Lapita and Post-Lapita ceramic sequences from Erromango, Southern Vanuatu

Stuart Bedford Archaeologist

Introduction

This paper briefly presents the results from excavations at two sites on the island of Erromango, southern Vanuatu and discusses how the recovered ceramics from these sites contribute to the debate on the relationship of Lapita and post-lapita ceramic traditions and the associated populations and cultures. It is divided into two distinct sections, the material from Ponamla, which was excavated in 1995 and has been partially analysed, and material from Ifo, the results of which are very preliminary in nature at this stage, as the six week excavation at the site was completed only ten days before the commencement of the Vila Conference.

It is now generally accepted that pottery production in Vanuatu began around 3000 years ago with the arrival of the Lapita colonists, with their distinctively decorated ceramics and vessels forms, and transformed in style, form, decoration and function over time. Were these developments largely indigenous or are they evidence of cultural replacement and/or the presence of different contemporary groups. In a 1984 paper, Spriggs argued for a basic cultural continuity in Vanuatu and a number of other islands in Melanesia between Lapita and the cultures that followed (Spriggs 1984). This scenario is generally accepted for the islands of western Polynesia. There are certainly strong indications from Erromango that incised and applied relief ware, often referred to as Mangaasi was associated with and evolved out of the Lapita traditions.

Ponamla

As outlined by Spriggs, Ponamla is a relatively undisturbed settlement site with related cultural deposits dating from circa 2800/2700 BP to 2400 BP. The areal excavation revealed what appeared to be a former cooking area. The presence of ash, charcoal and cooking stones, mixed with shellfish and faunal material certainly indicated that the remains from hearths were being deposited at the site. Thousands of sherds along with an assortment of other artefacts such as Tridacna adzes and arm rings, Conus shell rings, shell beads, a drilled shark tooth, bone needles (fashioned from the bone of an extinct bird) scoria abraders and numerous stone flakes were recovered.

Of the almost 20 square metres excavated at Ponamla only four were excavated to the bottom of the cultural deposit and to date only the ceramics from one of the these has been analysed in any detail. The results from this one square do however reflect the site overall and certainly concur with the impression gained during the excavation.

Recovered Ceramics

A total of 976 sherds were recovered from the one square (T.P.1.1), 96.5% of which were plain and some 3.5% decorated (Tables 1, 2 and 3). The remains clearly demonstrate a move from predominantly plainware to an increase in decorated ware over time, with more decorated material appearing from the bottom of Layer 2 upwards (2600 BP) (Fig. 2). The typical decorated material is fingernail impressed, with much fewer examples of incising on the lip. Lip morphology is made up of either tapered or plain lips with one flat and one expanded (Fig. 3 a i-iv). There is no discernible change through time in either lip or rim morphology. The pots are completely dominated by globular cooking vessels with outcurving rims (Fig. 3b). Numerous clay wasters were recovered from throughout the excavated area indicating that the pots were being made on the site.

Essentially the recovered ceramics from this one square metre are very similar in form and fabric (G. Summerhayes pers. comm.) the most discernible change being from a predominance of plainware in the earliest layers of the site to increased proportions of decorated ware in the upper layers. One sherd of classic dentate stamped Lapita was also recovered from the site (not this particular square), in secondary deposition.

