PROTO OCEANIC CULTURE: THE EVIDENCE FROM MELANESIA ANN CHOWNING

1. INTRODUCTION

It seems safe to say that the vast majority of linguists interested in Austronesian (AN) languages now accept the existence of a division of them usually called Oceanic, though there still remains some uncertainty about all the details of its borders.¹ Nevertheless, apart from a few languages of western Irian Jaya (Grace 1976:62; Pawley 1981:300), it is agreed that the AN languages of Melanesia are all OC. Here I am defining Melanesia as extending from New Guinea and the Bismarck Archipelago to Fiji and including all the intervening islands except those few on which Polynesian languages are spoken (see Chowning 1977). Admittedly the AN status of a number of Melanesian languages is disputed, and one of these is a language with which I have worked, Sengseng (Chowning 1985). For most languages, however, the classification as AN or NAN is clearcut.

It has not, however, been so easy to correlate culture traits with the linguistic distinctions. One reason is that Melanesia does not constitute a single unified culture area like Polynesia or Micronesia. Nevertheless, a number of culture traits are widespread, though not universal, in Melanesia, and attenuated, rare or non-existent in Polynesia and Micronesia, while a number of characteristic Polynesian and Micronesian traits are rare or absent in Melanesia (see Chowning 1977; Pawley 1981:298-299). These characteristic Melanesian traits cannot, however, easily be correlated with speakers of OC languages within the boundaries of Melanesia, because most of the traits are also found in the cultures of speakers of NAN languages who occupy most of western Melanesia. In most cases it is no longer possible to attribute the origin of some of these shared traits to the ancestors of the present OC speakers. If one does not accept Terrell's (1986) radical suggestions about the artificiality of the distinction between AN and NAN languages, with its implications for the time that AN speakers appeared in Melanesia, then the cultivation of root crops such as taro and the manufacture of pottery probably existed in western Melanesia well before AN speakers arrived there (see Bulmer 1982). What can be said, however, and with reasonable certainty, is that the earliest AN speakers in Melanesia possessed these traits along with various others. The evidence is of two sorts:

Robert Blust, ed. Currents in Pacific Linguistics: papers on Austronesian languages and ethnolinguistics in honour of George W. Grace, 43-75.

Pacific Linguistics, C-117, 1991.

© Ann Chowning

¹ Abbreviations used are as follows: EO – Eastern Oceanic, MN – Melanesian, NAN – non-Austronesian, OC – Oceanic, PAN – Proto Austronesian, PEMP – Proto Eastern Malayo-Polynesian, PEO – Proto Eastern Oceanic, PMN – Proto Melanesian, PMP – Proto Malayo-Polynesian, PNGA – Proto New Guinea Austronesian, PNH – Proto North Hebridean, PPH – Proto Philippines, PPN – Proto Polynesian, PWMN – Proto Western Melanesian, PWMP – Proto Western Malayo-Polynesian, PWO – Proto Western Oceanic, WMP – Western Malayo-Polynesian, WOC – Western Oceanic.

the distribution of the traits throughout Melanesia and, often, well beyond, and comparative linguistics. It is the combination of these that make clear the association between AN speakers and both the outrigger canoe and distinctions of relative age for same-sex siblings. These are not, however, peculiarly Melanesian traits, and here I am particularly concerned with those that may characterise the Melanesian region, or parts of it.

With acceptance of the validity of OC came attempts to reconstruct a specifically POC lexicon. A brief history of most of these attempts is given in Pawley and Green (1984). An extremely useful early compilation was Grace's Proto-Oceanic finder list (1969, following a cyclostyled version of 1965), which included data proposed by Biggs, Milke, Goodenough, Capell and Grace himself. Grace's continuing interest in this field is shown in the computer list he and his associates have assembled at the University of Hawaii. (I have seen only an 'edited' 1979 printout of this, variously attributed to Grace himself and to Peter Lincoln, and it is this version to which I shall be referring below, as Grace-Lincoln.) Over the years, many linguists have added POC reconstructions, but a considerable number of these are scattered in articles or, worse, in personal files, and at present it is impossible to say what the total reconstructed POC lexicon is.² Furthermore, it is also difficult to be sure how many of the forms assigned to POC actually belong to some smaller subgroup. When, for example. Pawley and Green (1984:128) say that a "reconstruction must be represented by cognates in at least two first-order subgroups of Oceanic", the problem is that ideas about the composition of first-order subgroups change with considerable frequency, and vary from one linguist to another. It must consequently be understood that in some cases, lexemes assigned to POC may actually belong only to a lower level proto-language. This fact was clearly recognised in Grace (1969), where forms originally ascribed only to PEO, PNGA, and PPN were signalled. Grace explained: "The reasoning is that such reconstructions, where sound, represent forms of some antiquity, and that it is therefore a possibility that they were in the PO [Proto Oceanic] vocabulary" (1969:40). Over time, however, it has become commonplace for the label POC to be used without discrimination for any terms found in Oceania and not wholly confined to Polynesia (or Micronesia). Publication of proto-forms often does produce examples from a wide scatter of languages and so supports the assignment of any particular lexeme, once apparently confined to a limited region, to POC itself. It is nevertheless dangerous to attribute to 'POC speakers' traits for which linguistic evidence is limited to a portion of the OCspeaking region³ (Pawley and Green 1984:130).

Contrary to what I once suggested (Chowning 1963), I am not assuming that the OC languages of Melanesia form a closed genetic group. Like Pawley (1981), however, I find it useful for the reconstruction of a portion of culture history to deal with the OC languages of Melanesia as a separate subset of OC, and I shall use Proto Melanesian in that sense, At the same time, I shall not assume that cognate forms found only in Melanesia should automatically be ascribed to POC, or to PMN. Some of them may be local developments – widespread, but not known to occur throughout the region. Terms for slit gong are a case in point (see below). At best, it may be that some forms that have been or could be labelled POC more properly belong only to a western region, or only to an eastern one. Here I shall use 'western Melanesia' to designate the region from western New Guinea

²Certainly some duplication of effort is involved. This paper was almost finished before I discovered that Blust too, admittedly in 1984, had reconstructed words for 'doorway' and 'taro pudding' which I thought I was the only one to have noticed.

³In some cases, data that suggest a wide distribution are dubious. Grace-Lincoln cite Bola *kaw* in reconstructing a POC word for kava, together with a Gedaged form, *aiu*, which looks much more dubious. I assume that these two constitute the grounds for assigning the proto-form to POC (see Pawley and Green 1984), but to the best of my knowledge Bola words never end in a consonant (nor is kava used on the Willaumez Peninsula).

through the western Solomons, including and ending at the boundaries of Ross's (1988) North-West Solomonic group, so that it encompasses the equivalent of his 'Western Oceanic', but also, temporarily at least, includes the Admiralties and Mussau-Emira, and 'eastern Melanesia' for the rest of the region. The latter should not be understood to imply that all, or almost all, the eastern languages belong together in a group that can be labelled Eastern Oceanic.

Relatively few of the linguists who have been reconstructing POC have also been interested in culture history rather than simply in linguistic relationships. Even for the best-studied part of Oceania, Polynesia, Clark (1979:268) points out that "[b]oth material culture and social organization in the Proto-Polynesian lexicon have received very little linguistic attention", and that even kinship terminology has not been fully studied. Interestingly, kinship is the one area that has received a great deal of attention in Melanesia, even if disagreements and questions remain (see below). Otherwise not a great deal has been done to use linguistic evidence to reconstruct the culture of the early speakers of OC languages in Melanesia. In their recent survey of POC reconstructions, Pawley and Green (1984:131) point out that the "list of artifacts ... is not very impressive." In fact, their list is unnecessarily short; for example, it contains 'needle' but not 'sew' (*saqit and perhaps other terms), and 'clay pot' but not 'stone oven' (*qumun). Many forms found in both Melanesia and Polynesia, or in Melanesia alone, have been reconstructed but not brought together to give insights into what might have been the culture shared by speakers of POC before the development of PPN. This is a preliminary attempt to remedy that situation.

The procedure followed here will be conservative. If a term is found both in Indonesia and in Polynesia or Micronesia, I shall assume that it once existed in Melanesia even if it no longer seems to. Otherwise, I shall call a term PMN only if it is attested from parts of Melanesia geographically distant from each other, preferably in both eastern and western Melanesia, and not to date assigned to the same subgroup of languages, or if it is found in Melanesia east of the Sarmi Coast and in some other part of the AN-speaking region.⁴ If all of the forms known to me should come, say, only from the region of New Guinea and the Bismarck Archipelago, I shall for the present call the proto-form only, western Melanesian; if only from the region from the southern Solomons eastwards, eastern Melanesian. Smaller regions will also be noted in a few cases.

Furthermore, since this is an exercise in cultural reconstruction, I shall be careful about deducing cultural practices from terms that have a range of meanings (see section 2.1.3). Also, as Pawley and Green (1984:131) point out, there is archaeological evidence in various cases for traits for which linguistic evidence is lacking. If we make the usual assumption that the bearers of Lapita culture spoke early forms of OC, if not POC itself, we might expect to find POC words for 'obsidian' and 'shell bracelet', but at present these are not reconstructible (see discussion below of the term for trochus shell). We also know because of the distribution of certain traits in later Melanesian societies that POC words for which there is no evidence must have existed. A conspicuous example is the absence of a word for 'betel pepper' when it is possible to reconstruct other terms that relate to chewing betel.

The reasons that this is only a first attempt are several. First, I have not yet had time to engage in a systematic search and comparison of, for example, words for 'hunt' and 'club' in different languages. This means that my data are biased either towards checks of the distribution of forms that

⁴For example, I would attribute *misa/*ma-isa 'only, alone' to POC solely because Sengseng misa- (which takes a suffixed possessive) agrees in shape and meaning with Blust's (1986) reconstruction of *ma-isa, with no Oceanic witnesses, for PMP.

have been reconstructed by others, or towards forms that resulted from my recognising in reading about other languages possible cognates with words in the languages that I speak (Lakalai, Sengseng, Kove of West New Britain, and Molima of Milne Bay, all in Papua New Guinea). Another reason is the dearth of published comparative material, and the fact that it has been difficult for me to obtain some of what does exist. With the rise of interest in lexicostatistics has come a dependence on 'non-cultural' vocabulary, and many of the published lists (such as those in Tryon and Hackman 1983) contain almost none of the lexemes that interest me. Some of the much older material, from Codrington and Ray to Churchill, is occasionally more useful, though greatly restricted by the dearth of sources available to them and by, as regards Codrington and Ray, their focus on forms with apparent cognates in Indonesian languages. The only complete published list dealing with cultural items is Leenhardt's for New Caledonia (1946), but most of these forms seem to be peculiar to New Caledonia.

The consequence is that I have relied heavily on a limited set of dictionaries and word lists – the published ones, my own manuscripts for the languages mentioned above, and a few manuscripts made available to me by colleagues, particularly Andy Pawley. In addition, I have been grateful for copies of unpublished data from Malcolm Ross and Bob Blust. I have found fragments of material in other sources such as ethnographies, but realise that there is much more that I have not seen, or recognised. It is hoped that others will be able to expand on, and emend, the proto-forms suggested here. Throughout, I shall use G to represent the velar fricative.

2. CULTURAL ITEMS

2.1 MATERIAL CULTURE

2.1.1 CLOTHING, ORNAMENTS AND OPERATIONS ON THE BODY

These are areas of enormous variation from one society to another. Although ornaments were worn everywhere, clothes were not; for example, in parts of the Bismarck Archipelago both sexes wore nothing (Parkinson 1907). In others, as Lakalai and part of Kove, only women wore clothing. Where it did exist, it was usually quite different for men and women, hence the impossibility of reconstructing a POC term for clothing in general. Nevertheless, two terms have been reconstructed, both assignable to POC. One is *malo, probably 'male garment of barkcloth'. The shape of the garment ranges from a strip passed between the legs to cover the genitals, or sometimes the penis alone (the so-called 'G-string'), to a wrap-around kilt, but except for the use of the same term to cover 'barkcloth' and the trees from which it is made, the range of meanings is restricted. Barkcloth used for purposes other than clothing is often called by a different term (e.g. Lakalai malaha 'barkcloth sling for carrying a baby', voi 'barkcloth for mask'). Very rarely were female garments made of barkcloth; more often, the basic material was shredded leaves (rarely if ever grass, despite the usual misnomer 'grass skirt'). I have not been able to reconstruct a term for a female garment, though for the west there are suggestive resemblances between Motu rami (with cognates in other Central Papuan languages) and Gitua rami. The other POC term, *tipi, is glossed 'belt' in Grace-Lincoln, but in Central Papua, where reflexes of *malo have not been recorded, it typically designates the male garment, and is so interpreted in Capell (1943). Its range of meaning, however, includes 'female garment', 'baby sling' and 'native cloth'. I suspect that it may originally have been a generic term for 'barkcloth' - perhaps, in view of its shape, a doublet of PPN *tapa (or related to *tapis 'cloth', reconstructed by Blust?). I have not been able to reconstruct, for Melanesia, any of the terms relating to the manufacture of barkcloth. The verb for beating it out usually reflects either POC

*katu, as in Lakalai, or POC *tutua/*tutuki, as in Sengseng. (Grace-Lincoln give cognates derived from the latter only for eastern Oceania and PAN, but Lakalai, Kove and Molima all contain tutu, and Sengseng tut, with meanings ranging from 'tap' to 'beat'.)

Perhaps the most common everyday ornaments were necklaces of shell or animal teeth, bracelets and armbands of a variety of materials, most often worn above the elbow, and ear ornaments. Noses were usually pierced, but it is not clear how often nose ornaments were worn. The other very common ornaments were legbands, worn below the knee, and anklets; belts and girdles; and hair ornaments, including ornamental combs. Aromatic herbs were commonly stuck onto armbands and into the hair; feathers too, unmodified or made into simple ornaments, were often stuck into the hair. Obviously it is not possible to reconstruct terms for the simplest ornaments, or to distinguish between, say, the usual word for 'comb' and one indicating its use as an ornament. Nevertheless, it is surprising that it has been possible to reconstruct so few terms. Where bracelets were made of shell or tortoiseshell, the words for both the artefact and the material were often the same. Consequently, although *lala* 'trochus shell' has been reconstructed for POC, and the cognate terms often designate bracelets of this material, it is difficult to know whether the 'bracelet' meaning can be attributed to the proto-form, and indeed Grace-Lincoln have not done so, despite the archaeological evidence mentioned above.

