

RESULTS FROM EXCAVATIONS AT THE MANGAASI TYPE SITE: A RE-ASSESSMENT OF THE CERAMIC SEQUENCE AND ITS IMPLICATIONS FOR MELANESIAN PREHISTORY

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ABSTRACT

This paper outlines results from recent excavations at the eponymous site of Mangaasi, located on the west coast of Efate, Vanuatu, and presents a re-assessment of the ceramic sequence from the site. The Mangaasi ceramic tradition has in the past been identified as one of the major ceramic traditions of the southwestern Pacific which spanned a lengthy time period and demonstrated conservatism both in form and design. The Mangaasi site was previously somewhat of an anomaly, used to argue for multiple colonisations of the region, but its re-excavation in 1996-7 indicates that the Mangaasi tradition as an entity requires revision. The more recent work has revealed a ceramic sequence that has parallels both within Vanuatu and other parts of Near and Remote Oceania.

INTRODUCTION

In mid 1996 and 1997, excavations were undertaken at the eponymous site of Mangaasi on the west coast of Efate, Central Vanuatu, by Matthew Spriggs, the author and a team from the Vanuatu National Museum. The excavations were part of the on-going Australian National University-Vanuatu National Museum Archaeological programme which began in 1994 after a more than 10 year hiatus in archaeological research in the islands (Bedford *et al.* 1998). The work at Mangaasi combines both a research and training component. Ni-Vanuatu Museum staff and fieldworkers from a number of islands have been involved in archaeological work at the site.

Before going into the detail of the recent work some background to previous research on Efate and the issues which it raised must be outlined. The sites of Mangaasi and

Erueti are central to this discussion (Figure 1). The site of Mangaasi, located on the north west coast of Efate, was originally excavated by José Garanger in 1967, which constituted the final phase of an extensive archaeological program which he carried out on the islands of Efate and the Shepherds group further north (Figure 1; Garanger 1972). Garanger excavated 118 square metres at the Mangaasi site and some 17,000 sherds were recovered, approximately 3500 of which were diagnostic. He had earlier recovered similar material from other areas of Efate and the Shepherds which he identified as being part of an incised and applied relief tradition.

After the excavations at Mangaasi, Garanger decided the term Mangaasi was a more appropriate and accurate term to describe the tradition in Vanuatu (Garanger 1971:54). The ceramics were characterised by globular incurving pots decorated with incised and or applied relief. Garanger argued that the recovered ceramics represented a tradition that appeared around 2600 BP, had survived for up to 2000 years, and could be divided into "early" and "late" phases (Garanger 1971:54). It was thought to represent a separate and distinct cultural tradition that was contemporary with or possibly pre-dated Lapita (Garanger 1972, Bellwood 1979, Green 1979).

Erueti was the other important site that Garanger excavated on the south coast of Efate (Figure 1) during the same field season (Garanger 1972:26-31). At this site an area of 38 square metres was excavated down to a depth of 80 centimetres. The site appeared heavily disturbed and a single date of 2300 BP was obtained at a depth of 60 centimetres. The ceramic material was characterised largely by plain globular pots (with a small component of carinated vessels) with outcurving rims and wide flat lips which were predominantly notched. Dentate stamped ceramics also were