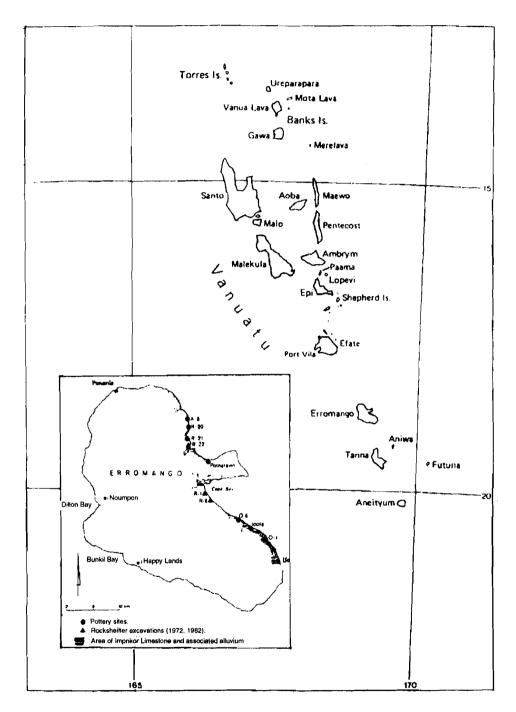


Figure 1 Vanuatu. Inset is enlargement of Erromango (adapted from Spriggs and Wickler 1989).

Layer			Sherd Type			% per layer of sherd type		
	plain	deco	deco rim	rim	total	plain	deco	rim
1	187	15	2	34	238	78.5	7.25	14.25
2	97	9	1	31	138	70	7	22.5
3	396	5	0	70	471	84	1	15
4	101	0	2	26	129	78.5	1.5	20
5								
Total	781	29	5	161	976			

Table 1 Summary of ceramics from Ponamia T.P. 1.1.

Layer		Lip Morpho	Rim Morphology			
•	taper	plain	flat	expand	outcurv.	horiz.
1	11	23			33	
2	14	18			32	
3	33	36	1	1	57	1
4	13	15			20	1
5						
	71	92	1	1	142	2

Table 2
Summary of lip and rim morphology from T.P. 1.1.

	Layer		Decoration form			
	fingernail	fnail + lip notch		incised	lip notching	
1	15		2			
2	8	ļ	1	1		
3	3			2		
4			1		1	
5						
	26		4	3	1	

Table 3
Form of decoration on ceramics from T.P. 1.1.

Brief summary

Ponamla appears to be a secondary colonising settlement on Erromango, a few hundred years after it was first settled by Lapita colonists possessing the full suite of dentate stamped ceramics. People arrived to colonise the area circa 2800 BP, dentate-stamped Lapita was no longer widespread, initially plainware dominated and over time fingernail and incised ceramics appeared. People moved into a pristine environment and commenced an intensive exploitation of the local fauna and marine resources. There is some indication of abandonment after 2400 BP probably due to resource depletion and people do not return until circa 1600 BP. People leave with the ceramic tradition intact and return without. The occupation was relatively short and intensive with ceramics that are culturally transitional between Lapitoid plainware and incised and applied relief traditions. It would appear that the site adds further strength to the argument, first put forward by Spriggs in 1984, of a basic cultural continuity from Lapita to later ceramic traditions as opposed to them being separate or intrusive.

Ifo

Spriggs tested the southern Erromangan site of Ifo in 1983. The eastern coast of Erromango comprises an extensive area of recently raised coral reef known as the Imponkor Limestone (Spriggs and Wickler 1989). This tectonic uplift has increased the chances for the preservation of the earliest settlement sites. However, the raised coral reef along most of the south eastern coast also presents a very hostile environment in terms of canoe access. In 1983 a number of ceramic sites were recorded along the east coast, all were located near past reef passages or at river mouths and were associated with beach ridge formations (Fig.1).

The site of Ifo is in many ways similar to Ponamla. It is located several hundred metres from the shore, on the north bank of a river which provides canoe access, and is concentrated on a series of linear ridge formations. A number of these ridges run parallel to the river and appear to be former beach ridges while others run at right angles and are primarily made up of cultural material. The site is some 10 metres above sea level.

