

# CROSSING BORDERS

**Selected Papers from the 13th International Conference of the  
European Association of Southeast Asian Archaeologists, Volume 1**

*Edited by*

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& Dominik Bonatz



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*Front cover image:* Excavation at Gò Ô Chùa, Long An province, southern Vietnam, March 2005. View on the section across the southern mound (Photo: L. Reinecke).

*Back cover image:* Excavation by the Mission Préhistorique Franco-Cambodgienne at Laang Spean cave, Cambodia, December 2010 (Photo: A. Reinecke).

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## Chapter 17

### Léonard Arousseau's Hypothesis Revisited: The Intersection between History and Archaeology

*Judith Cameron*

#### Abstract

This paper uses cloth production tools and extant remains to reconstruct the movement of prehistoric groups with textile technology into the Red River valley of Vietnam during the protohistoric period. The principal argument is that there was more than one wave of migration into Vietnam. This research shows that spinning technology developed independently in the Yangzi valley of southern China during the Neolithic period and gradually spread during the Bronze Age from the southeast region into the Red River region and other parts of Southeast Asia (including insular Southeast Asia); a second migration, evidenced at Dong Xa, is linked to the later movement of Han Chinese into the south.

#### Background

The origin(s) of the early chiefdoms on which the modern nation state of Vietnam is based has long been a contentious issue in history and one of considerable significance to contemporary Vietnamese groups. Almost a century ago, the historian of the French colonial period in Indochina, Léonard Arousseau (1923), put forward what has been described as his ill-fated migration theory. Arousseau proposed that the origins of the Vietnamese lay in the Chu conquest of Yue in 333 BC, which led to the migration of refugee Yue populations from their heartland in southeast China into the Red River plains where they assimilated indigenous hunter-gatherers (presumably Hoabinhian) more than a century before the Han incorporated northern Vietnam into the Chinese Empire. The Chu state (1030–223 BC) was a Zhou Dynasty vassal state in central and southern China during the Spring and Autumn period (722–481 BC) and the Warring States period (475–221 BC), controlling vast tracts of land in the present-day Chinese provinces of Hunan, Hubei, Henan, Jiangsu, Jiangxi and Anhui [Fig. 17.1]. As Keith W. Taylor explains, Arousseau's theory was totally rejected by historians (1983: 314). When the hypothesis was published, the historian Henri Maspero, who attributed the emergence of the Vietnamese state to indigenous development, advised, "It is best, I believe, to let it pass in silence" (Maspero 1924: 373). Le Thanh Khoi (1955) also had reservations about Arousseau's reconstruction. Claude Madrolle (1937: 313–25) likewise rejected the hypothesis, replacing it with his own origin theory that the ancient Viet were the Hoklos of Fujian, coastal corsairs who penetrated the Red River plains and created a political system to rule the tidal populations there. While Taylor acknowledged that Madrolle's theory was based on a careful study of Chinese historical sources and worthy of consideration, he nonetheless describes it as "outlandish and brash"; it was not based on fact but a "spider-web" of texts, proper names, and outright conjectures created in an attempt to salvage something of Arousseau's idea (1985: Appendix E). This paper revisits Arousseau's hypothesis in the light of recent archaeological evidence from three different classes of artifacts: spindle whorls, loom parts and excavated cloth remains from the Red River region of Vietnam [Fig. 17.1].

