

7 *Properties of inanimate objects*

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1 Introduction

The terms reconstructed in this chapter denoted properties of inanimate objects in POc. It is impossible to draw a clear line between the properties of inanimate objects and the properties of living beings as there are some properties, for example, ‘big’ and ‘small’, which were almost certainly used of both inanimate objects and animate beings. However, there are also many property expressions which were evidently used only of animate beings, and these are not considered here.¹

Oceanic languages make some distinctions between properties of inanimates and properties of animates that are not made in European languages, and vice versa. In most Oceanic languages there are distinct words for ‘old’ as applied to inanimate objects and ‘old’ as applied to human beings, and different temperature terms for the physical environment and for the human body. This appears to have been true in POc as well, where *[*ma*]*tuqa* ‘ripe, mature, adult, old’ was used of animates and POc **tuqa**Ri* ‘long ago, old’ and **rapu-ka* ‘old’ of inanimates.

Property words in European languages are typically adjectives. It is fairly certain, however, that POc did not have a separate adjective word class. Instead, it had a small subclass of nouns and a large subclass of verbs that were used to express properties (see vol. 1, pp.34–35). For convenience, I have named these adjectival nouns and adjectival verbs. The test of whether a noun or verb is adjectival is that it can occur without any additional morphology as the modifier of a noun. However, these subclasses have undergone various redistributions in different Oceanic languages, and this can sometimes make it difficult to determine whether a given reconstruction was a noun or a verb. Ross (1998a) gives a detailed study of the syntax of POc adjectival categories and of subsequent developments, and a second study (Ross 1998b) focuses on the fate of adjectival verbs and nouns in certain Western Oceanic languages.

¹ I am indebted to John Lynch for reading two drafts of a paper of which this chapter is a revised extract and for commenting in detail on South Vanuatu reflexes and for providing corrections and additional data. I am also grateful for comments by John Bowden, Bethwyn Evans, Françoise Ozanne-Rivierre and Andrew Pawley.

Languages in which there is no adjective class or in which there is a small class of adjectives or adjective-like words are fairly common among the world's languages, as Dixon (1977, 1982) has shown, and, if we count the small class of adjectival nouns as more adjective-like than adjectival verbs, then Dixon's generalisation extends to POc. Dixon divides properties into seven semantic categories: dimension, age, value, colour, physical property, human/animal propensity, and speed. In Oceanic languages, speed belongs with strength and toughness, a subcategory of physical property, and so I treat it thus (§5.3). Of Dixon's categories, I will here not discuss value ('good', 'bad'), human/animal propensity (e.g. 'kind', 'clever', 'happy', 'jealous', 'tame') or speed ('quick', 'slow'), as these are applied either entirely or generally to animate rather than to inanimate entities. The category of physical properties is a large one, and some of its subcategories will also be ignored here, for similar reasons.² This leaves the following semantic categories which include properties of inanimate objects:

1. dimension and distance: e.g. 'big', 'small', 'long', 'short', 'wide', 'narrow', 'near', 'far'
2. age: e.g. 'new', 'old'
3. colour: e.g. 'red', 'black', 'white', 'yellow'
4. physical property:
 - a. form: e.g. 'straight', 'flat', 'rough', 'smooth'
 - b. weight: 'heavy', 'light'
 - c. strength, toughness and speed: 'strong', 'weak', 'hard', 'soft'
 - d. content: 'full', 'empty'
 - e. temperature: e.g. 'hot', 'cold'
 - f. wetness and dryness: e.g. 'wet', 'dry'

This categorisation is somewhat *ad hoc*, but, other than colours, its terms situate the object they describe relative to 'a contextually determined standard of evaluation' (Croft 1990:260). These standards of evaluation are the basic human standards of dimension, age and so on. I add distance to Dixon's dimension category, as terms for 'near' and 'far' overlap with dimension terms in Oceanic languages.

Dixon assigns languages to one of three broad types with regard to the grammatical behaviour of their property terms. There are:

- A. languages like English, where there is a large open class of adjectives;
- B. languages like Samoan, where there is no distinct class of adjectives, but an open class of property terms which is a subclass of verbs;
- C. languages like Hausa, which have a closed, usually rather small, class of 'adjectives' and one or more open classes of property terms which are subclasses of nouns and/or verbs.

I have placed 'adjectives' in inverted commas in Type C because Dixon defines this class in terms of its meanings rather than in terms of its grammatical behaviour. In languages of Type A, there *is* an adjective class, i.e. a class of property terms whose grammatical behaviour is distinct from nouns or verbs. In languages of Type B, there is no such class. In languages of Type C, there is a closed class of property terms. Dixon does not discuss

² These include natural states, e.g. 'raw'/'unripe' (vol. 1, p.155), 'ripe' (vol. 1, p.157), 'rotten', and physical conditions of animate beings: (e.g. 'alive', 'dead', 'healthy', 'sick', 'hungry', 'thirsty').

their grammatical behaviour in depth, and one can envisage several subtypes of Type C, depending on (i) whether the members of the closed class are adjectives (i.e. behave differently from nouns and verbs) or form a subclass of nouns or verbs, and (ii) whether the one or more open classes are subclasses of nouns and/or verbs. He indicates, however, that the closed class is more likely to grammatically resemble nouns than verbs (1982:56). As I indicated above, POC was evidently a Type C language where the closed class was indeed a subclass of noun, the open class a subclass of verb.

One of Dixon's central findings is that in a Type C language, the members of the closed class usually belong to the semantic domains of dimension, age, colour and value. However, the converse is usually not true: not all property terms in these domains are adjectives. Instead, there are semantic oppositions where one pole is denoted by an adjective, the other by a verbal form. Often, the verbal form denotes the outcome of an event (e.g. *cooked*) whereas the adjective denotes the state prior to such an event (e.g. *raw*).

Basically, POC property terms conformed to these generalisations (Ross 1998a). The members of the adjectival noun class did indeed belong to the semantic domains of dimension, age, colour and value. However, they offer a small variation on Dixon's typology in that there were no underived adjectival nouns denoting colours. Instead, colour adjectival nouns were derived from other nouns (§4), a complication which apparently does not occur in any of the languages in Dixon's sample.

I have found twenty Oceanic languages which have a small property-term class for which a probably exhaustive list of underived members is available. The meanings represented in these small classes are listed below, together with the number of languages in whose small class each meaning is represented:

| dimension | | age | | value | | strength/toughness | |
|--------------|----|--------|---|--------------|---|--------------------|---|
| 'big' | 17 | 'new' | 9 | 'good' | 5 | 'hard, strong' | 1 |
| 'small' | 16 | 'old' | 6 | 'bad' | 4 | 'soft' | 1 |
| 'long, tall' | 6 | 'ripe' | 1 | 'true, real' | 2 | | |
| 'short' | 4 | | | 'beautiful' | 1 | | |
| 'thin' | 1 | | | | | | |
| 'far' | 1 | | | | | | |

Except for one language (Sye) in which terms denoting strength/toughness belong to the small class, these meanings all fall into the domains of dimension, age and value.

The small-class terms in the twenty languages for the three most frequent meanings, 'big', 'small' and 'new', are listed below:

| | 'big' | 'small' | 'new' |
|---------------|--------------------|----------------|---------------|
| Maleu | <i>amviŋe</i> | <i>kapori-</i> | — |
| Mangap-Mbula | <i>biibi</i> | <i>musaana</i> | — |
| Gumawana | — | — | <i>vau</i> |
| Tawala | <i>banei-</i> | <i>habulu-</i> | <i>wou-</i> |
| Saliba (Suau) | <i>woiyawaudoi</i> | <i>gagili</i> | — |
| Bali-Vitu | <i>kapou</i> | <i>kakauku</i> | <i>vahoru</i> |
| Nakanai | <i>uru</i> | <i>bisi</i> | <i>halaba</i> |
| Tigak | <i>lavu</i> | — | — |
| Halia | <i>pani</i> | — | — |
| Teop | — | <i>rutaa</i> | — |

| | | | |
|----------|-------------------------------|-------------------|---------------------|
| Zabana | <i>leyaha</i> | <i>rekaha</i> | <i>foforu</i> |
| Longgu | <i>b^weina, vae</i> | <i>kiki</i> | — |
| Tamambo | <i>tawera</i> | <i>vorivori</i> | — |
| Paamese | <i>haitamene</i> | <i>havivii</i> | <i>haiitee-haau</i> |
| Lewo | — | — | <i>viu</i> |
| Sye | <i>oroŋ, nmah</i> | <i>viroy</i> | — |
| Tinrin | <i>ḍoro</i> | <i>huwuu[-ṇã]</i> | <i>hãmã[-ṇã]</i> |
| Xârâcùù | <i>m^wĩĩ</i> | — | — |
| Mokilese | <i>soapoan, leklekin</i> | — | — |
| Bauan | <i>levu</i> | <i>lailai</i> | <i>vou</i> |

Although the same meanings occur in the small class across a number of languages, only for one of these, ‘new’, reflecting POc **paqoRu* (p.209), are the majority of the items cognate with each other. This means that the other meanings listed above, including ‘big’ and ‘small’, have remained in the small class in most of these languages, but that lexical replacement has occurred.

The practical consequence of these observations is that, among underived property terms, only POc **paqoRu* ‘new’ can be assigned to the class of adjectival nouns on the basis of this list. However, there is morphological evidence, noted below, that POc **lapuat* ‘big’ (p.197), **qitik/*qitek* ‘small’ and POc **riki(t,q)/*ri-riki(t,q)* ‘small’ (p.200) were also adjectival nouns.

With other underived items, we encounter the problem noted in volume 1, p.35: it is often impossible to assign a POc reconstruction to the appropriate word class. But the situation is not all gloom in this regard. One indicator of the class of a property term is derivational morphology.

Two morphemes occurred with some frequency in the derivation of these words, and others more rarely. The suffix **-ka* derived adjectival nouns, whilst the prefix **ma-* occurred in adjectival verbs. There is an important difference in the statuses of these affixes in POc, however. POc **-ka* was apparently a productive suffix (Ross 2000; see below, for example **[tubu]tubu[-ka]* ‘thick’ (p.208); **rapu-ka* ‘old’ (p.211); **keja-ka* ‘green’ (p.217)). PMP **ma-* was a prefix that derived stative verbs, often from abstract nouns, and occurred as a fossil in a number of POc adjectival verb forms (Evans & Ross 2001),³ for example, POc **mataq* ‘raw’ (vol. 1, p.155), **maosak* ‘ready to be eaten’ (vol. 1, p.157), **maqasin* ‘be salty’ (vol. 1, p.159, this volume Ch. 3, §7.8, and several below). In a good many cases, forms with and without **ma-* are reconstructable in POc, with no obvious difference in meaning (e.g. **[ma]lago* ‘long, tall’ (p.204); **[ma]lawā* ‘long, tall, far away’ (p.204); **[ma]tuqa* ‘ripe, mature, adult, old’ (p.211)).⁴

More rarely occurring derivational morphemes are POc **ka-*, a fossilised alternant of **ma-*,⁵ (Huang 2000, Zeitoun & Huang 2000); **pa-* and **paka-*, the productive POc

³ The story of **ma-* in Evans and Ross (2001) is better founded than that in vol. 1, p.25.

⁴ This circumstance is discussed at length by Evans and Ross (2001).

⁵ At a very early period (PAN/PMP), **ka-* was a morpheme that derived statives, whilst **ma-* was the corresponding finite form (from **⟨um⟩* + **ka-*; with regard to **⟨um⟩* see vol. 1, p.29). Thus Huang (2000:378) shows that in Mayrinax Atayal (Formosan) statives that take *ma-* in their declarative affirmative form take **ka-* in their negative form. Zeitoun and Huang (2000) show that in Pazeh, *ma-*statives have *ka-* in the irrealis (p.402), the imperative (p.406), and in non-‘actor’ focus forms of statives, e.g. *ka-kelem-an* ‘be oversalted (of cooked food)’ vs *ma-kelem* ‘be salty’ (p.407).

causative prefixes (vol. 1, pp.26–27), which were also used to form adverbs; and POc **ta-*, which was productive and derived agentless statives from dynamic transitive verbs.

The remainder of this chapter is concerned with reconstructed forms for POc property terms. In all domains except colour, property terms tend to fall into antonym pairs, and are presented here in these pairs wherever appropriate.

2 Dimension and distance

2.1 ‘big’/‘small’

It was noted above that lexical replacement of terms for ‘big’ and ‘small’ is common, whilst ‘new’ has tended to remain constant since POc times. A moment’s reflection shows that this is also true in English, apparently because people tend to exaggerate size and to play word games with the terms for it. As well as *big* we find *large*, *great*, *huge*, *gigantic*, *enormous*, *immense*, *colossal*, *mammoth*, *massive*, *prodigious* and more recently *ginormous* and *humungous*. However, what seem to have been the basic POc terms are reconstructable. They are **lapuat* ‘big, large, important’, **qitik*, **qitek* ‘small’ and **riki(t,q)* ‘small’, and the circumstantial evidence presented above suggests that they were adjectival nouns. This inference is moderately supported in the case of **lapuat* by the presence of two reflexes of the reduplicated intensified form **lap(u)-lapuat* (Tigak *lap-lavu*, Marshallese *l^wap-l^wap*) and one of a reduplicated plural form **la-lapuat* (Marshallese *l^w-l^wap*). Both reduplication strategies characterised adjectival nouns in POc (Ross 1998a).

Elsewhere I have reconstructed the term for ‘big’ as **lab^wat* (Ross 1998a:109), as the medial consonant in many of the forms below seems to reflect either **b* or **b^w*. The Loniū and SV forms offer apparent disambiguation in favour of **b^w*. Whilst **lab^wat* must have occurred in the history of many of the forms below, it is not reflected by the Roviana, Hoava, SES, Mota or Raga forms, where the medial consonant appears to reflect **p*. The form **lapuat* accounts for apparent reflexes of both **-b^w-* and **-p-*. The forms which appear to reflect **-p-* do just that. Moreover, Tigak *lavu*, West Kara *labu*, Raga *lavoā* and Bauan *levu* directly reflect medial **-pu-*.⁶ The forms which appear to reflect **-b^w-* also do just that, but this **-b^w-* reflects a later interstage: POc medial **-pua-* became first **-p^wa-*, then **-b^wa-*.

The sound changes in the paragraph above remain tentative, as there are few cases to compare this cognate set with. However, the least obvious step proposed above is that **-b^wa-* developed from **-p^wa-*, and there is reasonably good evidence for the step from **p^w* to **b^w* (vol. 1, p.16).

The Mapos Buang and Mumeng Patep forms may be non-cognate, as their final *-k* reflects POc **-R*, **-k* or **-q*.