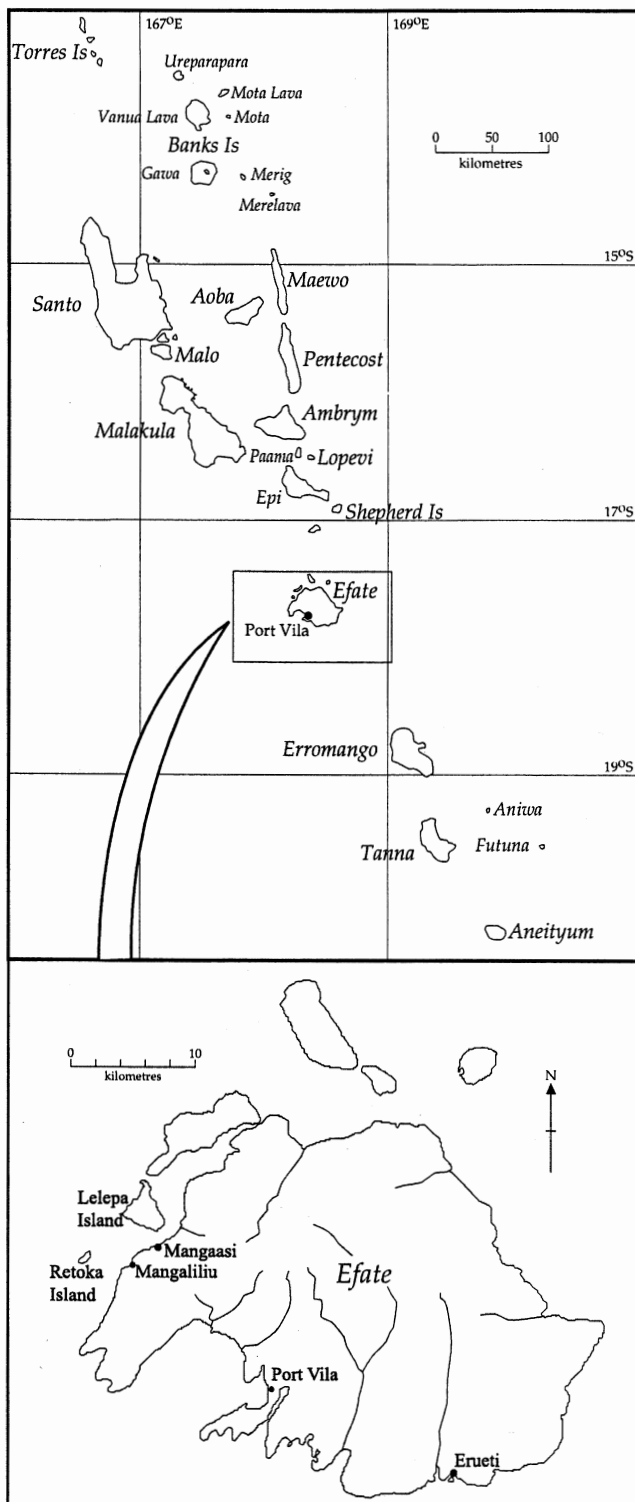


Figure 1: Vanuatu (above) and Efate.

found amongst the plainware, and a minor component of the material was incised. Garanger (1971:61) argued that the recovered ceramics from Erueti belonged to the Lapitoid tradition as had been earlier suggested by Golson (1971). Garanger further suggested, based on a comparison of the C14 dates from the two sites, that Lapitoid ware appeared some time later than the Mangaasi material, that it was unrelated, and had a restricted influence in Vanuatu (Garanger 1971:61).

It is now more than thirty years since Garanger carried out his research in Vanuatu and it must be seen in its historical context. Geologically the islands were virtually unknown and archaeologically the region was a complete blank, a fact that the chairman for this session, Dr Richard Shutler, would be able to attest to as he was the other researcher who pioneered archaeological work in Vanuatu after the setting up of the Pacific Area Archaeological Programme at the Pacific Science Congress in Hawaii in 1961 (Green 1961). Along with Vanuatu, many other areas of the Pacific were also largely unknown, and the idea that dentate stamped ceramics (later universally known as Lapita) were somehow related across different island groups and evidence of some "community of culture" was a comparatively recent idea.

It was also claimed at the time that Lapita ceramics, at least in Tonga, potentially continued to European contact (Poulsen 1964, 1967). Radiocarbon dating with its associated complexities and potential pitfalls, of which we have only recently become more fully aware in Pacific archaeology, was still regarded as the new definitive scientific "answer" for sorting out the chronology of sites. Therefore the identification of another distinct ceramic tradition which had survived for perhaps 2000 years was quite feasible and acceptable at the time and certainly not without precedent.

