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Talking about space: terms of location and direction

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1 Introduction

Talking about space is a part of talking about the environment as a whole. We include talking about space in this volume because some of the terms reconstructed in §2 are also used to denote parts of the landscape and seascape reconstructed in Chapters 3 and 4. However, much of the terminology reconstructed in this chapter was also used to talk about space in relation to manufactured objects (vol. 1), to flora and fauna (vols. 3 and 4) and to human beings (vol. 5). Many languages have complex terminologies for talking about space, and the length of this chapter bears witness to the fact that Proto Oceanic was no exception.

Following Levinson (1996) and Hyslop (2001), we distinguish four kinds of semantic system employed in talking about space. These are listed here with some commentary on their expression in Oceanic languages.

1. A system of **geographic** directions based on a division of the environment that normally has a vertical ('up'/'down') axis and a horizontal axis. On the horizontal axis European languages have the cardinal directions 'north', 'south', 'east' and 'west'. In Oceanic languages there are usually two sets of geographic directions, one used on or near land, the other used at sea (cf. Hill 1997, François 2003, 2004). Typically each has two subsystems.
 - (a) The land-based subsystems are (cf. Ozanne-Rivierre 1997):
 - (i) one with an inland/seaward axis, sometimes with a transverse axis pointing left and right along the coast (each axis is typically denoted by a local noun in a local construction; p.232);
 - (ii) one based on a river valley with an up/down axis (often using the vertical terms) and a transverse axis with one directionally neutral ('across the valley') term (each axis is typically expressed by a directional verb or other directional morpheme).

- (b) The sea-based subsystems both refer to a northwest–southeast axis,
 - (i) one using the terms for the northwest storm wind and the southeast trade wind (POc **apaRat* and **raki* respectively; Ch. 5, §4.2);
 - (ii) the other applying the river valley subsystem with its up/down axis (and perhaps its transverse axis) metaphorically to the sea, such that ‘down’ is towards the northwest and ‘up’ towards the southeast (François 2003, 2004).

If we wanted to be particular, incidentally, we could label a number of geographic expressions ‘deictic-geographic’. To say that something is seawards, for example, is to place it in relation to the speaker. If the speaker were closer to the sea, the same referent might be ‘inland’.

2. An **intrinsic** system specifies the location of an object in relation to a reference object. European languages often use prepositions for this purpose (*in*, *on*, *under*, *over*, *beside*). A few Oceanic languages also use adpositions, but in the majority a local construction is used. This is often an adpositional phrase containing a relational local noun, i.e. a noun that refers to a part of the reference object or to a location in relation to the reference object (‘inside’, ‘upper surface’, ‘top’, ‘underside’, ‘side’).
3. **Relative** locations entail both the position of a reference person, often the speaker, and the position of a reference object. Relative locations look like intrinsic locations, but the latter do not entail a reference person (Leech 1969:167–168). For example, ‘in front of the house’ is an intrinsic location because a house has a ‘front’. For an Oceanic speaker, this is the side with the ladder, balcony and door. But ‘in front of the tree’ is a relative location because a tree has no intrinsic front. When an English speaker uses this expression, s/he treats the tree as if it were facing her/him, and so the part of the tree that ‘faces’ the speaker is treated as its front. Thus the ‘front’ changes with a change in the speaker’s position. Similarly, ‘turn left’ entails a reference person—the addressee—and a reference object. The reference object is the addressee’s body, and the direction of ‘left’ varies according to the addressee’s location and which way s/he is facing. Relative locations are not used in Oceanic languages, however. Oceanic speakers use terms like ‘front’ and ‘left’ intrinsically. One does not talk about the ‘front’ of a tree, and ‘left’ is strictly an intrinsic part of the speaker’s body, not a direction (Ozanne-Rivierre 1997). Instead, one uses the geographic system: ‘seawards of the tree’, ‘go left-along-the-coast’ (cf. Hill 1997).
4. A **deictic** system is based on location relative to the speaker or to some other person and often also relative to the addressee. Deictic expressions are tied to the context of the individual speech act; they do not refer to fixed points in space. All languages probably have demonstratives of some kind (‘this’/‘that’, ‘here’/‘there’, ‘voici’/‘voilà’ etc). Many Oceanic languages in addition have deictic directional morphemes in their verb phrases (or sometimes in locative phrases) which indicate whether direction associated with the event is towards the speaker and/or, in some languages, towards the addressee.¹

¹ I am very grateful to John Lynch for his help and advice in interpreting data from New Caledonian languages, to Alexandre François for sharing with me his work on Oceanic marine directions, and to Andrew Pawley for his comments on an earlier draft of this paper.

Relationships between widespread Oceanic categories that probably existed in POC and systems of talking about space are summarised below.

- (a) Some **local nouns** (§2) are used to express the directions of the vertical, inland/seaward and coastal axes of the *geographic* system. Overlapping with these semantically are local nouns that express locations and directions in the local environment that are part of the shared experience of speaker and addressee ('home', 'bush', 'garden' etc). There are also relational local nouns that express locations ('inside' etc) in the *intrinsic* system.
- (b) **Directional** morphemes (§3) in verb phrases and in adjuncts are used in Oceanic languages to express *geographic* (vertical and valley-based) and *deictic* directions. In single-verb predicates and in serial verb constructions these morphemes are verbs. Elsewhere they are morphemes grammaticised from verbs. Grammaticisation had probably already occurred in some cases in Proto Oceanic (Ross 2003).²
- (c) **Demonstratives** are used as static *deictics*. The reconstruction of demonstratives is not treated in this chapter.

We can illustrate the typical Oceanic system by summarising the system in Longgu (SES) as described by Hill (1992, 1997, 2002). Local nouns marking the axes of the geographic system are *asi* 'seawards', *loŋa* 'inland', *alaʔa* 'east', *toli* 'west', *vuʔa* 'down', *laŋi* 'up'. Longgu has terms meaning 'left' and 'right', but their referents are the arms and the sides of the body, and they do not form part of the system of spatial orientation and are not local nouns. Where English would use 'left' or 'right', a Longgu speaker refers to *aʔae asi* 'the seawards leg' or *aʔae longa-i* 'the inland leg'. 'Nouns such as *komu* 'village' and *luma* 'house' function as place [local] nouns when their referent is the village or house considered to be the "home" location' (Hill 1997:103) and occur in different constructions from when they are used as common nouns (p.233). One of these constructions is with the preposition *i* or with no preposition. Relational local nouns express intrinsic locations in relation to objects. For example, *ubu-* 'inside' is treated as possessum in relation to the possessor *pera* 'basket':

vugi ubu-na pera-i
 banana inside-P:3SG basket-SG
 'The banana is inside the basket.'

Other relational local nouns are *buri-* 'behind', *naʔova-* 'front', *gege-* 'side', *orova-* 'underneath', *vavo-* 'top surface, space above', *levua-* 'middle, centre'. Demonstratives are also a type of local noun, occurring with the preposition *i* to indicate a location. Unlike many Oceanic languages, which have a person-oriented deictic system (§3.4), Longgu deictics distinguish four degrees of deictic distance from the speaker: *nene* 'this, here', *nina* 'that, there', *ninaina* 'that yonder, yonder' and *nihou* 'that/there far away'.

Like many Oceanic languages, Longgu has postverbal particles that distinguish motion towards and away from the speaker—*mai* 'hither' and *hou* 'thither'—and are hence deictic. Some languages have a third particle indicating motion towards the addressee (§3.4), and others also have particles expressing the geographic directions 'up (valley)', 'down (valley)' and 'across (valley)' (§3.3).

² Note that two morphosyntactic categories were used to express the vertical dimension in POC: local nouns and directional verbs.

There is no one-to-one relationship between the geographic, intrinsic, and deictic systems and the morphosyntactic categories used to express them. For this reason this chapter is organised on the basis of the morphosyntactic categories as they occurred in POc, rather than on the basis of the semantic systems outlined above.

2 Local nouns

In POc and indeed throughout the history of many Oceanic subgroups there were three subclasses of noun: personal, common and local. These subclasses are defined by the constructions in which they occur. Since some nouns occur in a number of constructions, they are assigned to more than one subclass.

1. **Personal:** personal proper names and kin terms used of known individuals. In POc a **personal noun phrase construction** consisted of the personal article **i* or **e* plus a personal noun,³ reflected in Taiof (MM) *e Maras* ‘Maras (proper name)’, *e cina-nai* (ART mother-P:3SG) ‘his/her mother’.⁴ In Longgu (SES) personal nouns occur without an article, but POc **i* is reflected in the ‘pronominal article’ in *i gira* ‘they’ and other free pronouns.
2. **Common:** human nouns and non-human animates when not used of known individuals, as well as inanimates and abstract nouns. A common noun with a specific referent was in most cases preceded by the common article **a* or **na*, as in POc **a/na Rumaq* ‘a/the house’.⁵ The construction is reflected in Taiof *a numa* ‘a/the house’, *a patu-re* (ART head-P:3PL) ‘their heads’; Longgu *a komu-i* (ART village-SG) ‘the village’⁶. If such a noun was used in an **adjunct construction** it was preceded by the sequence **i ta-*, as in POc **i ta-ña Rumaq* (PREP **ta*-P:3SG house) ‘at a/the house’.⁷ In this construction **ta-* was a monovalent semantically empty noun. In most Oceanic languages where this latter construction is reflected, however, **i* has dropped out, leaving **ta-* as a preposition.⁸ Hence Taiof *ta-na patu-na tober* (PREP-P:3SG head-P:3SG hill) ‘on top of the hill’, Longgu *ta-na iola-i* (PREP-P:3SG canoe-SG).
3. **Local:** nouns used with reference to a specific location, a time, or an intrinsically located part of something. The POc **local construction** consisted of the preposition **i* plus a local noun, with no intervening article. Local nouns include:

³ The distribution of these forms is not clear. Perhaps **e* was the POc phrase-initial form, **i* the phrase-internal form. It is also possible that the POc form was simply **i*, and that this, like the preposition **i* (§2.1), has independently become *e* in a number of languages.

⁴ Taiof *cina-nai* reflects POc **tina-* ‘mother’ + **ña* ‘3SG possessor’ + Taiof *aye* ‘3SG free pronoun’.

⁵ Crowley (1985) suggests that human common nouns had no article. This was apparently true of kin terms, but perhaps not of non-kin human common nouns, as an article is reconstructable in this context in Proto Eastern Oceanic (Pawley 1972).

⁶ Longgu *-i* marks a referential noun as singular.

⁷ The suffix *-ña* agrees in person and number with **Rumaq* ‘house’.

⁸ Evidence for reconstructing the sequence **i ta-* is found in Mussau (Adm) *e ta-gi* ‘to me, for me’, Gela *i ta-gua* ‘with me’ (both reflecting POc **i ta-gu*) and in a Longgu (SES) paradigm of prepositions and relators shown on p.5 (Hill 1992). Paradigmaticity indicates that the cell now occupied by *ta-* once contained **i ta-*. Proto South Vanuatu **ira-* (Lynch 2001) appears from its possessive suffixation and its uses as general and possessive preposition also to reflect POc **i ta-*, but this entails assuming the form underwent an idiosyncratic innovation, as it reflects POc **ira-*.

- (a) proper placenames;
- (b) nouns denoting locations, including
 - (i) nouns denoting familiar places like ‘home’, ‘(own) village’, ‘(own) garden’, ‘bush’, ‘beach’ etc.;
 - (ii) nouns denoting geographic directions, ‘down below’, ‘up above’;
- (c) temporal nouns;
- (d) monovalent relational nouns, e.g. nouns denoting intrinsic parts, like ‘inside’, ‘upper surface or space above’, ‘lower surface’, ‘space beneath’ and so on;

In Tai of a local noun may form a locative expression without a preposition (i.e. **i* has been lost), like *koma-na matan* below.⁹ A locative expression with a common noun must be formed with a preposition.

E Maras to noŋos no-n koma=na matan.
 ART Maras REAL dwell IMPF-P:3SG inside=ART ditch
 ‘Maras is in the ditch.’

In Longgu local and common nouns are preceded by different paradigms of relators and prepositions (the term ‘relator’ is explained on p.268):

	location ‘at’	extent ‘as far as’	direction ‘to, towards’
with a local noun	<i>i</i>	<i>mi</i>	<i>vu</i>
with a common noun	<i>ta-</i>	<i>mi ta-</i>	<i>vu ta-</i>

Thus we find:

e la vu komu (local noun)
 S:3SG go R village
 ‘s/he went towards her/his (home) village’

e la vu ta-na iola ŋaia (common noun)
 S:3SG go R PREP-P:3SG canoe D:3SG
 ‘s/he went to her/his (canoe)’

When a local noun indicating a geographic direction follows a verb it may occur without a preposition or relator, e.g. *lae asi* ‘go seawards’.

A noun like **tama-gu* (father-my) used with the personal article served as a name (‘Dad’, ‘Papa’); used without an article it served as a common human noun (‘my father(s)’). Similarly, in a local construction a noun like **Rumaq* ‘house’ behaved grammatically and semantically like a placename, so that **i Rumaq* meant ‘at home’ (p.241), but in the general adjunct construction **i ta-ña Rumaq* ‘at a/the house’ **Rumaq* was a common noun.

⁹ Abbreviations used in glosses are as follows: 1, 2, 3 first, second and third persons; ADN adnominal; ADV adverb; ART article; AUX auxiliary; COM common; CSTR construction marker; D: disjunctive pronoun; DEM demonstrative; DIR direction, directional; E exclusive; ENCL enclitic; HYP hypothetical; I inclusive; IMPF imperfective; IRR irrealis; LOC local, locative; N noun; O: object pronoun; PERS personal; PL plural; P: possessor pronoun; PLC placename; PREP preposition; PREPV prepositional verb; PRO pronoun; R relator; REAL realis; REL relative clause marker; SEQ sequential; SG singular; S: subject pronoun; V verb; VF final verb.

Inspection of the grammars of Oceanic languages shows that many have retained the distinction between local and common constructions, although a majority express it with morphemes other than reflexes of **i* and **ta-* (for elaboration, see Ross 2004); see also the local prepositions listed under POc **la[-]* (p.289). This inspection also shows that common nouns can be readily co-opted into the local construction. Thus it is common to find the common nouns for ‘house’, ‘garden’, ‘village’, ‘bush’ and ‘beach’ also occurring in the local construction, but this does not mean that the POc etyma they reflect necessarily occurred in the POc local construction.

As the Taiof examples above show, the division into common and local nouns cut across the division into zero-valency and monovalent nouns (vol. 1, p.32).

Zero-valency local nouns denoted familiar places like ‘home’, ‘own village’, ‘own garden’, ‘bush’, ‘beach’, i.e. locations whose reference would be clear to the addressee without further specification or whose exact reference was irrelevant (like the English construction with *at* and no article in *at home*, *at school*, *at hospital*, *at work*). Also belonging to the zero-valency local category were nouns denoting regions, either in relation to, say, the island home of the interlocutors or in relation to the speaker. These nouns denote geographic directions such as ‘up above’, ‘down below’, ‘inland’, ‘at sea’ and so on. There is no sharp distinction between these and nouns for familiar places: ‘inland’ and ‘bush’, for example, are often synonymous in Oceanic languages. This is not surprising. Palmer (2001) points out that the terms for a culture’s geographic directions are commonly grammaticised from perceptually salient phenomena of the landscape. These nouns have sometimes been labelled ‘absolute’ local nouns in the literature, to distinguish them from relational local nouns, but I prefer the label ‘geographic’ as some of their uses are deictic, referring to a location in relation to the speaker and addressee. Familiar-place and geographic local nouns are reconstructed in §2.2.

Monovalent local nouns, often labelled ‘relational’ nouns in the literature, referred to parts of objects. These are reconstructed in §2.3.

In POc the zero-valency/monovalent distinction was apparently not as sharp as it is in many modern Oceanic languages (Lynch, Ross & Crowley 2002:78–79), but there were semantically driven tendencies in the behaviour of nouns. When a noun was viewed as semantically inalienable, like the inside of an object, it was monovalent (i.e. directly possessed, with a possessor suffix), but the same noun could also have zero valency if used in a context where inalienability was irrelevant. For this reason, the relational nouns reconstructed in §2.3 have both monovalent and zero-valency forms, and we find cases where some reflexes of a relational noun are monovalent, others zero-valency.

The major local nouns reconstructed below are listed here with simplified glosses, in two groups, relational and familiar-place/geographic. Where a noun is also reconstructed as a common noun, its common-noun gloss is also given, and where a local adverb in **qa-* is reconstructable this is also shown.

Familiar-place and geographic local nouns:

	as common noun	as local noun	adverb
* <i>qutan</i>	‘bushland, hinterland’	‘inland’	* <i>qa-qutan</i>
* <i>loŋa</i>	...	‘inland’	—
* <i>laur</i>	—	‘seawards’	* <i>qa-laur</i>
* <i>tasik</i>	‘sea, salt water’	‘at sea’	—
* <i>Rumaq</i>	‘house’	‘home’	* <i>qa-Rumaq</i>
* <i>tanoq</i>	‘earth, soil’	‘down below’	* <i>qa-tanoq</i>
* <i>atas</i>	‘high country, uplands’	‘up above’	—
* <i>lanit</i>	‘sky, weather’	‘up top, high up’	—
* <i>laka</i>	...	‘up above’	* <i>qa-laka</i>
* <i>liwan</i>	‘open space’	‘middle’	—

Relational local nouns:

	as common noun	as local noun	adverb
* <i>lalo-</i> , * <i>lo-</i> , * <i>lalom</i>	—	‘inside’	—
* <i>papa-</i> , * <i>pa-</i> , * <i>papak</i> , * <i>pak</i>	—	‘underside’	—
* <i>papo-</i> , * <i>po-</i> , * <i>papo</i> , * <i>po</i>	—	‘upper surface’	—
* <i>qulu-</i> , * <i>qulu</i>	‘head, (head) hair’	‘top’	PNCV * <i>qa-qulu</i>
*[<i>p^wa</i>]p ^w aRa-, *[<i>p^wa</i>]p ^w aRa	‘cheek’	‘side’	—
* <i>qaro-</i> , * <i>qarop</i>	‘face’ ?	‘front’	—
* <i>muqa-</i> , * <i>muqa</i>	—	‘front’	PNCV * <i>qa-muqa</i>
* <i>mata-</i> , * <i>mata</i>	‘eye’	‘front’	—
* <i>nako-</i> , * <i>nako</i>	‘face’	‘front’	—
* <i>muri-</i>	‘back’	‘back’	—

‘—’ indicates that the item is not reconstructable, ‘...’ that the evidence is insufficient to decide whether it is reconstructable.

Heine (1989) observes an implicational relationship ‘under’ > ‘on’/‘in’ > ‘front’ > ‘back’ such that if any of these relational meanings is derived historically from a body-part term, so will be the meanings to the right of it. This is supported by the listing above, as ‘under’ and ‘on’/‘in’ are not derived from body-part nouns, but ‘front’ and ‘back’ are. Heine argues that this is a scale of increasing deictivity from left to right, but Bowden (1992:53) argues that ‘front’ and ‘back’ are based on body-part terms simply because entities in the landscape are not perceived as having intrinsic fronts and backs, i.e. Oceanic languages do not have a relative spatial system (p.230).

2.1 The preposition **i* and the prefix **qa-*

The preposition **i*, which occurred before local nouns, is widely reflected in Oceanic languages, but there are also many languages in which a local noun occurs without a preposition.

PAn **i* (PREP) locative (ACD)POc **i* (PREP w PLC, N LOC) locative

Adm:	Mussau	<i>e-</i>	fossilised prefix on locative nouns
Adm:	Penchal	<i>i</i>	(PREP) locative, temporal, allative, instrumental
Adm:	Lou	<i>e</i>	(PREP) locative, allative
NNG:	Manam	<i>e-</i>	locative prefix (e.g. <i>e-lau</i> 'seawards')
PT:	Molima	<i>i-</i>	locative prefix
PT:	Sudest	<i>e</i>	(PREP) locative
MM:	Tigak	<i>e</i>	(PREP w PLC) locative
MM:	Kara	<i>i</i>	(PREP) locative
MM:	Nalik	<i>i-</i>	prefix on locative demonstratives
MM:	Tabar	<i>i</i>	(PREP w PLC, N LOC) locative
MM:	Lihir	<i>i</i>	(PREP w PLC, N LOC) locative
MM:	Sursurunga	<i>i</i>	(PREP) locative, temporal
MM:	Ramoaaina	<i>i-</i>	prefix on locative demonstratives
MM:	Halia	<i>i</i>	(PREP) locative
MM:	Taiof	<i>i</i>	(PREP w predicate N LOC) locative
SES:	Bugotu	<i>i</i>	(PREP) locative
SES:	Gela	<i>i</i>	(PREP w N LOC) locative
SES:	Lengo	<i>i</i>	(PREP) locative
SES:	Longgu	<i>i</i>	(PREP w N LOC) locative
SES:	Lau	<i>i</i>	(PREP w PLC, N LOC) locative
SES:	Kwaio	<i>i</i>	(PREP) locative
SES:	Kwara'ae	<i>i</i>	(PREP) locative
SES:	Sa'a	<i>i</i>	(PREP) locative
SES:	Arosi	<i>i</i>	(PREP) locative
NCV:	Mota	<i>i</i>	(PREP) locative
NCV:	Merlav	<i>i</i>	(PREP) locative
NCV:	Nguna	<i>e-</i>	(PREP) locative
SV:	Kwamera	<i>i-</i>	prefix on locative nouns
SV:	Lenakel	<i>i-</i>	prefix on locative nouns
SV:	Anejom	<i>i-</i>	prefix on locative nouns
NCal:	Iaai	<i>e-</i>	prefix on locative adverbs
Fij:	Wayan	<i>i</i>	(PREP) locative
Fij:	Bauan	<i>e</i>	(PREP) locative
Pn:	Tongan	<i>i, ?i</i>	(PREP) locative
Pn:	Niuafu'ou	<i>?i</i>	(PREP) locative
Pn:	E Futunan	<i>i</i>	(PREP) locative
Pn:	E Uvean	<i>?i</i>	(PREP) locative
Pn:	Samoa	<i>i</i>	(PREP) locative
Pn:	Pileni	<i>i</i>	(PREP) locative
Pn:	Marquesan	<i>?i</i>	(PREP) locative

Tongan, Niuafo'ou and East Uvean *ʔi* are phonologically problematic, as they reflect POc **qi*, the form of the genitive preposition governing a non-specific inalienable possessor (Pawley 1972, Clark 1976, Hooper 1985, Ross 1998b, 2001b). However, as Clark (1976) and Blust (ACD) note, the introduction of a historically secondary glottal stop also occurs in some other Tongan grammatical formatives.

POc **i* occurred with local nouns. Its exact distribution is not clear, but it is likely that **i* was omissible if the phrase it initiated was licensed by the verb.

There are a number of languages in which the reflex of **i* is the general locative preposition. I take these to be cases where an extension of meaning has occurred, as there are ample and widely distributed languages where **i* is attested only with local nouns.

As mentioned above, a number of local nouns also formed POc local adverbs with the prefix **qa-*. Jauncey (1997) notes for Tamambo that the prefix *a-* means 'location in/at a place', and must be prefixed to a noun signifying a place in relation to the speaker, i.e. a local noun. The cognate set is listed below. This is the **qa-* which Pawley (1972:82, 114) found in Southeast Solomonian and Northern Vanuatu languages as a formative of temporal adverbs (Ch. 9, p.324).

POc **qa-* local adverb formative

NNG:	Bariai	<i>ga-</i>	local adverb formative
NNG:	Manam	<i>a-</i>	local adverb formative (fossil)
NNG:	Kairiru	<i>qa-</i>	local adverb formative (fossil)
MM:	Vitu	<i>ye-</i>	local adverb formative
MM:	Siar	<i>a-</i>	local adverb formative
MM:	Tolai	<i>a-</i>	local adverb formative
SES:	Gela	<i>ya-</i>	local adverb formative (fossil)
NCV:	Mota	<i>a-</i>	local adverb formative
NCV:	NE Ambae	<i>a-</i>	local adverb formative
NCV:	Raga	<i>a-</i>	local adverb formative
NCV:	Port Sandwich	<i>a-</i>	local adverb formative
NCV:	Tamambo	<i>a-</i>	local adverb formative
NCV:	Paamese	<i>a-</i>	local adverb formative (fossil)

There also seems to have been an alternant **ja-*, reflected in Poeng (NNG) *ja-*, Nakanai (MM) *ga-*, Longgu (SES) *ja-* and Samoan, Tikopia (Pn) *ja-*, but it is not strongly attested.

2.2 Familiar-place and geographic local nouns

The nouns reconstructed in this section are zero-valency local nouns denoting regions, either in relation to the island home of the interlocutors or in relation to the speaker. They have meanings like 'inland, bush', 'seaward, beach', 'down below' and 'up above'. Some of these glosses are adverbial in English. This is because a zero-valency local noun preceded by **i* often performed the task of an English adverbial. For example, POc **i tanoq* evidently expressed something like 'down there'.