One of the most distinctive Melanesian ornaments is the so-called *kapkap*, from its name in a New Ireland language (Reichard 1933), composed of tortoiseshell cut into intricate patterns and fastened to a disk of white shell. Despite its wide distribution, at least from the Admiralties through the southern Solomons (and see the similar ornaments of the Marquesas), no set of cognate names for it has been reconstructed.

In the key to his 1969 list, Grace gives *sa(d,r)u 'head ornament', with another meaning 'comb', taken from Milke. In fact the evidence for this head ornament gloss does not strike me as strong, with only two cases, Motu daria 'feather ornaments of comb', Gedaged saz 'headgear of feathers'. Beside Sia saraka, Sariba suari 'comb', there exists Manam and Sepa saru 'comb'. In reconstructing the POC word, I suspect that Milke was originally influenced by his knowledge of the Fijian and Polynesian words for 'comb', which he cites (Fiji seru, PPN *selu). For the present, the forms justifying *sa(d,r)u belong to a very limited area, geographically, and cannot be called even western Melanesian. Blust (1980), however, reconstructs PMP *saRu (and other words for 'comb'), and cites Samoan au, so presumably this form should be preferred to *sa(d,r)u. In any case, the 'head ornament' gloss should be dropped. The comparative evidence for POC reflexes of PMP *suat 'comb' are also good; Ross (n.d.) has reconstructed Proto Papuan Tip *(n)suad to account for the many cognates in that region of PNG.

Another proto-form that probably related to bodily decoration is *pani 'to apply oil or paint to the head or body'. The range of meaning varies from language to language; in some cases reflexes seem to refer only to the painting of objects, as with Sengseng pan, Samoan vali, both of which are used for painting designs on barkcloth. But with examples such as Lakalai vali, 'to apply paint, feathers, or other surface adornment to the head or body' and Fiji wali 'to anoint, to oil hair', I suggest that a prime meaning of PPN *pani 'to paint, smear, rub oil on' had to do with bodily adornment. Clearly the term itself, however defined, can be ascribed to PMN, and indeed to POC.

Terms for 'shave' and 'cut hair' tend to have so many wider, though related, meanings that it is difficult to suggest that one of these meanings was primary. Unfortunately, the same problem applies to the terms for most operations on the body. The most common were probably piercing of the nasal

septum and slitting (rather than piercing) of the earlobes, so that ornaments could be inserted. The verbs, however, tend to be general terms for 'pierce' and 'slit/cut'. Penile operations were rarer, and of two sorts: circumcision, and super(in)cision, in which the foreskin is simply slit and retracts of its own accord as the wound heals. Specialised terms exist for these operations in many areas, but the terms recorded are not usually cognate with each other or with PPN *tefe 'circumcise' (usually in fact supercision), *kula 'circumcision'. The exception is in some languages of Vanuatu; cf. Efate tefi 'to circumcise', with cognates from other languages cited by Churchill (1911:265) such as Malekula teve. In some languages the word is still a general one for 'cut', and in some (such as Mota) only means 'cut' (with a derivative meaning 'knife'). It still seems justifiable to attribute *tepe 'to circumcise' to the Central Pacific, but not yet to a wider region.

Tattooing has a limited distribution in Melanesia, tending to be confined to people with relatively light skin, though not all of these tattooed. (It was, for example, rare in the Massim region of eastern New Guinea.) Where it was practised, methods ranged from the cutting of fine lines with obsidian, after which pigment was rubbed in, to the use of special implements. Again, it has not been possible to reconstruct a PMN term. Darker-skinned people practised ornamental cicatrisation instead of tattooing, but the terms for it tend to be those for 'cut' (the burning of ornamental scars was also common but not a major form of ornamentation). I have not made a study of the literature on tattooing techniques, but as far as I know the implements used in Melanesia did not include the typically Polynesian toothed chisel (see Buck 1958:296). For example, in Central Papua the skin was pierced by thorns set into a handle (Seligman 1910:265). The difference is of some importance because Green attributes tattooing to the whole Lapita area on the basis of "tattooing chisels from early Eastern Lapita contexts on Tongatapu" (1979a:16). He points to the reconstruction of PPN terms not only for the process (*tatau) but for a kind of tattooing chisel (*hau), and has reconstructed a special word, *uhi, for the "Eastern Polynesian tattooing chisel". (I do not know if there are differences in the implements or only in the words.) Unless the terms used for implements associated with cicatrisation in regions like the Solomons are cognate with some of these terms, it looks for the present as if we lack linguistic confirmation of tattooing as an early trait throughout Melanesia. It should also be noted that Blust considers PPN *hau to be derived from POC *saRu 'comb'. Interestingly, a somewhat archaic Kove term for tattooing, totoring, appears to be cognate with PPN *tosi 'mark, draw line'. Geraghty (1983:141) defines this as 'score a line' and notes cognates in Fijian and Arosi. Nevertheless, without confirmation from other parts of Melanesia I can not assume that 'tattoo' was a general meaning for a term related to *tosi, though I am willing on this evidence to call the term POC.

One other bodily operation was widespread: the blackening of teeth. Early observers often confused deliberate blackening with the accidental effects of betel-chewing, but lexicons as well as the accounts of closer observers make clear how common the practice was. The blackening material differed from area to area, being sometimes mineral and sometimes vegetable. Sometimes the word for it seemed to be related to the term for 'black', as in much of New Britain, where the mineral (probably manganese) was called something like *kit* or *keto*, a term possibly related to PAN *qitem but possibly only to MN words such as Lakalai kato (and see also Nggela katoa 'very dark or dirty,

soot' as well as PPH $*(\emptyset q)$ ateq).⁵ There is, however, a word occasionally found in western Melanesia that refers only to tooth blackening – the process or the material: Tolai taval; Molima tavana; Roviana davala. These point to at least a proto-western term something like *ntapala. Words used elsewhere, such as Proto Malaita *oko, are unrelated. In view of the frequency of tooth-blackening in Indonesia, it is not a surprising trait to attribute to PMN culture. The materials were vegetal in the three regions for which the term derives from *ntapala.

My data, incidentally, endorse the attributing of mirrors to PMN, even if they always involved only water as the reflective surface (in Lakalai, backed by charcoal in a stone basin). The word *tido is glossed in Grace-Lincoln as 'to look at, especially in mirror' (derived from PAN). They cite only Fijian and Nggela within Melanesia, the latter glossed as 'to gaze' but Lakalai titiro 'mirror' confirms the distribution of this meaning throughout the region.

2.1.2 HOUSING AND RESIDENCE

I am able to add little to the usual words that have been reconstructed for houses and parts of them. The word, *katama 'doorway', which I had reconstructed without knowing that Blust had also done so,6 obviously adds nothing to our knowledge of PMN culture, since all houses must have doorways, and shelter is a human universal. Reflexes of the word are found all over Melanesia and also in Micronesia. Examples include Kove atama, Jabem katam, Rubi (of Central Papua) atama, katama in languages of Aoba (Ngwatua and Lolsiwoi), and Sonsorol xatamA, with cognates in other Trukic languages (Bender n.d.). I assume that Molima 'atamana and Efate katema, ekatema, which both mean 'outside' are derived from the same form, and also that the meaning 'doorway' is prior, both on distributional and logical grounds. Nevertheless, it must be noted that there is a widespread competing form for doorway, of which Lakalai la mata la luma is an example. In addition to most common meaning of 'eye', reflexes of *mata very often refer to an opening, especially one through which light comes, such as the mesh of a net (see below). Presumably these meanings are related. In any case, it is common for a doorway to be called by a mata term.

Of the words that have been reconstructed for 'house', the standard two, *pale and *Rumaq, are both represented throughout Melanesia. I have not, however, found any evidence to support the suggestion in Blust (1984c) that *pale specifically referred to public buildings. Sometimes, as with Tolai pal, the reflex is a generic term for all sorts of structures, including family houses, but in my data it is not the term for men's house or clubhouse, widespread though these are in Melanesia. I was unable to reconstruct a POC term for 'men's house', but Blust (pers. comm.) tells me that he has done so. The PMP term, *kamaliR, has reflexes in the Admiralties as well as in the well-known PNH (*na)kamal.

There is abundant evidence in Melanesia to support the POC terms for various parts of the house, such as 'sago thatch/roof' (*qatop), 'wall' (*ndindi) and 'rafter' (*kaso); there is no need to support or challenge these reconstructions. My Lakalai material also supports Blust's (1980) reconstruction of PMP *kapit 'fasten thatch with slats'. The case of 'ladder' is much more uncertain. Often houses

⁵Lakalai has reflexes of both, with maheto 'ripe Canarium almond' (with dark purple skin) and kato 'to paint black (for mourning), black mole on skin etc.'). It also has keto 'black stone found in the mountains'. Unlike many of their neighbours, including the Bola, the Lakalai did not blacken their teeth.

⁶Blust (1984c:205) postulates *kataman with some uncertainty, because of Mussau atamana beside Emira atama. The Molima example does not settle the question, because in that language (which often preserves POC*-C) -na can be a suffix.

were built on the ground, even in coastal areas. Where they are on piles, they are sometimes entered not by a true ladder, but by a slanting log (which may be removed at night). Both these and true ladders may be called by a term which can be reconstructed as *tete, presumably derived from PAN *taytay 'bridge, etc.' The comparative evidence indicates that the basic meaning of the term is 'to walk along a log (or something similar, such as a branch)'. This word, sometimes with a prefix, then became the word for 'bridge' or 'ladder/log for entering a house'. Examples of reflexes are: Nggela tete 'to cross a stream on a log or bridge, to descend a ladder, not using hands'; Molima tete 'to walk along a ridge or branch of tree', 'itete 'bridge'; Kove tete 'ladder, log leading into house', patete 'to go up a ladder'; Lakalai vagege 'bridge'. I doubt if this set should lead us to attribute ladders to PMN culture, but if we do, I suggest that they were logs which may not even have had notches cut in them (compare Blust's PAN *SaReZaSan).

Although it seems clear that the basic meaning of POC *panua was 'occupied place', and reflexes of the term have a variety of meanings from Fijian 'land' to Molima 'house' to Lakalai 'men', this is the only proto-form that can be cited for PMN 'village', the meaning that it has in languages throughout the region. The situation is a little different as regards the term for 'open space in village'. Grace (1969) gives only *malaqe (cf. PPN *malaqe 'meeting place'), together with *mwalala, later written *malala, with a variety of meanings ranging from 'earth' to 'empty' and including 'cleared ground'. There are a few cases in western Melanesia in which probable reflexes of *malaqe mean 'village': Jabem malaq, Wedau melagai, with cognates in related languages. Reflexes of *malala seem to be somewhat more likely to mean 'village plaza', as with Lakalai malala. It seems likely, however, that *malala basically refers to cleared ground of any sort; cf. Manam malala 'market place, assembly place', and perhaps Sengseng -mla 'in the open'. Possibly *malaqe and *malala come from a single root, but if they did not, then it is impossible to ascertain which of these led to mala, the Nggela word for 'place' and the Tami word for 'village'.

2.1.3 VEGETABLE FOODS

Apart from an early suggestion by Groube (1971) concerning the Lapita culture, it has been agreed that the first AN-speaking settlers of Melanesia practised horticulture, cultivating a range of root and tree crops together with other plants. Some of these plants they presumably brought with them from the Indo-Malaysian region, whereas others were discovered within Melanesia – probably already being cultivated by NAN speakers. In the case of sugarcane, however, even if it was first cultivated in New Guinea (Barrau 1958), it must have spread westwards before AN speakers came to Melanesia, because terms cognate with POC *topu are found throughout the AN-speaking region. It may be, however, that the phonemic resemblance between the POC word for sugarcane and one for Saccharum edule (*tampukal), a cultigen confined to New Guinea and neighbouring islands, may indicate that the latter term is an adaptation derived from the word for 'sugarcane'. I do not, however, know any languages in which the first vowel in the word for sugarcane is a (see Chowning 1963).

Recently French-Wright (1983) has verified or reconstructed a considerable number of POC words which have added to our knowledge not only of the plants eaten but also of techniques of cultivation and preparation. Nevertheless, because his terms have been cited without qualification as "associated with gardening" (Pawley and Green 1984:131), some difficulties should be noted. One is that a number of terms may indeed relate to plants but would apply whether or not they are cultivated. Examples include terms for 'mature' and 'ripe' and 'long pole for harvesting fruits'.

Another is that several of the terms (as is of course the case with *matuqa 'mature') have much wider meanings, and although they may be applied to horticultural and related practices, it is not justifiable to assume that these apparent extensions were part of the original meaning. Examples, cited in the same source, and taken from French-Wright (1983), are *pale designating a garden shed (see above), and *pata, which seems to refer to any kind of platform or shelf, not necessarily one for storing food. Present-day reflexes of these terms do not mean that we can infer the existence of garden huts or food storage on platforms, though it is certainly perfectly likely that both of these existed. We also do not know that yams were planted in mounds or staked everywhere, judging from French-Wright's data, which cite only eastern witnessess of his reconstructions. I do not know, however, the data supporting POC *ta(m)puki 'yam mound' in Pawley and Green (1984).

Of the terms unquestionably associated with horticulture, the best attested is certainly *quma 'garden, to garden'. In addition, despite its occasional use for digging up wild plants, a word for 'digging stick' (dibble) is well attested. French-Wright proposes *waso, which is the shape in Arosi and Tanna, but in view of Lakalai uaro and Kove waro, I think *wanso is more probable. As regards another term, one I originally proposed (Chowning 1963), I would now amend what has come to be the accepted form, *upe, for a taro top to be planted, by postulating a final consonant to account for Molima uveya. A probable form is *upeq.

