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An Introduction to Investigations on Watom Island, Papua New Guinea

R.C. Green¹

ABSTRACT

This paper introduces a series of articles which appear in this issue of the *New Zealand Journal of Archaeology*. It sets out the overall objectives: to report fully on two new excavations at localities SAC and SDI in the Reber-Rakival site on Watom Island, to assess claims made in previous brief reports on the site by Meyer and Specht, and to place the new findings within current knowledge of the archaeological entity known as Lapita. The paper provides a brief history of the previous investigations at the Reber-Rakival site, introduces research undertaken there during the Lapita Homeland Project, and outlines the context of the articles which follow. An appendix presents English translations of Meyer's original reports.

Keywords: OCEANIA, LAPITA, WATOM, REBER-RAKIVAL SITE, ARCHAEOLOGY.

Two archaeological sites feature in most general discussions of an archaeological entity now called Lapita. One is the Reber²-Rakival site on the small volcanic island of Watom, just off the north end of the main island of New Britain in the Bismarck Archipelago (Fig. 1). Finds there in January 1909 led to the first publication describing ceramics of this type (Meyer 1909a; Appendix 1). The other is at Koné on the Foué Peninsula on the main island of New Caledonia, first excavated in 1952 by Gifford and Shutler (1956: 7). It is the English transcription of that locality's placename, Lapita, that has since been applied as the term for the pottery, wherever found, as well as for the various materials associated with it (Sand 1998).

Despite frequent references to these two sites in the literature, their dating and the contexts and associations of items from them have been poorly understood until recently. Salvage investigations at a number of localities (13, 13A, 13B, 13C) at the Koné site of Lapita, coupled with attention to stratigraphy and a radiocarbon dating programme, have helped to clarify the situation at this large site complex (Sand 1998; Kirch *et al.* 1997). The series of papers appearing in this issue of the *New Zealand Journal of Archaeology* is intended to do the same for the Reber-Rakival Lapita site on Watom Island. These papers report in detail on major excavations at the Kainapirina locality (SAC) and on a brief excavation at another locality, Vunavaung (SDI). The results of these investigations, which took place as part of the Lapita Homeland Project (Allen and Gosden 1991), allow us to better assess and

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²The "b" represents a prenasalised phoneme, "mb", so on some maps the name is spelled as Rember.

interpret the original observations by Father Otto Meyer between 1909 and 1937 and the more archaeologically controlled excavations by J.R. Specht in the period 1965–1967.

Lapita is now the subject of a substantial and continuously growing body of literature. Much that is currently known about the topic is brought together in two books, one by Kirch (1997), which is entirely devoted to Lapita, and the other by Spriggs (1997), in which three chapters of ten are devoted to it. Questions still arise as to what kind of archaeological entity Lapita is (Green 1992). Some scholars use the term “peoples”, others “culture”, and yet others “cultural complex”, “horizon” and “tradition”. Still others deny the term Lapita utility by characterising it as a “scholar’s white elephant” (Terrell 1990: 827, 1996: 59). Most, however, agree that Lapita is an identifiable ceramic series associated with various cultural remains, whose sherds display fairly elaborate decoration. The easily recognisable decorative system is usually referred to as the Lapita style.

Temporally, the decorated pottery in this style forms a useful horizon marker over a wide area of the Pacific from the Bismarck Archipelago to West Polynesia. This horizon can be dated between 3500 and 2500 years ago in the Bismarck Archipelago. The earliest sites in that region constitute the early or Far Western Lapita style and are followed after some centuries by sites with ceramics in the Western Lapita style. After about 3100 to 3000 years ago, sites in the Western regional style appear farther east in Near Oceania and out into western Remote Oceania (Fig. 2), extending to Fiji, Tonga, Samoa, ‘Uvea and Futuna in the period 3000 to 2800 years ago. In this last area, the regional style is known as Eastern Lapita. It is because of the importance to Pacific prehistory of this larger Lapita context that information from the Reber-Rakival site on the island of Watom requires thorough reporting. As will be shown in this volume, when the details of this site are known, they make a solid contribution to our understanding of Lapita archaeology in general. That has not been the case up until now, because only brief notes and preliminary reports on the site have been available.

BRIEF HISTORY OF PREVIOUS INVESTIGATIONS

Meyer, a German missionary with the Mission of the Sacred Heart, lived on Watom Island in the Reber Mission Station next to Rakival village from 1902 until his death in 1937. His accounts, published and unpublished, over that period form a basis for our current knowledge of his activities, along with various collections of pottery which he deposited mostly in European museums, although some made their way to museums in Australia.

In 1965, Specht went to the Reber-Rakival site to do research towards his PhD at the Australian National University. He began with a field reconnaissance of Watom Island (Specht 1968: 119), before focusing his attention on the Reber-Rakival site during an eight month 1966 field season. He returned for a short period early in 1967 with Con A. Key who produced a “sub-soil contouring” of the Reber area based on augering and excavation stratigraphy (Specht 1968: 125, 1969: 223). Investigations on Watom were then terminated and Specht continued his PhD research on Buka.

Meyer’s three initial accounts in German (Meyer 1909a, 1909b, 1910) are brief, but two later unpublished reports in French, one by Meyer (n.d.), and one by O’Reilly (n.d.) based on Meyer’s text and the pottery collection deposited in the Musée de l’Homme, are fuller and contain important details. They are presented in English translation in Appendix 1.

