# 3 The true prepositions/ casemarkers in Proto Oceanic

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#### 1 Introduction<sup>1</sup>

#### 1.1 Preliminary comments

This work studies prepositions (PREP) and casemarkers (CM), categories which we shall usually combine as PCM. We begin with certain postulates about which PCMs, coming down from Proto Austronesian (PAn) and Proto Malayo-Polynesian (PMP), entered Proto Oceanic (POc) by direct inheritance. These are all monosyllables of CV structure. We won't deal with new prepositions emerging from locative nouns or from serial verbs except to note that as lenition gradually erodes understandability, longer words or phrases must be substituted or added. The present effort is more interested in finding relics of the ancient ones than in elaborating on the invaders.

We tend to say 'casemarker' when a PCM becomes more highly grammaticalised, more purely syntactic, with less specific semantic content, and/or, by lenition, tends toward becoming a clitic and eventually an affix.

Although the postulated PCMs are based on evidence, it is beyond the scope of this paper to test and prove them. We take them as given, and search the Oceanic languages for the PCMs that should appear as descendants of the postulated ones.

When reference to the PAn consonant \*C is needed, I'll write it in lower case ('c'), to allow 'C' and 'V' to be used for generalised Consonant and Vowel.

Two principles used in the study are worth mentioning. Principle 1: Take the simplest explanation. If an attested form can come from an acceptable protoform, take that as its source; don't concoct a theory to create it *ex nihilo*. Principle 2: Postulate an irregular

I am grateful to David Zorc for giving generously of his time to advise me about the Philippine languages. Malcolm Ross kindly corrected some of my errors, and graciously sent me some pages from work of his in press. Andy Pawley advised me on improving the logical structure of the paper. Advice from Bob Blust and Paul Geraghty on an earlier paper remained of value. None of them, of course, is responsible for any errors remaining in this work.

phonological change only as a last resort. If available, take an explanation that does not need any irregular sound change ad hoc.

As an example of the logic used here, consider the accepting or rejecting, as ancestral, of (1) the lo particle, which Ross (1988:287) calls a preposition innovated in Western Oceanic, and (2) the ta which Pawley (1973:147-148) called a true preposition, but Ross (1988:104-106) called an old noun. This study calls ta and not lo a possible true PCM because ta and not lo occurs as such in Formosan languages; and because lo and not ta has a plausible noun source, the locational noun lalo. Ross is right (1988:287) both in seeing \*la/\*lo as an old inalienable locative noun and as seeing that it has become a preposition in the New Ireland languages. But the standing of ta in Ross's languages is less clear. For the Mussau language Ross (1988:117) shows:

(1) e-ta-ira
PREP-PREP-3PL<sup>2</sup>
'for them'

but the occurrence of two successive prepositions is problematic. The ta- seems to be a grammaticalised determiner (casemarker), and its ancestry can be a PAn preposition \*ca/\*ta or else a PAn demonstrative \*cV (which for PMP is most easily reconstructed \*tu < \*cu with the allowable variation among three vowels).

#### 1.2 Postulated cases

It is assumed that the 'focus' case system, found in Formosan and Philippine languages, was essentially what late PAn had. (Starosta 1974 may be right in contending that Rukai branched off from mainline AN before that system developed, though it is also possible that Rukai's ancestor had that system and lost it, as the ancestors of many MP languages did.) The system had at least the three cases found in Tagalog. Case 1 has been called the topic or focus. Evidence suggests that it began as a topic but became absolutive or nominative, and so

2	Abbreviations used in this paper:			
	IS.BN	first singular benefactive	0	object particles
	2SG	second person singular	OBJ	object
	3PL	third person plural	PAn, PAN	Proto Austronesian
	3SG	third person singular	PCEMP	Proto Central Eastern Malayo-
	Α	actor/agent particles		Polynesian
	AN	Austronesian	PCM	prepositional casemarkers
	ART	article	PEMP	Proto Eastern Malayo-Polynesian
	*c	Proto Austronesian consonant	PF	perfective
	С	consonant	PMP	Proto Malayo-Polynesian
	CEMP	Central Eastern Malayo-Polynesian	PN	personal name
	CM	casemarker	POc	Proto Oceanic
	CONJ	conjunction	POSS	possessive
	CV	consonant, vowel	PREP	preposition
	DEM	demonstrative	PSHNNG	Proto South Halmahera North
	DIR	directional		New Guinea
	<b>EMPH</b>	emphatic	SRP	inner nominative pronoun
	GEN	genitive	TAM	tense, aspect, mode
	IRR	irrealis	V	vowel
	LOC	locative	WMN	Western Melanesian
	MP	Malayo-Polynesian	WMP	Western Malayo-Polynesian
	NomAc	nominative accusative	<	comes from
			>	goes to

acquired some characteristics of the syntactic subject of the sentence, regardless of its semantic role. Affixes on the verb provide a partial mapping of semantic roles onto the syntactic cases.

Case 2 has genitive role (linking a noun to another noun), and is also used as the marked agent ('ergative' or passive), an agent (doer) that is not the focus nor a nominative subject. Its occasional 'from' role (na, no, Williams & Williams 1956:14, 15) is almost certainly a survival from earliest PAn, as (space) 'from' words tend to evolve into 'of' and 'by' words and not the reverse. Thus we get a small glimpse into a pre-PAn or early PAn state that preceded 'focus' syntax.

Case 3 is used for space relations (location or motion to/from) and for a broad variety of other semantic roles, such as time, dative, benefactive, causative, comitative, means, and manner. POc's ancestor, PCEMP, abandoned the focus system for a new Nominative-Accusative (NomAc) syntax, though its PCMs show their ancestry.

# 1.3 Functions of the initial consonants of ancestral PCM

It is postulated that the syntactic case and semantic role of each PCM was determined anciently by the consonant. In MP only six initial consonants, including zero, were used in PCMs, but most of them (zero, /s/, /k/, if not /t/ and /d/) seem to have been used for both Case 1 and Case 3. As PAn \*c and \*t merge in PMP, we need not consider the Formosan evidence that PAn had both \*c- and \*t- PCMs. The paradigm postulated here includes:

- zero- Case 1 topic, focus, nominative, absolutive
- zero- Case 3 locative, mostly with /i/ vowel
- n- Case 2 genitive, ablative, ergative, complement
- s- Case 3 dative, allative, adjuncts, usually sa
- s- Case 1 nominative, usually si for persons only
- k- Case 1 topic, nominative, presentive
- k- Case 3 allative, comitative, dative, adjunct
- t- Case 3 locative, accusative, allative, others
- d- Case 3 locative, accusative, others. It is r- in Oceanic.