Within Oceania, the manufacture of sago flour characterises the western part of Melanesia – the New Guinea region, according to Barrau, though he also notes that there were traditions in Vanuatu of it having been made in the past (1958:37-38). In some other areas, such as parts of the Solomons, the pith was fed to pigs, but human beings did not eat the food. What Barrau overlooked, however, was the manufacture of sago in Tikopia and Anuta – according to Yen (1973), one of their Melanesian traits, along with betel-chewing. It seems probable, then, that sago flour was once made in nearby parts of the Solomons.

Even if the palms apparently grow wild in Melanesia and may first have been used for food there (Barrau 1958), the fact that the words for sago palm (PMP *Rumbia, POC *rampia), and sago thatch (PAN *qatep, POC *qatop) are cognate in PAN and POC indicates that the ancestors of POC speakers were already familiar with the plant before they arrived in Melanesia. French-Wright (1983) notes that reflexes of the former term are confined to New Guinea and the Bismarck Archipelago. It is unlikely that they invented the process of manufacturing the flour, since it is made by many NAN speakers. I have only one bit of linguistic evidence for a PMN word related to sago manufacture. This is a cognate set of words for sago beater, the implement used to pulverise the pith, in Kove walu, Lakalai ualu, and Molima ewanu. This suggests a form *(e)walu for western Melanesia, since *I is often n in Molima (cf. Molima nima 'hand').

The word for 'sago' in Tikopia and Anuta is ota. Since the sago palm itself is sometimes called by the word for 'thatch', as in Lakalai hato and various examples from the Solomons (Chowning 1963), it is possible that this is a metathesised form of the same word. Another possible origin, however, is PPN *qota 'dregs, rubbish'. The Kove cognate kota refers only to the pith left behind after sago starch has been extracted. Since PPN has another word, *penu, for the remains left after grated coconut has been squeezed, it is tempting to wonder whether POC *(kq)onta referred originally to sago pith and was applied to other matter after OC speakers moved beyond the area of sago use, or abandoned its use. Note the Fiji doublet kora 'refuse of scraped coconut', kosa 'dregs of yaqona'. Geraghty (1983) mentions PEO *qota, glossed only as 'coconut grated and wrung', and cites only Fijian kota, with that meaning.

Sago is an example of a food plant that may be very important in the economy without necessarily being cultivated. It needs to be noted that a number of the fruit and nut trees listed in Pawley and Green (1984) were rarely or never cultivated in particular Melanesian societies; at most, those laying claim to bush trees might clear an area around the base of the trunk. Examples include *Canarium* almond, *Terminalia*, *Pometia*, and often breadfruit. Furthermore, many other wild plants for which POC names have been reconstructed, were also exploited, for food as well as other purposes. Examples include edible fungi: POC *koko (French-Wright 1983) and *taliŋa (the same word as 'ear', from the shape), and wild mango, *wai (Chowning 1963). Important though gardening undoubtedly was in POC society, wherever local conditions permitted so was the exploitation of bush foods, which added immensely to the variety and nutrition derivable from cultigens.

2.1.4 DOMESTIC ANIMALS

The POC word for 'pig', *mpoRok, is derived from PMP *beRek, as Pawley and Green note, and is attested throughout Melanesia. Compare Lakalai bolo, Nggela mbolo. Pawley and Green do not mention dogs, which are eaten in many parts of Melanesia as well as being used for hunting. Grace-Lincoln reconstruct POC *kaun, and apparently cognate terms are scattered across Melanesia; see Kove kaua, Nggela kau. Nevertheless, partly because of the diversity of terms for 'dog' and also because of the lack of archaeological evidence for their antiquity, Hudson (1989) has recently proposed that dogs cannot be attributed to POC, and that the forms apparently reflecting POC *kaun or *nggaun are onomatopoetic. Her evidence looks convincing, but it is necessary to keep in mind the local diversity of terms for starch staples that no one hesitates to attribute to POC (Chowning 1963). I still suspect that the wide distribution in the west of words beginning with kau- may reflect a term attributable at least to western Melanesian.

Pawley and Green have been curiously reluctant to reconstruct a POC term for 'fowl/chicken', saying of terms like Bugotu kokorako, Motu kokoroku, and Tolai kakaruk that "apart from irregularities in the sound correspondences, the onomatopoeic nature of these forms reduces confidence in their cognation" (1984:130). Adding Lakalai kureko (pl. kukureko) to the list in no way alleviates the problem of the vowels, but I think that the correspondence in the consonants goes well beyond anything that can be attributed to onomatopoeia, and that it is necessary to reconstruct forms like *kVkVrVkV for western Melanesia. Cognates extend only into Guadalcanal, however, being replaced further south and west by other terms, such as those derived from Proto Malaitan *kua. Green (1979b:37) notes that chicken (as well as pig) bones occur in Lapita sites, including Watom, off New Britain, but it may nevertheless be worth mentioning, as regards these varying terms, that chickens were not found even throughout New Britain at the time of first European contact. (The Sengseng lacked them, saying that pythons kill any they bring in, and most, though not all, Kove speakers say they are a recent introduction.) None of the three PPN terms for these three creatures have certain cognates in western Melanesia.

2.1.5 FISHING AND HUNTING

My own data add nothing to the relatively rich vocabulary already reconstructed for POC fishing techniques (see Pawley and Green 1984:129; Blust 1984:64). Probably other terms will be

⁷I have recorded elsewhere (Chowning 1987) my objections to the suggestion that reflexes of the PPN word for 'dog' are found in NAN languages of New Guinea.

reconstructed; for example, I should expect one that differentiates a multi-pronged fish spear from the kind used for hunting and warfare (see below). Here I wish to say more about an area that has been comparatively neglected, the hunting and trapping of non-marine animals. The reasons for the neglect probably reflect both the degree of attention received by eastern Oceania, with its scanty land fauna, and the tendency to equate Lapita with POC. Since Lapita sites have usually been littoral, the animal remains found in them have been largely marine. Green (1979b:37) concludes that hunting "was never an important part of the Lapita economy". Even if Lapita can be equated with POC, this conclusion may reflect a bias in the location of sites discovered and excavated to date (see Spriggs 1985). The large number of names of trees and plants, many wild, that can be reconstructed for POC - by no means exhausted by lists in Chowning (1963), French-Wright (1983) and Pawley and Green (1984) – indicates that the people were familiar with a forest environment away from the seashore. They must in any case have exploited it to get material for houses and canoes, and it would be remarkable if they ignored the animal resources. At the very least, they would have had to take measures to control the depredations of feral pigs which were surely present on the larger islands even before AN speakers arrived (Bulmer 1982). (Green assumes that the pig bones found in several Lapita sites were from domestic pigs, but this need not have been true everywhere.)

The most common hunting method recorded in the ethnographic literature required only dogs and spears (and, in grasslands, sometimes fire). If dogs were indeed absent, it is still likely that spears were used for hunting as well as fishing (and warfare). One POC term for 'spear' was originally noted as pan-Melanesian by both Codrington (1885) and Ray (1907). This is reconstructed for POC as *io 'spear', and it appears in that shape in most languages. There are a few exceptions, however; Kove iro, Gitua izo, Mekeo iso, and Wogeo iwo all point to the presence of a medial consonant. Unfortunately nothing in Ross's list of reflexes for POC consonants makes it possible to decide what this one should have been. I should add that in Bwaidoga and a few languages of Central Papua the word is gio or Giyo, but these are languages which sometimes have that initial consonant in words that in POC almost surely began with a vowel. If there was an initial consonant, it was probably *q. For the present, I suggest the reconstruction POC *(q)iCo 'spear'. In addition to this, Blust has reconstructed a PMP term *saet 'spear, to spear' but cites no Melanesian witnesses, nor have I noticed any.

Terms for 'hunting bow' and 'to shoot', dating back at least to PMP, are well attested in Melanesia (see Pawley and Green 1984:131), and Blust has added a term for 'bowstring' in PMP *deles, with reflexes in Sa'a and Arosi (Blust 1980). By contrast, the term for 'bowstring' in Grace-Lincoln, *uka, seems to be confined to the east.

Pigs and other game such as cassowaries were also caught in snares and traps. I have yet to reconstruct a PMN word for 'snare', though I had hoped that the resemblance between Sengseng sik and Molima sikwa would lead me to other cognates. Blust, however, has reconstructed PAN *taqen 'to set a trap' (1984). In view of Lakalai taho 'to set a snare', I feel justified in reconstructing POC *taqon.

Sticky sap was often used as birdlime, but while terms in some languages (e.g. Lakalai bulubulu) may derive from PAN *bulit/*pulit(B) 'stick, glue, paste', the evidence does not justify ascribing birdlime as a primary meaning of the term.

Pawley and Green list POC *su(n)ja, from PMP *suja 'sharpened stake set in ground to stop or wound animals or enemies'. I assume that Molima suna, 'sharpened stakes set where a pig jumps (as over a garden stile)' reflects this. On the other hand, Kove sokasoka, for the same apparatus, derives

from POC *soka 'stab', which in Grace-Lincoln has reflexes only in Fiji, Rotuma, and Polynesia. This Kove form suggests that the term can be attributed to PMN.

I hope that in time it may be possible to reconstruct other terms relevant to this topic, such as words for 'pig net' and 'bird net'. (In addition, I would expect to add some words for weapons used primarily if not exclusively in warfare, such as clubs.)⁸ At this point I argue only that the statement in Pawley and Green (1984:128-130) that "POC speakers had an economy based jointly on gardening and fishing" probably seriously underestimates the degree to which they exploited the resources of the bush, both fauna and flora.

2.1.6 FOOD PREPARATION

A few terms already reconstructed for POC, although they often have wider meanings, are so often associated with aspects of food preparation throughout Melanesia that it is probably safe to attribute those meanings to them. These include *kosok 'to husk a coconut, pointed stick used for doing this'; *kweli 'scrape a coconut'/*kori 'scrape, shave, peel'; *supi 'to peel, as taro'; *kasi 'kind of bivalve; to scrape (coconut, char from roasted food) with the edge of a shell'; and perhaps *poRo 'to squeeze, wring out juice, as coconut into food'. Coconut oil itself is often called by a term like mona, especially in western Melanesia, by contrast with the east, where the term used in Polynesia, lolo, is more common (but see Nggela mona, cited in Blust 1984c:205). The former term, from POC *moñak 'fat, grease', (including that of animal origin), often has a secondary meaning 'sweet, pleasant-tasting', as with Manam monamona. A more specific meaning is also found in a few western languages; pudding of cut-up starchy vegetables boiled in coconut cream. Examples are Kove, Molima, and Kilivila mona, and probably Motu mone 'cakes of sago, taro, etc. boiled in leaves'. I had originally postulated this gloss on the basis of the shared forms in Kove and Molima, and just learned that Blust had done the same though more tentatively, because of Mussau mona 'pounded taro with coconut cream' (Blust 1984c:193, 205). He cites a Sa'a term that would justify attributing this meaning to POC. Unrelated words in many other languages are glossed 'pudding'; this particular term seems to have a limited distribution.

Linguistic, archaeological and ethnographic evidence agree in justifying the reconstruction of at least five terms, two nouns and three verbs, related to cooking methods. These distinguish between boiling in a clay pot, steaming between heated stones, and roasting directly on the fire. As regards the first, the distribution of potsherds in sites, some of which predate Lapita, has led to general agreement that the early speakers of OC used pottery, even though many of their descendants did not. Where it did exist, however, a word derivative of *kudon is so common that the term must be ascribed to POC. It is usually a noun, so that the identical verb, meaning 'to boil in a pot' (e.g. Kove ulo) is presumably a secondary formation. In addition, Milke (1965) reconstructed a verb for 'boil', *nansu, for PNGA alone. I criticised part of the cognate set involved (Chowning 1973), but Blust (1980:115) assigned *nansu to PAN and cited cognates of Motu nadu in other Melanesian languages. Teop of Bougainville has nahunahu. Nevertheless, reflexes of this form are so rare that I expect that eventually it will be possible to reconstruct another PMN/POC word, possibly simply meaning 'to cook'.

⁸Although shaped sling stones have been identified in Lapita sites (Green 1979b:39), the POC word *maka, which has 'sling' among its glosses, seems to mean that only in Polynesia.

The term 'earth oven' is a misnomer in many parts of Melanesia, including Lakalai, Kove and Sengseng, where the whole process is completely above ground. It seems better to accept the gloss 'stone oven', even though the evidence at Lapita sites indicates at least some excavation. The method of cooking is essentially the same in all cases, except that extra water is not necessarily added to foods that are juicy in themselves or well wrapped in leaves. The POC term was given as *qumu in Grace (1969), but Blust amended it to *qumun, noting that the final consonant in Molima 'umula is anomalous. Sometimes, as in Lakalai humu, the same word is used for the oven and for cooking in it, but there is abundant evidence for reconstructing POC *taqo for the process. This term was originally reconstructed for PEO, and is so listed in Grace (1969). I have not been able to locate it in Grace-Lincoln. Nevertheless, it is present in the west with the same meaning, as in Kove tatao.

Probably the most common form of cooking in Melanesia involves simply laying the food on an open fire, or hot embers, whether wrapped in bark or leaves or unwrapped. Throughout Melanesia and Polynesia, the same term, from POC *tunu, was used for this process and also for 'set alight, burn'. (Unrelated terms in some languages, such as gabu in Central Papua and Milne Bay, have the same range of meaning.) Grace-Lincoln give as the only western cognate Motu tunu, 'bake pottery', but Tolai tun is one of many western examples that make it possible to say that this was a pan-Melanesian term for roasting, in addition to POC/PMN *maRi.

Other terms for 'cooking' have also been proposed, such as Milke's *kasan, and there exist a number of terms (glossed 'mix', 'stir', 'knead' etc.) which probably refer to processes of food preparation. I have not to date been able to confirm a wide Melanesian distribution of any of these, or of a word for smoking food, reconstructed by Blust as *tapa. Blust's data (pers. comm.) connect Roviana tava with numerous non-OC forms, and therefore do indeed justify assigning the term to POC. Milke's few examples from which he reconstructed *sagan do look cognate, but the meaning of the term is uncertain. Nevertheless, I suspect that in time various other terms related to food preparation will be found to be distributed throughout Melanesia.