During the fieldwork of 1983, five square metres of a six by one metre trench was excavated across one of the ridges. Recovered pottery included, one dentate-stamped Lapita sherd in secondary deposition along with post-lapita style pottery, largely decorated

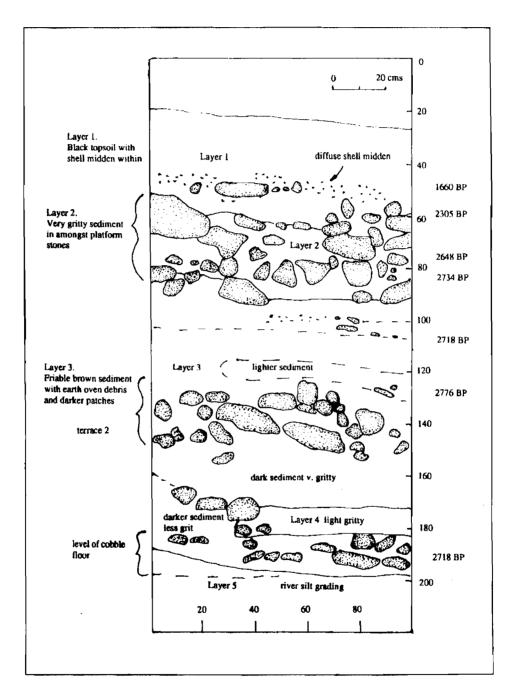


Figure 2 Ponamia, Erromango, TP 1.1, west section.

with fingernail impressions. Shell from the lowest cultural layer of the mound returned a radiocarbon date of 2300 BP. It mound appeared to be an in situ cultural deposit with charcoal, shellfish, cooking stones and numerous ash lenses (Spriggs and Wickler 1989). Spriggs argued that the site represented a culturally transitional phase from Lapita to post-lapita.

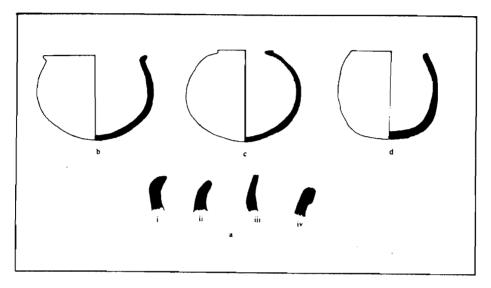


Figure 3
Ceramics from Erromango.

It was to this site that I returned in June and July of 1996, working with Jerry Taki (Vanuatu Cultural Centre fieldworker) and a crew of local labour for six weeks. After an intensive test-pitting programme to determine the area of the site and any temporal/spatial variation, it was found that the most productive and undisturbed mound was the same that Spriggs had tested in 1983. Two parallel trenches some metres apart and on either side of the mound were excavated from the edge of the mound into the centre and connected by a trench along the spine of the mound, a total area of 17 m².

The mound comprises a central core of flattish coral cobbles on top of a relatively level degraded coral subsurface. These flattish coral blocks appear to have been the result of people clearing a flat area on first arrival. Similar scattered coral blocks in uncleared areas can be seen further towards the coast. Once these linear piles of coral had been formed they appear to have served as a focus for the dumping of cooking debris and refuse, a practice that is still seen today on Erromango.

The mound is essentially formed from a series of relatively undisturbed in situ dumping layers with a maximum accumulation of cultural material of around 1.50 m.

At the lowest level of the mound, below and amongst the coral blocks cultural material associated with a Lapita settlement was recovered. The ceramics include dentate-stamped sherds along with finely incised sherds from a number of different vessels along with numerous plain sherds. The ceramics were associated with bones of a large bird, turtle and flying fox and *Tridacna* adzes and armrings. A number of the shellfish species recovered from the midden were said by local people to be no longer available in the area.

Later incised Lapita, with accompanying circle designs (Lapita géométrique (Frimigacci 1974) was found at the upper level of this layer. There is a plainware component (globular pots with outcurving rims) present with both the Lapita occupation and the post-Lapita materials, although not with the same predominance as seen with the material from Ponamla.

The Lapita ceramics are followed by wares with fingernail and incised decoration with out-curving rims (Fig.3b). This is again very similar to the decorated sherds recovered from Ponamla and probably corresponds to a similar date of circa 2500 BP.