Case 1 in t- and d- is more elusive. The six initial consonants (including zero) are seven in PAn, as two PAn consonants merge as t- in PMP.

The similarity of t- and d- in both phonology and usage suggests the possibility of a common prehistoric origin with some unknown element present in one of them; but that issue involves pre-PAn and may never be resolved.

The *n*- morph is the best established of all. It is also the simplest and clearest. Case 2 had only the *n*- marker; the *n*- marker was used only in Case 2; and Case 2 was clearly defined.

It is curious that in five of the seven reconstructible PAn PCMs the consonant is in the dental-alveolar range of articulation (PAn \*n, \*s, \*t, \*c, \*d) with only zero and \*k as exceptions. Is that a chance happening, or did something of interest happen in pre-PAn?

#### 1.4 Functions of the vowels of ancestral PCM

The vowels anciently marked certain classes of substantives, but no simple paradigm seems to cover this matter. For the consonant n-, the one most certain to have occurred with

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all three vowels in PAn, and what seems clearest from examining Philippine and Atayal languages (Schachter & Otanes 1972; Huang 1994; Li 1995) is that *i*- was used for proper names of persons (and perhaps places), personal pronouns, and some demonstrative pronouns; and *a* for nonspecific common nouns. A table (slightly adapted for clarity from Huang 1994:97) shows the vowels and classes as:

Casemarking, Genitive, for Nouns:

Common: nonreferential [nonspecific]: na'

Referential [specific]: nku'
Proper [always referential and specific]: ni'

[An unidentified vowel is elided between n and k in the second line.]

In Chamorro (Topping & Dungca 1973:133-135), where i is a specific article that cannot occur before a pronoun, nu + i is contracted to ni. In Paiwan (Ferrell 1981), where ni is 'of' before personal pronouns and names of persons, nu or nua or (contracted to) na is used before common nouns. Those two contractions suggest that the ancient PCM was the -u form, and that PCMs in -i and -a are contractions of it with article \*i for persons or proper names and \*a for (nonspecific?) common nouns. Furthermore, Paiwan (Ferrell 1981:12) shows tua (PAn \*sua) beside tu (PAn \*su) as the -f ocus, non-agent 'construction marker'. This fits our definition of a Case 3 marker. His example 'the bird grasped the stone' seems accusative. Ferrell's 'construction markers' show only the 'syntactic slot', in contrast to casemarkers, which, he says, should show also semantics. And for Kanakanavu, Li (1997:353) shows sa and sua as alternative forms of a casemarker. So we have evidence from languages in three different primary branches of AN, that casemarkers Ci < Cui < Cui, and Ca < Cua < Cua. Chamorro supports the hypothesis for nV, Kanakanavu supports it for sV, and Paiwan supports it for both.

So what the evidence suggests is that the PCMs in -u may be the most ancient ones; and that those in -i and -a were formed from the -u forms plus an article, i for reference to persons or proper nouns, or a for nonspecific common nouns. The simple Cu form may have remained for nouns fulfilling neither the -i nor the -u requirement.

For the other initials (zero, k, d, t, c) the same process may have taken place. On the other hand, some of them (perhaps the vowel alternatives to the locative i and possibly di) could have arisen later by analogy with the ancient \*n- and \*s- forms.

This explanation accounts for evidence that had been noted before by others. Zorc (pers. comm.) said that in the Central Philippine languages, regardless of the consonant, -u is the most specific, -i is indefinite-nonspecific, and -a is perhaps neutral, though specific-definite for Case 3 common nouns. Malcolm Ross (pers. comm.) suggested that the vowel is i for personal pronouns and names and for indefinite common nouns; but a for common nouns of things present, and u for common nouns of things absent.

It is agreed that PAn had only four vowels: a, i, u, and an indefinite ('schwa') that can be written 'e' and became o in Oceanic. Vowels 'e' and 'o' in attested words, including PCMs, are usually from PAn \*i and \*u respectively. In CVCVC words, PAn final \*-ay > e and \*-aw > o. In Oceanic examples, when a PCM is attested as -o or -e, it will be regarded as ancestrally \*-u or \*-i, respectively, in the absence of any other explanation.

The archaic PCMs in -u/-o are somewhat scarce in Oceanic and other CEMP languages today. Beginning perhaps with prehistoric Wolio and the adjacent Proto CEMP, the PCMs with vowel i came to predominate. But forms with varying vowels are found scattered

widely. Collins (1983), based in part on Reid (1978), hypothesised either \*u or \*su as nominative marker for Proto Central Maluku in Seram, Central MP.

# 1.5 Some problems with the vowel + consonant system

One possible paradigm is that all the initials occurred with all three vowels. This is very simple and elegant. A purpose of this paper is to explore to what extent it is supported by evidence. It works best for the n and s forms, the ones for which we have evidence that the a and i variants arose from earlier i.

For other initials, especially k and s, the list of cases and markers suggests two problems to be solved: (1) How are the Case 1 and Case 3 interpretations distinguishable to the hearer? (2) To what extent were the consonants of the casemarkers in free variation, within Case 3 (zero, \*k, \*t, \*d, \*s) and within Case 1 (the same repertory)? A full answer to the two questions may be attempted in a future study. A partial answer is that the vowel paradigm derived from n may not have applied to all initials. Initial zero in Case 3 in PAn may have been strictly locative, not used for direction or broader Case 3 meanings; and in PAn it may have had only the i vowel.

Part of the answer to question (2) is that PAn may have been like Amis as described in Chen (1987) in having two different cases (zero consonant as predicate noun and topic, and k- as nominative-absolutive) that merged into Case 1 in the emerging 'focus' syntax. Evidence in Amis is that the \*kV marker moved from topic use to nominative sooner than the \*zeroV did.

The point of question (1) is that use of the same initial for Cases 1 and 3 could result in ambiguity, but this has seldom, if ever, been a problem. A partial answer to question (1) is that only in Reid's (1974) Central Cordilleran language group is PCM s- allowed to occur with the same vowel in Cases 1 and 3, and even in that group, no language seems to have identical phonology for the two cases in the same person and number. For s, the oldest Case 1 usage probably was restricted to vowel i and restricted to singular proper names of persons; and the oldest Case 3 usage of s- may have been restricted to vowel a. Reid (1974:534) shows s used in both cases, singular, with vowel -i in Central Cordilleran languages, but Case 1 only for 'personal' and Case 3 only for 'common' substantives.