Some POc zero-valency local nouns, at least, were also used as common nouns, and this difference sometimes also entailed a difference in meaning. Thus **i tanoq* meant 'down there' but **tanoq* meant 'earth, soil' (vol. 1, p.119); **i qutan* meant, among other things, 'inland', but **qutan* meant 'bushland' (vol. 1, p.118).

As far as possible, the cognate sets below are limited to reflexes of local-noun uses. However, the glosses of the reconstructions distinguish between common-noun (N) and local-noun (N LOC) meanings.

2.2.1 ‘Inland, bush’

As a common noun POc **qutan* meant ‘bushland, hinterland’ (vol. 1, p.118; this volume, Ch. 3, §5.1). As a local noun, however, **qutan* denoted the direction of the bush, namely ‘inland’. By extension, this has come to mean ‘upwards’ in a number of languages, by virtue of the fact that the inland region is significantly higher than the coast on many Pacific islands.

PAn **quCaN* ‘scrubland, bush’ (ACD)

PMP **qutan* ‘small wild herbaceous plants; scrubland, bush’ (ACD; Dempwolff 1938)

POc (N) **qutan* ‘bushland, hinterland’, (N LOC) **qutan*, (ADV) **qa-qutan* ‘in the bush, inland’

NNG:	Manam	<i>-uta</i>	(root of adverbials) ‘inland’
		<i>(a)uta</i>	(N) ‘inland’
NCV:	Mota	<i>uta</i>	‘bush, forest, unoccupied land; the inland country’
NCV:	NE Ambae	<i>(a)ute</i>	(ADV) ‘up in the bush’
NCV:	Tamambo	<i>(a)uta</i>	(ADV) ‘inland direction’
NCV:	Paamese	<i>ut</i>	(N LOC) ‘ashore’
NCV:	Lewo	<i>ura</i>	(N LOC) ‘ashore’
NCV:	Nguna	<i>uta</i>	‘inland’
SV:	Lenakel	<i>-ət, -it</i>	(DIR) ‘upwards’
SV:	Kwamera	<i>(p)uta</i>	(N LOC) ‘up, upwards, on top of’
Mic:	Kosraean	<i>wat</i>	(N) ‘area inland or towards the mountains’
Mic:	Marshallese	<i>(e)ḃc</i>	(N) ‘interior of an island’
Mic:	Mokilese	<i>(e)wic</i>	(N) ‘inland’
Fij:	Rotuman	<i>ufa</i>	‘land (from the sea); interior (from the coast)’
Pn:	Tongan	<i>ʔuta</i>	(N LOC) ‘inland (from shore); shore, land (from sea)’
Pn:	Niuafo’ou	<i>(ŋā)ʔuta</i>	(N LOC) ‘upland’
Pn:	Samoan	<i>uta</i>	(ADV) ‘on shore, inland’; (N LOC) <i>i uta</i> ‘on the side facing the land’ as opposed to <i>i tai</i> ‘on the side facing the sea’
		<i>(ŋā)ʔuta</i>	(ADV) ‘to shore, in an inland direction’
Pn:	Pileni	<i>(ya)uta</i>	(N LOC) ‘shore, village location on shore, inland’
Pn:	Tikopia	<i>(ŋa)uta</i>	‘inland, landwards’
Pn:	Hawaiian	<i>uka</i>	‘inland (from shore); shore, land (from sea)’
Pn:	Marquesan	<i>uta</i>	(N LOC) ‘towards the mountain’

The cognate set below has fewer members than the one above, but appears to reflect a local noun with similar meanings. Polynesian reflexes display a vowel change and a change in meaning from ‘inland’ to ‘top, space above, up top’, a change presumably mediated by the fact that on a high island (as opposed to atoll) the inland of the island was also its ‘top’.

POc (N) **loŋa* ‘inland’, (N LOC) **loŋa* ‘inland’

NNG:	Bariai	<i>loŋa</i>	‘bush people’
SES:	Bugotu	<i>loŋa, (i)loŋa</i>	‘landwards, from sea’
SES:	Gela	<i>loŋa, (i)loŋa</i>	‘landwards, inland’
SES:	Longgu	<i>loŋa</i>	(N LOC) ‘direction towards bush’
SES:	Kwaio	<i>(i ka)loŋa</i>	‘in the forest’
Mic:	Marshallese	<i>-laŋ</i>	(DIR) ‘upward’
Mic:	Puluwatese	<i>-loŋ</i>	(DIR) ‘inland’
Mic:	Woleaian	<i>roŋ</i>	(DIR) ‘inland’

PPn **luŋa* ‘top, space above, up top’ (-*u-* for expected *-*o-*)

Pn:	Niuean	<i>luŋa</i>	(N LOC) ‘above, upon, top’
Pn:	Niuafo’ou	<i>(ʔo)luŋa</i>	(N LOC) ‘up’
Pn:	Samoan	<i>luŋa</i>	(N LOC) ‘top, space above, up top’
Pn:	Pileni	<i>luŋa</i>	(N LOC) ‘top, up, east’

2.2.2 ‘Seaward, towards the beach, at sea’

The principal POc local noun meaning ‘seawards’ was **laur*, and it was evidently the antonym of **qutan* and **loŋa* above. It reflects PMP **lahud* ‘downriver, towards the sea’, and it is likely that it was inherited into POc primarily, perhaps exclusively, as a local noun denoting a direction (for common-noun reflexes, see p.95). In this regard it differed from POc **tasik* ‘sea, salt water’ and POc **laman* ‘deep sea beyond the reef’, reconstructed in Chapter 4, which were common nouns.

POc **tasik* is quite often reflected as a local noun and presumably functioned as both a local and a common noun in POc. Occasional reflexes have meanings similar to those of POc **laur*, but most mean ‘at sea’, and this was presumably its POc meaning.

It is unlikely that POc **laman* normally occurred as a local noun, as only two local noun reflexes have been found (Mussau [Adm] *lamana* ‘beach’, Tigak [MM] *laman* ‘down there, at the beach’).

PMP **lahud* ‘downriver, towards the sea’ (Dempwolff 1938, Blust 1997)

POc (N LOC) **laur* ‘sea, seawards’; (ADV) **qa-laur* ‘in a seaward direction’

Yap:	Yapese	<i>lʔāy</i>	‘seaward’
NNG:	Manam	<i>-lau</i>	(root of adverbials) ‘seawards’
		<i>(i)lau</i>	(N) ‘seawards’
MM:	Nakanai	<i>(go)lau</i>	‘go toward the sea’
MM:	Meramera	<i>-lau</i>	(root of adverbials) ‘beach’
MM:	Kokota	<i>rauru</i>	‘seaward’
SES:	Bugotu	<i>lau, (i)lau</i>	‘seawards’ (as opposed to <i>i-loŋa</i> ‘landwards, inland, towards land’)
SES:	Gela	<i>lau, (i)lau</i>	‘seawards, shorewards from a speaker inland, (river) bank’ (as opposed to <i>i-loŋa</i> ‘landwards, inland, towards land’)
SES:	Lau	<i>lau</i>	‘north; open sea to the north’

NCV:	Mota	<i>lau</i>	‘the beach, as approached from the land’
NCV:	NE Ambae	<i>(a)lau</i>	(ADV) ‘down by the sea’
NCV:	Tamambo	<i>(a)lau</i>	(ADV) ‘seawards, shore direction’
NCV:	Paamese	<i>(a)lau</i>	‘seawards’

PMP **tasik* ‘sea’ (Dempwolff 1938)

POc (N) **tasik* ‘sea, salt water’, (N LOC) **tasik* ‘at sea’

MM:	Lihir	<i>(i) tes</i>	‘at sea’
MM:	Ramoaaina	<i>(nə)tai</i>	‘on the sea, out to sea’ (not ‘seawards’)
MM:	Tolai	<i>(na)ta</i>	‘on the sea, out to sea’ (not ‘seawards’)
SES:	Longgu	<i>asi</i>	(N LOC) ‘seawards’
SES:	Kwaio	<i>(i) asi</i>	‘at the coast’
SV:	Lenakel	<i>(i)rhe</i>	(ADV) ‘at/to sea’
Fij:	Wayan	<i>taōi</i>	(N LOC) ‘coast, seashore, sea, from the perspective of the land’
Pn:	Niuafo’ou	<i>(ŋā)tai</i>	(N LOC) ‘outer sea’
Pn:	Samoa	<i>tai</i>	(ADV) ‘at sea’, (<i>i tai</i> ‘on the side facing the sea’, as opposed to <i>i uta</i> ‘on the side facing the land’)
		<i>(ŋā)tai</i>	(ADV) ‘to sea’
Pn:	Marquesan	<i>tai</i>	(N LOC) ‘sea’

2.2.3 *Directions along the coastline*

The items reconstructed above for ‘inland’ and ‘seawards’ were orientations at an angle to the coastline. Also recorded for a few languages are items referring to the two directions along the coastline. Possible PWOC candidates for these meanings are given below. Although the data are fragmentary, the fact that both members of the pair are recorded in widely separated languages supports their reconstruction. The Nalik glosses ‘south-east’ and ‘north-west’ are equivalent respectively to ‘to one’s left when facing the sea’ and ‘to one’s right when facing the sea’ if one is on the west coast of New Ireland.

PWOC (N LOC) **pa*, (ADV) **qa-pa* ‘to one’s left when facing the sea’

NNG:	Manam	<i>(a)wa</i>	(N) ‘to one’s left when facing the sea’
MM:	Vitu	<i>(ye)va</i>	(ADV) ‘downwards’
MM:	Nalik	<i>pa</i>	(N LOC) ‘south-east’

PWOC (N LOC) **ta*, (ADV) **qa-ta* ‘to one’s right when facing the sea’

NNG:	Manam	<i>(a)ta</i>	(N) ‘to one’s right when facing the sea’
MM:	Vitu	<i>(ye)ta</i>	(ADV) ‘upwards’
MM:	Nalik	<i>ta</i>	(N LOC) ‘north-west’

Nakanai (MM) has the non-cognate pair of roots (used in directional and local verbs) *-ale* ‘to one’s left when facing the sea’ and *-muli* ‘to one’s right when facing the sea’.

2.2.4 ‘At home’

The cognate set attesting POc **Rumaq* ‘house’ was presented in vol. 1, p.48. It is reasonably clear that it also functioned as a local noun in the phrase **i Rumaq* ‘at home’, and apparently also in the adverb **qa-Rumaq*.

PAn **Rumaq* ‘dwelling house’ (Blust 1987)

POc (N) **Rumaq* ‘house’, (N LOC) **Rumaq*, (ADV) **qa-Rumaq* ‘at home’

PT:	Saliba	<i>numa</i>	(N LOC) ‘home’
MM:	Nakanai	<i>(go)luma</i>	‘go to nearest hamlet, usually one’s home’
MM:	Meramera	<i>-luma</i>	(root of adverbials) ‘home’
MM:	Ramoaaina	<i>(nə)ruma</i>	‘at home’
MM:	Taiof	<i>numa</i>	(N LOC) ‘home’
NCV:	Tamambo	<i>(a)imo</i>	(ADV) ‘at home’
NCV:	Paamese	<i>(tela)im</i>	(N LOC) ‘home’
NCV:	Lewo	<i>um^wa</i>	(N LOC) ‘home’
SV:	Lenakel	<i>īm^wa</i>	‘at home, homewards’ (cf. <i>nim^wa</i> ‘house’)

2.2.5 ‘Down below’

POc **tanoq* is reconstructed as a common noun meaning ‘earth, soil, ground; land’ in vol. 1, p.119 and in this volume, p.41. However, there is well distributed evidence that as a local noun it meant ‘down below’. This is not surprising when one considers that POc speakers must generally have lived in stilt houses (vol. 1, Ch. 3) for whose inhabitants the ground was indeed ‘down below’.

PMP **taneq* ‘earth, land’ (Dempwolff 1938)

POc (N) **tanoq* ‘earth, soil, ground; land’, (N LOC) **tanoq*, (ADV) **qa-tanoq* ‘down on the ground, down below’

Adm:	Loniū	<i>tan</i>	(ADV) ‘down’
NNG:	Takia	<i>tan (na)</i>	(N + POSTPOSITION) ‘on the ground, down below’
PT:	Gumawana	<i>tono</i>	‘down’
MM:	Harua	<i>tano</i>	‘down there’
MM:	Nakanai	<i>(go)talo</i>	‘go down’
MM:	Meramera	<i>tano(do)</i>	‘down there’ (-do DEM)
NCV:	Tamambo	<i>(a)tano</i>	‘down on the ground, downwards’
NCV:	Paamese	<i>dan</i>	‘down, below’
NCV:	Lewo	<i>tano</i>	‘underneath, downwards’
SV:	Kwamera	<i>təna</i>	‘earth, ground; land, island, country’
NCal:	Iaai	<i>kənɔ</i>	‘earth, ground’
NCal:	Nengone	<i>ten</i>	‘under’

The meanings above overlap with the adverb reflexes of POc **sipo* ‘go downward’, (ADV) ‘down below’, but **tanoq*, a noun, and **sipo* a verb (and perhaps adverb), belonged to different word classes (§3.3.1).

2.2.6 ‘Up above’

A few of the reflexes of POC **atas* ‘top, space above’ are monovalent relational nouns. However, the vast majority of reflexes are geographic, not relational, nouns, and it seems that POC **atas* was also a geographic noun. It also seems that it was not a common noun (in this respect it resembles POC **laur*, p.239).

The items listed under ‘cf. also’ below reflect a Proto North Bougainville form **yasa*, which has replaced **yatasa*. Possibly **yasa* is derived from expected **yatasa* by idiosyncratic deletion of the middle syllable.

PAn **aCas* ‘high, tall’ (ACD)

POC (N) **atas* ‘top; space above’, (N LOC) **atas* ‘up top’

NNG:	Ali	<i>yat</i>	‘on top’
NNG:	Tumleo	<i>yot</i>	‘on top’
PT:	Are	<i>yata</i>	‘on top’
PT:	Gapapaiwa	<i>yata</i>	‘on top’
PT:	Sinaugoro	<i>iata(na-i)</i>	‘on top of it’ (N-P:3SG-POSTP)
PT:	Motu	<i>lata-</i> <i>ata(i)</i>	‘summit, top’ ‘on top’ (N-POSTP)
MM:	Bali	<i>yata</i>	‘up (there)’
MM:	Nakanai	<i>(go)ata</i>	‘go upwards’
MM:	Meramera	<i>uata</i>	‘upwards’
MM:	Lavongai	<i>(la)kat</i>	‘top’
MM:	Nalik	<i>uata</i>	‘top’
MM:	Sursurunga	<i>(u-ram)iet</i> <i>ieti</i>	‘upwards’ ‘top’
MM:	Tangga	<i>(l)iat</i> <i>(ua)yat</i>	‘up (there)’ ‘upwards’
Mic:	Kiribati	<i>(i)eta</i>	‘up, on high, above, top, upper, heavens’
Mic:	Marshallese	<i>ec</i>	‘upper, eastern’
Mic:	Chuukese	<i>ās</i> <i>asa-</i>	‘upper part, top, summit, eastern side’ ‘upper part’
Mic:	Woleaian	<i>yat</i>	‘up, top’
Fij:	Wayan	<i>ata</i>	(N LOC) ‘top, above; interior of a mountainous island, up the hill, inland’

cf. also

MM:	Solos	<i>yas</i> <i>(i)yas</i>	‘top’ ‘up (there)’
MM:	Petats	<i>(i)yas</i> <i>yas</i>	‘up (there)’ ‘topside; upwards’
MM:	Halia (Haku)	<i>(i)yasa</i> <i>(pal)yasa</i>	‘up (there)’ ‘upwards’
MM:	Halia (Selau)	<i>(i)yasa</i>	‘up (there)’
MM:	Taiof	<i>yas</i>	‘up (there); upwards’

POc **laŋit* ‘sky, weather’ is reconstructed as a common noun in Chapter 5, but the reflexes below suggest that it was also used as a POc local noun.

PAn **laŋiC* ‘sky’ (Dempwolff 1938)

POc (N) **laŋit* ‘sky, weather’, (N LOC) **laŋit* ‘up top, high up’

Yap:	Yapese	<i>lǣŋ</i>	‘up’
SES:	Lau	(i) <i>laŋi-</i>	‘up, above’
SES:	Kwaio	<i>laŋi-</i>	‘space above’
NCV:	Mota	<i>laŋ</i>	‘upwards, heavenwards’
NCV:	Nguna	(e) <i>laŋi</i>	‘up, high, above, top’
Mic:	Marshallese	<i>laŋ</i>	‘up, above’

The meanings above overlap with the adverb reflexes of POc **sake* ‘go upward’, (ADV) ‘upwards, up top’, but **atas* and **laŋit* were nouns, **sake* a verb (and perhaps adverb, p.277).

It is less clear whether POc **laka* ‘up above’ was a noun or a verb. In Takia its reflex is a zero-valency noun, in Mapos Buang and Kiriwina a local adverb. These could be derived from either a noun or a directional verb. Monovalent noun reflexes occur in the two New Ireland (MM) languages Lihir and Siar, but in other New Ireland languages (Lavongai, Tigak and Kara) the reflexes are verbs. However, the Southeast Solomonic reflexes reflect the derived adverb **qa-laka* ‘up there, up above’ (which was then used as a verb in some SES languages). Since **qa-* is far more readily reconstructable as a prefix to nouns than to verbs, I assume that **laka* was a noun.

POc (N LOC) **laka* ‘up above’, (ADV) **qa-laka* ‘in an upward direction’

NNG:	Takia	<i>lak (na)</i>	‘high up’ (<i>na</i> local postposition)
NNG:	Mapos Buang	<i>raq</i>	‘up, above’
PT:	Kiriwina	<i>lake(va)</i>	‘top, in sky’
MM:	Lavongai	(<i>saŋ</i>) <i>lak</i>	‘(sun) rise’
MM:	Tigak	<i>lak</i>	‘(sun) rise’
MM:	Kara (East)	<i>lak</i>	‘(sun) rise’
MM:	Lihir	<i>laka-</i>	‘top surface, space above’
MM:	Siar	<i>laka-</i>	‘top surface, space above’
SES:	Gela	(<i>ya</i>) <i>laya</i>	‘up’
SES:	Talise	(<i>ya</i>) <i>laya</i>	‘go up’
SES:	Birao	(<i>ha</i>) <i>laha</i>	‘go up’

There was also a POc verb **laka*, which meant ‘walk’ and apparently had no directional meaning.

2.2.7 ‘In the middle, between’

There is well distributed evidence that POc **liwaŋ*, **liwa-*/**liwaŋa-* was a local noun meaning ‘open space, space between, middle’, and that it had at least one relational alternant. The form we would expect to find reflected in most languages with relational forms is POc **liwa-*. However, we also find reflexes of **liwaŋa-*. This may be the result of local developments, and this in turn may suggest that there was no relational form in POc.

The forms listed below under ‘cf. also’ are similar in form to those listed here. However, the fact that they share a formal irregularity—they seem to reflect POc **lua*—and a different meaning—‘outside’—suggests that POc **lua* ‘outside’ may have been a separate etymon, and also a local noun.

PMP **liwaŋ* ‘open space’ (ACD: Proto Western Malayo-Polynesian)

POc (N) **liwaŋ*, **liwa-/ *liwaŋa-* ‘open space, space between, middle’, (N LOC) **liwaŋ* ‘in the middle’

Adm:	Loniu	(<i>lɔhɔ</i>) <i>luwa-</i>	‘middle’
NNG:	Mangap	<i>lwo-</i>	‘torso; middle’
NNG:	Manam	<i>luʔaŋa-</i>	‘space in middle’
NNG:	Hote (Misim)	<i>livuŋ</i>	‘front’
PT:	Minaveha	<i>niwani-</i>	‘midst, among’
PT:	Sudest	<i>luyawo-luyawo-</i>	‘middle’ (metathesis of <i>**luwayo-</i>)
MM:	Ramoaaina	(<i>nə</i>) <i>liwən</i>	‘between’
MM:	Tolai	(<i>na</i>) <i>livuan</i>	‘in the middle’
		<i>livuan</i>	‘(be) in the middle’
SES:	Longgu	<i>levua-</i>	‘middle, centre’
NCV:	NE Ambae	<i>livuge-</i>	‘middle’
NCV:	Tamambo	<i>livuya-</i>	‘middle part of s.t.’
NCV:	Paamese	<i>luhi, luhu</i>	‘middle’
SV:	Sye	(<i>i</i>) <i>lvuy(teve)-</i>	‘between, in the middle of’
Mic:	Woleaian	<i>rɨwan-</i>	‘between, among’
Fij:	Bauan	<i>liwa</i>	(N) ‘ocean far from land’, (ADV) ‘far from habitation’
		(<i>mā</i>) <i>liwa</i>	(N) ‘space between, interstice’
cf. also:			
MM:	Minigir	(<i>na</i>) <i>lua</i>	‘outside’
MM:	Tolai	(<i>na</i>) <i>lua</i>	‘outside’
SV:	Lenakel	(<i>i</i>) <i>lua</i>	‘outside’
SV:	Kwamera	(<i>i</i>) <i>rua</i>	‘outside’

2.3 Relational local nouns

The function of a POc monovalent relational local noun preceded by **i* was similar to that of an English preposition, as in these Tabar (MM) examples, where the relational noun *paki-* ‘underneath’ performs a function similar to that of the English preposition *under*.¹⁰

<i>i</i>	<i>paki-na</i>	<i>mi</i>	<i>vanua</i>
PREP	underneath-P:3SG	ART	house
‘under the house’ (more literally ‘at the house’s underneath’)			
<i>i</i>	<i>paki-gu</i>		
PREP	underneath-P:1SG		
‘under me’			

¹⁰ Tabar and Lengo sentences are from my fieldnotes.

In these Lengo (SES) expressions the relational noun *muri-* ‘back’ performs a function similar to that of the English preposition *behind*.

i muri-e na vae
 PREP back-CSTR ART house
 ‘behind the house’ (more literally ‘at the house’s back’)

i muri-gu
 PREP back-P:1SG
 ‘behind me’

Hence we can with reasonable confidence make POc reconstructions such as:

**i lalo-ña Rumaq*
 PREP inside-P:3SG house
 ‘inside the house’ (more literally ‘at the house’s inside’)

**i gab^wari-ña Rumaq*
 PREP underneath-P:3SG house
 ‘underneath the house’ (more literally ‘at the house’s underneath’)
 (*gab^wari-* ‘the area underneath a raised house’; vol. 1, p.51)

**i muri-gu*
 PREP back-P:1SG
 ‘behind me’

Many Oceanic languages have relational nouns with the meanings reconstructed below: ‘inside’ (§2.3.1), ‘underneath, lower surface, space below’ (§2.3.2), ‘top, upper surface, space above’ (§2.3.3), ‘side’ (§2.3.4), ‘outside’ (§2.3.5), ‘front, time before’ (§2.3.6), ‘back, space behind, time after’ (§2.3.7). Although the nearest semantic equivalents of Oceanic relational nouns are English prepositions, I have used nouns and noun phrases in the titles of these subsections in an attempt to replicate the meanings of the reconstructed Oceanic terms.¹¹

In their monovalent form, relational local nouns are reconstructed below like other monovalent nouns, i.e. without their final consonant, on the assumption that it was lost before a possessor suffix: for example, **lalom* ‘inside’ became **lalo-*, **papak* ‘underneath’ became **papa-*. However, as I note in Lynch, Ross and Crowley (2002, Ch. 4), there is some evidence from Tanna languages (SV) that POc retained the final consonant in this context, so that, e.g., POc **lalo-ña* in the reconstructed example above may have been (optionally?) **lalom-ña*.

2.3.1 ‘Inside’

The most widely reflected POc term for ‘inside’ is **lalo-/lalom*. This reflects PMP **Daləm* with assimilation of the initial liquid to the intervocalic liquid: the expected POc form is ***ralo-/**ralom*. Reconstruction of unsuffixed **lalom* is supported by just one reflex, Mussau *e-lom-e*.¹²

¹¹ Some of these titles, like ‘inside’, show categorial ambiguity between noun and preposition because the English preposition reflects the grammaticisation of a relational noun.

¹² Initial *e-* reflects the POc local preposition **i*. Final *-e* is also found on another Mussau relational noun, *pak-e*, reflecting POc **pak* ‘underside’. Its origin is not known.

In Polynesian languages reflexes of **lalo-/lalom* denote the region underneath something. Blust (1997) suggests that this meaning change comes from the use of **lalom* in relation to a planar surface, the sea, rather than a three-dimensional container.