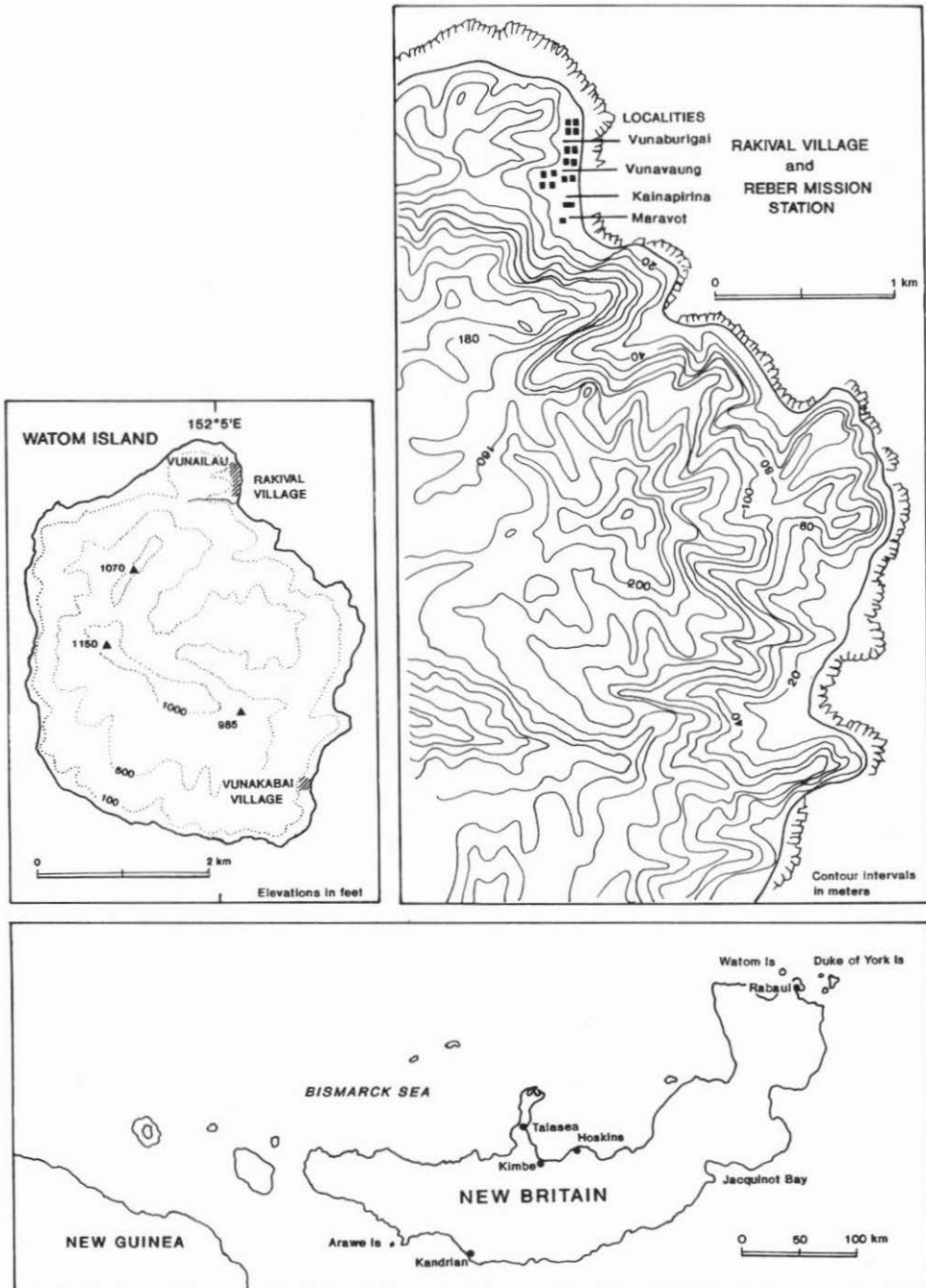


Figure 1: Location map showing (a) the position of Watom Island in relation to New Britain; (b) the position of Reber Mission and Rakival Village on Watom Island; and (c) excavation localities within the Reber-Rakival complex.

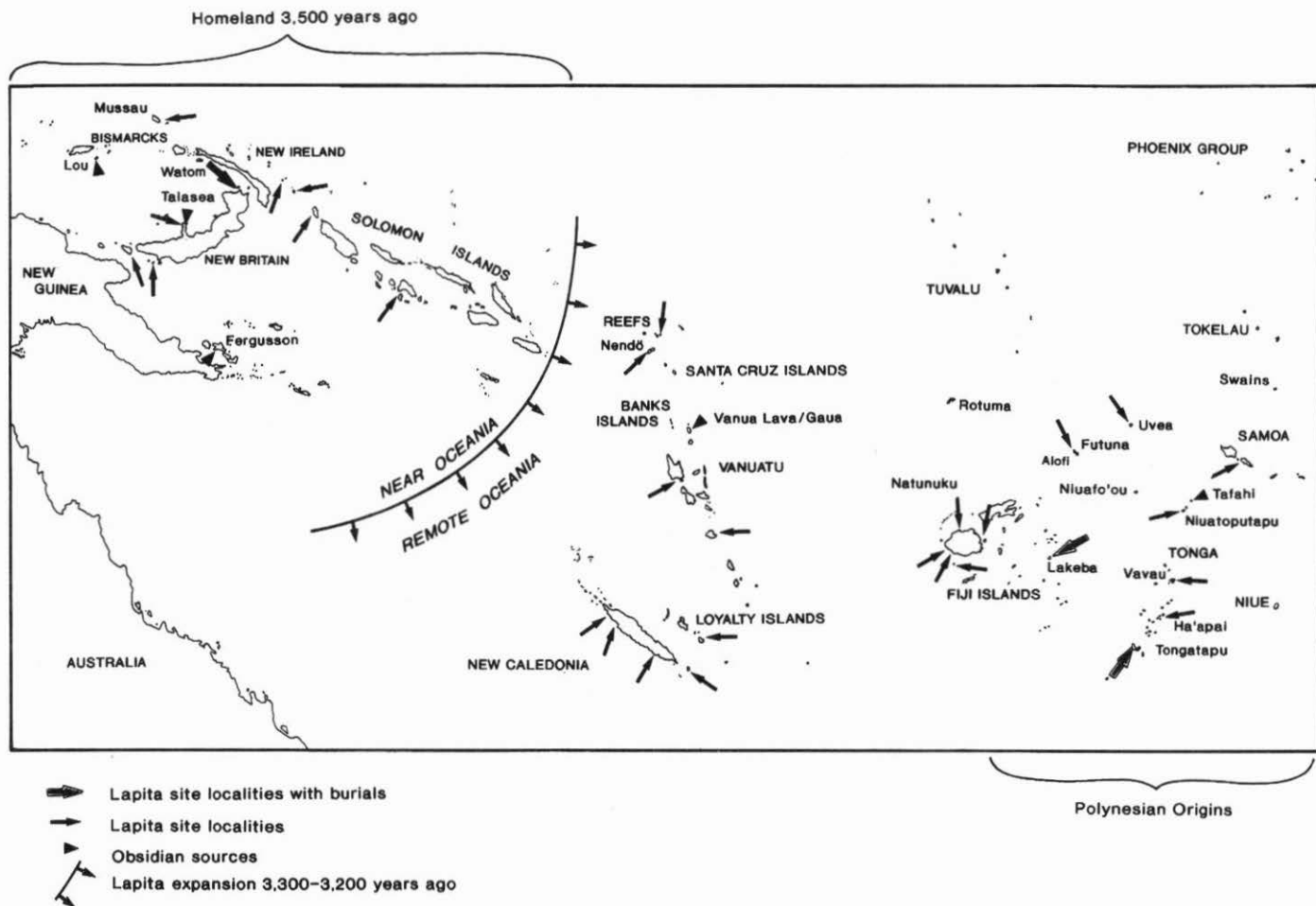


Figure 2: The distribution of Lapita sites, including those with associated burials, in Near and Remote Oceania.

Meyer investigated several localities in the Reber-Rakival area. One early excavation was near his house in the locality of Maravot (SAD)³, which was part of the Reber Mission Station; its storm-washed beach front was where sherds were first found. Our knowledge of this locality comes largely from Specht's investigations, never reported in detail (see below). Another of Meyer's investigations was at Kainapirina (SAC) near the cemetery on the Mission Station. Knowledge of this locality derives from his excavation there, two further trenches dug by Specht, and the more extensive work during the Lapita Homeland Project reported in this volume. Meyer dug a third pit at the northern end of Rakival village in a locality called Vunaburigai (SAB), which was also investigated by Specht (Fig. 1).

The stratigraphy of all three known Meyer excavations was similar, and the pottery and other associated materials from the lower cultural deposits were comparable. However, it has never been possible to assess the full significance of Meyer's findings, because of the difficulty of access to the accounts (overcome here — Appendix 1), and because they raised issues which later scholars could not resolve on the basis of external evidence alone. Further and more controlled excavation evidence from the Reber-Rakival area itself was required.

It was with this intention that Specht went to Watom in 1965. He carried out excavations in the three localities previously identified by Meyer in the Reber-Rakival site, as well as at some sites elsewhere on Watom (Specht 1968: 121). He dug four test trenches at Vunaburigai or SAB (his site 7), but abandoned further work there because of the proximity of houses, burials by ancestors of the present day Tolai villagers, rubbish pits and World War II activities (Specht 1968: 121–22). Two trenches, I and II, were excavated at Kainapirina or SAC (his site 8), but only Trench II was completed. In Trench I, three burials were found in the upper part of the lower, pottery-bearing, cultural deposits within an area of six square metres (Specht 1968: 126; Green *et al.* 1989). After they were removed time was running out, and the remaining deposits in Trench I were covered in sheet plastic and the trenches refilled, in anticipation of a return (in the event that was not to occur for 19 years). Most of Specht's effort went into seven trenches in the Maravot or SAD locality (his site 6) adjacent to an intermittent stream to the south, and two trenches just to the north of them⁴.