For k-, I don't know any language that has it in both Cases 1 and 3 with the same vowel. A partial exception is Rukai, in which one case has an a/i distinction based on specificity. And for initial zero, languages with broad use of Case 3 i, such as (WMP) Wolio (Anceaux 1987:45) and Oceanic, have generally lost, reduced or hidden the Case 1 i.

# 1.6 Demonstratives with casemarking

In Austronesian as in Indo-European, third person pronouns, articles, and demonstrative adjectives (determiners), often have a common origin in demonstrative pronouns. PAn \*i(y)a(n), recognised by Dempwolff (1938), is the demonstrative that most commonly develops into 3SG in MP tongues. In PMP and Proto Central Philippine, and Formosan languages such as Atayal, are seen signs that the PCMs in -i merged with pronoun (i)(y)a(n) to the right, forming left-casemarked pronouns. The formation of Case 2 niya and its later course were well discussed by Blust (1977) and others. It is attested, for example, in Tagalog niya (Schachter & Otanes 1972:88). Blust noted its slight lenition to nya (and thence to 'palatalised' -a in POc), a process he thinks may have occurred independently in many

branches of AN. Tagalog also has siya and diyan (Schachter & Otanes 1972:88, 91). Less noticed has been Atayal kya glossed 'to it' and 'there' (Rau 1992:75, 227). In Oceanic and Indonesian, Case 3 role tended to bleach out. In Oceanic, the demonstrative tia appears as a predicate nominative marker in Fijian (Geraghty 1983:232) and its possible lenition as an article, te, ta, ti, has shown a powerful presence in Polynesian and Micronesian languages.

A fuller account is in Finney (1997). In that account I accepted Dempwolff's reconstruction of PMP pronoun \*ia. Now I see it as more parsimonious to reconstruct the PAn and PMP pronoun simply as \*a. The occasional forms that point to \*ia as the pronoun (having a different PCM on its left) seem to be later reanalyses occurring after grammaticalisation. This new approach allows us to posit a full set of PAn or PMP demonstratives, all light monosyllables \*(C)V.

When the new nominative-accusative syntax of POc appeared, requiring preverbal subject pronouns, the 3SG forms available were (i)a descendants. Doublets were available, drawn from the old Case 1 with zero initial (old agent focus, nominative or absolutive) and the old Case 2 (with the agent in n-, ergative, from the old voices in which the nominative slot was occupied by something other than the agent). Most Polynesian languages have the preverbal subject 3SG as na, old Case 2, but it is (old Case 1) e in Fijian and i in the Polynesian languages of West Futuna and Aniwa (Dougherty 1983:34).

#### 1.7 Forms in PAn, PMP, PCEMP, PEMP, PSHWNG, and POc

In the generally accepted theory of Blust, the successive proto levels from the top down to Oceanic are Proto Austronesian, Proto Malayo-Polynesian, Proto Central-Eastern Malayo-Polynesian, Proto Eastern Malayo-Polynesian, Proto South Halmahera North New Guinea, and Proto Oceanic. Little is said here about the varying phonological forms of the PCMs at the several levels. The vowels, as noted, have changed minimally from PAn down to POc, and not much even within Oceanic. Among the consonants, n- has the clearest syntactic and semantic functions, and persists in a great number of languages today. The forms ni and na, which must have occurred by late PAn, occur unchanged in many Oceanic languages, and with much the same semantic role. The other initials, zero, s, k, t and d, also stayed unchanged from PMP all the way down to POc, although recently it has become customary to write \*r for what was formerly written POc \*d.

In presenting the PCMs of Oceanic languages, we'll deal briefly with those best known and most firmly established, and give longer discussion to those (such as sa) which are suggested here for the first time as Proto Oceanic.

# 2 Forms in Oceanic languages

#### 2.1 A full set, all in -i

Arosi (Fox 1978), an Oceanic language of San Cristobal in the SE Solomons, has five 'prepositions' in -i, all glossed as 'of, belonging to', a genitive translation. They are: i, ni, ki, ri, and si. In §2.5.2 we'll note evidence that ti merged into si, and so the set may represent six initials. Attested forms in other Oceanic languages, too, are sufficient to show that ancestral forms \*i, \*ni, \*ki, \*ti, and \*di > \*ri, all found in Western MP, can be reconstructed for POc.

It is recognised that *i*, in all likelihood, was by source a locative preposition in the narrow sense. Likewise, evidence suggests that all of these PCMs began as prepositions of space. Only *ni* was a genitive in PAn, and it also had 'from' semantics. What we see here is the locative-allative prepositions invading the genitive field as in their own fields they are slowly replaced by old nouns or serial verbs. That happens in many language families. Contrariwise, in other Oceanic languages, *ni* can invade the field of other space relations. In Tungaru (Gilbertese, Kiribati) *ni* or *n* is glossed 'at, in, for, to' (Sabatier 1971). (We should say Sabatier and Oliva, as Sister Oliva, though modestly calling herself a mere translater of the Gilbertese-French dictionary into Gilbertese-English, was fluent in all three languages and must have used her own judgment.)

#### 2.2 Oceanic PCMs in zero-

#### 2.2.1 Oceanic PCMs u, old Case 1

In Formosan (Starosta 1974), u or o marks elements found in Amis (topics and predicate nouns) and in Tsou (less easily defined). Chen (1987) confirmed them in Amis, and Collins (1983) found them in Central MP. After the present paper was given, I found evidence for topic-marker o in Proto Oceanic, which may be given in a future paper.

# 2.2.2 Oceanic PCMs i, old Case 1

This is the Case 1 marker for personal proper names in Atayal, where Tagalog and many Formosan languages have si. Tagalog (Schachter & Otanes 1972:88) shows it in the Case 1 2SG ikaw 'thou', from \*i + \*kaSu.

For Lau, Solomon Islands, Fox's (1974) dozen definitions of PCM *i* include one that is nominative Case 1: "9. used before pronouns: *i gia* 'we', *i nau* 'I'".

The marker *ia* (from *i* plus article) in Tokelau is the most likely example I have seen of this in Oceanic. The Tokelau dictionary (Anon. 1986) lists six uses:

1. Before a personal name which is not preceded by a preposition, except the preposition *mai* 'from'...2. Sometimes used before pronouns which are not preceded by a preposition and which do not immediately follow the verb...3. Before locative nouns and place names which are not preceded by a preposition...4. Before nouns referring to people who are acting collectively...5. Before nouns referring to violent weather phenomena or to objects which occur in profusion...6. Before a noun which is the subject of a number predicate.