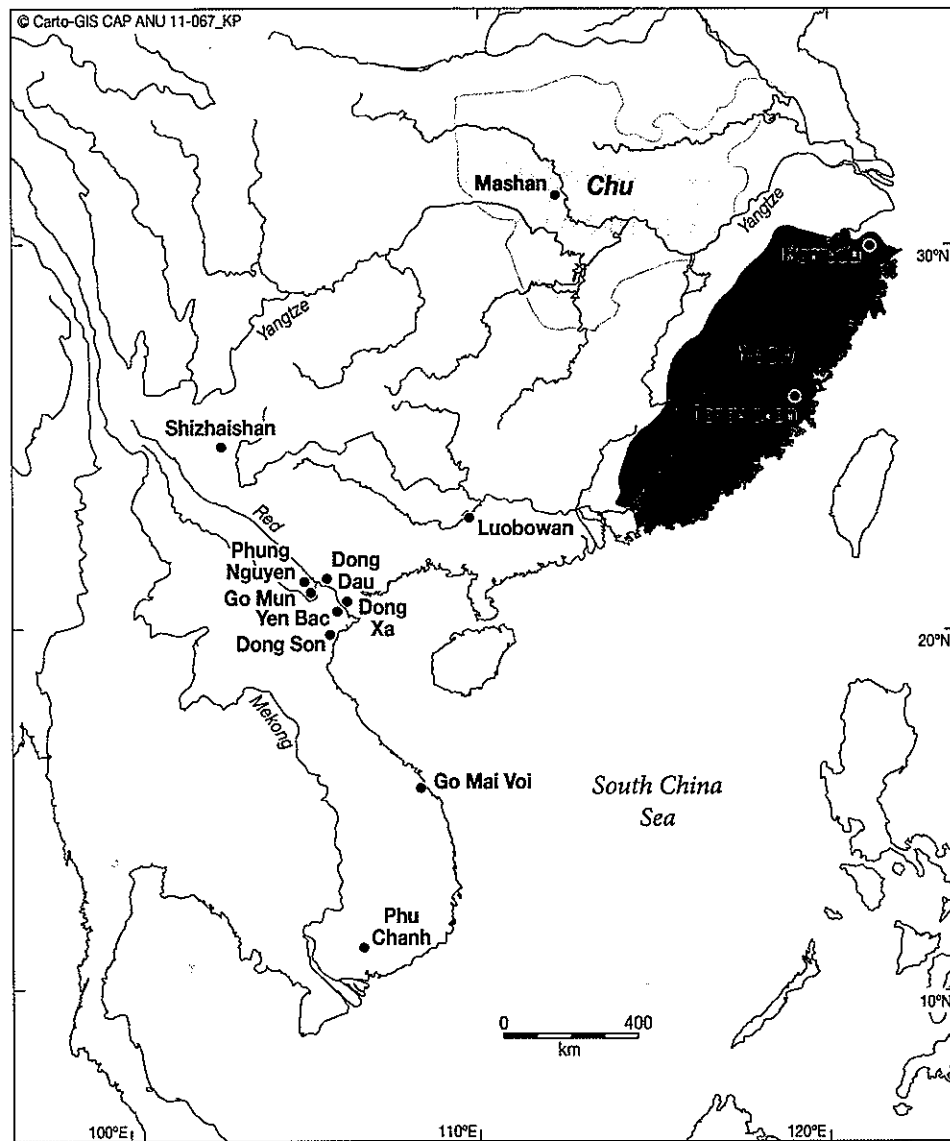


Fig. 17.1: Map showing location of sites with biconical spindle whorl and back-strap looms discussed in the chapter (Cartography, ANU).

**Spinning Tools**

Textile weaving is contingent on the availability of long continuous threads. However, because the climate of Southeast Asia is far from conducive to the preservation of organic materials, usually only indirect evidence from more permeable pottery spinning tools survives. For this reason, my previous research into the origins and distribution of textile technology in Southeast Asia focused on spindle whorls. Drawing from Dieter Kuhn's (1988) landmark study of Chinese textile technology, my study identified an independent origin centre for textile technology in the Middle Yangzi, parallel to developments in the *zhongyuan* (Cameron 2002). The distribution of these tools showed the gradual spread of spinning from the middle Yangzi valley to the lower Yangzi, to Hemudu (5000–4500 BC), Majiabang (5000–3000 BC) and Tanshishan sites (2300 or 1300 BC) located along the coastal strip of southeast China. Kuhn's (1988: figs. 96, 97) two typologies of Chinese spindle whorls [Fig. 17.2] were central to the research. His typology of basic spindle whorls shows types that commonly occur at Neolithic sites, which are too generic to indicate more than knowledge of spinning technology. His typology of atypical whorls was crucial to the origin question as it consists of an unusual, culturally specific biconical spindle whorl,

