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EXOTIC TYPE ADZES FROM TONGA AND WESTERN SAMOA

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Poulsen (1987:165, 172) several decades ago reported on two exotic hawaiite or mugearite adzes from late Lapita excavation contexts in Tongatapu. On petrographic analysis White (Poulsen 1987:Appendix 7) believed they had come from the Oceanic islands of Polynesia like Uvea or Samoa on the other side of the andesite line from Tonga, or less likely from the more distant Vanuatu or the Loyalty Islands on the Tongan side. Typologically, moreover, with their rounded quadrangular (Poulsen adze group 2c or 2d) and quadrangular to trapezoidal (Poulsen adze group 1a or 1c) cross-sections, they fitted well within the corpus of adzes known from Tonga and other islands of Western Polynesia. More recently Dye (1987:135) has reported on a broken adze blade of a Polynesian type (Poulsen adze group 2c) fashioned from a coarse-grained blue-green rock exotic to Tonga excavated from a late Lapita period site in the Ha'apai group. He (1987:266) also notes that "quadrangular section adzes fashioned from a dark gray, fine grained rock that is macroscopically identical to basalts sourced to Samoa are common on the surface of inland sites in Tonga" which are not dated.

Now Leach and Green (in press) report on an adze in basaltic andesite from the Ferry Berth Lapita site on Upolu. The rock is petrographically exotic to Western Samoa but not Tonga, and typologically is of an oval-shaped cross-section similar to adzes found in Tongan and Fijian Lapita sites. The type is not found in later Samoan adze assemblages which are largely in alkali olivine basalts or hawaiites. The data begins to establish the reciprocal movement of adzes between Tonga and Samoa for this part of Polynesia, with some perhaps from islands even further to the west. More importantly these adzes have reasonably secure temporal contexts which allow them to be associated with the Lapita cultural complex.

Here we report on two exotic adzes, one from Samoa, the other from Tonga, which are typologically not of the usual Polynesian adze morphologies, but are of a shape well known throughout the Lapita cultural complex. Furthermore, they are made in rock types apparently exotic to both Tonga and Samoa.

The finding of the first adze from Western Samoa (Fig. 1) was by Richards, who brought it to Best and Green to examine. They recognised its significance from their recovery of almost identical adzes, both in type and material, in the Naigani Lapita site of Fiji (Best 1981:12, and especially Plate 8d),

and in the Nenumbo Reef Island Lapita site of the Outer Eastern Islands of the Solomons (Green 1979:38, Fig. 2.4). As a result they encouraged Richards to write an account of its discovery and significance in the context of adzes known from Western Samoa. An edited version of his report follows:

The Lapita Axe from Luatuanu'u, Upolu, Western Samoa

"In November 1987 I visited the village of Luatuanu'u on the northeast coast of Upolu to ask several families there if they had seen any *to'i ma'a* - old stone adzes. Immediately a young man gave me a large heavy example in a green polished stone. It has an unusual shape, as it is double bevelled like an axe, with a smooth front and back, but rounded down to very narrow flat sides (Fig. 1). The stone is as unusual as the shape. It is a fine grained green stone, with some white grains evident at a recent chip, but little effected by weathering. I had not previously located any stone of this, or of any related type, in Western Samoa despite extensive searching.

When the young man was asked where the stone had come from, the exact spot was pointed out, but with the comment that the stone had previously been in the sea. As evidence of this, the young man pointed to some brittle encrusted worm tubes on one side of the stone. This possible context was later confirmed by Margaret Crozier Richards, a former conchologist at the Dominion Museum, who was certain that the worm tubes were from a species that does not live on land or in fresh water.

The land site where the young man found this axe is at the western end of Luatuanu'u village, about 150m east of the stream and the Mormon church. On NZMS map 174, Upolu sheet map 20, published in 1970 and revised in 1977, the grid references of the find-spot are 278-682. This is within 100m of the present sea shoreline, but back between the present *fales* (houses) and the stone pig fence, on the old shoreline at the foot of the steep hills on which the old and new adze forms were found in the 1960's, and described by Davidson (1969:197). None were, however, of this distinctive shape or of this green stone.