#### 2.2.3 Oceanic PCMs a, old Case 1

Atayal Formosan uses this marker for nonspecific common nouns. Zorc (pers. comm.) rightly analyses the Tagalog common noun Case 1 marker ang as a + 'linker' ng.

No example was found in Oceanic. The a which occurs as a general article or a personal article in Oceanic languages seems to be a grammaticalisation (and possibly lenition) from demonstrative a or ia, not a reanalysis of an old Case 1 marker.

#### 2.2.4 Oceanic PCMs u, old Case 3

The non-Oceanic use is shown by Donohue (1995), in a study of Tukang Besi on Sulawesi, giving examples of u labelled genitive, with varying semantic roles. Rather than create a new category for zero casemarking of (genitive) Case 2, we'll assume that this is an ancestrally locative Case 3 that has invaded genitive territory, as often happens. The following example has kept spatial semantics:

(2) te po'o l-tompa-api-su u La Mar CORE mango OBJ-throw-DIR-1SG.POSS GEN PN 'the mango that I threw over to La Mark'

In the Oceanic language of Anejom (Aneityum), the southernmost island in Vanuatu, "the basic locative prepositions are a and u, and a large number of locative phrases...are introduced by one or other of these two prepositions" (Lynch 1982:127). An example:

(3) Et ehes aen u incai.

3SG:AOR come.from she LOCtree
She is coming from the tree.

Kwamera, Vanuatu, has a demonstrative 'this' or 'here', u, which may be PAn preposition u + demonstrative (lenited). If so, that PCM is an early doublet of Kwamera i, ia 'it, to, in, on, from'.

In Yap, probably an Oceanic language, the preposition u is glossed 'at, from, on, in', and is the left preposition in the 'on top of' construction (Jensen 1977:54, 167, 238).

# 2.2.5 Oceanic PCMs i, old Case 3

These are too common to need comment. I am not the first to note that locative is the only semantic function that can be reconstructed with certainty for preposition i in POc. It acquired genitive uses, too. In Tuvalu (my fieldwork) embedded prepositional phrases such as 'on top of' are i + locative noun + i, in this case, i lunga i. One can also say ki lunga i for 'to the top of', or mai lunga i for 'from the top of'. Kennedy's ki lunga ki (1945:9) was never used in any Tuvalu island but Vaitupu and is no longer used there. Finney and Alexander (1998:30) found it in Rapanui and in Maori. Question of qi. The suggested presence of qi as a PCM in Proto Oceanic (Hooper 1985) is not supported by any \*qi in non-Oceanic protolanguages. All examples suggested as reflexes of POc \*qi are better accounted for as i or ki. Only two Oceanic languages were cited in support of a \*\*qi reconstruction, and both were misconstrued. Tongan may seem to have three similar PCMs, i, 'i, and ki, which could support Proto Polynesian and POc i, qi, and ki respectively. But Churchward's dictionary (1959) makes clear that the first two are alternate forms of the same word, without and with a glottal stop, respectively. The parsimonious view is that the initial glottal is a prosodic one that some speakers have reanalysed as phonemic. As for Kwara'ae (Deck 1933), it has no phonetic ki, but has i < POc i, and i < POc ki, both being the regular reflexes for that language. It is time to abandon the myth of POc qi. The author of the qi paper, Robin Hooper, states (pers. comm.) that in writing the paper she was concerned mainly with other matters and only peripherally with the initial consonant, in which she has no investment. The q designation was decided by one of her professors.

#### 2.2.6 Oceanic PCMs a, old Case 3

Just as with initial consonants, prepositions show variation of vowels, especially between -i and -a, and it may be that the locative i (initial zero) can have a variant a.

Tolo (Crowley 1986) shows a preposition a 'of':

- (4)a. gare a tataru
  man of healing
  'man of healing' (a traditional doctor)
  - b. kabikabi a kolo bank of river 'bank of river'

Crowley regards it as a shortened form of *na*. But it's found in other languages where such origin is even more implausible.

For Anejom, the language of the southernmost island of Vanuatu, Lynch (1982) says, "the basic locative prepositions are a and u", and gives this example of a:

(5) Et ehes aen a nauritai.

3SG:AOR come:from she LOC garden
'She is coming from the garden.'

Lynch is puzzled by the "subtle" distinction between 'garden', which requires a, and 'tree' in sentence (3), which requires u.

For Hawai'ian, Puku'i and Elbert (1957:1) list:

- (6)a. 'ai a puaqa eat PCM pig 'eat like a pig'
  - b. kahe a wai flow PCM water 'flow like water'

Samoan (Milner 1966) shows:

- (7)a. Sau a fuifui lupe. come PCM cluster pigeon 'Pigeons come in flocks.'
  - b. nu'u a uta
    village PCM inland
    'inland village'

#### 2.3 Oceanic PCMs in s-

Zorc (pers. comm.) hypothesises that Proto Central Philippine had all three s- forms: su as definite, usually Case 1, occasionally Case 3; sa as neutral or definite Case 3; and si as indefinite Case 3.

#### 2.3.1 Oceanic PCMs su, old Case 3

In Formosa, Paiwan has \*su->tu-(+a) as casemarker for [Case 3] 'neither in Focus nor Agent' (Ferrell 1981:285).

In MP outside Oceanic, Case 3 su is found in Ata Manobo, southern Philippines (Hartung 1975:36). In the Talaud and Sangir Islands, Stokhof (1982b:41, 59, 220, 244, 283), su occurs (glossed 'at, in, on') in many dialects, including Taghulandang, Beo, Enemawira, Taruna, Tahuna, Tamako, Beran Manganitu, Tambo, Tabuti, Sawang, Siau. It is also found in languages in Seram (Samasuru-Paulohij, Elpaputih), glossed 'at' (Stokhof 1981:93, 115, 138, 155).

In North Sulawesi, where the languages are mostly of Philippine type, several languages show PCM su, with glosses mostly 'at, in, on', occasionally also 'from'. Languages include Tompakewa, Ratahan, Bantik. Another dialect of Tompakewa has si. Other examples of su are in Ratahan and Bantik (Stokhof 1983:281, 295).

Despite all this, I know of no example in Oceanic.

#### 2.3.2 Oceanic PCMs si, old Case 3

Reid (1974) reported si in 'oblique' (Case 3) in the Central Cordilleran languages of the Philippines. Stokhof (1982b:76, 90, 105, 134, 162, 185, 268) also found it as 'on, at, in' in eight languages on Talaud and Sangir islands. But evidence for its occurrence in Oceanic is very slight.