The one process that is distinctively eastern is that of preserving vegetable food by fermentation. Green attributes this process to the Lapita stage, but if it was present so early, it is curious that no trace of the process remains in the west (see Barrau 1958; Yen 1973; Pollock 1984 on the distribution of the processes). In the east, two different terms have been used to describe the process and/or the product. One derives from POC *ma-asin/*maqasin and another from POC *mada. Both of these were originally attributed to PEO. The former term generally, and surely originally, meant 'salty', but derived meanings ranging from 'stinging' (like salt water in a wound) as in Lakalai, to 'tasty' and 'sweet' as in Sengseng and Cristobal-Malaita languages (Blust 1984b). The other, POC *mada(d,R), is glossed in Grace-Lincoln 'soft, ripe, fermented', but I suspect that the basic meaning was 'overripe', as in Tolai madar. It is only in Melanesia that the term for fermented food seems to derive from *ma-asin (see terms in Pollock 1984). In the Solomons, a process of fermenting taro by adding coconut cream mixed with salt water seems to be a separate development, and the product sometimes called by the same term that is used for 'coconut cream' (eastern lolo). Despite the archaeological pits, we lack linguistic evidence for attributing fermentation to any part of western Melanesia – nor, as noted, is it recorded in the ethnographies.

The one implement apart from clay pots that can reliably be attributed to POC is tongs for handling cooking food. Although other terms exist, the evidence for pan-Melanesian distribution most strongly supports *kapit 'tongs', (so defined in Grace 1969).

2.1.7 CONTAINERS

The words for 'water bottle' and 'lime container' tend either to be the words for 'water' and 'lime' or a general name for the material – coconut shell, bamboo, gourd. I have not been able to reconstruct a PMN term for these two types of containers. The best data exist, interestingly, for two artefacts that are not found everywhere in Melanesia, clay pots and wooden bowls, and for a third one that differs in its material and shape from one society to the next. I have nothing to add to the data already presented to justify POC *kudon 'clay pot'. Wooden bowls vary in shape from the deep elaborately carved Tami (or 'Siassi') bowls so widely traded in north-east New Guinea and across the Vitiaz Straits, to what sound like shallower 'dishes' in the Solomons, but cognate terms, derivable from POC *tampida(n), are found from the north coast of New Guinea (Ross 1977) to Vanuatu (Merlav taber, cited in Pawley 1972:114). The term *tana, found throughout Melanesia, seems to refer to either a bag or a small basket but typically designates the kind used for carrying personal possessions such as betel-chewing equipment. I have not, however, been able to find clearcut evidence that words for larger baskets, cognate with PPN *kato and *kete, were used in the west.

I am also uncertain about the evidence for another term, *ipu 'container for liquid'. The only non-Polynesian form cited in Grace-Lincoln is Ulawa ipu 'hollow in tree holding water', and the only possible western cognate that I can cite is Lakalai piu 'drinking coconut'. Several other words in Lakalai that reflect POC *iCu show this kind of metathesis; cf. liu 'drink', kiu 'tail'. Nevertheless, since neither the Lakalai nor the Ulawa terms designate what the Polynesian ones do, I am reluctant to suggest that this was actually a POC term for a kind of container for liquid.

A word related to containers that has not, so far as I know, been reconstructed is, for the western region *quntu 'to carry on the head'. In Lakalai hugu and Kove uru refer specifically to the way that women carry burdens, including baskets and, in Kove, wooden bowls (tavila), though the Lakalai also use the term for a man's wearing of a mask to cover the head. The Motu word, obviously cognate, is udu 'to carry a child astraddle the neck'. I have not found cognates in the east. By contrast, Sengseng sun 'to carry on the head', may derive from PAN *suqun.

2.1.8 MATS, CORDAGE AND NETS

In most precontact Melanesian societies, pandanus mats were formed of strips sewn together rather than plaited. Plaited mats, traditional in Polynesia, were then introduced into many parts of Melanesia by Polynesian missionaries. With one end sewn together, mats often doubled as raincapes, and sails were sometimes made in the same way, though in other areas sails were plaited (see Haddon and Hornell 1975). Although often the word for 'pandanus' was also used for all of these artefacts, the evidence for one POC word is well known. Its pan-Melanesian distribution was pointed out by both Codrington and Ray, and it has also been attributed to PPN and PPH. I emend Grace's POC *qempa to take account of Molima 'ebana. The PPH form is *hempas, which raises questions about the final consonant; Molima /n/ reflects *n, *I and *n. I propose only *qempa(C).

In 1963, I reconstructed a 'Proto Melanesian' term for pandanus in addition to *pandan. This was *moi, and my evidence then included 'Admiralties' muoi, Pakalai moe, and Wedau moi. To these I can now add Kove moe (contrasting with moi 'taro'), omoi in several West New Britain languages (Thurston 1987:130), and Kilivila moi. In most of these languages the word also designates sleeping mats. Apart from uncertainty about the final vowel, we also need to note Bola moke 'pandanus, rain

⁹Blust (pers. comm.) tells me that this term cannot be cognate with the others.

cape' and Mandok moki 'mat'. They point to a proto-form *mok(e,i) 'pandanus, sleeping mat'. There is no reason to assume a connection with POC *mose 'sleep'; *s would not become /k/ or /0/ in these languages. Apart from the dubious cognacy of Gedaged moi 'dull, inactive', reflexes of *mose seem to be confined to eastern Oceania. By contrast, the words for 'pandanus, sleeping mat of pandanus' that originally led me to reconstruct *moi are only attested in the west, with one probable exception: Kwaio mode 'pandanus, mat or umbrella made of pandanus'. These are also a rare example of terms that connect the Admiralties with other parts of western Melanesia. The medial consonant is a problem, but it seems likely that we should ascribe *mok(e,i) to PMN.¹⁰ Another very widespread term in eastern Oceania derives from *pola, reconstructed in Grace-Lincoln for POC and defined 'coconut thatch'. It is clear from the meanings of the cognate forms outside Polynesia, however, that it designates coconut leaves woven together for any purpose, including mats and bags. See for example, Efate bora 'coconut leaf, or basket made of it, or plaited for thatching houses' (Macdonald 1907). Again, this seems to be an eastern term, though another and possibly related term *pola 'spread out, lay down, as a mat' has possible cognates in western Melanesia (see Lakalai bolabola 'flat'; Kove pola 'open out'). But since 'mat' does not seem to be the primary meaning of the noun, I suspect that the verb is unrelated.

The sewing together of leaves, and similar acts, are often expressed in Melanesia by reflexes of POC *saqit. The objects sewn are most often pandanus mats, as in Lakalai (where the word sahi is also used for 'sewing' thatch), but the Sengseng, who lack mats, use the reflex sihit both for the sewing of areca palm spathe pouches for lime powder, and for the barricading of doors by interlacing vines across them. There is also abundant evidence for the reconstruction of POC *nsaRum 'needle' (PAN *zaRum). (This was *nsaRu in earlier POC reconstructions, but the final consonant is necessary to explain Kove salumu and Molima saima.) In some Melanesian languages, words for 'sew' have other origins, such as POC *tuRia, but it seems clear that, as Grace-Lincoln indicate, the basic meaning of this is 'to string on a line'. I am sceptical about some of the other POC terms that have been reconstructed for 'sew', such as *susud, reflected in Rotuman and Sa'a susu and Mota susur. This seems suspiciously close to POC *sudu 'enter, insert'. It may be that in PMN, there was only one term for 'sew', though others developed out of related terms in various parts of the region.

Thread was sometimes only unmodified plant fibre, as from the inner bark of hibiscus, or thin vine. Thicker cord was, however, often composed of several fibres rolled together. Grace-Lincoln contains three reconstructions which resemble each other in form and meaning: *pidi 'twist, bind around, plait, braid'; pili 'plait, wind around'; and *widi 'turn, revolve, twist around, twist, bore'. The two PPN forms *firi 'plait, braid' and *wili 'twist, bore' suggest that indeed two proto-forms were involved, but if so, the reflexes in some languages seem to be identical (cf. Maori whiri 'twist, plait'). It is tempting to suggest that a term which had been used for the manufacture of cordage by twisting (from a word that originally meant 'to twist, to wind (or bind) around') was then extended to include a different method of manufacture by braiding.

Through Melanesia the word for 'vine' and rope' are the same, derived from POC *waRos. Presumably this reflects the fact that often strong vines (or rattan, POC *quwe) were used for binding without being modified. The evidence is also good for a term *tali 'cord, line', typically used for

¹⁰Tryon and Hackman do not derive Kwaio d from any POC consonant. It may be that the medial consonant is the result of word tabu, which frequently produces phonemic change in Kwaio words (Keesing 1975). The dictionary shows examples of the opposite shift, as in the doublets oka/oda 'eat raw food', when the historical evidence shows that the latter is the expected reflex.

something smaller than a rope. In some languages, reflexes of it mean 'sew', but this is probably a secondary meaning (as Grace-Lincoln seem to agree).

Another term that looks like a good candidate for PMN is *loi. In both Kove and Shortlands the identical form is the term for manufacturing thread by rolling the fibres on the thigh. In Lakalai, where that process is described by a verb derived from the word for 'rope' (Lakalai ualo), loi means 'to rub between the hands'. But outside western Melanesia, see also Kwaio loi(a) — 'weave a net, knit'; Efate lolo 'thread', loloa-si 'manufacture thread' (apparently derived from loa 'rub', however); and outside Melanesia, Gilbertese ro 'cord'; Tuvalu lö 'binding, sennit'; Maori roi/roki 'secured, tied up, knot, bind'. Within western Melanesia there are also Tolai loe 'to coil', loloi 'roll or coil' (both terms referring to how strips of shell money are made into coils), Manam lolori, (pl. lolo) 'to bind or knot grass skirts'. If none of these represents a shortening of *waRos, there may still be reflexes of at least two proto-forms here, one meaning 'tie up' and the other 'roll (fibre?) under the palm of the hand'. For the present, I shall suggest that *loi 'roll under the palm, make cord' is justified at least for western Melanesia.

I have a small amount of evidence to suggest the reconstruction of another term used for the process of braiding larger ropes, such as those used on canoes. This is *mwali, reflected by Lakalai mali, Molima mwali, and also, I assume, by Manam moli 'plait'. I have not, however, found reflexes in other languages. Because some writers use 'plait' for 'braid' (as cordage) and others for the process of mat-making (otherwise 'weave'), it is often difficult to know which process is being described. Nevertheless, these three examples should suffice to establish this term for PWMN. Various other terms have also been proposed, including $*(q)a(\tilde{n})am$ 'loosely braided' (Blust 1978:5).

Although POC words for 'fishnet' have been reconstructed by others (see references in section 2.1.5), most terms relate to the finished products rather than to techniques of manufacture. POC *sika was reconstructed by Milke (1961) for 'netting needle', reflected in PPN and Fijian (sika ni lawa), and also in Gedaged siwali. Grace-Lincoln follow Milke in including as cognate Sa'a sike 'thorn', but a thorn is not much like the shuttle that has been glossed as needle. Another probable cognate is Molima sikwana/si'wana, which is also the verb for manufacturing nets. The Gedaged and Molima terms suggest a final consonant for the proto-form. In addition there exist two other terms which are certainly cognate with each other, Dobu siyona and Kove sione. In Kove, and in some other Milne Bay languages, though not usually in Dobu, labialised stops preceding a shift the a to o: compare Lakalai pati; Manam pwati; Kove popoti 'float'. If all of these terms for 'net gauge' are cognate, they suggest a proto-form like *sikwan, though it would be helpful to have other cases in which *k disappeared after affecting the following vowel. See also Motu diva; according to the reflexes in Ross (1988), this should derive from POC *siwa.

In Kove and Molima there exist cognate terms for 'net gauge': Kove mata; Molima matana. Since mata is the word for 'mesh' in many OC languages (see discussion of 'doorway' above), I assume that the name of the tool is a secondary development, and perhaps independent in these two languages. I have not yet found any other examples. Another term for net gauge, *qapa, has no recorded reflex in the west.

2.1.9 WATERCRAFT

Pawley and Green list a considerable number of POC words associated with 'sailing', but do not include all of those to be found in Grace (1969) and Grace-Lincoln. My own data on this topic are not very full, so that all I can do here is slightly amend either the shapes or the glosses of some proto-

forms reconstructed by others. Blust defines PMP *dakit as 'join along the length, raft'. For Oceania he mentions only Motu rai-a 'prepare a raft for the sea' (Blust 1986). Lakalai lage, Kove laGe 'raft' presumably derive from this proto-form but leave the precise shape of the POC form uncertain.

Grace-Lincoln only gloss *qulin 'to steer', but in a variety of languages the cognate terms also mean 'steering paddle' or 'rudder'. This is also the case with Molima kuliga, and I suggest that this meaning should be one of the primary ones. Indeed, Pawley says as much (1981:287). Similarly, my own data indicate that in a number of languages, including several in Polynesia, reflexes of POC *tokon 'pole, stick' not only designate walking sticks but also punting poles, and so may justify our attributing these implements to POC. (Kove, however, contains a doublet: atoko 'walking stick', toto 'to punt a canoe'.)

2.1.10 MUSICAL INSTRUMENTS AND GAMES

The one implement, only marginally musical, that can certainly be ascribed to POC (and PAN) is the conch-shell (triton shell) trumpet. Cognate terms derivable from POC *tapuRi are found throughout Oceania, and although Grace-Lincoln do not include 'trumpet' in the gloss, Wurm and Wilson (1975) do so with respect to the PAN form. The use is so frequently mentioned that I consider it safe to associate it with these shells (which are not always the same kind). My own data did not permit me to reconstruct any other POC terms with certainty, but Blust (pers. comm.) tells me that the Fijian term for 'nose-flute' has cognates in several Indonesian languages, so that "POC speakers must have had the nose-flute".

