

9 *Time*

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1 Introduction

The kinds of time and duration expressions that we might expect to find in a language are listed below. This categorisation could probably be applied to any language, Oceanic or otherwise, as it appears to have its basis in human cognition and universal experience rather than in the vagaries of English. Part 1 also indicates the structure of this chapter. Why part 2 is not part of that structure is explained below.

1. Times

a. Undirected:

- (i) times within cycles: ‘at midnight’, ‘at dawn’, ‘at midday’, ‘at full moon’, ‘at yam harvest’, ‘in daylight’, ‘in the morning’/‘in the afternoon’/‘in the evening’/‘in the night’;
- (ii) labelled sets of times within cycles: names of seasons or lunar months in a year, names of periods or days in a lunar month.

b. Directed:

- (iii) purely deictic: ‘now’, ‘today’;
- (iv) vague distance: ‘in the past’/‘in the future’, ‘earlier’/‘later’, ‘long ago’;
- (v) specified distance within a cycle or measured by cycles: ‘last night’/‘tonight’, ‘today’/‘yesterday’/‘tomorrow’, ‘two days ago’/‘two days hence’.

2. Durations

c. from one time to another:

- (vi) one time specified: ‘since yesterday’, ‘until tomorrow’;
- (vii) both times specified: ‘from yam harvest to taro harvest’;

d. length of time: ‘for a long time’.

The rest of this introduction explains this categorisation. The reader is asked to forgive the immediate introduction of two pieces of syntactic jargon, as they are indispensable to this explanation. Times and durations can be expressed in most (if not all) languages as syntactic time **adjuncts**, e.g. *He came **last week** and stayed **for two days*** or *He was sick **yesterday***. In many languages these adjuncts interact with the semantics of the **predicate**, e.g. *came*, *stayed* or *was sick* to produce the temporal meaning of the sentence.

One such interaction is illustrated in English sentences with the time adjunct *yesterday*. In *He worked **yesterday*** or *He was sick **yesterday***, the event lasts for a period of time—for all or part of *yesterday*. But in *He came **yesterday***, the event is to all intents and purposes punctiliar and *yesterday* is construed as a point in time.¹ Because many time expressions can be construed as denoting either a point of time or a period of time, no attempt is made under 1 to distinguish between points and periods: both are treated simply as ‘times’.

There is a clear distinction, however, between the time expressions in 1 and the duration expressions in 2. A duration expression denotes a period which begins at one point in time and ends at another. Thus I can say *He worked **from midday until midnight*** or *He was sick **from midday until midnight*** but not **He arrived **from midday until midnight***. Some predicates of punctiliar meaning do co-occur with a duration expression, but the duration enforces a durative or an iterative construal of the predicate. Thus if I say *He came **from midday until midnight***, this is nonsensical as a punctiliar event, but may mean *He came and stayed **from midday until midnight***. If I say *The light flashed **at midnight*** or *The light flashed **until dawn***, it is the adjunct which determines how the predicate is construed. *Flash* is semantically punctiliar and *at midnight* is a time which can be read as punctiliar, so the light flashed only once. But *until dawn* denotes a duration, so *The light flashed* is construed as being iterative: the light flashed repeatedly (Jackendoff 1991:40–42).

The duration expressions in the previous paragraph all entail, explicitly or implicitly (for *until dawn*, see below), a beginning point and an end point, but other duration expressions, are specified as a length of time: *for six nights* or *for a long time*.

In English, times—and the beginnings and ends of durations—may be absolute or they may be deictic. Absolute expressions are, for example, *in 1999* or *on 3rd May 2001*. In terms of token frequency, however, the vast majority of English time expressions are deictic, i.e., relative to the time of speaking or to some other point of time internal to the discourse which is readily recognised by the addressee.² Thus *recently*, *this morning*, *tomorrow*, *two days ago* and *last year* are construed relative to the time of speaking, whilst *earlier*, *that morning*, *the next day*, *two days before* and *the previous year* are construed relative to some point of time internal to the discourse. *Now* can be construed either way. Either the beginning or the end point of a duration may be deictically specified: *since Monday* and *until tomorrow* mean that ‘now’ is respectively the end point and the beginning point of the time period.

¹ The meaning of *yesterday* as a period of time can be preserved by a semantic analysis which interprets it in this context as *at some point of time during yesterday*, but I have not come across a language where the period-of-time and point-of-time uses of ‘yesterday’ are distinguished in the form of the adjunct, and so the assumption here, that the difference between them is one of contextually determined construal, not of polysemousness, appears legitimate.

² If we think of time as analogous with space, then deictic temporal expressions like ‘recently’ (= ‘a short distance in the direction of the past’) are analogous with deictic-geographic expressions like ‘seawards’ (= ‘in the direction of the coast’), not with ‘pure’ deictics like ‘there’ or ‘yonder’.

English also has generic time expressions like *in the mornings* and *on weekdays*. Many undirected expressions (1a) which at first sight appear to be absolute are in fact either deictic or generic, according to context. Expressions like *at midnight*, *on Tuesday* or *at six o'clock* may specify a point of time, but, as I noted above, their temporal direction—past or future—is specified by the predicate tense. And such expressions may also be used generically: *The bell rings at midnight*.

Implicit in the previous two paragraphs is the fact that some lexical items used in time expressions denote parts of cycles. In English, at least, *midnight*, *morning* and *six o'clock* are parts of the cycle represented by a day, *day* or *Tuesday* a part of the cycle represented by a week, *Autumn* or *September* a part of the cycle represented by a year. Such cycles are the basis of calendars. However, it is important to distinguish between arbitrary and natural calendrical units. Although the western (Gregorian) calendar grew out of a nature-based calendar, its units today are arbitrary in that they have boundaries which bear, at best, a quite indirect relationship to natural cycles. Thus *midnight*, *six o'clock*, *day* (as a unit stretching from midnight to midnight), *Tuesday* and *September* are all arbitrary points or units. Thus a calendrical year begins (arbitrarily) on 1st January and ends on 31st December and is made up of arbitrarily named calendrical months that occur in a fixed order. A calendrical month is made up (in the Gregorian calendar) of a predetermined number of sequentially numbered calendrical days.

The only natural units observed on a day-to-day basis by western English-speaking societies in the temperate zones are the seasons. *Autumn* is a natural unit (for most English-speakers it does not even have clear natural boundaries, but this is a different matter: a natural unit may have a defined boundary, as we will see below). The natural calendrical units that concern us in connection with Oceanic languages are essentially based on four kinds of cycle: horticultural, floral/faunal, meteorological and astronomical. A cyclic unit, incidentally, does not necessarily have defined boundaries. There is a distinction in English between *last year*, where *year* is a calendrical unit, and *a year ago*, where *year* is a length of time (Leech 1969:113–114). The same can be true of months and days.

Absolute time expressions in European languages involve a calendrical unit: *in 1999* or *on 3rd May 2001*. Traditional Oceanic systems offered no equivalent to these, firstly because there was no labelling of years like *1999* and secondly because there appears to have been no use of units within units like *on 3rd May 2001*, a day of a month within a month of a labelled year. Traditional labels for months and days were used deictically as described above like *in May* or *on Tuesday*. This means that pre-contact Oceanic systems had no absolute time expressions.

Some Oceanic speaking communities, especially in Melanesia, apparently had nothing resembling a calendrical system. Others, in Micronesia and Polynesia, had naming systems based on lunar months, with names for the months of the year and sometimes names for every day of a lunar month. These systems, however, had not proceeded far along the path towards the arbitrariness of the Gregorian calendar. In some systems all or most of the month names have a recognisable meaning; in others the origins of the names seem to have been lost.³

The implications of this discussion can be a little difficult for a western-trained mind to grasp: the fact that, e.g., a month was a cycle, not a unit, means that months were

³ A discussion of Oceanic month names will appear in a future volume.

conceptualised as the passing of cycles, not as collections of countable units. Whorf (1956:139) says that *ten days* in English is ‘an “imaginary”, mentally constructed group’—“imaginary” because it ‘cannot be objectively experienced’ like ‘ten men on a street corner’. Foley (1997:205) comments on Whorf’s formulation that the use of a plural category to express the repetition of temporal cycles is a metaphorical extension from plural groupings of physical objects. Whorf says that the Hopi do not make this extension: if they count cycles at all, they do it with ordinal numbers: “first day”, “second day”, and so on.⁴ The situation in traditional Oceanic societies seems to have been similar. This extract from an oral account of Takia (Karkar Island, NNG) marriage practices as they were explained by an elderly man in 1987 contains similar insights:⁵

All right, and so they waited—in the old times they didn’t know about years. They always kept time by the moon. Thus when they wanted to set a time—when they wanted to set a time, they mentioned the month. But they also didn’t know the names of the months. The moon waned and waxed, that’s all. They would say the months in this way: they would count the months with their hands, they would count them with their fingers. And then they would say, the month of the little finger will come and will die, the next finger will die, and the next and in the fourth month the man and woman will get married. They said this—well—with regard to their saying that they would marry in four months ...

An English time adjunct may interact with the the tense of the predicate. In the sentences *He came **last night*** and *He will come **tonight*** the temporal direction (1b)—past or future—of the adjunct ‘agrees’ with the tense of the predicate. In *He came **at midnight*** and *He will come **at midnight***, however, temporal direction is expressed only by the predicate tense: *at midnight* says nothing about temporal direction. If a language expresses the difference between past and future through the predicate, it will not necessarily be expressed in the adjunct. Conversely, if there is no tense difference in the predicate, then the adjunct may well express temporal direction.

Aspect and mood categories are more widely distributed across major Oceanic subgroups than tense categories, and it is therefore probable that POc lacked tense but made extensive use of aspect and mood. Aspect included continuative/habitual, probably marked by reduplication of the verb stem, and completive (perhaps expressed by a serial verb construction ending in the verb ‘finish’). Mood distinguished realis and irrealis. Realis was used for past and present events considered to have occurred or to be occurring, irrealis for future events and all events considered not to have actually occurred (e.g. conditionals). From the lack of tense, we might expect temporal direction to be marked more often on time expressions than it is in English, and this is true in that the temporal prefix **na-* marks an expression as past (p.324).

Much play has been made in the linguistic literature of the idea that by metaphorical extension spatial relations form the model for other grammatical patterns (Gruber 1965, Anderson 1971, Jackendoff 1976, 1983, 1991, 1992). This has often been emphasised with regard to time (H. Clark 1973, Jackendoff 1983:189–193, Jackendoff 1992). However, when we examine the parallels between space and time in English (*at the corner/at six*

⁴ Foley (1997:207) is careful to point out that Whorf is not talking about thought *per se* but about the kinds of conceptual systems that people use to construe experience.

⁵ The text was recorded, transcribed and translated by Mait Kilil and myself.

o'clock, in Canberra/in 1999, from Sydney to Canberra/from Tuesday to Thursday), then look for them in Oceanic languages, we find that they do not loom nearly as large in Oceania because so many English parallels depend on the use of calendrical units. Even so, there *are* some parallels between space and time in Oceanic languages.

Semantically, there is an analogy between the spatial domain and the temporal domain, if we take it that time is a line running from past to future through a deictic point, usually the time of speaking. However, the analogy is limited: space is three-dimensional, but time is only a single dimension. In this analogy, there are parallels between a specific location and a specific time, between generic location ('at home') and generic time ('at night'), and between a path ('from Sydney to Canberra') and a duration ('from midday until midnight'). These parallels are realised in Oceanic languages by the use of similar grammar for both domains (pp.320–321). More specifically, there is a deictic parallel between 'here' and 'now', but other deictic parallels are less obvious, especially in Oceania, where spatial deixis tends to be person-oriented (Ch. 8, §3.4.1).⁶ There is also a parallel between temporal directionality (past vs future) and geographic (e.g. 'seawards' vs 'inland', 'up' vs 'down') or intrinsic directionality (e.g. 'to the back' vs 'to the front'), as well as between temporal distance ('long ago') and spatial distance ('far away'). However, the distance parallels are limited, as expressions of spatial distance do not also involve direction, whereas expressions of temporal distance typically include past or future denotation ('earlier'/'later'). The spatial domain typically lacks anything analogous to the lexicalisation of temporal distances or times within natural cycles ('today' vs 'yesterday' vs 'tomorrow', 'midnight' vs 'morning' vs 'midday').

The remainder of this chapter is devoted to reconstructing temporal expressions. It is organised on the basis of the listing under 'Time', part A, of the list above. Part B of that list deals with duration. One would expect most duration expressions to be expressed grammatically, and at most a few like 'for a little while' and 'for a long time' to be lexicalised. However, I have been unable to reconstruct any lexicalised POc duration expressions. I have attempted to find a term for 'time' in the sense of duration (as in 'for a long time'). Oceanic languages clearly have terms with this meanings, but they do not form a cognate set. A number of languages, however, use the reflex of POc **boŋi* (p.305) in this sense, and it is possible that this was a POc usage too.

2 Undirected times: times within cycles

Cyclic times recognised in Oceanic languages are all natural, as noted above. They include times of day, phases of the moon and seasons of the year marked by a variety of natural events. Some languages also have more detailed naming systems for lunar months and for the days within a lunar month.

2.1 The day and times of day: synchronic overview

In most Oceanic languages, the times of the day form a rough taxonomy, with the primary and secondary taxa as follows:

⁶ Note that the parallel between 'then' and 'there' is anaphoric, not deictic, and so does not belong here.

1. night
2. daytime
 - (a) early morning, from dawn to 9 or 10 a.m.
 - (b) middle of the day, from 9 or 10 a.m. to about 3 p.m.
 - (c) late afternoon and evening, from 3 p.m. to sunset

The first-order division is, as we might expect, into night and daytime. I have opted to put 'night' first, as POc **boŋi* 'night' also served as the word for the twenty-four hour period. In Fijian, for example, certain feasts have names like *boŋi-lima*, literally 'five nights', denoting the fact that they last five days. In Hawaiian (Pn), the day began at sunset, and this is perhaps the case elsewhere in Oceania. The Motu (PT) expression *varani hanuaboi* ('yesterday' + 'night') is interesting in this regard, as it means 'two nights ago'. That is, the night belonging to yesterday is the one that precedes it rather than the one that follows it.

The second-order division only affects daytime, which has three parts. The periods 2(a) and 2(c) are roughly the first and the last three hours of daylight respectively and are usually denoted by single-word terms. Curiously, there is often no word for the middle six hours of daylight, and it could be argued that 2(b) should be omitted from the taxonomy above. However, there is often a term glossed 'midday' in the sources, and this seems to refer to a period of time rather than to noon as a point of time.

The clock times given above are of course vague. The salient feature of 2(a) and 2(c) is that the sun is not high in the sky during these periods (sunrise is shortly before 6 a.m., sunset shortly after 6 p.m. in areas close to the equator). One of the difficulties in setting up the illustrative taxonomies below, however, is that most sources are even vaguer. In fact I have found no source which sets out a taxonomy of times of night and day, and those below are culled from dictionaries, most of which use the terms 'morning', 'afternoon' and 'evening' without much further specification. The term for 2(a) is often glossed 'morning', but so, often, are terms for the period immediately before dawn, which is part of 'night'. 'Afternoon' and 'evening' are both used for 2(b) and 2(c), and, as I mentioned above, 'midday' sometimes seems to denote 2(b).

The sources give a plethora of third-order terms for parts of the day, and a few corresponding terms for parts of the night (which I also treat as third-order terms, despite the lack of second-order terms here). Generally, these terms denote periods of time clustered around the boundaries between the first-order terms. Thus commonly occurring terms for parts of the night denote 'cockcrow' and the period between cockcrow and dawn (sometimes divided into two, the second denoting the time of pre-dawn light). There are sometimes terms for the immediate post-dawn period, and at the other end of the day for twilight and dusk. Typically, third-order terms are phrasal.

