close to the Ngoc River. The coffins from Quyet Tien were found alongside the banks of the Van Uc River. The sites of Chau Can, Kim Duong, Minh Duc, Phu Luong, Yen Tu, Ong Luu, Phu Lam, Nguyet Ang, and Thang Loi are all located in low-lying marshlands and lakes that are flooded during the rainy season. The cemeteries at Phuong Nam and Phuong Dong are less than 2 km from the coast, near the port of Bach Thai Buoi

Most of the coffins were recovered from shallow graves, 150-220 cm beneath the surface. At Phung Nam, a

few coffins were slightly deeper, at a depth of 250-400 cm. Most were placed in rectangular pits slightly larger than the coffins themselves. The pits measured between 250 and 280 cm in length, 65 and 90 cm in width and 80 to 150 cm in depth. Pieces of bamboo or wood were also placed at the bottom of some pits. A few pits contained wooden stakes to hold the wooden coffins in place before they were covered with soil.

All of the burials in the study were extended, with the skulls in the larger ends of the coffins in examples that were tapered. In some boat-shaped coffins the arms of the deceased were placed beside the body; in others (e.g. Yen Bac) the arms were placed over the stomach or chest. In a few coffins, the bodies were still wrapped in several layers of coarsely woven cloth; others were covered in bark and leaves from trees. At Xuan La and Yen Bac, some of the bodies inside the boat-shaped coffins were tied with tightly spun rope.

### **DATING**

Altogether, 12 radiocarbon dates have been obtained for the boat-shaped coffins. These dates are given in Table 2. The dates clearly show that the boat-shaped coffins are the products of the Dong Son culture (Early Iron Age) that appeared in Vietnam around the 5<sup>th</sup> century BC, and continued through to the 1<sup>st</sup> and 2<sup>nd</sup> centuries AD.

#### MATERIALS AND CONSTRUCTION

All of the boat-shaped coffins were made from wood. During the manufacturing process, trunks of trees were split into two halves then hollowed out with the two ends left solid and uncut. Alternatively, some were made of planks fitted together edge-to-edge by inserting rectangular tenons of wood into chiseled-out mortises in the plank edges, the tenons being locked into place by circular-sectioned dowels. Similar techniques were used to fit boat planks to dug-out hulls in the Dong Son boat recovered from Dong Xa. A few coffins were fastened with bamboo splints and tied with rope. Bulkheads (dividers) were also found inside some of the coffins, for instance in the large coffin from Viet Khe.

## **GRAVE GOODS**

In all of the coffins, the grave goods were carefully arranged near the head, body and feet. Some burials also contained the remains of gourds and of several different

# BUI VAN LIEM: DONGSON BOAT-SHAPED COFFINS

Table 1: Distribution of boat-shaped coffins at Dong Son sites in Vietnam (to 2002).

