

LAPITA AND POST-LAPITA DEVELOPMENTS IN THE VITIAZ STRAITS-WEST NEW BRITAIN AREA

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This paper concerns mid to late Holocene developments in the Vitiaz Strait-West New Britain region, an archaeologically little-known part of northwest Melanesia. It outlines the results of recent fieldwork in northwest New Britain and considers their implications for models of past patterns of settlement and interaction in the wider region of interest.

FIELDWORK IN EAST KOMBE

In 1988, I undertook eight weeks of exploratory site survey and excavation on the coast and offshore islands in the eastern half of the Kombe (or Kove) language area, roughly 30 km west of the Willaumez Peninsula (Fig. 1). The project aimed to provide a preliminary test of two propositions founded on Ross' (1988, 1989) recent linguistic studies:

1. That the "homeland" of Oceanic Austronesian languages and the Lapita cultural complex encompassed or was adjacent to the study area, and
2. that the study area was also part of the "homeland" of the present-day Austronesian languages and associated cultures of western New Britain, the Vitiaz Strait and northeast New Guinea.

The importance of the first proposition derives from a need to resolve on-going debate concerning the origins of the Lapita cultural complex (e.g. Allen and White 1989; Gosden *et al.* 1989; Green 1985; Spriggs 1984, 1989; Kirch 1988). The importance of the second proposition lies in a need to determine the nature, timing and direction of Austronesian colonisation of the Vitiaz Strait and northeast New Guinea and, through this, to discover how Lapita-using people link with contemporary Austronesian-speaking groups in the region.

In addition to the fact that Ross (1989, 1988) places east Kombe in the above mentioned "homelands", the area was chosen as an appropriate place to investigate these matters for four reasons. First, much of it is limestone, and thus might have caves