POc **lapuat* ‘big, important’ (Lichtenberk 1986:350: **la(m)pat* ‘(be) big, great’)

| | | |
|-------------|-------------------------------|------------------|
| Adm: Seimat | <i>la-lap</i> | ‘big, important’ |
| Adm: Loniū | <i>lap^wa(na-n)</i> | ‘big, important’ |
| Adm: Koro | <i>laba-n</i> | ‘chieftain’ |
| Adm: Mussau | <i>(kula)laba</i> | ‘big, important’ |

⁶ For Tigak and W. Kara the interstages **-p^wu-*, then **-bu-* must be posited. For Bauan, where we find *levu* for expected ***lavua*, we must infer irregular raising of **-a-* to *-e-* and loss of later final **-a*.

| | | | |
|-----------|-------------|--|--------------------------|
| NNG: | Manam | <i>laba</i> | ‘big, wide’ |
| | | <i>labata-</i> | ‘width’ |
| NNG: | Terebu | <i>labi</i> | ‘big, important’ |
| NNG: | Kairiru | <i>(wo)lab</i> | ‘big, important’ |
| NNG: | Ulau-Suain | <i>laba</i> | ‘big, important’ |
| MM: | Lavongai | <i>lava</i> | ‘big, important’ |
| MM: | Tigak | <i>lavu</i> | ‘big, important’ |
| | | <i>lap-lavu</i> | ‘very big’ |
| MM: | Kara (West) | <i>labu</i> | ‘big, important’ |
| MM: | Nalik | <i>laba</i> | ‘big, important’ |
| MM: | Roviana | <i>lavata</i> | ‘great’ |
| MM: | Hoava | <i>lavati</i> | ‘be big’ |
| SES: | Talise | <i>lava</i> | ‘big, important’ |
| SES: | Lau | <i>(a)lafa</i> | ‘chieftain’ |
| SES: | Arosi | <i>(a)laha</i> | ‘chieftain’ |
| SES: | Sa’a | <i>raha</i> | ‘big, important’ |
| NCV: | Mota | <i>lava</i> | ‘big, important’ |
| NCV: | Raga | <i>lavoa</i> | ‘big, important’ |
| NCV: | Lewo | <i>lapa</i> | ‘fat’ |
| NCV: | Nguna | <i>lapa</i> | ‘big, important’ |
| SV: | Lenakel | <i>ip^wər⁷</i> | ‘big, important’ |
| SV: | N Tanna | <i>emp^wət</i> | ‘big, important’ |
| SV: | Whitesands | <i>ep^wət</i> | ‘big, important’ |
| SV: | Anejom | <i>(a)lp^was</i> | ‘big, important’ |
| Mic: | Marshallese | <i>l^wap</i> | ‘great, large’ |
| | | <i>l^w-l^wap</i> | ‘great, large (PL)’ |
| | | <i>l^wap-l^wap</i> | ‘very great, very large’ |
| Mic: | Woleaian | <i>rap</i> | ‘big, important’ |
| Fij: | Bauan | <i>levu</i> | ‘big, important’ |
| cf. also: | | | |
| NNG: | Mapos Buang | <i>levk</i> | ‘big, important’ |
| NNG: | Patep | <i>levak</i> | ‘big, important’ |

Inherited POc terms for ‘small’ were **qitik*, with a variant **qitek*, and **riki(t,q)*/**ri-riki(t,q)*. There is reasonable evidence in the cognate set below that POc **ri-riki(t,q)* was a plural form. Since reduplication of the kind reflected in POc **ri-riki(t,q)* was one of the ways in which POc plural adjectival nouns were marked (Ross 1998a), we can infer that POc **riki(t,q)* was singular. In a number of languages which reflect **ri-riki(t,q)*, however, there is a suppletive singular form (another indicator that this was an adjectival noun, not an adjectival verb; Ross 1998a).

In Proto Polynesian, **riki* (reflecting POc **riki(t,q)*) had become plural, contrasting with PPn **qiti* ‘small (SG)’ (from POc **qitik*), but there is no evidence that this had

⁷ John Lynch (pers. comm.) points out that the initial *i-* of Lenakel *ip^wər* is the regular reflex of POc **l-*, whilst the initial *e-* of N. Tanna *emp^wət* and Whitesands *ep^wət* reflects a sequence of accreted **a-* (cf. Anejom *a-* in *(a)lp^was*) and **-i-* reflecting POc **l-*.

occurred at an earlier interstage. This contrast is reflected in the following compounds, which reflect PPn **tama* ‘child’ (from POc **tama-* ‘father’):

| PPn | <i>*tama-qiti</i> ‘child’ | <i>*tama-riki</i> ‘children’ |
|------------|-----------------------------------|---------------------------------|
| Tongan | (<i>tama-siʔi</i>) ⁸ | <i>tama-iki</i> |
| E Uvean | (<i>tama-siʔi</i>) | <i>tama-lik</i> |
| Rennellese | <i>tama-ʔiti-ʔiti</i> | <i>tama-giki</i> |
| Hawaiian | <i>kama-iki</i> (rare) | <i>kama-liʔi</i> |
| Tahitian | <i>tama-iti</i> | <i>tama-riʔi</i> |
| Rarorongan | <i>tama-iti</i> | <i>tama-riki</i> |
| Maori | <i>tama-iti</i> | <i>tama-riki</i> |

The reconstruction of PPn **riki* is complicated by the fact that Tongan has two forms: *iki*, reflecting **riki*, and *lik*, which occurs only in compounds. The latter may be a borrowing. On the other hand, it may reflect the separately reconstructable form POc **lik* (see below). If it does, then we are left with the possibility that some of the Polynesian forms here attributed to POc **riki(t,q)* instead reflect POc **lik*, as POc **r* and **l* have merged in all Polynesian languages other than Tongan and Niuean.

Also apparently reconstructable are **drik(i)*, **lik*, **siki* and **kiki*. Despite their similarity, there is no point in trying to derive these from each other. Rather, the human affection for small creatures, and prototypically for babies, has resulted in the same kind of word play among Oceanic speakers as we hear in English *tiny*, *teeny*, *teeny-weeny* and *wee*. If we ignore the criteria for reconstructing POc items and look for further candidates for word-play, we find for example *siʔi* ‘small, younger’ in Tongan, *sisi* in Futuna-Aniwa (Polynesian), and a long list in Puluwatese: *kitikit*, *iyekkit*, *kikk*, *lekit*, *rik*, *rirrik*, *mettik*, *rarikrik*. It may well be, for example, that the items listed under **kiki* are not due to shared inheritance but to independent parallel word play. It also seems, despite the doubts that have been expressed about this kind of sound symbolism (Hinton, Nichols & Ohala 1994:4), that Oceanic speakers have a preference for the high front vowel in terms for ‘little’, a phenomenon which is common in other areas of the world too (Ulta 1978).

PMP **qitik* ‘small, little; few’ (Blust 1986; ACD)

POc **qitik*, **qitek* ‘small’

| | | |
|------|------------|------------------|
| Yap: | Yapese | <i>ʔacīg</i> |
| NNG: | Gitua | <i>keteka</i> |
| NNG: | Gedaged | <i>kitik</i> |
| NNG: | Bukawa | <i>atiʔ</i> |
| NNG: | Zenag | <i>ktək</i> |
| MM: | Roviana | <i>ʔiteke</i> |
| MM: | Zabana | <i>te</i> |
| SES: | Kwara’ae | <i>tiʔ-tiʔ</i> |
| Mic: | Carolinian | <i>xit</i> |
| Pn: | Rapanui | <i>ʔiti-ʔiti</i> |
| Pn: | Samoan | <i>iti-iti</i> |

⁸ Tongan and E. Uvean *-siʔi* would reflect apparent PPn **tiqi*, and are therefore perhaps metathesised reflexes of PPn **qiti*.

| | | | |
|-----|------------|------------------|--------------------------------|
| Pn: | Rennellese | <i>?iti-?iti</i> | ‘be small, not much, nor many’ |
| Pn: | Hawaiian | <i>iki</i> | |
| Pn: | Tahitian | <i>iti</i> | |
| Pn: | Tuamotuan | <i>iti</i> | |
| Pn: | Rarotongan | <i>iti</i> | |
| Pn: | Maori | <i>iti</i> | |

PAn **diki[t,q]* ‘little, few, small in amount’ (ACD)

POc **riki(t,q)* ‘small’, **ri-riki(t,q)* ‘small (PL)’

| | | | |
|------|--------------|------------------------|---|
| MM: | Bali | <i>(ma)ri-(ma)riki</i> | ‘small (PL)’ (cf. <i>kakauku</i> SG) |
| NCV: | Mota | <i>-rig</i> | ‘small’ |
| NCV: | Tamambo | <i>(wa)ri-riyi</i> | ‘small (PL)’ (cf. <i>vorivori</i> SG) |
| NCV: | Raga | <i>-rigi</i> | ‘small’ |
| Fij: | Rotuman | <i>ri-ri?i</i> | ‘small, young (PL)’ (cf. <i>me?a-me?a</i> SG) |
| Pn: | Tongan | <i>iki</i> | ‘small’ |
| | | <i>i-iki</i> | ‘small (non-singular)’ |
| Pn: | Niuean | <i>iki-iki</i> | ‘small’ |
| Pn: | Tokelauan | <i>liki</i> | ‘small-sized’ |
| Pn: | Tuvalu | <i>liki</i> | ‘small (of person or chicken)’ |
| Pn: | Rennellese | <i>giki</i> | ‘small’ |
| Pn: | Tikopia | <i>riki</i> | ‘small’ |
| Pn: | Sikaiana | <i>liki-liki</i> | ‘small’ |
| | | <i>li-liki</i> | ‘small (PL)’ |
| Pn: | Hawaiian | <i>li?i</i> | ‘small’ |
| Pn: | Tahitian | <i>ri?i</i> | ‘small (PL)’ (cf. <i>iti</i> SG) |
| Pn: | Rarotongan | <i>riki</i> | ‘small’ |
| Pn: | Maori | <i>riki</i> | ‘small’ |
| | | <i>ri-riki</i> | ‘small (PL)’ |
| Pn: | Tuamotuan | <i>riki</i> | ‘small’ |
| Pn: | Futuna-Aniwa | <i>rik-riki</i> | ‘small (PL)’ (cf. <i>sisi</i> SG) |

POc **drik(i(t,q))* ‘small’

| | | | |
|------|-------------|----------------|---|
| NNG: | Amara | <i>di-dik</i> | ‘small’ |
| Mic: | Kosraean | <i>sik</i> | ‘small’ |
| Mic: | Carolinian | <i>-six</i> | ‘small, little, weak (in compounds only)’ |
| Mic: | Marshallese | <i>rik</i> | ‘lowly, small’ |
| | | <i>r-rik</i> | ‘lowly, small (PL)’ |
| | | <i>rik-rik</i> | ‘very lowly, very small’ |
| Mic: | Puluwatese | <i>rik</i> | ‘be small (usually as a qualifier)’ |
| | | <i>rirrik</i> | ‘small’ |

POc **liki* ‘small’ (perhaps only in compounds)

| | | | |
|------|----------|--------------------|---------|
| NNG: | Arove | <i>(tu)lik-lik</i> | ‘small’ |
| MM: | Lavongai | <i>lik</i> | ‘small’ |
| MM: | Tigak | <i>(lak)lik</i> | ‘small’ |
| MM: | Lihir | <i>(ia)lik</i> | ‘small’ |

| | | | |
|-----|------------|------------------------------|--------------------------------|
| MM: | Madak | (<i>kaka</i>) <i>lik</i> | ‘small’ |
| MM: | Tolai | (<i>iki</i>) <i>lik</i> | ‘small’ |
| MM: | Minigir | (<i>siki</i>) <i>liki</i> | ‘small’ |
| MM: | Label | (<i>si-sik</i>) <i>lik</i> | ‘small’ |
| | | (<i>kak</i>) <i>lik</i> | ‘boy’ |
| Pn: | Tongan | - <i>liki</i> | ‘small (in compounds only)’ |
| Pn: | Samoan | <i>liʔi</i> | ‘scattered in small fragments’ |
| Pn: | Ifira-Mele | - <i>riki</i> | ‘small’ |
| Pn: | Takuu | - <i>riki</i> | diminutive |

POc **kiki* ‘small’

| | | |
|------|---------------|------------------|
| MM: | Torau | <i>kiki-(na)</i> |
| SES: | Gela | <i>kiki</i> |
| SES: | Talise | <i>ki-kiki</i> |
| SES: | Longgu | <i>kiki</i> |
| NCV: | Axamb | <i>kiki</i> |
| NCV: | Port Sandwich | <i>kekei</i> |

PWOC **siki* ‘small’

| | | |
|------|----------|---------------------------|
| NNG: | Adzera | (<i>i</i>) <i>siʔ</i> |
| NNG: | Manam | <i>siʔi-siʔi</i> |
| MM: | Minigir | <i>siki(liki)</i> |
| MM: | Label | <i>si-sik(lik)</i> |
| MM: | Babatana | (<i>va</i>) <i>siki</i> |

There is good evidence that POc had at least two lexicalised possessee-like attribute constructions, whereby ‘mother of an X’ meant ‘big X’, and ‘child of an X’ meant ‘small X’. A number of Oceanic languages in all three primary subgroups use reflexes of ‘mother of’ and ‘child of’ as the usual adjectives meaning ‘big’ and ‘small’, or perhaps ‘biggest’ and ‘smallest’, respectively.

POc **tina-ña* ‘her/his mother; big, biggest’

| | | | |
|------|-----------|-----------------|-----------------------|
| Adm: | Bipi | <i>tinan</i> | ‘big’ |
| Adm: | Nyindrou | <i>tinan</i> | ‘large, big’ |
| NNG: | Tami | <i>tina-tin</i> | ‘very big, monstrous’ |
| NNG: | Malai | <i>tina</i> | ‘big’ |
| NNG: | Takia | <i>tinan</i> | ‘huge’ |
| MM: | Label | <i>tna</i> | ‘big’ |
| NCV: | Fortsenal | <i>tina-na</i> | ‘mother, huge, large’ |

POc **natu-ña* ‘her/his child; small, smallest’

| | | | |
|------|----------|--------------|------------------------|
| Adm: | Drehet | <i>neči</i> | ‘child; small, little’ |
| NNG: | Dami | <i>nālu</i> | ‘small, little’ |
| MM: | Patpatar | <i>nat</i> | ‘small’ |
| MM: | Tolai | <i>nat</i> | ‘small’ |
| NCV: | Lewo | <i>nari-</i> | ‘child, smallest’ |

These attributes turn up in odd lexicalised expressions, for example, Motu (PT) *sina-vai* ‘river’ (literally ‘mother of waters’ (Ch. 3, §6.1)); Gedaged *boi tinan* ‘Morning Star’ (literally ‘mother of stars’ (Ch. 6, §5.2.1)).

