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THE HEARTH IN FIJI

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Abstract

There are several different firing practices revealed by archaeological excavations in Fiji which need to be related to ancestral practices on the one hand, and to derived or related cultures on the other.

The timely discussion of the hearth as an archaeological feature in New Zealand by Helen M. Leach (1972: 59) draws attention to a comparable need in Pacific Island archaeology in order to interpret temporal and functional differences of such features. These notes summarize findings from recent fieldwork in Fiji as well as drawing on earlier data of Gifford's 1947 excavations. Some of Everett Frost's Tavenui data is included here (Frost 1970) as well as details from Fiji Museum excavations on Wakaya Island and at Tatuba cave in inland Viti Levu. Reference is also made to Lawrence Birks' Sigatoka dunes excavations (Birks 1972, in press).

Contemporary ethnographic fieldwork shows that there is a preference for three vertically placed water-worn stones as stands (sue) for cooking containers, particularly where traditional earthenware pots are still used. In his description of a rock shelter (Site 8) near Vatucere in the hill country, Gifford (1952: 246) recorded that between the surface and 15 ins there were:

"three cobbles, which had apparently been used as pot rests. These (oven stones) were from an earth oven near the outer edge of the shelter."

This description does not clarify the difference between a covered over earth oven and an open fire with pot stands for container cooking. Elsewhere in his report Gifford showed that he was not fully aware of the need to explain the difference himself, as in his two following notes on Site 17A, Navatu. Indeed, the notes suggest some confusion in Gifford's mind:

"Groups of stones associated with charcoal and ash gave evidence of earth ovens. These were encountered occasionally, as for example in the upper 18 ins of rectangle C3-4 D3-4 of Location A."

"Ash and charcoal lenses under the rock shelter indicated that it was perhaps frequently used for fires and cooking, probably in pots which would require no stones as do earth ovens."

Gifford 1952: 198

Fieldwork has confirmed that rock shelters and caves in Viti Levu hill country contain surface hearths of water-worn stones, usually in groups of three but not necessarily so. Rock shelters VL 1/16 and 1/17 near Vatukoula certainly had them (Palmer 1968: 153) but Tatuba (VL 11/14) had less regular clusters of water-worn stones. Gifford saw a parallel row of stones in use at Vatucere Village when he visited it in 1947:

"A cooking pot from Nandroga Province was lying on its side on two rows of stones over a fire within a small kitchen outhouse."

Gifford 1952: 245

Confirmation that this was an older practice is seen in his report of fireplaces seen on Korovatu fortress in Colo North:

"These were oblong, about a foot wide and 2 ft long, with rather thin, flat stones stood on edge to form the sides and edge. On these, it was said, large cooking pots were laid on their sides....."

Gifford 1952: 246

Not too far distant near Vatukoula, in the site designated VL 1/15 an oblong hearth open at one end and of similar dimensions, was seen (Palmer 1968: 153, Fig. 3). Two parallel rows of stones were excavated by Fiji Museum at a depth of 30 cm in square ACc 1-2 at Tatuba and were clearly associated with charcoal (MS in preparation) while at Location B in the same cave there were two superimposed hearths. Both were in the paddle-impressed level and indeed such sherds were in, around and underneath the hearths themselves. The upper one consisted of three irregularly shaped limestone blocks forming three sides of a square while a fourth block a little distance away may have made up the fourth side. Sitting immediately under this feature was another hearth made up of three water-worn stones, one

of them being flaked or fractured. All of them were set on edge with charcoal present, but around the upper one there was only a brown dusty deposit. The lower one was set in triangular form with a marked space between each stone.