Below I give taxonomies drawn from Drehet (Adm), Takia (NNG), Gapapaiwa (PT), Kiriwina (PT), Motu (PT), Gela (SES), Marshallese (Mic), Wayan (Fij) and Niuean (Pn). Their distribution is a little skewed, a fact determined by the available sources. They probably vary considerably in terms of completeness and accuracy. The grammatical category of each term is given where it is available, and where I can identify the meanings of the parts of a compound, I have done so. Sources are given in Appendix 1.

Drehet (Adm)**night**

midnight
pre-dawn

[kom]piŋ N

kxikilie-piŋ ADV (*kxikilie* ‘middle’, *piŋ* ‘night’)
hep^wehe-laŋ ADV (*laŋ* ‘daytime’)

daytime

morning
dawn
early morning
(at) sunrise

laŋ N

kxepiŋ N (*piŋ* ‘night’)
koŋ-tupurip ADV (*koŋ* ‘place’)
kxekxepiŋ N (*kxepiŋ* ‘morning’)
aŋ imi liki ADVP (*aŋ* ‘sun’, *imi* ‘come’, *liki* ‘up top’)
aŋ ya?aŋ ADVP (*aŋ* ‘sun’, *ya?aŋ* ‘go through’)

middle of day
(at) mid-morning
(at) noon

—
aŋ tikimiŋ m^walaŋ ADVP (*aŋ* ‘sun’, *tikimiŋ* ‘be present’, *m^walaŋ* ‘hill’)
aŋ imi kxikilie koŋ ADVP (*aŋ* ‘sun’, *imi* ‘come’, *kxikilie* ‘middle’, *koŋ* ‘place’)

afternoon/evening
(at) sunset

piyiŋ N
aŋ ilie p^winiek ADV (*aŋ* ‘sun’, *ilie* ‘go’, *p^winiek* ‘down below’)
upayah V

Takia (NNG)**night****tidom N****daylight/daytime
sunrise to sunset****ad, adad N (ad ‘sun’)
nal N**

morning⁷
dawn

tidomlom ADV (*tidom* ‘night’, *lo* ‘in’, *mi* ‘only’)
salso, sasulo

midday
noon

ad uyan, adian NP (*ad* ‘sun’, *uyan* ‘good’)
ad biben NP (*ad* ‘sun’, *biben* ‘its heart’)

afternoon/evening⁸

gurai, guraian (? < *gurai uyan* ‘evening’ + ‘good’) N, NP

Gapapaiwa (PT)**night****didibara N**

midnight
just before sunrise

pom baso NP (*pom* apparently archaic ‘night’)
mara didibara ADVP (*mara* ‘time’, *didibara* ‘night’, *-i* POSTP)

daylight**gabudara (archaic: ‘sun, day, time’) N, madeya N**

morning, sunrise to 10 a.m.

sunrise, dawn
just after sunrise

boiboi N
mara tomtom (*mara* ‘time’, *tomtom* ‘k.o. seaweed’)
mara boiboi (*mara* ‘time’, *boiboi* ‘morning’)

midday

madeya pu NP (*madeya* ‘daylight’, *pu* ‘middle’)

⁷ From sunrise until about 10 a.m. when the sun is high.

⁸ From about 2 p.m. when the sun is no longer directly overhead until sunset.

afternoon/evening, about 3 to 7 p.m.

ravi ADV

about 3 to 5 p.m.

ravi madeyina ADVP (*ravi* ‘evening’, *madeyina* ‘its light’, -i POSTP)

about 5 to 7 p.m.

ravi didibara ADVP (*ravi* ‘evening’, *didibara* ‘night’, -i POSTP)

sundown

ravi pikana NP (*ravi* ‘evening’)

sunset

madeya ivokutuvi (*madeya* ‘daylight’)

Kiriwina (PT)

night

midnight

***bogi/[b]ibog* N/ADV**

first streak of dawn

lubulotoula/elubulotoula N/ADV

halfnight

bulubuvigisa ADV

about 5 a.m.

dudubali

kikivigisa

daytime

***yam/iyam* N/ADV**

morning, 6–9am

kaukwau, gabogi (*bogi* ‘night’)

early morning

o-lile-yam ADV

dawn

isiga ADV

sunrise

iyuwola kalasia VP (-*yuwola* ‘rise’, *kalasia* ‘sun’)

about 9 a.m.

ipokala valu (-*pokala* ‘present, give’, *valu* ‘land’)

midday

lalavi/ilalavi N/ADV

noon

itowota kalasia VP (*kalasia* ‘sun’)

afternoon/evening

kwayavi/ikwayavi N/ADV

about 3 p.m.

itobalia kalasia VP (*kalasia* ‘sun’)

sunset

isalili kalasia VP (-*salilia* ‘drown’, *kalasia* ‘sun’)

Motu (PT)

night

middle of the night

***hanuaboi* N, *boi* N**

midnight

malo N

morning twilight

malokihi, malo hevani

daba vaburana NP (*vabura* ‘twilight’)

daylight

***rani* N, V**

morning

daba N

peep of dawn

daba e kinia VP (*kinia* ‘nip’)

first shafts of light

daba e rotoa VP (*rotoa* ‘cut in strips’)

light in the east

daba e daria VP (*daria* ‘husk, tear’)

light before sunrise

daba mamana NP (*mama* ‘light from lamp’)

dawn

daba e mamaia VP (*mamaia* ‘chew’)

daybreak

daba matana NP (*mata* ‘eye’)

early morning

galuna

dawn ‘spreads’

daba e tataia VP (*tataia* ‘strike, hit’)

daylight

daba e rere VP, *daba rere* NP (*rere* ‘(go) from place to place’)

daytime, sun

dina N

about 9 a.m.

dina e taolara VP

9 a.m.–noon

dina e tubua VP (*tubua* ‘grow’)

midday about 3 p.m.	<i>adoata</i> N (<i>ado</i> ‘sun’ [not used independently], <i>ata</i> ‘up above’)
	<i>dina gelona</i> NP
afternoon/evening (just before) sunset	<i>adorahi</i> N (<i>ado</i> ‘sun’ [not used independently])
	<i>dina kerekere</i> VP, <i>dina kerekere</i> NP (<i>kerena</i> ‘light reflected in the sea’)
evening twilight 7–8 p.m.	<i>mairu</i>
	<i>adorahi gamagamana</i> NP

Gela (SES)

night	<i>boŋi</i> N
all night, until morning	<i>dai-dani-hagi</i>
midnight	<i>kutu ni boŋi</i> NP (<i>kutu</i> ‘stomach, womb’, <i>boŋi</i> ‘night’), <i>boŋi hau</i> (<i>hau</i> ‘raise, lift’)
cockcrow, 4 a.m.	<i>danimarao</i>
after cockcrow	<i>labota</i>
morning twilight	<i>labota mulemule</i> (<i>mulemule</i> ‘be nauseated’)
just before dawn	<i>marao</i>
daytime	<i>dani</i> N, <i>daidani</i>
morning	<i>puipuni</i> N
sunrise	<i>soga ni aho</i> NP (<i>soga</i> ‘jump’)
dawn	<i>na dani te vavala</i> VP
break, of dawn	<i>lavahi</i> V
middle of the day	<i>kutu ni dani</i> NP (<i>kutu</i> ‘stomach, womb’, <i>dani</i> ‘daytime’), <i>danikama</i> (<i>kama</i> ‘big’)
noon	<i>hinagota</i> (<i>hina</i> ‘sunlight’), <i>turinunu</i> (<i>turi</i> ‘walk’, <i>nunu</i> ‘shadow’)
latter part of the day	<i>levu ni dani</i> (<i>levu</i> ‘side’)
afternoon/evening	<i>nulavi</i>
dusk	<i>lioliahahi</i>

Marshallese (Mic)

night	<i>p^{uu}oŋ^w</i> V
midnight	<i>luk^wən p^{uu}oŋ^w</i> N (<i>luk^wə-</i> ‘middle’, <i>p^{uu}oŋ^w</i> ‘night’)
day	<i>r^{uu}ān</i> N
morning	<i>cipp^{uu}oŋ^w</i> V (<i>cip</i> ‘rise’, <i>p^{uu}oŋ^w</i> ‘night’)
sunrise	<i>takinal^{uu}</i> (<i>al^{uu}</i> ‘sun’)
daybreak, dawn	<i>ɔk^{r^{uu}}ān</i> V (<i>ɔka^{r^{uu}}</i> ‘root’, <i>r^{uu}ān</i> ‘day’), <i>r^{uu}āntak</i> V (<i>r^{uu}ān</i> ‘day’, <i>tak</i> ‘upward’), <i>ci^{r^{uu}}ān</i> (<i>r^{uu}ān</i> ‘day’), <i>cor^{uu}āntak</i> V (<i>co</i> ‘appear’, <i>r^{uu}āntak</i> ‘daybreak’), <i>m^{uu}acawānene</i> N, V
noon	<i>raɛɛp</i> V
hottest time of day	<i>p^wiltəŋtəŋ</i> N (<i>p^wil</i> ‘hot’, <i>təŋtəŋ</i> ‘most’)
evening	<i>cota</i> V
sunset	<i>tulɔkun al^{uu}</i> (<i>tulɔk</i> ‘go down’, <i>al^{uu}</i> ‘sun’)

Wayan (Fij)**night**

just after dark

midnight

before sunrise

boŋi N, V*aviavi boŋi N* (*aviavi* ‘evening’, *boŋi* ‘night’)*boŋilevu V* (*boŋi* ‘night’, *levu* ‘big’)*g^watag^wata boŋiboŋi N, V* (*g^watag^wata* ‘morning’, *boŋi* ‘night’)**daytime****siŋa V**

morning

g^watag^wata V (*g^wata* ‘go out before dawn’)

be nearly morning

mata g^watag^wata

just before and around dawn

g^watag^wata ḍakaḍā

dawn

g^watag^wata tūtū V (*g^watag^wata* ‘morning’, *tūtū* ‘exactly’)

dawn, daylight

ḍēḍē N, V (= ‘be light’)

midday

siŋa-levu V (*siŋa* ‘day’, *levu* ‘big’)

late afternoon, evening

aviavi V

mid-afternoon

aviavi tūtū N (*aviavi* ‘afternoon’, *tūtū* ‘exactly’)

almost twilight

sī-aviavi ḍēḍē V (*sī-aviavi* ‘twilight’, *ḍēḍē* ‘be light’)

afternoon twilight

sī-aviavi V

just before dusk

karati-avi V

be almost dusk

mata boŋi

dusk

sī-aviavi karawa V (*sī-aviavi* ‘twilight’, *karawa* ‘blue-green’)**Niuean (Pn)**Note: *maŋa-aho*, *moŋo* ‘part of day’**night****pō N/V**

midnight

maŋa-aho tulotopō NP (*pō* ‘night’)**daylight****aho N**

morning

poŋi-poŋi N

dawn

maŋa-aho mahēŋiheŋi NP (*mahēŋiheŋi* ‘be twilight’)

sunrise

moŋo hake laā NP (*hake* ‘rise’, *laā* ‘sun’)

early morning

maŋa-aho kō moa NP (*kō* ‘crow’, *moa* ‘chicken’)

middle of the day

—

broad daylight

aho-teka NP (*aho* ‘daylight’, *-teka* ‘very’), *aho-tea*

midday

moŋo/maŋa-aho tūpou laā NP (*tūpou* ‘be directly above’, *laā* ‘sun’)

afternoon

moŋo/maŋa-aho pale laā NP (*pale* ‘turn’, *laā* ‘sun’)

late afternoon, evening

afi-afi N

sunset

moŋo/maŋa-aho tō laā NP (*tō* ‘fall’, *laā* ‘sun’)**2.2 The day and times of day: reconstructions**

A reconstructable taxonomy for POc is given below (the word-class labels are none too certain). The primary terms for ‘night’ and ‘daylight’ were evidently **boŋi* and **raqani*. No third-order terms are reconstructable.

night****boŋi N, V* ‘night, day of twenty-four hours’******rodrom V* ‘be dark, be night’******marom V* ‘be dark’**

daylight	*raqani N, V ‘daytime, daylight’ *qaco N ‘sun, daylight’ *sinaR N, V ‘shine, sun’
morning	*boŋi-boŋi N, ADV ‘early morning from dawn to perhaps about 10 a.m.’
middle of the day	—
late afternoon, evening	*Rapi N, *Rapi-Rapi ADV ‘late afternoon and evening, from about 3 p.m. to sunset’

Pawley (n.d.) notes an idiomatic construction in which at least some of these terms co-occurred with POC **panua* which, among other things, meant ‘the visible world, land and sky’ (vol. 1, p.62). The combination of **panua* and **boŋi*, probably as a verb, is reflected in:

Motu (PT)	<i>hanua-boi</i> ‘night’
Wayan, Bauan (Fij)	<i>boŋi na vanua</i> ‘be night’
Rotuman (Fij)	<i>hanua he poŋ</i> ‘it is getting late, night is coming on’
Rennellese (Pn)	<i>henua pō</i> ‘night time’

Presumably the combination meant something like ‘the world is becoming dark’. The expressions below reflect the same construction, with ‘night’ replaced by ‘daylight’:

Lau (SES)	<i>fanua sato</i> ‘sunny weather’ (< POC <i>*qaco</i>)
Wayan (Fij)	<i>siŋa na vanua</i> ‘be daylight’ (< POC <i>*sinaR</i>) <i>siŋa-levu na vanua</i> ‘be midday’ (<i>levu</i> ‘big’)
Rotuman (Fij)	<i>hanua ran</i> ‘daylight, dawn’ (< POC <i>*raqani</i>)

2.2.1 Night

POC **boŋi* ‘night’ also meant ‘day of twenty-four hours’, to judge from the widely scattered reflexes with this meaning (see below NNG: Manam, Poeng; MM: Tolai; SES: Gela, Lau; NCV: Tamambo, Nokuku, Uripiv, Port Sandwich, Lonwolwol; Mic: Kiribatese; Pn: Samoan, Tuvalu, Nanumean, Rennellese, Hawaiian, Marquesan). Blust (ACD) notes that PMP **beRŋi* is also reconstructable with both senses. The dual sense is not surprising: in European languages ‘day’ serves in the same way.

All Polynesian reflexes point back to PPn **pō* (for expected **poŋi*, which survived in **poŋi-poŋi* ‘be or become morning’ (p.16 and certain other expressions, e.g. Samoan *poŋi-sā* ‘be dark’ V., ADJ., ‘darkness’ N., *po-poŋi* ‘(night) be full’ V., ADJ.). Ross Clark (pers. comm.) attributes the replacement of **poŋi* by **pō* to back-formation from **poŋi-a* ‘be overcome by night’, via reanalysis as **po-ŋia*, with automatic lengthening of the new monosyllabic content word **po-* to bimoraic **pō*.