Results, although patchy, were informative. They indicated that while Meyer's stratigraphic records were generally correct, the yellow soil he described under the upper black earth deposits was in fact a culturally sterile primary or secondary volcanic ash (Specht 1968: 122). All pottery (just as Meyer observed) occurred in deposits underneath the volcanic ash, and "post-ash occupation seems to have been unaccompanied by pottery" (Specht 1968: 132). However, the stratigraphy of the pottery-bearing deposits beneath the ash (zones 4A and 4B in SAD and C1 and C2 in SAC) turned out to be rather more complex than the situation described by Meyer, and basal deposits in each locality were quite different. Thus

³ The various names and site numbers for the four excavated localities in the Reber-Rakival complex are potentially confusing. The locality names (e.g., Maravot) and the current designations in the Papua New Guinea National Site Code (e.g., SAD) are used throughout this volume. The original site designations had a different initial letter (e.g., FAD rather than SAD) which should now be disregarded. Specht's site numbers (e.g., Site 6), are also given in this paper when his investigations are described.

⁴For details of the layout of excavations at Kainapirina and Maravot see map in Green and Anson, this volume, p.32.

zone 4A just under the volcanic ash at SAD exhibited a banded gritty ash with sherds, while zone C1 under the ash at SAC was a black loamy clay soil horizon. SAD's zone 4B consisted of a grey sand clay that gave way to a black clayey mud, and the often waterlogged deposits revealed extensive crab-burrowing, root channels, and lumps of limestone and massive basalt boulders (Specht 1968: 123–24; Specht 1985). In contrast, SAC's zone C2 was a discoloured coral beach sand giving way to a sterile white coral beach sand whose surface was above the groundwater level and lacked signs of crab-burrowing or numerous basalt boulders. Only one radiocarbon sample, of the five reported, provided any indication of the age of the pre-ash human occupation. The sample consisted of human bone taken from two of the SAC burials. This combined sample returned an age then interpreted as about 470 BC⁵ (Specht 1968: 124).

Specht's reports (1967a, 1967b, 1968, 1969, 1985) on the results of his investigations at the Reber-Rakival site are preliminary summaries, not comprehensive accounts of the extent of his discoveries. Thus the economic aspects, the burials and the portable artefacts he recovered were usually only briefly described. Most of the more detailed reporting covered the various categories of pottery that came to light: plain ware, applied relief, linear incision, nail impressing, and dentate-stamping, and their inter-relationships and associations (Specht 1969: 222–28, plate XI-47 and 48) and drawings of and comparative commentary on a range of other portable artefacts (Specht 1969: 284–85, 291–92, 297–98 and Fig. XI-47). Specht thought that O'Reilly's division of the pottery into Melanesian and non-Melanesian components (O'Reilly n.d.; see also Appendix 1) seemed unwarranted, and he suggested instead that the different kinds of pottery might simply have been made by the same people to serve different uses (Specht 1967a: 31, 1969: 223).

Various problems arose from the brevity of Specht's reports. For example, Golson (1971: 69) expressed doubts about the "integrity of all the claimed associations" and a single pottery tradition, while Groube (1971: 311–12), questioning the existence of an agricultural component in the initial Lapita subsistence economy, did not seem to accept the claimed association of pig bones, human bones, and the several categories of pottery found at SAC. His argument again implied that probably very little of the material from Specht's excavations on Watom, like that from Poulsen's in Tonga, was *in situ*. The radiocarbon dates for the four pottery-bearing layers at SAD and SAC proved very unsatisfactory and the one available date could only be quoted as equal to or less than a true age of 470 BC (Specht 1968: 124). Finally, the human burial material had been subject to only very preliminary analysis.

However, a few further analyses were undertaken of certain materials from the Reber-Rakival site. Key (1968, 1969) demonstrated by elemental optical emission spectroscopy that a few pieces of obsidian from SAC were most likely to have originated from the Talasea obsidian sources on the central west coast of New Britain, 265 km away by sea. Dickinson and Shutler (1979: 1647), using petrographic methods, showed that although some of the Watom pottery was exotic, most of it was probably local. This was confirmed by Anson's (1983: 166) microprobe-based elemental analysis of selected sherds. Finally, Anson's (1983, 1986) detailed analysis of Lapita motifs clearly associated those on the Watom pottery with Western Lapita. He interpreted this as indicating that the Watom pottery was probably later than pottery from the Ambitle, Talasea, and Mussau Lapita sites, which he assigned to an

⁵For details of these and other radiocarbon results from Reber-Rakival see Green and Anson, this volume, pp.38–39, 87.

earlier Far Western Lapita style. However, at the time there was little radiocarbon dating to support his inference. In 1983, when Anson and I were planning our work on Watom, his study of the Watom pottery, its decoration and its motifs was the most comprehensive of any analyses undertaken of Specht's and Meyer's pottery collections. The one radiocarbon date did seem to indicate a relatively late age, but more precise age estimates for the various cultural deposits at the site were not possible.

RECENT INVESTIGATIONS ON WATOM

Plans for the Lapita Homeland Project (Allen 1984; Allen and Gosden 1991) included a five-week return to the Reber-Rakival site by Dimitri Anson and myself. This was supported by Specht, who accompanied us during our first week on Watom Island, helped us to relocate his Trench 1 at SAC, and supplied us with a large amount of unpublished information, including the subsoil contour maps and sections of the Reber Mission Station area stemming from Key's coring there. This enabled us to select a part of the Kainapirina locality most likely to have intact deposits and with the potential for the discovery of more burials (few Lapita-associated burials having been found elsewhere). We have been able to use Specht's unpublished findings to guide our analysis of the materials which we ourselves recovered. However, in deference to his present wishes, references in this volume to his findings are limited to information already published.

Two preliminary reports on our excavations have already appeared (Green and Anson 1987, 1991). The human biological results from SAC, covering the burials recovered by Specht and five subsequently recovered by ourselves, have been published in detail as part of a series of papers in one issue of the *Records of the Australian Museum* (41: 207–96, 1989) devoted to all Lapita-associated skeletal material known at that time. This issue of the *New Zealand Journal of Archaeology* follows a similar format: a series of papers which report in depth on the information (other than the human biological results) we recovered by carrying out additional excavations at the Reber-Rakival site as our contribution to the Lapita Homeland Project.

Although we report in detail on the economic aspects of finds from SAC, they prove, as usual, insufficient on their own to reconstruct the dietary contribution of the various components. In Volume 41 of the *Records of the Australian Museum*, the diet of the Lapita people of Watom was alluded to in several places, particularly in the introductory essay (Green 1989: 211), where I drew on the evidence of dental caries and trace element and isotope analysis of Watom human bone samples. The stable isotope analysis is presented in detail in this volume (Leach *et al.* 2000).

The volume includes site reports on SAC (Green and Anson 2000a) and SDI, a new locality at Vunavaung investigated by Anson (2000a). The association of pig and other mammal bone with the burials and pottery at SAC is studied in detail by Smith (2000), while the petrographic composition of the Reber-Rakival Watom pottery is reviewed in regional perspective by Dickinson (2000).

A full set of Meyer's writing, translated into English, appears here for the first time (Appendix 1). A catalogue of the principal motifs found at all of the localities at the Reber-Rakival site and in some of the Meyer collections in museums is presented and the chronological implications discussed (Anson 2000b). The concluding paper (Green and Anson 2000b) draws together what has been learned, from the time of Meyer's initial writings to the present.

This series of papers will, we believe, ensure that the significance of the Reber-Rakival site's place in Lapita studies (and Meyer's contribution) rests on far more than the fact that it happened to be the first site with Lapita pottery to be described in the literature.

APPENDIX 1

THE ARCHAEOLOGICAL EXCAVATIONS OF FATHER OTTO MEYER ON WATOM ISLAND

Dimitri Anson⁶

These writings are a record of what was known about the Watom Lapita, before the advent of modern archaeological investigations in the Pacific in the 1960s. As they are not easily accessible to most workers today they are assembled here together, for the first time in English translation.