PMP **Daləm* ‘inside’

POc (N, N LOC) **lalo-*, **lalom* ‘inside’

Adm:	Mussau	(e)lom(e)	(ADV) ‘inside’
NNG:	Gitua	<i>lolo-</i>	‘inside’
NNG:	Mangap	<i>lele-</i>	‘inside, in’
NNG:	Kakuna	<i>lolo-</i>	‘inside’
NNG:	Bam	<i>liluo</i>	‘room’
NNG:	Kairiru	<i>lal</i>	‘inside’
NNG:	Ulau-Suain	<i>lulua-</i>	‘room’
NNG:	Ali	<i>lal</i>	‘room’
NNG:	Numbami	(tae)lalo	‘intestines’
		(weni)lalo	‘forest’
NNG:	Yabem	(ŋa)lelom	‘inside’
NNG:	Kela	<i>raro</i>	‘inside’
PT:	Motu	<i>lalo-</i>	‘inside, within’
PT:	Mekeo	<i>alo-</i>	‘inside’
MM:	Bola	<i>lilo</i>	‘inside’
MM:	Meramera	<i>lilo</i>	‘inside’
MM:	Notsi	<i>lolo</i>	‘inside’
MM:	Lihir	<i>lilie</i>	‘inside’
MM:	Sursurunga	<i>lali</i>	‘underside’
MM:	Ramoaaina	<i>lolo</i>	‘intestines’
SES:	Gela	<i>lalo</i>	‘deep, profound’
SES:	Talise	<i>lalo-na</i>	‘in’
SES:	Lau	(i)lalo	‘inside, in’
SES:	Sa’a	<i>lalo</i>	‘inside’
SES:	Arosi	<i>raro</i>	‘in’
NCV:	Mota	<i>lolo-</i>	‘the inner part; a hollow; the inward part of man, heart, affections’
NCV:	Raga	<i>lolo-</i>	‘inside, middle; body, stomach’
NCV:	Uripiv	<i>lolo-</i>	‘inside’
NCV:	Port Sandwich	<i>nalö-n</i>	‘inside; seat of feelings’
SV:	Kwamera	<i>rer-</i>	‘internal portion, insides, heart, mind, feeling, emotion’
SV:	Anejom	<i>lele-</i>	‘inside; heart, seat of feelings’
NCal:	Tinrin	<i>ñuwuu-</i>	‘inside’
Mic:	Kiribati	(i)nano-n	‘inside, in’
Mic:	Kosraean	<i>lʷal</i>	‘deep’
Mic:	Marshallese	<i>i-lɔwa</i>	‘inside, in’
		<i>lalʷ</i>	‘down, bottom, below, earth, world’
Mic:	Ponapean	<i>lɔɛ</i>	‘inside (it)’

Mic:	Chuukese	<i>rrɔr</i>	‘inside of’
Mic:	Puluwatese	<i>llɔn</i>	‘in it’
Mic:	Woleaian	<i>raro</i>	‘inside’

PPn **lalo* ‘region underneath’

Pn:	Tongan	<i>lalo</i>	‘below, under’
Pn:	Samoan	<i>lalo</i>	‘under, down, below’
Pn:	Pileni	<i>lalo</i>	‘bottom, down, west’

There is evidence that POc **lalo-* had two short forms, **lo-* and **la-*. A number of their reflexes occur as prepositions and may have been conflated with reflexes of POc **lako/*la* ‘go (to); away from speaker’. They are listed together with a discussion of this conflation in §3.4.5. Listed below are those reflexes of the short forms which are not prepositions; most are local nouns. Significantly, there is a difference between the distributions of the two short forms. Reflexes of **lo-* occur quite commonly as local nouns, and a number of them have a fossilised prefix reflecting the POc local preposition **i*. Reflexes of **la-* have a stronger tendency to occur as prepositions (p.288), and may reflect the short form of **lako* rather than of **lalo-*.

There is, of course, also a possibility that **lalo-* has undergone haplology to form **lo-* more than once in the history of Oceanic languages, but reflexes of **lo-* below and in §3.4.5 are widespread enough to warrant its reconstruction in POc.

POc (N LOC) **lo-* ‘inside’

Adm:	Titan	<i>lo(n-um)</i>	‘floor, inside of a house’ (<i>um</i> ‘house’)
NNG:	Malasanga	<i>lo-</i>	‘inside’
NNG:	Sio	<i>(i)lo</i>	‘inside’
NNG:	Tami	<i>lo</i>	‘inside’
NNG:	Poeng	<i>lo-</i>	‘inside’
NNG:	Roinji	<i>lo</i>	‘inside’
NNG:	Manam	<i>(i)lo-</i>	‘inside, in’
NNG:	Bing	<i>lo</i>	‘inside’
NNG:	Takia	<i>(i)lo-</i>	‘inside, in’
MM:	Nakanai	<i>-(i)lo</i>	‘inside’
MM:	Siar	<i>lo</i>	‘inside’
SES:	Gela	<i>lo-</i>	‘inside’
NCV:	Lonwolwol	<i>lo-</i>	‘inside; heart, feelings’

POc (N LOC) **la-* ‘inside’; ?? (PREP) ‘in’

Yap:	Yapese	<i>lā-n</i>	‘inside’
MM:	Tigak	<i>la-</i>	‘inside’
MM:	Kara (East)	<i>la</i>	‘inside’
Mic:	Woleaian	<i>ra-n</i>	‘inside’

POc **loto-* ‘space within a concave object’ is not well supported. It has become the default relational noun for ‘inside’ in Polynesian languages (where POc **lalo-* is reflected with the meaning ‘underneath’; see above) and is also reflected in Wayan Fijian, so it can be reconstructed for Proto Central Pacific. Its reconstruction in POc rests on a single Admiralties reflex, Loniū *lɔtiyɛ-*, with *-i-* for expected *-o-*.

POc (N, N LOC) **loto* ‘space within a concave object’

Adm:	Loniū	<i>lɔtiye-</i>	‘inside’
Fij:	Wayan	<i>loto-</i>	‘bottom, lowest part (e.g. of kava bowl)’

PPn **loto* ‘inside’

Pn:	Tongan	<i>loto</i>	‘inside; hole or depression in coral reef or sea bed’
Pn:	Samoa	<i>loto</i>	‘deep hole in lagoon; (house) interior’
Pn:	Tahitian	<i>roto</i>	‘pool, lake, lagoon; inside’
Pn:	Hawaiian	<i>loko</i>	‘pond, lake, pool; inside, interior; internal organs, as tripe’

In many Oceanic languages the word for ‘inside’ is the reflex of a POc body-part term. Two of these may have had the secondary meaning ‘inside’: POc **b^wal(o,a)-*, **b^wal(o,a)k* seems to have denoted the belly, POc **tinaqe-* the intestines.

POc (N) **b^wal(o,a)-*, **b^wal(o,a)k* ‘belly; hollow space’, (N LOC) ‘inside’

Adm:	Nyindrou	<i>bolo-n</i>	‘inside, in’
Adm:	Titan	<i>pólo-n</i>	(PREP) ‘among, inside’
NNG:	Kairiru	<i>balai</i>	‘inside’
MM:	Vitu	<i>polok</i>	‘inside’
MM:	Sursurunga	<i>polgo</i>	‘inside’
MM:	Tolai	<i>(ta ra) bala-na</i>	‘inside, in’ (<i>ta</i> PREP, <i>ra</i> ART, <i>bala-</i> ‘belly, interior’)
NCV:	Raga	<i>b^wala</i>	‘shell’
		<i>b^wala(lolo)</i>	‘middle’
NCV:	Lonwolwol	<i>bwele-n</i>	‘hollow vessel, empty shell’
NCV:	Paamese	<i>vale(-ŋe-ne)</i>	‘hollow part of something, cave’
NCV:	Namakir	<i>bwele-n</i>	‘belly’
NCV:	Nguna	<i>(na-)pwele</i>	‘stomach, belly, abdomen, waist, genital region’
		<i>(na)-pwala(u-na)</i>	‘among, middle, inside’

PMP **tinaqi* ‘small intestine’ (Blust 1981)

POc (N) **tinaqe-* ‘intestines; ?? (N LOC) inside’

Adm:	Drehet	<i>kxine</i>	‘inner part, inside’
PT:	Tawala	<i>(u) hine-na</i>	‘inside, in’
PT:	Iduna	<i>hinage-ne</i>	‘inside’
PT:	Gapapaiwa	<i>sine</i>	‘inside’
PT:	Sudest	<i>tine</i>	‘inside’

2.3.2 ‘Underneath, lower surface, space below’

The most widely reflected POc term for ‘underneath, underside’ is **papa-*, **papak*. This reflects PMP **babaq*, which Blust reconstructs as referring to the underside or lower surface of something (the change from PMP **-q* to POc **-k* is unexplained). In a number

of Oceanic languages, its meaning also includes the space beneath something, e.g. a house (see the NNG reflexes below), and it is probable that this extension of meaning had already occurred in POc. Its zero-valency forms are the source of local adverbs meaning ‘below, down there’ in a number of languages.

Scattered reflexes also suggest the reconstruction of monosyllabic forms without the first (reduplicated) syllable. An innovative monovalent form **p^wake-* is reflected in Meso-Melanesian languages, apparently by the addition of **-e* to the monosyllabic form **pak*.

No reflexes occur in Central Pacific languages. In Fijian, **papa-*, **papak* has been ousted by reflexes of POc **ruku-* ‘underneath’ (see below), in Polynesian languages by reflexes of POc **lalom* ‘inside’ (p.247).

PMP **babaq* ‘lower surface, bottom, underside’ (ACD)

POc (N, N LOC) **papa-*, **pa-*, **papak*, **pak* ‘underneath, lower surface, bottom, underside’

Adm:	Mussau	<i>pak(e)</i>	‘underside’
Adm:	Loniu	<i>paʔaha-</i>	‘underside’ (metathesis of <i>*pahaʔa-</i> < <i>*papaqa-</i> with unexplained final <i>*-a-</i>)
Adm:	Drehet	<i>pehe(kxa-)</i>	‘underside’
NNG:	Lukep (Pono)	<i>pa(rumu)</i>	‘area under house’ (< POc <i>*pak qi Rumaq</i> ‘underneath of house’)
NNG:	Dami	<i>pa(rume)</i>	‘under’ (< POc <i>*pak qi Rumaq</i>)
NNG:	Bing	<i>papa(rum)</i>	‘under (a house)’ (< POc <i>*papak qi Rumaq</i>)
PT:	Are	<i>baba-</i>	‘beneath’
PT:	Gapapaiwa	<i>vava-</i>	‘beneath’
PT:	Tawala	<i>baba-</i>	‘base, underneath, bottom; reason’
PT:	Mekeo	<i>papu-</i>	‘under’
SES:	Talise	<i>vava-</i>	‘below’
SES:	Birao	<i>vava-</i>	‘below’
NCV:	Nokuku	<i>veva-n</i>	‘underside’
NCV:	Kiai	<i>vova-na</i>	‘underside’
NCV:	Uripiv	<i>(mel)ve-n</i>	‘the underneath of it, the shade of it’ (<i>*malu</i> ‘shadow’)
NCV:	Lonwolwol	<i>fa-n</i>	‘underneath’
NCV:	Paamese	<i>hehe-ne</i>	‘underneath’
NCV:	Nguna	<i>na-ve(ruku)</i>	‘underneath’
Mic:	Kiribati	<i>ā-</i>	‘underside, underneath, bottom’
Mic:	Ponapean	<i>pā-</i>	‘underneath’
Mic:	Mokilese	<i>pā-</i>	‘underneath’
Mic:	Chuukese	<i>fā-</i>	‘underneath’
Mic:	Woleaian	<i>fā-</i>	‘underneath’
NCal:	Cèmuhî	<i>hāhî-n</i>	‘underneath’

Proto Meso-Melanesian **pake-* ‘underneath, underside’

MM:	Bali	<i>va-vake(ni)</i>	‘down (there)’
MM:	Tigak	<i>pak(a-)</i>	‘underside’
MM:	Kara (East)	<i>pa-</i>	‘underside; down there’

MM:	Notsi	<i>pai-</i>	‘underside’
MM:	Tabar	<i>paki-</i>	‘underside’
MM:	Lihir	<i>pakie-</i>	‘underside’
		<i>pek-</i>	‘down (there)’
MM:	Tangga	<i>(ua-i)fafi</i>	‘downwards’
MM:	Konomala	<i>fəi-</i>	‘underside’
MM:	Tolai	<i>(na)vavai</i>	‘under’
MM:	Taiof	<i>fai-</i>	‘underside’
MM:	Teop	<i>pa-</i>	‘underside’
MM:	Roviana	<i>(pana)peka</i>	‘below’ (vowel metathesis)
MM:	Vangunu	<i>(pana)peka</i>	‘below’ (vowel metathesis)
MM:	Kia	<i>peka</i>	‘below’ (vowel metathesis)
MM:	Laghu	<i>peka</i>	‘below’ (vowel metathesis)

Three other POc terms can be reconstructed with a meaning related to ‘underneath’ or with a denotation which has given rise to it in daughter languages.

Several reflexes of the first, POc **ruku-*, are concatenated with a reflex of **pa-* ‘underside’, the short form of **papa-*. These seem to be compounds, implying that the meaning of **ruku-* was perhaps more specific than that of **papa-*. The latter was evidently the generic term for ‘underneath’. Perhaps **ruku-* denoted the undersurface of something.

The second term, POc **gabwari-* meant ‘the area underneath a raised house’ (vol. 1, p.51) and has come to mean ‘underneath’ in some languages by extension. POc **puqu-*, *puqun* had the relational meaning ‘base, foundation’ when used in association with an object, as well as the more abstract meaning ‘origin, source, reason’.

POc (N, N LOC) **ruku-* ‘underneath, undersurface (?)’

MM:	Bulu	<i>luku(va)-</i>	‘underside’ (-va < POc <i>*pa-</i> ‘underside’)
MM:	Meramera	<i>luʔu(va)-</i>	‘underside’ (-va < POc <i>*pa-</i> ‘underside’)
MM:	Nakanai	<i>(lau)lu(va)-</i>	‘underside’ (-va < POc <i>*pa-</i> ‘underside’)
MM:	Nalik	<i>ru</i>	‘down (there)’
SES:	Gela	<i>(ru)ruyu</i>	‘below’
SES:	Lau	<i>rū</i>	‘inside of roof’
SES:	Kahua	<i>ruyu(ha)-</i>	‘below’ (-ha < POc <i>*pa-</i> ‘underside’)
NCV:	Tamambo	<i>ruhu-ruhu</i>	‘underneath part of s.t.’
NCV:	Nguna	<i>(na-ve)ruku</i>	‘underneath’ (ve- < POc <i>*pa-</i> ‘underside’)
Fij:	Wayan	<i>ruku</i>	‘underneath, under, below, space underneath’
Fij:	Bauan	<i>ruku-</i>	‘space underneath’

POc (N, N LOC) **gabwari-* ‘the area underneath a raised house’ (vol. 1, p.51)

Adm:	Titan	<i>kapwaliŋ</i>	‘area underneath a house’
NNG:	Mapos Buang	<i>ybi(ne)</i>	‘underneath’
NNG:	Mangga	<i>kabi(ni)</i>	‘underneath’
NNG:	Patep	<i>ŋbi-</i>	‘underneath’
PT:	Gumawana	<i>gabula</i>	‘underneath’
PT:	Tawala	<i>gaboli-</i>	‘area underneath a house’

PT:	Dobu	<i>gabura</i>	‘area underneath a house’
PT:	Duau	<i>gabule-</i>	‘area underneath a house’
PT:	Misima	<i>gabúla</i>	‘area underneath a house; underneath’
PT:	Sinaugoro	<i>gabule-</i>	‘underneath’

PMP **puqun* ‘beginning, cause, origin, source, basis’ (ACD)

POc (N, N LOC) **puqu-*, *puqun* ‘base, foundation, origin, source, reason’

Adm:	Loniu	<i>puʔu-</i>	‘bottom, underside’
NNG:	Tami	<i>pu-</i>	‘base, origin’
NNG:	Mangga	<i>kabi(ni)</i>	‘underneath’
NNG:	Takia	<i>fū-n</i>	‘bottoms’
NNG:	Yabem	<i>m̐</i>	‘origin’ ¹³
NNG:	Bukawa	<i>(ŋa)pu</i>	‘underside’
NNG:	Mangga	<i>vu</i>	‘underside’
NNG:	Wampar	<i>fo(n)</i>	‘origin’
NNG:	Labu	<i>(a)ho</i>	‘base; bottom; reason’
NNG:	Silisili	<i>fogo</i>	‘origin’
NNG:	Wampur	<i>hugu-n</i>	‘trunk’
NNG:	Adzera	<i>fugu-n</i>	‘tap-root; base’
PT:	Bwaidoga	<i>vu-vu-</i>	‘cause, origin, foundation of anything; (tree) root’
MM:	Tolai	<i>vu-</i>	‘beginning, cause, origin, source, basis, root, foundations’
SES:	Longgu	<i>vuʔa</i>	‘below, down; a time before’
Fij:	Wayan	<i>-vū</i>	‘base, bottom; origin, source, cause; taproot, tuber’

2.3.3 ‘Top, upper surface, space above’

The basic POc term for ‘top, upper surface, space above’ is **papo[-]*, **po[-]*. Blust (ACD, 1997) writes that PMP **babaw* ‘upper surface, top’ is the antonym of PMP **babaq* ‘lower surface, bottom’, and the same is true of their POc reflexes: POc **papo[-]*, **po[-]* is the antonym of POc **papa-*, **papak* (p.249).

The unsuffixed forms are a source of local adverbs meaning ‘above, up there’ in a number of languages, although here POc **qulu[-]* below is a close competitor.

The Kiribati (Mic) reflex of POc **papo[-]* also has the meaning ‘outside’, and this is the sole sense of the Nemi (NCal) and Polynesian reflexes. Blust (ACD) suggests that (as with **lalom*; p.246) this is the result of applying the term to the planar surface of the sea. In relation to the sea, **papo[-]* was its surface and the space above it. This is beyond the land, hence ‘outside’ it.

¹³ Yabem *m̐* (syllabic low-tone bilabial nasal) is the regular reflex of earlier **vu* < POc **puqu-*.

PMP **babaw* ‘upper surface, top; above; highlands’ (ACD)POc (N, N LOC) **papo[-]*, **po[-]* ‘upper surface, top’

Adm:	Mussau	<i>po(na)</i>	‘top’
NNG:	Tami	<i>[ka]popo-</i>	‘top (of s.t.)’
		<i>po</i>	‘above’
NNG:	Takia	<i>fo</i>	(POSTPOSITION) ‘on’
NNG:	Numbami	<i>wao-</i>	‘above’
NNG:	Yabem	<i>aɔ̌</i>	‘upwards’
		<i>(ŋ)aɔ̌</i>	‘upper surface’
NNG:	Kela	<i>baba</i>	‘topside’
NNG:	Mapos Buang	<i>vavu</i>	‘up top’
		<i>vavu(ne)</i>	‘upwards’
NNG:	Wampar	<i>we(ŋ)</i>	‘topside’
NNG:	Yalu	<i>wav(g)</i>	‘topside’
NNG:	Adzera	<i>wagu(ŋ)</i>	‘topside’
MM:	Notsi	<i>papa-</i>	‘topside’
MM:	Tabar	<i>popo-</i>	‘topside’
MM:	Tangga	<i>fo-</i>	‘topside’
SES:	Baegu	<i>fafo(luma)</i>	‘thatch’ (<i>luma</i> ‘house, building’)
SES:	Lau	<i>fafo-</i>	‘top’
SES:	Longgu	<i>vavo-</i>	‘top surface, space above’
SES:	’Are’are	<i>haho-</i>	‘topside’
SES:	Sa’a	<i>haho-</i>	‘above’
SES:	Arosi	<i>haho-</i>	‘topside’
NCV:	Mota	<i>vawo</i>	‘above, upon’
NCal:	Nemi	<i>p^wap</i>	‘outside’
Mic:	Kiribati	<i>āo</i>	‘upper part of, surface, outside, back’
		<i>(i)ao-</i>	‘on, on top’
Mic:	Kosraean	<i>fɛ-</i>	‘above, on’
Mic:	Marshallese	<i>ɛwɛ-</i>	‘on; upon; top; surface; over’
Mic:	Mokilese	<i>pō-</i>	‘on’
Mic:	Chuukese	<i>wɔ̌-r</i>	‘above, on it’
Mic:	Puluwatese	<i>wɔ̌-n</i>	‘above, on it’
Mic:	Woleaian	<i>wɔ̌-</i>	‘on, topside, upside’
Pn:	Samoa	<i>fafo</i>	‘outside, out of doors, a place other than Samoa’
Pn:	Rennellese	<i>haho</i>	‘outside’
Pn:	Maori	<i>waho</i>	‘outside; open sea; coast, as opposed to inland’
Pn:	Hawaiian	<i>waho</i>	‘outside, beyond, out, outer, outward’

Given the tendency for body-part terms to be used by metaphorical extension as relational nouns (cf. p.248), it is unsurprising that the word for ‘head’ and ‘head hair’, POc **qulu[-]*, also acquired the meaning ‘top’.

PAn **qulu* ‘head’ (ACD)

POc (N) **qulu[-]* ‘head, (head) hair’, (N LOC) ‘top part’

Adm:	Mussau	<i>ulu (bo)</i>	‘headwaters of a river’
Adm:	Nauna	<i>kulu(n puli)</i>	‘(mountain) peak’
NNG:	Yabem	<i>lo-lo(?)</i>	‘topside’
NNG:	Bukawa	<i>lu-lu(?)</i>	‘topside’
PT:	Molima	<i>ʔunu-ʔunu-</i>	‘head, forehead; (river) source’
MM:	Tigak	<i>kuli-</i>	‘top’
		<i>kul</i>	‘up (there)’
MM:	Tiang	<i>kələ</i>	‘topside’
MM:	Nalik	<i>kula</i>	‘up (there)’
MM:	Tabar	<i>kulu</i>	‘topside’
MM:	Lamasong	<i>kun</i>	‘up (there)’
MM:	Konomala	<i>ulə</i>	‘topside’
MM:	Tolai	<i>ul</i>	‘head, hair, top, apex, crown’
MM:	Roviana	<i>ulu</i>	‘top’
SES:	Gela	<i>ulu-</i>	‘head, except of a chief; (in compounds) hair; eastern end, upper end’
SES:	Bugotu	<i>ulu</i>	‘head, top end’
SES:	Lau	<i>ulu(nao)</i>	‘first-born, elder, senior’
		<i>ulu-ulu-</i>	(tree) topmost branch
SES:	’Are’are	<i>uru</i>	‘cloud, heaven, sky, top’
NCV:	NE Ambae	<i>ulu-</i>	‘top’
NCV:	Tamambo	<i>ulu-</i>	‘top part’
NCV:	Raga	<i>ulu-</i>	‘space above’
NCV:	Paamese	<i>(n)ulu(ʔout)</i>	‘at the top of the garden’ (< POc <i>*na qulu ni qutan</i> ART top PREP bush)
NCal:	Nemi	<i>hule-n</i>	‘top’
Mic:	Kosraean	<i>ulu-</i>	‘top’
Fij:	Wayan	<i>-ulu</i>	‘head or top part of an animal or thing’
Fij:	Bauan	<i>ulu-</i>	‘head, top’
Pn:	Tongan	<i>ʔulu</i>	‘head, upper end’
Pn:	Samoan	<i>ulu</i>	‘head, hair’
		<i>ulu(matua)</i>	‘first-born, eldest child’
Pn:	Maori	<i>uru</i>	‘head, (head) hair; chief; top, upper end; (weapon +) point’

In NCV languages we find reflexes of the adverb **qa-qulu* ‘up there, up above’: NE Ambae *a-ulu* ‘up high, on top’, Tamambo *a-ulu* ‘on top, at the gardens’, Kiai *aulu* ‘above’.

2.3.4 ‘Side’

It is tempting to look for a POc relational noun which would correspond in its use to the English preposition ‘beside’. However, in many of its English uses ‘beside’ denotes a relative location, and, as I noted in §1, speakers of Oceanic languages do not make use of

relative locations. We would expect POc reconstructions corresponding to meanings of English ‘side’ to denote an intrinsic, not a relative, location, and consequently perhaps to denote a part of a particular object.

This expectation is at least partly fulfilled. We can reconstruct POc **[p^wa]p^waRa[-]* ‘side; cheek’, a body-part term whose primary meaning was probably ‘side of the face’. Its uses are analogous to those of POc **mata[-]* ‘eye; face; front’ (p.249). However, a good deal of confusion surrounds reflexes of **[p^wa]p^waRa[-]*. Reflexes of POc **baban/*bapan* ‘plank; canoe plank or strake’ (vol. 1, p.185) are similar in both form and meaning to those of **[p^wa]p^waRa[-]*. Listed under ‘cf. also’ below **[p^wa]p^waRa[-]* are terms whose glosses include the meaning ‘side’ but whose forms reflect **baban*. The Lau and Bauan reflexes have glosses which are associated with both items, suggesting conflation.