PMP **beRŋi* ‘night’ (ACD)

POC **boŋi* ‘night, day of twenty-four hours’

Adm: Mussau	<i>bo</i>	‘night’
	<i>bo-boŋi(ena)</i>	‘black’
Adm: Loniū	<i>peŋ</i>	‘night’

Adm:	Drehet	<i>piŋ</i>	‘night’
NNG:	Manam	<i>boŋ</i>	‘day, time’
NNG:	Gedaged	<i>boŋ(anip)</i>	‘at the end of night, tomorrow’
NNG:	Gitua	<i>boŋ</i>	‘last night’
NNG:	Yabem	<i>-be?</i>	‘be night’
NNG:	Mangga	<i>bus(in)</i>	‘night, day of twenty-four hours’
NNG:	Mapos Buang	<i>buk</i>	‘night, day of twenty-four hours’
NNG:	Poeng	<i>voŋ(a-lua)</i>	‘day after tomorrow’
SJ:	Sobei	<i>pani</i>	‘night’
SJ:	Kayupulau	<i>boni</i>	‘night’
PT:	Motu	<i>(hanua)boi</i>	‘night; till night’
PT:	Molima	<i>boi-boi</i>	‘night’
PT:	Dobu	<i>boi-boi</i>	‘night’
PT:	Bwaidoga	<i>boŋi</i>	‘night’
PT:	Kiriwina	<i>bogi</i>	‘night; darkness’
MM:	Tigak	<i>vuŋ</i>	‘night’
MM:	Notsi	<i>biŋ</i>	‘night’
MM:	Patpatar	<i>buŋ</i>	‘night’
MM:	Tolai	<i>buŋ</i>	‘a day, either of twelve or twenty-four hours’
MM:	Halia (Haku)	<i>buŋ</i>	‘night’
MM:	Mono-Alu	<i>boi</i>	‘night, day’
MM:	Simbo	<i>boŋi</i>	‘night’
SES:	Bugotu	<i>boŋi</i>	‘night’ (<i>ke boŋi</i> ‘by night, at night’)
SES:	Gela	<i>boŋi</i>	‘night’ (<i>te mboŋi</i> ‘by night’); a day, as a measure of time (<i>e rua na boŋi</i> ‘two days’); yesterday; the weather
SES:	Lau	<i>boŋi</i>	‘night; a day, in reckoning time’
SES:	Sa’a	<i>poŋi</i>	‘a time, a season’
		<i>poŋi-ku</i>	‘my appointed time’ (<i>-ku</i> ‘my’)
SES:	’Are’are	<i>poni</i>	‘evening, after sunset, night; an appointed day’
SES:	Arosi	<i>boŋi</i>	‘a night, last night’
NCV:	Mota	<i>p^woŋ</i>	‘night, darkness, to be dark’
NCV:	Raga	<i>boŋi</i>	‘night, darkness’
NCV:	Tamambo	<i>boŋi</i>	‘day of twenty-four hours’
NCV:	Nokuku	<i>pon</i>	‘night, day of twenty-four hours’
NCV:	Uripiv	<i>(na)boŋ</i>	‘day of twenty-four hours’
NCV:	Port Sandwich	<i>(na)boŋ</i>	‘day of twenty-four hours’
NCV:	Lonwolwol	<i>buŋ</i>	‘darkness, blackness; night; dark, black’
		<i>(wo)buŋ</i>	‘day of twenty-four hours’
NCV:	Paamese	<i>voŋi(ene)</i>	‘night’
NCV:	Lewo	<i>(yo)poŋi</i>	‘night’
		<i>poŋi</i>	‘time, period’
NCV:	Namakir	<i>(e)boŋ</i>	‘night’
NCV:	Nguna	<i>p^wōŋi</i>	‘night’

SV:	Lenakel	(<i>la</i>) <i>pən</i>	‘night, at night’
SV:	Kwamera	(<i>nə</i>) <i>pən</i>	‘night; a day of twenty-four hours’
SV:	Anejom	(<i>ne</i>) <i>peñ</i>	‘night’
Mic:	Kiribati	<i>boŋ</i>	‘night; a day of twenty-four hours, period, season’ ⁹
Mic:	Marshallese	<i>p^uoŋ^w</i>	‘night, last night’
Mic:	Ponapean	<i>p^wōŋ</i>	‘night’
		<i>p^woŋ</i>	‘numeral classifier used in counting nights’ (<i>p^woŋ sili-p^woŋ</i> ‘three nights’)
Mic:	Kosraean	<i>foŋ</i>	‘night’
Mic:	Chuukese	<i>p^wōŋ</i>	‘night’ (mostly in compounds)
Mic:	Puluwatese	<i>-p^woŋ</i>	‘counting classifier for nights’
		<i>p^wōŋ</i>	‘night; day of the month; be night’
Fij:	Rotuman	<i>poŋi</i>	‘night, night-time; be night or evening or late in the day’
Fij:	Wayan	<i>boŋi</i>	‘night’
PPn * <i>pō</i> ‘night, day of twenty-four hours’			
Pn:	Tongan	<i>pō</i>	‘night’
Pn:	Samoa	<i>pō</i>	‘night, day of twenty-four hours (especially in certain expressions), dark, blind’
Pn:	Tuvalu	<i>pō</i>	‘night, day of twenty-four hours’
Pn:	Nanumean	<i>pō</i>	‘night, day of twenty-four hours’
Pn:	Rennellese	<i>pō</i>	‘night, become night, day of twenty-four hours’
Pn:	Hawaiian	<i>pō</i>	‘night, formerly the period of twenty-four hours beginning at nightfall’ (the Hawaiian day began at nightfall)
Pn:	Maori	<i>pō</i>	‘night’
Pn:	Marquesan	<i>pō</i>	‘night; day of twenty-four hours’
Pn:	Rapanui	<i>pō</i>	‘night’

The reflexes from Huon Gulf languages (NNG: Yabem, Mangga, Mapos Buang) all reflect a verb Proto Huon Gulf **bok*(-) ‘be night’ (Mangga *bus(in)* is a nominalisation): I am assuming that this is an irregular reflex of **boŋi*. There are other fragments of evidence above (Puluwatese, Rotuman, Rennellese) that POc **boŋi* also served as a verb ‘be/become night’.

The word for ‘night’ in a number of Oceanic languages reflects POc **rodrom*. It is reasonably evident, however, that this term meant ‘be dark’, and did not in POc refer to a period of time.

⁹ Each of the two seasons which make up the Gilbertese year, *Nei Auti* (Pleiades) and *Rim^wimāta* (Antares) is divided into eight shorter periods called *boŋ*, each separately named (see Grimbale 1931:201).

PMP **dem-dem* ‘be dark’¹⁰POc **rodrom* ‘be dark, be night’ (Blust 1984)

NNG:	Kis	<i>doma</i>	‘night’
NNG:	Terebu	<i>(bu)lom</i>	‘night’
MM:	Bola	<i>rodo</i>	‘night’
MM:	Nakanai	<i>logo</i>	‘night’ (regular reflex)
MM:	Meramera	<i>na-lodo</i>	‘night’
MM:	Barok	<i>dom(on)</i>	‘night’
SES:	Talise	<i>rodo</i>	‘night’
SES:	Lau	<i>rodo</i>	‘night’
		<i>ro-rodo(a)</i>	‘dark, dark in color’
SES:	‘Are’are	<i>roto</i>	‘be dark, night; night darkness’
SES:	Sa’a	<i>roto</i>	‘night’
SES:	Arosi	<i>rodo</i>	‘dark, black, night’
NCV:	Raga	<i>dodo</i>	‘rain cloud’
NCV:	NE Ambae	<i>dodo</i>	‘be dark; dark cloud’
NCV:	Tamambo	<i>dodo</i>	‘night’
Mic:	Kiribati	<i>roro</i>	‘black, dark color’
Mic:	Kosraean	<i>lɔʃ</i>	‘dark’
Mic:	Mokilese	<i>ros</i>	‘dark’
Mic:	Ponapean	<i>roç</i>	‘dark’
Mic:	Puluwatese	<i>rōr</i>	‘dark’
Mic:	Carolinian	<i>roʃ</i>	‘dark’
Pn:	Tongan	<i>lōlō</i>	‘absolutely dark, pitch dark’
Pn:	Samoaan	<i>lōlō</i>	‘absolutely dark, pitch dark’
Pn:	Marquesan	<i>lōlō</i>	‘absolutely dark, pitch dark’

The two sets below probably do not reflect POc **rodrom*. Rather, **rodrom* and the sets below all reflect a PAN monosyllabic root **-dem* (see vol. 1, pp.24–25, 27–28). That is, several items reflecting this root were separately inherited into POc.

PMP **ma-edem* ‘be dark’ (ACD: ‘Proto Western Malayo-Polynesian’ **ma-edem* ‘overcast, dull lustre’)

POc **marom* ‘be dark’

NNG:	Wampur	<i>maroʔ</i>	‘night’
MM:	Minigir	<i>marumu</i>	‘night’
MM:	Tolai	<i>marum</i>	‘night’
MM:	Ramoaaina	<i>marum</i>	‘night’
MM:	Kandas	<i>mirun</i>	‘night’
MM:	Bilur	<i>morom</i>	‘night’

¹⁰ Reconstructed on the basis of Proto Minahasan **dm̥dm̥* ‘dark’ (Sneddon 1978) and the Oceanic reflexes shown here.

2.2.2 Daytime

The POc term which specifically denoted daylight was **raqani*, reconstructed in Chapter 6 (p.161), to which the reader is referred for further detail.

PAn **daqani* ‘day’ (ACD)

POc **raqani* ‘daytime, daylight’

Adm:	Nauna	<i>lin</i>	‘day’
Adm:	Ponam	<i>ran</i>	‘day’
NNG:	Yabem	<i>-leŋ</i>	‘be daytime’
PT:	Kiriwina	<i>yam</i>	‘daytime’
PT:	Sinaugoro	<i>layani</i>	‘daytime’
PT:	Motu	<i>rani</i>	‘daytime’
MM:	Nalik	<i>ran</i>	‘daytime’
MM:	Haku	<i>lan</i>	‘daytime’
MM:	Uruava	<i>rani</i>	‘daytime’
MM:	Roviana	<i>rane</i>	‘day’
MM:	Maringe	<i>na-rane</i>	‘day’
SES:	Bugotu	<i>dani</i>	‘morning, daylight’
SES:	Kwaio	<i>dani</i>	‘day’
SES:	‘Are’are	<i>tani</i>	‘daylight’
NCV:	Mota	<i>(ma)ran</i>	‘light, daylight, morning, day; be light; tomorrow’s light; the morrow’
NCV:	Tamambo	<i>rani</i>	‘daylight’
NCV:	Paamese	<i>lani</i>	‘daybreak’
SV:	Lenakel	<i>n-ian</i>	‘day’
SV:	Kwamera	<i>ia-ran</i>	‘day’
Mic:	Marshallese	<i>r^uān</i>	‘day, date’
Mic:	Ponapean	<i>rān</i>	‘day’

The primary meaning of POc **qaco* was ‘sun’, but it was also used for ‘daylight, daytime’. Indeed, in Polynesia reflexes of POC **qaco* are restricted to the sense of ‘period of a day, daylight’ and do not refer directly to the sun. This item, along with **sinaR* ‘shine, sun’, is also reconstructed in Chapter 6 (p.160), where more detail is provided.

PAn **qajaw*, **qalejaw* ‘sun, daylight’ (ACD)¹¹

POc **qaco* ‘sun, daytime’

Adm:	Ponam	<i>al</i>	‘sun’
Adm:	Mondropolon	<i>al</i>	‘sun’
NNG:	Bariai	<i>ado</i>	‘day, sun’
NNG:	Takia	<i>ad</i>	‘sun’
		<i>ad-ad</i>	‘daytime’
NNG:	Kaiwa	<i>as</i>	‘daytime’

¹¹ Blust (ACD) glosses this ‘day’, but the gloss given here appears more consonant with the data.

PT:	Molima	<i>ʔasu</i>	‘sun’
MM:	Nakanai	<i>haro</i>	‘sun, day’
MM:	Tigak	<i>ias</i>	‘sun’
MM:	Nalik	<i>ias</i>	‘sun’
SES:	Bugotu	<i>aho</i>	‘sun’
SES:	Gela	<i>aho</i>	‘sun; good weather; put in the sun; experience good weather’
SES:	Sa’a	<i>sato</i>	‘sun, sunshine, fine weather’
NCV:	Mota	<i>loa</i>	‘sun’
NCV:	Namakura	<i>ʔal</i>	‘sun’
Mic:	Marshallese	<i>al^u</i>	‘sun’
Mic:	Woleaian	<i>yaro</i>	‘sun’
Mic:	Puluwatese	<i>yælet</i>	‘sun’
Pn:	Tongan	<i>ʔaho</i>	‘day’
Pn:	Samoa	<i>aso</i>	‘day’
Pn:	Tuvalu	<i>aho</i>	‘day (as time span)’
Pn:	Tikopia	<i>aso</i>	‘day (as time span)’

PMP **sinaR* ‘ray of light’ (Dempwolff 1938)

POc **sinaR* ‘shine, sun’

Adm:	Mussau	<i>sinaka</i>	‘sun’
Adm:	Lou	<i>sinsin</i>	‘sun’
PT:	Motu	<i>dina</i>	‘sun; day’
MM:	Lavongai	<i>sinaj</i>	‘sun; (sun) shine’
MM:	Tigak	<i>sinjan</i>	‘(sun) shine’ (metathesis)
SES:	Lau	<i>sina</i>	‘shine, give light’
SES:	’Are’are	<i>sina</i>	‘shine, brighten; light, brightness’
SES:	Sa’a	<i>sineli</i>	‘shine’
NCV:	Mota	<i>siŋa</i>	‘shine’
Mic:	Chuukese	<i>ttira</i>	‘shine, ray, brightness, beam’
Mic:	Puluwatese	<i>tin</i>	‘shine, as the sun’
Fij:	Rotuman	<i>sina</i>	‘light, lamp, star’
Fij:	Wayan	<i>siŋa</i>	‘day, daylight, sun’
Fij:	Bauan	<i>ðina</i>	‘lamp, torch’

2.2.3 *Early morning: from dawn to 9 or 10 a.m.*

The POc term for the first few hours of daylight was **boŋi-boŋi*, self-evidently a reduplicated form of POc **boŋi* ‘night’.

POc **boŋi-boŋi* ‘early morning from dawn to 9 or 10 a.m.’

PT:	Gapapaiwa	<i>boi-boi</i>	‘morning; from sunrise to about 10 a.m.’
PT:	Dawawa	<i>boi-boi</i>	‘morning, tomorrow’
PT:	Sinaugoro	<i>boyi-boyi</i>	‘morning’
MM:	Sursurunga	<i>(kə)buŋ-buŋ</i>	‘morning’
MM:	Mono-Alu	<i>boi-boi(uana)</i>	‘in the morning (early?)’

SES:	Talise	<i>boŋi-boŋi</i>	‘morning’
SES:	Birao	<i>(bo)boŋi(hana)</i>	‘morning’
SES:	Lau	<i>bo-boŋi</i>	‘tomorrow’
SV:	SW Tanna	<i>(ie)n-pəŋe-n-pəŋ</i>	‘morning’
SV:	Kwamera	<i>nə-pnə-pən</i>	‘morning’
Mic:	Kiribati	<i>boŋi-boŋ</i>	‘twilight’

PPn **poŋi-poŋi* ‘(N, V) morning’

Pn:	Tongan	<i>poŋi-poŋi</i>	‘be or become morning; by morning, early in the day’
Pn:	Niuean	<i>poŋi-poŋi</i>	‘tomorrow, this morning’
Pn:	E Uvean	<i>poŋi-poŋi</i>	‘morning’
Pn:	Samoa	<i>poŋi-poŋi</i>	‘be dusky, twilight’
Pn:	Tikopia	<i>poŋi-poŋi</i>	‘morning’
Pn:	Nanumean	<i>poŋi-poŋi</i>	‘morning (6–8 a.m.)’
Pn:	Tuvalu	<i>poŋi-poŋi</i>	‘morning (6–8 a.m.)’
Pn:	Anutan	<i>poŋi-poŋi</i>	‘morning (5–11 a.m.)’