The reconstructable POc possessive construction was probably as follows:⁹

**a tina-ña Rumaq*
 ART mother-P:3S house
 ‘a/the big house’ (more literally: ‘a/the mother of house(s)’)

This seems to have remained a live metaphor for a long time (and is perhaps still alive in some Oceanic languages). Evidence for this is that where the reflex of **tina-* or **natu-* has been replaced in a language, this construction often shares in the lexical replacement. Thus in Lewo (Early 1994a), the term for ‘little’/‘child’ still reflects **natu-ña*, but the term for ‘very big’/‘mother’ has undergone lexical replacement:

Lewo (NCV):

- a. *nari-n sisi*
 offspring-*n* child
 ‘a little kid’ (more literally ‘the offspring of children’)
- b. *ane-n laŋi*
 mother-*n* wind
 ‘an immensely powerful hurricane’ (more literally ‘the mother of winds’)

Similarly in Tinrin (New Caledonia) *huwuu[ŋã]* is both ‘small’ and ‘child of, sprout of’.

Matisoff (1992) has examined ‘mother of’ and ‘child of’ constructions which serve as augmentatives and diminutives in a range of Asian languages. Interestingly, whilst he reports a number of cases where ‘mother of’ and ‘child of’ are lexicalised in collocations where they mean something like ‘the most important’ and ‘a component/member of’, in none of these cases do ‘mother of’ and ‘child of’ seem to have been lexicalised as independent lexemes meaning ‘large’ and ‘small’.

2.2 Other dimensions

English (and other European languages) have several antonym pairs denoting dimensions. *Tall* refers to the longitudinal dimension of a vertically oriented object, *long* to the longitudinal dimension of a horizontally oriented object. *Short* is the antonym of both *tall* and *long*. *Wide* and *narrow* refer to the transverse dimension of a flat object, *thick* and *thin* to the transverse dimension of an object which is not flat. *Far* and *near(by)* refer to distances, not to objects.

POc evidently made no horizontal/vertical distinction, so that **b^(w)arapu*, **[ma]lago* and **[ma]lawa* were used for ‘tall’ and ‘long’, and the two latter items evidently also for ‘far’ (§2.2.1). There are fewer reflexes of **tuku* and **botoŋ* ‘short’, so it is harder to know just how they were used (§2.2.2).

On the surface there appear to have been no POc etyma with the basic meanings ‘wide’ and ‘narrow’. However, it is just possible that **[ma]lawa* simply denoted a large dimension, regardless of whether it was longitudinal (‘long’) or transverse (‘wide’). The

⁹ This differs from the possessive-like attribute constructions reconstructed by Ross (1998b). There, the possessor is non-specific; here the possessor is apparently specific.

evidence for this is indirect. POc **[ma]lawa* ‘long, tall’ continues PMP **lawa*, glossed ‘wide’, but a number of non-Oceanic reflexes also mean long: Malagasy *lava*, Manggarai *lewe*, Ngadha *leva*, and Palue *lawa* all mean ‘long’. Fordata *lawa* is glossed ‘length’ (ACD). It therefore seems likely that PMP **lawa* also meant ‘long’, and possible that POc **[ma]lawa* meant both ‘wide’ and ‘long’.

In a number of daughter languages reflexes of POc **ta-pola(s)* ‘spread out (as of a mat)’ (derivationally related to **polas-i-* ‘spread (s.t.) out (VT)’; see p.208) are by extension used to mean ‘wide’ (§2.2.4). In some Western Oceanic languages a reflex of **baban* ‘flat; board, plank, canoe strake; flat shelf of rock’ is used for ‘wide’, but this is by extension from ‘flat’. Fijian *raba* ‘wide, broad’ reflects POc **raba(r)*, the basic meaning of which was also ‘flat, level’. Terms for ‘flat’ are covered in §5.1. No POc term for ‘narrow’ is reconstructable. Most modern languages use the terms for ‘big’ and ‘small’ with reference to the width of a path or a beach, and I infer that the same was true of POc.

POc terms for ‘thick’ were POc **ma-tolu*, **kuba* and **[tubu-]tubu(-ka)*, for ‘thin’ **manipis* and **ma-tipi(s)* (§2.2.5).

2.2.1 ‘tall’, ‘long’

Of the three terms for ‘tall’ and ‘long’, **b^(w)arapu* is underived and its Tamambo, Cèmuhî, and Bauan reflexes belong to the small closed adjectival class in their respective languages, so it is possible that **b^(w)arapu* belonged to the small class of adjectival nouns.

The other two terms, **[ma]lago* and **[ma]lawa*, clearly are derived. The final **-a* of **[ma]lawa* is reconstructed on the basis of the non-Oceanic evidence. A number of Western Oceanic languages (Lou, Titan, Nyindrou, Bing, Takia, Kayupulau, Gumawana, Torau) appear to reflect a final **-e*. We can posit two possible sources of this, although neither reflects a regular process. The first is that in many Western Oceanic languages, an adjective takes a reflex of the third person possessor suffix **-ña* either by default or when it agrees with a singular head noun. The palatal nasal **-ñ-* may have caused the **-a-* of **[ma]lawa-ña* to be raised to **-e-* in **[ma]lawe-ña*. This is a reasonable interpretation of the Lou, Titan, Takia, Gumawana and Torau reflexes. Alternatively, in many Western Oceanic languages of the NNG and PT linkages, there is a locative postposition *-i* or *-ai* (relecting the POc locative proform **iai*), and forms like Sio *malawa-e* and Bing *malwe-i* suggest that some instances of *-e* may reflect final **-a-i* resulting from its capture.

POc **b^(w)arapu* ‘long, tall’

| | | | |
|-------|-------------|---------------------------|--|
| PT: | Kiriwina | <i>-vanau</i> | ‘long’ |
| MM: | Kara (East) | <i>vaiqf</i> | ‘long’ |
| MM: | Nalik | <i>baraf</i> | ‘long’ |
| MM: | Siar | <i>ba-baraf</i> | ‘long’ |
| MM: | Nehan | <i>barah</i> | ‘long’ |
| MM: | Maringe | <i>brahu</i> | ‘long’ |
| SES: | Bauro | <i>borahu</i> | ‘long’ |
| NCV: | NE Ambae | <i>g^waravu</i> | ‘long’ |
| NCV: | Tamambo | <i>baravu</i> | ‘long’ |
| SV: | Anejom | <i>(o)pra</i> | ‘long’ |
| NCal: | Cèmuhî | <i>pîléhê-</i> | ‘tall, big, enormous; size’ |
| Fij: | Bauan | <i>balavu</i> | ‘long, tall’ (<i>l</i> for expected <i>*r</i>) |

PMP **[ma]lan̄kaw* ‘high, tall’¹⁰ (ACD: **lan̄kaw*)POc **[ma]lago* ‘long, tall’

| | | | |
|------|----------|------------------|------------------|
| NNG: | Amara | <i>melak</i> | ‘far away’ |
| NNG: | Arove | <i>malak</i> | ‘long, far away’ |
| NNG: | Kaulong | <i>(no)malak</i> | ‘long’ |
| MM: | Meramera | <i>lago</i> | ‘long’ |

PMP **lawā* ‘wide’ (ACD)POc **[ma]lawā* ‘(?) long, tall, far away; wide’

| | | | |
|------|-----------|--------------------|-----------------------------------|
| Adm: | Lou | <i>elēwē-n</i> | ‘long, tall’ |
| Adm: | Titan | <i>aláwē-n</i> | ‘long, tall’ |
| Adm: | Nyindrou | <i>lawe</i> | ‘long, tall’ |
| NNG: | Gitua | <i>malawa</i> | ‘long; far away’ |
| NNG: | Malai | <i>malau</i> | ‘long; far away’ |
| NNG: | Mangap | <i>molo</i> | ‘long, tall’ |
| NNG: | Sio | <i>malawa</i> | ‘a long time’ |
| | | <i>malawa(e)</i> | ‘a long way’ |
| NNG: | Bebeli | <i>lo-loi</i> | ‘long’ |
| NNG: | Bing | <i>malwe(i)</i> | ‘long’ |
| NNG: | Takia | <i>milae-n</i> | ‘long’ |
| NNG: | Kairiru | <i>milawo-ŋ</i> | ‘long’ |
| SJ: | Kayupulau | <i>marawe</i> | ‘long’ |
| PT: | Gumawana | <i>manawe-</i> | ‘long’ |
| PT: | Mekeo | <i>maeva</i> | ‘long’ |
| MM: | Nakanai | <i>malau</i> | ‘long’ |
| MM: | Nalik | <i>laua-lau</i> | ‘far away’ |
| MM: | Tolai | <i>lo-lovi</i> | ‘long’ |
| MM: | Petats | <i>ra-ro-n</i> | ‘long’ |
| MM: | Torau | <i>marae-la</i> | ‘long’ |
| SES: | Kwaio | <i>la-lau</i> | ‘far’ |
| SV: | Ura | <i>lau(pe)</i> | ‘long, tall’ |
| SV: | Anejom | <i>lau, laulau</i> | ‘long (of time)’ |
| Pn: | Niuean | <i>loa</i> | ‘long, tall’ |
| Pn: | Samoaan | <i>loa</i> | ‘be old, ancient; be a long time’ |
| Pn: | Maori | <i>loa</i> | ‘long, tall’ |

2.2.2 ‘short’

Two terms for ‘short’ are reconstructed. All the supporting data for **tuku* are from Western Oceanic languages except for Mussau *tuku*. In the unlikely event that the latter were a borrowing, **tuku* would then be of Proto Western Oceanic, rather than of POc, vintage.

¹⁰ A PMP form with **ma-* is reflected by Palawan *m̄lan̄k̄w*, Molbog *molan̄kow*, and Uma *molan̄ko*, all ‘tall’ (data from Tryon, ed. 1995).

POc **tuku* 'short'

| | | | |
|------|----------|------------------|---------|
| Adm: | Mussau | <i>tuku</i> | 'short' |
| NNG: | Mutu | <i>tuku</i> | 'short' |
| NNG: | Bilibil | <i>tu-tuk</i> | 'short' |
| NNG: | Manam | <i>-tuku(ra)</i> | 'short' |
| MM: | Label | <i>tuk</i> | 'short' |
| MM: | Babatana | <i>tuko</i> | 'short' |

POc **botoŋ* 'short'

| | | | |
|------|-----------|--|--|
| MM: | Bali | <i>botoŋo</i> | 'short' |
| MM: | Meramera | <i>boto</i> | 'short' |
| MM: | Tigak | <i>poto</i> | 'short' |
| SES: | Arosi | <i>p^wa-p^watu</i> | 'short' |
| Fij: | Wayan | <i>boto</i> | (postposed particle) 'restrictive, only, just' |
| Fij: | Rotuman | <i>pofo</i> | 'tiny; lump, small projection' |
| Pn: | Mele-Fila | <i>pō-poto</i> | 'short' |
| Pn: | Rapanui | <i>poto-poto</i> | 'short' |
| Pn: | Maori | <i>poto</i> | 'short' |

2.2.3 'far'/'near'

There is a tendency to replace terms denoting 'far' and 'near' with something more specific, so that instead of generic 'far' we get 'beyond the horizon' or 'a long path'. Indeed, from the vantage point of a smaller island, 'far away' inevitably entails 'beyond the horizon'. The hypothesis that 'far away' was sometimes replaced by 'a long path' receives some support from the fact that reflexes of POc **[ma]lago* 'long, tall' and POc **[ma]lawā* 'long, tall' (p.204) are sometimes used in the sense of 'far away'.

A POc verbal root **sauq* (V) 'be far away' is reconstructable.

PMP **Zauq* 'far away' (Dempwolff 1938)POc **sauq* (V) 'be far away', **sau-sauq* (ADV) 'far away'

| | | | |
|------|---------|-------------------|-------------------|
| PT: | Tawala | <i>dau</i> | (V) 'be far' |
| | | <i>dau-dau-na</i> | (ADJ) 'far, long' |
| PT: | Motu | <i>dau-dau</i> | (ADV) 'far away' |
| MM: | Bali | <i>zauku</i> | 'far away' |
| MM: | Vitu | <i>ðau</i> | 'far away' |
| MM: | Roviana | <i>seu</i> | 'far' |
| MM: | Hoava | <i>seo</i> | 'far' |
| SES: | Gela | <i>hau</i> | 'far' |
| SES: | Bugotu | <i>hau</i> | 'far' |
| SES: | Talise | <i>sau-na</i> | 'far' |
| SES: | Birao | <i>sau</i> | 'far' |
| SES: | Longgu | <i>tau</i> | (V) 'be far' |

| | | | |
|------|------------|-----------------|--------------------------|
| SES: | Kwaio | <i>tau</i> | ‘far’ |
| SES: | Sa’a | <i>tau</i> | ‘far off, distant’ |
| NCV: | Raga | <i>hau(tu)</i> | (ADV) ‘far’ |
| NCV: | Paamese | <i>sau(tin)</i> | (ADV) ‘far’ |
| SV: | N Tanna | <i>(i)sou</i> | (ADV) ‘far’ |
| Mic: | Kiribati | <i>rā-roa</i> | (ADV) ‘far’ |
| Mic: | Ponapean | <i>tō</i> | (ADJ) ‘distant, far off’ |
| Mic: | Mokilese | <i>tō</i> | ‘far’ |
| Mic: | Chuukese | <i>tōw</i> | ‘far’ |
| Mic: | Carolinian | <i>tāw</i> | ‘far’ |
| Mic: | Woleaian | <i>ttāw</i> | (ADV) ‘far’ |
| Fij: | Rotuman | <i>sou-sou</i> | (ADV) ‘far’ |

PMP **ma-Zauq* ‘far away’ (Blust 1981)

POc **ma-sauq* (V) ‘be far away’

| | | | |
|------|--------|--------------|------------|
| Adm: | Mussau | <i>masau</i> | ‘far away’ |
|------|--------|--------------|------------|

PWOC **ka-sauq* (V) ‘be far away’

| | | | |
|------|----------|------------------|-----------------------|
| NNG: | Takia | <i>asau</i> | (ADV, ADJ) ‘far away’ |
| NNG: | Manam | <i>kasau</i> | (ADJ) ‘far away’ |
| | | <i>kasau(ba)</i> | (ADV) ‘far away’ |
| MM: | Babatana | <i>kōu</i> | ‘far’ |
| MM: | Sisiqa | <i>kəu</i> | ‘far’ |
| MM: | Nduke | <i>(ɣa)sau</i> | ‘far’ |

In Ysabel (MM) languages, POc **sauq* is reflected with the reciprocal prefix **paRi-*, as in Kia (*vari*)*hau* ‘far’ and Laghu (*vari*)*hau* ‘far’. I take it that the sense was formerly ‘far from each other’. In Southeast Solomonic languages it occurs with reflexes of the POc causative **pa-* or **paka-*, also used to form adverbs, and I assume this is the function of the prefix here:

| | | | |
|------|---------|------------------|-------|
| SES: | W Guad. | <i>(va)sau</i> | ‘far’ |
| SES: | Sa’a | <i>(haʔa)tau</i> | ‘far’ |
| SES: | Arosi | <i>(haʔa)tau</i> | ‘far’ |
| SES: | Bauro | <i>(haya)tau</i> | ‘far’ |

The POc antonym of **sauq* ‘be far away’ was the root **raŋi* ‘be near’. However, **raŋi* is not reflected without verb-deriving prefixes and is thus not reconstructable alone in POc. Most commonly it is reflected with **ga-*, a prefix that I do not recognise: it may be a variant of **ka-*, which also occurs with **raŋi*.