From this it would appear that in the Viti Levu hill country there were two distinct forms of natural pot stands: (1) a group of three stones which may be water-worn or irregularly shaped. These have persisted from paddle-impressed horizons to the near present, the earlier water-worn units being set on edge with the modern ones being set on end vertically. The irregularly shaped ones are both early and late with a hint that in former times a square unit may have been used while in modern times water-worn stones were preferred; (2) an oblong stone hearth sometimes open at one end which is known from modern ethnographic and archaeological data. It appears to be a middle period feature at Tatuba on present evidence. Gifford's mention of a detached kitchen draws attention to a trend in this century - to build a separate kitchen to be used away from the dwelling-house in case of fire spreading in high winds.

It would appear from old engravings of Fiji that in parts of Viti Levu, cooking in the nineteenth century was actually done in the main house with an oblong wooden slab-lined hearth and a wooden rack or platform above it for holding earthenware pots (Gordon-Cumming 1885: 208). The artists has shown this to be nearer the long side of the house than the centre and is obviously in eastern Viti Levu which was the region most familiar to her and is shown to be that locality by the Nasilai pottery figured. D'Urville's artist in 1837-8 showed the interior of a Fijian house in Levuka, Ovalau, with a hearth in one corner next to an entrance. In this case the oblong hearth was slab-lined with wood and with large stones as pot stands but there was no storage platform above it (D'Urville: Plate 95). The same artist shows a temple interior in Ovalau with a pit in which there is a rack (Plate 92). This practice has been noted by Fiji Museum field parties in the Viti Levu hill country, particularly in the type of house known as bito, used by men only or elderly people. Oblong pit fires have been seen, even two in the one bito at Nakoro, during the cool season. Occasionally still seen, too, is a simple rack with two upright stakes and one horizontal one. Elderly men use this to warm themselves by lying down and placing both feet on the cross-piece. This is undoubtedly the purpose of the structure figured by D'Urville's artist.

At this stage it is appropriate to turn to evidence from other parts of Fiji to see if there are any discernible differences in the excavation findings of recent times.

Excavations undertaken in a small cave on Wakaya Island in the Lomaiviti Group showed a difference in firing techniques. The lowest level marked by paddle-impressed pottery, had small deep fire pits or scoops cut into the natural. These scoops contained quite an amount of black ash, charcoal and some smooth oven stones. They were cut into the orange of the natural bedrock. From the evidence in the form of the stones, shell fragments and small pieces of bone, it appeared that these were cooking ovens. At a higher level the soil was of a looser browner consistency and had much larger and thinner firing areas, marked in all cases by a prominent white ash. In some cases this rested on a thin black layer but the area of white ash seemed to indicate a slow-burning softwood being used for firing material. Some remains suggestive of cooking were also present. The large extent and shallow depth of the Wakaya white ash areas indicated a fire for warmth and light as well, but there was not the appearance of underground cooking units because the white ash appears fairly horizontal in section. These upper level firing areas were associated with applique and incised potsherds, thus showing a temporal cultural difference. Such ovens and firing zones, as opposed to the hearths with stone pot stands, need in turn to be compared with similar units in Viti Levu.

At Tatuba Cave in the upper Sigatoka Valley, four squares were excavated. The lowest horizon was almost predominantly paddle-impressed and while the Wakaya "earth oven" was not present there were some generally concave white ash lenses which were much larger than the Wakaya units. The overlying layers showed the large, thin areas of white ash with a grey or blackish lower margin rather like the upper level at Wakaya and like it, too, showing more recent ceramic material. In some there were postholes clearly sealed by subsequent deposition.

A notable feature of the Tatuba site was the presence of a recent pit which had been cut down sharply from a horizon near the present cave surface and was itself sealed in by a thin white layer. At the bottom of the pit there was an inch of charcoal and white ash, on top of which large boulders had been placed. This layer of rocks had a capping of 1-2 inches of white fibrous material, some of which had been set vertically and seemed to be bamboo subjected to slow burning. The purpose of this pit is unknown at the time of writing and may relate to a specialised firing practice such as Bellwood recorded at MangaKaware 2, i.e., a smokeless means of heating. Cool season nights at Tatuba can be bitterly cold, as any Fiji Museum fieldworker can testify to with conviction born of experience.