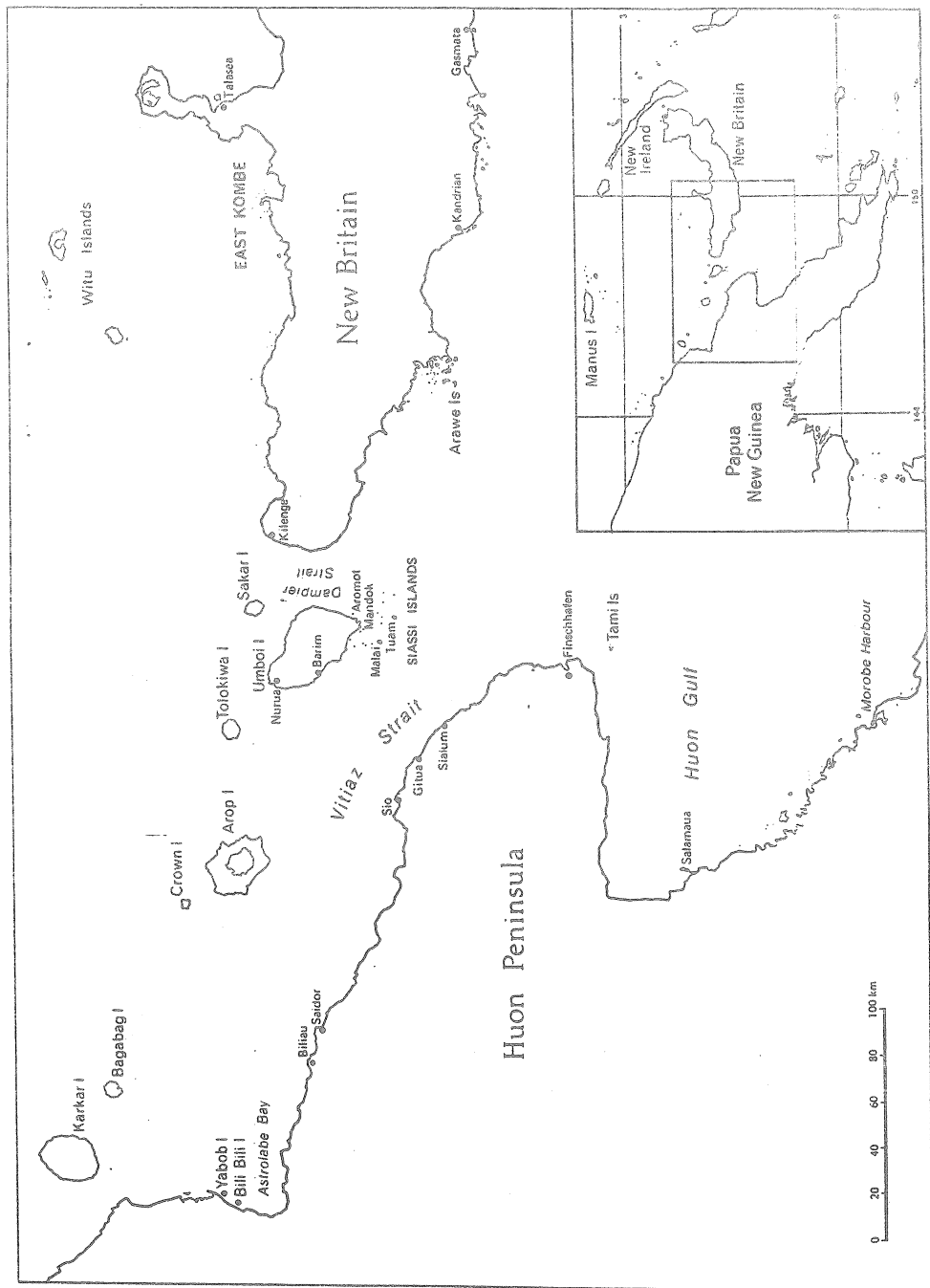


FIGURE 1: THE REGION OF INTEREST

with long sequences. Second, it is sufficiently far from the currently-active volcanoes of the Willaumez Peninsula not to be subject to overwhelming ash-falls or other forms of tectonic activity. The third reason is that until a few years ago, very little Western development had occurred to disturb or destroy the archaeological record. Finally, environmental data indicated that other parts of northwest New Britain would not be suitable for an exploratory study of the sort envisaged as they have few, if any, offshore islands and little coastal plain development.

The only archaeology previously done in east Kombe was Kamminga's summary recording of surface finds at the FCL site on Poi Island (Fig. 2) (Specht pers. comm.), but Swadling has worked in the wider Kombe language area some distance west of Rudiger Point (Swadling and Chowning 1981; Swadling pers. comm.). She excavated a test-pit in one of five pottery-bearing shell mounds on Nukukau Island and obtained a modern date on material from some 60 cm depth. The pottery from these sites is badly degraded and non-diagnostic (personal observation). She also dug two earth mounds on the adjacent New Britain coast and found them to be 500-600 years old. Neither of these mounds yielded pottery but one contained some obsidian.

I examined all the islands between Kou and Makati as well as selected parts of the adjacent mainland (Fig. 2). Plans to survey more of New Britain had to be changed in the face of various social and political problems associated with a Korean timber project based at Silavuti.

In addition to an almost continuous background surface scatter of flaked obsidian on New Britain and most of the small islands, the survey found 23 archaeological sites including FCL on Poi (Fig. 2). One of the sites, FPM on Little Talasea, is a cemetery which was not further investigated. All of the remaining sites contain obsidian and seven yielded Lapita pottery. Two of the latter, FPB on Kou and FPN on Rudiger Point, are effectively isolated finds; they yielded only two sherds and one sherd respectively. FPB is highly disturbed, while the FPN sherd was the only pottery of any sort found on New Britain. Another two Lapita sites, FPR and FCL on Poi, also yielded Type X pottery (Lilley 1988a), while a further two, FPE and FPF on Kalapiai, contain recent Sio and Madang pottery from northeast New Guinea (Lilley 1988b) as well as Lapita. Three other sites, FPD, FPS and FPT, yielded recent New Guinea pottery, while the rest are aceramic.