Interestingly, terms for ‘early morning’ in some Oceanic languages that do not reflect **boŋi-boŋi* nonetheless include that language’s root for ‘night’:

	night	early morning
Drehet (Adm)	<i>piŋ</i>	<i>kxe-piŋ</i>
Lou (Adm)	<i>keli-peŋ</i>	<i>pati-peŋ</i>
Loniu (Adm)	<i>peŋ</i>	<i>ma-peŋ</i>
Bing (NNG)	<i>boŋan</i> ‘last night’	<i>boŋ-sag</i> (<i>sag</i> ‘only’)
Takia (NNG)	<i>tidom</i>	<i>tidom-lom</i> (<i>lo</i> ‘in’, <i>mi</i> ‘only’)
Mapos Buang (NNG)	<i>buk</i>	<i>mon-buk</i>
Kiriwina (PT)	<i>bogi</i>	<i>ga-bogi</i>
Marshallese (Mic)	<i>p^woŋ</i>	<i>cip-p^woŋ</i> (<i>cip</i> ‘rise’)

POc **puko* ‘morning’ is only distributed over a certain area of Oceania—from New Britain to central Vanuatu—but this is enough to meet our criteria for POc reconstruction. To judge from the verbal morphology that occurs on a number of reflexes, **puko* often occurred as a verb. Unfortunately none of the reflexes occurs with a gloss which would confirm that this referred to the same time period as POc **boŋi-boŋi* ‘early morning’.

POc **puko* ‘(N, V) morning’

MM:	Bilur	<i>(la)puko</i>	‘tomorrow’
MM:	Lungga	<i>vuka</i>	‘tomorrow’
		<i>vu-vuye(i)</i>	‘morning’
MM:	Nduke	<i>vuye</i>	‘tomorrow’
MM:	Roviana	<i>vuyo</i>	‘tomorrow’
MM:	Vangunu	<i>(pana)vuho</i>	‘tomorrow’
MM:	Kia	<i>(fu)fuyo</i>	‘morning’
		<i>fuyo</i>	‘tomorrow’

MM:	Kokota	(fu)fu	‘tomorrow’
		fugo(nare)	‘morning’
SES:	Bugotu	vuo-vuʔo(i)	‘morning’
SES:	Oroha	hoʔo(a)	‘morning’
SES:	Sa’a	(ma-hu)huʔo	‘morning’
SES:	Arosi	(hā)hoʔo(a)	‘morning’
SES:	Fagani	(tei)hoyo(a)	‘morning’
SES:	Bauro	(ma)hoyo	‘morning’
SES:	Kahua	(haya)hoyo	‘morning’
NCV:	Raga	(vai)go-ugo	‘tomorrow’
NCV:	Tamambo	(a)vuho	‘tomorrow’
NCV:	Tangoa	vuho	‘tomorrow’
NCV:	Uripiv	(me)vi	‘tomorrow’
NCV:	Burmbar	(ma)vuk	‘morning’
NCV:	Labo	(mitu) ^m buko	‘morning’

2.2.4 Middle of the day: from 9 or 10 a.m. to about 3 p.m.

Outside Polynesia, very few languages have a dedicated word for this part of the day, and those that do show no sign of cognation. Most languages have a phrasal expression, sometimes meaning ‘the middle of the day’:

Loniu (Adm)	<i>tiko an</i> (<i>tiko</i> ‘middle’, <i>an</i> ‘day, sun’)
Gapapaiwa (PT)	<i>madeya pu</i> (<i>madeya</i> ‘daylight’, <i>pu</i> ‘middle’)
Roviana (MM)	<i>korapa rane</i> (<i>korapa</i> ‘middle’, <i>rane</i> ‘daylight’)
Gela (SES)	<i>kutu ni dani</i> (<i>kutu</i> ‘stomach, womb’, <i>dani</i> ‘daytime’)

Others have a noun phrase whose head is ‘sun, daylight’, modified by ‘big’ or ‘good’:

Takia (NNG)	<i>ad uyan, adian</i> (<i>ad</i> ‘sun’, <i>uyan</i> ‘good’)
Gela (SES)	<i>dani-kama</i> (<i>dani</i> ‘daylight’, <i>kama</i> ‘big’)
Wayan (Fij)	<i>siŋa-levu</i> (<i>siŋa</i> ‘day’, <i>levu</i> ‘big’)

Biggs and Clark (1993) reconstruct PPn **qaho-atea* ‘late morning and early afternoon’, from PPn **qaho* ‘daylight’ and **qātea* ‘clear, unobstructed’. The addition of Anejom reflexes raises the reconstruction to PROc **qaso-qatea* (Lynch pers. comm.).

PROc **qaso-qatea* ‘late morning and early afternoon’¹²

SV:	Anejom	<i>afiat</i>	‘become day’
		<i>n-afiat</i>	‘day, daytime’
		<i>n-afiat-iat</i>	‘midday’
Pn:	Niuean	<i>ahotea</i>	‘broad daylight’
Pn:	Samoan	<i>aoatea</i>	‘midday’

¹² Tongan *ʔahoʔataa* ‘at noon today’ seems at first sight to belong here, but, as Churchward (1959) shows, it reflects a probably unrelated base *-hoʔatā*.

Pn:	Anutan	<i>avatea</i>	‘midday’
Pn:	Tikopia	<i>avatea</i>	‘midday’
Pn:	Rennellese	<i>ʔaoʔatea</i>	(N, V) ‘(be) early afternoon’
Pn:	Hawaiian	<i>awakea</i>	‘noon’
Pn:	Maori	<i>awatea</i>	‘broad daylight’
Pn:	Rarotongan	<i>avatea</i>	‘forenoon nine to twelve’
Pn:	Tahitian	<i>avatea</i>	‘late morning to early afternoon’

2.2.5 Late afternoon and evening, from about 3 p.m. to sunset

Just one term is reconstructable for this period of the day, POc **Rapi*.

PAn **Rabi* ‘evening’ (Dempwolff 1938, ACD)

POc **Rapi*, **Rapi-Rapi* ‘(N, V) late afternoon and evening, from about 3 p.m. to sunset’

Adm:	Mussau	<i>(eloa)lai</i>	‘evening’
Adm:	Nyindrou	<i>(be)yeh</i>	‘afternoon’
NNG:	Tuam	<i>rav-rav</i>	‘evening’
NNG:	Lukep (Pono)	<i>rai</i>	(N) ‘afternoon from about 2 p.m. to darkness’
NNG:	Sio	<i>la-la</i>	‘afternoon’
NNG:	Tami	<i>la-la</i>	‘evening’
NNG:	Takia	<i>(g)rai(an)</i>	‘evening’
NNG:	Kela	<i>(guru)rap</i>	‘evening’
NNG:	Sukurum	<i>(fi)raf</i>	‘evening’
NNG:	Manam	<i>rai-rai</i>	‘evening’
PT:	Kiriwina	<i>kwayavi</i>	‘evening’
PT:	Gapapaiwa	<i>ravi</i>	(ADV) ‘afternoon; evening, from about 3 to 7 p.m.’
PT:	Gumawana	<i>lavi-lavi</i>	(ADV) ‘evening/late afternoon’
PT:	Iduna	<i>lavi-lavi</i>	‘afternoon’
PT:	Sinaugoro	<i>lavi-lavi</i>	(N) ‘afternoon’
PT:	Motu	<i>(ado)rahi</i>	(N) ‘late afternoon/evening’ (<i>ado</i> ‘sun’ [not used independently])
MM:	Bali	<i>(ga)ravi</i>	‘evening’
MM:	Meramera	<i>lavi-lavi</i>	‘evening’
MM:	Kara (East)	<i>(la)iaf</i>	‘evening’
MM:	Lihir	<i>(le)leh</i>	‘evening’
MM:	Sursurunga	<i>rah-rah</i>	(N) ‘afternoon
MM:	Label	<i>rah</i>	‘evening’
MM:	Ramoaina	<i>(malu)rap</i>	(V) ‘evening’
MM:	Tolai	<i>ravi(an)</i>	‘afternoon, evening’
MM:	Siar	<i>raf</i>	‘evening’
MM:	Taiof	<i>(tou)raf</i>	‘evening’
MM:	Banoni	<i>(nē)navi</i>	‘evening’
MM:	Torau	<i>rai</i>	‘evening’
MM:	Maringe	<i>grafi</i>	‘evening’

SES:	Gela	(<i>nu</i>) <i>lavi</i>	‘evening’
SES:	Longgu	(<i>zao</i>) <i>lavi</i>	(N) ‘evening’
SES:	Lau	(<i>sau</i>) <i>lafi</i>	‘evening’
SES:	Kwaio	(<i>lau</i>) <i>lafi</i>	‘late afternoon’
SES:	Sa’a	(<i>sau</i>) <i>lehi</i>	‘evening, dusk, from 4 p.m. to dark’
NCV:	Mota	<i>rav-rav</i>	‘evening, the dusk of evening’
NCV:	Raga	<i>rav-ravi</i>	‘late’
		(<i>ute</i>) <i>rav-ravi</i>	‘evening’
NCV:	Tamambo	<i>ravi-ravi</i>	‘late afternoon/evening’
NCV:	Uripiv	<i>riv-riv</i>	‘afternoon’
NCV:	Paamese	(<i>medī</i>) <i>lahi</i>	‘afternoon, evening’
NCV:	Namakir	<i>d(a)ravi(h)</i>	‘evening’
SV:	Sye	(<i>p^wa</i>) <i>rap</i>	‘evening’
		(<i>a</i>) <i>rap</i>	‘begin to get dark in late afternoon’
SV:	Anejom	(<i>injup-u</i>) <i>ra</i>	‘evening’
NCal:	Nemi	(<i>bate</i>) <i>ap</i>	‘evening’
Fij:	Wayan	<i>avi-avi</i>	‘late afternoon/evening’
Pn:	Tongan	<i>afi-afi</i>	‘evening’
Pn:	Samoa	<i>afi-afi</i>	‘evening’
Pn:	Niuean	<i>afi-afi</i>	‘late afternoon/evening’
Pn:	Hawaiian	<i>ahi-ahi</i>	‘late afternoon, evening’

There are also Micronesian reflexes. These are not listed above because they show hefty phonological reduction. The Proto Micronesian term was **faka-afi*, reflecting a combination of the POc prefix **paka-* (which among other things derived adverbs) and POc **Rapi*, reconstructed above.

Proto Micronesian **fakāfi* ‘evening, in the evening’

Mic:	Mortlockese	(<i>lɛ</i>) <i>fāf</i>	‘evening’
Mic:	Chuukese	<i>fāf</i>	‘evening meal, main meal’
Mic:	Puluwatese	(<i>lē</i>) <i>fāf</i>	‘evening meal’
Mic:	Carolinian	(<i>lē</i>) <i>fāf</i>	‘evening, dusk’
Mic:	Woleaian	<i>fexāfi</i>	‘last night’

2.2.6 *Third-order terms for parts of the day*

I have not been able to reconstruct any third-order terms for parts of the day. As the taxonomies above (pp.301–304) show, in modern Oceanic languages parts of the day smaller than ‘night’, ‘early morning’ and ‘late afternoon/evening’ are usually described by phrasal expressions. The only generalisation to be made is an obvious one—that ‘sunrise’ and ‘sunset’ are denoted by expressions meaning ‘the sun rises’ and ‘the sun sets’. Among the verbs for ‘rise’ and ‘set’ here were almost certainly **sake* and **sipo* respectively (see Ch. 6, pp.181–182 and Ch. 8, pp.271, 273).

2.3 The moon and its phases

POc **pulan* ‘moon’ also meant ‘month’. The reconstruction here is repeated from Chapter 6 (p.164).

PAn **bulaN* ‘moon, month, menstruation’ (ACD)

PMP **bulan* ‘moon, month; menstruation’ (Dempwolff 1938)

POc **pulan* ‘moon, month’ (ACD)

Adm:	Lou	<i>pulan</i>	‘moon’
Adm:	Mussau	<i>ulana</i>	‘moon’
PT:	Motu	<i>hua</i>	‘moon, month’
MM:	Tigak	<i>ulan</i>	‘moon’
SES:	Bugotu	<i>vula</i>	‘moon, month’
SES:	Lau	<i>fula</i>	‘the moon (but only in naming a month)’
SES:	Kwaio	<i>fula</i>	‘moon (mainly in compounds)’
SES:	Sa’a	<i>hule</i>	‘phases of the moon; full moon’
		<i>hule i lade</i>	‘name of a month, July’
SES:	Arosi	<i>hura</i>	‘moon, month’
NCV:	Mota	<i>vula</i>	‘moon, month, season marked by moon’
Fij:	Bauan	<i>vula</i>	‘moon, month’

As a verb, POc **sinaR* ‘sun, shine’ (Ch. 6, p.163; above, p.310) has given rise to a number of Polynesian terms which, with the addition of the stativising prefix *mā-* (Ch. 6, p.164), refer to the moon:

PPn **mā-sina* ‘moon, month’

Pn:	Rennellese	<i>māsina</i>
Pn:	Tongan	<i>māhina</i>
Pn:	Samoa	<i>māsina</i>
Pn:	E Futunan	<i>māsina</i>
Pn:	E Uvean	<i>māhina</i>
Pn:	Maori	<i>māhina</i>

Phases of the moon are probably named in every Oceanic language. However, there are differences in how many phases are named. In most languages for which information is available, the month seems to begin with the appearance of the narrowest crescent moon after the three days of darkness. In western astronomical terminology, the ‘new moon’ refers to the days of darkness, but in many of the sources terms glossed ‘new moon’ appear to denote the first appearance after the days of darkness.¹³ Minimal systems have terms glossed ‘new moon’ in the latter sense, for the first quarter (half-moon, roughly 7th day), the full moon (roughly 15th day), the last quarter (half-moon, roughly 22nd day) and the period of darkness. However, it is clear that in some systems these terms may denote a period of two or more nights, whilst in others the sources do not allow us to determine whether they are used for more than a single night. There are also numerous confusions in the English glosses of moon phase terms. Some of these simply reflect the mismatch

¹³ ‘New moon’ is also used in this sense in everyday English.

between 24-hour days and the lunar month of 29.53 days, so that phases do not exactly match days. Others are the result of different uses of terms and perhaps from failures to recognise that phases recognised by Oceanic speakers do not match with those recognised by westerners.

Maximal systems, like those found in Micronesia and in Central Eastern Polynesian languages, have thirty names, one for each day of a lunar month.¹⁴ Between the minimal and the maximal systems are systems that divide the month into phases of two or three nights each (e.g. Sa'a as reported by Ivens 1927, 1929). Some Oceanic communities, like Mwotlap (NCV), seem to divide the lunar month into phases based on sixths rather than quarters. That is, they have terms for the new moon and (roughly) the 5th, 10th, 15th, 20th and 25th days (François 2001). From White, Kokhonigita and Pulomana's (1988) dictionary definitions it seems that Maringe may also be such a language. Kiriwina apparently names days only from the 10th to the 20th day. The Lamotrek days, as listed by Christian (1899) are divided into two sections of respectively ten and twenty days.

Proto Micronesian and Proto Central-Eastern Polynesian sets of day names could probably be reconstructed, but the two sets would not be cognate and, unlike the month names, it is not possible to attribute literal meanings to most of their members (although some of the Polynesian sets apparently name supernatural beings). Hence for POc purposes there is little point in reconstructing them. In fact, there is not a great deal that can be reconstructed of the way that POc speakers talked about moon phases.

The first phase is strictly speaking the days of darkness. Interestingly, the sources vary as to how many of these there are, and Grimble (1931) claims that the Kiribati did not know.

The denotation of the first visible phase often makes reference to the moon's thin crescent shape. A number of languages compare it to a crescent-shaped pearlshell ornament, and it is possible that this image was also used in POc. Such artefacts have not appeared in the archaeological record, but they are fairly common ethnographically and a term for them, POc **japi* was reconstructed in vol. 1 (p.104). It is reflected in the Arosi term below.