POc **raŋi* appears to be descended from PMP **dani*. The replacement of **-n-* by **-ŋ-* evidently occurred earlier than POc, as we find Buru (Central Malayo-Polynesian) *b-raŋi-n* (ADV) ‘near’.

PMP **dani*, **Sa-dani*, **ma-dani* ‘be near’¹¹

PCEMP **dani* ‘be near’

POc **garaŋi* ‘be near’

| | | | |
|------|--------|---------------------------|------------------|
| NNG: | Takia | <i>giriŋe-n</i> | ‘close, near by’ |
| NNG: | Dami | <i>garan</i> | ‘to, near’ |
| SES: | Lau | <i>garaŋi</i> | (ADV) ‘near’ |
| SES: | Kwaio | <i>galani, galaŋi</i> | (ADV) ‘near’ |
| | | <i>galani-a, galaŋi-a</i> | (V) ‘be near’ |
| SES: | Arosi | <i>garaŋi</i> | ‘near’ |
| SES: | Fagani | <i>karaŋi</i> | ‘near’ |

POc **karaŋi* ‘be near’

| | | | |
|------|--------|------------------------|--------------|
| Adm: | Mussau | <i>kala-kalangi-na</i> | (ADV) ‘near’ |
| NNG: | Mangap | <i>kolouŋa-na</i> | (ADV) ‘near’ |
| NNG: | Poeng | <i>ko-koroŋo</i> | (ADV) ‘near’ |
| SES: | Gela | <i>ɣaraŋi</i> | ‘near’ |
| SES: | Bugotu | <i>ɣarani</i> | ‘near’ |
| SES: | Talise | <i>ɣaraŋi</i> | ‘near’ |

POc **pa-raŋi*, **paka-raŋi* ‘be near’

| | | | |
|------|---------|------------------|--------|
| SES: | W Guad. | <i>va-raŋi</i> | ‘near’ |
| SES: | Bauro | <i>haya-raŋi</i> | ‘near’ |
| SES: | Kahua | <i>haya-raŋi</i> | ‘near’ |

There was also a POc term **tata* ‘near’, perhaps an adverb:

POc **tata* (ADV) ‘near’

| | | | |
|-----|----------|----------------|------------------|
| MM: | Lungga | <i>tata</i> | ‘near’ |
| MM: | Nduke | <i>tata</i> | ‘near’ |
| MM: | Roviana | <i>tata</i> | (ADV) ‘near’ |
| MM: | Hoava | <i>tata</i> | ‘near’ |
| Pn: | Tongan | <i>tata</i> | ‘be near’ |
| Pn: | Tahitian | <i>fa-tata</i> | (ADV) ‘near’ |
| Pn: | Maori | <i>tata</i> | ‘be near, close’ |

2.2.4 ‘wide, spread out’

PMP **belaj* ‘spread out to dry’ (ACD)

POc (?) **ta-pola(s)* ‘spread out (as of a mat); wide’

| | | | |
|------|--------|-------------------|--------|
| NNG: | Poeng | <i>(sasa)pola</i> | ‘wide’ |
| SES: | Bugotu | <i>tavoōa</i> | ‘wide’ |

¹¹ Supporting evidence for PMP **dani* is Kagayanen Manobo *dani* (ADV) ‘near’, Dobel *ren* (ADV) ‘near’. Evidence for **Sa-dani* is Isneg (N. Cordilleran) *adanni* (ADV) ‘near’, Limos Kalinga (C. Cordilleran) *adani* (ADV) ‘near’, N. Samareño, Samar-Leyte, Waray (Bisayan) *ha-ráni*, Masbateño, Sorsogon, Gubat (Danaw) *ha-rani*. Evidence for **ma-dani* is Maranao, Iranun (Danaw) *ma-rani*, Ata, Dibabwon, Tigwa (Manobo) *ma-dani*, Ilianen *mī-rani*.

| | | | |
|------|--------|---------------|---------------------------------------|
| SES: | Lau | <i>afola</i> | ‘wide’ |
| SES: | Arosi | <i>ahora</i> | ‘wide’ |
| NCV: | Raga | <i>tavola</i> | ‘flat, wide, smooth’ |
| Pn: | Tongan | <i>tafola</i> | (VI) ‘be spread out, scattered about’ |

This term is related derivationally to POc **polas*, **polas-i-* ‘spread (s.t.) out’, reflected in (NCV) Tamambo *vuolasi* ‘spread (mat)’, Paamese *hoosi* ‘lay out (mat)’ and in (Pn) Tongan and Samoan *folā* ‘spread’ and Tongarevan *ho-hora* ‘spread out; wide open’. It is probable that *-pola* in Poeng *sasapola* is derived independently from a reflex of POc **polas*. If so, then **ta-pola(s)* is reconstructable only in PEOc.

2.2.5 ‘thick’/‘thin’

Three forms can be reconstructed for ‘thick’. The third, **[tubu]tubu[-ka]*, is derived from **tubuq* ‘grow’.

PCEMP **telu* ‘thick’

POc **ma-tolu* ‘thick’ (Clark 1996)

| | | |
|------|-------------|------------------|
| NNG: | Manam | <i>matoli</i> |
| NNG: | Sio | <i>mata-tola</i> |
| MM: | Nakanai | <i>bitolu</i> |
| SES: | W Guad. | <i>matolu</i> |
| NCV: | Mota | <i>matol-tol</i> |
| NCV: | Paamese | <i>mate-tel</i> |
| NCV: | Nguna | <i>matolu</i> |
| SV: | Anejom | <i>(a)mesej</i> |
| Mic: | Marshallese | <i>micel</i> |
| Mic: | Ponapean | <i>mosul</i> |
| Fij: | Rotuman | <i>mafolu</i> |
| Pn: | Tongan | <i>matolu</i> |

PMP **[ma-]kumba* ‘thick (in dimension)’¹²

POc **kuba* ‘thick (in dimension)’

| | | |
|------|----------|-----------------|
| Fij: | Nadrogaa | <i>kuba</i> |
| SV: | Kwamera | <i>-kum-kum</i> |

POc **[tubu]tubu[-ka]* ‘thick (in dimension)’

| | | |
|------|-------|------------------|
| MM: | Tolai | <i>tubu</i> |
| SES: | Lau | <i>ūbu-ūbu-a</i> |
| SES: | Kwaio | <i>ubu-ubu</i> |
| SES: | Arosi | <i>ub-ubu-ʔa</i> |

¹² The reconstruction of PMP **[ma-]kumba* ‘thick’ is supported by the Oceanic data listed here and by Da’a *na-kumba*, Uma *mo-kumpa*, Buginese *ma-umpəʔ*.

Two formally related terms are reconstructable for ‘thin’: **ma-tipi(s)* and **manipis*. Although at first sight they look like forms derived with PMP **ma-* and **maN-* respectively, **manipis* has cognates in Taiwan, reflecting PAn **maLipis*. The prefix **maN-* in any case dates only from PMP, and so cannot be reflected in **manipis*. Instead, the two forms evidently reflect the same PAn monosyllabic root **-pis* ‘thin, tenuous, fine’ (Blust 1988; see vol. 1, pp.27–28) and presumably differed in meaning by some subtlety which is not clear from their reflexes.

PMP **tipis* ‘thin’¹³

POc **ma-tipi(s)* ‘thin’

| | | | |
|------|--------|---------------|--------|
| SES: | Talise | <i>matipi</i> | ‘thin’ |
| SES: | Birao | <i>matipi</i> | ‘thin’ |

PAn **[ma]Lipis* ‘thin’¹⁴

POc **manipis* ‘thin’

| | | | |
|------|----------|--------------------|-------------------------------------|
| NNG: | Malai | <i>manipi</i> | ‘thin’ |
| NNG: | Manam | <i>manipi</i> | ‘thin’ |
| MM: | Roviana | <i>manivisi</i> | ‘thin’ |
| MM: | Maringe | <i>manivi</i> | ‘thin’ |
| SES: | Bugotu | <i>manivi</i> | ‘thin’ |
| SES: | Arosi | <i>manihi</i> | ‘thin’ |
| NCV: | NE Ambae | <i>manivi-nivi</i> | ‘be/become shallow, low tide, thin’ |
| NCV: | Raga | <i>manev-nevi</i> | ‘thin’ |
| NCV: | Paamese | <i>mahini-hin</i> | ‘thin’ (metathesis) |
| Mic: | Kiribati | <i>mmani</i> | ‘thin’ |
| Mic: | Ponapean | <i>menipi-nip</i> | ‘thin’ |
| Fij: | Rotuman | <i>mahini</i> | ‘thin’ (metathesis) |
| Pn: | Tongan | <i>manifi</i> | ‘thin’ |
| | | <i>manifi-nifi</i> | ‘comparatively thin’ |
| Pn: | Samoa | <i>manifi</i> | ‘thin’ |
| | | <i>mānifi-nifi</i> | ‘thin’ |

3 Age

Two POc terms for ‘new’ can be reconstructed: the adjectival noun **paqoRu*, which was also applied to animate beings in the sense of ‘young’ (Pawley 1982), and **ka(l,r)ab^wa*, which has fewer reflexes, but as these occur in both MM and NCV languages, it must be reconstructed as POc. Meso-Melanesian reflexes of the latter reflect **-l-*, North and Central Vanuatu reflexes reflect **-r-*.

¹³ The reconstruction of PMP **tipis* ‘thin’ is supported by the Oceanic data listed here and by Indonesian, Javanese and Balinese *tipis* ‘thin’.

¹⁴ Tsuchida (1976:139) reconstructs PAn **Nixjepis*, in the orthography of Ross (1992) **Lihepis*. However, the only reflex of **-h-* occurs in Saisiat (Taiwan) *lih-lihpih-an*, which may be the result of modifying **-li-* to rhyme with **-pih*. Accordingly I reconstruct PAn **Lipis*, PMP **nipis*.

PAn **baqeRuh* ‘new’ (ACD)POc **paqoRu* ‘new; young, recent’PNGOc **paqu*, **paqoRu* ‘new, young’

| | | | |
|------|----------|---------------------------|---|
| Adm: | Mussau | <i>ou</i> | ‘new’ |
| Adm: | Lou | <i>pa-pa-peu-n</i> | ‘new’ |
| Adm: | Nyindrou | <i>haʔun</i> | ‘new’ |
| NNG: | Bariai | <i>pau</i> | ‘new’ |
| NNG: | Mutu | <i>pagu</i> | ‘new’ |
| NNG: | Gitua | <i>pagu</i> | ‘new’ |
| NNG: | Lukep | <i>pau-nu</i> | ‘new’ |
| NNG: | Mangap | <i>po-po-ŋana</i> | ‘new’ |
| NNG: | Kilenge | <i>pau-a</i> | ‘new’ |
| NNG: | Poeng | <i>pau</i> | ‘new’ |
| NNG: | Takia | <i>fau-n</i> | ‘new’ |
| NNG: | Numbami | <i>wou</i> | ‘new’ |
| NNG: | Yabem | <i>wakuʔ</i> | ‘new’ |
| NNG: | Manam | <i>wau-wau</i> | ‘new’ |
| SJ: | Sobei | <i>fe-fou</i> | ‘new’ |
| PT: | Tawala | <i>wou-na</i> | ‘new’ |
| PT: | Misima | <i>va-valu-na</i> | ‘new’ |
| PT: | Kiriwina | <i>-vau</i> ¹⁵ | ‘new’ |
| MM: | Bali | <i>vayoru</i> | ‘new’ |
| MM: | Nalik | <i>fakur</i> | ‘new’ |
| MM: | Tabar | <i>vouru</i> | ‘new’ |
| MM: | Teop | <i>von</i> | ‘new’ |
| MM: | Mono | <i>haolu-na</i> | ‘new’ |
| MM: | Zabana | <i>fo-foru</i> | ‘new’ |
| SES: | Gela | <i>vaolu</i> | ‘new; young, fresh, beautiful, in one’s prime; renew’ |
| SES: | Arosi | <i>haoru</i> | ‘new, recent, youthful, vigorous’ |
| NCV: | Paamese | <i>hāu</i> | ‘new’ |
| NCV: | Nguna | <i>vau</i> | ‘new’ |
| SV: | Sye | <i>(it)vau</i> | ‘new, clean’ |
| SV: | Ura | <i>vau</i> | ‘new’ |
| SV: | Lenakel | <i>vi</i> | ‘new’ |
| Mic: | Woleaian | <i>fe</i> | ‘new, cleaned’ |
| Fij: | Bauan | <i>vou</i> | ‘new; newly, recently’ |
| Pn: | Tongan | <i>foʔou</i> | ‘new, fresh; strange, unfamiliar’ |
| Pn: | Samoa | <i>fou</i> | ‘new; fresh’ |

¹⁵ This form is always suffixed to a classifier.

POc **ka(l,r)ab^{wa}* ‘new’

| | | | |
|------|----------|---------------------------------------|---|
| MM: | Bulu | <i>kalaba(ka)</i> | ‘new’ |
| MM: | Nakanai | <i>halaba</i> ¹⁶ | ‘new’ |
| MM: | Tolai | <i>kalama</i> | ‘new’ |
| NCV: | Tamambo | <i>haramba</i> | ‘new’ |
| NCV: | Mota | <i>garag^{wa}</i> | ‘new’ |
| NCV: | Raga | <i>gara</i> | ‘new’ (unexpected loss of final syllable) |
| NCV: | Tolomako | <i>garavu</i> | ‘new’ |
| NCV: | Nduindui | <i>kara^ŋg^{wa}</i> | ‘new’ |

The antonym of **paqoRu* ‘new, young’ was evidently **[ma]tuqa* ‘ripe, mature, adult, old’. A difficulty in reconstructing this term is its formal and semantic similarity to POc **matuqu* ‘coconut growth stage: ripe, brown but has not fallen yet’ (Ross 1996c). It is sometimes quite difficult to determine which of the two reconstructions a reflex like, for example, Sursurunga *matuk* ‘ripe, well-developed, ready to harvest’ should be assigned to, and I suspect that reflexes of the two items have been conflated in some languages.