Arosi si 'belonging to, of', has been mentioned above. Arosi sia(na) 'at the house of, in the presence of, with (like French chez)' (Fox 1978), is the same with the demonstrative suffix mentioned above. In view of the absence of Case 3 si elsewhere in Oceanic, and the possibility that some or all of Arosi si < \*ti (discussed in §2.5.2), we can have no confidence that POc had this si PCM.

#### 2.3.3 Oceanic PCMs sa, old Case 3

As sa is such an important and basic preposition and casemarker in the Philippine languages, it is curious that nobody has looked for it in the Oceanic languages. It is possible that this PCM began with only the a vowel, and that the oblique su and si forms found in Western MP arose by analogy with the three-vowel paradigm found with other initials.

For Tagalog, Schachter and Otanes (1972) show the sa case as one of the three cases, calling it the 'directional complement'. Its central and probably oldest use is 'to, toward', but its uses cover a wide field of dative, allative, locative, instrumental, and miscellaneous oblique functions.

In Bikol, one of the Philippine languages in which it became a casemarking prefix to pronouns, it kept its a as well as the (arguably) pronominal i as shown in Mintz's (1971) entries:

saiya 'his; him; her; to, from, by him (it, if animate)' sainda 'they; them; to, from, by them'

Oceanic has dethroned sa from its key position, mainly by encroachment of the five -i PCMs. The form sa survives only in niches here and there.

Tolo (Solomon Islands):

Tolo (Crowley 1986) has two sa prepositions: sa-na 'with, from, of, belonging to':

(8) A baka pepetsi i sa-na ki Maria. the child little at with ART Maria 'The small child is with Maria.'3

and sa-nia 'at, from, of':

(9) Hira baka ra tsolo sani-u. the-DEF-PL child they laugh at.me 'The children are laughing at me.'

The n- elements on the ends of the prepositions are old object pronouns, not possessives, and do not mean that sa is an old noun. They resemble Chen's "DEM" (1987:127).

# Kwamera (Vanuatu):

Here, sa- is defined (Lindstrom 1986:122) as "marker of benefactive":

(10) O sa-i kaha.
do for-POSTCLITIC grandparent
'Do it for grandmother.'

# Tinrin (New Caledonia):

For this language, which is about the same as Grace's Grand Couli, Osumi (1995:132) says: "- $s\hat{a}$  'at, about' is suffixed to only two intransitive verbs, a and  $\hat{i}g\hat{a}$ ":

a-sâ 'laugh at' îgâ-sâ 'dream about'

#### Nguna (Vanuatu):

The basic transitive clause, 3SG, in Nguna, is (Schütz 1969b:54, 207):

(11) E soli a. he bound it 'He bound it.'

with element 3, inner nominative e, and element 5, inner accusative a.

With one verb, the 3SG object pronoun is na, ancestrally from \*na + a, or \*ni + a, old Case 2; and with some verbs it is sa, from \*sa + a, old Case 3. Those forms reflect the fact that in agent-focus in contemporary Tagalog and Wulai Atayal, and likely in PMP and PAn, either Case 2 or 3 can represent what can be considered semantically as (accusative-like) objects (patients, undergoers). For Tagalog (Schachter & Otanes 1972:78) the object is (nang) Case 2 in 'the child washed a plate' but is in (sa) Case 3 in 'the young man loves the young woman' and 'the child helped the woman'. For Wulai (Rau 1992:143-144) the 'direct object' of a common noun is in 'genitive' Case 2 (He bought a rope), while for a pronoun the 'direct object' is usually in 'dative-locative' Case 3 especially 'if it can be viewed as referring to a location', examples 'My mother talked to me', 'I did not utter a word', 'when he saw the woman'. So it is striking that despite the undeniable change from ergative to accusative syntax, the Vanuatu Oceanic language of Nguna shows clear relics of the representation of

POc initial \*k > h, and initial \*t > k. The particle ki < \*ti is honorific before female names.

accusative-like objects seen in agent focus in Atayalic (Formosan) and in Tagalog (Western MP) languages. The absence of an unequivocal accusative marker in those languages is a strong reason for classifying the languages as of ergative type, in which sentences of this kind are intransitive.

At any rate, Nguna is interesting as possibly the only Oceanic language in which sa follows the example of other PCMs in coalescing with a pronoun to its right, thereby constituting a left-sided case inflection (though it does that in at least one Philippine language, Bikol, and to a lesser extent, Pangasinan). Thereby, Nguna is the only Oceanic language in which sa occurs in ways that are more likely to be called 'casemarker' than 'preposition'.

Nguna is also the only language in which sa occurs in two forms: simple sa and asa (though Chamorro has it as as). In its asa form this casemarked pronoun is called Ablative Case by Schütz (1969b:39): "the ablative indicates the place from, of, or in which. The paradigm is almost identical to that for object." Indeed, his table of pronouns forms shows that for three of the six person-number slots the forms are identical; for the other three, including sa, the ablative differs only in having the syllable a prefixed; and in the 3SG pronoun, while, for the ablative, the (a)sa form is the only one, the inner accusative object has four forms, sa, na, a, and e.

When I first noticed that set of four forms, it puzzled me. Only much later did it dawn on me that the sa and na are ancient markers for the old Cases 3 and 2, respectively, each of which marks accusative-like objects in some non-Oceanic AN languages, as we have noted here. What Schütz calls Ablative Case functions much as Tagalog's sa case and Wulai's Case 3 called Dative (Rau 1992:144) or Locative (Huang 1993:17). Here are examples from Schütz (1969b), with page and line numbers:

- (12)a. E too pae asa. it TAM come from.it 'It came from it.' (16:19)
  - b. E paae asa mari-tipa e. he begin it against him 'He turned on him.' (20:61)

and from Schütz (1969a:39):

- (13)a. E one asa one. it lie (on).him lie 'It's required of him.'
  - b. A noa ki sua e asa. I tell OBJ TAM him of.it 'I already told him about it.'4

When the oblique asa pronoun is to be replaced or supplemented by a noun, the PCM for the noun is not \*asa but ki. For example, Schütz (1969a:76) gives a basic sentence using pronouns:

(14) Eu soso e asa. they call it that 'they call it that.'

Or ki is 'to', in which case, the translation is 'I told it to him.'

but when the pronouns are replaced by nouns, it comes out:

(15) Eu soso na-wora waia ki malapoa. they call place this OBJ Malapoa. 'they called this place Malapoa.'