THE THREE *Anthropos* ARTICLES

Father Meyer's three published accounts are little more than initial notes about his discoveries. The first tells of finding a few pieces of pottery on the beach front (1909a: 251–52). The second confirms the supposition that they had been washed into the sea from deposits just inland of the beach, a finding he demonstrated by an initial excavation to show that they occurred at up to 2 m depth next to his house. It also includes illustrations of a number of the decorated sherds (1909b: 1094–95). The third item is a fuller description of further excavations. This illustrates additional decorated sherds and, for the first time, provides information on some of the associated items (1910: 1160–61). Translations of these three accounts follow.

Account 1: Finds of prehistoric pottery and stone knives on Vuatom, Bismarck-Archipelago.
(Note published in *Analecta et Additamenta* section of *Anthropos* Volume 4 1909: 251–52)

In the beginning of the year we had terrible northwest weather here, such as we have not had for decades. The corner I live in is protected from the rough sea in northwestern weather. But the current running about five minutes away from my station forms a small counter current in the quiet bay of Reber. It is to this current and to the rain that I owe the discovery of two sherds of pot- or jug-like shape. Both pieces were found in the same place, the first at the beginning and the second at the end of January. Nearby, about 300 m further away the northwestern rains eroded a gully. It is possible that the sherds, along with stones, pieces of earth and plants, were carried from there to the shore and into the coastal current.

Natives daily walk by the place where the sherds were found and children spend hours and hours on the beach, so the two sherds could not have lain there long. The natives to whom

⁶Otago Museum, P.O. Box 6202, Dunedin, New Zealand

I showed these "stones" could only tell me that the designs on them were probably made by Pir the legendary person in their tales.

Both sherds are made of black earth. The well preserved piece is smoothed on the inside and the exterior figures appear indented. The second, with entirely different designs, is strongly weathered and worn. The designs (a) and (b) [Fig. 3]⁷ are recognised by the natives as *daudaul* and *tutumu na bint*.

Also, recently I received fragments of stone knives which were used formerly by the people of Vuatom. These are flat pieces of basalt. The sharp end of one knife is rounded, it is 6 cm wide, the back is 12 mm thick, the whole object was probably 25 cm long. The end of a second piece is pointed. On the blade strokes of whetting are still recognisable.

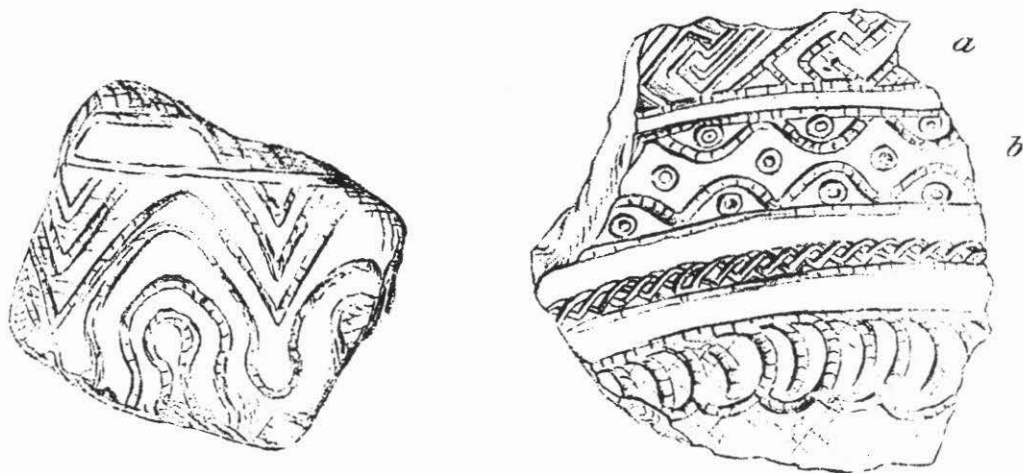


Figure 3: Illustration of sherds a and b, Meyer 1909a.

Account 2: Finds of prehistoric pottery and stone knives on Vatom, Bismarck-Archipelago. (Note published in *Analecta et Additamenta* section of *Anthropos* Volume 4 1909: 1093–95)

In addition to the two pot sherds (see *Anthropos* 4, p. 251) I have now found a third piece showing the designs of both piece no. 2 and piece no. 1. Let us hope that the northwester now raging will unearth some more of these fragments.

In hindsight, regarding the stone knives, I must say that only the first described has been used as such. The other one is a piece of a *palavat na pipi* of the islanders, but not a knife.

Postscript — My hope in the northwesterly has not been disappointed. It has in fact brought to light more sherds of prehistoric pottery though only three with designs. See the sketches [Figs 4 to 7]. Other pieces have indented or undulating rims and like the other sherds, big and small, they are thin walled, 3 mm at the thinnest. Some are brick red but most are black

⁷ In this and subsequent figure references (a) or (Fig. 3) refers to Meyer's original figure designation while [Fig. 3] or [Fig. 4] is the number of the figure in this paper.

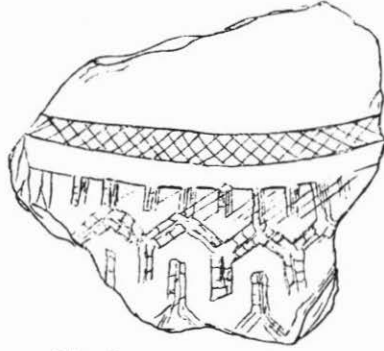
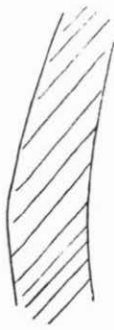


Fig. 3.

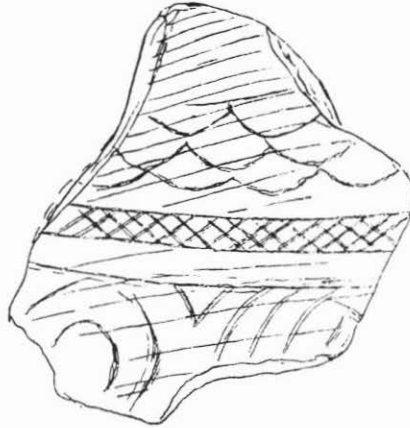
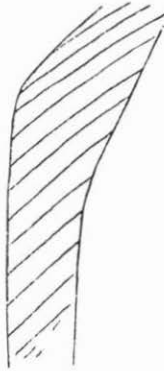


Fig. 4.

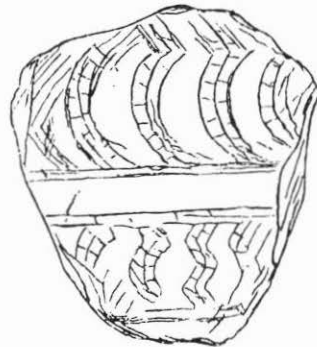
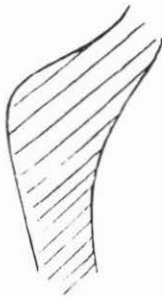


Fig. 5.

Figure 4: Illustrations of sherds, Meyer 1909b, Figs 3, 4, 5.