Other more purely musical wind instruments are also very widely distributed, particularly flutes and Pan's pipes. I have not, however, been able to reconstruct terms apart from those which reflect words for 'bamboo', such as POC *kaundu (Blust), and those which reflect one or more POC words beginning with *pu-, which mean 'to blow'. Grace-Lincoln contains three such terms: *pu 'explosive noise, conch trumpet'; *puput 'to blow' (the same in PAN); and *pus-i 'puff, blow', also from PAN. I suspect that other terms should be reconstructed, but the 'blow' sense of the first syllable is obvious. An example of the problems of disentangling related meanings can be seen in Lakalai: pupu 'to blow up' (as a pig bladder, for a balloon, or blowfish, both called by terms derived from this); pusu 'to blow, as conch shell'; e pususu 'small wild bamboo and articles made of it, including Pan's pipes and flute', 'flutemouth' (fish); puratete 'of a masker, to produce a particular sound by blowing through tense lips'; pusese 'shrill sound produced by masker through pursed lips'; pututu 'to blow pipes or whistle', e pututu 'whistle made of split bamboo'.

In western Melanesia, two types of percussion instruments are widely distributed, among NAN speakers as well as speakers of OC languages. One is the hourglass drum with a skin head. To date I have not been able to reconstruct a name for it that extends throughout the area. Along the entire north coast of New Britain we find cognates of Tolai *kudu*, the origin of the Tok Pisin name; examples include Lakalai *kude*, Kove and Kilenge *kure* (see below). Mota *kore*, though defined as 'slit gong', is the only possible cognate I have found to the east or south of this region. On the north coast of New Guinea and in some parts of West New Britain, the name is suspiciously close to the word for 'monitor lizard', whose skin is often used as a drumhead (see Thurston 1987:127), though in Sengseng they differ minimally: *pahiyo* 'drum', *apahiya* 'lizard'. Terms in Milne Bay and Central Papua differ from both of these, and from each other. I do not have the data to indicate whether any borrowing from NAN languages may be involved.

Niles (1983) has made a study of the distribution of slit gongs and terms for them, and points out that in New Guinea slit gongs are limited to the central north coast and regions inland from it, including the whole of the main stream of the Sepik. They do not occur in the region formerly called Papua, nor on the western end of the island, but they are found throughout the Bismarck Archipelago, in the Solomons, and in Vanuatu. The names for them in PNG show many cognate forms, though not quite so many as Niles suggests. For example, Kilenge na kure is surely cognate with terms for hourglass drum found elsewhere; the Kove often use that term for both instruments. Again the most common terms are cognate with Tolai garamut, the source of the Tok Pisin term. Terms like this, including the final consonant, are found throughout New Ireland, up into Mussau-Emira (galamutu), and across into Halia of northern Bougainville (garamuts). In West New Britain, the final consonant disappears, so that the term is galamo in Lakalai and its closest relatives, and then further west the first vowel changes, producing Kove Gilamo and related terms in New Guinea (Kairiru giram, Manam giramo). Terms in the Admiralties, such as Bipi drami, could be cognate only if they had changed considerably from a proto-form which, for western Melanesia, must have been something like *nk(a,i)ram(o,u)t. (Blust, however, postulates POC *lali 'slit gong' based on cognates in the Admiralties, Fiji and Polynesia.) Other terms recorded farther south, in the Solomons and Vanuatu, are very different.

Niles notes that some have suggested derivation from PAN *girin 'bell, gong' (which has also been given as the source for POC *kidi 'ring a bell, beat a drum'). If so, there have been innovations in form and, I assume, meaning; though slit gongs do exist in Indonesia, I would expect reflexes of qirin to refer to metal gongs of a very different shape. Because of the odd distribution of the instruments, Niles has suggested that they are correlated in western Melanesia with a pre-Lapita settlement of Oceanic speakers (1983:98).

I do not know of any reconstructed term for POC that means 'to sing'. 11 Terms differ widely from one area to another; the few observable cognates are very limited geographically, even when they cut across boundaries postulated for major subgroups (as Lakalai bau, Kove vou, Gitua bwau).

The term for the famous Polynesian dart game, and for the dart, *tika in PPN, has, according to Grace-Lincoln, cognates only in Fiji, Rotuman and Nggela. I have been able to find no others, and suggest that this is another term that should be ascribed to a lower level than POC. The only other game for which I have comparative data is string figures. These are made throughout Oceania, and the relation between Kove wawaina and EP *fa(q)i looks suggestive. The difficulty is that the words are very close to those for 'weave' (e.g. Kove wai, wawai 'to make a basket, plait leaves for a door') and so may represent independent invention.

2.2 RELIGION

Several terms can undoubtedly be attributed to PMN. One, which derives from PAN, is *qanitu 'ghost (of the dead), evil spirit'. Melanesian examples include Kove anitu, Lakalai (la) hitu. (I assume that in Lakalai metathesis was followed by assimilation of the first syllable to the article la, from POC *na.) In the Shortlands, the term is nitu. It seems probable that the name of a major god or gods along the Rai Coast of New Guinea and also among the Mengen of East New Britain, Anutu or Anut, is a variant of this. Blust, who overlooked my mention of the Kove form (Chowning 1973:198), mentions Wuvulu aniqu 'ghost' and Wayan anitu, the latter supporting his conclusion,

¹¹Blust tells me that he has reconstructed such a term, of which Molima wali is a reflex.

with which of course I agree, that "the sporadic loss of the nasal in PPN *'aitu 'ghost, spirit' postdated the breakup of Proto-Oceanic" (Blust 1978:10). Pawley (1985) also discusses a POC form *taumate, literally 'dead person'. Although terms derived from this may mean 'ghost', they often just mean 'corpse'. I am dubious about whether this term originally pertained to the religious realm.

Another term is *qanunu 'soul, shadow, reflection'. Nowadays reflexes are usually the word for 'photograph'. A reduced form of this, *nunu, had previously been reconstructed (Grace-Lincoln), reflecting the form found from the Shortlands south (compare loss of the first syllable in Shortlands nitu with nunu); it is reconstructed for Proto Malaita by Levy and Smith (1969). The short form is also recorded for Ulau-Suain, on the New Guinea coast. But the forms that require an initial syllable include Lakalai halulu, Molima 'anunu, Bwaidoga and Kove anunu, and Manam anunuka 'shadow'. This last may, of course, also point to the presence of a final consonant, but since it is not reflected in either Kove or Molima, both of which often preserve POC final consonants, I have not postulated it. Blust (1978:6) reconstructed *(q\$\theta\))anunu. I am not sure whether reflexes of the term are found south of the Solomons, but a few terms from Vanuatu languages look plausible. These include Efate anu-na (and Macdonald also cites 'Malekula' nunu) and Kwamera nanumu- 'spirit, ghost, shadow, image, reflection'. In Kove and Sengseng, reflexes of *qanunu are also the term for 'dream', used as in Kove anunu-Gu la 'my anunu goes = I dream', but since there is good evidence for another POC word for 'dream', *nipi, this may just be a localised idiom. Like Grace-Lincoln, I am inclined to connect *qanunu, at least as regards the meaning 'shadow', with PAN *ali(n,n)u 'shadow'.

Blust has also postulated PMP *qatuan 'deity', connecting WMP terms for 'lord', such as Malay tuan, with Polynesian terms which derive from PPN *qatua 'deity'. The link between these differing forms is Emira otuana 'spirits' (Blust 1984:41). (In Mussau, however, the same word means 'snake'; Blust 1984c.) I am not very happy about the postulated connection or the gloss. It seems surprising that no other Melanesian cognates have been identified (but see below). If they are located, I should not expect the term to mean 'deity'; one of the differences between Melanesian and Polynesian religions is the scarcity, and often the complete absence, in Melanesian systems, of any beings powerful enough to be given that label (see Chowning 1986). If the Emira term is indeed a cognate, I would expect the POC term originally to have designated spirits that were not of human origin, with 'deity' a special development of PPN. It might however be worth taking a look at a term *qadua 'soul' postulated by Capell (1943) and included in Grace-Lincoln. All of the reflexes come from the Milne Bay region (e.g. Molima yaluyaluwa), and so do not justify reconstruction for POC. Furthermore, tempting though it might be to suggest a connection between *qadua and Emira otuana, the likelihood of cognacy is small, judging from the reflexes that Ross gives for POC consonants in Emira.

A completely uncontroversial POC term is *tampu. Reflexes of it are found throughout Melanesia, as well as in Polynesia. My data suggest that the greatest complexities of meaning are found in the eastern region (see Keesing 1982), but this impression may only reflect the rather limited range of meaning that reflexes have in languages I know. For example, in Molima tabu- (with a suffixed possessive) refers only to food tabus, and in Kove, also with a suffixed possessive, tavu- refers to tabus on some foods, on saying the name of certain affines, and on other types of behaviour. (In both cases, the tabus relate to kin ties.) Nevertheless the comparative data seem to justify the various glosses given in Grace-Lincoln: 'sacred, forbidden, ritual restriction protected by supernatural sanction'.

The situation is somewhat different as regards mana terms. Blust has corrected the *manan form in Grace (1969) to *mana($q\emptyset$), though without altering the earlier definition 'power, wind'. I am

dubious about whether a single form is represented here. Only in Milne Bay are there words like mana meaning 'wind', and it was Capell who argued that they are related to words meaning 'power' elsewhere. Furthermore, with a single exception not known to Capell, mana forms in Milne Bay do not refer directly to power. Because Blust (1978:11) cites it in support of his alteration of the final consonant postulated by Grace following Capell, it should be pointed out that Dobu bomana is properly boma-na, with the final syllable representing a suffixed third person singular possessive, a fact known to Capell as well as to Fortune (1932:233), who defines the term boma-gu as 'my sacred prohibition' as opposed to Capell's 'supernatural power'. Both of these men did relate the term to mana as it is used further east, and assumed that the Dobuans had mis-analysed the term, but I do not think we are justified in accepting this assumption. In fact, in an intensive search of the available material, Keesing found only one possible example of mana with the meaning in the west, ironically in a Milne Bay language, that of Tubetube (Keesing 1984). Here, however, the shape is anomalous, being written naManaMa, and the meaning contains no reference to the supernatural (Keesing 1984:147). Keesing argues throughout his paper that POC *mana did not necessarily refer to the supernatural. But apart from this Tubetube case, reflexes of *mana, often with religious connotations, are very much confined to eastern Melanesia, together with Polynesia. The question of the association of leadership with mana is discussed under 2.3.

2.3 SOCIAL ORGANISATION

The only two aspects that have been dealt with in any detail are leadership and kinship. To these I shall add, very briefly, only one other: gender relations.

2.3.1 LEADERSHIP

A general discussion of the topic of linguistic evidence for POC leadership patterns began only recently, with a paper by Pawley (1982). In it he challenged the common assumption, made famous in a paper by Sahlins (1963), that Melanesia, characterised by achieved leadership, the so-called Big Man system, contrasted with Polynesia, with an institution of chieftainship as a sacred, powerful, ascribed office. It had been pointed out that hereditary leadership was much more common in Melanesia than was commonly assumed (Chowning 1977; Douglas 1979), but a term for 'chief' had been reconstructed only for PPN (*?ariki) (Biggs, Walsh and Waqa 1970). Beginning with an apparent cognate of PPN *?ariki in Arosi which designated the chief's firstborn son and heir, Pawley went on to reconstruct two POC proper nouns, *qa-lapa(s) 'Great One' (originally designating the chief) and *qa-diki 'Little One', designating his successor (*qa marks a personal name or title). *qa-diki then became the Polynesian term for 'chief', *qa-lapa(s) being retained only in various parts of the Solomon Islands, extending as far north as Mono-Alu.

In 1986 Lichtenberk challenged this scenario on several grounds. First, he changed the reconstruction of *qa-lapa(s) to *ta-la(m)pat, but still ended up with a term meaning 'Great One'. He pointed out, however, that such a meaning would not distinguish a chief from a Big Man; reconstructing it gave no decisive evidence for the existence of chieftainship. (The Big Man system is so-called because the titles so often have that literal meaning – see Chowning 1979.) He also suggests that *qa-diki should be *qa adiki, and that the original meaning was 'eldest child', pointing to the importance of primogeniture in POC society. There are, however, some difficulties with this reconstruction. The reflexes of *qa adiki that he cites nowhere mean 'oldest child' (though see below). In Malaitan languages they mean 'unmarried girl, daughter', which Lichtenberk thinks is

(along with the Arosi reflex) likely to be derived from 'oldest child'. I do not find this derivation persuasive. Furthermore, Lichtenberk overlooks cases cited by Codrington (1885:64) in which there are apparent cognates in various places outside the south-east Solomons with the general meaning 'child'. For example, Codrington gives karik for Efate; Macdonald has variants kariki, karikiki. While I could not confirm from Lanvon-Orgill Codrington's suggestion of a cognate form in Tolai ('New Britain'), I was struck by the resemblance to Kove Galiki, which designates both a girl in seclusion after her ears have been slit (the house in which she is kept being called *luma Galiki*), and an unmarried heroine in stories. The same term appears in Bola stories and is translated 'Mädchen' (Kroll 1938), but I suspect that this may be a borrowing from Kove. The comparative evidence seems to suggest that the initial consonant was part of the root, and that perhaps the word originally meant 'child (not 'offspring') especially girl'. This seems especially likely if the word indeed incorporates the POC root for 'small', since there is no reason to stress the smallness of a firstborn; cf. Lakalai guliliki, Bola guriki 'child' (and perhaps Mussau aliki 'child' - Blust 1984c). The suggestion that girls in particular were designated would, however, be contradicted by Pawley's reconstruction of a POC term *nkeni with this meaning, unless this was a term for 'unmarried woman' (Pawley 1985:101).

There is, however, one piece of evidence to support Lichtenberk's hypothesis. Scaletta (1987), writing of the Bariai (her Kabana), whose language is very close to Kove, says that originally galiki designated firstborn children of both sexes, whereas now it is only a personal name for a firstborn daughter. (In Kove, a group of sisters in a story can all be referred to as Galiki (pl. GaliGaliki) so there is no trace of such a meaning there.) I remain reluctant to assume that the proto-form necessarily designated firstborns. (I also dispute Lichtenberk's assumption that the word was a kinship term, at least outside Polynesia (Pawley 1981:284). In the languages I know it is a title which does not take the suffixed possessive of kinship terms.) I do not dispute that firstborns are often singled out, though not only by AN speakers; compare the Siuai (Oliver 1955). In some languages the term for firstborn is the same as or derived from the word for 'first, precede' which is usually reconstructed as *muqa; 12 cf. Kove muGaiai (muGa 'precede') and Ambrym mo, with both meanings (Paton 1973). Whether or not he has succeeded in reconstructing a word for firstborn, however, I fully agree with Lichtenberk (1986:353) that: "At present there is no convincing linguistic evidence to determine whether leadership in Proto-Oceanic society was of the chiefly or the big-man type".