It is hard to avoid the conclusion that **tuqaRi* ‘(be) long ago, take a long time, old (of inanimates)’ is historically related to **[ma]tuqa*. If, as seems likely, Proto Buang **tk^{wi}* ‘old’ (Patep *tk^we*, Kapin *tak^{wi}*) reflects **tuqaRi*, then it provides evidence for the putative **-q-*. However, I do not know where final **-Ri* comes from. There are signs that **[ma]tuqa* and **tuqaRi* may occasionally have been conflated: a putative **ma-tuqaRi* seems to be reflected in Gapapaiwa *maturi* and Tubetube *matuli* where **[ma]tuqa* is expected, and in Tabar *ma-cari* where **tuqaRi* is expected.

Whereas **[ma]tuqa* probably referred mainly to animates and to the vegetable world, **rapu-ka* (with adjectival-noun suffix **-ka* added to an unidentified root **rapu*) apparently modified nouns referring to lifeless objects.

PAn **CuqaS* ‘mature, elder’ (ACD)POc **[ma]tuqa* ‘ripe, mature, adult, old’

| | | | |
|------|-----------|---------------|---------------------------------------|
| Adm: | Lou | <i>matak</i> | ‘old person’ |
| NNG: | Poeng | <i>matua</i> | ‘ripe’ |
| PT: | Dobu | <i>matua</i> | ‘ripe’ |
| PT: | Gapapaiwa | <i>maturi</i> | ‘half-ripe’ |
| PT: | Tubetube | <i>matuli</i> | ‘ripe’ |
| PT: | Misima | <i>matua</i> | ‘ripe’ |
| MM: | Patpatar | <i>matuko</i> | ‘ripe’ |
| SES: | Arosi | <i>maua</i> | ‘ripe’ |
| NCV: | Mota | <i>matua</i> | ‘full-grown, ripe’ |
| NCV: | Raga | <i>metua</i> | ‘full-grown, mature’ |
| NCV: | Paamese | <i>matū</i> | ‘(s.o.) old’ |
| NCV: | Nguna | <i>matua</i> | ‘old, ancient, mature, ripe, big’ |
| SV: | Lenakel | <i>matak</i> | ‘ready to be eaten: ripe, cooked’ |
| SV: | Anejom | <i>metou</i> | ‘(fruit) ripe, mature, ready to pick’ |
| Fij: | Wayan | <i>mātua</i> | ‘mature, full-grown, adult, ripe’ |
| Fij: | Rotuman | <i>mafua</i> | ‘old’ |

¹⁶ Nakanai *h* reflects POc **q*, not **k*.

| | | | |
|-----|--------|---------------|----------------|
| Pn: | Tongan | <i>motuʔa</i> | ‘old’ |
| Pn: | Samoan | <i>matua</i> | ‘old (person)’ |

POc **tuqaRi* ‘(be) long ago, take a long time, old (of inanimates)’

| | | | |
|------|------------|-------------------|---|
| NNG: | Ali | <i>care-ŋ</i> | ‘old’ |
| MM: | Tabar | <i>(ma)cari</i> | ‘old’ |
| MM: | Sursurunga | <i>torai-n</i> | ‘old’ (metathesised) |
| MM: | Patpatar | <i>tuare</i> | ‘old’ |
| MM: | Ramoaaaina | <i>turāi</i> | ‘old’ (metathesised) |
| MM: | Siar | <i>turai</i> | ‘old’ (metathesised) |
| MM: | Uruava | <i>tuari</i> | ‘old’ |
| MM: | Mono | <i>tuali-na</i> | ‘old’ |
| MM: | Ririo | <i>cuer</i> | ‘old (thing)’ |
| SES: | Bugotu | <i>tuali</i> | ‘(thing) old’ |
| SES: | Lau | <i>kwali</i> | ‘be old, worn out (house, net, etc.); descendant’ ¹⁷ |
| SES: | Arosi | <i>wari</i> | ‘old, chiefly of living things; old man’ |
| NCV: | Mota | <i>tuai</i> | ‘of long duration, old’ |
| NCV: | Tamambo | <i>tuai</i> | ‘of old’ |
| NCV: | Neve’ei | <i>tuyoi</i> | ‘a long time ago’ |
| | | <i>duyoi</i> | ‘old (inanimates)’ |
| NCV: | Naman | <i>toye</i> | ‘a long time ago’ |
| NCV: | Nguna | <i>tuai</i> | ‘long ago, (thing) old’ |
| SV: | Sye | <i>(e)twai</i> | ‘recently’ |
| | | <i>(it-e)twai</i> | ‘long time ago’ |
| SV: | Kwamera | <i>tui</i> | ‘old, previous, of the past, long ago’ |
| SV: | Anejom | <i>(i)tuwu</i> | ‘long ago’ |
| Fij: | Wayan | <i>tuei</i> | ‘take a long time, be slow, tardy, late’ |
| Pn: | Tongan | <i>tuai</i> | ‘be late, be late, take a long time’ |
| Pn: | Samoan | <i>tuai</i> | ‘be late, be delayed, take a long time’ |

POc **rapu-ka* ‘old (of inanimates)’

| | | |
|------|----------|---------------------|
| MM: | Bulu | <i>rapu-rapu-ka</i> |
| SES: | ’Are’Are | <i>rahu-ʔa</i> |
| SES: | Sa’a | <i>lahu-ʔa</i> |

4 Colour

Most reconstructable POc colour terms fall into two formal groups, adjectival verbs reflecting earlier **ma-* + ROOT and adjectival nouns with either a reduplicated root, ROOT + **-ka*, or both (see p.196).

PMP terms were of the form **ma-* + ROOT. Blust (ACD) concludes that PMP had a classic three-term colour system, i.e. terms for black, white and red. Other terms were derived from terms for natural objects or, in the case of ‘green’, unripeness (see vol. 1,

¹⁷ Blust (ACD) attributes these reflexes to **waRi* ‘past (of time)’, but the current attribution is better supported by the set as a whole.

p.155). The same comments evidently applied to POc. The three PMP terms were **ma-qitem* ‘black, dark in colour’, **ma-iRaq* ‘red’, and **ma-putiq* ‘white, light in colour’. The first two are continued in POc **maqeto(m)* and POc **meRaq*. Until recently, I thought that **ma-putiq* had been lost in POc and replaced by a plethora of terms, but two reflexes have been found.

PMP **[ma]qitem* ‘black, deep blue’ (ACD)

PCMP **ma-qitom*, **ma-qetom* ‘black; dirty’

POc **maqeto(m)* ‘black’

| | | | |
|------|----------|-----------------|---------------------------|
| MM: | Nalik | <i>makit</i> | ‘black’ |
| MM: | Tabar | <i>maketo</i> | ‘black’ |
| SES: | Gela | <i>meto</i> | ‘dirty’ |
| SES: | Arosi | <i>maeo</i> | ‘full grown, ripe, black’ |
| NCV: | Mota | <i>maeto</i> | ‘black’ |
| NCV: | NE Ambae | <i>maeto</i> | ‘be black, blacken’ |
| NCV: | Raga | <i>meto</i> | ‘black’ |
| NCV: | Paamese | <i>(na)meto</i> | ‘k.o. black fish’ |
| NCV: | Nguna | <i>maeto</i> | ‘angry’ |

PMP **ma-iRaq* ‘red’ (Blust 1980b)

POc **meRaq* ‘red’

| | | | |
|-------|----------|----------------------|-------------------|
| NNG: | Kaulong | <i>mhe</i> | ‘red’ |
| NNG: | Kairiru | <i>mera-mer</i> | ‘red’ |
| MM: | Nalik | <i>me-mek</i> | ‘red’ |
| MM: | Siar | <i>me-merek</i> | ‘red’ |
| SES: | Bugotu | <i>mela-</i> | ‘red’ |
| SES: | Longgu | <i>mela-mela(ʔa)</i> | ‘red’ |
| SES: | ʼAreʼAre | <i>me-mera(ʔa)</i> | ‘red’ |
| NCV: | Mota | <i>me-mea</i> | ‘red’ |
| NCV: | NE Ambae | <i>memea</i> | ‘be red, redden’ |
| NCal: | Xârâcùù | <i>mĩã</i> | ‘red’ |
| Pn: | Tongan | <i>mea</i> | ‘reddish’ |
| Pn: | Rapanui | <i>mea-mea</i> | ‘red’ |
| | | <i>mea</i> | ‘light red, pink’ |

PMP **ma-putiq* ‘white, light in colour’ (ACD)

POc **maputi(q)* ‘white’

| | | | |
|------|----------|---------------|-----------------------|
| SES: | Arosi | <i>mahui</i> | ‘white’ |
| NCV: | NE Ambae | <i>mavute</i> | ‘to be white, whiten’ |

One colour term of the form **ma-* + ROOT has no known non-Oceanic cognates. In the southeast Solomons and Micronesia we find **marawa* ‘green’ competing with **[ma]karawa*, indicating that both are derived from a base **rawa* of unknown meaning.

POc **[ma]karawa* ‘green, blue’

| | | | |
|-----|-------|--------------------|---------|
| PT: | Suau | <i>ʔala-ʔalawa</i> | ‘green’ |
| MM: | Tigak | <i>makago</i> | ‘green’ |

| | | | |
|------|------------|--------------------|------------------------------------|
| MM: | Nalik | <i>marakaua</i> | ‘green’ (metathesised) |
| MM: | Sursurunga | <i>məkrau</i> | ‘green’ |
| MM: | Maringe | <i>ka-kahra</i> | ‘green, light blue’ |
| Mic: | Woleaian | <i>xāzawe-zaw</i> | ‘green’ |
| Fij: | Rotuman | <i>čarava</i> | ‘blue’ |
| Fij: | Bauan | <i>kara-karawa</i> | ‘blue; k.o. blue-green fish’ |
| Fij: | Wayan | <i>karawa</i> | (V) ‘be blue, blue-green, green’ |
| | | <i>kara-karawa</i> | (V, ADJ) ‘blue, blue-green, green’ |

PEOc **marawa* ‘green, blue’

| | | | |
|------|-------------|---------------------------------------|---------------------------|
| SES: | Talise | <i>marao</i> | ‘green, blue’ |
| SES: | Longgu | <i>m^warawa</i> | ‘green, blue’ |
| SES: | Kwaio | <i>malak^wa</i> | ‘green’ |
| SES: | Arosi | <i>marawā</i> | ‘green, blue (if bright)’ |
| Mic: | Kiribati | <i>māwawa</i> | ‘green, blue’ |
| Mic: | Marshallese | <i>maṛ^{uu}ṛ^{uu}</i> | ‘green’ |

Blust (2001) observes that colour terms with a reduplicated root are common in Oceanic languages. Generally, but not always, the initial CVCV- is copied. He infers that this reduplication reflects the unmarking of an earlier use of reduplication to express intensity. Whatever its origin, however, in many Oceanic languages reduplication is a derivational process whereby a colour term is derived from a noun, and in some it appears to be a productive process.¹⁸ Blust’s examples are drawn from twenty-four languages. Among them we find the following:

Mussau (Adm):¹⁹

| | | | |
|------------------------|----------------------|------------|--------------------------|
| <i>bo-boŋi-e-na</i> | ‘black’ | <i>bo</i> | ‘night’ |
| <i>rae-rae-a-na</i> | ‘red’ | <i>rae</i> | ‘blood’ |
| <i>usou-usou-e-na</i> | ‘white’ | | (no unreduplicated root) |
| <i>vero-veroŋ-a-na</i> | ‘black’ | | (no unreduplicated root) |
| <i>riu-riu-e-na</i> | ‘thin (of animates)’ | <i>riu</i> | ‘bone’ |

Kairiru (NNG):

| | | | |
|------------------|---------------------|-------------|--|
| <i>jir-jir</i> | ‘black, dirty, old’ | <i>jir</i> | ‘mangrove swamp’ |
| <i>kiet-kiet</i> | ‘black’ | <i>kiet</i> | ‘black paint’ |
| <i>pun-pun</i> | ‘white’ | <i>pun</i> | ‘pigeon’ |
| <i>mera-mer</i> | ‘red’ | <i>mer</i> | ‘red paint’ |
| <i>yaŋ-yaŋ</i> | ‘yellow’ | <i>yaŋ</i> | ‘yellow paint, white or yellow skinned people’ |

¹⁸ Lichtenberk (1983:611) was offered the apparent nonce form *taʔe-taʔe*, from *taʔe* ‘faeces’ in Manam, when he asked an informant to identify a particular shade of brown.

¹⁹ I have corrected Blust’s Mussau data on the basis of materials provided by John Brownie of the Summer Institute of Linguistics.

Manam (NNG):

| | | | |
|--------------------|---------|---------------|---------------------------------------|
| <i>ziŋ-ziŋ</i> | ‘black’ | <i>ziŋ</i> | ‘black ashes’ |
| <i>jim-jim</i> | ‘black’ | <i>jim</i> | ‘rain, cloud; black, dark deep (sea)’ |
| <i>wa-wawa</i> | ‘white’ | <i>wawa</i> | ‘discoloured (light) patch of skin’ |
| <i>dara-dara</i> | ‘red’ | <i>dara</i> | ‘blood’ |
| <i>ʔate-ʔateʔa</i> | ‘brown’ | <i>ʔateʔa</i> | ‘ground’ |

Mota (NCV):

| | | | |
|-------------------|------------|---------------|---|
| <i>me-mea</i> | ‘red’ | <i>mea</i> | ‘red pigment’, <i>mea-mea</i> ‘k.o. red fish’ |
| <i>sor-soroga</i> | ‘dark red’ | <i>soroga</i> | ‘red, colour of <i>pes nai</i> when ripe’ |
| <i>aŋo-aŋo</i> | ‘yellow’ | <i>aŋo</i> | ‘turmeric; yellow’ |

From these examples we see that the colour term is often derived from a noun whose referent has that colour as a salient characteristic. We also see that in closely related Kairiru and Manam (Ross 1988:122–132) different derivations have occurred, indicating that the process remains productive, or has done so until recently. This observation leads to a reconstructive problem: we often find cognate reduplicated forms in a number of different languages, and it is sometimes hard to determine whether the reduplication had already occurred in POc or whether the reduplicated forms result from independent parallel derivations. We can arrange cases on a rough cline. At one extreme is POc *[*yaŋo*]/*yaŋo* ‘yellow’, whose reflexes occur so consistently across Oceania that it seems over-cautious not to reconstruct it. The base form was POc **yaŋo* ‘turmeric, *Curcuma longa*’ (Ross 1996c:216).