#### Rotuma:

In Rotuma (Churchward 1940), \*sa appears as se, which is phonologically consistent with the fact that the POc adverb sake 'upward' appears as se'e. Churchward (1940:31, 32) defines se as 'to: for' and comments:

the chief non-possessive preps. are 'e, se, and ma, meaning (fundamentally) at, to, and with...Principal senses of se: (a) to (also towards...); on to, into, up to, as far as; until. (b) according to, to the extent of:...(c) for.

He also mentions it in 'look AFTER', 'think ABOUT', 'lean AGAINST'; and as the first preposition in se rer ne 'to the top of', which is  $ki \ lunga \ i$  in Tuvalu Polynesian. An example of a se phrase where English uses a direct object is:

(16) Gou fesia' se irisa.

I hate PCM them
'I hate them.'

#### 2.3.4 Oceanic PCMs su, old Case 1

Reid (1978) reconstructed \*su as nominative casemarker for a protolanguage ancestral to Philippine languages he studied. Chen (1987:52) gives McKaughan's (1962) example of Case 1 so < su in Maranao, a Philippine language.

Collins (1983), considered Reid's \*su as a reasonable source for u markers in Seram, but PAn \*u is more plausible. Pangasinan has so (<\*su) 'particle marking topic of equational sentence and subject of verbal sentence usually when these are 'general' and non-personal in character' (Benton 1971).

I know of no example of nominative su in Oceanic.

#### 2.3.5 Oceanic PCMs si, old Case 1

This particle clearly goes back to PAn, and very early became a Case 1 marker for proper names of persons and, perhaps later, for third person pronouns referring to persons. Ross (pers. comm.) finds evidence that it began as an honorific particle placed after the PCM, before the name.

For Oceanic, Ross (1988:240-247) finds *si* a general topic marker in Western Melanesian (WMN), but as used in Roviana for final topic accusative marker ('pragmatic pivot') it aligned undergoer with intransitive subject as absolutive, and so made Roviana an ergative language (with *si* as absolutive casemarker) as opposed to its close kin Maringe.

#### 2.3.6 Oceanic PCMs sa, old Case 1

I know of no example of nominative sa in Oceanic. Nor is there strong reason to think it existed in PMP. The initial Case 1 s- may never have had the full set of three vowel alternatives

#### 2.4 Oceanic PCMs in k-

#### 2.4.1 Oceanic PCMs ku, old Case 3

Chen (1987:52) gives McKaughan's (1962) example of Case 3 locative ko < ku in Maranao Philippine.

Wolio, a WMP language of Southeast Sulawesi (Anceaux 1987), shows ko < \*ku or \*ku-a as comitative preposition 'with, and'; so we have direct evidence of u forms for the kinitial both in the unmarked case (old Case 1) and in the oblique (old Case 3).

Yap is probably an Oceanic language. One of its four prepositions discussed by Jensen (1977:54, 167, 235-236, 238) is ko/ku. It is spoken and written ku in certain contexts and is surely from \*ku, although in other contexts it is spoken and written ko. It is glossed 'for'; also 'in', 'from'. It appears as the right (genitive) preposition in the 'on top of' construction.

Also in Oceanic, a Micronesian language, Marshallese (Abo et al. 1976), has differentiated kon 'for, because, with, concerning', possibly from \*ku.

# 2.4.2 Oceanic PCMs ki, old Case 3

These are clearly PAn, as they are common throughout many branches of AN, including Oceanic. In Mayrinax Atayal (Huang 1994:109) ki is comitative and allative. In Bunun (a language that has been described in both focus and accusative terms) Starosta (1974:316) calls ki 'accusative' without giving an example. It is also an accusative marker in Tanan Rukai (Starosta (1974:319): ki for personal and ka for impersonal (the former a true Case 3 but the latter agreeing with nominative). Some Philippine languages have ki as Case 3 marker for personal names, though kani, kay and kang also occur. In Deli-Malay Sumatra Indonesian, Tampubolon (1983) reports ke allative 'to, onto, into', in contrast to di locative 'on, in, at'; this may be a PAn distinction.

The Tolo Oceanic k- preposition [h- by regular sound change] (Crowley 1986) is expanded by suffixing demonstratives, as follows: hinana 'prep. for, of, belonging to' (+ noun) hinia 'prep. 1. with. 2. about, of, concerning.'

In Kwara'ae (by regular phonological change, 'k' is a glottal, written with an apostrophe), interestingly, the POc \*ki reflex has genitive meaning 'of', sharing that field with ni. The subtle difference is shown in examples (Deck 1933):

ni in: 'a bill of divorcement' i < ki in: 'the sound of wailing'

For Nguna in Central Vanuatu, Schütz (1969a:41) says, 'Ki and ni are both translated as 'of', but their difference in meaning is similar to that of O- and A- particles in many Polynesian languages' [inalienable and alienable possession, respectively].

Schütz seems to distinguish at least two ki particles: when it links noun with noun, and can be glossed 'of', like a genitive, he calls it a preposition; but in a verb phrase he seems to

Fiji (Capell 1968) has ki 'to, toward'; kei 'with, and'. That's the same combination of allative and comitative usage that was found in Mayrinax Atayal. Such close agreement between languages in different primary branches of AN (and too far apart geographically to posit borrowing) is striking. It is highly convincing for attribution to PAn.

Rotuma (where \*k >glottal): 'e is "at, on, in, with (instrumental), from, than, etc." (Churchward 1940).

All Polynesian languages have \*ki (with any applicable phonological change, k to glottal). It is indistinguishable from i in Hawai'i. Nearly all have allative meaning 'to'; many have dative, benefactive, direct object, and other functions. For instance: West Futuna (Dougherty 1983:324) has ki oblique, dative object, 'to, toward', while Nukuoro (Carroll 1973:88) has ki (spelt 'gi') glossed: 'toward', 'to', 'in order to'; desiderative aspect (< kia).

Kosrae (Lee 1975, 1976) has nu ke 'to'; but simple ke 'from, at/about (place), instrument'; ke [its object is always non-human] 'at' (place), 'on', 'about' or 'at' (time, field of knowledge, topic of speaking); 'from', 'by means of', 'because of' (material, inanimate cause, instrument); kac 'at', 'about', 'for' (it or them) [this word, in Lee's dictionary (1976), is not in Lee's grammar (1975)]. Note that in Kosrae the digraph 'ac' is simply an open e, and 'c' is not a consonant; nuh ke 'to, till, up to (a time or place), for (a purpose)'; liki 'from, than'. (It is not clear whether this is from POc \*ri + \*ki, or from the word coined in POc \*l that is not ancestral.)