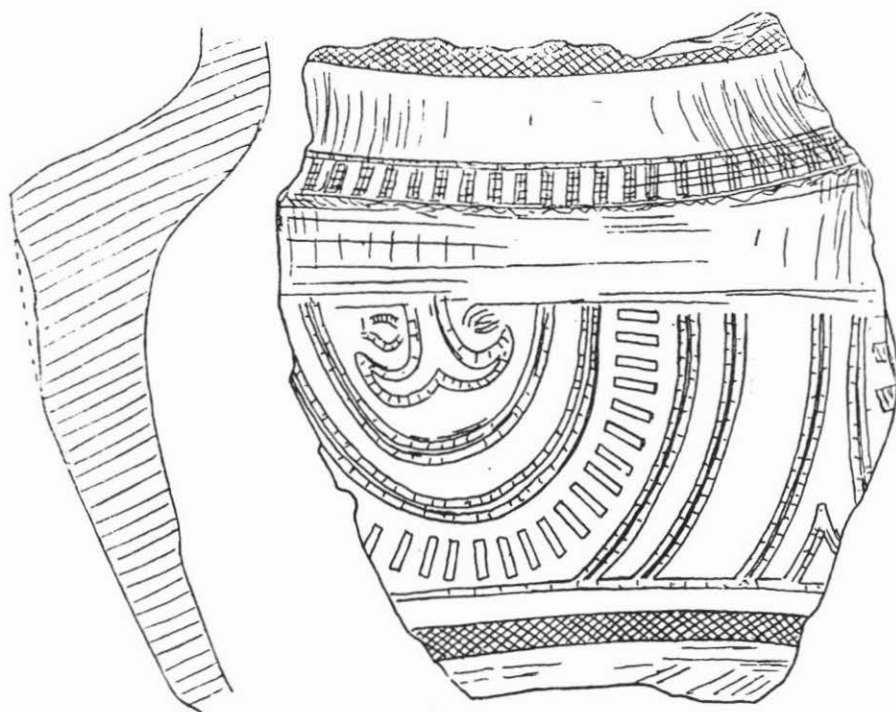


Fig. 6.

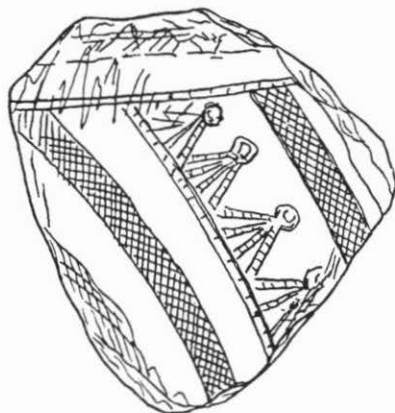


Fig. 7.

Figure 5: Illustrations of sherds, Meyer 1909b, Figs 6 and 7.

or grey. Still others simply have stick-shape impressions. I also believe that I have found the place where they all come from. Some years ago I had a pit about 2 m deep dug next to my house. Sherds (without designs) were in the soil that came out last, those with designs were further away and were probably carried to the beach by the rain. However, it is not impossible that sherds may also be found at other places.



Figure 6: Photograph of the sherd depicted in Meyer's Figure 6 (1909b), now in the Museum für Völkerkunde, Basle.

Approximately five years ago I had some digging carried out for a pump about 50 m away. At the same depth I found human bones and 1 m deeper I hit beach sand. This would

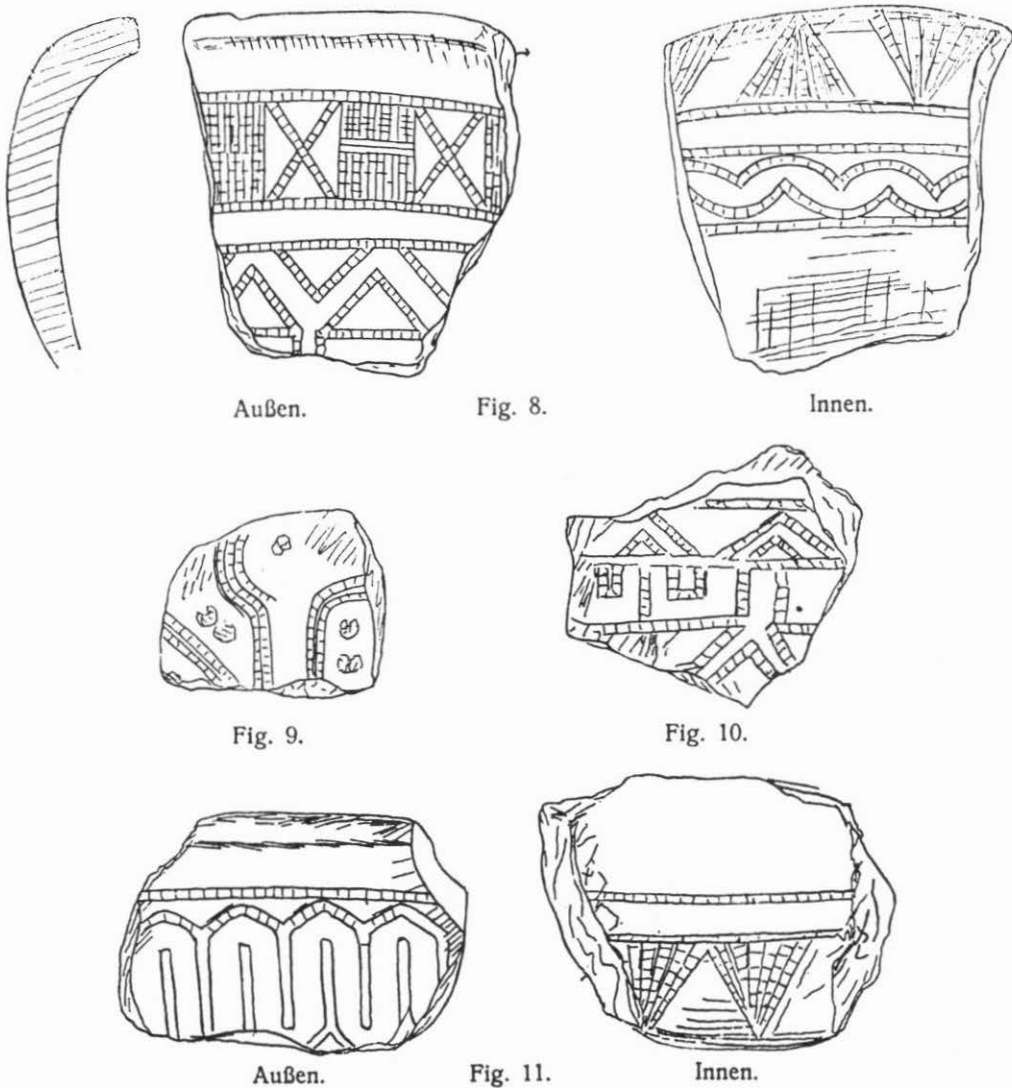


Figure 7: Illustrations of sherds, Meyer 1909b, Figs 8 to 11.

permit the drawing of some conclusions as to the age of the finds because here at my station the soil is alluvial.

The latest excavations have also yielded many plain and more indented sherds of pottery as well as snail-shells and coconut shells suggesting there may have been a dump at this location.

Fig. 6 and 8 [Figs 5 and 7] are red glazed [slipped] outside, Fig. 10 [Fig. 7] yellowish, the others black. Fig. 6 and 8 probably belong to a jug, whereas Fig. 7 [Fig. 5] is more likely to have been a shallow receptacle.

Account 3: Finds of human and animal bones, of prehistoric pottery and stone tools on Vatom, Bismarck-Archipelago. (Note published in Analecta et Additamenta of Anthropos Volume 5 1910, pp. 1160-61)

I want to tell you briefly about the results of the latest excavations I have had carried out.

On one day so many sherds got unearthed that I have to abstain from telling you all the details. In general more pieces of plain receptacles have been unearthed. Amongst them some had coarse or appliqué patterns the like of which I have not found before. I have made a clear list of most of the motifs of the patterns (see Figs 1, 2, 3) [Fig. 8]. This was not possible for the more complicated patterns because only small pieces of them were found. I also reconstructed a bowl, as it probably was, from some of its fragments. See enclosed sketch (Fig. 4) [Figs 9 and 10].