PCEMP **papaR* ‘cheek, temple, side,’ (ACD)¹⁴

POc (N) **[p^wa]p^waRa[-]* ‘cheek, side of head’, (N LOC) ‘side’

NNG:	Kairiru	<i>poreq</i>	‘side of house’ (- <i>q</i> unexplained)
MM:	Nalik	<i>par, pāran</i>	‘side’ (dialectal variants)
MM:	Tolai	<i>papar, papara-</i>	‘side’
MM:	Minigir	<i>papara</i>	‘side’
MM:	Ramoaaina	<i>papar</i>	‘side’
MM:	Kandas	<i>papori</i>	‘side’
MM:	Taiof	<i>pana</i>	‘side’
MM:	Mono-Alu	<i>(pa)pala</i>	‘side’
MM:	Roviana	<i>papara</i>	‘side of face, cheek’
cf. also			
NNG:	Rauto	<i>vava-</i>	‘side’
NNG:	Maeng	<i>vava-</i>	‘side’
NNG:	Poeng	<i>vava-</i>	‘side’
SJ:	Sobei	<i>popa</i>	‘cheek’
SES:	Kwaio	<i>baba</i>	‘side, cheek’
SES:	Lau	<i>baba</i>	‘side; long side board of canoe’
SES:	Arosi	<i>baba</i>	‘cheek, temples; side (of a stream +)’
Fij:	Bauan	<i>baba</i>	‘side of s.t., cheek bone; side of a canoe’

POc **p^wala(η)* ‘side, part’ is reconstructable, but its exact sense is unclear.

PMP **balan* ‘side, part’ (ACD)

POc **p^wala(η)* ‘side, part’ (ACD)

MM:	Tigak	<i>pal</i>	‘part’
SES:	Gela	<i>pala</i>	‘side, part’
SES:	Lau	<i>bara-</i>	‘side’
NCV:	Mota	<i>para</i>	‘sideways, turning aside’
Pn:	Tongan	<i>pala</i>	‘side, edge’

POc **bali* denoted ‘one of two (opposing) sides or parts’.

¹⁴ Blust also gives ‘plank’ as a gloss. See text.

PMP **baliw* ‘moiety; answer; oppose; partner, friend, enemy; opposite side or part’ (ACD)¹⁵

POc (N, N LOC) **bali[-]* ‘one of two (opposing) sides or parts’

SES:	Gela	<i>bali</i>	‘bring together (opposite planks of a canoe)’
SES:	Kwaio	<i>bali-</i>	‘part, side, portion, half’
NCV:	Mota	<i>(ta)vali(u)</i>	‘one of two sides or parts’
NCV:	Raga	<i>bal(si)</i>	‘side’
NCV:	Lonwolwol	<i>wali</i>	‘one of (a pair); the mate of’
Mic:	Ponapean	<i>pali</i>	‘side’
Mic:	Woleaian	<i>pariy</i>	‘side’
Pn:	Tahitian	<i>pari</i>	‘side’
Pn:	Tuamotuan	<i>pari(a)</i>	‘a half’

cf. also:

MM:	Motu	<i>badi(nai)</i>	‘beside’ (- <i>d-</i> for expected <i>** -r-</i>)
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There are two other reconstructions from which terms for ‘side’ are derived. One, POc **siriŋ* ‘side, edge’, is derived from a PMP term whose basic meaning was apparently ‘be close to, be near to’. Only three Oceanic reflexes have been found to date. The other, PEOc **tapa-* ‘side, outside’, is limited to Eastern Oceanic, where the earlier sense seems to have been ‘side’ in the sense of ‘outer surface other than front or back’.

PMP **sidiŋ* ‘border on, neighbour; peer, equal’ (ACD)

POc (N, N LOC) **siriŋ* ‘side, edge’

NNG:	Dami	<i>siri-</i>	‘side’
NNG:	Takia	<i>siriŋe-</i>	‘side’
Mic:	Marshallese	<i>tur^{uu}u-</i>	‘beside’

PEOc (N, N LOC) **tapa-* ‘side, outside’

NCV:	NE Ambae	<i>tava(lu)-</i>	‘side’
NCV:	Tamambo	<i>tava(lu)</i>	‘side part of s.t.’
NCV:	Paamese	<i>tav</i>	‘one side’
Pn:	Tongan	<i>tafa</i>	‘edge, border’
Pn:	Samoan	<i>tafa</i>	‘side’
Pn:	K’marangi	<i>taha</i>	‘outside, shore’
Pn:	Rennellese	<i>taha</i>	‘outside, beside, near, edge, side’
Pn:	Tuamotuan	<i>taha</i>	‘side, margin, edge, border’

2.3.5 ‘Outside’

It is reasonably clear that the ‘inside’/‘outside’ opposition found in European languages did not occur in POc. This is unsurprising, since POc relation terms were nouns denoting parts of an object. The inside of a house is readily conceived as a part of it (POc **lalo-*), but the English term ‘outside’ only denotes a part insofar as it refers to the external surfaces of the building. As noted at various points in §2.3, terms which denote (among

¹⁵ The PMP etymon is discussed at length by Blust (1980a) and in the ACD.

other things) particular external surfaces are also used metonymically to denote the external surface or ‘outside’ of an object in general. This is true of some reflexes of POc **papo[-]* ‘upper surface, top’ (p.252), of POc **muri[-]* ‘back part, rear’ (p.261) and of PEOc **tapa-* ‘side, outside’ (above).

The terms in the set below could tempt us to reconstruct POc **luku-* ‘side, outside’.¹⁶ However, their uneven distribution is suspicious, and it seems far more likely that they reflect PMP **likuD*, POc **liku(r)* ‘(person’s) back’ (Blust 1981). The meaning of scattered reflexes of this word has extended to include the backs and rear parts of inanimate objects (like POc **muri[-]*), and thence the external surfaces of objects in general. The specification of ‘back’ in the Marshallese and Woleaian reflexes below supports this interpretation.

Yap:	Yapese	(wu)ɽuʔ	‘outside of’
NNG:	Manam	(e)luku	‘outside’
Mic:	Kosraean	likɨ	‘outside’
Mic:	Marshallese	liki-	‘outside; ocean side of; behind, in back of’
Mic:	Ponapean	liki-	‘outside’
Mic:	Mokilese	liki-	‘outside’
Mic:	Chuukese	rikɨ	‘exterior, outside, outside surface, outer edge, immediate environs’
Mic:	Woleaian	rixɨ	‘outside, back of s.t.’
Fij:	Wayan	liku	(N LOC) ‘back side of the island’

2.3.6 ‘Front, time before’

According to Blust (1997), the PMP relational noun for ‘front’ was **qadəp* ‘front’, which was also used of the human face. Although reflexes of this term have been replaced by body-part terms (see below) in a majority of Oceanic languages, enough reflexes survive to make it clear that its reflex POc **qaro-*, **qarop* ‘front; face’ is reconstructable.

PAn **qadəp* ‘front, face’

POc (N) **qaro-*, **qarop* ‘face’, (N LOC) ‘front’

NNG:	Mangap	kere-	‘front’
NNG:	Manam	aro-	‘space in front’
NNG:	Kairiru	aro-	‘in front of (s.t.)’
PT:	Dawawa	karo	‘in front’
SES:	Sa’a	saro	‘face, turn oneself’
Fij:	Rotuman	aro	‘front, side or surface that is usually seen.’
Pn:	Tongan	ʔao	‘front’
Pn:	E Futunan	ʔalo	‘in front’
Pn:	Marquesan	aʔo	‘front’
Pn:	Hawaiian	alo	‘front’
Pn:	Maori	aro	‘front of body, pubic area of females’

¹⁶ This putative item resembles POc **ruku-* ‘underneath’, but this is probably fortuitous.

None of the items above reflects final POc **-p*, but we can be certain that the form **qarop* occurred, as a reflex is preserved in PPn **ʔarofiwaʔe* ‘sole of foot’ (e.g. Tongan *ʔaofi vaʔe*, East Futunan *ʔalofi-vaʔe*, Samoan *alofivae*), reflecting POc **qarop qi qaqe*, literally ‘front of foot’ (where **qi* is the non-specific possessive preposition (Ross 1998b, 2001b)).

Another generic POc term for ‘front’ (but probably not ‘face’) was **muqa[-]*, which—its reflexes suggest—occurred more often as a zero-valency than a monovalent noun. As a zero-valency local noun it occurred in the prepositional phrase **i muqa* ‘in front, formerly’. The reduplicated form **muqa-muqa* ‘in front, formerly’ represents a morphological pattern not found with other local nouns.

As the glosses indicate, POc **muqa[-]* had the temporal sense of ‘time before’ as well as the local sense of ‘front’. It was thus the antonym of POc **muri[-]* ‘back, time after’ (§2.3.7).

POc (N LOC) **muqa[-]* ‘front’, **muqa* ‘front, be in front’, **i muqa*, **qa-muqa* **muqa-muqa* (ADV) ‘in front, formerly’

Yap:	Yapese	<i>mʔōn</i>	‘front’
Adm:	Mussau	<i>mua</i>	‘front’
Adm:	Titan	<i>mo(ndrol)</i>	‘bow of canoe’
NNG:	Manam	<i>mua</i>	‘go first, precede’
MM:	Vitu	<i>muya-</i>	‘front’
MM:	Nalik	<i>(pa)mua</i>	‘in front’
MM:	Notsi	<i>(la)mua</i>	‘front’
MM:	Tabar	<i>mu-mua</i>	‘formerly’
		<i>moa</i>	‘front’
MM:	Lihir	<i>(i)muo</i>	‘formerly’
		<i>muo</i>	‘in front’
MM:	Solos	<i>ma-mua</i>	‘in front’
MM:	Halia (Selau)	<i>(to)mua-na</i>	‘old’
MM:	Taiof	<i>(i)mua-n</i>	‘formerly’
MM:	Teop	<i>(ta)mua-na</i>	‘old’
MM:	Banoni	<i>ma-ma</i>	‘in front’
NCV:	Mota	<i>m^woa-i</i>	‘first, foremost, principal; to be first’
NCV:	Raga	<i>mua-i</i>	‘first’
NCV:	NE Ambae	<i>mue-</i>	‘front of’
NCV:	Lewo	<i>(va)mo</i>	‘front’ (va ‘go’)
Mic:	Nauruan	<i>(ā)m^wō</i>	‘front’
Mic:	Kiribati	<i>moa</i>	‘front, fore part’
Mic:	Woleaian	<i>mm^wa-</i>	‘front, first, tip, before’
Mic:	Marshallese	<i>m^uā-</i>	‘front’
		<i>m^wāha-</i>	‘ahead of, before, in front of’
Mic:	Mokilese	<i>m^wō-</i>	‘front’
Mic:	Ponapean	<i>m^wowε-</i>	‘ahead of, in front of, before’
Mic:	Chuukese	<i>m^w-m^wa-</i>	‘in front of, more than’
Fij:	Wayan	<i>mua</i>	‘end-point or tip of a long object; head for or set course for a place’

Fij:	Bauan	<i>mua</i>	‘the first; tip, point, prow’
Pn:	Tongan	<i>muʔa</i>	‘front’
Pn:	Niuafu’ou	<i>muʔa</i>	‘front’
Pn:	Rapanui	(ʔi) <i>muʔa</i>	‘front’
Pn:	Tahitian	(i) <i>mua</i>	‘front’

In NCV languages we find reflexes of the adverb **qa-muqa* ‘in front, formerly’: Mota (*a*)*mʷoa* ‘before, first’, Raga (*a*)*mua* ‘before, at first, first, in front of’, NE Ambae (*a*)*mue* ‘in front, at the front’, Port Sandwich (*a*)*mo* (POSTVERBAL ADV) ‘before’.

There is evidence in Western Oceanic languages for a competing form **muga*. This occurs far more often in verbal reflexes than does **muqa*, so it is possible that **muga* was the POC verb, and that **muqa* supplanted **muga* in PEOc. The possibility of conflating the two terms is illustrated in Vitu and Bali, dialects of the Bali-Vitu language. In one, Vitu, the monovalent term for ‘front’ is *muya-*, reflecting **muqa*, whilst in the other, Bali, it is *muga-*, reflecting **muga*. Since reflexes of **muga* are otherwise not monovalent, it is reasonable to infer that this is a conflation whereby the noun *muya-* has been replaced by the verb-form *muga*.

Although **muqa* and **muga* are formally similar, a historical relationship between them is problematic: we would expect an alternation between POC **k* and **g*, but not between **q* and **g*.¹⁷

PWOC (?? N LOC, V) **muga* ‘front; be in front; formerly’

NNG:	Bariai	<i>muga</i>	‘front’
		<i>muga(ŋa)</i>	‘forehead’
		<i>muga(eai)</i>	‘formerly’ (- <i>eai</i> POSTP)
NNG:	Arop-Lokep	<i>mugu</i>	‘first of all, formerly’
NNG:	Mangap	<i>muʔgu</i>	‘first of all, formerly, long ago’
NNG:	Gitua	<i>munga</i>	‘precede, go ahead, future’
NNG:	Sio	<i>muga</i>	‘precede; before’
NNG:	Tami	<i>muŋ</i>	‘front; in front’
NNG:	Bing	<i>mug</i>	‘formerly’
NNG:	Gedaged	<i>mug</i>	‘precede’
NNG:	Yabem	<i>muŋ</i>	‘precede’
NNG:	Adzera	<i>moŋʔ</i>	‘prior’
		<i>moŋʔ(an)</i>	‘precede’
PT:	Suau	- <i>muga(i)</i>	‘precede’
MM:	Bali	<i>muga-</i>	‘front’
MM:	Bola	<i>muga</i>	‘frontside’
MM:	Nakanai	<i>ma-muga</i>	(RELATIONAL N) ‘front’
MM:	Ramoaina	(<i>nə</i>) <i>mugə</i>	‘in front; formerly’
MM:	Kandas	<i>mugu</i>	‘in front’
MM:	Bilur	<i>mugo</i>	‘frontside’
MM:	Siar	<i>muŋ</i>	‘in front of’

¹⁷ There are non-Oceanic items that look cognate, but they are descended from borrowings of Sanskrit *mukha* ‘face’. The items are Isneg *múkāt* ‘face’, Ilokano *mukat* ‘eye mucus’, Tagalog *mukhaʔ*, Indonesian *muka* ‘face’, Balinese *muə* ‘face’. Sasak *mua* ‘face’ (Gonda 1973:104). I am grateful to Robert Blust for this information.

The body-part terms whose reflexes are often used for ‘front’ are POc **mata[-]* ‘eye, face, front’ and POc **nako[-]* ‘face, front’. The original and basic meanings of **mata[-]* and **nako[-]* were ‘eye’ and ‘face’ respectively. Nonetheless, reflexes of these terms occur with great frequency in the meaning ‘front’. Scattered reflexes below suggest that **i mata* was a POc expression meaning ‘in front’, and other modern uses suggest that it has long been used for the front of an inanimate object, e.g. Nalik (MM) *la maran a fal* [PREP eye PREP house] and Tolai (MM) *ta ra mata-na pal* [PREP ART eye-P:3SG house], both ‘in front of the house’.

PAn **maCa* ‘eye’

POc (N) **mata[-]* ‘eye; face’, (N LOC) ‘front’

NNG:	Lusi	<i>mata-</i>	‘eye; front’
NNG:	Bariai	<i>mata</i>	‘eye; front’
NNG:	Mangap	<i>mata-</i>	‘eye; front’
NNG:	Takia	<i>mala-</i>	‘eye, front’
NNG:	Buang	<i>mala</i>	‘eye, front’
NNG:	Adzera	<i>mara-</i>	‘eye, front’
NNG:	Kaulong	<i>(e)mara</i>	‘in front’
PT:	Kiriwina	<i>mata-</i>	‘eye; front’
MM:	Nalik	<i>mara-</i>	‘eye; front’
MM:	Siar	<i>mata-</i>	‘eye; front’
MM:	Tolai	<i>mata</i>	‘eye; front’
MM:	Taiof	<i>mata-</i>	‘eye; front’
SES:	Gela	<i>(i)mata</i>	‘in front of’
SES:	Sa’a	<i>mā</i>	‘eye; front’
		<i>(i)mā</i>	‘outside’
NCal:	Tinrin	<i>(ŋā)m^wāŋā</i>	‘front’
Mic:	Kosraean	<i>maɬa-</i>	‘eye; front’
Fij:	Wayan	<i>mata-</i>	‘face, front of head, face of object with both front and back side’
		<i>(i)mata</i>	‘in front’
Fij:	Bauan	<i>mata-</i>	‘eye; face; front’
		<i>(i)mata</i>	‘in front’
Pn:	Tongan	<i>mata</i>	‘eye, face’
Pn:	Samoa	<i>mata</i>	‘eye, face’
Pn:	Maori	<i>mata</i>	‘eye, face’

POc (N, N LOC) **nako[-]* ‘face, front’

Adm:	Pak	<i>nogo(gi)</i>	‘front, before, face’
NNG:	Gitua	<i>nago</i>	‘face’
NNG:	Tami	<i>nao</i>	‘front, face’
NNG:	Takia	<i>nao-</i>	‘face’
		<i>nao(-n na)</i>	‘in front of’ (N-P:3SG POSTPOSITION)
PT:	Ubir	<i>na(-na-i)</i>	‘in front of it, him’

PT:	Tawala	<i>nao-</i>	‘front/forward position’
		<i>u nao-na</i>	‘in front’ (PREP N-P:3SG)
MM:	Lavongai	<i>(ai)no</i>	‘formerly’
		<i>no</i>	‘forehead; frontside’
MM:	Tigak	<i>(ai)no</i>	‘formerly’
		<i>no</i>	‘forehead; frontside’
MM:	W. Kara	<i>no</i>	‘forehead’
MM:	Nalik	<i>no</i>	‘forehead’
SES:	Gela	<i>nayo</i>	‘front, before, face’
SES:	Bugotu	<i>nayo</i>	‘front’
SES:	Longgu	<i>naʔo(va-)</i>	‘front’
SES:	Lau	<i>nao</i>	‘front’
SES:	Kwaio	<i>naʔo-</i>	‘front’
SES:	‘Are’are	<i>naʔo</i>	‘front’
SES:	Sa’a	<i>naʔo</i>	‘front, before, face’
NCV:	Mota	<i>nago-i</i>	‘face, front, cutting edge’
NCV:	Merlav	<i>nago-i</i>	‘front, before, face’
NCV:	Tamambo	<i>naho-</i>	‘face’
NCV:	Paamese	<i>nā-</i>	‘face, front’
NCV:	Nguna	<i>nako-</i>	‘front, before, face’

2.3.7 ‘Back, space behind, time after’

The generic POc term for the back (of something or someone), the space behind (something or someone), and the time after (an event) was **muri[-]*. However, it has a more complex history than other POc relational nouns. Blust (ACD) derives it from PMP **ma-udehi*, containing the PMP undergoer-subject verbal prefix **ma-* and the root **udehi* which he glosses as ‘last; come after or behind; late, later; future; stern of a boat; youngest child.’ Blust’s glosses are not intended to be a claim about the morphological class of the item, but it is a reasonable inference from work on the history of PMP and POc **ma-* (Evans and Ross 2001) that PMP **udehi* was a noun, perhaps meaning ‘that which is behind, that which is last, that which is after or in the future’ and that **ma-udehi* was a stative (adjectival) verb derived from it.

There is evidence in the Gapapaiwa (PT), Ramoaina (MM), Arosi (SES), Bauan (Fij), Samoan (Pn), and Rennellese (Pn) definitions below that POc **muri* remained a stative verb, but there is also overwhelming evidence that it was a monovalent relational noun with spatial meanings like ‘back part, rear, behind, space to the rear of, time after’ as well as more concrete uses like ‘stern of a canoe’. It is also glossed as an adverb of place and/or time in a number of languages, but where there is evidence about its morphological class, these uses derive from its nominal use with a preposition, suggesting POc **i muri* ‘behind, later’ (more literally, ‘in the space behind, at a time after’). POc **muri* thus also had a temporal use, referring to time after the time of speaking (p.322). Note that the syntactic behaviour of POc **muri[-]* broadly matches that of its antonym **muqa[-]/*muga* (§2.3.6), which also had both nominal and verbal uses.

It appears that the PMP root **udehi* was also inherited into POC as the base **uri*, but only two reflexes have been found. They are both in NNG languages: Gedaged *uli* ‘follow, pursue; come after, succeed; go to the rear’ and Kaulong *e-uli* ‘back’ (*e-* ART).

PMP **ma-udehi* ‘be last; be after or behind; be late, be later; future’ (ACD)¹⁸

POC (N, N LOC) **muri[-]* ‘be behind, be after; back part, rear, behind, space to the rear of, time after; (canoe) stern; space outside’, **i muri*, **muri-muri* ‘at the back, later’

Adm:	Wuvulu	<i>muki</i>	‘(canoe) stern’
Adm:	Loniu	<i>muʔu (tun)</i>	‘(canoe) stern’
Adm:	Drehet	<i>(o)mu(ŋ)</i>	‘back’
NNG:	Kove	<i>muhi-</i>	‘s.o.’s back’
NNG:	Bariai	<i>mur[-]</i>	‘s.o.’s back’
NNG:	Gitua	<i>mur</i>	‘behind, afterwards’
NNG:	Gedaged	<i>muli-</i>	‘behind, rear, back part, stern, rear, posterior, outside of s.t.’
NNG:	Manam	<i>muri</i>	‘behind’
NNG:	Yabem	<i>(ŋa)mu(ŋa)</i>	‘back of s.t.’
NNG:	Bukawa	<i>(ŋa)^mbu(ⁿga)</i>	‘back of s.t.’
NNG:	Kaiwa	<i>mul</i>	‘back of s.t.’
PT:	Iduna	<i>muli(ne)</i>	‘back of s.t., behind’
PT:	Dobu	<i>muri-</i>	‘behind, afterwards’
PT:	Gapapaiwa	<i>muri</i>	‘follow’
		<i>muri-</i>	‘back of s.t.; behind, afterwards’
PT:	Tawala	<i>muli-</i>	‘back of s.t.; behind, afterwards’
PT:	Motu	<i>muri-</i>	‘back of s.t.; space behind’
MM:	Bali	<i>muri</i>	‘back of s.t.’
MM:	Meramera	<i>(ma)muli</i>	‘back of s.t.’
		<i>(muli)muli</i>	‘later’
MM:	Nakanai	<i>(muli)muli</i>	‘later’
MM:	Lavongai	<i>muŋ</i>	‘back of s.t.; s.o.’s back’
MM:	Tigak	<i>(ai)muk</i>	‘later’
		<i>mugi-</i>	‘back of s.t.; s.o.’s back’
MM:	Tabar	<i>muri-</i>	‘back of s.t.’
MM:	Ramoaina	<i>mur</i>	‘follow; behind, back; last’
		<i>(na)mur</i>	‘later, afterwards’
		<i>mur</i>	‘s.o.’s back’
SES:	Gela	<i>muri-</i>	‘behind, afterwards; back; outside of s.t.; afterbirth; posterity’
SES:	Lengo	<i>(i)muri(a)</i>	‘after’
SES:	Arosi	<i>muri-</i>	‘follow; behind, back; outside of s.t.; afterwards; left hand when facing an object’
Mic:	Ponapean	<i>m^wuri</i>	‘behind’
Mic:	Woleaian	<i>m^wiʔi-</i>	‘behind, after, backside, rear’

¹⁸ Blust (ACD) does not provide a gloss for **ma-udehi*. The gloss here is based on that for **udehi*.

Mic:	Mokilese	<i>m^weri-</i>	‘back of s.t.; s.o.’s back’
Mic:	Puluwatese	<i>m^wir-</i>	‘back of s.t.; s.o.’s back’
Fij:	Bauan	<i>muri</i>	‘following, after’
		<i>(e) muri</i>	‘behind, later’
		<i>(ki) muri</i>	‘to the rear’
Pn:	Tongan	<i>mui</i>	‘space behind; rear; end, extremity, tip; back, rear; later; young, immature, only partly developed’
Pn:	Samoa	<i>muli</i>	‘come last, be last; young, new’
Pn:	Rennellese	<i>mugi</i>	‘follow, be or go behind or after; rear end, esp. lower or western end’
Pn:	Maori	<i>muri</i>	‘rear, hind part; sequel, time to come; behind, afterwards, backwards; youngest child’
Pn:	Hawaiian	<i>muli</i>	‘behind, afterwards; last, following behind; younger, youngest; (canoe) stern’

The reflexes below contain a Northwest Solomonian innovation whereby Proto Northwest Solomonian **mudi[-]* is reconstructable (this would reflect POc **mudri*) instead of expected ***muri[-]*.