PT:	Motu	<i>hua doyayi</i>	'new moon' (<i>doyayi</i> 'crescent shaped pearl shell ornament')
MM:	Nakanai	<i>mapa-le-Gileme</i>	'moon when it is small' (lit. 'payment for Gileme': the reference is to a goldlip shell used in brideprice)
		<i>kalisu</i>	'noseplug of mother-of pearl; new moon'
SES:	Arosi	<i>si?e-dahi</i>	'a phase of the moon' (<i>si?e</i> 'rub fire' or 'stripes', <i>dahi</i> 'crescent shaped ornament made from gold-lipped pearlshell')

Other descriptive terms also occur:

¹⁴ Sources listing days of the moon's age are Christian (1899:387–395) for Yapese, Ponapean, Lamotrek, Mortlockese and Woleaian, Jackson and Marck (1991) for Carolinian, Lee (1976) for Kosraean, Tregear (n.d.) for Hawai'ian, Tahitian, Marquesan, Rarotongan, Māori and Moriori, Stimson (1928) for Tahitian, Williams (1928) for Hawai'ian, Mangareva, Tahitian, Marquesan, Rarotongan, and Māori.

PT:	Kiriwina	<i>kapatu</i>	‘new moon’ (- <i>kapatu</i> ‘close, become small’)
SES:	Gela	<i>rau ni lei</i>	‘thin sickle of young moon, new moon’ (‘blade of grass, <i>Imperata cylindrica</i> ’)
		<i>vula taŋeu</i>	‘crescent moon’ (<i>vula</i> ‘moon’, <i>taŋeu</i> ‘split’)
Fij:	Wayan	<i>tāgaga ni vula</i>	‘horns of the moon’ (<i>tāgaga</i> ‘forked top piece of mast of traditional canoe’)

Other languages refer to what was apparently the same phase as ‘the young moon’, and here a reconstruction is perhaps possible: POc **pulan paqoRu*, where **pulan* is ‘moon’ (p.315) and **paqoRu* is ‘new, young’ (Ch. 7, p.210). Note, however, that I have also treated terms in which lexical replacement has occurred as reflexes of this item.

POc **pulan paqoRu* ‘new moon, young moon’

MM:	Roviana	<i>sidara vaqura</i>	‘new moon’ (<i>sidara</i> ‘moon’, <i>vaqura</i> ‘new, young’)
NCV:	Mwotlap	<i>no-wol wehey</i>	‘new moon’ (<i>no</i> ART, <i>wol</i> ‘moon’, <i>wehey</i> ‘new, young’)
SV:	Lenakel	<i>mouk vi</i>	‘new moon’ (<i>mouk</i> ‘moon’, <i>vi</i> ‘new’)
Fij:	Wayan	<i>vula vou</i>	‘new moon’ (<i>vula</i> ‘moon’, <i>vou</i> ‘new’)
Pn:	Tongan	<i>māhina foʻou</i>	‘new moon’ (<i>māhina</i> ‘moon’, <i>foʻou</i> ‘new’)
Pn:	Niuean	<i>mahina pula fōu</i>	‘new moon’ (<i>mahina</i> ‘moon’, <i>pula</i> ‘rise’, <i>fōu</i> ‘new’)

Some languages have a term which means, literally, ‘unripe moon’. This evidently refers to a phase between the new moon and the full moon, but exactly what part of the waxing half of the month it denotes is not clear.

PT:	Kiriwina	<i>tubukona tubu-geguda</i>	‘first quarter’ (<i>tubukona</i> ‘moon’, <i>tubu</i> ‘grow’, <i>geguda</i> ‘unripe’)
PT:	Motu	<i>hua karukaru</i>	‘young moon’ (<i>hua</i> ‘moon’, <i>karukaru</i> ‘undercooked, not fully ripe’)
Pn:	Niuean	<i>mahina pula mui</i>	‘new moon, first quarter’ (<i>mahina</i> ‘moon’, <i>pula</i> ‘rise’, <i>mui</i> ‘unripe’)

Mwotlap, where we know with reasonable certainty that the moon phases are roughly of five days apiece, has a term meaning ‘a piece of the moon’, which refers roughly to the 5th day after the moon’s appearance (whereas ‘the unripe moon’ seems to refer roughly to the 7th). One other language, Drehet, has a similar term:

Adm:	Drehet	<i>pun rekkex</i>	moon phases: 1st and 3rd quarters (<i>pun</i> ‘moon’, <i>rekkex</i> ‘a quarter, a piece’)
NCV:	Mwotlap	<i>no-wol yayte-yi</i>	‘one-third moon’ (<i>wol</i> ‘moon’, <i>yayte</i> ‘half, piece’)

Maringe has a term with an apparently similar meaning to Mwotlap:

MM:	Maringe	<i>k^hafa</i>	‘moon between new and half moon’
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Curiously, this is about as far as we can go with reconstructing POc moon phases. Many languages have a term which is glossed in English as ‘half moon’, but I have found none that are cognate with each other, and none that agree on the metaphor they use. Every

language has a term for the full moon, but, again, I find no cognates and no agreement on metaphor. A good many languages also have terms for the night (or two nights) immediately before and/or immediately after the full moon.

2.4 The year and its seasons

Probably the main seasons for POc speakers living in northwest Melanesia were meteorological: the dry, when the southeast trades blew with reasonable consistency, and the wet, when there were sporadic northwesterly winds. The POc terms for these were respectively **raki* and **apaRat*, which seem to have referred centrally to the seasons, with typical weather and wind direction as inevitable components of their meanings. More details are given in Chapter 5, §4.2, whence the reconstructions below are repeated.

POc **raki* ‘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:	Gitua	<i>rak</i>	‘southeast trade’
NNG:	Mangap	<i>rak-rak</i>	‘fresh morning (during windy season)’
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’
MM:	Tigak	<i>rei</i>	‘wind’
NCV:	Lewo	<i>lagi(pesoi)</i>	‘east wind’
Mic:	Marshallese	<i>ṛ^{uu}ak</i>	‘south, summer’
Mic:	Ponapean	<i>rāk</i>	‘breadfruit season, season of plenty’
Fij:	Wayan	<i>draki</i>	‘weather’
Fij:	Bauan	<i>draki</i>	‘weather’
Pn:	Niuean	<i>laki</i>	‘west’
Pn:	Tongan	<i>lak(oifie)</i>	‘fair, fine weather’
Pn:	E Uvean	<i>laki</i>	‘southeast or southwest wind’
Pn:	Pukapukan	<i>laki</i>	‘southwest wind’
Pn:	Samoaan	<i>laʔi</i>	‘southwest veering to northwest’
Pn:	Hawaiian	<i>laʔi</i>	‘calm, stillness, quiet, as of sea, sky, wind’

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

Adm:	Mussau	<i>apae</i>	‘strong wind, storm wind’
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:	Kove	<i>awaha</i>	‘rain’
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:	Iduna	<i>yavalata</i>	‘rains with wind from the northwest in February and March’
PT:	Tawala	<i>yawalata</i>	‘light rain from southwest during dry season’
PT:	Motu	<i>lahara</i>	‘northwest wind and season’
MM:	Bali	<i>vurata</i>	‘northwest wind’
MM:	Nakanai	<i>le-avala</i>	‘year, wet season’
MM:	Kara (East)	<i>yefet</i>	‘wet season’
MM:	Barok	<i>awat</i>	‘year’
MM:	Siar	<i>yahrat</i>	‘year’
MM:	Tinputz	<i>ivat</i>	‘strong wind’
Fij:	Wayan	<i>ḍavā</i>	‘storm, strong wind bringing rain’
Pn:	Tongan	<i>afā</i>	‘hurricane, gale or very severe storm’
Pn:	Samoa	<i>afā</i>	‘storm, hurricane.’

The terms I have reconstructed above refer to wind directions and to seasons. A further development is that one of the seasonal terms comes to mean ‘year’ (perhaps something like ‘the annual round’ would be more accurate). Reflexes of both POc **raki* ‘dry season’ and POc **apaRat* which are used in this way are listed below, but local seasonal/wind terms also tend to be used in this way.

NNG:	Kove	<i>hai</i>	‘southeast trade, year’
NNG:	Bariai	<i>rai</i>	‘year’
NNG:	Lukep	<i>rai</i>	‘year’
Mic:	Woleaian	<i>zaxi</i>	‘year, age, summer season’
MM:	Barok	<i>awat</i>	‘year’
MM:	Siar	<i>yahrat</i>	‘year’

In Ross (1995a) I wrote, ‘There is ... no doubt that POc had a separate (and widely reflected) word for year’, and followed it with the reconstruction of POc **taqun* below. This statement stands, but with a qualification. The Buang, Tongan and East Futunan reflexes indicate that **taqun* may have been used particularly to denote the yam-growing cycle. This would not be surprising: the greater yam, *Dioscorea alata* (POc **qupi*; Ross 1996c) is a highly prized—but not especially nutritious—crop throughout much of Oceania, with much ritual associated with its growth cycle, and so it is a highly salient marker of a year. It is likely that that it already had the meaning ‘yam season cycle’ in POc times.

PMP **taqun* ‘period of a year’ (Dempwolff 1938)

POc **taqun* ‘period of a year, yam season cycle (?), any cyclic period’

NNG:	Bariai	<i>taun</i>	‘the time when ...’
NNG:	Buang	<i>ta</i>	‘year; a complete cycle of yam growing’
NNG:	Ulaui-Suain	<i>taun</i>	‘year’
MM:	Bola	<i>tahu(na)</i>	‘the time when ...’
MM:	Sursurunga	<i>taul</i>	‘season’

MM:	Patpatar	<i>t<in>ahon, t<in>ohon</i>	‘year’ (<in> marks a nominalisation: vol. 1. p.33)
MM:	Ramoaaaina	<i>t<in>əwon</i>	‘year’ (<in> marks a nominalisation: vol. 1. p.33)
NCV:	Mota	<i>tau</i>	‘season’
NCV:	Nguna	<i>(na)tau</i>	‘year’
Mic:	Kiribati	<i>tai</i>	‘time, season, harvest’
Mic:	Chuukese	<i>sowu-</i>	‘time, season’ (in compounds)
Pn:	Tongan	<i>taʔu</i>	‘yam season cycle, year’
Pn:	E Futunan	<i>taʔu</i>	‘yam season’
Pn:	Samoaan	<i>tau</i>	‘season, year’
Pn:	Rennellese	<i>taʔu</i> <i>taʔu ika</i>	‘season’ ‘fish season (late July to early January)’ (<i>ika</i> ‘fish’)
Pn:	Tuvalu	<i>tau(naŋa)</i>	‘year’
Pn:	Rapanui	<i>taʔu</i>	‘year’
Pn:	Anutan	<i>tau</i>	‘year’
Pn:	Mangareva	<i>tau</i>	‘season, year’

Newell and Poligon (1993:486) define Batad Ifugao (Central Cordilleran, Philippines) *tawon* as follows: ‘a measure of the time between a major event such as planting or harvesting rice until it recurs. Traditionally, reference is not to a calendar year; a year does not have a fixed beginning and end.’ The rice harvest was evidently replaced by the yam harvest in POc. Glosses in other languages suggest that **taqun* was perhaps originally the name of a particular season, the dry season when food did not grow. We find Isneg (North Cordilleran) *mag-d<in>axun* ‘the hot, dry season’, derived from *taxun* ‘year’ (Vanoverbergh 1972), and Binukid (Manobo) *taun* ‘hunger season’ (Post 1992).

In Polynesian languages, there is a tendency, stronger in the east than in the west, for the reflex of POc **taqun*/PPn **taqu* to denote a ‘season’, in the sense of the dry season or the wet season. Kirch and Green (2001:261, 265) believe that the use of these reflexes to mean ‘year’ postdates western contact, but it does seem that the annual cycle of planting and harvesting was a major element of the meaning of both POc **taqun* and PPn **taqu* (Kirch & Green 2001:267). The presence of the nominaliser <in> in the Patpatar and Ramoaaaina reflexes above suggests that POc **taqun* was also a verb meaning ‘last a year’.

2.5 Lunar month names

Throughout much of Oceania there were calendars based on lunar months. However, discussion of these lies beyond the scope of this chapter, which is concerned with the labelling of time units whose connection to nature is fairly transparent. Calendrical names have complex associations with their users’ culture, both material and non-material, and will receive a chapter to themselves in a later volume.

3 Directed times: present, past and future

As noted in the introduction to this chapter (p.295), directed times—adjuncts expressing past, present and future—may be purely deictic (‘now’, ‘today’), may express vague

distance ('in the past', 'in the future'), or may express a specified distance within a cycle (e.g. 'this morning', 'this evening') or measured by cycles (e.g. 'yesterday', 'tomorrow', 'the day before yesterday').

There is strong evidence that most of the temporal terms that are reconstructable in this semantic category belong to the same class as the local nouns reconstructed in Chapter 8 (p.233), and that like those nouns, they occurred in a local construction with the POc preposition **i* or formed adverbs with the prefix **qa-* (p.322). Some temporal members of the class, however, also formed adverbs by reduplicating the disyllabic root.

3.1 Deictic time: 'now', 'today'

No POc form which uniquely means 'now' or 'today' is reconstructable. In many languages the same term is used for both meanings. Insofar as etymologising is possible (and more often than not it isn't), the term for 'now' or 'today' is formed by one of two strategies. In the first, the proximal demonstrative is used. Thus Lou (Adm) *tapoŋ*, Drehet (Adm) *iⁿdah*, Kaulong (NNG) *ai*, Bing (NNG) *nien*, Takia (NNG) *ete*, Gumawana (PT) *ame*, Patpatar (MM) *kaiken*, Longgu (SES) *nene* are each both 'here' and 'now'. Nêlêmwa (NCal) *l^heny* is both 'this' and 'today'.

The second strategy is an extension of the first: a phrase corresponding to 'this day' is used. Hence Drehet (Adm) *laŋ nane*, Nguna *raŋi waia*, Niuean (Pn) *aho nei*, all 'day' + 'this'. Nehan (MM) *ene dān* once meant 'this day' (*dān* < POc **raqani* 'daytime') but now means only 'today'.

The claim is sometimes made that Oceanic systems of spatial deixis are also used for temporal purposes. There are very few well documented cases of this beyond the use of the proximal demonstrative 'here' for 'now'. Such cases are Nêlêmwa (Bril 2002), Iai (Ozanne-Rivierre 2004), Kosraean (Lee 1975:129), Mokilese (Harrison 1976:77–81, 85) and Samoan (Mosel 2004). However, as Anderson and Keenan (1985:298–299) observe with regard to Kosraean and Mokilese, even in these two Micronesian languages the temporal applications of the spatial deictics are not parallel. The same observation is true of the other languages just listed, and so no precise reconstruction of a temporal usage of spatial deictics in POc is possible.

3.2 Vague temporal distance

There are relatively few lexical items in Oceanic languages denoting vague temporal distances. Lexical items for 'in the past' and 'in the future' used relative to the time of speaking are also used respectively for 'earlier' and 'later', i.e., for expressions relative to a time named by the speaker. Expressions for 'recently' and 'soon' are usually phrasal or clausal (e.g. 'a little time has passed/will pass ...'), not lexical.

3.2.1 'in the past'/'earlier' and 'in the future'/'later'

Curiously English and other European languages have two superficially contradictory ways of using the spatial analogy to express temporal direction. We say that the past *is behind us* and the future *lies before us*, yet when the deictic point is not the time of speaking we say that something in the past relative to that point is *beforehand* whilst

something in the future relative to it is *afterwards*. The Oceanic spatial metaphor for past and future is the second of these: ‘front’ is past, ‘back’ is future, presumably because that which is in front of one is visible, and so is, metaphorically speaking, the past.

The reconstructions below are repeated from Chapter 8, but only reflexes with a temporal meaning are listed here. The POC terms for ‘formerly’ were apparently **i muqa*, **qa-muqa* and **muqa-muqa*, for ‘later, afterwards’ **i muri*/**i buri* and **muri-muri*. In PWOc **muga* also occurred (p.258).