This material in turn is followed by globular pots with incurving rims and largely fingernail impressed designs which may correspond to the 2300 BP dates received from the 1983 excavations. The essential change being from a predominance of out-curving rims to predominance of incurving rims (Fig. 3c).

And finally near the top of the mound thick sherds of several more crudely made and roughly incised globular pots occur with a much less incurving rim and more open mouth (Fig. 3d). This material would appear to signal the end of the ceramic tradition on Erromango, probably around 2000 BP.

The site at Ifo is situated in a much more open area than the site at Ponamla where the area for settlement was restricted by its location in a river valley. At Ponamla the ceramic sequence is somewhat stretched, with almost 2 m of cultural stratigraphy accumulating over 300-400 years and at Ifo a similar depth of material has accumulated over at least 1000 years, somewhat compacting the sequence.

Comparisons with other Vanuatu material

Although Vanuatu has been the subject of archaeological study for some time it has often been difficult to clearly establish the chronological sequence of the varying ceramic traditions, largely due to site disturbance. The recent excavations at Erromango and

the relatively undisturbed ceramic sequences recovered will contribute to the further interpretation of other ceramic material previously excavated from Vanuatu.

Ceramics very similar to those recovered from Erromango were found at the Banks Islands by Ward (1979) from his excavations at Pakea. Ward recovered some 900 sherds of highly fragmented and eroded pottery comprising plainware and incised and applied-relief ware, which he argued were in association. Ward suggested that the pottery appeared around 2500-2000 BP and disappeared around 1850 BP. It seems quite probable that there was some mixing at the site and that rather than being in association the plainware may have preceded the decorated material, as in the case of Ponamla. This suggestion was first made by Kirch (Kirch and Yen 1982) after excavations at Tikopia.

From the site of Erueti on the island of Efate, Garanger (1972) recovered Lapita dentate stamped sherds in association with plainware and incised material, which apart from some distinctive flat rims, is similar to the ceramics from Ponamla and some of the material from Ifo. Garanger argued that the dentate-stamped material and the plainware were related but rather than having any direct association, they had been preceded in a neighbouring site by what he argued was an earlier incised and applied-relief ware. The site was dated to 2300 BP from charcoal from the lowest level, but again the site had experienced some mixing. It seems more likely from the results at Ponamla and Ifo that the ceramic sequence at Erueti may also have followed the Lapita dentate stamped to plainware to incised and applied-relief ware sequence. Erueti was identified by Spriggs (1984) as such a transitional site.

From the site of Mangaasi, the core of Garanger's seminal work on the ceramics of Vanuatu, thousands of sherds with the incised and applied-relief decoration were recovered along with an assortment of distinctive handles. There seems to have been little plainware component at the site. Garanger often noted that he had some difficulty in interpreting the stratigraphy and this is reflected in his summing up of the ceramic chronology. Researchers have questioned the validity of his early to late Mangaasi ceramic sequence (Ward 1989) and although the material can be reliably accepted as dating from around 2700 BP, the termination date for pottery production and use has still to be established.

Despite some exclusive attributes, the most obvious being the range of vessel handles which have only been found at one other site in Vanuatu (Erueti), the ceramics from Mangaasi have a greater similarity with the ceramics from other islands that allows them to be fitted into a general Vanuatu ceramic sequence. There is no need to argue for the arrival of a new group of people as has been done in the past (and more recently [Gorecki 1992]) or that the ceramics at Mangaasi predate Lapita. It would appear that the site post-dates the period of dentate-stamped Lapita, and certainly lacks any great plainware component. Vessel forms were dominated by ovoid pots with restricted orifices, similar material to that recovered from Ifo and probably dating from 2300-2000 BP, and the incised and fingernail impressed decoration seen at Mangaasi, is of course, found throughout Vanuatu.