Proto Northwest Solomonian **mudi*-‘back of s.t.; s.o.’s back’

MM:	Nehan	<i>mudi</i>	‘back of s.t.; s.o.’s back’
MM:	Petats	<i>mur</i>	‘s.o.’s back’
MM:	Halia (Haku)	<i>mur</i>	‘back of s.t.; s.o.’s back’
MM:	Halia (Selau)	<i>muri-</i>	‘back of s.t.’
		<i>mur</i>	‘s.o.’s back’
MM:	Banoni	<i>muri</i>	‘behind’
MM:	Mono-Alu	<i>(muri)muri</i>	‘later’
MM:	Vangunu	<i>(tara)meji-na</i>	‘after’
MM:	Varisi	<i>(tara)muzi-na</i>	‘after’
MM:	Nduke	<i>mudi-</i>	‘back of s.t.; s.o.’s back’
MM:	Roviana	<i>mudi-</i>	‘back of s.t.; s.o.’s back’

The semantic and formal similarity of the reflexes of POc **burit* below to those of POc **muri[-]* above is evidently due to chance. In the 2003 version of this chapter, I attributed members of the set below to a putative PMP **pa-udehi*, paradigmatically related to PMP **ma-udehi* (ancestral to POc **muri[-]*), but the presence in this set (listed in the ACD) of Bugotu *buriti* indicates that I was wrong.

PMP **burit* ‘hind part, rear, back’ (ACD)

POc **burit* ‘hind part, rear, back’, (N, N LOC) ‘back part, rear, behind, space to the rear of, time after; (canoe) stern’, (ADV) ‘behind, afterwards’

NNG:	Kela	<i>^mhuri(ya)</i>	‘back of s.t.’
MM:	Tinputz	<i>puri</i>	‘behind’
MM:	Teop	<i>huri</i>	‘behind’
SES:	Lau	<i>huri</i>	‘back, stern’
SES:	Bugotu	<i>buriti</i>	‘back’

SES:	Longgu	<i>buri-</i>	'behind; after'
SES:	Lau	<i>buri</i>	'back; behind, after; stern, rear'
		<i>buri(wela)</i>	'after-birth'
		<i>(i) buri</i>	'afterwards'
SES:	Kwaio	<i>buli-na</i>	'after'
		<i>buli</i>	'after, behind'
SES:	'Are'are	<i>puri-na</i>	'after'
SES:	Sa'a	<i>(i) puri</i>	'back of, behind; stern of a canoe'
		<i>puri-na</i>	'after, back, stern'

One body-part term occurs with fair frequency with the sense of 'back part of, space behind'. This is POc **takuRu[-]* '(s.o.'s) back'. The evidence that this was a body-part term in POc is clear. It may also have been used by extension as a POc relational local noun, but it is also possible that local-noun uses in modern languages represent independent parallel developments.

POc (N, ? N LOC) **takuRu[-]* '(s.o.'s) back'

Adm:	Titan	<i>lákulo-</i>	'(s.o.'s) back' (<i>l-</i> for expected <i>t-</i>)
NNG:	Sio	<i>taulo</i>	'behind'
PT:	Gumawana	<i>tolu-</i>	'(s.o.'s) back'
PT:	Dawawa	<i>tauri</i>	'back of s.t.; s.o.'s back'
PT:	Motu	<i>doru-</i>	'back, behind'
MM:	Lavongai	<i>toŋ</i>	'back of s.t.'
MM:	Nalik	<i>toru-</i>	(N LOC) 'space behind' (e.g. <i>la toru-gu</i> [PREP N LOC-P:1SG] 'behind me')
MM:	Minigir	<i>tauru-</i>	'(s.o.'s) back'
MM:	Bilur	<i>taru-</i>	'(s.o.'s) back'
MM:	Siar	<i>taru-</i>	'(s.o.'s) back'
MM:	Taiof	<i>touno-</i>	'(s.o.'s) back'
MM:	Teop	<i>tonu-</i>	'(s.o.'s) back'
MM:	Kia	<i>tayuru-</i>	'back of s.t.; s.o.'s back'
MM:	Kokota	<i>tagru-</i>	'back of s.t.; s.o.'s back'
MM:	Maringe	<i>t^hagru-</i>	'back of s.t.; s.o.'s back'
NCV	Mota	<i>tawur, tawuru-</i> <i>(a)tawur</i>	'back of s.t.; s.o.'s back' 'behind'
NCV:	NE Ambae	<i>tagu-</i>	(N LOC) 'space behind'
NCV:	Raga	<i>(a)tayu-</i>	(N LOC) 'behind'
NCV:	Port Sandwich	<i>(a)rax</i>	(N LOC) 'behind'
NCV:	Lonwolwol	<i>tao-</i>	'lower back (region around hips); behind'
NCV:	Lewo	<i>ra-</i> <i>(va)rau</i>	'back of s.t.; s.o.'s back' 'behind' (<i>va</i> 'go')
NCV:	Nguna	<i>(na)taku</i> <i>(e)daku</i>	'back; the far side, other side' (ADV) 'at the back, behind; after'
SV:	Sye	<i>(n)toc(-noki)</i> <i>(n)tocu(-nta-)</i>	'back of skull' 'shoulder blade'

SV:	Kwamera	<i>taku-</i>	‘back’
SV:	Anejom	<i>(i)tay</i>	(ADV) ‘behind’ (e.g. <i>itay a niom^w</i> [ADV PREP N] ‘behind the house’)
NCal:	Nyelâyü	<i>dū-</i>	‘(s.o.’s) back; behind’
NCal:	Tinrin	<i>tɔɔ-</i>	‘(s.o.’s) back’
Mic:	Kiribati	<i>akū-</i>	‘back; behind’
Mic:	Kosraean	<i>tɔkɔ-</i>	‘back of s.t.; s.o.’s back’
Mic:	Marshallese	<i>æliki-</i>	‘(s.o.’s) back’
Mic:	Puluwatese	<i>hækir</i>	‘(s.o.’s) back’
Mic:	Woleaian	<i>taxizi-</i>	‘back of s.t.; s.o.’s back’
Fij:	Wayan	<i>takū</i>	(N LOC) ‘behind’
Fij:	Bauan	<i>daku-</i>	‘back of s.t.; s.o.’s back’
cf. also			
SES:	’Are’are	<i>kokoru-</i>	‘(s.o.’s) back’
SES:	Sa’a	<i>kokolu-</i>	‘(s.o.’s) back’

2.4 The interrogative local noun ‘where?’

The interrogative local noun ‘where?’ was POc **pai*. Micronesian reflexes of **i pai* reflect Proto Micronesian **i-fā* rather than expected **i-fai*.

PMP **pai* ‘where?’ (ACD)

POc (N LOC) **pai*, **i pai* ‘where at?’

NNG:	Bebeli	<i>ehae</i>	‘where?’
NNG:	Numbami	<i>ai(a)</i>	‘where?’
MM:	Bali	<i>ve(ni)</i>	‘where?’
MM:	Bola	<i>vai</i>	‘where?’
MM:	Meramera	<i>(i)va</i>	‘where?’
MM:	Nakanai	<i>-ve</i>	‘where?’
MM:	Tigak	<i>ve</i>	‘where?’
MM:	Kara (East)	<i>fa</i>	‘where?’
MM:	Nalik	<i>fa</i>	‘where?’
MM:	Tabar	<i>ve</i>	‘where?’
MM:	Lihir	<i>he</i>	‘where?’
MM:	Sursurunga	<i>ai, ai(ə)</i>	‘where?’
MM:	Patpatar	<i>he</i>	‘where?’
MM:	Minigir	<i>va</i>	‘where?’
MM:	Tolai	<i>ve</i>	‘where?’
MM:	Ramoaaina	<i>(ə)wai</i>	‘where?’
MM:	Teop	<i>(ha)ve</i>	‘where?’
MM:	Banoni	<i>vai</i>	‘where?’
MM:	Uruava	<i>vei(a)</i>	‘where?’
MM:	Lungga	<i>pai</i>	‘where?’
MM:	Roviana	<i>(pa)vei</i>	‘where?’

MM:	Kia	<i>hae</i>	‘where?’
MM:	Gela	<i>(i)vei</i>	‘where?’
SES:	Longgu	<i>evei</i>	‘where?’
SES:	Lau	<i>(i)fai</i>	‘where?’
SES:	Kwaio	<i>(i)fai</i>	‘where?’
SES:	Arosi	<i>(naʔi)hei</i>	‘where?’
SES:	Bauro	<i>(i)hai</i>	‘where?’
NCV:	Raga	<i>(be)he</i>	‘where?’
NCV:	Uripiv	<i>(ni)be</i>	‘where?’
NCV:	Lonwolwol	<i>be</i>	‘where?’
NCV:	Paamese	<i>(e)vē</i>	‘where?’
NCV:	Lewo	<i>pe</i>	‘where?’
NCV:	Namakir	<i>(-o)be-</i>	‘where?’
Mic:	Chuukese	<i>(i)fa</i>	‘where? how? what?’
Mic:	Puluwatese	<i>(yi)fa</i>	‘where? what? which?’
Mic:	Satawalese	<i>(i)fa</i>	‘where (is it)? which?’
Mic:	Carolinian	<i>(i)fa</i>	‘where?’
Mic:	Woleaian	<i>(i)fā</i>	‘where? which? what?’
Fij:	Bauan	<i>vei</i>	‘where?’
Fij:	Wayan	<i>vei</i>	‘where?’

Also found are forms which appear to reflect **pea*, **pia* and, in Polynesian, PPn **fē*. These probably reflect POc **pai-a* (cf Numbami *aia*, Sursurunga *aiə*, Uruava *veia* above), together with vowel sequence reductions which have occurred independently but in parallel. The step from POc **paia* to **pea* is an obvious one. In a number of languages the height distance between the vowels of **pea* has been maximised, giving **pia*. And in Polynesian, an innovation which is regular in Tongic and sporadic in some other Polynesian languages apparently produced **fē* as an alternant to **fea* (< **pea* < **paia*). The forms are listed below. Where a reconstruction is preceded by a question mark, the forms beneath it may be the result of parallel developments.

? POc (N LOC) **pea* ‘where at?’

Adm:	Mussau	<i>bea</i>	‘where?’
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? PNCV (ADV) **vea*, **bea*

NCV:	Mota	<i>vea</i>	‘where?’
NCV:	Kiai	<i>vea</i>	‘where?’
NCV:	Tamambo	<i>(a)bea</i>	‘where?’

PPn (ADV) **[i] fea* ‘where at?’

Pn:	Tongan	<i>fē</i>	‘where?’
Pn:	Niuean	<i>fē</i>	‘where?’
Pn:	Samoa	<i>fea</i>	‘where?’
Pn:	Anutan	<i>pea</i>	‘where?’
Pn:	E Futunan	<i>fea</i>	‘where?’
Pn:	E Uvean	<i>fea</i>	‘where?’
Pn:	Tikopia	<i>fea</i>	‘where? what? when?’

Pn:	Ifira-Mele	<i>(i)fea</i>	‘where at?’
Pn:	Hawaiian	<i>hea</i>	‘where?’
Pn:	Maori	<i>φea</i>	‘where?’
Pn:	Tahitian	<i>hea</i>	‘where?’
Pn:	K’marangi	<i>hē</i>	‘where’
Pn:	Mae	<i>fē</i>	‘where?’
Pn:	Nukuria	<i>ihē</i>	‘where?’

? POc (N LOC)*[i] *pia* ‘where at?’

MM:	Nehan	<i>ia</i>	‘where?’
MM:	Solos	<i>īa</i>	‘where?’
MM:	Petats	<i>īa</i>	‘where?’
MM:	Taiof	<i>ifīa</i>	‘where?’
MM:	Mono-Alu	<i>hi(na)</i>	‘where?’
MM:	Nduke	<i>(o)via</i>	‘where?’
SES:	Gela	<i>via</i>	‘wherever, of whatever kind, where, what, which’
NCV:	Port Sandwich	<i>(a)^mbi</i>	‘where?’
Pn:	Maori (Aupōuri)	<i>hia</i>	‘where?’
Pn:	Tahitian	<i>hia</i>	‘where?’

3 Directional verbs

Directional verbs can be conveniently divided into verbs of **deictic direction** (‘towards speaker’, ‘towards addressee’, ‘away from speaker and addressee’) and verbs of **geographic direction**, and especially vertical direction (‘go up’, ‘go down’).

3.1 Some Proto Oceanic serial verb constructions

Directional verbs play an important role in certain serial verb constructions in Oceanic languages, and they evidently did so in POc, to judge both from the wide distribution of such constructions today and from grammaticised versions of these constructions (Ross 2003).

Verbs of deictic direction occur in serial verb constructions of deictic direction, where they follow a verb of locomotion (transitive or intransitive) or a verb of geographic direction. The examples below are from Yabem (NNG). In both the first two examples, the deictic directional verb is *-yà* ‘go away from speaker and addressee’.¹⁹ In the first example it follows the locomotion verb *-lob* ‘fly’, in the second the geographic directional verb *-pi* ‘go up’.

balosi ge-lob ge-yà lo?
dove S:3SG-fly S:3SG-go:3 mountain
‘The doves flew off to the mountain.’

¹⁹ Deictic direction verbs are glossed ‘come’ (move to(wards) speaker), ‘go:2’ (move to(wards) hearer) and ‘go:3’ (move to(wards) a third person or place).

ke-pi lom ge-yà.
 S:3SG-go.up men's.house S:3SG-go:3
 'He climbed up to the men's house.'

Verbs of geographic direction also occur in serial verb constructions of geographic direction, where they follow a locomotion verb (transitive or intransitive). In this example, the locomotion verb is *-pwane?* 'insert', the geographic directional verb *-sep* 'go down'.

ya-pwane? mɔ e-sep aò-ʔ-sùŋ
 S:1SG-IRR:insert taro S:3SG-IRR:descend mouth-P:1SG-hole
 'I'll put the taro into my mouth.'

Commonly the two constructions are combined, giving a sequence of locomotion verb, geographic directional verb and deictic directional verb, e.g. *-ne* 'sink', *-sep* 'go down' and *-yà* 'go away from speaker and addressee' in this example.

way ge-ne ke-sep gwe? ge-yà
 canoe S:3SG-sink S:3SG-descend sea S:3SG-go:3
 'The canoe sank into the sea.'

Directional verbs, both deictic and geographic, also occur in sequential serial verb constructions, where the first verb is a directional verb expressing 'go [up/down] and ...' or 'come and ...', the second a verb expressing the main event of the predication. This example is from Bali (MM):

Hizi mi=ri zio ki vahi-aŋa ihaŋa.
 they IRR=HYP:3 go.down SEQ:3 get-PL fish
 'They will go and catch fish.'

3.2 Grammaticisations of serial verb constructions

Directional verbs are grammaticised in a number of ways in Oceanic languages (Lichtenberk 1991). Three of these grammaticisation paths give rise to morphemes expressing location and direction. Reflexes of directional verbs which have undergone these grammaticisations occur in the cognate sets below, and for that reason are described here.

In the first type of grammaticisation, a directional verb in a serial verb construction loses its subject proclitic/prefix and becomes a directional adverbial enclitic (glossed DIR in cognate sets). In the two Sisiqa (MM) examples below, the directional enclitics *=me* and *=la* reflect the POC deictic directional verb forms **ma* 'come' and **la* 'go:2' (§3.4) respectively. Each is preceded by a locomotion verb ('carry', 'walk'), reflecting an earlier serial verb construction of deictic direction.

ra ko-gisu=me kavia kuda
 I S:1SG:REAL-carry=hither some coconut
 'I have brought some coconuts.'

yōi ma-zo=la Susuka
 s/he S:3SG:IRR-walk=thither Susuka
 S/he is going to Susuka village.'

In this Manam (NNG) example there is a sequence of locomotion verb ('take') and two directional enclitics, *-ra?e* 'up, to one's right when facing sea' (< geographical directional verb POc **sake* 'go up', p.273) and *-la?o* 'away' (< deictic directional verb POc **lako* 'go:3', p.287) reflecting an earlier three-verb sequence (Lichtenberk 1983:576–582).

Ogi i-do?-i-ra?e-la?o.

axe S:3SG-take-O:3PL-upward-away

'He took the axes away upward.'

In the second type of grammaticisation, described by Pawley (1973) and Durie (1988), a directional verb in a serial verb construction is reanalysed as a preposition or a relator (see below) and comes to form a constituent primarily with the following locative expression. Prepositional reflexes of POc **mai* 'come' occur in Polynesian languages. In Samoan, for example, we find (Mosel & Hovdhaugen 1992:147):

Na oso i lalo le tama mai le solofanua ...

PAST jump PREP down ART boy PREP ART horse

'The boy jumped down from the horse ...'

In Meso-Melanesian languages of New Britain and New Ireland and in Longgu (SES), the deictic directional verbs **mai* 'come' and **ua* 'go:2' have become respectively ablative and allative relators (Ross 2003). I use the term 'relator' for a preposition-like morpheme which differs in its distribution from a preposition in that it precedes either a prepositional phrase or a local noun. This distribution reflects its verbal ancestry: a POc deictic directional verb could be followed by a locative expression consisting of a local noun or a prepositional phrase. Hence in Longgu, *vu* is the allative relator reflecting **ua*:

... m-ara la ma?a vu masu?u

and-S:3PL go PERFECTIVE R bush

'... and they went into the bush'

amalu ho la vu ta-na malaba-i ni um^wani-a

D:1EP IRR go R PREP-P:3SG garden-SG in.order.to weed-O:3SG

'we will go into the garden to weed it'

In the third, least widespread, grammaticisation type, the deictic directional verb in a sequential serial verb construction becomes a pre-verbal clitic indicating the location or direction of the event in relation to the speech act participants. In the best described case, Sinaugoro (PT) (Tauberschmidt 1999:31–32), the clitics are enclitics to the preverbal subject/aspect/mood marking complex. In this example =*ma* reflects POc **ma* 'come'.

Si=ma yani-yani.

S:1IPL=near.me ITR-eat

'Let's eat here.'

3.3 Geographic directional verbs and enclitics

Geographic direction verbs occurred both independently and in geographic directional serial verb constructions. From the latter usage, they have often developed into enclitics or adverbs marking geographic direction.

The main semantic domain of geographic direction verbs is that of vertical direction, downward and upward. Vertical direction terms have developed two kinds of secondary

meanings in Oceanic languages, and these were probably present in Proto Oceanic. First, ‘downward’ and ‘upward’ often have the secondary horizontal senses ‘to the northwest’ and ‘to the southeast’. Second, because Oceanic speakers often dwell on mountainous islands, in some languages ‘downward’ also means ‘seaward’, and ‘upward’ also means ‘inland’ or, from the sea, ‘landward’.

A pair of antonyms occurred in POc. These were the generic verbs of movement down and up:

**sipo* ‘go downward’ **sake* ‘go upward’

As I noted earlier (p.229), POc apparently had a subsystem of geographic direction which was based on a river valley and had an up/down axis and a transverse axis with one directionally neutral (‘across the valley’) term. The terms used for ‘down the valley’ and ‘up the valley’ were evidently **sipo* and **sake*. The transverse term was possibly **pano*, which also served as a verb of deictic direction and is reconstructed on p.289. However, there are no known Western Oceanic or Southeast Solomonian reflexes of **pano* with this sense, so this may be a later innovation.

Recent work by François (2003, 2004) suggests strongly that this subsystem was also applied metaphorically to directions at sea. The two cardinal directions at sea were evidently provided by the major winds, POc **apaRat*, the northwest storm wind, and **raki*, the southeast trade wind, as the reflexes below (repeated from Chapter 5, §4.2) suggest:

PMP **habaRat* ‘west monsoon’ (Dempwolff 1938, ACD)

POc **apaRat* ‘northwest wind; wet season when northwesterlies blow and sea is rough’

Adm:	Wuvulu	<i>afā</i>	‘northwest wind’
Adm:	Drehet	<i>yaha</i>	‘stormy season, generally from November to March; strong wind and rough sea from the northwest’
NNG:	Gitua	<i>yavara</i>	‘north wind’
NNG:	Tami	<i>yawal</i>	‘northwest wind’
NNG:	Kairiru	<i>yavar</i>	‘northwest wind, makes sea rough’
PT:	Muyuw	<i>yavat</i>	‘west, west wind’
PT:	Iduna	<i>yavalata</i>	‘rains with wind from the northwest in February and March’
PT:	Motu	<i>lahara</i>	‘northwest wind, season of northwest wind’
MM:	Bali	<i>vurata</i>	‘northwest wind’

POc **raki* ‘southeast trades’ (probably also ‘dry season when the southeast trades blow’)

Adm:	Lou	<i>ra</i>	‘northeast, northeast wind’
Adm:	Titan	<i>ⁿray</i>	‘wind from the mainland, mountain breeze, blows at night’
NNG:	Kove	<i>hai</i>	‘southeast trade, year’
NNG:	Gitua	<i>rak</i>	‘southeast trade’
NNG:	Tami	<i>lai</i>	‘southeast trade’
NNG:	Maleu	<i>na-lai</i>	‘southeast trade’
NNG:	Ali	<i>rai</i>	‘southeast trade’
NNG:	Tumleo	<i>riei</i>	‘southeast trade’
MM:	Vitu	<i>rayi</i>	‘southeast trade’

MM:	Bulu	<i>layi</i>	‘southeast trade’
NCV:	Lewo	<i>lagi(pesoi)</i>	‘east wind’
Mic:	Marshallese	<i>ɾ^{uu}ak</i>	‘south, summer’
Pn:	E Uvean	<i>laki</i>	‘southeast or southwest wind’
Pn:	Niuean	<i>laki</i>	‘west’
Pn:	Samoan	<i>laʔi</i>	‘southwest veering to northwest’

After examining the sea-based directional systems of a sample of Oceanic languages, François concludes that in POc ‘go down’ apparently had the secondary sense ‘go northwest’, whilst ‘go up’ had the secondary sense ‘go southeast’. More tentatively, he suggests that **pano* may have been used for movement across the northwest–southeast axis. He suggests that the basis of this metaphor was that sailing into the wind felt to the sailors like going uphill.

In Ross (1995a) I suggested that **sake* ‘go up’ and **sipo* ‘go down’ were used by POc speakers to denote ‘east’ and ‘west’, i.e. the locations of sunrise and sunset. This inference was based on the fact that the glosses for their reflexes in many Oceanic languages are given as ‘east’ and ‘west’ (this is also true of some of the sources that François 2004 cites). However, François argues in his detailed account of Mwotlap directional systems that this is semantically implausible, as reflexes of **sake* and **sipo* are used for ‘go southeast’ and ‘go northwest’ respectively, and it is hard to see how these meanings—or ‘go east’ and ‘go west’—could be derived from ‘go to the place where the sun rises/sets’ (François 2003). In François (2004) he also presents the systems of a number of languages which display the ‘go up/southeast’ and ‘go down/northwest’ correlations. I find his reconstruction of a terminological subsystem corresponding to the major wind directions convincing, and I think it likely that systems which are oriented to the rising and setting of the sun are probably more recent developments.

François (2004) is a reconstruction of a POc terminological subsystem, i.e. a system of meanings and the relationships among them. The languages in his sample by no means all use reflexes of **sipo* and **sake* for ‘go downward’ and ‘go upward’, and he makes no attempt to reconstruct the POc forms, assuming that the relevant POc etyma were **sipo* and **sake*. I return briefly to the reconstruction of **sipo* and **sake* as directions at sea in §3.3.3 below.

3.3.1 Downward movement

Three possible verbs of downward movement are reconstructed below. They are:

POc **sipo* ‘go down, downwards’

POc **sobu* ‘go downward, dive down’

POc **surup* ‘(?) enter, penetrate; go down’

The most widely reflected of these is **sipo*, the generic verb of downward movement. POc **sobu* seems also to have carried the meaning ‘dive down’, as several of its reflexes have to do with action in the sea. I also include POc **surup* ‘enter, penetrate, go down’ here on account of reflexes with the gloss ‘go down’, but the latter are found only in Meso-Melanesian and Southeast Solomonic languages, and I question whether it had this sense in POc.