Site	Hamlet, District, Province	Date of	Date of	Number	Other
		Discovery	Excavation	excavated	coffins
Viet Khe	Phu Ninh, Thuy Nguyen, Hai Phong		1961	5	-
La Doi	Hop Tien, Nam Sach, Hai Duong	1961, 1986	1964	5	-
Nghia Vu	An Sinh, Kinh Mon, Hai Duong	1962		1	-
Lat Phuong	Chi Minh, Phu Xuyen, Ha Tay	1968		1	-
Tu Lac	Minh Tan, Kinh Mon, Hai Duong	1971		2	-
Chau Can	Chau Can, Phu Xuyen, Ha Tay		1974, 2000	10	
Chau Son	Chau Son, Kim Thanh, Ha Nam		1976		
Thanh Son	Thanh Son, Kim Thanh, Ha Nam	1976		1	
Song To	Yen Hoa, Tu Liem, Ha Noi		1978	1	
Yen Tu	Moc Bac, Duy Tien, Ha Nam	1980	1980, 1986	12	4
Moc Nam, Do	Moc Nam, Duy Tien, Ha Nam	1980		2	4
Quan	CI C' D'T' H N	1000			2
Tri Xa	Chau Giang, Du Tien, Ha Nam	1980		2	2
Vu Xa Tien Noi	Tien Nu, Dut Tien, Ha Nam	1980		1	-
	Duy Tien, Ha Nam Hoa Lam, Ung Hoa,Ha Tay	1980	1981	2	+
Dong Long Xuan La			1982	7	
Doi Son	Phuong Duc, Phu Xuyen, Ha Tay Doi Son, Duy Tien, Hanoi		1983	3	8
Phu Long	Phu Long, Thanh Oai, Ha Tay	1983	1984, 1987	6	25
Phuong Tu	Phuong Tu, Ung Hoa, Ha Tay	1984	1904, 1907	1	23
Xom Gam	Tram Long, Ung Hoa, Ha Tay	1985		4	
Xom Bung	Tram Long, Ung Hoa, Ha Tay	1985		2	
Cho Tram	Tram Long, Ung Hoa, Ha Tay	1985		1	
Duong Thau Dau	Tram Long, Ung Hoa, Ha Tay	1985		1	
Duong Con Ca	Tram Long, Ung Hoa, Ha Tay	1985		1	
Cua Dinh	Tram Long, Ung Hoa, Ha Tay	1986		4	
Dong Lang	To Hieu, Thuong Tin, Ha Tay	1986		1	
Vu Xa		1986		1	
	Thuong Vu, Kinh Mon, Hai Duong				1
Thon Tu	My Van, Duy Tien, Ha Nam	1987	1007	3	1
Kim Duong	Kim Duong, Ung Hoa, Ha Tay		1987	2	
Minh Duc	Minh Duc		1989	7	
Phuong Nam	Phuong Nam, Uong Hoa, Ha Tay		1971	7	
Phuong Dong	Phuong Dong, Uong Bi, Quang Ninh	1992		2	
Nguyet Ang	Dai Ang, Thanh Tri, Ha Noi	1993		2	
Dong Xa <sup>1</sup>	Luong Bang, Kim Thi, Hung Yen	1981, 1984	1996	30	2
Phu Lam	Phu Lam, Thanh Oai, Ha Tay	1996		1	
Dong Quam	Tan Hung, Gia Loc, Hai Duong	1997		5	
Quet Tien	Quyet Tien, Tien Lang, Hai Phong		1997	5	ļ
An Thi	Thon Dom, An Thi, Hai Duong	1997		1	
Thang Loi	Thanh Loi,. Thuong Tin, Ha Tay	1990		2	
Trai Son	An Son, Thuy Nguyen, Hai Phong	1998		8	1
Trung Ha	Trung Ha, Thuy Nguyen, Hai Phong	1998	2000	1	-
Yen Bac <sup>1</sup>	Yen Bac, Duy Tien, Ha Nam	2000	2000	9	5
Thuy Son	Thuy Son, Thuy Nguyen, Hai Phong	2000	2000	5	
KietThuong	Van An, Chi Linh, Hai Duong	2000		2	16
TOTAL				171	46

Table 2: Radiocarbon dates for boat-shaped coffin sites in Vietnam.

Site	Sample	Radiocarbon
		Date (uncal.)
Viet Khe	Bln 950	$2480 \pm 100$
	Bln1227	$2415 \pm 100$
	Bln1249	$2320 \pm 100$
Chau Can	Bln1438	2326±100
	Bln1718	$1015 \pm 45$
Chau Son	Bln1971	$2285 \pm 100$
Phu Luong	Bln338	$2150 \pm 60$
	Bln339	$2060 \pm 50$
Kim Duong	HNK4	$2070 \pm 60$
Trai Son	HNK6/1	$2390 \pm 50$
	HNK6/2	$2400 \pm 50$
Yen Bac	HNK84	$2140 \pm 70$

types of bamboo. Bronze weapons such as spears, javelins, arrows and swords were placed parallel to some bodies, with blades pointing towards heads and handles pointing towards feet. A few coffins contained pottery and tools that were placed over the head and body. Some coffins also contained exotic artefacts made from wood, iron, bronze and glass.

## **TYPOLOGY**

Two principal types of boat-shaped coffins were identified. The coffins classified as Type 1 are round in cross-section, whereas type 2 coffins are six-sided in section.

#### CONCLUSIONS

The most significant finding of the study concerns chronology. Boat-shaped coffins in Vietnam were used during the Dong Son culture, i.e. 500 BC-AD 300. The study also shows a correlation between boat-shaped coffins and the introduction of iron into Vietnam. It is well established that iron was superior (sharper and harder) to other metals and as a consequence, iron tools would have allowed the heavy clay but fertile soils in the alluvial and deltaic marshlands to be developed for agriculture. Boat-shaped coffins are still used by the Muong (linguistic relatives of the Vietnamese), Tais and other minorities in both Truong Son and Ta Nguyen Provinces. Not only do these particular ethnic groups share traditions with the Vietnamese, they also create distinctive features in their coffins, such as those shaped like the roofs of houses and animals.

### **NOTE**

1. This count excludes an actual Dong Son canoe coffin (a 2.3 metre stern segment) found at Dong Xa (c. 50 BC to AD 1) in Hung Yen Province, and boat side planks found at the site of Yen Bac (c.AD 300) in Ha Nam Province. These were excavated in December 2004 by a combined team from the Institute of Archaeology, the Centre for Southeast Asian Prehistory, the Australian National University and the National Museum of Australia.