POc **muqa* ‘front’, **muqa* ‘front; be in front’, **i muqa*, **qa-muqa*, **muqa-muqa* ‘in front, formerly’ (p.257)

Adm:	Mussau	<i>mu-mua</i>	‘first of all, formerly’
MM:	Tabar	<i>mu-mua</i>	‘formerly’
MM:	Lihir	<i>(i)mua</i>	‘formerly’
MM:	Taiof	<i>(i)mua(n)</i>	‘formerly’
NCV:	Mota	<i>(a)m^woa</i>	‘before, first’
NCV:	Raga	<i>(a)mua</i>	‘before, at first, first, in front of’
NCV:	Port Sandwich	<i>(a)mo</i>	(POSTVERBAL ADV) ‘before’
Mic:	Woleaian	<i>[i]m^wowa-m^w-m^wa-</i>	‘front, before’
			‘front, first, tip, before’
Pn:	Tongan	<i>(ʔi) muʔa [-atu]</i>	‘formerly’ (- <i>atu</i> DIR; p.279)
Pn:	Samoa	<i>(ana)mua</i>	‘formerly, in those days’

PWOc **muga* ‘front; be in front; formerly’

NNG:	Bariai	<i>muga(eai)</i>	‘formerly’ (- <i>eai</i> POSTP)
NNG:	Arop-Lokep	<i>mugu</i>	‘first of all, formerly’
NNG:	Mangap	<i>mu^ŋgu</i>	‘first of all, formerly, long ago’
NNG:	Bing	<i>mug</i>	‘formerly’
NNG:	Adzera	<i>moŋʔ</i>	‘prior’
MM:	Bali	<i>muga-</i>	‘front’
MM:	Ramoaina	<i>(nə)mugə</i>	‘in front; formerly’

PMP **ma-udehi* ‘be last; be after or behind; be late, be later; future’ (ACD)¹⁵

POc **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’ (p.261)

Adm:	Titan	<i>muri-n</i>	‘behind, afterwards’
NNG:	Bariai	<i>muri(ai)</i>	‘later, afterwards’
NNG:	Sio	<i>muri</i>	‘later’
NNG:	Gitua	<i>mur</i>	‘behind, afterwards’
NNG:	Bing	<i>mur(gam)</i>	‘later’
PT:	Dobu	<i>muri-na</i>	‘behind, afterwards’
PT:	Gapapaiwa	<i>muri</i>	‘back of s.t.; behind, afterwards’
PT:	Tawala	<i>muri</i>	‘back of s.t.; behind, afterwards’
PT:	Sinaugoro	<i>muri-na(i)</i>	‘behind, afterwards’

¹⁵ Blust (ACD) does not provide a gloss for **ma-udehi*. The gloss here is based on that for **udehi*.

MM:	Meramera	(muli)muli	‘later’
MM:	Nakanai	(muli)muli	‘later’
MM:	Tigak	(ai)muk	‘later’
MM:	Ramoaaina	(na)mur	‘later, afterwards’
MM:	Mono-Alu	(muri)muri	‘later’
MM:	Vangunu	(tara)meji-na	‘after’
MM:	Varisi	(tara)muzi-na	‘after’
SES:	Gela	muri	‘behind, afterwards; back; outside of s.t.; afterbirth; posterity’
SES:	Lengo	(i)muri(a)	‘after’
SES:	Arosi	muri	‘follow; behind, back; outside of s.t.; afterwards; left hand when facing an object’
Fij:	Bauan	(e) muri	‘behind, later’
Pn:	Tongan	(ʔa)mui	‘later on, at some future time’
Pn:	Maori	muri	‘rear, hind part; sequel, time to come; behind, afterwards, backwards; youngest child’
		(i) muri	‘afterwards’

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

POc *burit ‘be behind, be after; back part, rear, behind, space to the rear of, time after; (canoe) stern’, *i burit ‘behind, afterwards’ (p.262)

SES:	Lau	(i) buri	‘afterwards’
SES:	’Are’are	puri-na	‘after’

3.2.2 ‘long ago’

It is hard to avoid the conclusion that *tuqaRi ‘(be) long ago, old (of inanimates)’ is historically related to *[ma]tuqa ‘ripe, mature, adult, old’. POc *tuqaRi appears to be both verb and temporal adverb. The full cognate set is given on p.212, with a discussion of the form of the reconstruction.

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

NCV:	Mota	tuai	‘of long duration, old’
NCV:	Tamambo	tuai	‘of old’
NCV:	Nguna	tuai	‘long ago, (thing) old’
SV:	Sye	(e)twai	‘recently’
		(it-e)twai	‘long time ago’
SV:	Kwamera	tui	‘old, previous, of the past, long ago’
SV:	Anejom	(i)tuwu	‘long ago’
Fij:	Wayan	tuei	(V, ADJ) ‘take a long time; be slow, late’

Pn:	Tongan	<i>tuai</i>	(V) ‘be slow, late’
		<i>(mai) tuai</i>	(PP) ‘from of old, since very early times’
Pn:	Samoan	<i>tuai</i>	(V) ‘be late, be delayed’

3.3 Distances within a day or measured by days

POc temporal bases themselves were in general directionless, i.e. neutral between past and future. The exception to this was **ñoRap* ‘yesterday’. There is no clearly reconstructable term for ‘tomorrow’, and both ‘yesterday’ and ‘tomorrow’ are often denoted by terms which reflect as their base either POc **boŋi* ‘night, day of twenty-four hours’ (p.305) or POc **raqani* ‘daytime, daylight’ (p.309). ‘The day before yesterday’ and ‘the day after tomorrow’ both had as their base the directionless **waRisa* ‘two days from today’ (p.332).

Pawley (1972:32–33, 82) reconstructed the PEOc prefixes **qa-* and **qana-* as formatives of future and past temporal expressions respectively. In the light of wider evidence, it seems that **qana-* was originally two prefixes: **qa-* and **na-*. In both formatives **qa-* is the POc adverbialising prefix described in Chapter 8 (p.235), whilst **na-* was a prefix forming temporal bases situated in the past. Sometimes, it seems, it was attached to a base which had past meaning, but often it formed a past term from a base which did not express temporal direction. This **na-* may well be of PMP antiquity, as it is reflected with the same function in (Western Malayo-Polynesian) languages of the Kaili-Pamona, Wotu-Wolio and SE Celebic families on the island of Sulawesi (Mead 2001).

3.3.1 Distances within a day

By distances within a day, I mean expressions corresponding to English ‘last night’, ‘tonight’, ‘this morning’, ‘this evening’. Oceanic data relating to these are very thin indeed. I suspect the main reason for this is that expressions consisting of ‘today’ or ‘yesterday’ plus ‘morning’ or ‘evening’ are often used, and they are simply not noted in dictionaries. For example:

Adm:	Drehet	<i>kum^{wiŋ}</i> ‘now, today’	<i>piŋ</i> ‘night’	<i>piŋ kum^{wiŋ}</i> ‘tonight’
PT:	Ubir	<i>ari</i> ‘now, today’	<i>fom</i> ‘night’	<i>ari-fom</i> ‘tonight’
PT:	Kiriwina	<i>lagaila</i> ‘today’	<i>bogi</i> ‘night’	<i>lagaila bogi</i> ‘tonight’

There are a few languages where **qa-* is prefixed to a part of the day to form a future expression, **[qa]na-* to form a past expression, but it is not clear whether these expressions are reconstructable for POc or are simply independent innovations resulting from the productivity of the prefixes. Thus we find Nakanai (MM) *ala-logo* ‘last night’ vs *ga-logo* ‘tonight’ (*-logo* < **rodrom* ‘night’), Nehan (MM) *na-boung* ‘last night’, *na-liwo* ‘this morning (past)’ vs *ro-liwo* ‘tomorrow’ (the origin of *ro-* is unknown), and Tongan (Pn) *ʔane-pō* ‘last night’ vs *ʔa-pō* ‘tonight’. Niuean (Pn) has terms reflecting **[qa]na-*: *ne-poŋi-poŋi* ‘this morning (past)’, *ne-pō* ‘last night’, and *ne-aŋi-aŋi* ‘yesterday evening’. Biggs and Clark (1993) reconstruct PPn **qana-pō* ‘last night’:

PPn **qana-pō* ‘last night’

Pn:	Tongan	<i>ʔanepō</i>	‘last night’
Pn:	Niuean	<i>ne-pō</i>	‘last night’
Pn:	Samoan	<i>anapō</i>	‘last night’

Pn:	Anutan	<i>anapo</i>	‘last night’
Pn:	E Futunan	<i>nāpō</i>	‘last night’
Pn:	E Uvean	<i>ʔana pō</i>	‘last night’
Pn:	Nukuria	<i>anabō</i>	‘last night’
Pn:	Tahitian	<i>napo</i>	‘last night’

3.3.2 ‘yesterday’

The POc base for ‘yesterday’ was **ñoRap*. A few reflexes reflect accretion of the preposition **i*, and just two reflect **qa-*. Whether **qa-ñoRap* occurred in POc or whether **qa-* continued to be productive and came later to be attached to reflexes of **ñoRap* is unclear. This question is compounded by an interesting distributional phenomenon. We can also reconstruct POc **na-ñoRap*, with past formative **na-* (p.324). This is reflected largely, but not exclusively, in Eastern Oceanic languages, whilst unprefixes **ñoRap* is reflected mainly in Western Oceanic languages. There is an overlap zone in the southeast Solomons and northern Vanuatu.

PMP **ñeRab* ‘yesterday’

POc **ñoRap* ‘yesterday’, *i ñoRap*, **qa-ñoRap* (?)

NNG:	Kove	<i>noha</i>	‘yesterday’
NNG:	Gitua	<i>nora</i>	‘yesterday’
NNG:	Mangap	<i>nēri</i>	(ADV) ‘yesterday, subjectively recent time, just recently’
NNG:	Sio	<i>nola</i>	(ADV) ‘yesterday; any unspecified prior time or day’
NNG:	Kilenge	<i>nola</i>	‘yesterday’
NNG:	Amara	<i>noru</i>	‘yesterday’
NNG:	Aria	<i>narep</i>	‘yesterday’
NNG:	Poeng	<i>ŋalla</i>	‘yesterday’
NNG:	Kakuna	<i>ŋala-na</i>	‘yesterday’
NNG:	Roinji	<i>nola</i>	‘yesterday’
NNG:	Takia	<i>nor</i>	(ADV) ‘yesterday, recently’
NNG:	Numbami	<i>nolowa</i>	‘yesterday’
NNG:	Yabem	<i>no(geŋ)</i>	‘yesterday’
NNG:	Kaiwa	<i>nolik</i>	‘yesterday’
NNG:	Medebur	<i>nora</i>	‘yesterday’
NNG:	Manam	<i>nora</i>	‘yesterday’
NNG:	Ulau-Suain	<i>nira-ñ</i>	‘yesterday’
NNG:	Ali	<i>nari</i>	‘yesterday’
PT:	Misima	<i>noru</i>	‘yesterday’
MM:	Bali	<i>ŋorapa</i>	‘yesterday’
MM:	Bulu	<i>nola</i>	‘yesterday’
MM:	Lavongai	<i>(a)noŋo</i>	‘yesterday’
MM:	Tigak	<i>nogo</i>	‘yesterday’
MM:	Ramoaaina	<i>narap</i>	‘before, formerly’

MM:	Nehan	<i>nerau</i>	‘yesterday’
MM:	Solos	<i>nonoh</i>	‘yesterday’
MM:	Halia (Haku)	<i>(i) nolaha</i>	‘yesterday’
MM:	Halia (Selau)	<i>narowa</i>	‘yesterday’
MM:	Taiof	<i>nanaf</i>	‘yesterday’
MM:	Teop	<i>nanava</i>	‘yesterday’
MM:	Banoni	<i>(ya)nanava</i>	‘yesterday’
MM:	Roviana	<i>norae</i>	‘yesterday’
MM:	Kia	<i>norao</i>	‘yesterday’
MM:	Maringe	<i>ñora</i>	‘yesterday’
SES:	Gela	<i>nola</i>	‘yesterday’
SES:	Bugotu	<i>(i)ñođa</i>	‘yesterday’
SES:	W Guad.	<i>(i)noa</i>	‘yesterday’
NCV:	Motlav	<i>a-nor</i>	‘yesterday’
Mic:	Kiribati	<i>noa</i>	‘yesterday’

The Southern Vanuatu members of the set below reflect a Proto South Vanuatu form reconstructed by Lynch (2001:211) as **na-yan(a,u)v*. POC **R* is sporadically lost in Proto South Vanuatu, and these forms seem to reflect a metathesis of a reflex of *na-ñoRap* to **na-Rañop*.

POC **na-ñoRap* ‘yesterday’, *i na-ñoRap*, **qa-na-ñoRap* (?)

NNG:	Lamogai	<i>narnop</i>	‘yesterday’ (< <i>*na-norap</i> : metathesis)
MM:	Tabar	<i>nenora</i>	‘yesterday’
MM:	Nduke	<i>nonoro</i>	‘yesterday’
SES:	’Are’are	<i>nonora</i>	‘yesterday’
SES:	Sa’a	<i>nonola</i>	‘yesterday’
SES:	Arosi	<i>nanora</i>	‘yesterday’
SES:	Fagani	<i>nanora</i>	‘yesterday’
SES:	Bauro	<i>ananora</i>	‘yesterday’
SES:	Kahua	<i>nanora</i>	‘yesterday’
NCV:	Mota	<i>ananora</i>	‘yesterday’
NCV:	Motlav	<i>(n)ananoa</i>	‘yesterday’
NCV:	NE Ambae	<i>nainoa</i>	‘yesterday’
SV:	Sye	<i>ninu</i>	‘yesterday’
SV:	Whitesands	<i>neniəv</i>	‘yesterday’
SV:	Lenakel	<i>nenav</i>	‘yesterday’
SV:	Kwamera	<i>neiv</i>	‘yesterday’
SV:	Anejom	<i>(i)yenev</i>	‘yesterday’
Mic:	Kiribati	<i>nanoa</i>	‘yesterday’
Mic:	Mortlockese	<i>nanaw</i>	‘yesterday’
Mic:	Puluwatese	<i>nænewi</i>	‘yesterday’
Mic:	Woleaian	<i>rarowa</i>	‘yesterday’
Fij:	Bauan	<i>(e) nanoa</i>	‘yesterday’

There seem to be at least two other variants on this form. Certain Papuan Tip languages reflect **Ropa*:

PT:	Tawala	<i>lolowa</i>	‘before, (a few) days back’
PT:	Dobu	<i>lowa</i>	‘day before yesterday’
PT:	Kiriwina	<i>lova</i>	‘yesterday’

This seems to be the outcome of a three-step process. First, the vowels of **ñoRap* metathesised to **ñaRop* (as they have done in Selau *narowa* in the first **ñoRap* set above). Then, **ñ* became **n* and a paragogic *-a* was added, both regular changes, giving **naRopa*. Finally, **na-* was reinterpreted as the past formative, leaving the base **Ropa* reflected above.

The forms below reflect Proto NCV **na-novi* ‘yesterday’. This contrasts with Proto NCV **novi* ‘tomorrow’ (Nokuku *p^{wa}-novi*, Kiai *i-novi*, Tolomako *i novi*) and so may have nothing to do with **na-ñoRap*. Clark (1996) thinks it reflects a conflation of POc **na-ñoRap* and **na-Rapi* (below), however, and he may be right.