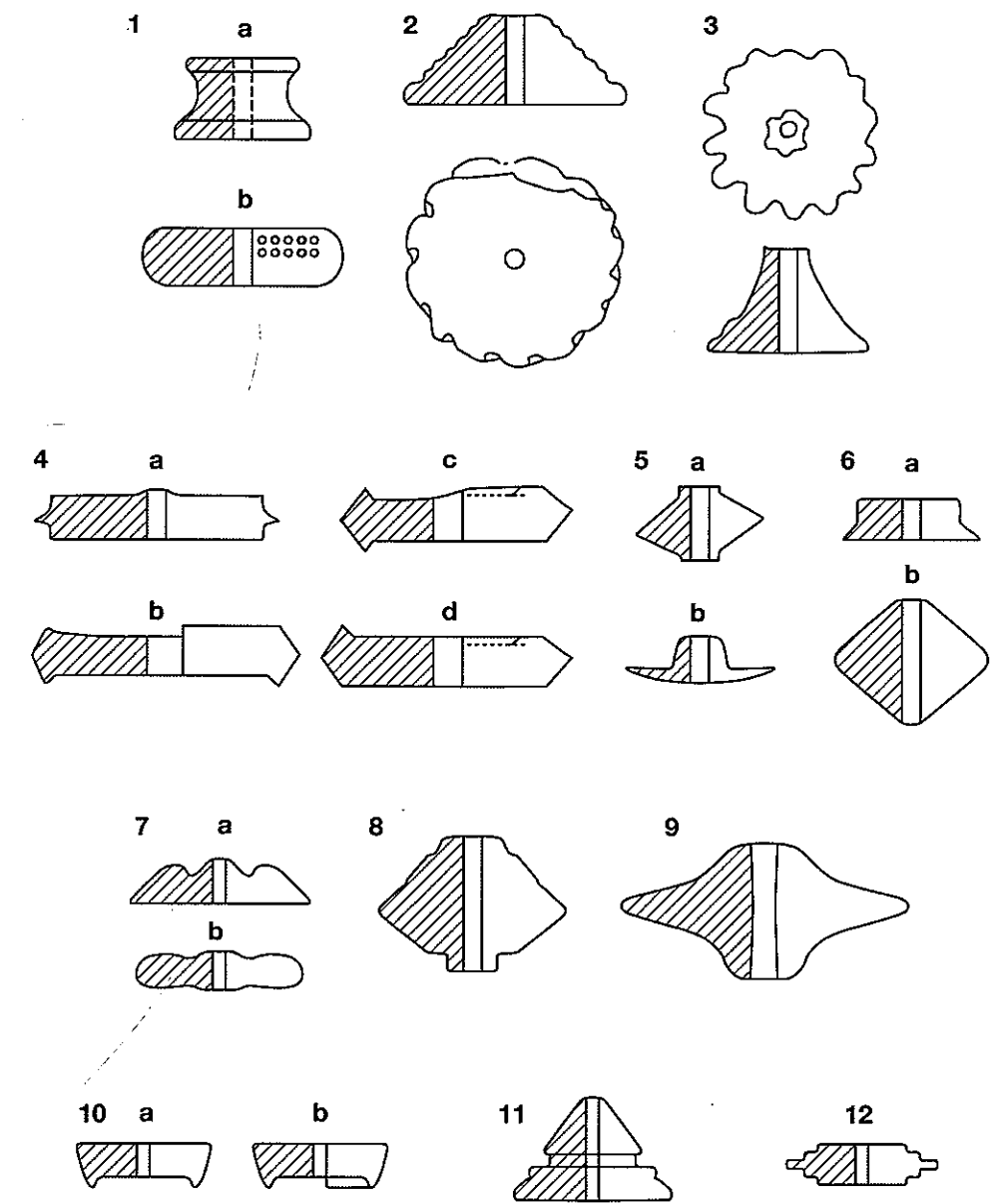


Fig. 17.2: D. Kuhn's typologies of Chinese spindle whorls. Basic types (above), atypical whorls (below) (after D. Kuhn 1988: figs. 96, 97).