Garanger's original conclusions regarding the relationship of Lapita to Mangaasi continue to be stressed by a number of authors, some of whom have further promoted the idea of two separate cultural traditions along with the idea of two separate migrations. Garanger (1972:124) initially suggested Mangaasi origins possibly lay somewhere in mainland Papua New Guinea. More recently this argument has re-surfaced and been further emphasised with claimed evidence of 5000 year old pottery being found in Papua New Guinea said to provide further support (Galipaud 1996a, 1996b; Gorecki 1992, 1996).

A number of other researchers, however, have questioned the validity of Garanger's Early to Late Mangaasi ceramic sequence and his proposed termination date for pottery production and use. Graeme Ward highlighted these problems after excavations in the Banks Islands to the north (Ward 1979, 1989). It should be noted that Garanger himself noted at the time that he had some difficulty in interpreting

both the stratigraphy of the site and the ceramic chronology, and in a recent article (Garanger 1996:70) has stated that he now agrees with Ward's suggested circa 2000 BP termination date for ceramics on Efate. He goes on to recommend, in the same article, that further excavation should be carried out in areas of the Mangaasi site which may be less disturbed (1996:70).

Partly based on fieldwork carried out on Erromango in the south of Vanuatu in the early 1980s, Spriggs was to further challenge the idea that Lapita and Mangaasi were two separate traditions, and argued that there was a developmental sequence from Lapita to Mangaasi (Spriggs 1984). This was an extension of a hypothesis first canvassed as a Melanesia-wide phenomenon by Jean Kennedy (1982). Mounting evidence from further excavations in the mid-1990s on the islands of Erromango in the south and Malakula in the north tended to support Spriggs' argument but ultimately the above questions could only really be further resolved with renewed investigations at the Mangaasi site itself. Hence the commencement of an archaeological program in 1996, immediately following the Lapita Conference held in Vila that same year. A second field season was carried out in 1997 during the months of June and July. Research at the site continued in 1998 and was broadcast on the World Wide Web (<http://artalpha.anu.edu.au/nobarriers>). This article concerns itself only with results from the 1996 and 1997 seasons.

RECENT EXCAVATIONS

Details of the complicated site formation processes which have been identified at the site from more recent excavations are still under investigation by Spriggs and the author. One of the clear consequences of these processes was that much of the area excavated by Garanger was subject to severe post-depositional disturbance, and that his pottery sequence appears to be in part a product of post-depositional sorting of occupational deposits that we can now determine are late in the overall sequence at the site.

The excavations of 1996 were carried out both near the location of Garanger's earlier excavations and further inland (Figure 2, Test pits 1-4). The excavations in 1997 were extended even further inland and parallel to the present shoreline, and to the small creek known as Pwanmwou (Test pits 5-11). The stratigraphy of the site is both horizontal and vertical. The main areas of cooking and the dumping of refuse are concentrated along the bank of the small perennial creek and on the gently sloping prograding beach, the location of which was changing due to uplift. As mentioned, detailed geological information for Vanuatu, which has enabled a clearer interpretation of these site formation processes, was not available to Garanger at the time of the earlier excavations.

The earliest *in situ* material was found furthest from the sea and near the bank of the creek at Test pit 9 where some two metres of archaeological deposit was uncovered above the former beach foreshore. The relatively intact cultural deposits are comprised of concentrated pottery and shellfish, some bone, shell adzes, armrings and beads, and occasionally stone flakes. Rapid accumulation is indicated by the radiocarbon dates and the consistency of the ceramic material from the test pit. Dates of 2800-2700 BP were returned from the basal levels of the test pit, through to 2600 BP for levels some one metre above the former beach.

Twenty five metres further east at Test pit 5 the remains are much more ephemeral and 25 metres beyond and to the south are non-existent for the earliest material. The early ceramic material is also found in small quantities (somewhat water rolled and worn) in other testpits closer to the sea (Test pits 1, 2 and 10), but largely restricted to the former foreshore layer indicating that, at the time of earliest occupation, material was being dumped into the inter-tidal zone. Later ceramic materials are found only in the upper most layers of Test pit 9 and throughout the layers in test pits further towards the sea. A total of 18.5 square metres was excavated over the two field seasons with a total of 4076 sherds being recovered, of which 1095 (27%) were diagnostic (rims or decorated).