NCV:	Raga	<i>ninovi</i>	‘yesterday’
NCV:	Nokuku	<i>nonovi</i>	‘yesterday’
NCV:	Kiai	<i>nanovi</i>	‘yesterday’
NCV:	Tamambo	<i>(na)nanovi</i>	‘yesterday’
NCV:	Lonwolwol	<i>nono</i>	‘yesterday’
NCV:	Namakir	<i>nanov</i>	‘yesterday’
NCV:	Nguna	<i>nanova</i>	‘yesterday’
NCV:	Tolomako	<i>na novi</i>	‘yesterday’

The term below reflects POc **boŋi* ‘night, day of twenty-four hours’ prefixed with the past formative **na-*. The reconstruction of **na-boŋi* ‘yesterday’ as far back as POc is questionable, as it is not well attested outside Meso-Melanesian languages.

POc (?) **na-boŋi* ‘yesterday’

NNG:	Kairiru	<i>nubuoŋ(nai)</i>	‘yesterday’
MM:	Sursurunga	<i>nabuŋ</i>	‘yesterday’
MM:	Tangga	<i>nabiŋ</i>	‘yesterday’
MM:	Konomala	<i>nabuŋ</i>	‘yesterday’
MM:	Patpatar	<i>nabuŋ</i>	‘yesterday’
MM:	Tolai	<i>nabuŋ</i>	‘yesterday’
MM:	Ramoaaina	<i>nabuŋ</i>	(ADV) ‘yesterday’
MM:	Kandas	<i>nubuŋ</i>	‘yesterday’
MM:	Bilur	<i>naboŋ</i>	‘yesterday’
MM:	Label	<i>naboŋ</i>	‘yesterday’
MM:	Tinputz	<i>noboŋ</i>	‘yesterday’
MM:	Kwaio	<i>nāboni</i>	‘yesterday’

cf. also

NNG:	Kairiru	<i>(ra)buŋ</i>	‘yesterday’
NNG:	Hote	<i>(wak)buk</i>	‘yesterday’ (<i>wak</i> < POc <i>*qaco</i> ‘sun’)
PT:	Tawala	<i>pom</i>	‘yesterday’
MM:	Siar	<i>(la)buŋ</i>	‘yesterday’

MM:	Hahon	(ro)bon	‘yesterday’
SES:	Gela	(i)boŋi	‘yesterday’
NCV:	Port Sandwich	(xi) ^m boŋ	‘yesterday’
NCV:	Labo	(lo) ^m bun	‘yesterday’

A few Western Oceanic terms for ‘yesterday’ reflect POc **raqani* ‘daytime, daylight’ (p.309). Reflexes in Sio (NNG) and in the Central Papuan subgroup of Papuan Tip languages have a prefix which appears to reflect a preposition reflex of POc **ua* (VF) ‘go towards addressee’, (DIR) ‘towards addressee’ (Ch. 8, §3.4.4).

NNG:	Sio	<i>wa-lani</i>	(ADV) ‘day before yesterday’
NNG:	Wogeo	<i>ra-ran</i>	‘yesterday’
PT:	Sinaugoro	<i>ɣwa-layani</i>	‘yesterday’
PT:	Keapara	<i>va-rayani</i>	‘yesterday’
PT:	Motu	<i>va-rani</i>	‘yesterday’
PT:	Roro	<i>ua-rani</i>	‘yesterday’
PT:	Kuni	<i>ua-nani</i>	‘yesterday’
PT:	E. Mekeo	<i>a-ŋani</i>	‘yesterday’

The term below is clearly the same root as **Rapi*/**Rapi-Rapi* ‘late afternoon and evening, from about 3 p.m. to sunset’ (p.313). I have placed a question mark against the reconstructed gloss below, as it is not attested in the data. However, the gloss ‘yesterday’ is presumably the result of extension of meanings denoting ‘last evening’. Nuclear Polynesian languages reflect an unexplained innovation whereby **qa-na-api* became **qa-na-napi*.

POc **i Rapi* ‘(?) in the evening’, **na-Rapi* ‘yesterday’, **qa-na-Rapi* ‘yesterday’

PT:	Gapapaiwa	<i>ravi-ravi</i>	(ADV) ‘yesterday’
MM:	Bola	<i>ravi</i>	(ADV) ‘yesterday’
MM:	Meramera	<i>lavi</i>	‘yesterday’
MM:	Nakanai	(ala)lavi	‘yesterday’
MM:	Kara (East)	(la)nef	‘yesterday’ (metathesis)
MM:	Kara (West)	(ne)ief	‘yesterday’
MM:	Nalik	(la)raf	‘yesterday’
MM:	Lihir	(la)leh	‘yesterday’
MM:	Barok	<i>la</i>	‘yesterday’
MM:	Minigir	(na)ravi	‘yesterday’
MM:	Nehan	(ne)rau	‘yesterday’
MM:	Mono-Alu	<i>lahi</i>	‘yesterday’
Pn:	Tongan	(?ane)afi	‘yesterday’
Pn:	Niuean	(ne)afi	‘yesterday’
Pn:	Samoa	(ana)nafi	‘yesterday’
Pn:	Ifira-Mele	(nā)nafi	‘yesterday’

cf. also:

SES:	Longgu	(ŋa)lavi	‘yesterday’
Fij:	Wayan	(ni)avi	‘yesterday’

3.3.3 ‘tomorrow’

There is no POc term for ‘tomorrow’ that is as unambiguously reconstructable as **ñoRap* is for ‘yesterday’.

We might expect that just as POc **na-boŋi* (p.327), with the past formative, was perhaps used for ‘yesterday’, so **boŋi* ‘night, day of twenty-four hours’, without a formative, might also have served for ‘tomorrow’. But this would have been ambiguous in at least some contexts, so we would expect some disambiguating marker. We do indeed find reflexes of **boŋi* used for ‘tomorrow’, and some of these are listed below, but they do not form a cognate set, and their disambiguating markers vary from demonstratives (Iduna, Sinaugoro) through an adposition (Dawawa) to irrealis enclitics (Mindiri, Bilibil, Matukar).

Adm: Drehet	(<i>neke</i>) <i>piŋ</i>	(ADV) ‘tomorrow’
Adm: Lou	(<i>ti</i>) <i>peŋ</i>	‘tomorrow’
Adm: Nyindrou	(<i>na</i>) <i>biŋi</i>	‘tomorrow’
NNG: Malalamai	<i>boŋ(o)</i>	‘tomorrow’
NNG: Bing	<i>boŋ(sag)</i>	‘tomorrow’
NNG: Mindiri	<i>bum(pɔ)</i>	‘tomorrow’
NNG: Bilibil	<i>boi(lap)</i>	‘tomorrow’
NNG: Gedaged	<i>boŋ(anip)</i>	‘tomorrow’
NNG: Takia	<i>boŋ</i>	‘tomorrow’
NNG: Matukar	<i>bo(ip)</i>	‘tomorrow’
NNG: Sera	<i>puiŋ(eteik)</i>	‘tomorrow’
PT: Iduna	<i>bogi(yadi)</i>	‘tomorrow’
PT: Muyuw	(<i>nu</i>) <i>bweig</i>	‘tomorrow’
PT: Sinaugoro	<i>boi(nani)</i>	(ADV) ‘tomorrow’
NCV: Paamese	(<i>visu</i>) <i>voŋ</i>	‘tomorrow’
NCV: Namakir	(<i>paʔa</i>) <i>bog</i>	‘tomorrow’
Mic: Kiribatese	(<i>niŋā</i>) <i>boŋ</i>	‘tomorrow’

We also find reduplicated reflexes of **boŋi*, but I take these to be reflexes of POc **boŋi-boŋi* ‘early morning from dawn to 9 or 10 a.m.’ (p.310). I doubt whether the sense ‘tomorrow’ is also reconstructable for **boŋi-boŋi* and assume that these are the outcomes of parallel innovations, similar to those via which reflexes of **Rapi* ‘evening’ came to mean ‘yesterday’.

POc **i boŋi-boŋi* ‘(?) in the morning’, **qa-boŋi-boŋi* ‘(?) in the morning’

NNG: Barim	<i>buŋ-buŋ</i>	‘tomorrow’
NNG: Arop-Lokep	<i>boŋ-boŋ</i>	‘tomorrow’
NNG: Malasanga	<i>buŋ-boŋ</i>	‘tomorrow’
PT: Dawawa	<i>boi-boi</i>	‘morning, tomorrow’
PT: Tangga	(<i>na</i>) <i>biŋ-biŋ</i>	‘tomorrow’
SES: Lau	<i>bo-boŋi</i>	‘tomorrow’
Pn: Tongan	(<i>ʔa</i>) <i>poŋi-poŋi</i>	‘tomorrow’
Pn: Niuean	<i>poŋi-poŋi</i>	‘tomorrow, this morning’
Pn: E Futunan	(<i>ā</i>) <i>poŋi-poŋi</i>	‘tomorrow’
Pn: E Uvean	(<i>a</i>) <i>poŋi-poŋi</i>	‘tomorrow’

Pn:	Tikopia	(a)poŋi-poŋi	‘tomorrow’
Pn:	Maori	(ā)pō-pō	‘tomorrow’

Reflexes of POc **puko* ‘morning’ (p.311) have also come to mean ‘tomorrow’ in a number of languages.

POc **ma-pua* ‘tomorrow’ is reconstructable from the rather skewed cognate set below. Data from Sulawesi languages and Balinese cited by Mead (2001) point to the reconstruction of PMP **i-pu(h)a-n* ‘day after tomorrow, day before yesterday’, and the POc root **-pua* here apparently reflects PMP **-pu(h)a-*. However, the apparent shift in meaning is unexplained.

POc **ma-pua* ‘tomorrow’

Adm:	Loniu	<i>mahu</i>	‘tomorrow’
PT:	Kukuya	<i>mapu(tua)</i>	‘tomorrow’
MM:	Tigak	(a) <i>mau(a)</i>	‘tomorrow’
MM:	Tiang	<i>məu(ə)</i>	‘tomorrow’
MM:	Kara (East)	<i>mofu</i>	‘tomorrow’
MM:	Kara (West)	<i>mofu</i>	‘tomorrow’
MM:	Nalik	(la) <i>maf</i>	‘tomorrow’
MM:	Solos	<i>mahu</i>	‘tomorrow’
MM:	Petats	<i>mahu</i>	‘tomorrow’
MM:	Halia (Haku)	<i>mahu</i>	‘tomorrow’
MM:	Halia (Selau)	<i>mawu</i>	‘tomorrow’

POc **ma-raqani* was presumably originally a verb meaning ‘become light’, derived from **raqani* ‘daytime, daylight’ (p.309). Its reflexes in a number of languages mean ‘tomorrow’, as do several other reflexes of **raqani* listed below. If it is the case, as suggested on p.300, that the POc day began at sunset, then, once sunset had passed, **i raqani* ‘in the daylight’ (reflected directly in Sa’a and ’Are’are) would have referred to the daylight of the present day—‘tomorrow’ in an English-speaker’s terms.

POc **ma-raqani* ‘become light’

PT:	Gapapaiwa	<i>maram</i>	‘tomorrow, in the future’
PT:	Kandas	<i>markan</i>	‘tomorrow’
MM:	Patpatar	<i>marakan</i>	‘tomorrow’
NCV:	Mota	<i>maran</i>	‘light, daylight, morning, day; be light; tomorrow’s light; the morrow’
NCV:	Raga	<i>maran</i>	‘morning light, morning’
NCV:	Labo	<i>maxan</i>	‘tomorrow, morning’
SV:	Sye	<i>mran</i>	‘tomorrow’
SV:	Anejom	(i) <i>mrañ</i>	‘tomorrow’
cf. also:			
SES:	Longgu	<i>dañi</i>	(V) ‘tomorrow; daylight’
SES:	Sa’a	<i>i deni</i>	‘tomorrow’
SES:	’Are’are	<i>itani</i>	‘tomorrow’
NCV:	Sakao	(lak) <i>ren</i>	‘tomorrow’
NCV:	Port Sandwich	(pe) <i>an</i>	‘tomorrow’

There is also a variety of forms that seem to reflect a root **tuqu* ‘tomorrow’.

POc **la-tuqu* ‘tomorrow’

MM:	Label	<i>latu</i>	‘tomorrow’
MM:	Sursurunga	<i>latiu</i>	‘tomorrow’
MM:	Siar	<i>latu</i>	‘tomorrow’
Mic:	Marshallese	<i>(i)lcu</i>	‘tomorrow’
Mic:	Kosraean	<i>lutu</i>	‘tomorrow, morning’
Mic:	Chuukese	<i>rəwɪ</i>	‘tomorrow’
Mic:	Puluwatese	<i>layɪ</i>	‘tomorrow’
Mic:	Woleaian	<i>raɪ</i>	‘tomorrow’

PNS: **na-tuqu* ‘tomorrow’

MM:	Papapana	<i>natui</i>	‘tomorrow’
MM:	Ghove	<i>natui</i>	‘tomorrow’
MM:	Maringe	<i>natuʔu</i>	‘tomorrow’

PPn: **a(r,l)etuqu* ‘tomorrow’

Pn:	Mae	<i>aretū</i>	‘tomorrow, day after’
Pn:	Nukuria	<i>(bō)aledū</i>	‘tomorrow night’ (<i>bō</i> ‘night’)
Pn:	W Futunan	<i>aratu</i>	‘tomorrow’

3.3.4 A note on the derivations of ‘yesterday’ and ‘tomorrow’

The derivational relationships (i) between POc **na-Rapi* ‘yesterday’, **qa-na-Rapi* ‘yesterday’ and POc **Rapi* ‘evening’ and (ii) between POc **raqani* ‘(become) daylight’ and POc **ma-raqani* ‘tomorrow’ reflect a tendency across the world’s languages whereby terms for ‘yesterday’ and ‘tomorrow’ are derived from terms for ‘evening’ and ‘morning’ respectively. Terms meaning ‘in the evening’ and ‘in the morning’ lack temporal direction, but this is filled in by the presence of tense or (in some Oceanic languages) mood markers in the verb phrase, i.e. ‘in the evening’ is interpreted as ‘yesterday evening’, then comes by semantic extension to mean simply ‘yesterday’. A similar observation can be made for ‘tomorrow’. This interpretation is proposed by Buck (1949:999–1000) for the similar derivations that are found for ‘tomorrow’ across much of the Indo-European family and for ‘yesterday’ in Modern Greek, and the Baltic and Slavonic languages. Parallel derivations have also occurred in Finnish and Estonian, in Turkic languages, in Arabic, in Pama-Nyungan and non-Pama-Nyungan Australian languages, in Siouan, in Chinese and in Japanese (Ross 2001c).

It seems possible that the one directed lexical root above, PMP **ñeRab*, POc **ñoRap* ‘yesterday’ is itself derivationally related to PMP **Rabi* ‘evening’.

3.3.5 ‘the day before yesterday’ and ‘the day after tomorrow’

As I noted earlier, both ‘the day before yesterday’ and ‘the day after tomorrow’ were denoted by the inherently directionless temporal term POc **waRisa* ‘two days from today’. Past direction, i.e. ‘the day before yesterday’, was specified by the past formative **na-*, but, as with **na-ñoRap* and **na-boŋi* above, **na-* is reflected only (patchily) among Meso-

Melanesian languages and more widely in Eastern Oceanic languages. Hence unprefixes reflexes of **waRisa* in Western Oceanic languages often denote ‘the day before yesterday’.

Note that reflexes in Bing, Takia and Yabem which lack a reflex of final **-sa* have lost it as a result of regular sound changes.

The Proto Tanna (SV) and Proto Polynesian reflexes of **qa-na-* lost the past-marking function. Tanna languages add a prefix for future direction, and PPn **qanoisa* came to mean ‘the day after tomorrow’.