which he found to be peculiar to Tanshishan sites in Fujian province and therefore diagnostic. Because of their shape, the weight of biconical whorls congregates in the centre of the tool giving it a high moment of inertia, which means that it spins bast fibers very tightly. Drawing from Kuhn's typologies, my study demonstrated the gradual diffusion of spinning technology with atypical biconical whorls (and *Boehmeria nivea* {ramie}) from Tanshishan heartland within the geographical region recognized as Yue territory into Vietnam (and Taiwan and other parts of Southeast Asia, including island Southeast Asia) during the early Bronze Age (Cameron 2001, 2002).

The Museum of Vietnamese History in Hanoi houses two biconical whorls recovered by Madeleine Colani during reconnaissance of Hoabinhian sites (12,000–10,000 BC) in Hoa Binh province, northern Vietnam. However, these specialized tools were surface finds and do not belong to what is generally accepted as the Hoabinhian techno-complex; nor do they occur at other Hoabinhian sites. Securely provenanced spindle whorls have been excavated from Phung Nguyen sites (2000–1500 BC), strategically

located near rivers and streams in the Red and Black River plains. The lower Red River valley and delta not only comprise the most extensive tracts of flat agricultural land in Southeast Asia but as Charles Higham (2002: 282) points out, also occupy a pivotal position for exchange.

The fertile alluvial soils of the Red River valley would not only have been suitable for riziculture but also for the cultivation of fibre-producing plants such as ramie (*Boehmeria nivea*) and hemp (*Cannabis sativa*) to be spun and woven. Biconical spindle whorls with the same functional attributes (material composition, size, shape, weight) and decorations to those from Tanshishan sites were identified amongst the material remains recovered from Phung Nguyen sites and continue in the archaeological record at subsequent Dong Dau, Go Mun and Dong Son sites within the same general geographical region (Cameron 2002). These specialized tools [Figs. 17.3 and 17.4] have also been excavated from Sa

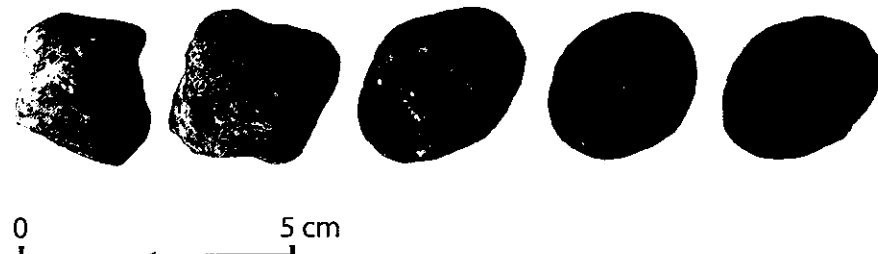


Fig. 17.3: Biconical whorls from Phung Nguyen site, Collection of the Institute of Archaeology, Hanoi (Photo: J. Cameron).