POc *[*yaŋo*]/*yaŋo* ‘yellow’

| | | | |
|------|-------------|------------------|--|
| Adm: | Seimat | <i>aŋo-aŋ</i> | ‘yellow’ |
| Adm: | Kele | <i>aŋw-an</i> | ‘yellow’ |
| NNG: | Kove | <i>yaŋo-yaŋo</i> | ‘yellow’ |
| NNG: | Mutu | <i>yaŋo-ŋa</i> | ‘yellow’ |
| NNG: | Lukep | <i>yoŋo-no</i> | ‘yellow’ |
| NNG: | Amara | <i>aŋo-ʔaiŋo</i> | ‘yellow’ |
| NNG: | Poeng | <i>ŋ-aŋo</i> | ‘yellow’ |
| NNG: | Gedaged | <i>yaŋ-yaŋ</i> | ‘yellow’ |
| NNG: | Numbami | <i>(me)yaŋo</i> | ‘yellow’ |
| NNG: | Yabem | <i>yaŋ-yaŋ</i> | ‘yellow’ |
| NNG: | Mapos Buang | <i>saŋ-saŋ</i> | ‘yellow’ |
| NNG: | Manam | <i>zaŋ-zaŋ</i> | ‘yellow’ |
| MM: | Vitu | <i>yaŋo-yaŋo</i> | ‘yellow’ |
| MM: | Nakanai | <i>iala-lo</i> | ‘yellow’ |
| MM: | Kara (West) | <i>iaŋ</i> | ‘yellow’ (East Kara <i>ioŋ</i> ‘turmeric’) |
| MM: | Taiof | <i>aŋo-m</i> | ‘yellow’ |
| SES: | Gela | <i>aŋo-aŋo</i> | ‘yellow’ |
| SES: | Talise | <i>aŋo</i> | ‘yellow’ |
| NCV: | Mota | <i>aŋo-aŋo</i> | ‘yellow’ (<i>aŋo</i> ‘turmeric’) |
| NCV: | Raga | <i>aŋo-ya</i> | ‘yellow, become yellow’ |
| SV: | Sye | <i>(mel)yeŋ</i> | ‘yellow’ |

| | | | |
|------|----------|--|-----------------------------------|
| SV: | Ura | (<i>mel</i>) <i>yeŋ</i> , (<i>un</i>) <i>iaŋ</i> | ‘yellow’ |
| SV: | Anejom | <i>yaŋ</i> | ‘yellow’ |
| Mic: | Ponapean | <i>ɔŋɔŋ</i> | ‘yellow’ (<i>ɔŋ</i> ‘turmeric’) |
| Mic: | Woleaian | <i>yaŋo-yaŋ</i> | ‘yellow’ (<i>yaŋ</i> ‘ginger’) |
| Fij: | Wayan | <i>aŋo-aŋo</i> | (V, ADJ) ‘(be) yellow’ |
| Pn: | Tongan | <i>eŋa-eŋa</i> | ‘yellow’ (<i>eŋa</i> ‘turmeric’) |

Nearer the other extreme are reduplicated reflexes of POc **draRaq* ‘blood’ (e.g. Mussau *rae-rae-ana* ‘red’ and Manam *dara-dara* ‘red’ above). Here, reflexes have a much spottier distribution, closely related languages often have different forms for ‘red’, and other terms for ‘blood’ are also reduplicated to form terms for ‘red’. These facts suggest that the reduplicated forms reflect independent parallel development and that there is not sufficient evidence for a POc reconstruction ***draRa-draRaq* ‘red’.

In this connection, it is worth noting that a number of reflexes of POc **meRaq* ‘red’ and **karawa* ‘green, blue’, reconstructed above, also display reduplication. Since there were originally morphologically complex forms (**ma-iRaq* and **ka-rawa*), and **meRaq*, at least, was originally an adjectival verb, these reduplications can be attributed to analogy. That is, reduplication has moved in a number of languages from being a process which derives colour terms from nouns to being simply a marker of a colour term. This suggests that we should be very cautious about reconstructing POc reduplicated colour terms.

Despite the need for caution, the fact that Blust finds reduplicated colour terms scattered across Oceania suggests quite strongly that this derivational process was already present in POc. It is true, as Blust notes, that the unreduplicated root often does not occur in the data. This may be because it has been lost or simply because its meaning is such that it has not been recorded in available sources (‘black’ is far more likely to be recorded, for example, than the term ‘mangrove morass’ from which it is derived in a number of languages).

What is much less clear is the relationship of this POc reduplication to derivations with **-ka*. Forms with a reduplicated root, ROOT + **-ka*, or both, tend to cooccur in cognate sets. Note Longgu *mela-mela(ʔa)* and ‘Are’Are *me-mera(ʔa)* ‘red’ and Raga *aŋo-ya* ‘yellow’ above. Reflexes of **-ka* also crop up in Blust’s collection of reduplicated colour terms in Mussau and Vitu and in To’aba’ita (SES). Since these three languages belong to different primary subgroups of Oceanic (St Matthias, Western Oceanic and Eastern Oceanic respectively), it is possible that reduplicated colour terms with **-ka* also occurred in POc. If so, however, we still have to account for reduplicated forms without **-ka* (like those listed under **[yaŋo]yaŋo* ‘yellow’ above) and for unreduplicated forms with **-ka*. The simplest solution is to reconstruct two POc processes: (i) ROOT + **-ka* forming adjectival nouns and (ii) CVCV- reduplication forming colour terms and perhaps some other property terms.²⁰ Whether the words formed by process (ii) were verbs or nouns is uncertain. In some languages, and particularly for colour terms, the two processes combined, forming adjectival nouns.

²⁰ Blust’s 24-language survey suggests that property terms other than colour terms are only rarely reduplicated. This corroborates the research underlying Ross (1998a), where the only languages with a strong tendency to reduplicate property terms are those in Western Oceanic which have innovated a distinct adjective class.

In the light of this discussion, I reconstruct two pairs of POc colour terms, **keja-ka*, **[keja]keja* ‘green’ and **biRiŋ-(k)a*, **[biRi]biRiŋ* ‘dark hue, dirty’, but I cannot be sure that both members of each pair actually occurred in POc. The Tamambo reflex of the root **keja* refers to a kind of blue-green fish, and this may have been its POc meaning. POc **biRiŋ* perhaps meant ‘dirt’.

POc **keja-ka*, **[keja]keja* ‘green’

| | | | |
|------|---------|-----------------------|---|
| NNG: | Mangap | <i>kes-keeze(ŋa-)</i> | ‘green’ |
| NNG: | Sio | <i>kenza</i> | ‘green’ |
| NNG: | Apalik | <i>-kes-kes</i> | ‘green’ |
| NNG: | Bebeli | <i>ke-kese</i> | ‘green’ |
| NNG: | Mindiri | <i>kiede</i> | ‘green’ |
| NNG: | Bilibil | <i>yed-yed</i> | ‘green’ |
| MM: | Nakanai | <i>ka-kesa</i> | ‘green’ |
| NCV: | Mota | <i>gesa-gesa(ga)</i> | ‘bright blue, or bright green’ |
| NCV: | Raga | <i>geha(ga)</i> | ‘blue-green’ |
| NCV: | Tamambo | <i>ŋenja(ŋa)</i> | ‘blue-green’ (<i>ŋenja</i> ‘k.o. blue-green fish’) |
| NCV: | Nguna | <i>kesa-kesa</i> | ‘blue’ |
| Pn: | Tikopia | <i>kesa</i> | ‘green, yellow-green, with suggestion of off-colour; greyish-green’ |

PMP **biRiŋ* ‘dark hue, dark red (?)’ (ACD)

POc **biRiŋ-(k)a*, **[biRi]biRiŋ* ‘dark hue, dirty’

| | | | |
|------|----------|--------------------|---------|
| NNG: | Kove | <i>vihi-vihiŋa</i> | ‘green’ |
| NNG: | Aria | <i>-vir</i> | ‘green’ |
| MM: | Tiang | <i>biliŋə</i> | ‘dirty’ |
| MM: | Madak | <i>biliŋa</i> | ‘dirty’ |
| MM: | Patpatar | <i>biliŋe</i> | ‘dirty’ |
| SES: | Gela | <i>bili-bilia</i> | ‘dirty’ |
| SES: | Kwaio | <i>bili-bili?a</i> | ‘dirty’ |

There is one other reduplicated colour term which may be reconstructable, POc **[pula]pula-n* ‘white’, probably derived from **pulan* ‘moon’. However, the dangers of reconstructing reduplicated colour terms in POc apply here too, and these terms may be independent innovations.

PMP **bulan* ‘white’ (Blust 1989)

POc **[pula]pula-n* ‘white’

| | | | |
|-------|---------|------------------|---------|
| NNG: | Sissano | <i>owul-wul</i> | ‘white’ |
| NNG: | Psohoh | <i>vul-vul</i> | ‘white’ |
| Fij: | Bauan | <i>vula-vula</i> | ‘white’ |
| NCal: | Nemi | <i>pulo</i> | ‘white’ |

5 Physical property

5.1 Shape and surface texture

Terms denoting the shape and surface texture of an object include the meanings such as ‘flat’, ‘round’, ‘rough’, ‘smooth’, ‘straight’ and ‘crooked’. However, it seems that there were few POc lexemes with basic meanings in this domain. No word for ‘round’ is reconstructable. The main term for ‘flat’ was probably POc **baban* ‘flat; board, plank; canoe strake; flat shelf of rock’, and we can be reasonably confident that it was a noun denoting a flat surface or flat plank-like object (vol. 1, pp.58, 185).

POc **baban* ‘flat; board, plank; canoe strake; flat shelf of rock’

| | | | |
|------|---------|-------------------|---|
| NNG: | Mutu | <i>babaga</i> | ‘wide’ |
| NNG: | Mangap | <i>baba(ŋa-n)</i> | ‘wide, broad’ |
| NNG: | Gedaged | <i>baba(ŋa-n)</i> | ‘wide’ |
| NNG: | Manam | <i>baba</i> | ‘flat; palm of the hand’ |
| PT: | Motu | <i>papa</i> | ‘flat rock’ |
| MM: | Teop | <i>babana(o)</i> | ‘wide’ |
| SES: | Kwaio | <i>baba</i> | ‘flat’ |
| SES: | Lau | <i>baba</i> | ‘flat; long side board of canoe’ |
| Pn: | Tongan | <i>papa</i> | ‘flat hard sandstone forming a layer or bed at the coast in certain places; flat and smooth and hard, as a well-trodden track; board’ |
| Pn: | Samoa | <i>papa</i> | ‘rock; floor mat; plain, level, flat, as a rock, board, nose, etc.’ |

The term **raba(r)* may have denoted the property ‘flat’, but there are too few Oceanic reflexes to be certain. Indeed, if the Tongan reflex is regularly descended from a POc forebear, then the latter had initial **l-*, not **r-*. This suggests that the Polynesian terms may not reflect POc **raba(r)*.

PMP **da(m)paD* ‘flat, level’ (ACD)

POc **raba(r)* ‘flat, wide, broad’

| | | | |
|------|----------|-------------|---|
| Fij: | Bauan | <i>raba</i> | (N) ‘breadth, width’, (ADJ) ‘broad, wide’ |
| Fij: | Nadrogaa | <i>raba</i> | ‘wide, broad’ |

cf. also:

| | | | |
|-----|--------|------------------|-------------------------------------|
| Pn: | Tongan | <i>lafa-lafa</i> | ‘flat’ |
| Pn: | Samoa | <i>lafa-lafa</i> | ‘flat; the level top of a mountain’ |

No term for ‘rough’ is reconstructable, but ‘smooth’, also with the sense ‘slippery’ was POc **madralsi(s,t)*.

PAn **ma-dalis* ‘smooth, slippery’ (ACD)

PAn **[ma]dalit* ‘smooth, slippery’ (Blust 1986)

POc **madralsi(s,t)* ‘smooth, slippery’

| | | | |
|------|-------|-----------------|------------------------------|
| MM: | Siar | <i>ma-madal</i> | ‘smooth’ |
| SES: | Gela | <i>madali</i> | ‘slippery’ |
| SES: | Arosi | <i>madari</i> | ‘wet and slippery, as rocks’ |

One shape concept for which POc evidently had terms was ‘straight, level’. Reflexes of these terms often also include ‘true’ among their meanings, but I assume that the metaphorical extension was from shape to value (i.e. from visible to abstract), rather than vice versa.

The data require that we reconstruct two variants for each of the three terms. Thus we reconstruct not only **[ma]koto*, whose canonic shape suggests that it is the inherited term, but also **ta-kodos*, which is derived from **kodos* ‘go straight; straighten’ (see p.196).²¹ I suspect that the verbs **[ma]koto* and **kodos* were separately inherited into POc (although no non-Oceanic cognates have been found) and that their formal similarity is attributable to derivation at an earlier stage, as POc **-t-* and **-d-* reflect PMP **-t-* and **-nt-* respectively. The Polynesian reflexes are attributed to the set with **-t-* because of their similarity in meaning to Bauan *koto*. Formally, they could at least as well reflect POc **ta-kodos*.

POc **[ma]koto* ‘straight’

| | | | |
|------|---------|----------------|---|
| MM: | Vitu | <i>mayoto</i> | ‘straight; (ground) flat’ |
| MM: | Tolai | <i>ot</i> | ‘straight’ |
| SES: | Gela | <i>oto</i> | ‘go directly, straight; set face to do, stare straight at’ (for expected <i>*yoto</i>) |
| SES: | W Guad. | <i>yoto</i> | ‘straight, correct’ |
| Fij: | Bauan | <i>koto</i> | (V) ‘lie down’; (ADJ) ‘extended, stretched out’ |
| Pn: | Tongan | <i>to-koto</i> | (V) ‘lie down’ |
| Pn: | Samoa | <i>ta-ʔoto</i> | (V) ‘lie down’ |
| Pn: | Maori | <i>ta-koto</i> | (V) ‘lie down’ |

POc **kodos* ‘go straight; straighten’, **ta-kodos* ‘straight’

| | | | |
|------|----------|------------------|---|
| MM: | Lavongai | <i>koronj</i> | ‘straight’ |
| MM: | Lamasong | <i>tokodos</i> | ‘straight’ |
| MM: | Patpatar | <i>takodas</i> | ‘straight’ |
| MM: | Tolai | <i>kodo</i> | ‘straighten’ |
| | | <i>takodo</i> | ‘straight’ |
| MM: | Nehan | <i>kod-kodoh</i> | ‘straight’ |
| SES: | Lau | <i>odo-odo</i> | ‘go in a direct line, straight’ |
| SES: | Kwaio | <i>odo</i> | ‘straight, correct’ |
| SES: | Sa’a | <i>odo-odo</i> | ‘be straight, go straight forward; be correct and proper’ |
| SES: | Arosi | <i>odo-odo</i> | ‘straight’ |

POc **[t,d]onu(p)* ‘straight’²²

| | | | |
|------|---------|-----------------|-----------------------------------|
| NNG: | Malai | <i>dunu(ŋa)</i> | ‘straight’ |
| NNG: | Numbami | <i>tonowa</i> | ‘straight’ |
| MM: | Laghu | <i>to-tonu</i> | ‘straight’ |
| NCV: | Kiai | <i>tu-tunu</i> | ‘good, straight, sweet’ |
| NCV: | Labo | <i>tən</i> | ‘straighten an arrow in the fire’ |

²¹ The Southeast Solomonian reflexes show unexplained loss of **k*.

