Socketed axe head

On display

Title/Description: Socketed axe head

Object Type: Implement

Materials: Bronze

Measurements: h. 183 x w. 121 x d. 32 mm

Accession Number: 756

Historic Period: Dong Son period (c. 2nd century)

Production Place: Indonesia, Java, Pacific, Southeast Asia

This is a fine example, rather larger than most, of a type of socketed bronze axe found widely distributed in western Indonesia and occasionally in the Lesser Sunda Islands. It has a 'swallow-tail' butt typical of many Javanese axes and the cutting edge is scrolled upwards. In Glover and Syme's (1993) classification, this axe conforms to type 8b (type ha in Soejono, 1972: pl. 9), Huijser (1942: pl. 2) and van Heekeren (1958: pl. 1) show comparable examples, and van der Hoop (1941: fig- 52) illustrates one from Central Java with intact casting sprues which is a good indication that it was made in the region. This type of axe is occasionally found east of Java as far as Flores, and a few rather similar axes with less developed 'swallow-tail' features have also been reported from the Ca River valley in north-central Vietnam, although this style is not found in the Dong Son culture of the Ma and Red River valleys. However, in contrast to axes found on the Southeast Asian mainland, those from Java and Sulawesi are facially asymmetrical and may be decorated in low relief, as here, and usually on one side only.

Archaeologists traditionally refer to these pieces as axes, but in fact none have ever been found hafted as axes. The only two specimens found with wooden hafts in place, in waterlogged wooden coffin burials at Cau Can in northern Vietnam, suggest that they were used as shoulder-pressure wood-working tools (Glover and Syme, 1993: fig. 28). However, some schematic illustrations on Vietnamese Dong Son drums show feathered warriors on boats holding what look to be typical Vietnamese asymmetric or pediform 'axes' *(ibid.:* fig. 30).

Since quite a number of bivalve moulds, in terracotta and sandstone, have been found for the manufacture of Southeast Asian axes - in Thailand, Cambodia, Vietnam, the Philippines, near Bandung in Java and in Leang Buidane Cave in the Talaud Islands in Indonesia - it is usually assumed that all Southeast Asian axes were piece-mould cast. However, the fine low relief decoration on this and the following example (no. 154), as on many other Javanese examples, and the presence of in-place casting sprues on a very similar axe in the National Museum of Indonesia in Jakarta (van der Hoop, 1941: fig. 52) suggests that these pieces may have been made by lost-wax casting. Compositional analysis by Dr Peter Northover indicates that this axe is a binary alloy of copper (89%) and tin (10.4%), with arsenic, antimony and bismuth as minor elements.

To this author's knowledge only one other Indonesian bronze axe has been analysed for metal composition, a piece found in Timor which rather surprisingly turned out to be almost pure copper (McConnell and Glover, 1990). However, in Vietnam where Trinh Sinh (1990) undertook an extensive programme of compositional analyses of axes and other prehistoric bronzes, a rather

complex picture emerged. Large and ceremonial objects, such as drums with heavily decorated surfaces, were usually ternary alloys, while edged tools and weapons such as axes were likely to have little lead and more tin, in the range of 5-15 per cent.

Entry taken from Robert and Lisa Sainsbury Collection 3 volume catalogue, edited by Steven Hooper (Yale University Press, 1997).