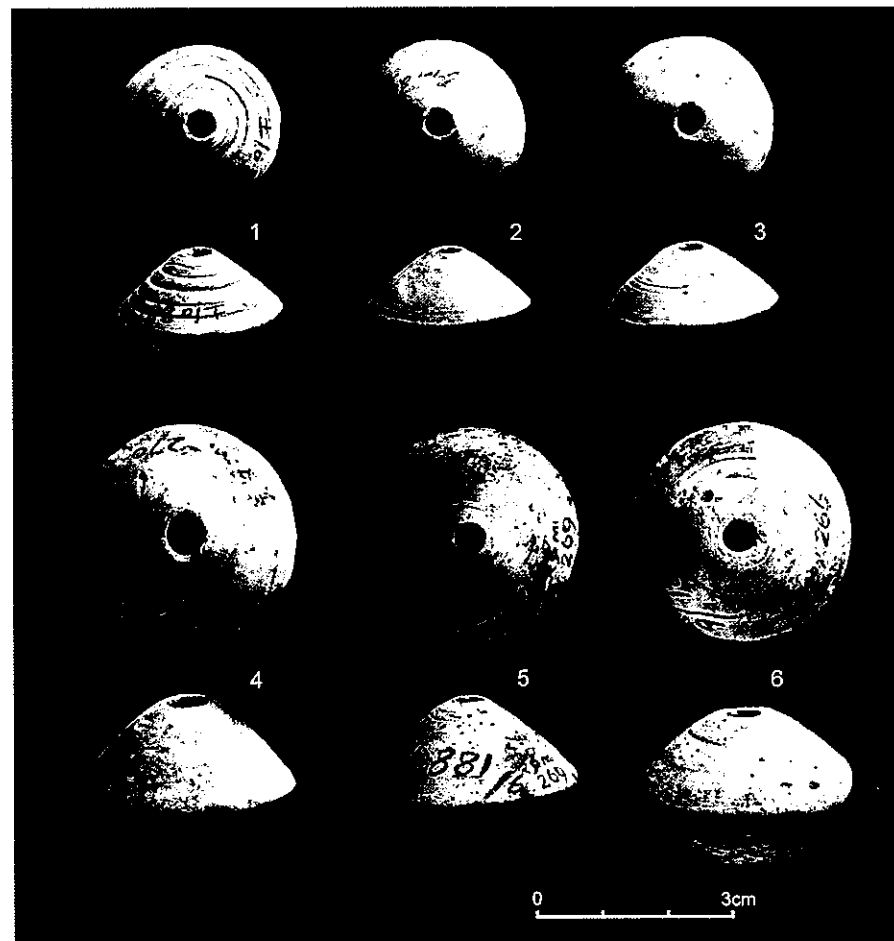


Fig. 17.4: Biconical whorls from the Han period burial of Loubowan site (Photo: Guangxi zhuangzu zizhiqu bowuguan).

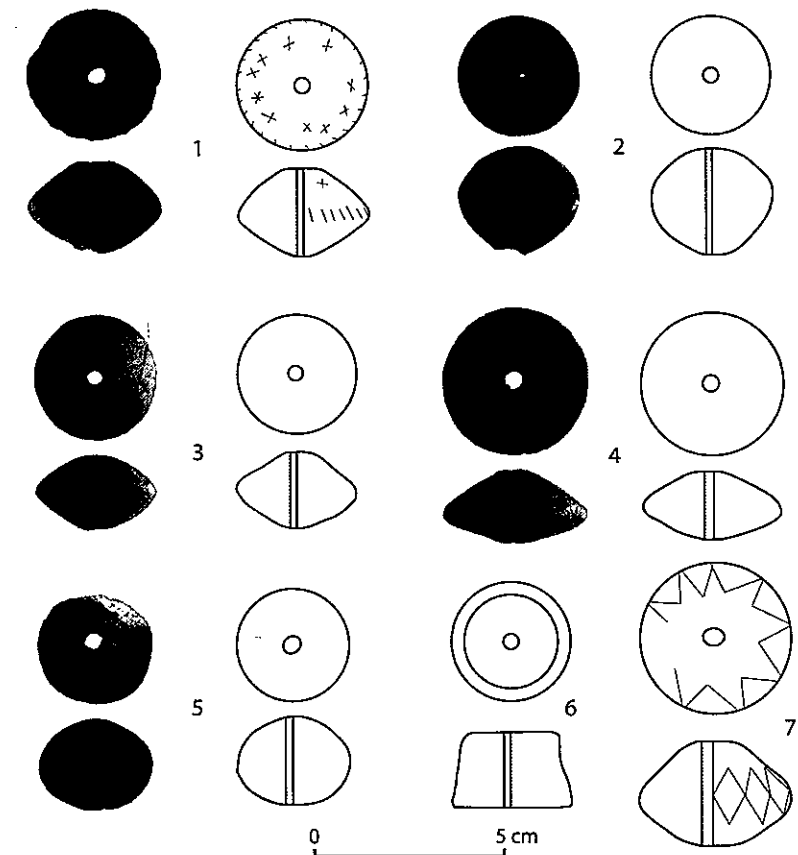


Fig. 17.5: Biconical whorls from the Sa Huynh site of Gò Mã Vôi (Photo: A. Reinecke *et al.* 2002: fig. 57).