²² The final *-(p)* of **[t,d]onu(p)* is tentatively reconstructed to account for Numbami *tonowa*, where paragogic *-a* indicates the presence of a final consonant and *-w-* reflects **-p*.

| | | | |
|------|-----------|---------|---------------------------------------|
| SV: | Kwamera | (a)tuən | verbal adjunct: implies straightening |
| Fij: | Bauan | donu | ‘(be) straight, true, correct’ |
| Fij: | Wayan | donu | ‘(be) right, correct, true’ |
| Pn: | Tongan | tonu | ‘be exact, be correct, be right’ |
| Pn: | Samoan | tonu | ‘(be) exact, correct, just’ |
| Pn: | Mele-Fila | tō-tonu | ‘right, correct’ |

I have no explanation for the pair **m^wane-m^wane* and **wane-wane*. Reflexes of the former occur in the Admiralties, Southeast Solomonian and New Caledonia, of the latter in the Schoutens and Micronesia. However, if the Ali reflex were non-cognate, then **wane-wane* would simply be a Nuclear Micronesian innovation.

POc **m^wane-m^wane* ‘straight, direct; flat, level’ (ACD)

| | | | |
|-------|----------|----------------------|---|
| Adm: | Aua | wane-wane | ‘smooth, level; straight’ ²³ |
| Adm: | Pak | m ^w ane-n | ‘straight’ |
| Adm: | Nyindrou | mone-n | ‘straight’ |
| Adm: | Loniu | m ^w εnε-n | ‘straight’ |
| SES: | Gela | mae-mane | ‘straight’ |
| SES: | Lau | ma-mana | ‘true’ |
| NCal: | Cèmuhî | mó-m ^w ɔn | ‘straight, right, correct’ |

POc **wane-wane* ‘straight, direct; flat, level’ (ACD)

| | | | |
|------|----------------|-----------|---|
| NNG: | Ali | wane(ŋ) | ‘straight’ |
| Mic: | L. Mortlockese | wane-wan | ‘straight, steady, direct’ |
| Mic: | Puluwatese | wene-wen | ‘be directly above; straight, direct, honest, exactly’, ‘greatly’ |
| Mic: | Woleaian | were-were | ‘straight, steady, still’ |

The only antonym of the terms above is PWOC **kalis* ‘crooked’, which is only weakly attested.

PWOC **kalis* ‘crooked’

| | | | |
|------|------------|-----------|-----------|
| NNG: | Takia | kael(a-n) | ‘crooked’ |
| MM: | Sursurunga | kalis | ‘crooked’ |

5.2 Weight

Forms for ‘heavy’ are morphologically complex. POc **[pa]pat* reflects the base **pat*, POc **ma-pat* and **mamat* reflect prefixation with **ma-* and **maN-* respectively (the function of **maN-* in this context is unclear; cf. vol. 1, p.29). The term for ‘light’ (in weight) is **[ma]Raqa*.

POc **[pa]pat* ‘heavy’

| | | | |
|------|-------|------------|---------|
| NNG: | Gitua | pat(aŋa-n) | ‘heavy’ |
| NNG: | Maleu | -pat(aŋa) | ‘heavy’ |
| NNG: | Yabem | (ŋa)wapa? | ‘heavy’ |

²³ Aua initial *w-* could reflect either **m^w-* or **w-*, but I have assumed the Aua reflex to reflect **m^wane-m^wane*, as this is reflected elsewhere in the Admiralties.

POc **mapat* ‘heavy’ (ACD)

| | | | |
|------|-----------|------------------|---|
| Adm: | Nyindrou | <i>mahaʔ(an)</i> | ‘heavy’ |
| SJ: | Sobei | <i>mafo</i> | ‘heavy’ |
| MM: | Bulu | <i>mava</i> | ‘heavy’ |
| MM: | Ramoaaina | <i>məvət</i> | ‘heavy’ |
| SES: | Gela | <i>mava</i> | ‘heavy, important’ |
| NCV: | NE Ambae | <i>mava</i> | ‘be/become heavy’ |
| Fij: | Rotuman | <i>maha</i> | ‘heavy’ |
| Pn: | Tongan | <i>ma-mafa</i> | ‘heavy’ |
| | | <i>mafas-ia</i> | ‘(be) weighed down, burdened’ |
| | | <i>mafāt-aki</i> | ‘(rain) be heavy; (work) be heavy, difficult’ |
| Pn: | Samoaan | <i>ma-mafa</i> | ‘heavy’ |
| | | <i>mafāt-ia</i> | ‘exhausted, overcome’ |

POc **mamat* ‘heavy’

| | | | |
|------|---------|-------------------|---------|
| Adm: | Mussau | <i>mamāta(na)</i> | ‘heavy’ |
| MM: | Tolai | <i>mamat</i> | ‘heavy’ |
| MM: | Roviana | <i>mamata</i> | ‘heavy’ |

PMP **[ma]Raqaan* ‘light in weight’ (ACD)POc **[ma]Raqaan* ‘light in weight’

| | | | |
|------|----------|-------------------|---------------------------|
| PT: | Motu | <i>haraya</i> | ‘easy, light (in weight)’ |
| NNG: | Bariai | <i>malan</i> | ‘light in weight’ |
| NNG: | Sio | <i>malalvka</i> | ‘light in weight’ |
| NNG: | Tami | <i>malaga-lag</i> | ‘light in weight’ |
| NNG: | Aria | <i>maŕkan</i> | ‘light in weight’ |
| MM: | Vitu | <i>maraya</i> | ‘light in weight’ |
| MM: | Nakanai | <i>mara-mara</i> | ‘lightened, relieved’ |
| SES: | Gela | <i>ma-mala</i> | ‘light in weight’ |
| NCV: | NE Ambae | <i>ma-marae</i> | ‘be/become light’ |
| NCV: | Raga | <i>ma-mara</i> | ‘light in weight’ |
| NCV: | Paamese | <i>melā-la</i> | ‘light in weight’ |
| Mic: | Ponapean | <i>marā-ra</i> | ‘light in weight’ |
| Fij: | Nadrogaa | <i>mā-mā</i> | ‘light in weight’ |
| Fij: | Wayan | <i>mā-mā</i> | ‘be light (in weight)’ |
| Pn: | Tongan | <i>maʔa-maʔa</i> | ‘light in weight’ |
| Pn: | Samoaan | <i>mā-mā</i> | ‘light in weight’ |

5.3 Strength, toughness and speed

Oceanic speakers tend to express the cluster of concepts ‘hard’ (of physical substances), ‘strong’ (of human beings), ‘quickly moving’ and ‘energetic’ with a single lexeme, and ‘soft’, ‘weak’, ‘slow’ and ‘gentle’ also with a single lexeme. Terms for the first, again due entirely to Blust (ACD), are POc **paka(s)* and **laga(s)*, neither of them particularly stable (i.e. we find few reflexes of them). Terms for its antonym are **[ma]lumu* and **ma-luas*,

both quite stable and thus widely reflected. The latter is also used of calm weather in eastern Oceanic languages (see Ch. 5, §5.1).

PMP **ba(ŋ)kas* ‘swift, strong, energetic, fast’ (ACD)

POc **paka(s)* ‘have strength, energy’ (ACD)

NCV: Mota *vaka* ‘have strength, energy’

PMP **la(ŋ)kas* ‘spirited, energetic’ (ACD)

POc **laga(s)* ‘spirited, energetic’ ACD

MM: Sursurunga *lak-lak* ‘hard, stubborn’

SES: Gela *laga* ‘strong, strength; energetic’

SES: Arosi *raga* ‘strong, strengthened, invigorated’

Two POc terms, **[ma]lumu* and **ma-luas*, express ‘soft, gentle’.

PMP **[ma]lumu* ‘soft, tender, gentle’ (ACD)

POc **[ma]lumu* ‘soft, gentle, easy’

NNG: Bariai *marum* ‘soft’

NNG: Amara *mulum* ‘soft’

MM: Nakanai *malumo* ‘be soft (bread or sweet biscuits, or taro left too long in the ground)’

MM: Lavongai *malum* ‘soft’

MM: Patpatar *ma-malum* ‘soft’

MM: Mono *maluŋ* ‘soft’

SES: Gela *malumu* ‘easy’

SES: Kwaio *malumu* ‘good-looking’

SES: Arosi *rumu* ‘oil’

marumu-rumu ‘soft’

NCV: Mota *malum-lum* ‘soft, gentle’

NCV: NE Ambae *lu-lumu* ‘be/become sweet, good tasting’

NCV: Raga *lumu-lumu* ‘soft’

NCV: Tamambo *ma-lu-lum* ‘soft’

Fij: Bauan *malumu* ‘weak, faint, sick, soft’

PPn **malū* ‘soft (of a substance), calm (of day, sea)’ (irregular loss of **-m-* in all Polynesian reflexes)

Pn: Tongan *malū* ‘soft, tender, flexible; (weather) mild, pleasantly calm; (pain) abated’

Pn: Niuean *molū* ‘soft, weak, humble’

Pn: Samoan *malū* ‘(substance) soft; (sea +) calm; (voice) bass

Pn: E Uvean *malū* ‘calm, peaceful’

Pn: E Futunan *malū* ‘soft’

Pn: Rennellese *magū* ‘be soft, be slack’

Pn: Tahitian *marū* ‘soft, gentle, easy’

POc **ma-luas* ‘soft’

| | | | |
|------|----------------|--------------------|--|
| NNG: | Sio | <i>malve</i> | ‘limp, squishy, soft’ |
| MM: | Notsi | <i>məlus</i> | ‘soft’ |
| MM: | Konomala | <i>ma-mlas</i> | ‘soft’ |
| MM: | Siar | <i>ma-maluas</i> | ‘soft’ |
| MM: | Ramoaina | <i>məl-məluə</i> | ‘soft’ |
| MM: | Nehan | <i>mal-malua-n</i> | ‘soft’ |
| SES: | Gela | <i>malua</i> | ‘soft’ |
| SES: | ’Are’are | <i>mārū-rū</i> | ‘soft, gentle, flexible’ |
| Mic: | Ponapean | <i>malu-n</i> | ‘calm, of the sea’ |
| Mic: | Mokilese | <i>molu-n</i> | ‘calm or fine, of weather’ |
| Mic: | L. Mortlockese | <i>maləwa-ləw</i> | ‘peaceful’ |
| Mic: | Puluwatese | <i>malīwa-lī</i> | ‘to be easy or slow, to be calm (as the sea), to be gentle’ |
| Fij: | Bauan | <i>mālua</i> | ‘gently, slowly, quietly’ |

5.4 Content

Three terms meaning ‘full’ are reconstructable. The first, **ponuq*, is the general term. It is not clear to me how **puŋu* and **poju* differed in meaning from this and from each other. However, **puŋu* may simply be a doublet of **ponuq*. The term **poju* seems to be a reflex of PMP **besuR* ‘satiated’. The opposite meaning, ‘empty’, seems to have been expressed by **[ma]maca* ‘dry’ (p.226), at least when ‘empty of liquid’ was intended.

PMP **ponuq* ‘full’POc **ponuq* ‘full’

| | | | |
|-------|----------|---------------|---------------|
| NNG: | Bariai | <i>-won</i> | |
| NNG: | Lukep | <i>-pon</i> | |
| NNG: | Poeng | <i>ponu</i> | |
| NNG: | Wogeo | <i>-won</i> | |
| NNG: | Kaiep | <i>-wun</i> | |
| PT: | Motu | <i>honu</i> | |
| PT: | Mekeo | <i>poŋu</i> | |
| MM: | Bali | <i>vonuku</i> | |
| MM: | Meramera | <i>vonu</i> | ‘full; swell’ |
| MM: | Nakanai | <i>volu</i> | |
| MM: | Lihir | <i>on</i> | |
| MM: | Nehan | <i>won</i> | |
| MM: | Mono | <i>honu</i> | |
| SES: | Gela | <i>vonu</i> | |
| SES: | Talise | <i>vonu</i> | |
| SES: | Longgu | <i>vonu</i> | |
| SES: | Kwaio | <i>fonu</i> | |
| SES: | Arosi | <i>honu</i> | |
| NCal: | Nemi | <i>punuk</i> | |

| | | |
|------|----------|-------------|
| Mic: | Kiribati | <i>on</i> |
| Pn: | Tongan | <i>fonu</i> |

POc **puŋu* ‘full’

| | | |
|------|----------|----------------------------|
| NNG: | Maleu | <i>-uŋ</i> |
| NNG: | Silisili | <i>(ri)fu^ŋg</i> |
| NNG: | Sukurum | <i>fuaŋ</i> |
| MM: | Lamasong | <i>-uŋ</i> |
| MM: | Patpatar | <i>huŋ</i> |
| SES: | Lau | <i>fuŋu</i> |
| SES: | Kwai | <i>fuŋu</i> |

PAN **besuR* ‘satisfied from having eaten enough, satiated’ (ACD)POc **poju* ‘full’

| | | | |
|------|-------------|----------------|--------|
| Adm: | Mussau | <i>pasu</i> | ‘full’ |
| MM: | Kara (East) | <i>vəs</i> | ‘full’ |
| MM: | Notsi | <i>us</i> | ‘full’ |
| MM: | Tabar | <i>vosu</i> | ‘full’ |
| MM: | Teop | <i>(ha)pus</i> | ‘full’ |
| MM: | Maringe | <i>fodu</i> | ‘full’ |

5.5 Temperature

Two terms are reconstructable for ‘hot, warm’, **[ma]panas* and **maŋini(t)*. The first was probably the general term, to judge from its distribution, whilst **maŋini(t)* probably had some specialised sense.