POc **[i] waRisa* ‘two days from today’

NNG: Gitua	<i>wariza</i>	‘day before yesterday’
NNG: Lukep	<i>airi</i>	‘day before yesterday’
NNG: Mangap	<i>urizi</i>	‘day before yesterday’
NNG: Kilenge	<i>olia</i>	‘day before yesterday’
NNG: Amara	<i>ueri(o)</i>	‘day before yesterday’
NNG: Uvol	<i>alia</i>	‘day before yesterday’
NNG: Roinji	<i>walia</i>	‘day before yesterday’
NNG: Bing	<i>wari(nan)</i>	‘day before yesterday’
NNG: Takia	<i>wari</i>	‘day before yesterday, in the past’
NNG: Medebur	<i>waijira</i>	‘day before yesterday’
NNG: Numbami	<i>walisawa</i>	‘day before yesterday’
NNG: Yabem	<i>wali(geŋ)</i>	‘day before yesterday’
PT: Misima	<i>varira</i>	‘before (in time)’
PT: Kiriwina	<i>(silo)valela</i>	‘a few days ago’
PT: Sudest	<i>vaiya</i>	‘day before yesterday’
MM: Bali	<i>varira</i>	‘day before yesterday’
MM: Bola	<i>rira</i>	‘day before yesterday’ (for expected <i>**arira</i>)
	<i>(gi)rira</i>	‘day after tomorrow’
MM: Meramera	<i>lisa</i>	‘day before yesterday; formerly’ (for expected <i>**walisa</i>)
MM: Nakanai	<i>uaisa</i>	‘the day after tomorrow’ (for expected <i>**ualisa</i>)
MM: Patpatar	<i>uaris</i>	‘day after tomorrow’
MM: Tolai	<i>oari</i>	‘day after tomorrow’
MM: Siar	<i>urisa(i)</i>	‘day after tomorrow’
MM: Nehan	<i>iorih</i>	‘day after tomorrow’
MM: Halia (Haku)	<i>ialisa</i>	‘day after tomorrow’
	<i>alisa</i>	‘day before yesterday’
MM: Banoni	<i>(d)onisa</i>	‘day after tomorrow’
MM: Mono-Alu	<i>elila</i>	‘day after tomorrow’
MM: Maringe	<i>(na)uriha</i>	‘day after tomorrow’ (<i>na</i> ART)
SES: Gela	<i>valiha</i>	‘day before yesterday, day after tomorrow, some time ago, by and by, some day’
SES: Kwaio	<i>kwalita</i>	‘three days ago’
SES: ’Are’are	<i>warita</i>	‘former, previous, past’
	<i>i warita</i>	‘formerly, in the old days’

SES: Ulawa	<i>i welita</i>	‘two days hence’
SES: Sa’a	<i>i waite</i>	‘two days ago’
NCV: Mota	<i>arisa</i>	‘day before yesterday, day after tomorrow’
NCV: Raga	<i>(vai)wehe</i>	‘day after tomorrow’
NCV: Port Sandwich	<i>(x)ois</i>	‘day after tomorrow’
NCV: Lonwolwol	<i>wuh</i>	‘day after tomorrow’
NCV: Lewo	<i>vewo</i>	‘day after tomorrow’
NCV: Namakir	<i>(pa)waih</i>	‘day after tomorrow’
NCV: Nguna	<i>wāsa</i>	‘day after tomorrow’
NCV: S. Efate	<i>uāsa</i>	‘day after tomorrow’
SV: Sye	<i>wisas</i>	‘five days hence’
SV: Anejom	<i>(ho)viθ</i>	‘three days from today’

POc **[qa-]na-waRisa* ‘day before yesterday’

MM: Patpatar	<i>nauaris</i>	‘day before yesterday’
MM: Tolai (Nodup)	<i>nari(a)</i>	‘day before yesterday’
MM: Solos	<i>nanis</i>	‘day before yesterday’
MM: Petats	<i>nalis</i>	‘day before yesterday’
NCV: Mota	<i>anarisa</i>	‘day before yesterday’
NCV: Port Sandwich	<i>(xi)nois</i>	‘day before yesterday’
NCV: Paamese	<i>noeise</i>	‘day before yesterday’
NCV: Nguna	<i>(n)anoasa</i>	‘day before yesterday’
SV: Sye	<i>nowisas</i>	‘five days ago’
SV: Lenakel	<i>nihin</i>	‘day before yesterday’
	<i>(to)nhi</i>	‘day after tomorrow’
SV: Kwamera	<i>neis</i>	‘day before yesterday’
	<i>(tə)neis</i>	‘day after tomorrow’
SV: Anejom	<i>nviθ</i>	‘day before yesterday, day after tomorrow’
Pn: Tongan	<i>[ʔa]ʔanoiha</i>	‘day after tomorrow’
Pn: Niuean	<i>[a]noiha</i>	‘day after tomorrow’
Pn: E Uvean	<i>anoia</i>	‘day after tomorrow’
Pn: Mae	<i>anoisa</i>	‘day after tomorrow’

The contrast between **waRisa* with and without **na-* is reflected in the following pairs:

	<i>*waRisa</i>	<i>*[qa-]na-waRisa</i>
	‘day after tomorrow’	‘day before yesterday’
MM: Patpatar	<i>uaris</i>	<i>nauaris</i>
MM: Tolai (Nodup)	<i>oari(a)</i>	<i>nari(a)</i>
NCV: Mota	<i>arisa</i>	<i>anarisa</i>
NCV: Port Sandwich	<i>(x)ois</i>	<i>(xi)nois</i>
SV: Sye	<i>wisas</i> ‘five days hence’	<i>nowisas</i> ‘five days ago’
SV: Anejom	<i>(ho)viθ</i> ‘three days from today’	<i>nviθ</i> ‘day before yesterday, day after tomorrow’

Apparently an alternative way of expressing ‘the day after tomorrow’ in POc was **boŋi rua* ‘day of twenty-four hours’ + ‘two’ (in a few languages the opposite order of elements is reflected, in line with syntactic change). This was perhaps a way of avoiding the ambiguity of temporally directionless **waRisa*. However, in a few modern languages this expression can also mean ‘day before yesterday’ (in Wayan a preposed particle indicates temporal direction). In two widely separated languages, Tami and Mono-Alu, the reflex apparently means ‘tomorrow’: one can imagine several ways in which this meaning change might have occurred, but none is especially convincing.

POc **boŋi rua* literally ‘two days’, apparently by default ‘the day after tomorrow’

Adm: Lou	<i>ru-peŋ</i>	‘day after tomorrow’
Adm: Titan	<i>lu-poŋ</i>	‘day after tomorrow’
NNG: Kove	<i>voŋo-hua</i>	‘day after tomorrow’
NNG: Bariai	<i>boŋ-rua</i>	‘day after tomorrow’
NNG: Tami	<i>boŋ-lu</i>	‘tomorrow’
NNG: Kilenge	<i>voŋ-a</i>	‘day after tomorrow’
NNG: Maleu	<i>vuŋ-ua</i>	‘day after tomorrow’
NNG: Amara	<i>voŋo-ruo</i>	‘day after tomorrow’
NNG: Poeng	<i>(ŋa)voŋa-lua</i>	(ADV) ‘day after tomorrow’
MM: Kandas	<i>ura-buŋ</i>	‘day after tomorrow’
MM: Mono-Alu	<i>boi-ua</i>	‘tomorrow’
NCV: Nokuku	<i>pon rua</i>	‘two days hence’
NCV: Kiai	<i>pon-rua</i>	‘the day after tomorrow’
NCV: Uripiv	<i>bon eru</i>	‘day before yesterday’
Fij: Bauan	<i>boŋi-rua</i>	‘day before yesterday’
Fij: Wayan	<i>ei boŋi-rua</i>	‘day after tomorrow’
	<i>a boŋi-rua</i>	‘day before yesterday’

3.3.6 *More than two days from now*

A number of languages have terms meaning ‘in three days time’ (i.e. ‘the day after the day after tomorrow’) and ‘three days ago’, and some have similar terms for up to five days. However, there is no sign of cognacy among them, and it is difficult to reconstruct terms in lower-order proto languages, let alone POc.

3.4 Distances within a month/years or measured by months/years

As far as I can tell, only temporal distances within a day and those measured in days were lexicalised in POc. Distances related to the longer periods of months, seasons or years were not lexicalised.

3.5 The interrogative local noun ‘when?’

Blust (ACD) reconstructs PAN **ijan* ‘when?’, and we would expect the POc form to be **ican*. This is indeed attested, always with a prefix, but only in a few languages. What we find more widely are reflexes of POc **ŋaican* or **ŋican*, sometimes prefixed with **qa-* or

*[qa]na-. The added * η [a]- of * η a-ican or * η -ican seems to be a fossilised reflex of the POc prefix * η a-, an occasionally reflected alternant of POc *qa- (p.237). This prefix is also reflected in Nakanai *ga-isa*, shown as a reflex of *ican below. The reason Nakanai *ga-isa* is treated as a reflex of *ican, and not of * η aican, is that in Nakanai *ga-* remains as a productive adverbial formative on temporal bases, alternating with the past formative *ala-* (reflecting POc *[qa]na-).

From the distributions of their reflexes, it seems that * η aican or * η ican were already alternants to *ican by the time POc broke up.

PAn **ijan* ‘when?’ (ACD)

POc **ican* ‘when?’, **qa-ican* ‘when?’

NNG: Manam	<i>aira</i>	‘when?’
MM: Nakanai	(<i>ga</i>) <i>isa</i>	‘when?’
MM: Meramera	<i>aisa</i>	‘when?’
MM: Tabar	(<i>si</i>) <i>sa</i>	‘when?’
MM: Mono-Alu	(<i>ro</i>) <i>isa</i>	‘when?’

POc *[i] *ḡaican* ‘when?’, **qa-ḡaican* ‘when?’

NNG: Malai	<i>ḡez</i>	‘when?’
NNG: Gitua	<i>ḡeza</i>	‘when?’
NNG: Arop-Lokep	<i>ḡe(lo)</i>	‘when?’
MM: Sursurunga	<i>aḡes</i>	‘when?’
MM: Tolai	(<i>vi</i>) <i>ḡaia</i>	‘when?’
MM: Ramoaaina	(<i>na</i>) <i>ḡaian</i>	‘when?’
MM: Label	(<i>na</i>) <i>ḡse</i>	‘when?’
MM: Siar	(<i>la</i>) <i>ḡsinḡ</i>	‘when?’
SES: Arosi	<i>ḡaita</i>	‘when (future)?’
SES: Fagani	<i>kaitā</i>	‘when?’
SES: Kahua	<i>keta</i>	‘when?’
NCV: Mota	<i>aḡaisa</i>	‘when (future)?’
NCV: Nokuku	(<i>p^wa</i>) <i>nes</i>	‘when (future)?’
NCV: Port Sandwich	<i>ḡais</i>	‘when?’
Mic: Kosraean	<i>ḡε</i>	‘when?’
Mic: Mokilese	<i>ḡēt</i>	‘when?’
Mic: Mortlockese	<i>iḡēt</i>	‘when?’
Mic: Puluwatese	<i>yḡet</i>	‘when?’
Mic: Satawalese	<i>ilēt</i>	‘when?’
Mic: Carolinian	<i>inēta</i>	‘when?’
Mic: Woleaian	<i>irēta</i>	‘when?’

POc *[i] *ḡican* ‘when?’, **qa-ḡican* ‘when?’

MM: Bali	<i>ḡizana</i>	‘when?’
MM: Lavongai	<i>aḡisan</i>	‘when?’
MM: Notsi	(<i>la</i>) <i>ḡisa</i>	‘when?’
MM: Madak	(<i>na</i>) <i>ḡisa</i>	‘when?’

MM:	Barok	(la)ŋis	‘when?’
MM:	Tangga	(na)ŋis	‘when?’
MM:	Bilur	iŋian	‘when?’
MM:	Nehan	(ma)ŋiha	‘when?’
MM:	Solos	(ha)ŋis	‘when?’
MM:	Halia (Haku)	(iha)ŋisa	‘when?’
MM:	Teop	(tobo)nihi	‘when?’
MM:	Kia	niha	‘when?’
MM:	Kokota	niha(o)	‘when?’
MM:	Maringe	(a)ñiha	‘when?’
MM:	Gela	ŋiha	‘how many?’ ‘how much?’ ‘when?’
SES:	Bugotu	ñiha	‘when?’
SES:	Lengo	iŋiða	‘when?’
SES:	Talise	(ka)ŋisa	‘when?’
SES:	Malango	iŋisa	‘when?’
SES:	Birao	(daka)ŋisa	‘when?’
SES:	Longgu	aŋita	‘when?’
SES:	Lau	aŋita	‘when?’
SES:	Kwaio	aŋita	‘when?’ (also <i>nānita</i> ‘when?’)
NCV:	Kiai	nisa	‘when (future)?’
NCV:	Tolomako	i ŋisa	‘when (future)?’
SV:	Anejom	iñiθ	‘when?’
Fij:	Wayan	ei ŋiða	‘when (future)?’
		a ŋiða	‘when (past)?’

A scattering of languages reflect the past formative with either **ŋaican* or **ŋican*.

POc **[qa]na-ŋaican*, **[qa]na-ŋican* ‘when (past)’

MM:	Nakanai	alaisa, alisa	‘when (past)?’
MM:	Halia (Selau)	naŋsa	‘when?’
MM:	Papapana	noŋovita	‘when?’
SES:	Kwaio	nānita	‘when?’ (also <i>aŋita</i> ‘when?’)
SES:	’Are’are	nanita	‘when?’
SES:	Arosi	nageita	‘when (past)?’
SES:	Oroha	nanita	‘when?’
SES:	Sa’a	ŋanite	‘when?’
SES:	Fagani	anakaita	‘when?’
SES:	Bauro	anakaita	‘when?’
NCV:	Mota	anaŋaisa	‘when (past)?’
NCV:	Nokuku	nenesa	‘when (past)?’
NCV:	Kiai	nanisa	‘when (past)?’
NCV:	Tolomako	naŋisa	‘when (past)?’
NCV:	Lonwolwol	neŋeh	‘when (past)?’
NCV:	Paamese	neŋeise	‘when (past)?’
NCV:	Nguna	naŋasa	‘when?’

SV:	Sye	<i>niŋoi</i>	‘when?’
Mic:	Kiribatese	<i>niŋaira</i>	‘when?’

In Proto Polynesian, reflexes of POc **ican* and its derivatives had been lost. Instead, the PPn local root **fea* ‘where’ (Ch. 8, p.265) was used. The local and temporal uses remained distinct, since ‘where’ was expressed by the preposition **i* + root, whereas ‘when’ was expressed by prefixing PPn **qā-* for the future and **[qa]na-* for the past.

PPn **qā-fea* ‘when (future)’

Pn:	Tongan	<i>ʔafē</i>	‘when (future)?’
Pn:	Niuean	<i>fē</i>	‘when (future)?’
Pn:	Samoaan	<i>āfea</i>	‘when (future)?’
Pn:	Nanumean	<i>āfea</i>	‘when (future)?’
Pn:	Ifira-Mele	<i>āfea</i>	‘when (future)?’
Pn:	Hawaiian	<i>āhea</i>	‘when (future)?’
Pn:	Tahitian	<i>āfea</i>	‘when (future)?’

PPn **[qa]na-fea* ‘when (past)’

Pn:	Tongan	<i>ʔanefē</i>	‘when (past)?’
Pn:	Niuean	<i>nefē</i>	‘when (past)?’
Pn:	Samoaan	<i>anafea</i>	‘when (past)?’
Pn:	Nanumean	<i>nāfea</i>	‘when (past)?’
Pn:	Rennellese	<i>anafea</i>	‘when (past)?’
Pn:	Ifira-Mele	<i>nafea</i>	‘when (past)?’
Pn:	Hawaiian	<i>ināhea</i>	‘when (past)?’