A much clearer picture of the ceramic sequence from the Mangaasi site has now emerged and is broadly outlined below. The sequence begins at about 2800-2700 BP with plain globular, outcurving rimmed cooking vessels, frequently with notching on the lip (Figure 3a). Over a short time period the rims become increasingly divergent creating a wide flat lip (Figure 3b,c). These flat lip forms can be horizontal, tilted outward or inward and almost always feature notching on the exterior of the lip. More occasionally punctuation or incision on the flat area of the lip can be seen. The pots are predominantly globular, but also included are a small component of carinated vessels, and unrestricted vertical or slightly incurving walled pots. These pots are initially largely undecorated but incised motifs become increasingly common after 2500 BP, particularly on pots with increasingly incurving rims (Figure 3d,e,f). The motifs are characterised by parallel vertical linear incision with incised infill. Parallel oblique incision also begins to appear.

The vessel form and decoration of this material from Mangaasi is very similar to the material excavated by Garanger at Erueti. This Erueti ware was not recovered by Garanger at Mangaasi in the excavations of the 1960s largely due to the fact that the area he excavated was located nearer the sea and dated to a later period. He did, however, note the presence of small numbers of these early rim forms in all layers, a further indication of mixing in the deposits he excavated.

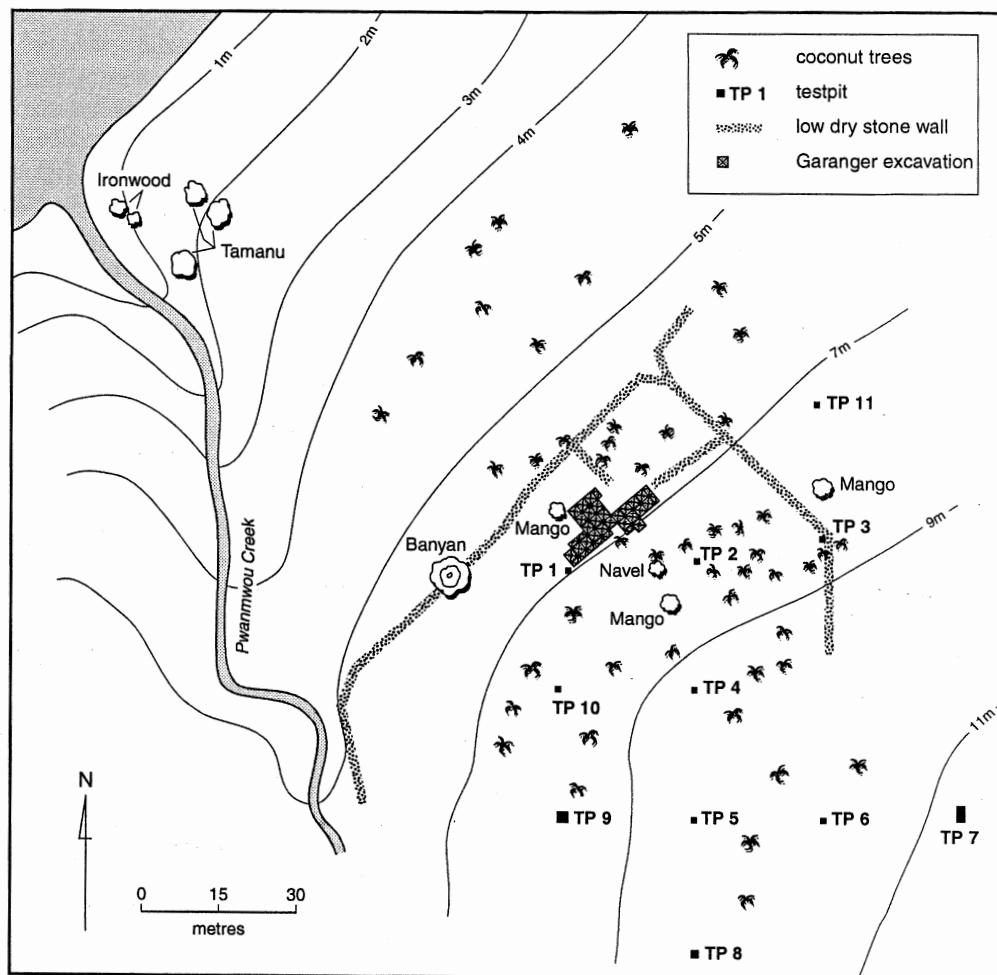


Figure 2: Mangaasi, Efate, Vanuatu.