The incised and applied-relief material seems to appear rather earlier than that from other islands in Vanuatu and the South West Pacific (Spriggs 1993: 196) and it may well have been an initial centre from where the distinct decoration style was disseminated. The termination date for pottery production and use at Mangaasi is still not clear. Further archaeological work was undertaken at the Mangaasi (Mangaas) site by Matthew Spriggs and staff of the Vanuatu Cultural and Historical Sites Survey in August 1996, in an attempt to address some of these chronological issues.

On the island of Malo, off southern Santo, plainware and incised ceramics are present along with abundant dentate-stamped Lapita. A series of sites were excavated by Hedrick in the 1960's and 1970's, but they were very disturbed and it was difficult to establish any chronology for the recovered ceramics (Hedrick n.d.). The material from Malo would however appear to contain all the elements of a pottery sequence from Lapita dentate stamped to plainware to incised and applied relief.

If one takes into account the variation found amongst pots made by the same potter and between different potters of the same village then clearly there is little likelihood of finding identical sequences across the archipelago. Variation is also to be expected as cultural groups, through increased isolation, diverged over thousands of years. There is variation from island to island in Vanuatu, as clearly seen when comparing some of the Mangaasi ceramics to material from other islands, but general similarities and patterns are beginning to emerge.

Erromango then, the island once categorised as an aceramic oddity, has made something of a spectacular comeback, the material going some way in further establishing the transitional nature of Lapita to post-lapita style ceramics and aiding in the clarification of the previously somewhat confused ceramic sequences of Vanuatu.

Hemia nomo.

Acknowledgments

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Bibliographie

FRIMIGACCI (D.), 1974 — Les deux niveaux à poterie du site de Vatcha (IIe des Pins). Journal de la Société des Océanistes, 30 : 25-70

GARANGER (J.), 1972 —
Archéologie des NouvellesHébrides: contribution à la connaissance des îles du Centre.
Paris, Musée de l'Homme,
Publications de la Société des
Océanistes N° 30.

GORECKI (P.), 1992 —
"A Lapita Smoke Screen"? In
Galipaud (J.-C.) ed.: Poterie
Lapita et Peuplement. Actes du
Colloque Lapita, Nouméa,
Nouvelle-Caiédonie, Janvier
1992. Nouméa, Orstom: 27-47.

GROUBE (L.), 1972 — Erromango fieldnotes, Canberra Division of Archaeology and Natural History, RSPAS, Australian National University. HEDRICK (J.) n. d. — Archaeological Investigations of Malo Prehistory. Lapita Settlement Strategy in the Northern New Hebrides. Manuscript draft of Ph.D dissertation, University of Pennsylvania.

KIRCH (P.V.), YEN (D.), 1982 — Tikopia: The Prehistory and Ecology of a Polynesian Outlier. Bemice P. Bishop Museum Bulletin 238.

SHUTLER (M.E.),
SHUTLER (R.), 1966 —
A preliminary report of archaeological explorations in the southern New Hebrides.
Asian Perspectives 9: 157-166.

Springes (M.J.T.), 1984 — The Lapita Cultural Complex: origins, distribution, contemporaries and successors. *Journal of Pacific History* 19 (4): 202-223. SPRIGGS (M.J.T.),
WICKLER (S.), 1989 —
Archaeological Research on
Erromango: Recent Data on
Southern Melanesian
Prehistory. Indo-Pacific
Prehistory Association Bulletin
9: 68-91.

SUMMERHAYES (G.), 1996 — Personal communication. WARD (G.) 1979. Prehistoric Settlement and Economy of a Tropical Small Island Environment: The Banks Islands, Insular Melanesia. Ph.D. thesis, ANU, Canberra.

WARD (G.), 1989 —
"The Mangaasi pottery and the
Mangaasi site". In Sutton
(D.G.) ed.: Saying So Doesn't
Make It So. Papers in Honour
of B. Foss Leach. Otago, New
Zealand Archaeological
Association Monograph 17.