Huynh sites [Fig. 17.5] located along the river banks and coastal plains of central Vietnam, indicating the diffusion of textile technology to groups south of Dong Son heartland into Cham territory (Cameron, in press).

Remarkably, there is congruence between archaeology and oral history. Vietnamese folklore purports that spinning and weaving were introduced to the Red River region during the time of the Hung kings, who reportedly claimed descent from an heroic ancestor, the Lac Dragon lord, who came from the sea, subdued evil elements in the region and civilized the people, teaching them to cultivate rice and weave cloth (Tessitore 1988 / 89: 33).

#### Weaving Tools

The same interaction pattern is elucidated by the distribution of looms described in a previous paper presented at the 10th International Conference of the European Association of Southeast Asian Archaeologists (Cameron 2006) summarized here. Looms are devices used for weaving that involve two distinct sets of parallel threads. The first set (the warp) is kept under tension during the weaving process while the second set (the weft) is continuously passed over and under the warp, at right angles. Ethnographically, the fundamental loom type throughout Southeast Asia is the back-strap loom, a body-tension loom with the weaver forming an integral part of the mechanism, creating tension by placing her feet on the warp beam. Significantly from an origins perspective, the earliest identified loom parts belonging to back-strap looms were found at Hemudu which is located in Yue territory [Fig. 17.1]. Sites belonging to this Neolithic culture flourished in the lower Yangzi Valley between 5000 and 3000 BC. The wooden tools were associated with basic spindle whorl types (Cameron 2001, 2002).

Although wooden loom parts have not as yet been identified at Phung Nguyen sites, the co-occurrence of whorls and looms at Bronze Age sites strongly suggests that looms were introduced with spinning tools during the Phung Nguyen phase but did not survive. The earliest evidence is from waterlogged sites in the same vicinity, assigned to the late Dong Son / Han transition period. The complete wooden back-strap loom unearthed from inside a wooden coffin at Yen Bac [Fig. 17.1] was described in an earlier paper (Bùi Văn Liêm *et al.* 2001; Cameron 2006). A second loom has been unearthed more recently at the site of Phu Chanh [Fig. 17.1] in south Vietnam, found in a high ranking female burial containing a Dong Son drum and Han mirror (Bui Chi Hoang 2008), signifying the high status weavers held during the Iron Age / Early historic period in Vietnam.

The better-known weaving scene, sculptured in the round on the tympanum of a bronze cowry container from the site of Shizhaishan, is pertinent to the discussion as it gives us insights into the organization of textile production in Yunnan when the site was used for burial between 250 BC–AD 250. The scene shows a small group of Dian women weaving on back-strap looms, using sword beaters of the type evidenced at Hemudu. Although the loom has its roots in the Neolithic, workshop production is linked to the development of the state in China. As early as the Qin, the first ruling dynasty of Imperial China (221–206 BC), specialized workshops strategically located near natural resources were set up to satisfy the demands of the elites. The importance of craftsmen during the Warring States period (475–221 BC) is exemplified by negotiations that occurred when the kingdom of Lu offered a hundred each of male artisans, women laborers and weavers to achieve peace with the Chu. The King of Chu agreed to the terms and brought them to his imperial workshops in the capital (Chengdu). Excavations of ruins around palaces have confirmed the existence of such workshops (Barbieri-Low 2007). The discovery of a more elaborate version of the back-strap loom with multiple pattern sticks in the Han dynasty tomb at Luobowan in Guangxi City confirms the relationship between workshop production and elites. The tomb contained the remains of a governor, his wives and concubines, buried with servants and their tools of production. Technological continuity is indicated by the presence of biconical whorl types within the tomb (Cameron 2011).