Twelve radiocarbon determinations were obtained (Table 1). Maximum dates for Lapita deposition (and island occupation) were obtained from culturally-sterile basal sediment at FPA, FPE and FCL, and two additional dates bracketing the actual period of Lapita deposition were obtained for FPA. All the Lapita dates from FPA and FCL overlap at two standard deviations and indicate that settlement occurred between approximately 3000-2700 cal BP. The date from FPE, 4151 cal BP, does not overlap with those from the other two sites. It was obtained on shell fragments gleaned from the top 15 cm of the sediment under the Lapita deposit, rather than the surface of such sediment in the way that the FPA and FCL maximum dates were. As such, it almost certainly represents a mixture of immediately pre-Lapita and slightly older material. While it may

not help date actual Lapita settlement, it does suggest that island occupation was possible from roughly 4000 years ago.

Sample	Site	C14 Age	Calendar Age
Beta-26259	FCL	2990±80	751 BC/2700 BP
Beta-26260	FCL	2030±50	AD 468/1482 BP
SUA-2822	FPA	3100±120	806 BC/2755 BP
SUA-2823	FPA	3220±70	926 BC/2875 BP
Beta-26261	FPA	3280±70	1007 BC/2956 BP
Beta-26262	FPB	1170±70	AD 1310/640 BP
Beta-26263	FPC	100.1%±0.9% modern	
Beta-26264	FPD	350±60	AD 1506/444 BP
Beta-26265	FPJ	790±70	AD 1648/302 BP
Beta-26266	FPQ	630±50	AD 1820/130 BP
Beta-26267	FPE	4210±60	2202 BC/4151 BP
Beta-26268	FPF	750±50	AD 1669/281 BP

TABLE 1: RADIOCARBON DETERMINATIONS

Other dates indicate that Type X pottery was deposited on Poi from about 1500 cal BP; that stylistically-recent Sio and Madang pottery was used on the islands from 400-500 cal BP until modern times; and that the non-ceramic sites on New Britain were in use during the same period.

DISCUSSION

If the determination from FPE is disregarded, the radiocarbon dates give no indication that Lapita-users settled in east Kombe before they settled elsewhere in the Bismarck Archipelago or other parts of the Pacific (Kirch and Hunt 1988). It thus seems unlikely that the study area was part of a Lapita homeland in northwest New Britain. Similarly, there is no evidence for a homeland-colony relationship between east Kombe and the Vitiaz Strait-northeast New Guinea area. However, the discovery of Type X pottery dating from about 1500 BP, and of Sio and Madang pottery dating from 400-500 BP, has significant implications for our understanding of other post-Lapita developments in the wider region of interest.

Very little is known of Type X, but elsewhere (Lilley 1988a) I hypothesize that it was produced at the eastern end of the Huon Peninsula (Fig. 1) between 1500 and 550-850 BP and was moved across the Vitiaz Strait by its makers or perhaps Siassi or Tami Islanders. The presence of the ware on Poi indicates that it was moved about 500 km by sea from its hypothetical source and much further into the Bismarck Archipelago than were Sio and Madang wares at that time.

Indeed, while ancestral forms of Sio pottery reached the Siassi Islands about 1500 years ago (Lilley 1988b), and ancestral Madang pottery may have reached Arop (Long) Island at least 1000 years ago (Egloff 1975), the fact that only recent forms of both wares were found in east Kombe suggests that their movement deeper into the Archipelago began during the period when the "ground plan" of the ethnographic Siassi trading system was emerging (Lilley 1988b). In short, three distinct wares were transferred across the Vitiaz Strait some 1000-1500 years ago, but Type X is the only one to have penetrated the Bismarck Archipelago proper.

In addition, Type X is the only one of these three wares to be found near the Willaumez Peninsula obsidian sources, stone from which reached both the Siassi Islands and Sio during the period in question (Lilley 1988b). This suggests that of three wares crossing the Vitiaz Strait at the time, only Type X moved any distance into northwest New Britain in opposition to obsidian, which gives some support to my hypothesis (Lilley 1988a, 1988b) that Sio had little or no direct contact with the Archipelago during this period and received its obsidian from the makers of Type X located some distance to the east along the Huon Peninsula.