POc *sipo 'go down, downwards'

Adm:	Mussau	<i>sio</i>	'go downward'
		<i>(la-)sio</i>	'go down (to)'
		<i>(la-)sio(-kasu)</i>	'come down (from)' (<i>kasu</i> 'go from')
NNG:	Kove	<i>(i)ðio</i>	'go downward'
NNG:	Bariai	<i>(ga)dio</i>	(DIR) 'downward'
NNG:	Gitua	<i>zio(vave)</i>	(DIR) 'downward'
NNG:	Tuam	<i>(i)zi(la)</i>	'sink'
NNG:	Yabem	<i>siʔ</i>	(DIR) 'downward'
NNG:	Bing	<i>siy</i>	'come'
NNG:	Takia	<i>-s(-la)</i>	'go seaward, move downhill; land, arrive (of a boat)'
NNG:	Manam	<i>-ria</i>	(DIR) 'downward; to one's left when facing sea'
NNG:	Kaiep	<i>(a)si</i>	(DIR) 'downward'
SJ:	Sobei	<i>-si</i>	(DIR) 'downward'
PT:	Tawala	<i>-hi</i>	(DIR) 'towards addressee'
PT:	Sinaugoro	<i>(va-)riyo</i>	'go down' (<i>-riyo</i> occurs as the second element of verbal compounds)
MM:	Kia	<i>hi(nae)</i>	'go down'
MM:	Laghu	<i>hi(nae)</i>	'go down'
SES:	Lengo	<i>ðivo</i>	'go down'
SES:	Longgu	<i>sivo</i>	'go down'
SES:	Kwaio	<i>sifo</i>	'go down'
SES:	Sa'a	<i>siho</i>	(DIR) 'downward'
NCV:	Merei	<i>sio</i>	'move downward/seaward'
NCV:	Tamambo	<i>jivo</i>	'go down'
SV:	Sye	<i>-sep, -hep</i>	(DIR) 'downward'
		<i>yep</i>	'go down'
NCal:	Xârâcùù	<i>βē</i>	(DEM) 'coming down'
Mic:	Kosraean	<i>-ye</i>	(DIR) 'downward'
Mic:	Mokilese	<i>-ti</i>	(DIR) 'downward'
Mic:	Puluwatese	<i>-tiw</i>	(DIR) 'downward, west'
Fij:	Wayan	<i>ðivo</i>	(DIR) 'downward'
Fij:	Bauan	<i>ðivo-ðivo</i>	'wind sweeping down from hills'
Fij:	Yasawa	<i>ðivo</i>	(DIR) 'downward'
Pn:	Tongan	<i>hifo</i>	(DIR) 'downward'
Pn:	Samoan	<i>ifo</i>	(DIR) 'downward'
Pn:	Pileni	<i>ifo</i>	(DIR) 'downward'
Pn:	Rennellese	<i>iho</i>	(V, DIR) 'downward; seaward; northward, westward'

PEMP **sobu* ‘go downward’ (Blust 1978a)POc **sobu* ‘go downward, dive down’

PT:	Gumawana	<i>-sou</i>	‘move down’
PT:	Tawala	<i>-hopu</i>	‘go down’
PT:	Saliba	<i>dobu</i>	‘go down’
SES:	Gela	<i>sovu-sovu</i>	‘splash about in sea’
Fij:	Wayan	<i>sovu</i>	‘go down’
Fij:	Bauan	<i>sobu</i>	‘go down’, (DIR) ‘downward’
Fij:	Boumaa	<i>sobu</i>	‘go down’, (DIR) ‘downward’
Fij:	Rotuman	<i>jopu</i>	‘dive, swim under water’
Pn:	Rarotongan	<i>ʔopu</i>	‘(boat or stone) sink, (sun) set, fade away’

PMP **surup* ‘enter, penetrate’ (ACD)POc **surup* ‘enter, penetrate; go down (?)’

MM:	Barok	<i>su</i>	‘downwards’
MM:	Konomala	<i>sup</i>	‘(sun) set’
SES:	Bugotu	<i>horu</i>	‘go down’ (-o- for expected <i>*-u-</i>)
SES:	Gela	<i>horu</i>	‘go down’ (-o- for expected <i>*-u-</i>)
Fij:	Bauan	<i>ḍuru</i>	‘enter’
Fij:	Rotuman	<i>suru</i>	‘enter’
Pn:	Tongan	<i>hū</i>	‘enter’
Pn:	Samoan	<i>ulu</i>	‘enter’
Pn:	Marquesan	<i>uʔu</i>	‘enter’

The forms listed below also seem to constitute a cognate set, but, as the questions implicit in the reconstruction **[s,j]u[(a,u)]* indicate, their history is not fully understood. The New Caledonian reflexes suggest a contrast between a directional adverbial form in **j-* and a verb in **s-*, but this contrast is not reflected elsewhere in the set.

POc **[s,j]u[(a,u)]* ‘go down vertically, fall’²⁰

NNG:	Sio	<i>due</i>	‘downwards’
NNG:	Mangap	<i>-su</i>	‘go down’
		<i>-su(-la)</i>	‘go down away from speaker’
NNG:	Tami	<i>suʔ</i>	‘downwards’
NNG:	Lukep	<i>du</i>	‘go down’
NNG:	Malasanga	<i>(i)rua</i>	‘(sun) set’
NNG:	Roinji	<i>ru</i>	‘(sun) set’
NNG:	Mindiri	<i>du(lau)</i>	‘(sun) set’
NNG:	Gedaged	<i>-du</i>	‘go down’
NNG:	Megiar	<i>-du</i>	‘go down’
NNG:	Takia	<i>(i)du(man)</i>	‘downwards’
		<i>-du</i>	‘go down, fall’

²⁰ A possible non-Oceanic cognate is Kéo (CMP) *ndua* ‘go down’. The fact that some items here are simply glossed ‘(sun) set’ may be an artifact of data collection. They may well denote downward movement more generally.

SJ:	Sobei	<i>-so</i>	(DIR) 'downward'
MM:	Tigak	<i>(i)sua</i>	'go down'
MM:	Notsi	<i>(bi-)dū</i>	(adverb) 'from below' ²¹
		<i>(ta-)dū</i>	(adverb) 'from the west'
SES:	Longgu	<i>su</i>	'dive, (sun) set'
SES:	Lau	<i>sū</i>	'dive, (sun) set'
SES:	Arosi	<i>sū</i>	'dive, (sun) set'
NCal:	Nêlêmwa	<i>du</i>	(DIR) 'downward'
		<i>tu</i>	'go downward'
NCal:	Nyelâyû	<i>-du</i>	(DIR) 'downward'
		<i>tu</i>	'go downward'

POc **wau* 'go seawards' and **bala* 'move downward (?)' are also tentatively reconstructed, but they are not well supported.

POc **wau* 'go seawards'

NNG:	Bam	<i>wau(la)</i>	(DIR) 'downward'
NNG:	Sissano	<i>eu</i>	(DIR) 'downward'
PT:	Gumawana	<i>-iwo</i>	'move seaward'
Mic:	Puluwatese	<i>-wow</i>	(DIR) 'seaward' (contrast <i>-waw</i> 'towards addressee')
Mic:	Woleaian	<i>wai</i>	(DIR) 'seaward'

POc **bala* 'move downward (?)'

NNG:	Manam	<i>bala</i>	'move down, move to one's left when facing sea'
MM:	Tolai	<i>ba</i>	(DIR) 'downward'
PT:	Gumawana	<i>-bala</i>	'move across'
Fij:	Nadrogā	<i>bale</i>	(DIR) 'downward'

3.3.2 Upward movement

The generic verb of upward movement was POc **sake* 'go upward, go southeast', also used, for example, of boarding a canoe.

POc **sake* 'go upward'

Adm:	Mussau	<i>sae</i>	'go upward'
		<i>sae(-mae)</i>	'come up (from)'
		<i>(la-)sae</i>	'go up (to)' (<i>la</i> 'go away from speaker')
NNG:	Kove	<i>-ðae</i>	'go upward'
NNG:	Gitua	<i>-zage</i>	'(sun) rise'
NNG:	Tami	<i>sai</i>	'go up to'

²¹ The two Notsi ablative adverbs form a paradigm with the locative/allative adverbs *bi-lū* 'down below, downward' and *ti-lū* 'to the west, westward'. It is unclear to me how to interpret the *-dū/-lū* contrast historically, and this may indicate that *-dū* does not reflect POc **jua*.

NNG:	Mangap	-se	‘go upward’
		-sa-la	‘go upward away from speaker’
NNG:	Yabem	-sa	(DIR clause-final) ‘upward’
NNG:	Gedaged	-sa	‘(plant) grow’
NNG:	Takia	-s(-da)	‘move up, be high, be full, go up, rise, board (a canoe)’
		-sa(-la)	‘go inland, move uphill’ (i.e. towards the volcano), depart (by boat)’
NNG:	Manam	-raʔe	‘move up, move to one’s right when facing sea’; (DIR) ‘upward’
NNG:	Ali	-ha	‘(sun) rise’
NNG:	Sissano	ha	(DIR) ‘upward’
SJ:	Sobei	-sa[sa]	(DIR) ‘upward’
PT:	Tawala	-gae	‘go upward’
PT:	Saliba	-sae	‘go upward, eastward’
PT:	Sinaugoro	-raye	(second element of verbal compounds) ‘upward’
PT:	Motu	-dae(roha)	‘(sun) rise’ (roha ‘to come in sight’)
MM:	Bali	zaye	‘(sun) rise’; (DIR) ‘upward’
MM:	Nakanai	sahe	‘climb’
MM:	Meramera	saʔe	‘climb’
MM:	Tigak	(i)sa	‘go upward’
MM:	Halia (Haku)	sei	‘(sun) rise’
MM:	Teop	hae	‘board (canoe)’
MM:	Banoni	sai	(DIR) ‘upward’
MM:	Mono-Alu	sae	(DIR) ‘upward’
MM:	Roviana	saye(la)	‘go up’
MM:	Hoava	saye(la)	‘go up’
MM:	Kia	haye	‘board (canoe)’
MM:	Kokota	hage	‘go up; go landward; go east’
SES:	Gela	haye	‘enter’
SES:	Longgu	taʔe	‘ascend, go up, stand up, get into canoe’
SES:	Kwaio	taʔe	‘embark, rise’
SES:	Sa’a	taʔe	(DIR) ‘up, inland’
SES:	Arosi	taʔe	‘go upward’
NCV:	Merei	sa	‘move upward/landward’
NCV:	Araki	sa[ha]	‘go up, go inland, go eastward’
NCV:	Tamambo	sahe	‘go upward’
SV:	Lenakel	(a)hak	‘(sun) already risen’
SV:	SW Tanna	-hak(ta)	(DIR) ‘upward’
SV:	Sye	say	‘go up, go upstream, (tide) rise’
Mic:	Kosraean	-ek	(DIR) ‘upward’
Mic:	Marshallese	tak	‘(sun) rise’; (DIR) ‘upward’
Mic:	Mokilese	-ta	(DIR) ‘upward’
Mic:	Puluwatese	-tæ	(DIR) ‘upward’

Mic:	Woleaian	<i>tax</i>	(DIR) 'upward, eastward'
Fij:	Bauan	<i>ðake</i>	(DIR) 'upward, eastward'
Fij:	Wayan	<i>ðake</i>	'climb up, mount'
Pn:	Tongan	<i>hake</i>	'go upward, esp. from the sea to the land'; (DIR) 'upward'
Pn:	Samoa	<i>aʔe</i>	(DIR) 'upward'
Pn:	Pileni	<i>-ake</i>	(DIR) 'upward'
Pn:	Marquesan	<i>aʔe</i>	'upwards, distant in time'

Some or all of the forms below probably also reflect POc **sake* 'go upward', but they all reflect unexplained anomalies. The New Caledonian forms reflect the same contrast between an adverb in **j-* and a verb in **s-* as was noted above with regard to POc **[s,j]u[(a,u)]* 'go down vertically, fall'.

NNG:	Takia	<i>(-s)da</i>	'move up, be high, be full, go up, rise, board (a canoe)'
NCal:	Nêlêmwa	<i>da</i>	(DIR) 'upward'
		<i>(o-)da</i>	'go upward' (<i>o</i> 'go')
NCal:	Nyelâyû	<i>-da</i>	(DIR) 'upward'
		<i>ta</i>	'go upward'
NCal:	Nemi	<i>-da</i>	(DIR) 'upward'
		<i>ta</i>	'go upward'
NCal:	Cèmuhi	<i>da</i>	(DIR) 'upward'
NCal:	Tinrin	<i>ɖa(-juu)</i>	'go up'
Fij:	Wayan	<i>ða(va)</i>	'ascend, go up a slope'
		<i>ða(dra)</i>	(DIR) 'upward'

3.3.3 **sipo* and **sake* as directions at sea

Above I noted François' (2004) reconstruction of POc speakers' use of terms for 'go downward' and 'go upward' for 'go northwest' and 'go southeast', i.e. directions corresponding with those of the major winds. François assumes that the relevant POc terms were **sipo* and **sake*, reconstructed in §§3.3.1–3.3.2. As these were the generic terms for 'go downward' and 'go upward', his assumption is probably correct, but it is not particularly well supported by the available data, as the sets below show. In fact, all supporting data for both terms in these meanings come from Eastern Oceanic languages. The Yabem and Motu reflexes of **sipo* have 'wrong' directions in their glosses. This may mean that this use of **sake* and **sipo* was an Eastern Oceanic innovation, but it may also mean that insufficient Western Oceanic (and Admiralties) systems have been carefully recorded. In a number of Western Oceanic languages, 'east' and 'west' **are** translated as 'place where the sun rises' and 'place where the sun sets', but these phrasal expressions may be modern renderings of English 'east' and 'west'.

POc **sipo* 'go downward, go northwest'

NNG:	Yabem	<i>-sep</i>	'go down, go east'
PT:	Motu	<i>diho</i>	'south, south wind; down; go down, descend'
NCV:	NE Ambae	<i>hivo</i>	'move downward/seaward/northwestward'

NCV:	Araki	<i>si[vo]</i>	‘go down, go seaward, go westward’
SV:	Anejom	<i>-se[h]</i>	(DIR) ‘down, north, west’
Mic:	Woleaian	<i>tiw</i>	(DIR) ‘downward, westward’
Pn:	Rennellese	<i>iho</i>	(V, DIR) ‘downward; seaward; northward, westward’

POc **sake* ‘go upward, go southeast’ (Dempwolff 1938)

NCV:	Mwotlap	<i>hag</i>	(DIR) ‘(on land) eastward, (at sea) south-eastward’
NCV:	NE Ambae	<i>hage</i>	‘move upward/landward/southeastward’
NCV:	Araki	<i>sa[ha]</i>	‘go up, go inland, go eastward’
SV:	Anejom	<i>-tʃai</i>	(DIR) ‘upward, southward, eastward’
Mic:	Kiribati	<i>rake</i>	‘(sun) rise’; (DIR) ‘upward, eastward’
Mic:	Woleaian	<i>tax</i>	(DIR) ‘upward, eastward’
Fij:	Bauan	<i>ðake</i>	(DIR) ‘upward, eastward’
Pn:	Rennellese	<i>ake</i>	(V, DIR) ‘upward; inland; southward, eastward’

François also alludes to members of the Polynesian sets below. However, these are clearly locative nouns, and may just as well reflect an orientation to sunset and sunrise, as Biggs (1994:25) implies.

PPn **si-sifo* ‘(N) west’ (Biggs & Clark 1993)

Pn:	Tongan	<i>hihifo</i>	‘west’
Pn:	Niuean	<i>hifo</i>	‘go west’
Pn:	Samoan	<i>sisifo</i>	‘west’
Pn:	Tokelauan	<i>sisifo</i>	‘west’

PPn **sa-sake* ‘(N) east’ (Biggs & Clark 1993)

Pn:	Tongan	<i>ha-hake</i>	‘east’
Pn:	Samoan	<i>sa-saʔe</i>	(ADV) ‘in the east’
		<i>(ŋā-ŋ)aʔe</i>	(ADV) ‘eastward’

The important point about François’ reconstruction is that the equation of ‘go downward’ and ‘go upward’ with ‘go northwest’ and ‘go southeast’ occurs widely, suggesting that the equation itself should be reconstructed for POc, even if the forms themselves are hard to reconstruct. Except for Wayan, the terms listed below are drawn from François (2004).

		‘downward, northwest’	‘upward, southeast’
PT:	Saliba	<i>sae</i>	<i>dobi</i>
SES:	Longgu	<i>alaʔa</i>	<i>toli</i>
NCV:	Mwotlap	<i>hag</i>	<i>hōw</i>
NCV:	NE Ambae	<i>hage</i>	<i>hivo</i>
SV:	Anejom	<i>-jai</i>	<i>-se(h)</i>
NCal:	Nemi	<i>-da</i>	<i>-dic</i>
Mic:	Woleaian	<i>-tiw</i>	<i>-tax</i>
Fij:	Wayan	<i>vua i rā</i>	<i>vua i ata</i> (<i>vua</i> ‘direction’)
Fij:	Bauan	<i>sobu</i> ‘go down, west’	<i>ðake</i> ‘go up, east’

3.3.4 Geographic direction adverbs derived from verbs

In a scattering of Oceanic languages, the verbs POc **sipo* ‘go downward’ (p.271) and POc **sake* ‘go upward’ (p.273) are also reflected as (or as the roots of) locative and/or allative adverbs. These are distinct from directional adverbials in that they often form part of the locative demonstrative paradigm, with meanings like ‘down below’ and ‘up here’. These reflexes are sufficiently well distributed to arouse the suspicion, at least, that this was also one of their POc functions.

The meanings of the items listed below overlap substantially with reflexes of the POc local nouns **tanoq* ‘down below’ (p.241) and POc **atas* ‘top; space above’ (p.243). There are also a few reflexes below of **sipo* and **sake* which function as nouns, but it seems certain that these are the results of locally restricted developments.

POc **sipo* ‘go downward’, (ADV) ‘downwards, down below’

NNG:	Kove	<i>sio</i>	(ADV) ‘down below’
NNG:	Lusi	<i>sio</i>	(ADV) ‘below, down there’
NNG:	Bariai	<i>(ga)dio</i>	(ADV) ‘downward’
SES:	Kwaio	<i>(ʔai)sifo</i>	(ADV) ‘downwards, northwesterly’
NCV:	Merei	<i>(ai)sio</i>	(ADV) ‘down here’
NCV:	Araki	<i>sivo(su)</i>	(ADV) ‘down there’ (-su DEM)
SV:	Sye	<i>(ye)hep</i>	(ADV) ‘down here’
Pn:	Samoa	<i>si-sifo</i>	(ADV) ‘in the west’
		<i>(ŋā-ŋa)ifo</i>	(ADV) ‘westward’

POc **sake* ‘go upward’, (ADV) ‘upwards, up top’

Adm:	Mussau	<i>sae-sae(na)</i>	‘upwards’
NNG:	Lusi	<i>sai</i>	(ADV) ‘on top, above’
NNG:	Bariai	<i>(ga)dae</i>	(ADV) ‘above’
NNG:	Tuam	<i>(i)za</i>	(ADV) ‘upwards’
NNG:	Gitua	<i>sage</i>	(ADV) ‘up above’
PT:	Motu	<i>dae-</i>	(N) ‘above’
MM:	Siar	<i>sai(gali)</i>	(ADV) ‘up there, over there’
MM:	Label	<i>sa</i>	(ADV) ‘up there’
		<i>(u)sa</i>	(ADV) ‘upwards’
MM:	Minigir	<i>(ke-na)sa</i>	(ADV) ‘up there’
NCV:	Merei	<i>(ai)sa</i>	(ADV) ‘up here’
NCV:	Araki	<i>saha(su)</i>	(ADV) ‘up there’
NCV:	Paamese	<i>(ne)sa</i>	(N LOC) ‘up, above, on top’
SV:	Sye	<i>(ya)hay</i>	(ADV) ‘up here’
NCal:	Iaai	<i>(e)ðā</i>	(ADV) ‘upward, inland’
Mic:	Kiribati	<i>rake</i>	‘up, above’
Fij:	Wayan	<i>ðake</i>	(DIR) ‘upwards’
Fij:	Bauan	<i>ðake</i>	(N LOC) ‘up, above’
Pn:	Tongan	<i>ha-hake</i>	(N) ‘east’, (ADJ) ‘eastern’
Pn:	Samoa	<i>sa-saʔe</i>	(N LOC) ‘east’
		<i>(ŋā-ŋ)aʔe</i>	(ADV) ‘eastward’

3.4 Deictic directional verbs and enclitics

3.4.1 A note on deixis in Oceanic

Proto Oceanic deixis was person-oriented. That is, there were forms with the meanings ‘near speaker’, ‘near addressee’ and ‘distant from both speaker and addressee’. This pattern is well represented in Oceanic demonstrative forms right across the Pacific. Individual languages may lose a member of the paradigm, finishing up with a proximal/distal system. Some languages have reinterpreted the three-way system in terms of orientation to the speaker alone (‘near speaker’ vs ‘an intermediate distance from speaker’ vs ‘far from speaker’), but such languages are by no means as widespread as the person-oriented system. A good many languages have added members to the system, distinguishing, for example, between referents that can and cannot be seen by the speech act participants, or adding a member for referents the speaker points at, but none of these additions can be reconstructed as a POc category.

A reconstruction of POc demonstrative forms is beyond the scope of this chapter, but a sample of person-oriented systems is given below. The forms given are those used adnominally, except where shown (they may also have other language-specific uses).

		near speaker	near addressee	distal
Adm:	Mussau	<i>toko</i>	<i>o[ia]</i>	<i>teke</i>
NNG:	Lukep (Pono)	<i>i</i>	<i>in</i>	<i>ni</i>
NNG:	Yabem	<i>tɔnɛʔ</i>	<i>tɔnaŋ</i>	<i>tone</i>
NNG:	Kairiru	<i>an</i>	<i>at</i>	<i>nai</i>
PT:	Gapapaiwa	<i>we-ni</i>	<i>na-ni</i>	<i>noko-ni</i>
PT:	Gumawana	<i>ame</i>	<i>moe</i>	<i>amo</i>
PT:	Sinaugoro	<i>mai</i>	<i>mani</i>	<i>mo[a]</i>
MM:	Bali	<i>-ani</i>	<i>-ina</i>	<i>-ini</i>
MM:	Tigak	<i>gura</i>	<i>gara</i>	<i>tara</i>
MM:	Roviana SG	<i>hie</i>	<i>isa</i>	<i>hoi</i>
SES:	Bugotu	<i>ani, eni</i>	<i>ŋeni, ari</i>	<i>ŋgeri</i>
NCV:	Araki	<i>ne, kesi</i>	<i>ho-ni, vaha-ni</i>	<i>vā[ha]-su</i>
NCV:	Lewo	<i>nini</i>	<i>nam^{wā}</i>	<i>nena</i>
		(also <i>nene</i> ‘near speaker and hearer’)		
SV:	Anejom PRO SG	<i>niñ[ki], nī</i>	<i>nā[nai]</i>	<i>nai[kou]</i>
NCal:	Tinrin	<i>=ha</i>	<i>=m^{wā}</i>	<i>=ra</i>
NCal:	Iaai	<i>āŋ</i>	<i>ē</i>	<i>e-lē</i>
Mic:	Kosraean	<i>ʌ</i>	<i>an</i>	<i>ɔ</i>
Mic:	Ulithian	<i>-ē</i>	<i>-lā</i>	<i>-lāy</i>
Fij:	Boumaa	<i>yai, ī</i>	<i>yā</i>	<i>mayā</i>
Fij:	Wailevu	<i>γā</i>	<i>γāri</i>	<i>γaḏei</i>
Pn:	Tongan	<i>nī</i>	<i>na</i>	<i>ia</i> (also <i>ē</i> ‘pointing’)
Pn:	Pileni	<i>ne[i]</i>	<i>na</i>	<i>la</i>
Pn:	Marquesan	<i>nei</i>	<i>nā</i>	<i>ʔā, aʔa</i>

The person-oriented system of deixis was manifested not only in demonstratives, but also in the system of deictic directional verbs. POc had a system with at least three members: ‘come to[wards] speaker’, ‘go/come to[wards] addressee’ and ‘go to a point

away from both speaker and addressee', glossed here as 'come', 'go:2' and 'go:3' respectively. There were possibly two 'go:3' verbs, however. One licensed a location expression, i.e. its basic meaning was 'go to'. The other simply meant 'go away (from speaker)' and did not license a location expression. Thus in Kele (Adm) there is a contrast between *la* 'go to' and *aw* 'go away' (Ross 2002f). This suggests that POc had a four-member system, and I will assume this here. Against this is the fact that I have found no language in which a four-member system is preserved.