PMP **[ma]panas* ‘be/become warm, hot (of fire, sun, fever, water)’ (ACD)POc **[ma]panas* ‘warm, hot’

| | | | |
|------|-------------|---|--------------|
| Adm: | Mussau | <i>anasa</i> | ‘(s.o.) hot’ |
| NNG: | Kove | <i>wana-wana</i> | ‘(s.o.) hot’ |
| NNG: | Arove | <i>(ka)wanas</i> | ‘(s.o.) hot’ |
| NNG: | Takia | <i>wanana-n</i> | ‘hot’ |
| NNG: | Numbami | <i>wa-wana</i> | ‘hot’ |
| NNG: | Mapos Buang | <i>vane</i> | ‘hot’ |
| SJ: | Sobei | <i>mefna</i> | ‘(s.o.) hot’ |
| MM: | Tigak | <i>manas</i> | ‘(s.o.) hot’ |
| MM: | Maringe | <i>brana</i> | ‘hot’ |
| SES: | Longgu | <i>pa-pana</i> | ‘be warm’ |
| SES: | Bauro | <i>mahana-hana</i> | ‘hot’ |
| SV: | Kwamera | <i>-(a)p^wan-(a)p^wan</i> | ‘hot’ |
| SV: | Anejom | <i>(a)hen-hen</i> | ‘warm, hot’ |
| Fij: | Rotuman | <i>mah-mahana</i> | ‘warm’ |
| Pn: | Tongan | <i>māfana</i> | ‘warm’ |
| Pn: | Samoan | <i>māfana-fana</i> | ‘warm’ |

PMP **maN-qinit* ‘hot, warm’ (**qinit* ‘heat, warmth’) (ACD)

POc **maḡini(t)* ‘(?) become hot, warm’

| | | | |
|-----|---------|---------------|--------|
| MM: | Roviana | <i>maḡini</i> | ‘warm’ |
| MM: | Hoava | <i>maḡini</i> | ‘warm’ |

There are several POc forms for ‘cold’ which are derived from PMP **diḡin* ‘cold’. However, the expected POc reflex of PMP **diḡin* is ***riḡi(n)*, and we do not find this. Instead, we find **ridriḡ* and **ririḡ*, presumably from the reduplications **riḡ-riḡ* and **ri-riḡ*, preceded by various prefixes. POc **ma-ri(d)ri(ḡ)* needs no further explanation, whilst **madri(d)riḡ* is apparently derived from **maN-ri(d)riḡ*. POc **maka-ridri(ḡ)* is transparent enough, but I do not know the function of **maka-*. From the glosses of the reflexes, it seems that these terms probably referred to the temperature experienced by a person, i.e. ‘I feel cold’, rather than to the temperature of inanimate objects.

The other cognate set meaning ‘cold’ appears to reflect both **malaso* ‘cold (verb)’ and **malaso-ḡ* ‘cold (noun)’.

PMP **diḡin* ‘cold’

POc **ma-ri(d)ri(ḡ)* ‘(s.o.) cold’

| | | | |
|------|-----------|------------------|---------------|
| NNG: | Mutu | <i>marir</i> | ‘(s.o.) cold’ |
| NNG: | Apalik | <i>miri-n</i> | ‘(s.o.) cold’ |
| NNG: | Bebeli | <i>merir</i> | ‘(s.o.) cold’ |
| NNG: | Kaulong | <i>ḡlik</i> | ‘cold’ |
| NNG: | Poeng | <i>ma-mariri</i> | ‘(s.o.) cold’ |
| NNG: | Kaiep | <i>marir</i> | ‘(s.o.) cold’ |
| NNG: | Kairiru | <i>-meṛiṛ</i> | ‘(s.o.) cold’ |
| SJ: | Kayupulau | <i>mariri-e</i> | ‘(s.o.) cold’ |
| NCV: | Raga | <i>masisi</i> | ‘cold’ |
| NCV: | Merlav | <i>marir</i> | ‘(s.o.) cold’ |
| Mic: | Kiribati | <i>mariri</i> | ‘feel cold’ |
| Fij: | Rotuman | <i>matiti</i> | ‘cold’ |

POc **madri(d)riḡ* ‘(s.o.) become cold’

| | | | |
|------|-------------|----------------|----------------------|
| Adm: | Aua | <i>maxixi</i> | ‘cold’ |
| Adm: | Mondropolon | <i>madri</i> | ‘cold’ |
| NNG: | Takia | <i>madid</i> | ‘(s.o.) cold’ |
| NNG: | Manam | <i>madidi</i> | ‘cold’ |
| NNG: | Ulaui-Suain | <i>madid</i> | ‘(s.o.) cold’ |
| MM: | Tolai | <i>madiriḡ</i> | ‘cold (water, food)’ |
| MM: | Haku | <i>maririḡ</i> | ‘(s.o.) cold’ |
| NCV: | Paamese | <i>madil</i> | ‘cold’ |

POc **makaridriḡ* ‘(s.o.) cold’

| | | | |
|------|---------|-----------------|----------------|
| MM: | Notsi | <i>makadil</i> | ‘(s.o.) cold’ |
| SES: | Bauro | <i>mayārisi</i> | ‘cold’ |
| NCV: | Tamambo | <i>mayariri</i> | ‘cold’ |
| Pn: | Niuean | <i>makalili</i> | ‘cold, chilly’ |
| Pn: | Samoan | <i>maʔalili</i> | ‘(be) cold’ |

POc **malaso* ‘be cold’, **malaso-ŋ* (N) ‘cold’

| | | | |
|------|----------|-------------------|--------------------|
| NNG: | Roinji | <i>malasu(na)</i> | ‘(s.o.) cold’ |
| NNG: | Wab | <i>malsuŋ</i> | ‘cold’ |
| NNG: | Bing | <i>malsoŋ</i> | ‘cold’ |
| NNG: | Mindiri | <i>malas</i> | ‘cold’ |
| NNG: | Megiar | <i>malas</i> | ‘(s.o.) cold’ |
| MM: | Nehan | <i>malahon</i> | ‘(s.o.) cold’ |
| NCV: | Mota | <i>malaso</i> | (N) ‘cold’ |
| NCV: | Uripiv | <i>melas</i> | (N) ‘cold’ |
| SV: | Lenakel | <i>mhal</i> | ‘have a cold sore’ |
| SV: | SW Tanna | <i>(ə)m̥la</i> | ‘be cold’ |

5.6 Wet and dry

The English words ‘dry’ and ‘wet’ are polysemous. The meanings of ‘dry’ include ‘free from moisture’, ‘having lost natural moisture’ and ‘not in or under water’. POc terms with such meanings are reconstructed below. POc presumably also had words for various meanings of ‘wet’, but I have been able to reconstruct only POc **buluk*, in the meaning ‘soaked, waterlogged’.

POc **buluk* ‘be wet, soaked, waterlogged’

| | | | |
|------|------------|-------------------|---|
| NNG: | Bilibil | <i>polo</i> | ‘wet’ |
| MM: | Lavongai | <i>vuluk</i> | ‘wet’ |
| MM: | Ramoaaaina | <i>polo</i> | (V) ‘wet, muddy, swampy’; (N) ‘liquid, fluid’ |
| Fij: | Wayan | <i>bulu-bulu</i> | ‘be sticky, gluey, adhesive, cloggy, e.g. of clay or cloggy soil, too wet and lumpy to dig’ |
| Pn: | Niuean | <i>(faka)pulu</i> | ‘steep in water, ferment’ |
| Pn: | Mangareva | <i>puru</i> | ‘soaked’ |
| Pn: | Tahitian | <i>puru</i> | ‘soaked, waterlogged’ |
| Pn: | Hawaiian | <i>pulu</i> | ‘soaked’ |

The most widely reflected POc term with a ‘dry’ meaning is **[ma]maca*, which denoted states in which otherwise present liquid was absent. Thus it was used among other things of food which had dried up through overcooking and of low tide (Ch. 4, §2.6). POc **[ma](r,R)ano* ‘wither, dry up’ referred particularly to the dryness of dying vegetation and meant ‘withered, dry’ (vol. 1, p.135).

POc **karaŋo* is obviously formally related to **[ma]raŋo*, but its reflexes display the meanings both of this and of **[ma]maca*. POc **goRu* appears to have been a synonym of **[ma](r,R)ano*.

PMP **maja* ‘be dry’

POc **[ma]maca* (V) ‘dry up, evaporate, be empty of liquid’; (N) ‘low tide’

| | | | |
|------|--------|--------------------|-------------------|
| Adm: | Aua | <i>mamaha</i> | ‘dry’ |
| NNG: | Kove | <i>mamasa</i> | ‘dry’ |
| NNG: | Mutu | <i>mamas</i> | ‘(food +) dry up’ |
| NNG: | Mangap | <i>mamāza-ŋana</i> | ‘dry’ |

| | | | |
|------|-----------|-------------------|-----------------------------|
| NNG: | Tami | <i>mamat</i> | ‘dry’ |
| NNG: | Roinji | <i>mamasa-na</i> | ‘dry’ |
| NNG: | Bing | <i>mas-mamasa</i> | ‘low tide’ |
| | | <i>mamsa-s</i> | ‘dry’ |
| NNG: | Numbami | <i>mamasa</i> | ‘dry’ |
| NNG: | Wogeo | <i>mamasa</i> | ‘dry’ |
| NNG: | Kairiru | <i>-mamas</i> | ‘dry’ |
| SJ: | Kayupulau | <i>mamaxe</i> | ‘dry’ |
| PT: | Gumawana | <i>mamaya</i> | ‘low tide, shore’ |
| MM: | Meramera | <i>mamasa</i> | ‘low tide’ |
| MM: | Lihir | <i>mas</i> | ‘(food +) dry up’ |
| MM: | Patpatar | <i>mamasa</i> | ‘dry’ |
| MM: | Tolai | <i>mamā</i> | ‘lowtide’ |
| MM: | Siar | <i>mas-mas</i> | ‘(food +) dry up; low tide’ |
| MM: | Roviana | <i>masa</i> | ‘lowtide’ |
| SES: | Gela | <i>mamaha</i> | ‘dry’ |
| SES: | Arosi | <i>mamata</i> | ‘dry’ |
| NCV: | Raga | <i>mamaha</i> | ‘dry’ |
| NCV: | NE Ambae | <i>mamaha</i> | ‘be/become dry’ |
| NCV: | Tamambo | <i>mamasa</i> | ‘dry (of ground +)’ |
| NCV: | Paamese | <i>mes</i> | ‘dry’ |
| Fij: | Bauan | <i>maḍa</i> | ‘be empty, be dry’ |
| | | <i>mamaḍa</i> | ‘dry, be dry’ |
| SV: | N Tanna | <i>mas</i> | ‘lowtide’ |
| SV: | Kwamera | <i>maha</i> | ‘lowtide, empty of liquid’ |
| Pn: | Tongan | <i>mamaha</i> | ‘lowtide’ |
| Pn: | Samoa | <i>masa</i> | ‘be shallow’ |

POc *[*ma-*](*r,R*)*aŋo* displays a phonological problem. Apparent non-Oceanic cognates of the root **raŋo* reflect PMP **Raŋaw*, so we would expect the reconstructable POc form to be ***Raŋo*. But Oceanic languages which reflect POc **r* and **R* differently are not in accord with each other: SES and NCV languages have a reflex of **r* whilst Pn languages have a (zero) reflex of **R*. (Mussau and NNG and MM languages reflect **r* and **R* identically.) I assume tentatively that POc had **[ma]Raŋo* and that forms with **r* are innovative.

PMP **[ma]Raŋaw* ‘dry’, **[ma]Raŋu?* ‘dry’ (Blust 1981, 1986)

POc **[ma]Raŋo* ‘become withered (of vegetation)’²⁴

| | | | |
|------|---------|---------------|----------------|
| Adm: | Mussau | <i>malano</i> | ‘dry’ |
| NNG: | Manam | <i>marano</i> | ‘dry, arid’ |
| NNG: | Kairiru | <i>maran</i> | ‘ripe coconut’ |
| MM: | Nalik | <i>maran</i> | ‘ripe coconut’ |

²⁴ In Ross (1996c) I reconstructed POc **[ma]Raŋ(o,u)* ‘dry; coconut growth stage 8: dry and ready to fall’. However, its POc status rested on Baelelea (SES) *maleŋa* ‘coconut’. I no longer think this is cognate with the NNG and MM forms which refer to a withered coconut, and take the latter simply to be an extension of meaning of reflexes of **[ma-](r,R)aŋo*.

| | | | |
|------|---------------|----------------|--|
| MM: | Susurunga | <i>marañ</i> | ‘(be) old, dry; (old) coconut with lots of meat and little milk’ |
| MM: | Patpatar | <i>maraña</i> | ‘dry coconut’ |
| MM: | Tolai | <i>ma-raña</i> | ‘withered, dry (leaves, husk, tree)’ |
| MM: | Halia (Selau) | <i>raño</i> | ‘dry’ |
| SES: | Bugotu | <i>raño</i> | ‘wither (leaves, yam vines)’ |
| SES: | Sa’a | <i>raño</i> | ‘be withered, dry (esp. yams when vine withers)’ |
| SES: | Arosi | <i>raño</i> | ‘withered, dead (of grass, green boughs +)’ |
| NCV: | Mota | <i>raño</i> | ‘become dried up in the course of nature’ |
| Pn: | Samoaan | <i>maño</i> | ‘dry up; be dry (of wood, clothes)’ |
| Pn: | Niuean | <i>maño</i> | ‘dry (of wood, trees)’ |

POc **ka-(r,R)ano* ‘be dry; be low tide’

| | | | |
|------|--------|------------------|--|
| NNG: | Yabem | <i>(ŋa)kelɛŋ</i> | ‘dry (of a cloth etc)’ |
| MM: | Zabana | <i>karaño</i> | ‘be dry; be low tide’ |
| SES: | Gela | <i>karaño</i> | ‘dry up; reef, low tide, harvest time’ |
| SES: | Lengo | <i>karaño</i> | ‘low tide’ |

POc **goRu* ‘dry, of vegetation; coconut growth stage 8: dry and ready to fall’ (Ross 1996c)

| | | | |
|------|---------|------------------|---|
| NNG: | Mutu | <i>gor-gori</i> | ‘dry’ |
| NNG: | Malai | <i>gor-gori</i> | ‘dry, ripe coconut’ |
| NNG: | Kakuna | <i>kolu-ŋana</i> | ‘ripe coconut’ |
| SES: | Lengo | <i>golu</i> | ‘coconut flesh’ |
| NCV: | Mota | <i>kor</i> | ‘become dry, with heat or time; coconut in its last condition before it falls from the tree; dry (of other things too)’ |
| NCV: | Tamambo | <i>koru</i> | ‘dry, dying (of tree)’ |
| NCV: | Raga | <i>ʔgoru</i> | ‘dry’ |