In this context, it is difficult to understand why Type X is present only on Poi in east Kombe and absent from all the pottery-bearing sites known on the Willaumez Peninsula (Specht pers. comm.). While the implications for local patterns of settlement and trade of this problematical distribution remain to be determined, the other points raised above suggest that between 1500 and perhaps 500 BP, what can be loosely described as a "Type X interaction network" might have dominated communications across the Vitiaz Strait prior to the emergence of the ethnographically recorded Tami and Siassi exchange systems.

The appearance in east Kombe of recent forms of Sio and Madang pottery could have been anticipated on the basis of my findings in the Siassi-Sio region (Lilley 1988b). However, there are no clear reasons why the wares were found on the islands but not in broadly contemporaneous settlements on the immediately adjacent New Britain coast. It is difficult to believe that while ancestral Kombe lived in both places at the same time, only those on the islands traded and used pottery. It is easier to conceive of more-or-less separate island and coastal groups, with the former monopolizing access to, and use of, pottery. This situation may have arisen because the coastal people had no tradition of pottery use and/or because the island-dwellers found pottery to be of greater value in exchanges with more easterly groups rather than with those on the adjacent coast.

The problems engendered by the differential distribution of recent pottery have clear implications for Chowning's (1974, 1978a, 1978b) reconstruction of traditional Kombe patterns of settlement and exchange. She argues that the ethnographic picture of the Kombe as island-dwelling fisher-traders is largely an artefact of European contact and that in the past people lived mainly on New Britain and did not engage in long-distance middleman trade along the New Britain coast.

While there is no way as yet to tell one way or the other, I agree with Chowning that New Guinea pottery and New Britain obsidian are more likely to have been brought to

the study area by down-the-line exchange rather than long-distance middleman trading by the Kombe. However, the east Kombe evidence does indicate some antiquity of island occupation by people engaged in interaction networks which seem, at least as far as ceramics are concerned, to have some excluded people on adjacent parts of New Britain. In view of Swadling's dates from west Kombe, it is possible that the pattern I have found is peculiar to the eastern part of the Kombe coast, and that Chowning's position remains valid for the western part where she worked. Indeed, as Swadling's New Britain dates are slightly older than the set of late prehistoric ones from east Kombe, it might make sense to view west Kombe as a hearth area where people did traditionally live on the coast. In this scenario, east Kombe would comprise a later-settled addition to the Kombe domain, where, because the coast was already occupied at the time of their expansion, Kombe people lived mainly on the islands until the more recent past, when they were able to make inroads into New Britain.

Although this idea is not backed up by positive archaeological evidence for post-Lapita occupation of New Britain preceding the appearance of New Guinea pottery on the islands, it is consonant with Kombe origin myths and settlement histories. In addition to believing that they originated on New Britain in the area excavated by Swadling (Chowning 1974:176), local people attribute at least some sites on the coast, such as FPC and others around Eleonora Bay which I was shown from a distance but was unable to visit, to the presence of Bakovi-speakers on the east Kombe coast. The Bakovi now live mainly around the base of the Willaumez Peninsula, though there is one settlement bordering Kombe territory, immediately east of Kavutu Point (Fig. 2).

This admittedly tenuous evidence suggests that the pottery-using island dwellers might have been ancestral Kombe who brought their trade links with them from points slightly further west during some minor form of expansion. Any such spread may have been motivated in part by a desire or need to get closer to sources of obsidian and other goods at a time when trading systems spanning the Vitiaz Strait were expanding.