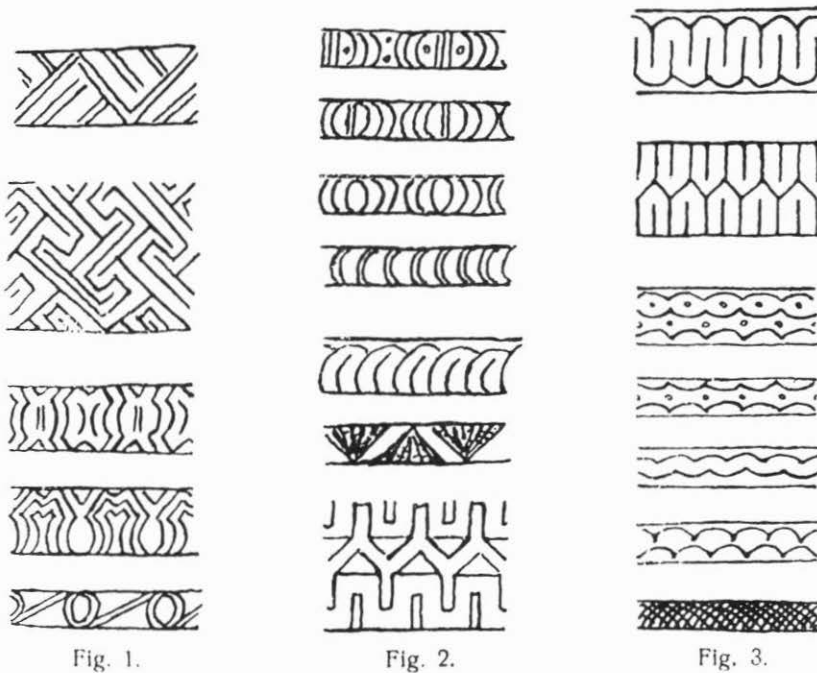


Figure 8: Illustrations of sherd motifs, Meyer 1910, Figs 1, 2, 3.

Most of the pieces lay only $\frac{1}{2}$ m deep, others up to about 2 m deep. Apart from the clay receptacles I found the following:

Bones — Nearly half of the skeleton of a child approximately ten years old. Bones and teeth of an adult; the front side of the incisors were shiny brown, maybe darkened in the past like the people still do today. Pig teeth, tusks and molars. Jawbones of fish (Pristipomatidae), species, which are caught today with big reef-creels. Birdbones (leg of raven?). Snail and mussel shell: mainly big *Trochus*, their lower parts already shaped into

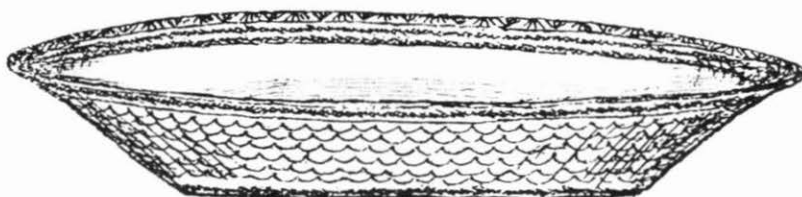


Fig. 4.

Figure 9: Illustration of a reconstructed flat-bottomed bowl, Meyer 1910, Fig. 4.

arm rings; also almost completed Trochus arm rings; a fish-hook made of Trochus. Terebra shell (borer); today these species are not eaten. Pteroceras, Turbo and their lids (the so-called cat's eyes), Cerithium, Haliotis and Potamite shells (the natives obtain the latter snails from the Nakanai, the animals live only in mangroves) etc.

In particular, plenty of small obsidian pieces which were still sharp. A small stone axe, like those still used up until some decades ago. A sharpened piece of greenstone, a second bigger one which served as a whetstone; half-circle-shaped sharp stones which were probably used as knives to cut liana etc. Stone knives of the type described in my first report; these are also used by the Inuit society.

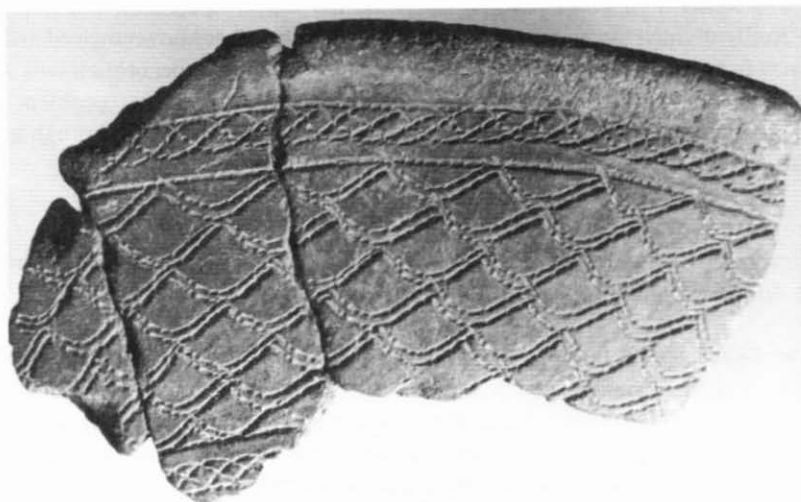


Figure 10: Photograph of the sherd used in Meyer's (1910) reconstruction of a flat-bottomed bowl, now in the Museum für Völkerkunde, Basle. Approximately 1:1.

Some time ago a native brought me a mortar-like stone, exactly of the shape and size described and illustrated by Parkinson in "Dreissig Jahre in der Südsee". The natives do not know the purpose of the stone. Some elders say it is a handclub used to hit enemies on the temple and chest. Others say the stone was used to close the bamboo tubes used to house and protect human remains. Others again think it could have served to break nuts (*Carinarium indicum* [sic]) to make a nut cake.

I sent the whole yield of clay receptacles to the Museum in Hilstrup.

UNPUBLISHED PAPERS OF OTTO MEYER AND PATRICK O'REILLY

The two unpublished manuscripts (Meyer n.d.; O'Reilly n.d.) in the files of the Department of Oceanic Prehistory, Musée de l'Homme, summarise Meyer's observations about the Reber-Rakival pottery and the contexts in which it was found between 1908 and the 1930s. They expand on and clarify points in the three published papers, and therefore should be available to Lapita scholars, especially as they have been used by both Specht and myself (Anson 1983: Appendix I and II). On internal evidence, Meyer's manuscript was written in the 1930s, probably 1934, and O'Reilly's in 1940.

Both manuscripts are in French. I copied the French versions and later translated them into English as appendices to my PhD thesis (Anson 1983). Meyer's paper is reproduced here in full, together with that part of O'Reilly's paper describing the pottery.

Meyer's report is extremely important, as it contains the only known map and section drawings he made. These allow his investigations to be related to those of later workers. The drawings are pencil sketches which I re-drew to make them suitable for publication, without altering any of the information presented on them (Anson 1983, Appendix I: 285). Meyer's report is also important in outlining some of the non-ceramic and faunal components found in association with the pottery.

Although O'Reilly's paper was largely based on the Meyer document, it differs in some details. O'Reilly divided the pottery into "Melanesian" (like other known incised and applied pottery types from that area) and "non-Melanesian" (of a different decoration and shape not previously recognised in Melanesia). As Green observes above, the problem of their association in the same contexts then became an issue requiring resolution through additional excavations.

Note of Reverend Father Otto Meyer, M.S.C., missionary at Watom Island (New Guinea Territory) on the subject of ancient pottery found in situ (cf. Anthropos 1910).

You will be familiar with the map of the island which *Anthropos* published in 1910. You will find there in the southeast, the station of Vunavutug, where we also found a piece of pottery a year ago. It was found about 400 metres inland behind the station of Vunavutug, in a small valley or gorge. \pm 40 metres higher we (now) find the native villages. I believe that the piece of pottery was carried from there by the rain.

In the northeast of the island is situated the station of Reber, where I carried out the excavations in 1909 etc., then in 1922 and in 1924.