An increase in the proportion of pottery that is decorated with incision from about 2500 BP is accompanied by the disappearance of the divergent rims and flat lips. The distinct incised designs can be seen on both the earlier and later pots with a continuation of notching on the lip.

From around 2100 BP, however, notching on the lip has disappeared along with the vertically partitioned motifs. They give way to parallel oblique incision in association with gashes, punctation and or geometric designs (Figure 3g,h). The flat lips have dropped out completely to be replaced by simpler rim forms on incurving rim vessels. Some discontinuous applied relief with similar incised designs along with pinched bands and handles also appear at around this time. Very little of this discontinuous applied relief material was recovered from the recent excavations as compared to that recovered by Garanger, essentially due to the fact that only limited testing was carried out in the area of his earlier excavations where this later material was commonly found. The interpretation of recovered ceramic

material and the identification of design motifs and form, particularly for the later material, was certainly greatly enhanced by being able to refer to Garanger's published illustrations.

Continuous applied relief decoration, most often notched bands and heavy incision associated with punctation and fine-cross hatching (Figure 3i,j), encompassing a multitude of motifs so typical of Mangaasi ware, appears only at the end of the ceramic sequence, sometime after 2000 BP. The applied relief pottery was recovered from the uppermost layers of the site or in test pits that were closer to the sea and clearly date to a later phase of occupation.

Several rim sherds associated with this later decoration of applied notched bands and heavy incision were recovered. They are convergent and actually outcurving (this is also the case with sherds of similar type illustrated by Garanger; all have outcurving or in one or two cases direct rims). At the end of the sequence then, there appears to be shift to globular outcurving rim vessels (Figure 3i,j).