### Embroidery

Embroidery is an embellishment technique used to apply decorative designs to previously woven fabrics with needle and thread using a repertoire of stitches. From the early dynastic periods in China, the technique was used to embellish silk robes worn during performances of *li* (correct behavior), a major pre-occupation of the ruling elite. Fragments of silk woven from domesticated silkworms from the 2nd millennium BC settlement site of Sapalli-Tepe in Uzbekistan indicate that silk was exchanged millennia before the intercontinental Silk Route was properly in operation in the 2nd century BC. By the Warring States period, the silk industry had already reached its peak, as attested to in large numbers of excavated silk robes in Chu tombs of unparalleled craftsmanship and artistic accomplishment. At Mashan in Hubei province, one elite's body was wrapped in many different forms of silk, with padded silk counterpanes and embroidered silk covers. The outer side of one robe was worked in a technique similar to the famous double-faced embroidery of Suzhou that is virtually invisible on the inside (Boulnois 2001). Not only were rulers, their families and concubines entitled to wear embroidered silk but the Prince of Chu, Zhuang Wang, so loved his horse that he reportedly dressed the animal in an embroidered coat (Huang 1991).

Paradoxically, the period of political unrest that marked the Spring and Autumn periods stimulated production because embroidered silk was used to establish alliances. According to the Records of the Historian, the Prince of Zhao sent 1000 reels of embroidered silk to establish an alliance with six states against the state of Qin. By the Han Dynasty (206 BC–AD 220) embroidered silk was no longer the predilection of the nobility but was being increasingly acquired by rich merchants and other emerging elites from China to Central Asia and to the eastern Mediterranean. Similar consumption patterns are documented for Rome. Towards the end of the Roman Republic (ca. 100 BC), only Emperor Julius Caesar wore Chinese silks to theatrical performances but around AD 100 during the initial period of the Roman Empire in the reign of Emperor Tiberius, Roman aristocrats wore silk embroidery (along with other exotic fabrics) obtained in large quantities from the Silk Routes.