In the course of collecting over 200 adzes (heads and pieces), including over 20 from Luatuanu'u and nearly 100 from neighbouring Solosolo, I have seen only one other double bevelled axe, and this is small, ill-made and of a rather brittle, grey local basalt. I have seen another 100 or so adzes in private collections in Western Samoa, while Green (1974:Table 28) worked from an excavated, surface and museum total of 946 items. Among more than 1200 adzes in all, this axe of green stone is the only one of its shape,

217.

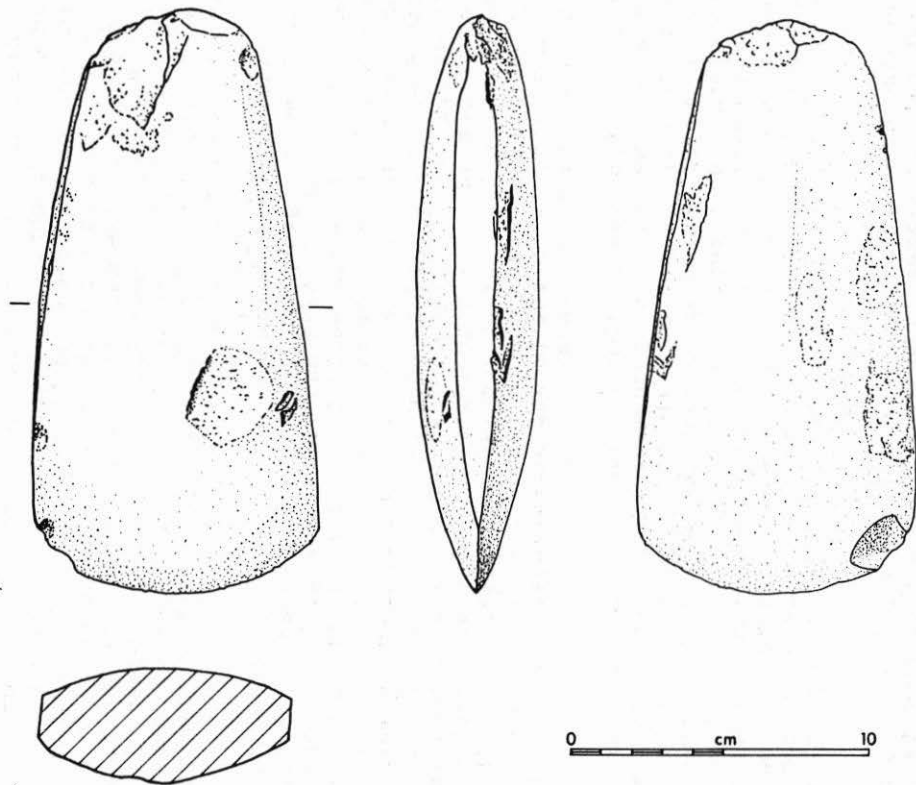


FIGURE 1. Plano-lateral adze/axe from Western Samoa.

and its stone, known so far from Western Samoa."

Since writing this description, its discovery place has been revisited by Rhys Richards and Helen Leach. However they were unable to find any signs of Lapita or later pottery, or any other indications of an early site. Richards's recognition of the unusual nature of the rock type among the extensive Samoan adze collections is also confirmed; it is a greenish coloured meta-sedimentary rock, probably a tuffaceous meta-sediment (Best, Green and Black 1988). This excludes a Samoan or Tongan origin for the rock. Typologically it is a plano-lateral adze/axe most similar to those from Lapita sites in Tonga, Fiji and the Reef/Santa Cruz Islands (Green 1974:262-265, 1979:39, Best 1981:12). So far as the authors are aware, this is the first time an adze of this type and material has been found in Samoa.

The situation is different in Tonga. Among Poulsen's rectangular adzes (group 1a) are at least two adzes of this type (1987:165, Nos. To-5/38 and To-6/29, Fig. 71, E2 and E4). One, To-5/38, is from the early Lapita period, the other more complete one, To-6/29, from the late Lapita period. The latter Poulsen (1987:174) says "can be closely compared" in morphology with the Reef Islands Lapita adze (Green 1979:Fig. 2.4). It is made in grey stone and like To-5/38, which is also made in a light grey rock which is a tholeiitic basalt, will probably be sourced to the Ha'apai group (Poulsen 1987:165, 279). Thus locally made Tongan adzes of the plano-lateral type are at present associated with the Lapita assemblages that span the first thousand years of Tongatapu's prehistory.