# 2.4.3 Oceanic PCMs ka, old Case 3

Several of Starosta's (1974) Formosan languages have accusative 'ka' in common with the nominative, so there it may be an extension of the Case 1 use, not an independent Case 3 PCM.

Outside Oceanic, Stokhof (1987:185) shows ka as 'at, in' in Mentawai, an island off the west coast of Sumatra.

Note that some Philippine languages have Case 3 PCMs of form kani and kay, which could possibly arise from ka + ni/i.

In Oceanic, a Micronesian language, Marshallese, has differentiated kon 'for, because, with, concerning', and nan, 'to' (Abo et al. 1976).

# 2.4.4 Oceanic PCMs ku > ko, old Case 1

The k- PCMs, mainly ka and ku/ko, predominate in Formosan languages as the Case 1 ('nominative' or topic) markers.

In Polynesian languages, ko is a standard casemarker (e.g. Churchward 1959, who calls it a preposition), often called 'presentive'. 'Predicate nominative' may be a good term for some of its common uses. In Fijian it is said to have become an article for proper names (Capell 1968) though I think it keeps signs of its ancestral role.

Here is the PCM ko, marking predicate nominative in Tuvalu Polynesian (my fieldwork):

(17) Koe ko te fai-ako-nga. thou KU the teacher 'You are the teacher.'

Compare a sentence (Rau 1992:187) in Wulai Atayal (where \*ku becomes qu):

Here is the PCM ko, marking predicate nominative in Tuvalu Polynesian (my fieldwork):

(17) Koe ko te fai-ako-nga. thou KU the teacher 'You are the teacher.'

Compare a sentence (Rau 1992:187) in Wulai Atayal (where \*ku becomes qu):

(18) Qani qu' puqing n-qu' ngasaN maku. this KU origin of-DEF home my 'This is my home town.'

This illustrates the fact that ku (or perhaps any marker of topic) implied being specific and definite in PAn, and in Atayal it becomes usable as a marker of specificity or definiteness (put right of another PCM) even when it is not in topic or nominative Case. I think that's the sequence. The alternate hypothesis could be explored that ku was a definite article first and later came to serve as topic marker and nominative marker.

In Kapingamarangi Polynesian, where 'g' is [k] and 'd' is [t], Lieber and Dikepa's dictionary (1974:xliii, 51, 287) supports the concept of predicate nominative by defining go (<\*ku) 'it is, it was'. One of their examples is:

(19) Go au ne hai di maa. it.was [KU] I TAM do the thing 'It was I that did it.'

Note the article 'ti'. There is a common belief that this article in Polynesian and Micronesian languages is only 'te', but in fact, 'ti' and 'ta' are also scattered widely.

#### 2.4.5 Oceanic PCMs ki, old Case 1

No unequivocal example was found in Oceanic, although the Kwaio and Fijian examples given in §2.4.6 may well belong here.

#### 2.4.6 Oceanic PCMs ka, old Case 1

In Formosan languages, ka is perhaps the commonest marker of Case 1 (nominative). Examples are in Starosta (1974).

An interesting fact, not noticed before, is the k- Case 1 marking found in Oceanic Kwaio by Keesing (1985:28-29). The inner nominative pronoun 3SG, which he calls SRP, has two forms in free variation: e < \*ia, as in Standard Fijian; and ka, which may come from old Case 1 PCM \*k(a, u, i) + ia, though I incline now toward construing it as PCM \*ki + PAn demonstrative a. In confirmation of either hypothesis, Geraghty (1983:302) reports pronoun 3SG kia in some Fijian communalects.

#### 2.5 Oceanic PCMs in t-

MP languages have a plethora of monosyllabic t- forms. Not all these are PCMs. Some are PAn demonstratives in \*t- and \*c-. Others might possibly be old locational nouns. In the section that follows, we'll mention some candidates that are to be rejected.

Are there any t- PCMs in Case 1? Fijian tia, which we have cited, is a rare example. Polynesian and Micronesian languages have an article that is usually te but also ti and ta. I had viewed it (1997) as lenitions of tia, but incline now toward viewing it as a set of simple PCMs, mostly nominative case, cognate with PCMs attested in Formosan languages both as tV and as cV.

#### 2.5.1 Oceanic PCMs tu, old Case 3

PAn had a demonstrative \*cu, which was \*tu in PMP, and less often appears with vowel a or i. Occasionally it is hard to distinguish a Determiner (Casemarker, ancestrally a preposition) from a demonstrative determiner or article of demonstrative pronoun ancestry).

Tsou Formosan to, accusative marker (Starosta 1974:349) must be PAn \*tu. But Li's (1995) \*cu, accusative marker in Mayrinax Atayal must be PAn \*cu. By regular phonological change, these two PAn forms merge in accusative marker to \*tu in Amis (Chen 1987:136-137) and PMP.

In MP outside Oceanic, in Ata Manobo, in the south Philippines, Hartung (1975:34-37, 47, 51) shows to as a preposition glossed 'in, at, to, from, of'. An example:

(20) Wa dod bag tunas to kamot ta.
not yet quite leafage in field our
'There aren't quite yet any sprouting leaves in our field.'

Stokhof (1987:131) has to 'at, in, on, from' for Lirung in the Talaud and Sangir Islands area. Stokhof (1987:131, 149) has it as *cho* ('at, in, on') in Nias, an island off the west coast of Sumatra. Borneo shows *tu-matan* 'from' (Stokhof 1986:30).

Standard Toba-Batak, described by Sarumpaet (1986:82-83), has tu, glossed 'to'. In Oceanic, Grace (1976) in Grand Couli, New Caledonia, records tu 'in, at, of'.

Kwamera is a language in the South-east of Tanna island in Vanuatu. A t- preposition occurs with alternate forms tu and ti, the latter a high central vowel. Lindstrom (1986) defines it: "1. dative preposition: to; ti nipran (I give it) to the women; ti si? to whom? for whom? 2. purposive or causative preposition;...ramen ti nife? what is he going for? 3. prefix to some temporal nouns expressing future;...ti nipin then (in the future);...4. marker of benefactive; ...ti tata for father;...6. prefix of address with calling out to people; ti mama! mama!" Definition 6 recalls the arguably non-oblique uses of t- forms noted in Ilokano and Tukang Besi.

Many WMP languages have a demonstrative pronoun to < \*tu. Sometimes it occurs with an i- prefix (fossilised Case 1 marker) and the complex resembles a casemarker.

#### 2.5.2 Oceanic PCMs ti, old Case 3

For t-, more than other initials, it is unclear what the syntactic role was in the earliest period, and the semantic function is even less clear, although it seems to fall more often among the Case 3 markers of allative/locative/temporal and accusative functions.