Nevertheless, in recent years the assumption that POC society had hereditary leadership associated with *mana* has become widely accepted, as by Keesing (1984) and Kirch (1984). Both of these cite Pawley in support. Keesing (1984:15) wrote as follows:

those entitled to lead presumably had to demonstrate, by success in war, skill in leadership and resource management, and proper conduct, that they had the support of the supernatural invisible beings, gods and ancestors on whom life depended. Such success was continuous visible evidence that the leader himself was mana or 'had mana'.

There are, however, several difficulties about Keesing's interpretation. First, it is at odds with the assumption (made by Kirch as well as by Pawley) that mana was tied to seniority of descent so that normally the senior man in the senior line was superior in this respect; he did not have to demonstrate it to achieve office. Second, the assumptions made about the nature of POC religion are not justified

¹²Considerable evidence (e.g. Lakalai muga, Kove muGa) indicates that at least in the west, a form should be reconstructed like *munka as an alternative to *muqa. Lincoln (n.d.) discusses the problem as regards Gedaged.

by the cross-cultural evidence. Even where hereditary leadership was found in western Melanesia, it often had nothing to do with gods or ancestors; to the extent that religion was involved, what mattered was control of powerful magic, including sorcery. This was the case in, for example, the Trobriands, Mekeo and Kove. Earlier in the same article Keesing had demonstrated that except in some parts of eastern Oceania, particularly but not exclusively Eastern Polynesia, mana had little or no explicit connection with supernatural beings. Consequently he, like Pawley, shows an eastern bias in making these links. To Lichtenberk's statement about the absence of linguistic evidence for hereditary leadership it is necessary to add another caution: we have no linguistic evidence that POC society had a concept called mana that pertained either to gods and spirits, or to primogeniture. Neither do we know that life was thought to depend on "gods and ancestors". Though it might be argued that in the west concepts were affected by contact with NAN speakers, in fact gods and ancestors were considerably more important in some societies with NAN languages than among OC speakers (see Lawrence and Meggitt 1965; Chowning 1986).

2.3.2 KINSHIP

In discussing Blust's (1980) paper, Grace points out that kinship terms offer particular problems of reconstruction because the AN-speaking area contains so many different kinship systems. "As a consequence, the original meanings of some of the original terms must not have been preserved under any name in many Austronesian languages" (Grace 1980:235). This warning needs to be kept in mind in reading what follows. Some of the terms to be discussed (such as *tama and *natu) so consistently include the same kin in a wide variety of languages and within differing systems that there is no serious question about their original meaning in POC, though the range of meaning may be disputed. For some others, the suggestions are necessarily more tentative.

The first person to consider POC kinship was Milke, who in 1938 and 1958 reconstructed a series of terms based on those recorded for all of Oceania. Later he added a few terms that he thought were confined to the western end of the region, his Proto New Guinea Austronesian. Subsequent writings on the topic have tended to deal either with wider considerations, such as 'Early Austronesian social organization' (Blust 1980) or narrower ones, such as 'Sibling classification in Oceania' (Marshall 1984), rather than with complete systems. For POC, Milke's reconstructions are sometimes simply cited without much comment or alteration (e.g. Pawley and Green 1984:132). Yet it has long been clear that there are considerable differences between the kinship terminology of most of Melanesia and that of Polynesia. Pawley is the only person known to me who has discussed some of these differences, including pointing out how PPN diverges from what he calls both POC and PMN (1981:284). His chart nevertheless contains omissions, such as *rawa (see below). It therefore seems worth discussing the Melanesian terms in more detail.

2.3.2.1 CONSANGUINEAL TERMS

The consanguineal terms that I propose are as follows:

(a) *t(i,u)mpu - kin two generations removed (grandparent, grandchild). Although Blust (1980: 214) mentions the varying vowels in the PAN and PWMP root, I am not aware that the POC form has been so reconstructed, but there are a number of languages that contain i, ranging from some in Ross's North New Guinea cluster, such as Gitua timbu-, to Maori tipuna. It is necessary to propose an alternative to the usual *tumpu. Although an alternative term for

'grandchild' has been proposed (see below), reflexes of the term just proposed are so often self-reciprocal that it is difficult to avoid attributing this meaning to POC, and indeed Blust (1980:214) attributes it to PAN.

- (b) *tama Fa, FaBr.
- (c) *tina Mo, MoSi.
- (d) *matuqa MoBr. Here I am accepting Milke's word for the distribution of this term, with this meaning, throughout Melanesia, from the New Hebrides and the Solomons to New Ireland, including Tolai of New Britain.
- (e) *(qa)lawa. This term, with the shape *(a)lawa, was originally reconstructed by Milke for 'SiCh, man speaking'. Later, because of Lakalai hala, he emended the reconstruction but kept the definition. But in Lakalai and other languages known to me that contain a reflex of the term, such as Kove waha, it is a self-reciprocal for MoBr as well as SiCh (man speaking). In Kove it is also the term for FaSi. I suspect that Milke was avoiding the problem of reconstructing two terms for the same kin type by so limiting his definition. With our present evidence, the double set seems unavoidable. We should, however, note that *matuga almost surely derives from the same root that means 'mature' (in Tolai, however, Lanyon-Orgill's dictionary shows a distinction between the adjective matuka and the kinship term matua-). It seems clear that in AN languages in general, *matuqa referred to a wide range of senior kin (see Blust 1980; Chowning 1980) – as witness its use in parts of Polynesia as the general word for 'parent' (PPN *matuga). It may be that the MoBr, rather than some wider, referent for this should not be ascribed to POC. On the other hand, reflexes of the *qalawa form seem rarely to mean anything else except MoBr or other cross-relative of the first ascending or descending generation. What seem to be almost wholly lacking are languages in which the term for MoBr reflects *matuga and that for SiCh reflects *galawa. (In some cases, especially with some Vanuatu languages, I am not sure whether either term reflects the proto-form.) It should be noted, however, that some of Milke's examples are misleading. Tolai matua, for example, is defined as including 'nephew or niece, also uncle or aunt' (Lanyon-Orgill 1960). Whatever the term may be, it is common to find that the one for MoBr is the same as that for SiCh. Examples in Rivers (1914) come from the Torres Islands, Ulawa and Lau, and various other parts of the Solomons. It is the case in Molima where the term, ova, is not cognate, as well as in Lakalai and Kove, and seems on the whole (judging from my recollection of collecting kinship charts at the University of Papua New Guinea) to be a common pattern in western Melanesia. If it is historically correct that *matuga designated only cross-kin of senior generation and *qalawa only those of junior generation, then the widespread development of self-referential terms in the west led to either of these applying to both generations (see Torres Islands meru/maru as an example which presumably reflects *matuga). In this respect languages from Vanuatu eastwards seem to contrast with those spoken further west.¹³
- (f) *natu child of self and siblings, especially those of one's sex. Milke and Pawley have both discussed this as a specifically Melanesian term, although Blust has suggested that its use extends westwards. This is a term that does not appear in Polynesia.

¹³In addition to these, Blust postulated POC *dawa (now *rawa- pers. comm.) 'MoBr/SiCh (man speaking) (recipr.)' together with a "Proto-Eastern Malayo-Polynesian term *dawa ... meaning 'child-in-law'". These data are cited as part of his argument that at the PMP level, a single term was used for SiSo and DaHu (man speaking) (Blust 1980:213-214). Because I think, unlike Blust, that rawa was primarily an affinal term, I have discussed it under that heading.

- (g) *makumpuis listed by Pawley as a second term for 'grandchild' together with his *tumpu. The former term is almost wholly limited to regions from Vanuatu eastwards; cf. PPN *makupu/na. Milke, however, records it for the Admiralties as well, but that still leaves it outside WOC as defined by Ross (1988). Nevertheless, if Admiralties languages developed quite separately from those spoken further east, as Ross assumes, then any form found both in the Admiralties and Polynesia must be POC. Furthermore, Blust (pers. comm.) tells me that there "are also non-OC reflexes of PMP *makempu 'grandchild'". Here again we find a tendency in the western part of Melanesia, including all of the Solomons (see examples in Rivers) towards a single self-referential grandparent/grandchild term (or occasionally two terms reflecting sex differences), as opposed to a pattern in which the generations are distinguished. It is only a tendency, in that separate terms are used in many areas, but I know of no examples in which a *makumpu term is used for 'grandparent'.
- (h) *t(o,u)ka older sibling, especially of same sex. This was originally reconstructed by Milke as *tuqaka. Blust rejected this and proposed *toka instead, together with *tua, for POC (1984a:626). He does not discuss the similarities between these, but in (1984c:202) gives *tuka alone. A number of Solomons languages justify reconstruction of a form in which -u is followed by a stop, so for the present this seems the best solution.
- (i) *tansi younger sibling, especially of same sex. This term has been accepted from the time of Milke's original formulation on.
- (j) *maRuqane brother, woman speaking (Blust's spelling; Pawley has *mwaqane).
- (k) *(pa)pine sister, man speaking. I have modified Pawley's spelling, which lacks brackets, to allow for those languages such as Lakalai (hata-vile) in which the first syllable is absent, as is the case in most Polynesian languages (see list in Marshall 1984). I had earlier argued (Chowning 1984) that because these terms literally mean 'male' and 'female', their application to cross-sex siblings might have represented multiple innovations in different Oceanic languages, but I have been persuaded by others commenting on Marshall (1984), and by the distribution of these terms, that both (j) and (k) should be attributed to POC.
- (1) *I(i,o)pu cross-sex sibling. Milke originally reconstructed this, as *Iibu, *lobu, for PNGA (1965), and essentially he was right. With one possible exception, Kosrae of Micronesia, where the term is (ma) louk (Marshall 1984:621), terms reflecting this are confined to the north coast of New Guinea, neighbouring parts of New Britain, and offshore islands, including those of Milne Bay. Vitu livu, cited by Milke (1965:345), is the only example very far from New Guinea. Ross (1988:187) has suggested that *lopu is the POC form and *lipu an innovation in his Proto North New Guinea. Since he assigns Vitu to Meso Melanesian, I assume that he is postulating borrowing in that case, as I am also inclined to do. Unless the Kosrae example can be demonstrated to be cognate, I am reluctant to assign this word to POC. At best, it belongs to western Melanesian.

It has been impossible to reconstruct a proto-form for 'cross-cousin', even though many languages of Melanesia (as opposed to Polynesia) distinguish them terminologically from siblings and parallel cousins, who are almost always (except in Crow and Omaha systems) called by the same terms as siblings.

Pawley, following Blust, has also included, though with a query, a term for FaSi *aya. I have already explained (Chowning 1980:222), my objections to this reconstruction, and so I have not included it in my list.

2.3.2.2 VOCATIVE TERMS

All of the terms that I shall be discussing have already been reconstructed by others. All I am doing here is bringing the material together, and in one or two cases arguing for the exclusively vocative nature, or the best gloss, for the term. These are the words that anthropologists call 'address terms', used in speaking directly to the person, as opposed to 'reference terms'. In my experience of looking at word lists for languages that I know, the former are often collected, doubtless because the questioner asks, 'What do you call your father?' and receives the equivalent of 'Daddy'. Within Melanesia, address terms vary more than do reference terms, and carelessness in this matter obscures the presence in many languages of reference terms derived from POC. Nevertheless, it is possible to reconstruct several terms for POC.

- (m)pu(m)pu 'grandparent, grandchild'. This appears in Grace (1969) with a credit to Capell (a) (1943), as *(mpu)mpu. More recently Blust has provided evidence that the term *bubu (of interest to him because it unites kin of 'alternating generations' as the reference terms he reconstructs do not) can be reconstructed for PAN (Blust 1980:219). This term extends throughout Melanesia, and also occurs in Polynesia (e.g. Tikopia pu). My modification of the proto-form reflects the fact that in much of western Melanesia, the vocative form does not seem to reflect the presence of the nasal, even when the reference term does. See for example Lakalai pupu (voc.), tubu- (ref.); Gitua pupu (voc.), timbu- (ref.); Molima pupu (voc.), tubu- (ref.); Namatanai pupu (voc.), tubu- (ref.) (Peekel cited in Rivers 1914). The exception is the one case cited by Capell, that of Motu bubu e (voc.), tubu- (ref.). In eastern Melanesia, as in Polynesia, neither term reflects the presence of a nasal in the proto-form, with the possible exception of Fiji, where a term mbu is used to address the grandmother only, 14 (Here I have ignored the fact that in a few cases, including Motu, there is no evidence in the publications that the term is also used for descending generations. It was a long time before I heard that usage in Lakalai, and I suspect that some of the data cited by others may not be complete.) Were it not for the discrepancies between vocative and reference forms in so many western Melanesian languages, and for the non-Oceanic witnesses, I would be inclined to assume that this term represented an abbreviation of the reference term (see below). Blust (1980:214) argues that for PWMP, the vocative term is the original, the *t- of the reference term being an accretion, so reversing my argument. His vocative contains a nasal.
- (b) mama 'father'. This appears in Grace-Lincoln, glossed as 'FaBr, Fa, daddy', with a reference to a PAN term *mama 'MoBr'. Witnesses include Gedaged, Motu, and Roviana. Even a cursory search of the literature indicates that the gloss should indeed be only 'daddy'; mama is the vocative term for 'father' along the entire Rai Coast, as in Gitua, and also in Lau and in Nggela. For possible origin, see under (c). Blust (1981) attributes this form to PMP.
- (c) nana 'mother' was reconstructed by Blust as a possibility, but he also presents the evidence for a competing form *ña[] which can more certainly be given "the meaning 'mother' (voc.)" (Blust 1978:57-58). Together with *mama and, more tenuously, with *(m)pu(m)pu, this suggests a pattern in which a term which might also have been a baby-talk form was composed by reduplication of the second syllable of the reference term.

¹⁴Blust (pers. comm.) has reminded me of Fijian *i tubutubu* 'origin, parents, ancestors'. I had been assuming that the term derived from the verb *tubu* (from POC *tupu 'grow'), under which it is listed, but clearly it may well derive from *t(i,u)mpu.