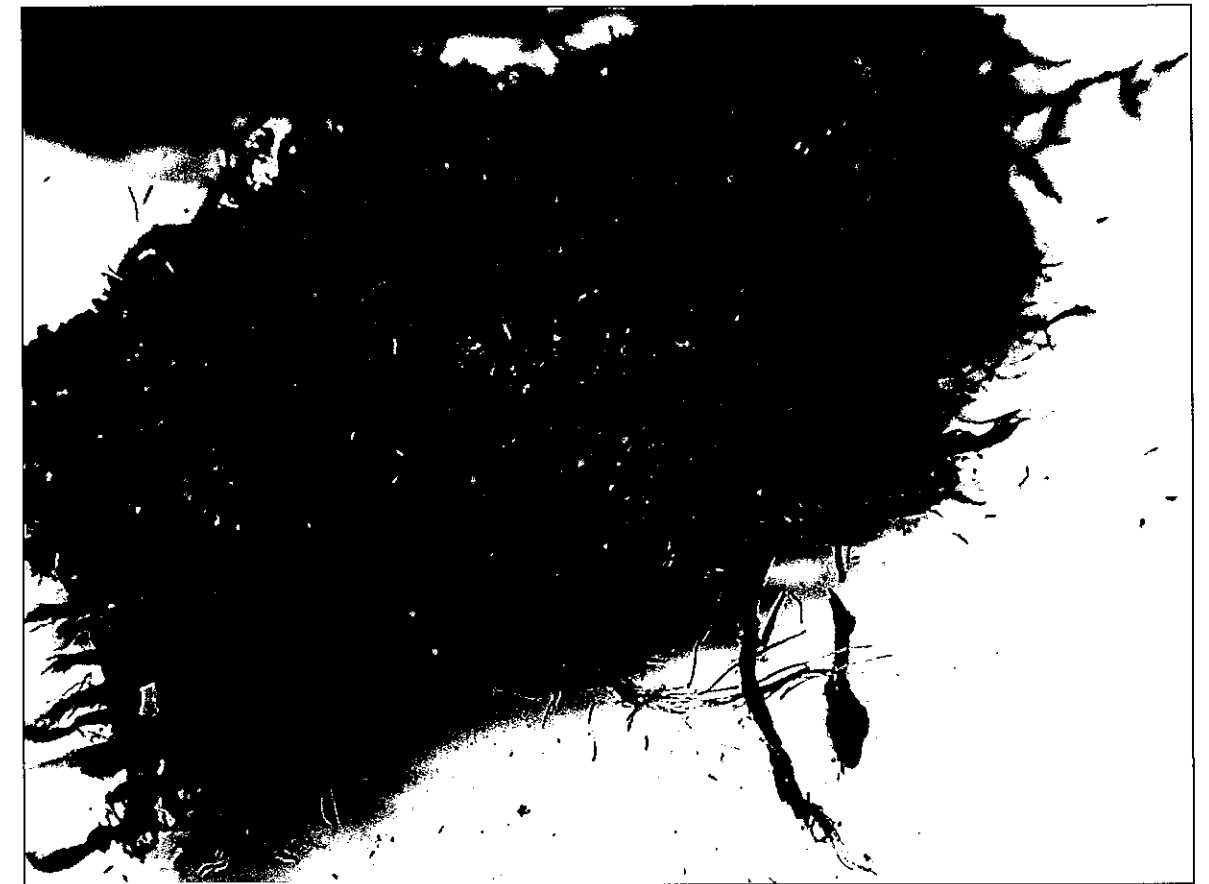


Fig. 17.6–17.7: Embroidered fragment from Dong Xa (Photo: Nguyễn Văn Việt).

Given the syncretism between embroidery and emerging elites, it is unsurprising that the only excavated embroidery fragment in Vietnam comes from the Red River valley where chiefdoms arose. In 2004, the joint Vietnamese-Australian excavations at Dong Xa (Bellwood *et al.* 2007; Cameron *et al.* 2009) yielded a wooden coffin containing an individual dressed in several layers of clothing. As the site was waterlogged, the clothing and other organic materials were exceptionally well-preserved. Recent analysis of the burial clothing by Nguyễn Việt from the Dong Son Textile Project team and students from the National University of Vietnam revealed that Dong Xa's clothing was not only tailored but also embroidered [Figs. 17.6 and 17.7], the earliest specimen found thus far. Although curvilinear motifs are discernible on tailored costumes depicted on the handle of the Dong Son bronze dagger known as the Nui Nua lady, suggesting embroidery, such motifs could also have been created through weaving.

### Discussion

Significantly, the spread of spinning (biconical whorls) and weaving (back-strap looms) into the Red River valley and other parts of Southeast Asia follows the same trajectory identified by Higham (1998) for the movement of rice (Cameron 2002). The textile evidence does not support Arousseau's hypothesis but although the textile evidence ostensibly supports Madrolle's hypothesis that Yue groups migrated to the Red River plains from southeast China, archaeology clearly places the migration of Yue spinners and weavers from Tanshishan sites in the Phung Nguyen phase, millennia earlier than generally postulated. These migrations and subsequent population movements involving groups wearing embroidered clothing can only be understood from an historical perspective, in the light of a series of inter-dependent political events that began at the beginning of the Warring States period (475–221 BC) with the expansionary policies of the Qin. At that time, three non-Han states existed in South China: the state of Shu (Szechuan), the state of Chu (Middle Yangzi) and the state of Yue (Yangzi delta and coast), with the Han Chinese in the Yellow River region. When the Chu attacked the Yue in 333 BC, large numbers of Yue dispersed, establishing many smaller kingdoms along the coast known as the Hundred Yue (Arousseau 1923). In 222 BC, the Qin conquered the Chu and the following year the Qin emperor ordered a million soldiers into Yue territories. Vietnamese historical sources indicate that during this period, Thuc Phan (An Duong Vuong), an invading prince of obscure origin, assembled his army and moved into southern Guangxi, western Guangdong and northern-most Vietnam, defeating the Hung kings to establish the kingdom of Au Lac (see Taylor 1983). Given these historical events, it seems reasonable to conclude that the embroidered costume in the burial at Dong Xa belongs to the same ancient Chinese textile tradition, albeit out of context in Vietnam, marking Han interaction in the Red River region in the 1st millennium AD. The archaeological record discussed above confirms that the origin(s) of Vietnamese politics is more complex than might generally be appreciated.

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