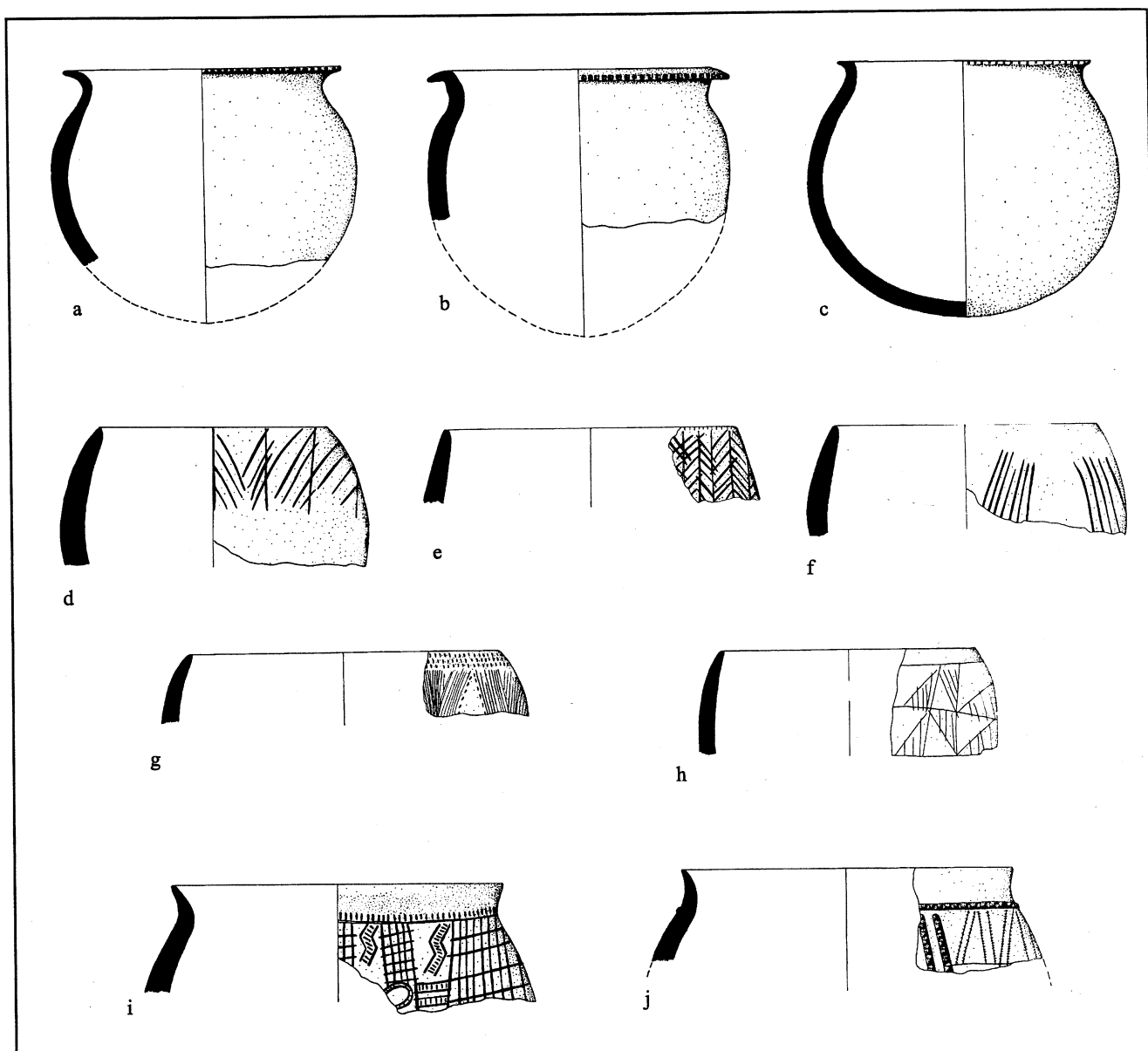


Figure 3: Selected vessel forms and limited decoration.

It is difficult to be certain of an exact termination date for the pottery at the site but indications thus far point to this latter material representing the end of ceramic production on Efate at about 1300 BP. The full Efate post-Lapita sequence seems to be represented as there is no other distinctly different ceramic material illustrated by Garanger from his extensive surveys and surface collections around much of the coast of Efate.

Where the stratigraphy is not disturbed, continuous notched applied relief pottery and heavily incised material appears to date to a period after deposition of a volcanic tephra which may have resulted from the Ambrym volcano

caldera-forming event of about 1850 BP. Thus far, only two radiocarbon dates clearly associated with this late Mangaasi style and close to its likely termination date are 1540 BP and 1300 BP. In an earlier article (Bedford *et al.* 1998) the 1300 BP date was rejected, but results from the 1998 excavations suggest that it can probably be accepted for the latest pottery at the site (Spriggs pers. comm.). This pottery occurs in an occupation layer which has been later subjected to disturbance through gardening activities, and was in turn sealed by tephra from the massive Kuwae eruption which created the present configuration of the Shepherd Islands to the north of Efate in about AD 1452.

Garanger submitted sherds from his excavations for petrographic analysis to both Bill Dickinson and Con Key, who confirmed the tempers appeared to be indigenous to Efate (Garanger 1972:110). Professor Dickinson has now also studied sherds from the lowest levels of the latest test pitting and again confirms that the temper is indigenous to Efate (Dickinson 1997). Clay wasters were noted by Garanger, and were also present in some of the test pits of the recent excavations providing further indication that the pottery was being manufactured on-site.