Sustained excavation of the Sigatoka sand dunes was undertaken by Lawrence Birks who defined three occupation levels:

- Level 1 (Lapita pottery)
- Level 2 (Paddle-impressed)
- Level 3 (Plain)

According to the excavator, there was no indisputable evidence in support of the assumption that earth ovens were used in the Lapita level of c. 500 B.C. (Birks 1972, in press). Furthermore, the excavator elaborates on the difficulty of interpretation at this site which may have always been subject to a certain amount of deflation, even at an early date. In his description of the Lapita level Birks states:

"No groups, or clusters of stones with accompanying ash, charcoal or other indications of fire were found in hollows or on an undisturbed surface. On a few occasions, stones were located with sherds, in circumstances such that, had the entire group been composed of stones, it might have been assumed to be a fireplace The discovery on all levels of sherds from pottery vessels indicates that a likely use for the stones would be as supports for pots over fires. If this were so, the fragments recovered were probably heat-fractured fragments discarded with the broken pot."

Birks, op.cit.

Although three places were found in the Lapita level where fires had burned, Lawrence Birks could not determine whether they were fires in the domestic sense or simply rubbish fires:

"One was indicated by a discoloured area, oval in plan and containing a few flecks of charcoal The other two displayed more tangible remnants in the shape of a pile of sherds and stones 4 inches deep within the culture layer the larger of the two being 28 inches long and 15 inches wide. Two of the stake holes may have been associated with one of the fireplaces as they were situated on opposite sides about 9 inches away."

Birks, op.cit.

In the Lapita level, the excavator found the enigmatic cylindrical ceramic objects with projections which, after analysis and consideration, he assigns to the category of pot stands, thus serving as a substitute for stones under certain circumstances for some reason. In his Level 2, dated at c. 230 A.D., Birks did not excavate any definite hearths although there are visible surface scatters of stones. At one point he specifically noted that the stones were:

"not so arranged that the assembly had the unmistakable appearance of a fireplace."

Birks, op. cit.

Evidence from eastern Fiji on the island of Taveuni comes from data recorded by Everett Frost (1970). In his work on fortified sites he noted several features related to firing which are arranged in chronological order below.

A.D.1140-1280 A pit described as a hearth was excavated at ring-ditch site VAL 16/210. The caption to figure 37 describes it as "a stone lined fire pit" while the text states that it is a hearth consisting of "a rounded stone lined pit 55 cm wide by 65 cm long... and is dug 30 cm deep into Layer A. The pit was filled with charcoal and soil of Layer B." (Frost, 1970: 102)

A.D. 1160-1320 The remarkable multiple unit ring-ditch site VAL 16/216E yielded a "fire hearth" according to the excavator and consisted of a circular concentration of charcoal, 80 cm in diameter, filling a concave depression 15 cm deep and 80 cm in diameter dug into a lower lava layer. (Frost, 1970: 114).

At the major volcanic cone site Navolivoli VAL 16/10, Frost recorded two pits, one of which he describes as an earth oven and the other a fire hearth:

"Excavations uncovered a pit, 80 cm in diameter at its base, 1 m deep, with its base lined with stones..... and could have served as a subsurface oven (lovo)."

Frost 1970: 126

"Excavations on this mound (structure 11) exposed a circular pit 85 cm in diameter and 25 cm deep, filled with ash and charcoal fragments..... it seems

reasonable to interpret the pit as a fire hearth."

Frost, 1970: 132

A.D. 1240-1420

An example of a horizontal unit, apparently without stones was recorded on the outer edge of ring-ditch site VAL 15/202. The layer was about 20 cm below the upper limits of his lowest layer and appeared to be in fairly close association with an oval pattern of charcoal and fire-cracked stones:

"A diffuse layer of charcoal fragments spread over an area roughly rectangular in plan, 60 cm long by 45 cm wide."