- (d) In addition to these, Milke (1965) mentioned a special vocative term, *wawa, to accompany the MoBr *waya reconstructed for PNGA. I have argued that *waya may be related to his POC *qa(lawa) (Chowning 1973), but as far as I know this vocative is indeed restricted to the general area for which Milke recorded examples the north coast of New Guinea, extending over to New Britain (Kove waha- (ref.), wawa (voc.)). Whatever the status of the reference term, the vocative term seems to coincide roughly with Ross's North New Guinea cluster, and may be an innovation of that group.
- (e) Milke (1958) also reconstructed *kaka as the address term for 'older sibling'. Since Blust, in rejecting Milke's reconstruction of the reference term *tuqa(ka) has proposed another, *toka, that ends with the same syllable (Blust 1984a:626), the argument that this fits the pattern of reduplicating the final syllable might still be made. The vocative term is widespread in Melanesia, at least from Motu to Bugotu, and because Blust (1984a:626) records its presence outside the OC languages, there need be no question about attributing *kaka to POC.

2.3.2.3 AFFINAL TERMS

Only four of these have been reconstructed, and three appear as Melanesian terms in Pawley and Green. The only point of interest here is the distribution of two of the terms.

- (a) *ansawa 'spouse'. This was reconstructed by Milke and is fully acceptable.
- (b) *qipaR 'spouse's sibling of opposite sex' (man's brother-in-law, wife's sister-in-law). Milke had reconstructed this without the initial consonant, but it is required by a considerable body of data (e.g. Lakalai hiva, admittedly with a doublet iva). Grace-Lincoln, though they omit the initial consonant, note that Dempwolff reconstructed it. Here I follow the spelling in Ross (1988), but note that there is some evidence for *q(e,i)paR. See, for example, Kove and Molima eya. (Alternatively, this may reflect a different western term.)
- (c) *puŋao 'parent-in-law'. Here I follow the spelling in Pawley (1981) and Pawley and Green (1984); Grace-Lincoln have *puŋo. There is no difficulty with the meaning of this term, originally reconstructed by Milke, but with its distribution, which seems to be wholly confined to eastern Melanesia and Polynesia. Competing with it in the west is:
- (d) *rawa (Ross's spelling, with the same meaning). Possibly it should be *raua, to account for Lakalai and Shortlands loa and Kove lauwa. Milke, who first proposed the term, thought that it was restricted to his PNGA (1965:345). I pointed out that Rivers had recorded it well away from New Guinea (Chowning 1973; see also Blust 1980:213) but I had not appreciated that reflexes of *rawa seem to be wholly confined to the western region as delimited by Ross and by Tryon and Hackman. That is, they include the northern Solomons but do not extend south and east. On present evidence, *rawa and *puŋao are in complementary distribution.

2.3.2.4 DESCENT GROUPS

There is no agreement at present about whether descent groups can be ascribed to PAN society, and if so, what they were like (see Blust 1980, including Comments, and also Fox 1988). Nevertheless, they are almost universal in Melanesia, as well as in Polynesia and Micronesia (for a survey, see Oliver 1988). Blust has suggested that PAN *Rumaq 'house' had a secondary meaning 'lineage', but gives no examples from Melanesia. I do not know of any, and have the impression that

the most common metaphorical extension is 'rope', in NAN as well as AN languages. Two terms relating to kinship groups have been reconstructed for eastern Oceania only. One is *qapusa, defined in Grace-Lincoln as 'to sire a family, accumulation, descendants'. The second gloss seems intended (by Milke, who proposed this in 1961) to justify connections with PAN *qabusa, on the one hand, and with Arosi qahuta 'all, whole' on the other. Neither of these has anything to do with kinship, though they (if indeed they are cognate with each other) certainly have cognates elsewhere in Melanesia, such as Molima yawu- 'all' (with a suffix varying for number). The comparative data point to a very narrow distribution for reflexes of *qapusa, which only in Fiji, yavusa, refers to a descent group. I have, however, postulated that Kove kabu 'patrilineage' may be cognate. The shape of the Kove word, which is the same in Kaliai (Lusi), does not suggest direct inheritance, but I do not know which other language in West New Britain might have been the source. If the Kove and Fiji terms are indeed cognate, then they would justify a gloss referring to descent groups for POC.

Goodenough (1955) pointed to cognate terms in Micronesia and Polynesia describing descent groups, and Pawley has recently written more on the subject. He reconstructs the term as *kainana or *mata kainana and defines it as a 'landholding descent group'. He suggests that the term is particularly likely to be derived from POC *kai(n) 'native of a place', attested with that meaning for Fiji and Arosi – and so of course raises doubts about whether it really refers to a descent group. Certainly it does not in many Polynesian languages (see list in Pawley 1981), though where it does not, it can, as he notes, label those "under the authority of a chief". While he says that "we may reconstruct *kainana 'high-order descent group' in the language immediately ancestral to Polynesian and Nuclear Micronesian" (1980:237), he does not mention Efate kainaga. Macdonald (1907) had proposed that the term was cognate with Samoan 'aina. If this is not a borrowing from a Polynesian language, then it certainly constitutes a Melanesian witness. It is, however, only because Pawley (1980:237) believes that "Polynesian and Nuclear Micronesian branches diverged perhaps 4,000 years ago" that he seems willing to attribute this term to POC, with the implication that the term dropped out throughout Melanesia, apparently because the hereditary chieftainship which he also attributes to POC society dropped out as well. But since hereditary chieftainship is in fact found in various parts of Melanesia that lack a term cognate with *kainana (Mekeo, Manam, the Trobriands, Kove, just to mention a few examples on or near New Guinea), this scenario is not persuasive. For the present, I prefer to attribute *kainaga to a lower level eastern branch than to POC. It is worth noting that Goodenough has more recently (1985) suggested that the term originally referred to a land-holding unit rather than a descent unit.

It is just possible that one other term points to the existence of descent groups. POC *tuRaŋ is defined in Grace-Lincoln as 'companion', and this is certainly its meaning in a number of languages (Motu, Wedau, Gedaged, Roviana, Nggela). In some languages, however, it is a kinship term. Examples include Proto Malaita *ula- 'kin term- sibling, distant classificatory kinsman' (Levy and Smith 1969); Tolai (with matrilineal descent) tura 'man's brother, MoSiSo' (apparently). In Lakalai tula includes 'co-wife', women whose husbands are brothers, men whose wives are sisters (though Lakalai lacks moieties). In Bola it is the term for cross-cousin. The term might originally have referred to a member of one's descent group, but also perhaps to collateral kin of any sort. Apart from indicating that in POC society, there was a special relation between MoBr and SiCh (man speaking) – a situation found in a variety of kinship systems, including non-unilinear ones – all that can be clearly deduced from POC kin terms is that probably POC society did not prescribe marriage with kin in certain categories; otherwise the terms for affines would be the same as terms for 'consanguineal' kin. (Here I stick to the position in Chowning 1980, contra Blust 1980, that the POC terms for MoBr, etc. and child-in-law, etc, are unrelated.)

Even if we could attribute *kainaŋa or *qapusa to POC, we would have no clue as to what kind of descent group or category might be represented. For the former, cognate terms designate a patrilineal group in Tikopia, a matrilineal one in Truk, and a cognatic one in Maori. Furthermore, the kinship terms reconstructed so far for POC do not solve the problem. If POC society had unilinear descent, one would expect either that a term for cross-cousin was reconstructible, or that many more of the societies would be like Truk and the Trobriands in having kinship systems (Crow, in these cases) that group cross-cousins with other kin types. I would also expect a reconstructible term for FaSi unless, as in Kove, she was called by the same term as MoBr, but this does not seem to happen in many Melanesian societies. Citing Indonesian evidence, Fox (1988:40) has pointed out that "it is possible to construct either a two-line terminology or a cognatic [bilateral, without descent groups] terminology from much the same array of terms". I endorse his warning about the difficulty of drawing inferences about wider aspects of kinship organisation from simply examining the terms.

2.3.3 GENDER RELATIONS

Another Melanesian characteristic is so-called 'gender antagonism'. Although it is common elsewhere in the Pacific for women to suffer certain restrictions – for example, to have to avoid contact with canoes used for deep-sea fishing – the belief that contact with women endangers not only a wide variety of masculine activities but also male health is particularly strongly developed in Melanesia. It does not occur in all societies, but is just as prominent where languages are OC as where they are not. The strongest restrictions are associated with menstruation and childbirth, particularly the blood shed in childbirth. Consequently I was interested to discover that the words for menstruation in Kove and Molima were reduplicated forms of *tampu: Kove tavutavu, Molima taputapu. I had expected to find similar terms in other languages, but have not succeeded. Possible though it might be that this meaning was a natural development from the term *tampu (see section 2.2), it must also be noted that in Malaita, a similar term has precisely the opposite meaning. For example, Kwaio abuabu designates the 'sacred area beside men's house' (which must be kept free of female pollution) (Keesing 1975, 1982). It is consequently impossible at present to reconstruct a PMN term *tamputampu with a unified meaning: presumably these are separate innovations in eastern and western Melanesia.

3. CONCLUSIONS

This exercise has produced conclusions that I had not anticipated. The most important is that the lexical data largely support Ross's (1988) hypothesis, based wholly on non-lexical data, of a division between what he calls Western Oceanic and other languages, lying mostly to the east, which he believes represent early departures from the New Guinea region. He also excludes from WOC the languages of the Admiralties and Mussau-Emira. These were classed with those of Polynesia and Micronesia by Milke (1958), but though Ross thinks that there may be a case for Micronesian connections he agrees with Blust (1978) that the languages of the Admiralties form a first-order subgroup of OC.

Because of the difficulty of distinguishing innovations that spread through the western region from retentions from an ancestral language, I am willing to label terms attested only for the west WOC only if it is understood that they may never have existed in the ancestor to the eastern languages and to those of the Admiralties. My data on the Admiralties are too poor to enable me to judge the position of those languages. As I noted in the Introduction, if for WOC (Ross's PWO) forms cognates are

found in languages to the west of New Guinea, then there is no difficulty about labelling terms POC even if they are no longer attested in the east. I also expect that cognates will be found in the east for many of the terms that now seem to be confined to western Melanesia, and such evidence would also warrant changing the label to POC. We need, however, to remember Ross's point about borrowing within the Solomons on the border between his two major groups; the evidence of cognates should come from further south.

The definition of EO as proposed initially by Biggs (1965), modified by Pawley (1972), and later amended by Pawley himself and other linguists, has led to uncertainty about its boundaries that leave me reluctant to use the term for the whole OC-speaking region exclusive of Ross's WOC. As modified by Lynch and Tryon (1985), 'Central Oceanic' includes all those OC languages excluded by Ross from WOC except those of the Admiralties. Whatever decision is made about terminology, it follows that PEO must not be equated with POC, and that the question of subgroupings at levels below POC or even PEO, must be kept firmly in mind, so that reconstructions can be labelled in accord with the present evidence. A system of numbers like that which Blust uses for PAN and its subdivisions would be a useful step in the right direction.

I should add that I would no longer argue, as I have in the past (e.g. Chowning 1973) that Lakalai, much less Kove, has particularly close ties with any EO language such as those of the southeast Solomons and Vanuatu. Accordingly, I feel that I can justifiably attribute to POC any pair of cognates shared between Lakalai or Kove and one of these eastern languages (see below).

Accepting Ross's WOC grouping solves certain problems of distribution that long puzzled me: sets of cognates widespread in languages that are not closely related to each other but are spoken in the general New Guinea region, and that seem not to occur elsewhere. An example is a word for Eclectus parrot: Molima kanavala, Kove kahaŋani, Sengseng kahalaŋ, Tolai kalaŋara; see also Kilivila karaga. Leaving aside some uncertainty about the order of the syllables, these are clearly cognate, but although the parrot itself is found in the Solomons, no similar words are recorded outside WOC, apart from a shorter term, *kara, reconstructed by Blust for PEMP, and presumably reflected in Roviana kara. (I assume that POC *kakaa is not a much-shortened version.) Presumably the longer term postdates the departure of the ancestors of speakers of eastern languages. My data generally support the suggestion of Pawley and Green (1984:144-145) that a single dialect chain was long maintained in western Melanesia, but it requires that those who settled eastern Melanesia (and Polynesia and Micronesia) acquired new lexicon that differed considerably from some of that used in the west.

Lest it be thought that I am postulating a radical break between eastern and western Melanesia, I should add that my data on non-cultural lexicon show a considerable number of shared cognates which justify assigning to PMN/POC various terms which have either not been reconstructed yet (to my knowledge) or which have been assigned to smaller divisions such as PEO. Examples include the following: *ipu 'head hair' (Lakalai ivu, Proto Malay *ifu); *maqono(ta) 'sweat' (Lakalai maholo, Raga mamaono, Navenevene and Tam (of Malekula) mamonota); *tue 'kind of shellfish' (Kove, Mengen, Nggela, Fiji); *pote 'willie wagtail' (Lakalai, Sa'a pote); *ponjponji 'morning' (a

reduplicated form of the word for 'night'); *kesa 'green, blue'. 15 Geraghty (1983:369) notes the relation of Fijian bogibogi to PPN *popipoqi, but my research, in collaboration with John Lynch, indicates that this is the only term for 'morning' that can be reconstructed for POC. Kove voqivoqi is an example from the west. Geraghty who reconstructs PEO *kesa 'dye', also cites as cognate Lakalai kesa 'painted with something unpleasant'. But that term means 'plastered with something unpleasant, such as excrement'; the cognates are the doublet, with reduplication, kakesa, kakisa 'green, blue'. Geraghty's gloss seems justified by the (non-Lakalai) cognates he cites, but the words mean specifically 'green', blue' in a number of widely separated languages, including Mota gesagesaga, and I think this is a justified gloss. I assume that unpublished data compiled by Blust, Pawley and others would add considerably to my own small collection of unpublished terms which are truly POC.