DISCUSSION

In many ways the material from the Mangaasi site and a recognised separate Mangaasi pottery tradition have been somewhat convenient over the last thirty years. With a general lack of detailed study or focus on post-Lapita style ceramics the Mangaasi tradition, spanning such a great time period and possessing such a variety of decoration, has provided a structure into which almost all post-Lapita material could be placed. Many non-Lapita ceramic collections have been accommodated within the tradition, and I found myself doing this after having excavated sites on Erromango (Bedford 1999). The Mangaasi tradition's durability, despite some doubts, appears largely due to the fact that little further work was carried out in Vanuatu, apart from that by Ward (1979), which seriously challenged the assumptions and conclusions. The re-excavation of the site, used in the past to argue for multiple colonisations of the region, indicates that the Mangaasi tradition as an entity requires major revision. More recent work has demonstrated a continuous sequence from Erueti ware (Lapitoid plainware) through to incised material followed by a number of varied decorative styles including applied relief. These need to be further subdivided. It is a ceramic sequence that has parallels within Vanuatu and with other parts of both Near and Remote Oceania.

For Vanuatu we now have evidence of initial Lapita colonisation with either dentate stamped ceramics and plainware (Malakula, Malo, Efate and Erromango), succeeded by ceramics decorated with a multitude of designs and techniques (Bedford *et al.* 1998). From the Banks Islands in the North, Ward recovered a collection of highly fragmented and eroded pottery which comprised plainware and incised and applied relief sherds. Many rims were outcurving and notched and would fit with his date of 2500 BP. This was probably succeeded by the vertically incised decorative style reminiscent of the early decorated material from both Mangaasi and Erueti, with applied relief appearing at the end of the sequence around 2000 BP or later.

On the north west of Malakula at Malua Bay a largely plainware site was excavated along with a single dentate-

stamped sherd. The site dates from 2750 BP and was occupied perhaps for only a few hundred years. The connection between this material and the later Malakulan ceramic traditions dating from 1000 BP up to European contact has yet to be established (Bedford *et al.* 1998:179).

On Malo we have the best evidence of Lapita settlement dating from around 3000 BP with numerous sites located along much of the east and north coasts of the island (Hedrick n.d.). Also present amongst the abundant dentate stamped material is plainware and incised material, although the disturbed nature of the sites has made the establishment of a chronological sequence difficult. Recent excavations by Galipaud (1998) have returned further dates of around 3000 BP.

On Erromango, with the excavation of the two sites of Ponamla and Ifo, a clear picture of local ceramic chronology also has been established (Bedford 1999). Ponamla was dominated by plainware ceramics dating from about 2800 BP (one dentate stamped sherd was also found in secondary deposition) with a change to incised and fingernail impressed material at around 2500 BP. The site was abandoned soon after. Ifo had components of the entire sequence: Lapita dentate stamped material underlay a plainware component which in turn underlay incised and fingernail impressed decorated pottery. The ceramic tradition appears to die out on Erromango at around 2000 BP, explaining the almost complete lack of applied relief ware.

CONCLUSIONS

The sites of Mangaasi and Erueti on Efate, as outlined above, have enabled the establishment of a detailed ceramic sequences for that island. For Vanuatu we are now able to demonstrate broad similarities in the ceramic sequences of individual islands. The idea that the ceramics went through similar sequential changes is supported. This would suggest continued regular contact between the islands for at least the first 500 years or so of settlement when southern Vanuatu appears to drop out of the sphere of communication. Continued regular contact for up to at least 1000 years can be demonstrated for the islands of the centre and north. After that time signs of increasing diversification begin to appear which were to ultimately lead to the culturally-diverse ethnographic present. As far as can be established at this stage the general ceramic chronology for the first 1500 years of Vanuatu history is characterised by a short period of dentate stamped material, replaced largely by plainware at 2800 BP. After 2500 BP an array of incised wares appear or, as in the case of Erromango, finger-nail impressed wares. Incision is later associated with punctuation and discontinuous relief with continuous applied relief decoration only appearing around 2000 BP or later.

These sequences for Vanuatu can now be related more directly to those of the rest of Island Melanesia where some parallels have previously been identified with sites located from the Bismarcks to Fiji. These suggest some level of continued regional communication and/or population movement (Spriggs 1997:152-86; Wahome 1997, 1998). After 2000 BP, the archaeological record indicates that both regional networks and inter-island connections underwent substantial contraction and re-alignment as the processes contributing to the diversification of language, material culture and social forms began to intensify.

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BEDFORD: RESULTS FROM EXCAVATIONS AT THE MANGAASI TYPE SITE

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