Frost, 1970: 76

A.D. 1580-1760

An element of doubt is in the excavator's mind regarding an oval feature excavated at Qalau, Site VAL 16/221:

"At a depth of 90 cm to 1.00 m a horizontal concentration of charcoal, oval in shape, 30 cm by 50 cm in diameter, was exposed and collected. Perhaps the charcoal represents the remains of a subsurface oven or lovo dug into the yavu from a floor level above or it may represent a fire hearth from an earlier floor surface....."

Frost, 1970: 119

Modern

In a level open area not modified by any stone faced mound, Frost noted a circular alignment of intermittently placed angular basalt stones which recalls the mention of somewhat similar features in northern New Zealand and from the New Hebrides (Garanger, 1972: Fig. 237). The unit seen at Taveuni was circling:

"A shallow depression in the site surface..... once been a pit of the same diameter as the stone ring with a concave bottom 40 cm deep below the site surface. The pit was filled with brown-black charcoal flecked soil..... The Fijians assisting in excavation suggested that the stone ring marked the limits of a subsurface oven (lovo) but excavation suggests that if the phenomenon was an oven it was a very shallow one."

Frost, 1970: 94

At Navuga, a late one-phase ridge site 1700 ft up in the rain forest, Frost noted a "fire hearth" exposed 15 cm below the mound surface. It extended only 20 cm from the hearth, was 6 cm deep, was filled with charcoal flecked earth and was rounded - rectangular in plan, 52 cm wide by 70 cm long (Frost, 1970: 37, 46). On structure 19 he noted a subsurface pit with charcoal flecked soil containing several "weathered shell operculum" (Frost, 1970: 4).

The importance of this extended series of descriptions lies in the difficulty of interpreting some features unless all details are noted, and even then the excavator sometimes has difficulty. It does appear from Everett Frost's work that in Taveuni ring-ditches, ridge forts and defended cone sites that the following generalizations may be valid:

- (1) both firing pits and horizontal units occur at all points of time from A.D. 1140 onwards;
- (2) nearly all units are rounded or circular in plan;
- (3) stones only occur with pits or depressions; and
- (4) stone free units containing only ash and charcoal are horizontal.

Interpretation of the Taveuni data will rely in part on whether or not firing units from mounds within defended ridge and cones sites are demonstrably the same as those from open areas within ring-ditch sites. It raises the question of permanent occupancy of the latter with the accompanying assumption that they were normal habitation units of defended villages which themselves could also rightly be called fortifications. They appear to be so in S.E. Viti Levu, but this may not apply to the whole of Fiji. Regardless of this factor, there appears to be a regional difference emerging in the archaeological evidence summarized above.

There is no mention of the parallel rows of stones found in the Viti Levu hill country while Viti Levu itself has yet to provide a pit encircled with stones recorded for Taveuni. The oblong stone hearth and triangular stone potstands may well be less important in Taveuni, although more work on habitation units is needed to draw a useful contrast. The evidence suggests that analysis of firing features will be worthwhile in Fiji and that regional differences or emphases, perhaps, will emerge as a result of more extensive archaeological work. At this point of time, it is sufficient to reiterate Helen Leach's point that hearth form may be a valuable marker of a regional tradition (Leach, 1972: 66). One might well extend this into Oceanic contexts and apply it over a much wider area and through a greater time depth than is known in New Zealand.

For Fiji Museum purposes, it is intended to recognise the distinction between a hearth and a firepit as Leach pointed out (op. cit. 59). The former we are regarding as a horizontal unit with or without stone potstands while the latter is essentially an excavated pit or scoop which need not have stones associated with it.

In order to bring a little more precision into our recording of field evidence, Fiji Museum intends using a Firing Feature Checklist. This will record the main elements of each feature met with on excavation and allow duplicate copies to be filed. This in turn will allow a file to be built up covering all excavated sites in Fiji, thus bringing together most of the available data needed in a study of firing and cooking practices. It is not claimed that the specimen checklist reproduced here is the final or even best solution. No doubt amendments will be necessary but, hopefully, it will be a research tool of use to scholars.

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