Finally, it needs to be remembered that here I am dealing with cultural items, assumed to be subject to borrowing much more than basic vocabulary is. We need not attribute a garamut-like term to the common ancestor of the separate 'clusters' that Ross (1988) calls North New Guinea and Meso Melanesian, which are spoken side-by-side, and indeed mixed in the Bola-Kove village of Kandoka. Wherever names for cultural items have a geographically limited distribution, regardless of whether the languages concerned belong to different first-order subgroups, we need to be very wary about assigning the item to an earlier stage of an ancestral culture. We know a good deal about the probable technology of POC society, but from linguistic evidence not a lot more, and in some cases less, than we could have deduced from the distribution of various items both in early historic times and in archaeological deposits. About other aspects of POC culture, we know very little. We do not know that the society possessed hereditary classes, chiefs or expert craftsmen, that special attention was given to firstborn children or seniority of descent lines, that there were gods or a concept of supernatural power called mana. We know that the people chewed betel, but it is much less certain that they drank kava. Apart from the special role probably given the MoBr, and the distinction of affines from consanguineal kin, we know no more about the kinship system than that they distinguished relative age and, almost surely, relative sex (compare Fox 1988 on Indonesia). 16

If we are to understand POC culture, we must not apply that label to items that, even if supported by a large cognate set, are not attested outside the Central Oceanic region, or some division thereof. We need to keep in mind Grace's cautions about his original list, particularly his statement about the perceived advantages "in including rather than excluding sets" for which the evidence was less than ideal, and his use of keys to the "putative proto-language". It was to be expected that some of the reconstructions would be dropped, and many emended. He is not to be blamed if some of us have assumed too readily that everything on the lists is undoubtedly POC. Without his contributions our present knowledge of the POC lexicon, and our ability to draw inferences from it, would be a fraction of what it now is.

¹⁵I do not dispute Blust's reconstruction of another term, POC *kadawa, with the same meaning. POC certainly possessed true synonyms, as evinced by the two words for 'yesterday', *ananapi and *noRap.

¹⁶I do not, however, accept Fox's suggestion that there is no justification for the "common division of Austronesian terminologies into consanguineal and affinal components" (Fox 1988:43).

BIBLIOGRAPHY

BARRAU, Jacques, 1958, Subsistence agriculture in Melanesia. Bernice P. Bishop Museum Bulletin 219. Honolulu: Bishop Museum.

BENDER, Byron W., n.d., Micronesian languages. Mimeo.

BIGGS, Bruce, 1965, Direct and indirect inheritance in Rotuman. Lingua 14:383-413.

BIGGS, Bruce, D.S. WALSH and J. WAQA, 1970, Proto-Polynesian reconstructions with English to Proto-Polynesian finder list. Working Papers in Linguistics, Department of Anthropology. University of Auckland.

BLUST, Robert A., 1978, *The Proto-Oceanic palatals*. Polynesian Society Memoir 43. Wellington: The Polynesian Society.

1980, Early Austronesian social organization: the evidence of language. Current Anthropology 21:205-247, 415-419.

1981, Variation in retention rate among Austronesian languages. Paper presented at the Third International Conference on Austronesian Linguistics, Bali, Indonesia.

1984, Austronesian etymologies - II. Oceanic Linguistics 22-23:29-149.

1984a, Comment on M. Marshall, Structural patterns of sibling classification in Oceania. Current Anthropology 25:626-628.

1984b, Malaita-Micronesian: an Eastern Oceanic subgroup? Journal of the Polynesian Society 93:99-140.

1984c, A Mussau vocabulary, with phonological notes. PL, A-69:159-208.

1986, Austronesian etymologies III. Oceanic Linguistics 25:1-123.

BUCK, Peter (Te Rangi Hiroa), 1958, The coming of the Maori. Wellington: Whitcomb and Tombs.

BULMER, S., 1982, Human ecology and cultural variation in prehistoric New Guinea. In J.L. Gressit, ed. *Biogeography and ecology of New Guinea*, 1:169-206. The Hague: Dr W. Junk.

CAPELL, A., 1943, The linguistic position of South-Eastern Papua. Sydney: Australasian Medical Publishing Company.

CHOWNING, Ann, 1963, Proto-Melanesian plant names. In J. Barrau, ed. Plants and the migrations of Pacific peoples 39-44. Honolulu: Bishop Museum Press.

1973, Milke's "New Guinea cluster": the evidence from northwest New Britain. Oceanic Linguistics 12:189-243.

1977, An introduction to the peoples and cultures of Melanesia, 2nd edn, Menlo Park, CA: Chandler,

1979, Leadership in Melanesia. Journal of Pacific History 14/1-2:66-84.

1980, Comment on R.A. Blust, Early Austronesian social organization. Current Anthropology 21:184-185.

1984, Comment on M. Marshall, Structural patterns of sibling classification in Oceania. Current Anthropology 25:628.

1985, Rapid lexical change and aberrant Melanesian languages: Sengseng and its neighbours. In Andrew Pawley and Lois Carrington, eds Austronesian linguistics at the 15th Pacific Science Congress, 169-198. PL, C-88.

1986, Melanesian religions: an overview. The encyclopedia of religion, vol.9:349-359. New York: Macmillan.

1987, The supposed Austronesian content of the Trans-New Guinea phylum. In D.C. Laycock and W. Winter eds A world of language: papers presented to Professor S.A. Wurm on his 65th birthday, 119-125. PL, C-100.

CHURCHILL, William, 1911, The Polynesian wanderings. Washington: Carnegie Institution of Washington.

1916, Sissano: movements of migration within and through Melanesia. Washington: Carnegie Institution of Washington.

CLARK, Ross, 1979, Language. In J.D. Jennings, ed. *The prehistory of Polynesia*, 249-270. Canberra: Australian National University Press.

CODRINGTON, R.H., 1885, The Melanesian languages. Oxford: Clarendon Press.

DOUGLAS, Bronwyn, 1979, Rank, power, authority: a reassessment of traditional leadership in South Pacific societies. *Journal of Pacific History* 14:2-27.

FORTUNE, R.F., 1932, Sorcerers of Dobu. New York: E.P. Dutton.

FOX, James J., 1988, Possible models of early Austronesian social organization. Asian Perspectives 26/1:35-44.

FRENCH-WRIGHT, Renwick, 1983, Proto-Oceanic horticultural practices. MA thesis, University of Auckland.

GERAGHTY, Paul A., 1983, The history of the Fijian languages. Oceanic Linguistics Special Publication 19.

GOODENOUGH, Ward H., 1955, A problem in Malayo-Polynesian social organization. *American Anthropologist* 57:71-83.

1985, Personal communication cited in Pawley 1985.

GRACE, George W., 1969, A Proto-Oceanic finder list. Working Papers in Linguistics, Department of Linguistics, University of Hawaii, 2:39-84.

1976, History of research in Austronesian languages of the New Guinea area: general. In S.A. Wurm, ed. New Guinea area languages and language study, vol.2: Austronesian languages, 55-71. PL, C-39.

1980, Comment on R.A. Blust, Early Austronesian social organization. Current Anthropology 21:235.

GRACE, George W. and Peter C. LINCOLN, 1979, Proto-Oceanic cognate sets. Computer printout.

GREEN, Roger C., 1979a, Early Lapita art from Polynesia and Island Melanesia: continuities in ceramic, barkcloth, and tattoo decorations. In S.M. Mead, ed. Exploring the visual art of Oceania 13-31. Honolulu: University of Hawaii Press.

1979b, Lapita. In J. Jennings, ed. *The prehistory of Polynesia* 27-60. Canberra: Australian National University Press.

GROUBE, L.M., 1971, Tonga, Lapita pottery, and Polynesian origins. *Journal of the Polynesian Society* 80:278-316.

HADDON, A.C. and J. HORNELL, 1975, Canoes of Oceania. Honolulu: Bishop Museum Press.

HUDSON, Elizabeth, 1989, All nggaun: Oceanic terms for 'dog'. In R. Harlow and R. Hooper, eds VICAL 1: Oceanic Languages, Part 1, 283-304. Auckland: Linguistic Society of New Zealand.

KEESING, Roger M., 1975, Kwaio dictionary. PL, C-35.

1982, Kwaio religion: the living and the dead in a Solomon Island society. New York: Columbia University Press. 1984, Rethinking 'mana'. Journal of Anthropological Research 40:201-217.

KIRCH, Patrick W., 1984, The evolution of the Polynesian chiefdoms. Cambridge: Cambridge University Press.

KROLL, H., 1938, Sagen und Märchen der Bola. Zeitschrift für Ethnologie 70:371-425.

LANYON-ORGILL, Peter, 1960, A dictionary of the Raluana language. Victoria, B.C.: privately published.

LAWRENCE, Peter and M.J. MEGGITT, 1965, Gods, ghosts and men in Melanesia. Melbourne: Oxford University Press.

LEENHARDT, Maurice, 1946, Langues et dialectes de l'Austro-Melanésie. Paris: Institut d'Ethnologie.

LEVY, Richard and Nathan SMITH, 1969, A Proto-Malaitan lexicon. Typescript.

LICHTENBERK, Frantisek, 1986, Leadership in Proto-Oceanic society: linguistic evidence. *Journal of the Polynesian Society* 95:341-356.

LINCOLN, Peter C., n.d., On Gedaged, Milke, and Proto-Oceanic. Typescript.

LYNCH, John and Darrell TRYON, 1985, Central Oceanic: a subgrouping hypothesis. In Andrew Pawley and Lois Carrington, eds Austronesian linguistics at the 15th Pacific Science Congress, 31-52. PL, C-88.

MACDONALD, D., 1907, The Oceanic languages: their grammatical structures, vocabulary, and origin. London: Henry Frowde.

MARSHALL, Mac, 1984, Structural patterns of sibling classification in Oceania. Current Anthropology 25:597-637.

MILKE, Wilhelm, 1958, Ozeanische Verwandtschaftsnamen. Zeitschrift für Ethnologie 83:226-229.

1961, Beiträge zur ozeanischen Linguistik. Zeitschriftfür Ethnologie 86:162-182.

1965, Comparative notes on the Austronesian languages of New Guinea. Lingua 14:330-348.

NILES, Don, 1983, Why are there no garamuts in Papua? Bikmaus 4/3:90-104.

OLIVER, Douglas, 1955, A Solomon Island society. Cambridge, Mass.: Harvard University Press.

1988, Oceania: native cultures of Australia and the Pacific Islands. Honolulu: University of Hawaii Press.

PARKINSON, R., 1907, Dreissig Jahre in der Südsee. Stuttgart: Strecker und Schröder.

- PATON, W.F., 1973, Ambrym (Lonwolwol) dictionary. PL, C-21.
- PAWLEY, Andrew, 1972, On the internal relationships of Eastern Oceanic languages. In R. Green and M. Kelly, eds *Studies in Oceanic culture history*, vol.3, 1-142. Honolulu: Bishop Museum Press.
 - 1978, The New Guinea Oceanic hypothesis. Kivung 21:99-151.
 - 1980, Comment on R.A. Blust, Early Austronesian social organization. Current Anthropology 21:236-237.
 - 1981, Melanesian diversity and Polynesian homogeneity: a unified explanation for language. In J. Hollyman and A. Pawley, eds, Studies in Pacific languages and cultures in honour of Bruce Biggs, 269-309. Auckland: Linguistic Society of New Zealand.
 - 1982, Rubbishman commoner, Big-man chief? Evidence for hereditary chieftainship in Proto-Oceanic. In J. Siikala, ed. Oceanic studies: essays in honour of Aarne A. Koskinen, 33-52. Helsinki: Finnish Anthropological Society.
 - 1985, Proto-Oceanic terms for 'person': a problem in semantic reconstruction. In V. Z. Acson and R. L. Leed, eds For Gordon Fairbanks, 92-104 Oceanic Linguistics Special Publication 20.
- PAWLEY, Andrew and Roger C. GREEN, 1984, The Proto-Oceanic language community. *Journal of Pacific History* 19:123-146.
- POLLOCK, Nancy J., 1984, Breadfruit fermentation practices in Oceania. *Journal de la Société des Océanistes* 79:151-164.
- RAY, Sidney H., 1907, Linguistics. Reports of the Cambridge Anthropological Expedition to Torres Straits, vol.3. Cambridge: Cambridge University Press.
- REICHARD, Gladys A., 1933, Melanesian design: a study of style in wood and tortoise shell carving. New York: Columbia University Press.
- RIVERS, W.H.R., 1914, The history of Melanesian society. 2 vols. Cambridge: Cambridge University Press.
- ROSS, Malcolm D., 1977, Relationships of the Austronesian languages of the Sepik and western Madang coast of New Guinea. Mimeographed.
 - 1988, Proto Oceanic and the Austronesian languages of western Melanesia. PL, C-98.
 - n.d., Lexicon of Proto Papuan Tip reconstructions. Computer print-out.
- SAHLINS, Marshall D., 1963, Poor man, rich man, big-man, chief: political types in Melanesia and Polynesia. Comparative Studies in Society and History 5:285-303. London.
- SCALETTA, Naomi, 1987, The first-born child as parental exemplar among the Kabana of West New Britain, Papua New Guinea. Paper delivered to the Association for Social Anthropology in Oceanic. Typescript.
- SELIGMAN, C.G., 1910, The Melanesians of British New Guinea. Cambridge: Cambridge University Press.
- SPRIGGS, Matthew, 1985, The Lapita cultural complex: origins, distribution, contemporaries and successors. In R. Kirk and E. Szathmary, eds *Out of Asia: peopling the Americas and the Pacific*, 185-206. Canberra: Journal of Pacific History.
- TERRELL, John, 1986, Prehistory in the Pacific Islands. Cambridge: Cambridge University Press.
- THURSTON, William R., 1987, Process of change in the languages of north-western New Britain. PL, B-99.
- TRYON, D.T. and B.D. HACKMAN, 1983, Solomon Islands languages: an internal classification. PL, C-72.
- WURM, S.A. and B. WILSON, 1975, English finderlist of reconstructions in Austronesian languages (post-Brandstetter). PL, C-33.
- YEN, Douglas E., 1973, Agriculture in Anutan subsistence. In D.E. Yen and Janet Gordon, eds Anuta: a Polynesian Outlier in the Solomons, 113-149. Pacific Anthropological Records 21. Honolulu: B.P. Bishop Museum.