With the aid of the little map (attached) of my place and the village in the bay of Reber, you will find the sites where the excavations were carried out [Fig. 11].

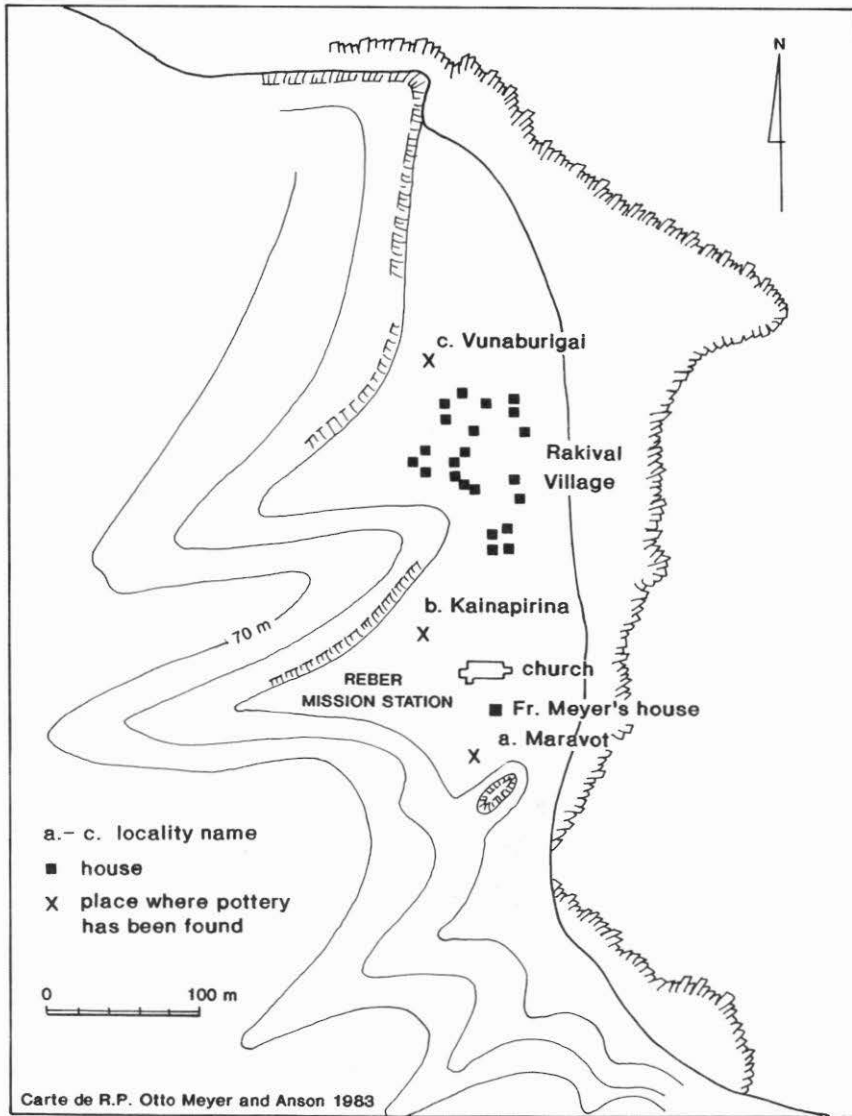


Figure 11: Meyer's map of the village in the bay of Reber as redrawn by Anson (1983).

Finally, I add three section drawings of the trenches that I had dug and where I found the debris of the pottery [Fig. 12].

(a) Maravot: (The place is situated at the foot of a large, uplifted coral rock 30 metres high and 50 metres long). In the section drawing [Fig. 12a] I give the maximum depth. On the seaward side, the depth is 1½ metres and the layers of earth are naturally less thick. The layers of earth also vary in thickness between 10 or 20 centimetres, depending on the lie of the land. In the black alluvial earth (0.50–0.80 m) is found coralline stones, probably fallen

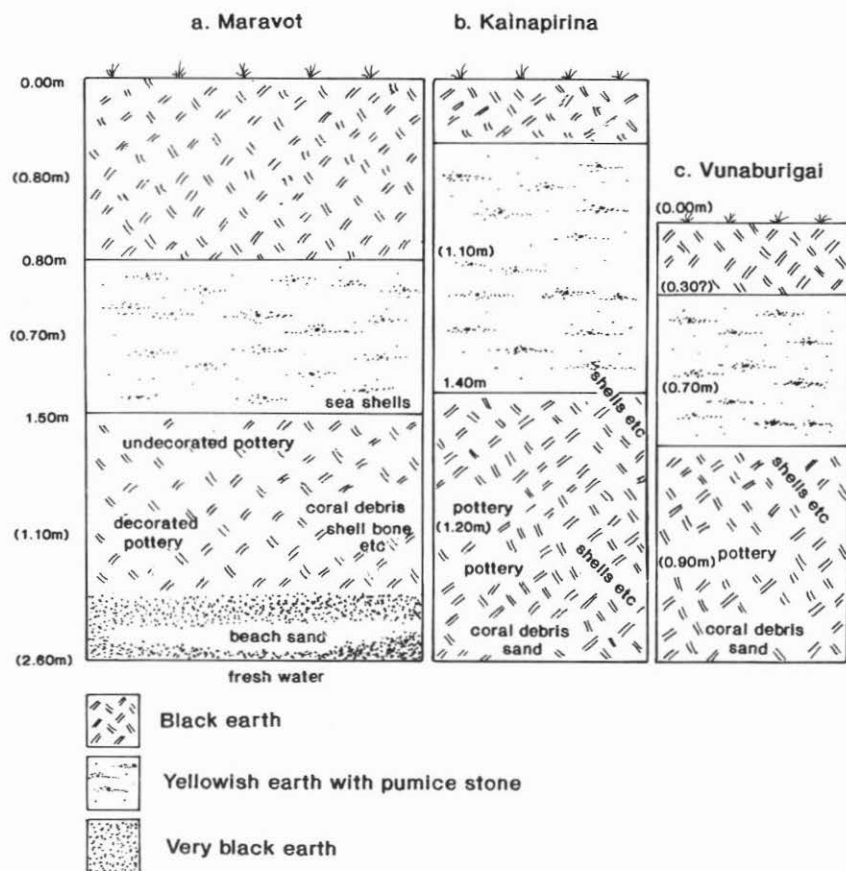


Figure 12: Meyer's section drawings of three localities in Reber village as redrawn by Anson (1983).

from the large block, and some recent shells. The yellowish earth (0.70–1.10 m) is made up of fine pumice (I don't know the technical word for this) and thus is not very recent, wherever it was uncovered. There are no coral stones in this layer. In the last, black earth layer (± 1 m), in parts very black, like wet ash, and sticky to the touch, like clay, we finally find the pottery fragments. Those which carry no designs (motifs) are found immediately under the yellowish layer, in the black earth. Those with designs are found below with many shells, animal bone (in particular skulls and jaws of small pigs), coral stone, small pieces of ochre, obsidian blades, sling stones, etc. (The *Strombus Lukuanus* [sic] shells are nearly always broken at the lip: natives of other islands make small discs from these, to use as money and as ornaments).

The names of the principal shells found: *Cerithium*, *Toubra*, *Conus*, *Pterivas* [sic] [*Petroceras* or *Lambis*], *Strombus Lukuanus* [sic] [*Luhuanus*], *Trochus*, *Turbo*, *Tridacna*, *Hippopus*, *Spondylus*, *Chama*, *Cardina* [sic] [*Cardita*], *Venus*.

I also found a polished *Conus* disc, like the ones the natives of New Guinea etc. wear as ornaments.

Fresh water in Trench a. is at 2.60 m. Sea level is a little higher and varies with the tide through about 0.80 m.