Three-member deictic directional verb systems are found right across Oceania,²² and a sample is given below. Some are reflected as directional enclitics, rather than as verbs. It is sometimes difficult to tell from a source whether the third member should be assigned to 'go:3' or 'go away'. However, in languages where deictic directional verbs have become directional enclitics, the 'go:3' form has lost its capacity to license a location expression and inevitably means 'go away'. Note that the two systems from the Admiralties make the contrast between 'go:3' and 'go away' which supports the reconstruction of a four-member system.

	come	go:2	go:3	go away
Adm: Loniū	<i>mε</i>	—	<i>la</i>	<i>yaw</i>
Adm: Kele	<i>sa</i>	—	<i>la</i>	<i>aw</i> (also <i>doh</i> 'come from')
NNG: Yabem	<i>-mèŋ</i>	<i>-wàʔ</i>	<i>-yà</i>	—
PT: Gumawana	<i>-ma</i>	<i>-wo</i>	<i>-na</i>	—
MM: Hoava	<i>-mae</i>	<i>-atu</i>	<i>-la</i>	—
NCV: NE Ambae	<i>vanai</i>	<i>vanatu</i>	—	<i>vano</i>
Mic: Kosraean DIR	<i>-ma</i>	<i>-ɽ</i>	—	<i>-læ</i>
Mic: Mokilese DIR	<i>-to, -tɔ</i>	<i>-wε</i>	—	<i>-la</i>
Fij: Bauan DIR	<i>mai</i>	<i>yani</i>	—	<i>tani</i>
Fij: Wayan DIR	<i>mai</i>	<i>ati</i>	—	<i>dei</i>
Pn: Tongan DIR	<i>mai</i>	<i>atu</i>	—	<i>aŋe</i>
Pn: Samoan DIR	<i>mai</i>	<i>atu</i>	—	<i>ʔese</i>
Pn: Pileni DIR	<i>mai</i>	<i>atu</i>	—	<i>aŋe</i>

3.4.2 Reconstructing Proto Oceanic deictic directional forms

The main deictic directional forms of POc, which account for the majority of the forms listed above, were as follows:

		verb	directional adverb
come	<i>*mai, *ma</i>	'come'	'towards speaker' (p.281)
go:2	<i>*ua</i>	'go towards addressee'	'towards addressee' (p.283)
	<i>*watu</i>	'go towards addressee'	'towards addressee' (p.286)
go:3	<i>*lako, *la</i>	'go (to)'	'away from speaker' (p.287)
go away	<i>*pano, *pa</i>	'go away'	'away from speaker' (p.290)

²² There are also a fair number of languages that have reduced the three-member system to a two-member system of 'come to[wards] speaker' and 'go away (from speaker)'. The latter is usually descended from one of 'go:2', 'go:3' or 'go away (from speaker)'.

Note that I reconstruct these POc forms as both verbs and directional adverbs. In §3.2 I briefly discussed the grammaticisation of deictic directional verbs as directional adverbs. This process raises the question, Were there already directional adverbs in POc, or are modern Oceanic directional adverbs the outcomes of independent parallel developments? The answer appears to be: both. Directional adverbs are so widespread in Oceanic languages that one may infer that they were already present in POc, otherwise we would not find such a plethora of reflexes of verbs as enclitics in modern Oceanic languages. On the other hand, there are cases where it is clear that the development of the directional adverb is more recent because it reflects not just the verb root but also accretions to it that have occurred in the history of the particular language.²³ The Sobei (SJ) directional enclitics *-ema* ‘towards speaker’ and *-ewo* ‘away from speaker’ transparently reflect the verbs *-ma* ‘come’ and *-wo* ‘go’ with a fossilised third person singular subject marker *e-*. The Sye (SV) directional adverb *mpelom* ‘towards speaker’ is transparently derived from the verb *velom* ‘come’. This must be a late development, since *ve-lo-m* seems itself to reflect the concatenation of three roots, **pano/*pa* ‘go away’, **lako/*la* ‘go’, and **ma* ‘come; towards speaker’.

Three of the verbs listed above, **mai/*ma*, **lako/*la* and **pano/*pa*, have long and short forms. It is difficult to reconstruct the distribution of the long and short forms with any certainty, as they do not correspond with the division between verb and enclitic. However, there seem to be two contexts in which the short forms may have emerged, both of them in serial verb constructions. One was as the final verb of a deictic directional serial verb construction. The other was as the first verb of a sequential serial verb construction (the gloss V AUX is used to label these below). POc **watu* and **ua* look superficially like a long/short pair, but they are regionally distributed, unlike the other three pairs (p.286).

Two other verbs seem to have been used as deictic directional verbs, but probably not as directional enclitics, in POc. They are less well attested than the verbs reconstructed above.

come	<i>*p^wati</i>	‘come’ (p.283)
go:3/go away	<i>*[y]aku</i>	‘go (to)’ or ‘go away’ (p.293)

It is unclear whether **[y]aku* meant ‘go (to)’ or ‘go away’.

I also reconstruct the prepositional verb **tani* ‘(go) away from’ below (p.293). It was not deictic, but it overlaps semantically with the verbs reconstructed in this section.

3.4.3 ‘Come towards speaker’

Blust (ACD) reconstructs PAn **aRi*, which in its root form was used imperatively as ‘come on’, ‘let’s go’ (Paiwan [Formosan] *ari* ‘let’s go!’) and apparently survives in the Takia interjection *aria* with the same meanings.²⁴ The indicative form was PAn **maRi* ‘come’ (from **um-aRi*, where **um* is the actor focus infix; vol. 1, p.29), and this form is well reflected in Formosan and WMP languages. However, it seems likely that the variant **mai* existed from the earliest times, as Blust notes Favorlang (Formosan) *mai* and Yami (WMP) *mai*, and that **mai* ousted reflexes of **maRi* throughout the Central/Eastern Malayo-Polynesian grouping (e.g. Manggarai, Sikka, Rotinese *mai*) to which POc belonged.

²³ For a more detailed examination of this issue, see Pawley (2003b).

²⁴ The interjection *aria* is widespread in Melanesia, and it is impossible to track its history accurately.

There is just one Oceanic reflex, Mangap (NNG) *-mar* ‘come towards speaker’, which appears to reflect **maRi* rather than **mai*. However, the fact that Mangap has a distinction between *-mar* ‘come towards speaker’ and *-ma* ‘come towards addressee’ suggests that a pre-Mangap reflex of **ma* expanded its use from ‘towards speaker’ to ‘towards us, speaker and addressee’, and that a further morpheme, perhaps a demonstrative, was then suffixed to it to disambiguate ‘towards speaker’, giving *-ma-r*.

Also reconstructable is the POc form **ma*, reflected in WOc and CEOc languages. There is no reconstructable functional distinction between **-mai* and **-ma*, as reflexes of both occur as verbs and as directional enclitics, and both should probably be glossed in POc as (V) ‘come’ and (DIR) ‘towards speaker’. In many languages, a reflex of **mai* or **ma* occurs as the second element of one or more compounds, and these are taken to be reflexes of an earlier final verb of a serial construction or reflexes of a directional enclitic (it is impossible to tell which). A number of these are listed below.

PAn **maRi*, **mai* ‘come’ (ACD)

PCEMP **mai* ‘come’

POc **mai*, **ma* ‘come’, (DIR) ‘towards speaker’

Adm:	Mussau	<i>mae</i>	‘come’
		<i>(sio)mae</i>	‘come down (from)’
Adm:	Loniū	<i>-mε</i>	‘come’; (DIR) ‘towards speaker’
Adm:	Aua	<i>-mai</i>	(DIR) ‘towards speaker’
NNG:	Mangap	<i>-ma</i>	‘come towards addressee’
		<i>-ma(r)</i>	‘come towards speaker’
		<i>(-le)-ma</i>	‘come inside’ (<i>-le</i> ‘enter’)
NNG:	Yabem	<i>-mè(ŋ)</i>	‘come’ (<i>-ŋ</i> is a suffix of unknown origin)
NNG:	Sio	<i>mɔ</i>	‘come’
NNG:	Tuam-Mutu	<i>(ka)miai</i>	‘come’
NNG:	Gitua	<i>(la)m</i>	‘come’
NNG:	Manam	<i>mai</i>	‘move towards speaker from neither up nor down’; (DIR) ‘towards speaker’
NNG:	Kairiru	<i>-myai</i>	‘come’
SJ:	Sobei	<i>-(e)ma</i>	(DIR) ‘towards speaker’
		<i>-ma</i>	‘come’
PT:	Tawala	<i>mai</i>	(DIR) ‘towards speaker’
PT:	Gumawana	<i>-ma</i>	‘come’
PT:	Saliba	<i>ma</i>	(DIR) ‘hither’
PT:	Sudest	<i>ma</i>	(DIR) ‘towards speaker’
PT:	Sinaugoro	<i>(iayo)ma</i>	‘come’ (<i>iayo</i> ‘go’ < POc <i>*lako</i>)
		<i>-ma</i>	(preverbal clitic) ‘near speaker’ ²⁵
		<i>-ma(riyo)</i>	‘come down’ (<i>-riyo</i> ‘downward’ < POc <i>*sipo</i> occurs in verbal compounds)
PT:	Motu	<i>-mai</i>	‘come’

²⁵ This is an enclitic to the preverbal tense/aspect/mood marker. It marks the location of the action relative to the speaker and addressee. To judge from its preverbal position, it reflects the use of a deictic direction verb with the sense ‘come and ...’ in the initial slot of a sequential serial verb construction.

MM:	Vitu	<i>mai</i>	‘come’
MM:	Bali	<i>mai</i>	‘come’
MM:	Bulu	<i>mai</i>	(DIR) ‘towards speaker’
MM:	Harua	<i>mai</i>	‘come from’
MM:	Tigak	<i>(i)ma</i>	‘come’
MM:	Notsi	<i>(kala)me</i>	‘come’
MM:	Selau	<i>(la)ma</i>	‘come’
MM:	Taiof	<i>(o)m</i> <i>-ma</i>	‘come’ ‘first/second person object enclitic’ ²⁶
MM:	Banoni	<i>ma</i> <i>(tai)ma</i>	(DIR) ‘towards speaker’ ‘come’ (<i>tai</i> ‘go’)
MM:	Mono	<i>(lao)ma</i>	‘come’
MM:	Babatana	<i>me</i>	(DIR) ‘towards speaker’
MM:	Hoava	<i>mae</i>	‘come’
MM:	Kokota	<i>mai</i>	‘come’
SES:	Bugotu	<i>mai</i>	‘come’; (DIR) ‘towards speaker’
SES:	Gela	<i>mai</i>	‘come’; (DIR) ‘towards speaker’
SES:	Longgu	<i>mai</i>	(DIR) ‘towards speaker’
SES:	Kwaio	<i>mai</i> <i>(leka)mai</i>	(DIR) ‘towards speaker’ ‘come’ (<i>leka</i> ‘go’)
NCV:	Mwotlap	<i>mε</i>	(DIR) ‘towards speaker’
NCV:	NE Ambae	<i>-mai, -mei, -ai</i>	(DIR) ‘towards speaker’ ²⁷
NCV:	Merei	<i>ma</i>	(DIR) ‘towards addressee’
NCV:	Araki	<i>ma</i>	(DIR) ‘towards speaker’
NCV:	Tamambo	<i>mai</i>	‘come’
NCV:	Sakao	<i>(la)m</i>	‘come’
SV:	Sye	<i>(ve-lo-)m</i> <i>(-mpe-lo-)m</i>	‘come’ (<i>ve</i> ‘go’) (DIR) ‘towards speaker’
SV:	Anejom	<i>-(pa)m</i> <i>(ha)m, (apa)m</i>	(DIR) ‘towards speaker’ (<i>pan</i> ‘away from speaker’) ‘come’ (<i>han, apan</i> ‘go’)
NCal:	Nêlêmwa	<i>me</i> <i>ō-me</i>	(DIR) ‘towards speaker’ ‘come’ (<i>o</i> ‘go’)
NCal:	Nyelâyû	<i>-me</i>	(DIR) ‘towards speaker’
NCal:	Xârâcùù	<i>mẽ</i>	(DEM) ‘near speaker’
NCal:	Iaai	<i>(jē)m</i>	(DIR) ‘towards speaker’
Mic:	Kosraean	<i>-ma</i>	(DIR) ‘towards speaker’
Mic:	Kiribati	<i>mai</i>	‘come’
Fij:	Nadrogaa	<i>mā, mei</i>	(DIR) ‘towards speaker’

²⁶ In Taiof the first/second person object marker, except for first person inclusive plural, is *-ma*. I suspect this was originally the ‘towards speaker’ directional. (The third person/first person inclusive plural form is *-i[ñ]*.)

²⁷ These forms occurs as a fossil in *van-ai* ‘move across towards deictic centre’ (cf *vano* ‘move across’), *ha-mai* ‘move upwards towards deictic centre’ (*hage* ‘move upwards’) and *hi-mei* ‘move downwards towards deictic centre’ (*hivo* ‘move upwards’).

Fij:	Wayan	<i>mai</i>	(DIR) ‘towards speaker’
Fij:	Bauan	<i>mai</i>	(DIR) ‘towards speaker’
Fij:	Boumaa	<i>mai</i>	(DIR) ‘towards speaker’
Pn:	Tongan	<i>mai</i>	‘come’; (DIR) ‘towards speaker’
Pn:	Samoaan	<i>mai</i>	(DIR) ‘towards speaker’
Pn:	Marquesan	<i>mai</i>	(DIR) ‘towards speaker’

In a number of languages POc **mai/*ma* is reflected as a preposition or a relator. However, the reflexes listed below are probably the result of parallel innovations in different groups of languages, and it is unnecessary to reconstruct a preposition or relator usage for POc **mai/*ma* (cf. §3.2).

POc **mai, *ma* ‘come’, (DIR) ‘towards speaker’

PT:	Tawala	<i>mei</i>	(PREP) ‘like, resembling’
MM:	Meramera	<i>maʔ-</i>	(R-) ablative
MM:	Lamasong	<i>ma-</i>	(R-) ablative
MM:	Madak	<i>me-</i>	(R-) ablative
MM:	Barok	<i>mu-</i>	(R-) ablative
MM:	Konomala	<i>mə</i>	(R) ablative
MM:	Patpatar	<i>ma-</i>	(R-) ablative
		<i>ma</i>	(PREP w PLC) ablative
MM:	Label	<i>mi-</i>	(R-) ablative
MM:	Tolai	<i>ma-, ma-ma-</i>	(R-) ablative
SES:	Longgu	<i>mi</i>	(R with placename or local noun) ablative
Fij:	Bauan	<i>mai</i>	(PREP) ablative

One other POc morpheme with the same meanings as **mai* may be reconstructable. This is **p^wati*. Note, however, that most reflexes are in the South New Ireland grouping of MM, and that the POc status of this reconstruction is dependent on the Arosi reflex alone.

POc **p^wati* ‘come’, (DIR) ‘towards speaker’

NNG:	Wogeo	<i>(e)wot</i>	‘come’
MM:	Minigir	<i>(vana)uti</i>	‘come’
MM:	Tolai	<i>pot</i>	‘come’
MM:	Tolai–Nodup	<i>(le)poti</i>	‘come’
MM:	Label	<i>(la-m)ut</i>	‘come’
		<i>hot</i>	‘towards speaker’
MM:	Bilur	<i>vot</i>	‘come’
MM:	Kandas	<i>(uan)pat</i>	‘come back’
SES:	Arosi	<i>boi</i>	‘come’

3.4.4 ‘Go towards addressee’

Two alternant forms, POc **ua* and **watu*, mean ‘go towards addressee’, (DIR) ‘towards addressee’.

It is just possible that POc **ua* reflects PAn **kuSa* ‘go’. However, no reflexes of PAn **kuSa* have been found in non-Oceanic languages outside Taiwan,²⁸ and it is more likely that the Taiwan and Oceanic sets reflect different etyma, the more so as no member of the Oceanic set reflects PAn **k-*.

Some of the reflexes of **ua* can be confused with those of POc **pa* and **ba*. That there is a contrast between **pa* and **ua* is attested by the pairs Adzera *fā* ‘go’ (p.291) and *waʔ-* ‘go out’ (p.286) and Kiriwina *va* (PREP, p.292) and *wa* (VF, below).

POc **ua* ‘go towards addressee’, (DIR) ‘towards addressee’

Adm:	Seimat	- <i>wa</i>	(DIR) ‘away from speaker’
SJ:	Sobei	-(<i>e</i>) <i>wo</i>	(DIR) ‘away from speaker’
		- <i>wo</i>	‘go’
PT:	Gumawana	- <i>wo</i>	(DIR) ‘towards addressee’
PT:	Saliba	- <i>wa</i>	(DIR) ‘thither’
PT:	Kiriwina	- <i>wa</i>	‘go (to addressee)’
PT:	Sudest	- <i>wo</i>	(DIR) ‘away from speaker’
		<i>wa</i>	‘go’
PT:	’Ala’ala	- <i>ovo</i>	(DIR) ‘away’
MM:	Bali	<i>ua</i>	‘go’
MM:	Tolai	<i>vue</i>	(DIR) ‘away’
MM:	Halia	<i>wa</i>	(DIR) ‘towards (a specified destination)’
			(Ross 1982:44–45)
Fij:	Nadrogaa	<i>wā</i>	(DIR) ‘thither’
Fij:	Wayan	<i>ā</i>	(DIR) ‘thither’

In a number of languages POc **ua* is reflected as a preposition or a relator (cf. §3.2).

POc **ua* ‘go towards addressee’, (DIR) ‘towards addressee’

Adm:	Yapese	<i>u</i>	(PREP) locative, ablative
PT:	Tawala	<i>u</i>	(PREP w N LOC) locative, allative
PT:	Kiriwina	<i>o</i>	(PREP w N LOC) locative ‘in, into’
PT:	Muyuw	<i>u, wa</i>	(PREP) locative, allative
MM:	Bulu	<i>o</i>	(PREP w PLC) locative
MM:	Nakanai	<i>o-</i>	(VF formative) locative
MM:	Meramera	<i>u-</i>	(R-) allative
MM:	Lamasong	<i>u-</i>	(R-) allative
MM:	Madak	<i>u-</i>	(R-) allative
MM:	Barok	<i>u-</i>	(R-) allative
MM:	Sursurunga	<i>u(r)</i>	(R) allative
MM:	Tangga	<i>ua, u</i>	(R) allative (<i>ua</i> w DEM, <i>u</i> elsewhere)
MM:	Konomala	<i>uə</i>	(R) allative
MM:	Patpatar	<i>u-</i>	(R-) allative
		<i>u</i>	(PREP w PLC) allative

²⁸ Supporting data given by Tsuchida (1976:235) are Kanakanavu *m-u-á-kusa* ‘go’, Tsou *uso* ‘go forward’, Saaroa *m-aʰu-kua* ‘go where?’, Puyuma *mu-kuwaʔ* ‘go’, Thao *m-úfāʔ* ‘go’, Pazeh *mu-husaʔ* ‘go’, Atayal, Seediq (*m*)*usaʔ* ‘go’, Rukai (*m*)*wa* ‘go’.

MM: Label	<i>u-</i>	(R-) allative
MM: Kandas	<i>u-</i>	(R-) allative
	<i>u</i>	(PREP w N LOC) locative, allative
MM: Ramoaaina	<i>u-</i>	(R-) allative
	<i>u</i>	(PREP) locative, allative
MM: Minigir	<i>u-</i>	(R-) allative
MM: Tolai	<i>u-</i>	(R-) allative
SES: Longgu	<i>vu</i>	(R) allative, towards
Fij: Bauan	<i>vuā, vei</i>	(PREP) locative, allative, dative, cause

Proto South Vanuatu **un-*, which forms locative nouns from common nouns (Lynch 2001:132), may also belong here.

Longgu *vu* appears to be cognate with forms in the Malaita/Makira subgroup (SES) that reflect Proto Malaita/Makira **vua* or **vuni*. Lichtenberk (1985) attributes all these forms to POc **pani* (V) ‘give’, (PREPV) ‘beneficiary case-marker’. The Malaita/Makira forms certainly have benefactive meanings, but Longgu *vu* is clearly allative, and the best account of both its form and meaning is given by attributing it to **ua*—although this means assuming that initial **v-* has arisen by epenthesis. But what are we to do with the Malaita/Makira forms? The best explanation seems to be that there was a conflation of pre-Proto Malaita/Makira **vua* ‘allative relator’ (cognate with Longgu *vu* and reflecting POc **ua*) and **vani* ‘beneficiary prepositional verb’ (reflecting POc **pani*), resulting in **vua* with a benefactive function and **vuni* with a form cobbled together from both items but in benefactive function.

This interpretation is supported by the Longgu dative verbal preposition *wini-*, which takes an object pronoun suffix when it governs a first or second person referent, e.g. *wini-o* DATIVE-O:2SG ‘to you’, but assumes the allomorph *wa-* with a possessor pronoun suffix when it governs a third person, e.g. *wa-na* DATIVE-P:3SG ‘to it/him/her’.²⁹ As Hill (1992:245) points out, *wa-* overlaps semantically with *vu* (< POc **ua*). It appears that *wini* reflects POc **pani* and *wa-* POc **ua*, but the two form a single paradigm in Longgu. This inference would also explain the non-etymological initial **v-* of *vu*: it is inherited from pre-Proto Malaita/Makira **vua*, where it resulted from ‘infection’ by **vani*.

The Bauan Fijian forms are tentatively included in the set above. The form *vuā* again has epenthetic *v-*, but its meaning and the parallel with the prepositional use of *mai* suggest that it reflects **ua*. More specifically, *vuā* apparently reflects pre-Fijian **vua-i-a* (go.towards-TR-O:3SG) and means ‘to/for/from/with him/her’. The form *vei* is more problematic. It may reflect either **vua-i* (go.towards-ART) or **pa-i* (go.away-ART). Either way, **i* is the personal article. Semantically, it is also possible that **pani* ‘give’ has played a role in the history of these forms, as they have a dative function.

Other reflexes of **ua* apparently occur as demonstratives in a number of languages.

POc **ua* ‘go towards addressee’, (DIR) ‘towards addressee’, (DEM) ‘away from speaker’, anaphoric

NNG: Lusi	<i>(ye-ra)wa</i>	(LOC) ‘away from speaker’
	<i>(ne-dua)wa</i>	(PRO) ‘that one remote from speaker’ (cf. <i>ne-dua</i> (PRO) ‘away from speaker’)
NNG: Bariai	<i>oa</i>	(ADN) away from speaker, anaphoric

²⁹ The possessor pronoun suffix was apparently acquired by analogy with the preposition *ta-*.

NNG:	Manam	(<i>ena</i>) <i>wa</i>	(ADN) 3
PT:	Saliba	- <i>wa</i>	(ADN ENCL) anaphoric
PT:	Kiriwina	- <i>we</i>	(ADN AFFIX) ‘away from speaker’
PT:	’Ala’ala	<i>uʔa</i>	(PRO) 3
Mic:	Kosraean	<i>æ</i>	(ADN, POST) anaphoric
Mic:	Mokilese	- <i>wa</i>	(ADN ENCL) anaphoric SG
Mic:	Puluwatese	(<i>ye</i>) <i>we</i>	(ADN, POST) anaphoric
Mic:	Woleaian	<i>we</i>	(ADN, POST) anaphoric SG
Mic:	Ulithian	- <i>wē</i>	(ADN ENCL) anaphoric SG

Forms reflecting POc **watu* are listed below. It is tempting to reconstruct this as **uatu* in view of its probable relationship to **ua*, discussed below. However, the reflexes listed below point to POc **watu*, even if this perhaps reflects pre-POc **uatu*.

Irregular loss of initial **w-* is reflected in New Caledonian and Central Pacific (Fij and Pn) languages, which reflect **atu* for expected ***watu*. POc **w* is lost regularly in all positions in Hoava and Roviana, word-initially in Gela and Bugotu, and sporadically in Mota and NE Ambae and other NCV languages.

POc **watu* ‘go towards addressee’, (DIR) ‘towards addressee’

Adm:	Aua	- <i>wau</i>	(DIR) ‘away from speaker’
NNG:	Yabem	- <i>wàʔ</i>	‘go (to addressee)’
NNG:	Adzera	<i>waʔ-</i>	‘go out’
PT:	Motu	<i>vasi</i>	‘go:2/3’
MM:	Hoava	<i>atu</i>	‘go (to addressee)’
MM:	Roviana	<i>atu-atu</i>	(INTERJECTION) implying movement away, of speaker or addressee
SES:	Gela	(<i>g</i>) <i>atu</i>	(DIR) ‘away from speaker’
SES:	Bugotu	<i>atu</i>	(DIR) ‘away from speaker’
SES:	Kwaio	<i>kaʔʔu</i>	(DIR) ‘thither’
SES:	Lau	<i>kou</i>	(DIR) ‘away from speaker’
SES:	Longgu	<i>hou</i>	(DIR) ‘thither’
SES:	Arosi	<i>wou</i>	(DIR) ‘thither’
SES:	Sa’a	<i>wau</i>	‘there’
NCV:	Mota	<i>at</i>	‘outwards or away from speaker’s point of reference’
NCV:	NE Ambae	- <i>atu</i>	‘towards addressee, towards past/future deictic centre’ (lexicalised in some compounds)
NCal:	Nemi	- <i>ec</i>	(DIR) ‘away from speaker’
Mic:	Kiribati	<i>wati</i>	(DIR) ‘away, hence’
Mic:	Kosraean	- <i>ɔt</i>	(DIR) ‘towards addressee’
Mic:	Marshallese	<i>wac</i>	(DIR) ‘towards addressee’
Mic:	Mokilese	- <i>wε</i>	(DIR) ‘towards addressee’
Mic:	Puluwatese	- <i>waw</i>	(DIR) ‘towards addressee’
Fij:	Wayan	<i>ati</i>	(DIR) ‘away from speaker towards addressee or elsewhere’

Fij:	Nabukelevu	<i>atu</i>	(DIR) ‘outwards or away from speaker’s point of reference’
Pn:	Tongan	<i>atu</i>	(DIR) ‘away from speaker towards addressee or elsewhere; onward in time’
Pn:	Niuean	<i>atu</i>	(DIR) ‘away from speaker towards addressee’
Pn:	Samoan	<i>atu</i>	(DIR) ‘away from speaker towards addressee’

Reflexes of **ua* and **watu* have a distribution which roughly matches major subgroups: **ua* is found throughout Western Oceanic, **watu* elsewhere. But the distribution is imperfect. Possible reflexes of **ua* occur in Southeast Solomonian and Fijian (and apparently as demonstratives in Micronesian). Reflexes of **watu* occur in a few Western Oceanic languages. And reflexes of both forms appear in the Admiralties. Despite these imperfections, however, the distribution of the two forms is quite different from that of the other deictic directional verbs, where geography plays no significant role. It seems legitimate to suggest that both forms occurred in POc, and that as POc broke up and diversified, one form or the other tended to win out on an areal basis.