It is in this context that one must consider an adze of that type borrowed by Dirk Spennemann from a Tongan shop where it was on display but not for sale and given to Simon Best when they met in Fiji. While Spennemann considered it a strange adze for Tonga, Best recognised it as being like the Samoan, Fijian, and Reef/Santa Cruz adzes we were currently examining. When acquired by Spennemann, the adze head was mounted on a modern haft, as are many adzes currently for sale in shops and stalls in Tonga (Green personal observation, Leach pers.comm. 1988).

The adze head (Fig. 2) fits within the typological group of plano-lateral adzes/axes known from Tonga and on that basis is acceptable as having been found there. What makes it unusual is the finely banded green colour of the material in which it is made. This was identified macroscopically as a tuffaceous meta-sediment by Professor Philippa M. Black of the University of Auckland Geology Department. Like the blue green adze found by Dye, it is a material exotic not only to Tonga, but also other West Polynesian islands.

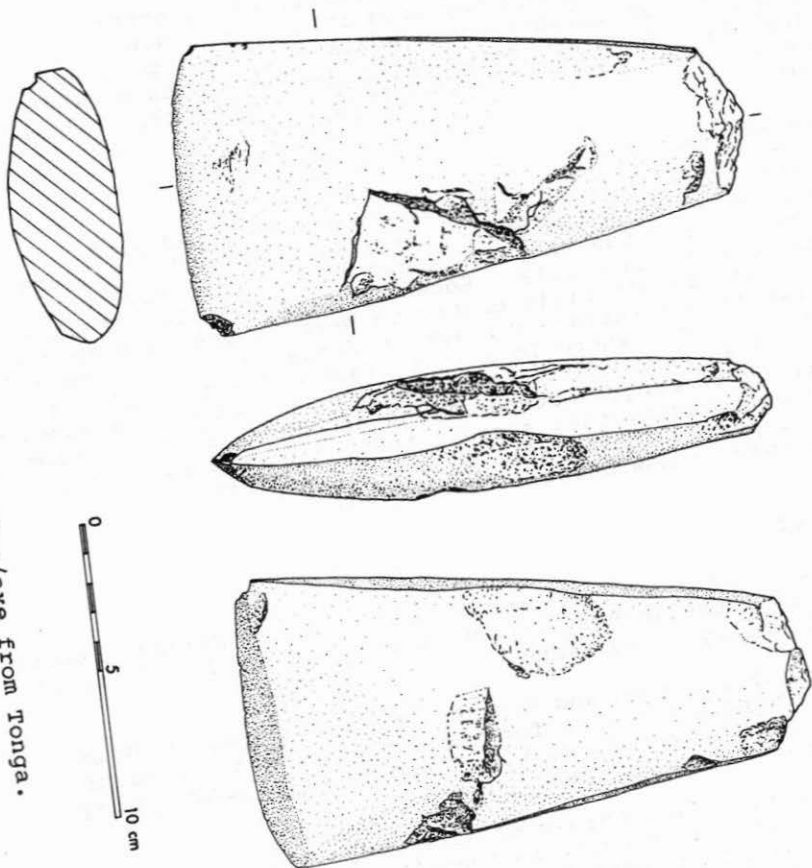


FIGURE 2. Plano-lateral adze/axe from Tonga.

Two possible explanations for the presence of this adze in Tonga occur to us. The first is that it was found in Tongatapu and was recovered from a disturbed prehistoric site or find spot. This conforms to what Spennemann (pers. comm.) was told about its discovery by the finder. It seems the more likely explanation. If so, the artefact was probably brought to Tonga when adzes of this type were in vogue. However another explanation is that the adze was brought back to Tonga in the post contact period by Tongan missionaries or others on overseas visits, who had acquired it in Papua New Guinea or other Melanesian islands where adzes of this type occur. This possibility cannot at present be excluded, although when we know more about adzes of this type, in this rock, that may be possible.

### Conclusion

Large plano-lateral adze/axes are associated with assemblages of both the Western and Eastern Lapita cultural complexes. In Tonga they are known to occur in such contexts made from local materials. Recently rare examples of adze/axes of this type in materials exotic to West Polynesia have been recovered from a surface context in Samoa, and in a commercial context in Tonga, where locally surface collected adzes are being sold as handicraft items. When these adzes are added to those being exchanged between Tonga and Samoa from the time of the Lapita horizon, they suggest that on occasion, at least in the early period, there will be items from further afield. How much further is now being investigated.

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