(In connection with the *Conus*, I have given you a piece of a *Conus* bracelet. Malinowski in his book *Argonauts of the Pacific* (Louiadiade Archipelago), gives a photo of a bracelet with two small holes similar to those on your piece).

At (b) Kainapirina, only one trench was dug [Fig. 12b]. At 0.60 m we found the skeleton of a native (with a large hole in the cranial temple), buried in a crouched position, in the manner natives used to bury those they killed clandestinely, especially at times of famine.

The first black earth layer is not very thick (0.30 m); the yellow earth layer is thicker (1.10 m) with lenses (stratified) of pure pumice. Again, in the third layer are found pieces of pottery, especially pieces with applied motifs, rare at location (a) Maravot.

(c) Vunaburigai is very close to the native village. The layers were not measured [Fig. 12c]. I found there mostly pieces with applied motifs.

The areas where I had excavations carried out could have been places where natives threw away broken or cracked objects or where they buried their dead. Even today they still bury their dead with valuable but broken objects.

In 1922 the Government geologist (of Papua) Mr Evan R. Stanley was sent here to the island by the Governor, to examine the ancient pottery finds. Mr Stanley said in his report that the pottery is of Peruvian origin: that it is not impossible that some ships of the first explorers brought them. And, as in 1537, the ship of the Spanish captain Grijalva foundered "somewhere on the coast of New Guinea" that "somewhere" could be Vuatom Island. But after having seen the specimens and heard my own opinion he believes that they are of older origin. He then refers to what I showed him in the Buschan "Illustrierte Volkerkunde, 1910", and in the little book of Hoemes "Urgeschichte Der Menschheit", that is to say, certain figures which resemble the motifs of pottery pieces from here.

(Note. Now some weeks ago, I heard that the English thought they might find Spanish gold, hence the Government's interest in the pottery!)

If I can permit myself the luxury of having an opinion, it is this: I believe that if the motifs mainly resemble those of South America, for example Peru, more than others, there could have been contacts between this local ancient culture and that of South America.

But I, poor hermit, what do I know of these scientific questions which are still so perplexing, even for you, the scientists, by the Grace of God.

Father Patrick O'Reilly: Extract from Communication on the subject of the pottery at the meeting of the "Centre des Études Oceaniennes" 9 February 1940.

The pottery in question today was found in the years 1909, 1922 and 1924 at Vuatom.

Of all the fragments found, we possess 75 picked up by Father Meyer or Father O'Reilly, during his mission in the Solomon Islands. There are two different types that can be easily distinguished. One of the types is clearly Melanesian, the second does not resemble any known Melanesian type.

1. Melanesian type [Fig. 13]: The fragments of Melanesian type are darker, more greyish than the others; made up of fine particles, the paste non-vitrified with a dull fracture. Certainly, we are dealing here with hand-made, not wheel-made pottery, but the fragments are too small to tell whether or not this is coil-made pottery. The fragments seem to indicate pottery of quite flat shape. Their thickness varies from 5 to 9 mm.

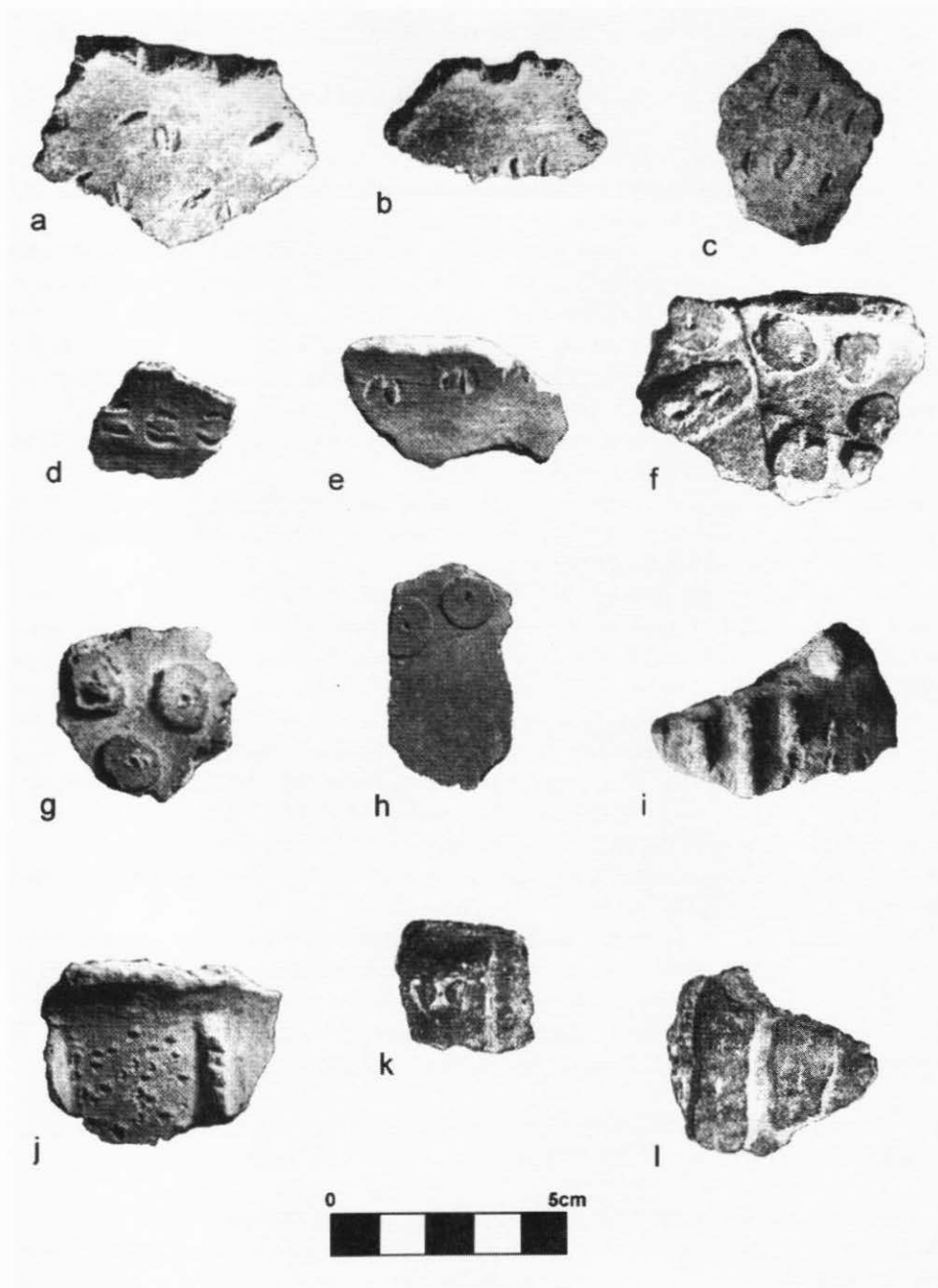


Figure 13: Nail-incised (a to e) and applied-relief (f to l) pottery found by Meyer on Watom and described by O'Reilly as of "Melanesian" type. a–c, k, l in Museum für Völkerkunde, Basle; d, e, g–j from the Musée de l'Homme, Paris.

Decoration is applied or incised by knife without lime incrustation. The rims of these fragments are often crenelated.

2. Non-Melanesian: Fragments belonging to the second type are the colour of brick. Particles, paste, fracture and construction seem analogous to the preceding pottery type. Their thickness varies from 1–1.5 cm.

The big difference is found in the *decoration* and also in the *shape*. We have here motifs incised before firing and then lime encrusted. Looking at the designs which are always geometric, one discovers that they are constituted from multiple little points. It is possible that these were produced by a roulette, but it rather seems that they were made with a wooden stick held vertically, imprinting each point individually. The edges of the designs are very crisp. From what we can tell, designs were not drawn out prior to impressing.

We have many more pieces of this latter type than of the former.

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