A Stone Adze from Ponape, Eastern Caroline Islands

Received 16 March 1981

J. STEPHEN ATHENS

DURING THE COURSE of archaeological fieldwork undertaken on Ponape in 1979–1980, a basalt adze in the Museum Pohnpei collection was brought to this author's attention. This specimen is notable due to the fact that stone adzes (and/or stone axes) are very rare on Ponape, despite plentiful sources of basalt (Hambruch 1936:52–53; Schurig 1930:7). The situation is similar for other volcanic islands of central Micronesia, though stone adzes are not as rare in western Micronesia (Craib 1977). Bellwood (1979:295) summarizes information on Micronesian stone adzes as follows:

> Stone tools are not common, even on the volcanic islands, and Micronesian stone adzes are generally of the simple untanged oval or lenticular cross-sectioned forms characteristic of Melanesia (Duff types 2F and 2G). Tanging and waisting are virtually unrecorded.

Because of the possible cultural implications of stone-adze styles in Oceania, a description of the Ponape specimen is of interest. Furthermore, its relatively large size and fine workmanship (Fig. 1), and its recovery in coral sand dredging from an underwater lagoon location, add to this interest.

The distinguishing features of this adze are its broad trapezoidal shape and relatively thin profile. In cross-section it appears lenticular with rounded edges. The tool's maximum length is 19.3 cm, and the maximum thickness is 2.4 cm.

The poll section has a squared-off appearance, though there is a slight roundedness in the center. Some evidence of ancient battering may be seen in this area. It is perhaps a result of the original shaping of the tool.

Author's address: 4646 Kahala Avenue, Honolulu, Hawaii 96816.

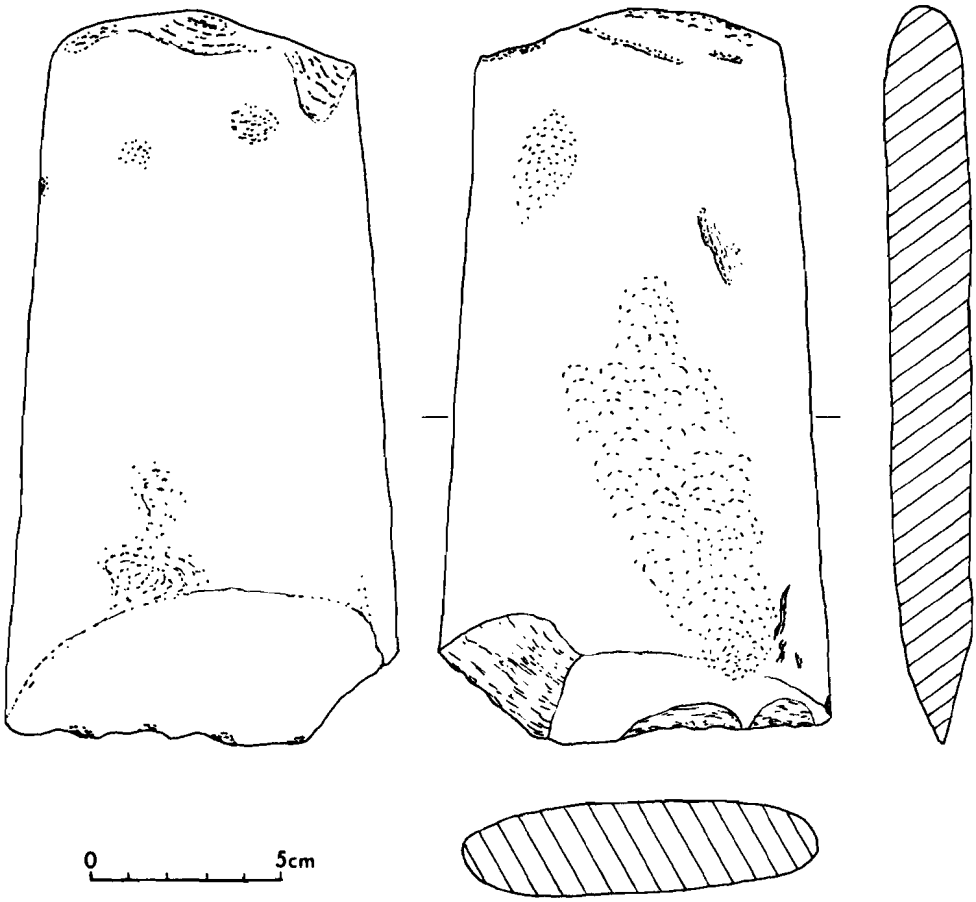

Fig. 1 Basalt adze from Ponape.

The cutting edge, which appears to have been straight rather than curved, is the widest part of the tool. A clearly distinguishable flat bevel is evident on one side. On the opposite side there is also the trace of a bevel, though it has a more rounded appearance in profile. Bilateral beveling is usually considered diagnostic of axes, which have the blade mounted parallel to the axis of the haft. However, since a flat bevel appears only on one side of the tool in question, similar to that seen on typical shell adzes, this tool is probably best categorized as an adze. The haft, therefore, would have been mounted perpendicular to the tool's cutting face.

The chipping along the blade and on one side of the poll is obviously recent, and must have occurred at the time of recovery. These exposures indicate the stone to be basalt.

The surface of the adze has been ground and polished to an almost glassy smoothness. Only a few slightly rough areas remain, which are found where the surface is slightly depressed.

The adze was recovered in 1977 by Miguel Marquez, a member of the Ponape Historic Preservation Committee, in coral sand being unloaded from a truck at the con-

struction site of the new Auak elementary school. In an interview, Marquez affirmed his presence at the school site while the truck was unloading the sand, and his recovery of the tool immediately afterward. According to Marquez, there is no doubt that the coral sand had been brought from an underwater lagoon dredging site at Mesihsou in Matolenihmw Municipality. While I had observed the area of dredging on several occasions previously, the coral sand was not inspected for artifacts. However, Saxe et al. (1980:119) note that artifacts occasionally occur in dredged coral sand and rock on Ponape, and Saxe (personal communication) specifically observed shell artifacts in the dredgings of Mesihsou.

The apparent underwater location of the adze at the time of recovery, along with the indication by Saxe et al. that artifacts occur in coral dredgings, suggests the possibility that Ponape may have underwater archaeological sites. If this is true, these would have to be sites of some antiquity, as presumably the island of Ponape would have to be slowly sinking to account for their submergence. Island subsidence during the Holocene, in fact, has been documented by Bloom (1970:149–150). Thus, the adze described here may be relatively old compared to other archaeological specimens presently known to occur on Ponape (e.g., Athens 1980; Ayres and Haun 1978; Ayres, Haun, and Severance 1981).

In the future, efforts should be made by archaeologists to carefully examine dredging localities in Ponape for the presence of artifacts. If underwater archaeological sites can be confirmed, then it may be possible to secure information for an earlier period of Ponape's human occupation than otherwise would be revealed by the usual dry-land exploration techniques.

ACKNOWLEDGMENTS

Archaeological fieldwork in Ponape was undertaken on behalf of the Pacific Studies Institute of Guam. I am grateful for its support, and also for the assistance provided by the Ponape Historic Preservation Committee.

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