BROADER IMPLICATIONS

I think it is reasonable to link events in east Kombe to developments in the Vitiaz Strait because the fragmented cultural sequence which can tentatively be inferred for the former is remarkably similar to that revealed by my studies in the Siassi-Sio region (Lilley 1988b). While island settlement was possible from at least 4000 years ago, Lapita-users occupied east Kombe about 2700-3000 years ago. Users of Type X were present in the area about 1500 years ago. After another 1000 year gap, importers of recent forms of Sio and Madang pottery lived on the islands, while people who appear not to have used pottery occupied coastal ridges. In the Siassi-Sio area, Lapita deposition also occurred about 2700-3000 years ago. Type X and ancestral Sio and Madang pottery first appeared about 1500 years ago and Sio and Madang pottery stylistically identical to that found in east Kombe was first deposited about 500 BP, although an intensity of trade like that recorded ethnographically did not develop until about 300-350 years ago.

As no detailed archaeology has been done in northwest New Britain between Siassi and east Kombe, and Gosden's work (Gosden *et al.* 1989) in southwest New Britain is still in progress, it cannot yet be ascertained whether these correspondences are coincidental or reflect general regional patterns in prehistoric activity. Further work in the region will undoubtedly attempt to come to grips with this problem. It can be noted, though, that the combined east Kombe - Siassi-Sio sequence does seem to fit reasonably well with Allen's (1985) model of the development of coastal Melanesian trading systems over the last 3000-4000 years.

Allen hypothesizes a long-term trend of increasing complexity in trade but decreasing geographical reach of individual trading systems. Development begins with a single, relatively simple but geographically extensive Lapita system and ends in the many complex but spatially relatively circumscribed systems of the ethnographic period. Rather than posit a simple upwards, bifurcating curve, though, Allen envisages a series of vertically and horizontally linked and increasingly steep "J"-curves, the troughs of which reflect periods of systemic collapse. Presumably to facilitate illustration of the model (e.g. 1985:52 Fig. 1), Allen synchronises the peaks and troughs on each of its steps. I doubt, however, that he would argue that such synchronicity really occurred. In other words, the peaks and troughs of development he posits could be out of phase between regions and probably within any particular region.

The two ends of the combined east Kombe - Siassi-Sio sequence correspond with the beginning and end of Allen's trajectory of change. This is as it should be, for the latter is based on knowledge of general patterns of interaction in the Lapita period and ethnographic times. What of trajectories between these extremes? There is a substantial gap in my combined sequence between the Lapita system and the second phase of development, which suggests a collapse of the former. Allen's model forecasts that several systems will arise from this trough and that they will be more complex but less extensive than the Lapita system. I think this prediction is met, as the second phase involves three basically separate but overlapping systems of pottery manufacture and distribution (Sio, Madang and Type X), all of which are relatively circumscribed, in contrast to the single, very extensive, regionally-differentiated one of Lapita times.

While this second phase appears to have started more or less at the same time throughout the region, its constituent elements appear to have followed different paths of change over differing periods. In the beginning, about 1500-1600 years ago, the proposed Type X system appears to have carried greater quantities of a more diverse array of goods over longer distances than the Siassi-Sio and Madang systems. Between 1000-500 BP, the Type X system collapsed, while the other systems, particularly the Sio-Siassi network, expanded geographically and increased in complexity until they reached their ethnographically recorded states within the last few hundred years before collapsing in the face of European colonisation (Lilley 1988a, 1988b).

Although there is no archaeological evidence bearing directly on the matter, it can be hypothesized that the ethnographically recorded Tami trading system, which centred on the Huon Gulf but also reached across to southwest New Britain, evolved from the earlier

Type X system. In Allen's terms, this means that the latter emerged from the trough in its developmental trajectory. If any such continued development saw the addition rather than just reactivation or strengthening of trading links in the Huon Gulf, even greater complexity was introduced to regional trading patterns within the last 500 years or so.

CONCLUSION

Archaeological fieldwork in east Kombe did not support linguistically-based hypotheses concerning early Lapita settlement in northwest New Britain, or a homeland-colony relationship between that region and the Vitiaz Strait-northeast New Guinea region. It seems, though, that post-Lapita changes in the two regions were linked, particularly shifts in long-distance interaction patterns. While further work may prove these links to be more apparent than real, they do suggest that Allen's (1985) general model of the development of coastal Melanesian interaction systems can be applied with only minimal modification to the west New Britain-Vitiaz Strait region.

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