Why did POc have the two forms **ua* and **watu*? Evidently, as hinted by Blust (ACD, under the entry for PAn **-Cu* ‘near addressee’), **watu* represents an innovation whereby the POc demonstrative morpheme **-tu* ‘near addressee’ was added to **ua*, stretching it to the canonic CVCV shape of POc morphemes. An obvious alternative suggestion is that **ua* represents the short form of **watu* in the same way as **ma* and **la* represent the short forms of **mai* (p.281) and **lako* (see below). This is unlikely, however, as the external evidence indicates that the inherited POc form was **ua*, and the fairly neat geographic distribution of **ua* and **watu* is very different from the scattered, interlaced distributions of **mai* and **ma* and of **lako* and **la*.

3.4.5 ‘Go away to’

Just as POc **mai* ‘come’ had a short form **ma*, so POc **lako* ‘go’ had the short form **la*. Again, reflexes of both occur as verbs and as directional enclitics, and each probably had both functions in POc, viz. **mai*, **ma* glossed as (V) ‘come’ and (DIR) ‘towards speaker’ and **lako*, **la* glossed as (V) ‘go (to)’ and (DIR) ‘away from speaker’. In some languages, a reflex of **lako* or **la* occurs as the second element of one or more compounds, and these are again taken to be reflexes of an earlier final verb or directional enclitic.

PMP **lako* ‘go’

POc **lako*, **la* (V) ‘go (to)’, (DIR) ‘away from speaker’

Adm:	Mussau	<i>la</i>	(DIR) ‘away from speaker’
		<i>lao</i>	‘go to’ (<i>la</i> in compounds)
Adm:	Loniu	<i>-la</i>	(DIR) ‘away from speaker’
		<i>-le</i>	‘go to’
Adm:	Kele	<i>la</i>	‘go to’
NNG:	Gitua	<i>lago</i>	‘go’
NNG:	Mangap	<i>-la</i>	‘go’
		<i>-sa-la</i>	(VF) ‘ascend away from speaker’
NNG:	Sio	<i>lɔ</i>	‘go’
NNG:	Takia	<i>la</i>	‘move away from speaker’, ‘go round the island’

NNG:	Manam	<i>laʔo</i>	(DIR) 'away from speaker'
		<i>-la[ʔo]</i>	'move away'
PT:	Kiriwina	<i>-la</i>	'go (to some place away from here)'
PT:	Tawala	<i>-nae</i>	'go away'
PT:	Gumawana	<i>-na</i>	(DIR) 'away from speaker and addressee'
PT:	Saliba	<i>lao</i>	'go across'
PT:	Sinaugoro	<i>iayo</i>	'go'
		<i>-a</i>	(preverbal clitic) 'away from speaker and addressee' ³⁰
PT:	Motu	<i>la</i>	'go away'
MM:	Tigak	<i>inan</i>	'go away'
MM:	Notsi	<i>la</i>	'go'
MM:	Banoni	<i>nau</i>	(DIR) 'away from speaker'
MM:	Torau	<i>lao</i>	'go'
MM:	Babatana	<i>ka</i>	(DIR) 'away from speaker'
MM:	Hoava	<i>la</i>	'go away from speaker and addressee'
MM:	Zabana	<i>lao</i>	'go'
MM:	Kokota	<i>lao</i>	'go'
SES:	Bauro	<i>rayo</i>	'go'
NCV:	Mota	<i>lago</i>	'step, stretch the legs'
NCV:	Raga	<i>lago</i>	'walk, travel'
NCV:	Sakao	<i>la(m)</i>	'come' (from POC <i>*lako</i> + <i>*mai</i>)
SV:	Sye	<i>(ve)lay</i>	'go ahead' (<i>ve</i> 'go')
NCal:	Cèmuhî	<i>-le</i>	(DIR) 'away from speaker'
Mic:	Kiribati	<i>nako</i>	'go'
Mic:	Kosraean	<i>-læ</i>	(DIR) 'away from speaker'
Mic:	Marshallese	<i>l^wpk</i>	(DIR) 'away from speaker'
Mic:	Mokilese	<i>-la</i>	(DIR) 'away from speaker'
Mic:	Puluwatese	<i>-lo</i>	(DIR) 'away, south'
Mic:	Woleaian	<i>rax</i>	(DIR) 'away from speaker'
Mic:	Ulithian	<i>loxo</i>	(DIR) 'away from speaker'
Fij:	Bauan	<i>lako</i>	'go'
		<i>la(i)</i>	'go and ...'
Fij:	Wayan	<i>la(i)</i>	'go and ...'

It is reasonable to expect that the processes that have created prepositions and relators from the deictic direction verbs **mai*/**ma* '[come] towards speaker' and **ua* '[go] towards addressee' may also have created them from **lako*/**la* 'go (to)', (DIR) 'away from speaker'. Although there are a good many prepositional reflexes, many of them are problematic because they have more than one possible source. In the set below, it is probable that some items reflect POC **lalo-*, **lo-*, **la-* (N LOC) 'inside' rather than POC **lako*, **la* 'go (to)', (DIR) 'away from speaker'.

³⁰ This is an enclitic to the preverbal tense/aspect/mood marker. It marks the location of the action relative to the speaker and addressee. To reflects the use of **la* with the sense 'go and ...' in the initial slot of a sequential serial verb construction.

1. POc **lako*, **la* ‘go (to)’, (DIR) ‘away from speaker’ (p.287)

2. POc **lalo-*, **lo-*, **la-* (N LOC) ‘inside’ (p.246)

Adm:	Loniu	<i>lɔ</i>	(PREP) ‘in’
NNG:	Arawe	<i>lu-O</i> ; <i>li-O</i> :	(PREP w N PERS, PRO PERS) locative, allative
NNG:	Mamusi	<i>la</i>	(PREP) general
PT:	Motu	<i>lalo</i>	‘the inside, the mind’
MM:	Tigak	<i>lo</i>	(PREP w N COM, N LOC) locative, temporal
MM:	Tiang	<i>lə</i>	(PREP) locative, temporal
MM:	Kara	<i>la</i>	(PREP) locative
MM:	Nalik	<i>la</i>	(PREP w N LOC) locative, temporal
MM:	Notsi	<i>la(n)</i>	(PREP) locative
MM:	Tangga	<i>lo</i>	(PREP w N PERS, PRO PERS) locative
MM:	Konomala	<i>lə</i>	(PREP w PLC, N LOC) locative, temporal
MM:	Label	<i>la</i>	(PREP w N LOC) locative, temporal
MM:	Bilur	<i>la</i>	(PREP w N LOC) locative
NCV:	Mota	<i>lo</i>	(PREP) ‘in, inside’
NCV:	Tasiko	<i>lo</i>	(PREP) ‘in, inside’
NCV:	Mwotlap	<i>lV-</i>	(PREP prefixed to N LOC) locative, allative
NCV:	NE Ambae	<i>lo</i>	(PREP w N LOC) locative
NCV:	Maewo	<i>le</i>	(PREP) ‘in, inside’
SV:	Lenakel	<i>le</i>	(PREP) locative, allative
Mic:	Marshallese	<i>(i)lɔ</i>	(PREP) locative
Mic:	Puluwat	<i>le-</i>	(PREP) ‘in, because of’

Formally, items reflecting **lo* presumably reflect **lo-*, one of the short forms of **lalo-*. It is tempting to attribute all forms reflecting **la* to the short form of **lako*, but there is evidence against this. In Lihir (MM), *la* is a short form of *lilie-* ‘inside’ (reflecting **lalo-*), as we find phrases like the one below where *la* must be a (relational) noun:

i la liom
 PREP inside house
 ‘in the house’

Semantically, all the reflexes listed above are locative, which sits better with a derivation from **lalo-* ‘inside’ than one from **lako* ‘go (to)’, from which one would expect an allative. But it is possible that some reflexes represent a conflation of the two etyma.

3.4.6 ‘Go away’

POc **pano*, reconstructed below, perhaps had two uses. Firstly, it was a deictic directional verb meaning ‘go away (from speaker), depart’. Evidence for this meaning is also widespread in non-Oceanic languages (Blust, ACD). Reflexes of both **lako*/**la* and **pano* occur as directional enclitics with the meaning ‘away from speaker’. However, there is evidence that as verbs they had different meanings. Most verbal reflexes of **lako* ‘go (to)’ have a valency which implies or requires a destination (expressed, for example, as a prepositional phrase), whilst those of **pano* are intransitive.

As noted in §3.3, some reflexes of POc **pano* indicate that it was also a geographic directional verb meaning ‘move in a transverse direction’, contrasting with ‘go up, go inland’ and ‘go down, go seawards’. However, it is not entirely clear whether this usage occurred in POc. On one hand, there is a non-Oceanic reflex with this meaning, namely Aralle-Tabulahan (South Sulawesi) *pano* (DIR) ‘along the level’ (McKenzie 1997). On the other hand, within Oceanic the meaning ‘move in a transverse direction’ is reflected only in North–Central Vanuatu and New Caledonian languages. There are two interpretations of these data: either there were independent parallel innovations in South Sulawesi and Remote Oceanic, or this usage was inherited into POc but happens to have been lost in Western Oceanic and Southeast Solomonic.

PMP **panaw* ‘go away, depart, leave on a journey’ (ACD)

POc **pano* ‘go away’, (DIR) ‘away from speaker’; ? ‘move in a transverse direction’

MM:	Vitu	<i>vano</i>	‘go (away)’
MM:	Harua	<i>mano</i>	‘go away’ (see text below)
SES:	Bugotu	<i>vano</i>	‘go, come’; (DIR) ‘thither’; (used in comparisons:) ‘beyond, more’
SES:	Gela	<i>vano</i>	‘away, further off; to go’
SES:	Arosi	<i>hano</i>	‘make a journey, set out; go’
NCV:	Mota	<i>van(o)</i>	‘go, come’
NCV:	Mwotlap	<i>van</i>	(DIR) ‘thither’
NCV:	NE Ambae	<i>vano</i>	‘move in transverse direction’
NCV:	Merei	<i>va, van(a)</i>	‘move in transverse direction’
NCV:	Tamambo	<i>vano</i>	‘go away from speaker’
NCV:	Lonwolwol	<i>van</i>	‘go, pass (and so also of time); continue (to do s.t.)’; (DIR) ‘away’
NCV:	SE Ambrym	<i>haen</i>	(N) ‘going, departure’
SV:	Lenakel	<i>-pən</i> <i>vən, (a)vən</i>	(DIR) ‘distant’ ‘go, walk’
SV:	Anejom	<i>-pan</i> <i>han, (a)pan</i>	(DIR) ‘away from speaker’ ‘go’
NCal:	Nêlêmwa	<i>ve</i> <i>o</i>	(DIR) ‘in a transverse direction’ ‘go’
NCal:	Nyelâyü	<i>-van</i> <i>van</i>	(DIR) ‘in a transverse direction’ ‘go’
NCal:	Nemi	<i>en</i> <i>hen</i>	(DIR) ‘in a transverse direction’ ‘go’
NCal:	Tinrin	<i>(ã)va</i>	‘there, the other side of stream’
NCal:	Xârâcùù	<i>fē</i>	(DEM) ‘away from speaker’
NCal:	Iaai	<i>hããŋ</i>	(DIR) ‘away from speaker crosswise’ ³¹
Pn:	Niuean	<i>fano</i>	‘go’
Pn:	Samoan	<i>fano</i>	‘(of time) be gone, past; perish’

³¹ It is possible that Iaai *hããŋ* does not belong here but is cognate with PPn **aŋe* ‘along; away from speaker and addressee’

Pn:	Nanumean	<i>fano</i>	‘go’
Pn:	Rennellese	<i>hano</i>	‘go; depending on, according to; on and on; little by little; one by one’
Pn:	Maori	<i>φano</i>	‘go, proceed; lead, of a road; verge towards; be on the point of; act, behave’

The Harua form *mano* appears to reflect the application of the PMP Actor focus morpheme *⟨um⟩ to the root **panaw* (vol. 1, p.29), suggesting that an alternation between **pano* and **mano* may have survived in POc.

POc **pano* evidently had a short form **pa*, giving a pair analogous to **mai*/**ma* and **lako*/**la* (pp.281, 287).

POc **pa* ‘go away; move in a transverse direction’; (V AUX) ‘go and ...’

NNG:	Lukep (Pono)	<i>pa</i>	‘go’
NNG:	Adzera	<i>fa</i>	‘go’
PT:	Sinaugoro	<i>va(riyo)</i>	‘go down’
PT:	Motu	<i>ha</i>	(V AUX) ‘go and ...’
SES:	Gela	<i>va</i>	(V AUX) ‘be going to ...’
NCV:	Mota	<i>va</i>	‘go, come’; (V AUX) ‘go on ...-ing’
NCV:	Araki	<i>vā</i>	‘go; go in a direction other than north or south’
NCV:	Lonwolwol	<i>va</i>	‘go’
NCV:	SE Ambrym	<i>ha</i>	‘go, leave, depart’
NCV:	Paamese	<i>vā</i>	‘go’
NCV:	Nguna	<i>vā</i>	‘go’ (short form of <i>vano</i> , Clark 1996)
SV:	Sye	<i>-mpe</i>	(DIR) ‘away from speaker’
		<i>-ve</i>	‘go’

The meanings of reflexes of **pa* agree with those of **pano*, and the function of the Motu, Sinaugoro,³² Gela, and Mota reflexes of **pa* (in three different subgroups) as a preverbal auxiliary is similar to that of the Sinaugoro reflexes of **ma* and **la* above. Clark (1996) notes that Nguna *vā* ‘go’ is also described as a short form of *vano*. Paton (1973) describes Lonwolwol *va* as a short form of *van* ‘go, pass’, and therefore as a reflex of POc **pano*, but Blust (ACD) argues that his inference is unjustified since original medial nasals are otherwise retained in Lonwolwol. If, however, *va* reflects POc **pa*, the objection disappears.

This leaves a loose end. Blust (ACD) takes the cognate set above to reflect PCEMP **ba* ‘go, go away, walk’. Clark (1996), on the other hand, infers that the set above and PCEMP **ba* are etymologically separate. It is true that the forms attributed to POc **pa* above *could* reflect PCEMP **ba*: there is no phonological objection to this. But there are just a few Oceanic forms which reflect a POc locomotion verb **ba* ‘go’ (Tolai [MM] *ba* ‘tread, go’, Talise [SES] *ba* ‘go’), and it seems likely that this **ba* reflects PCEMP **ba*, whilst POc **pa* is the short form of **pano*.

There are a number of apparent prepositional reflexes of **pano*/**pa* ‘go away’, but most are very problematic, as there are two other possible sources of the items listed.

³² Unlike Sinaugoro *-ma* ‘towards speaker’ and *-a* ‘away from speaker’, which still survive as preverbal auxiliaries, Sinaugoro *va* occurs only in lexicalised compounds.

These are POc **pani* ‘give’, (PREPV) ‘benefactive’ and PWOC **p^wa* (PREP) ‘instrumental, comitative’.³³ There is also evidence of conflation.

The clearest piece of evidence that **pano/*pa* played a role in the history of some of the items in the set below is that Hoava *pa* behaves as a relator, i.e. it occurs before a preposition.

ria pu tata mae pa tani sa gato
 D:3PL REL close come R PREP:3SG ART:SG tree
 ‘they who come close to the tree’

Relators reflect erstwhile deictic directional verbs (Ross 2003), and so **pano/*pa* is the most likely candidate for the ancestor of Hoava *pa*. Other probable straightforward reflexes of **pano/*pa* are the Kiriwina, Roviana and Nguna forms, and perhaps the Label locative preposition *ha*, as it contrasts with instrumental *pa* (from PWOC **p^wa*).

The NNG items below, all from the Vitiaz Strait area, probably reflect conflation of the POc benefactive prepositional verb **pani* and a PWOC instrumental preposition **p^wa* (Ross 1988:106–108, 112–115).

Bound items below are shown with the suffix paradigm that they take, one of object (O:), disjunctive (D:) or possessor (P:). The gloss of each item is formulated as carefully as the data allow, but should not be treated too seriously, as there are likely to be gaps in the glosses.

1. POc **pano, *pa* ‘go away; move in a transverse direction’ (p.289)
2. POc **pani* ‘give’, (PREPV) benefactive (Pawley 1973, Lichtenberk 1985)
3. PWOC **p^wa* (PREP) instrumental, comitative

NNG:	Kove	<i>pa, pa-O:</i>	(PREP) locative, temporal, allative, ablative
NNG:	Bariai	<i>pa-O:</i>	(PREP) locative, allative, ablative, benefactive
NNG:	Malai	<i>pa-D:</i>	(PREP) allative, instrumental
NNG:	Gitua	<i>pa-O:</i>	(PREP) temporal, allative, benefactive, ablative, instrument
NNG:	Malalamai	<i>pa-O:</i>	(PREP) allative, benefactive
NNG:	Lukep	<i>pa-O:</i>	(PREP) allative, benefactive
NNG:	Malasanga	<i>pa-O:</i>	(PREP) benefactive, comitative
NNG:	Roinji	<i>pa-P:/O:</i>	(PREP) allative, benefactive
NNG:	Sio	<i>pa-O:</i>	(PREP) allative, benefactive
NNG:	Tami	<i>pa, pa-D:</i>	(PREP) temporal, benefactive
NNG:	Mangap	<i>pa, pa-O:</i>	(PREP) locative, benefactive, ablative, instrument
NNG:	Rauto	<i>pa</i>	(PREP w N PERS) locative, allative
		<i>pe</i>	(PREP w N COM, PRO PERS) locative, allative, instrumental
PT:	Kiriwina	<i>va</i>	(PREP) ‘in the direction of’
MM:	Tiang	<i>pa-P:</i>	(PREP) locative, instrumental, comitative

³³ As well as the data given here, the reconstruction of **p^wa* is supported by three Meso-Melanesian reflexes from New Ireland which only have instrumental and comitative uses: Tigak *pe, pa-P:*, Kara *pa-P:* (both instrumental, comitative), and Label *pa* (comitative). The PWOC instrumental preposition **p^wa* was reconstructed for some interstage later than POc as **pa* by Ross (1988:106).

MM:	Nalik	<i>pana</i>	(PREP) locative, instrumental, comitative
MM:	Label	<i>ha</i>	(PREP) locative
MM:	Roviana	<i>pa</i>	(PREP) locative, allative
MM:	Hoava	<i>pa</i>	(R, PREP w PLC, non-human N) locative, allative
NCV:	Nguna	<i>pa(ki)</i>	(PREP w PLC) allative

Functionally and semantically the members of the small cognate set below resemble reflexes of POc **lako*, but phonologically they do not reflect it. The medial consonant is reconstructed on the basis of Yabem low tone, which reflects the loss of a Proto Huon Gulf voiced obstruent, probably either **v* or **ɣ*, lenis reflexes of POc **p* or **k*. Of these, both are lost intervocalically in Takia, but only **k* is lost in the Admiralties languages.

POc **[y]aku* ‘go (to)’, (DIR) ‘away from speaker’

Adm:	Loniu	<i>yaw</i>	(DIR) ‘away’
Adm:	Kele	<i>aw</i>	‘go away’
Adm:	Titan	<i>aw</i>	‘go away, leave’
NNG:	Yabem	<i>-yà</i>	‘go (to her/him/them)’
NNG:	Takia	<i>-au</i>	‘go (from the speaker)’

3.4.7 ‘Away from a specified point’

POc **tani* was a prepositional verb, reconstructed by Pawley (1973). It was not deictic, i.e. not oriented with regard to speaker or hearer, and so strictly does not belong here. It was transitive, and the object of the verb was the point of orientation from which movement takes place. I include it because its reflexes have become deictic directional adverbs in a few languages.

POc **tani* (PREPV) ‘(go) away from’

PT:	Motu	<i>tani</i>	(PREPV) ‘away from’
PT:	Mekeo (East)	<i>-ani</i>	‘away from’ (in compounds: fossilised DIR)
NCV:	Merlav	<i>dani-</i>	(PREPV) ‘away from’
NCV:	NE Ambae	<i>dene</i>	(PREPV) ‘away from’
NCV:	Sesake	<i>deni-</i>	(PREPV) ‘away from’
Fij:	Bauan	<i>tani</i>	(DIR) ‘away, elsewhere’
Fij:	Boumaa	<i>tani</i>	(DIR) ‘away’

A note on sources

In addition to the sources of lexical items listed in Appendix 1, a number of grammars and other grammatical sources were consulted during the research on which this chapter is based. Other than my fieldnotes, these are: NE Ambae (Hyslop 2001), Anejom (Lynch 2000b), Araki (François 2002), Arosi (Lynch & Horoi 2002), Awad Bing (Bennett & Bennett 1998), Bali-Vitu (Ross 2002a), Banoni (Lynch & Ross 2002), Bariai (Gallagher 1998), Bauan Fijian (Churchward 1973, Schütz 1985), Boumaa Fijian (Dixon 1988), Bugotu (Ivens 1933, author’s fieldnotes), Cèmuhî (Lynch 2002a), Drehu (Moyse-Faurie 1993), Erromangan (Sye) (Crowley 1998), Gapapaiwa (McGuckin 2002), Gela (Crowley 2002a), Gumawana (Olson 1992), Halia (Allen 1987), Hoava (Davis 1997), Iaaï (Ozanne-

Rivierre 2004), Ifira-Mele (Clark 2002), Kairiru (Wivell 1981, Ross 2002e), Kele (Ross 2002f), Kiriwina (Senft 1986), Kiribati (Groves, Groves & Jacobs 1985), Kokota (Palmer 1999), Kosraean (Lee 1975), Kwaio (Keesing 1985), Kwamera (Lindstrom 1986), Label (Peckel 1930), Lenakel (Lynch 1978c), Lewo (Early 1994a), Longgu (Hill 1992, 1997), Loni (Hamel 1994), Lukep (Pono) (D'Jernes & D'Jernes n.d.), Lusi (Counts 1969), Manam (Lichtenberk 1983), Mangap-Mbula (Bugenhagen 1995), Marquesan (Lynch 2002b), Mekeo (Jones 1998), Merei (Chung 1998), Minaveha (Lovell 1994), Mokilese (Harrison 1976), Motu (Lister-Turner & Clark 1954b), Mussau (Ross 2002b), Mwotlap (Crowley 2002b), Nadrogaa Fijian (Geraghty 2002), Nakanai (Johnston 1980), Nalik (Volker 1998), Nêlêmwa (Bril 1994), Nguna (Schütz 1969), Niuafo'ou (Early 2002), Notsi (Erickson & Erickson 1992), Nyelâyu (Ozanne-Rivierre 1998), Paamese (Crowley 1982), Pileni (Næss, forthcoming), Puluwatense (Lynch 2002c), Ramoaaina (Davies & Fritzell 1992), Roviana (Corston-Oliver 2002), Saliba (Margetts, forthcoming), Samoan (Mosel & Hovdaugen 1992), Siar (Ross 2002c), Sinaugoro (Tauberschmidt 1999), Sio (Clark & Clark 1987), Sobei (Sternier & Ross 2002), Sudest (Anderson & Ross 2002), Tamambo (Jauncey 1997), Tawala (Ezard 1997), Tigak (Beaumont 1979), Tinrin (Osumi 1995), Tobati (Donohue 2002), Tolai (Mosel 1982, 1984, Rinderknecht 1987), Tongan (Churchward 1953), Ulithian (Lynch 2002d), Wailevu Fijian (Ritsuko Kikusawa pers. comm.), Wayan (Pawley & Sayaba, forthcoming), Woleaian (Sohn 1975), Xârâcùù (Moyse-Faurie 1995), Yabem (Dempwolff 1939, Zahn 1940, Ross 2002d), Zabana (Fitzsimons 1989).