In texts scanned, t- PCMs appear to be used to mark direct objects, subjects and locatives (or allatives) in Seediq (Atayalic), Tsou, and Amis and Bunun (all Starosta 1974). One of the examples seen in Wulai Atayalic was allative (Egerod 1966:362 in Huang 1993:56) as follows.

(21) M-usaH-sakuH te ngasan.
M-go.1S.BN PCM house
'I go (in the direction of, toward) home.'

MP languages outside of Oceanic that show ti or te include Ilokano, Manobo, and some of Stokhof's Indonesian languages. 'Home' is a fairly common object.

First let's examine some MP particles that are doubtful candidates.

Note that Ilokano *i-ti* (Constantino 1971:224) (glossed: 'as for, concerning') occurs typically to mark a noun that is fronted as a topic (two occurrences of *ti*):

(22) *I-ti* lalaki, napigpigsa ngem ti babai.

PCM?.[as.for] man strong than PCM? woman

'As for a man, he is stronger than a woman.'

This Ilokano use of (i)ti resembles the use of te in Donohue's (1995) Tukang Besi, WMP, where te can mark any noun emphasised by fronting (topic) as well as others of 'core' complement (not adjunct) role, generally with semantic functions agent, dative, themepatient, or instrument.

In the Ilokano uses shown here, however, it is not clear whether it is the ancestral t- PCM or t- demonstrative.

One gloss of (i-)ti (also ta) in Ilokano is 'because of, on account of, due to, in'. The i+ti marker, which may be PAn, serves as a variant of ti in Ilokano but a variant of i in Amis.

(23) Iti rurod na, kayat no nga tiritiren ti tengnged ko.
from anger his wish CONJ ? twist the neck my
'In his irritation, he wanted to twist my neck.' (again two uses in one sentence)

The parsimonious view seems to be that Ilokano's ti is a determiner/demonstrative, and the PCM is the i syllable left of it.

The closest resemblance to Atayal's allative *te* is in Seram (Central Moluccas) seen in Stokhof (1982a:20, 28, 29, 38). It is an illative, 'into'.

Manobo: In this Philippine language, te is not listed as an entry in the dictionary but is shown thrice (Elkins 1968:88) in defining another word, himan 'an item used by someone for any purpose'.

(24) himan te me'ama thing of a.man 'man's clothes'

The other two examples were 'carpenter's tool' and 'part of a house'.

Glosses that seem to be suggested for te include: 'of, pertaining to, used by, belonging to, located with, associated with'. It may well have arisen as a locative and become a genitive. Muna, a language of Sulawesi, has te 'in, on'. (Stokhoff 1985:175). In Seumalur, a language of the islands off the west coast of Sumatra, teh means 'from' (Stokhof 1987:101) In Lekon (Stokhof 1987:41) it means 'from' and 'in'. Two other languages in the area (Stokhof 1987:131, 149) have cho apparently from the more archaic tu form of this preposition. In Banggai, a language of Sulawesi, tia means 'at' in contrast to na 'from' (Stokhof 1985:262).

With that background, we search in Oceanic.

For Loniu (in the Admiralty Islands, Papua New Guinea) Hamel (1994) finds *ti* as an emphatic particle. It may precede a noun, as if a casemarker, but can also precede the verb or be in clause initial position. An example (1994:93) is:

(25) Suwe iy ti cohonan mah iy ti cohoman. yam 3SG EMPH place.3SG taro 3SG EMPH place.3SG 'Yams have their place, taro has its place.'

As Arosi (Fox 1978) has only two words in ti, one of which is onomatopoetic (squeak, of a mouse), its preposition si may represent ancestral \*ti as well as (instead of?) \*si.

Mota (Vanuatu) has ti as instrumental 'with':

(26) Iloke o kere ni me vusi-a ti nia. this the club he PAST strike-him with that 'This is the club he has struck him with.'

Nakanai forms are quoted by Durie (1988) from Johnston's dissertation (1978) as follows:

- (27)a. E masta vi-valiburi-a la pepa lo-ata te balus. the white.man cause-scatter-3SG the paper come-down LOC plane 'The white man scattered papers from a plane.'
  - b. Egite ge go-muli te Kansel. they IRR motion-from.me.East LOC councillor 'They are going east to see the councillor.'

The examples show that the locative preposition-casemarker *te* is a very general locative ('to' in one example, 'from' in another), with the specific meaning supplied by the verb and by a suffix on the verb. This construction in Nakanai is used only for movable things and animates such as persons.

Grace (1976) in Grand Couli, New Caledonia, records  $t\hat{e}$  'near, adjacent to, at the home of'. Osumi (1995:163) shows:

(28) wake tê-patrik job home-Patrick 'job at Patrick's'

The Kwamera ti, tu, has been discussed under tu. Notice also Kwamera demonstrative te showing the -ee, -e lenition series as in Polynesian tee-nei. Lindstrom (1986) analyses demonstrative te as ti + i.

# 2.5.3 Oceanic PCMs ta, old Case 3

The PCM \*ta is reported in Starosta (1974:349) as a Dative-Accusative casemarker in the Formosan language Tsou. The language also has it as nominative, and also has accusative nca from \*ca. It also has to < \*tu as accusative and co < \*cu as nominative; that's more than we need. Bunun has accusative ta but as a suffix. It looks like the -a form of the Case 3 t- marker which also appears as tu, te, and ti.

Atayal (Li 1995) has a Case 3 marker which is sa, sa-qu in Wulai dialect and c-ku in Mayrinax (also Mayrinax ca; Huang 1994:109) and has been attributed to PAn \*ca, which would be ta in MP. More curiously, Li (1995:47) uses the Mayrinax Case 3 marker ca even though he fails to mention it as such, fails to gloss it, and fails to list it among the casemarkers or prepositions:

(29) Kac-un cu' na' xuil ca' tunux. bite-PF I GEN dog head 'I was bitten by a dog on the head.<sup>5</sup>

For POc, Pawley (1973) wrote, "\*ta is reconstructible as a preposition indicating locative and perhaps possessive relation."

Ross (1988) noted Pawley's reconstruction of POc preposition ta, but preferred to analyse it as a locative noun, because in some languages it takes possessive pronoun suffixes. They both may be right but speaking of different words. There may be two ta 'prepositions' of different origin.

Pawley's is the possible PAn \*ta. In Mosel's detailed study of Tolai (the language cited in Pawley 1973) it seems that this ta is identical in use with traditional Case 3 locative prepositions, such as di in Indonesian and Malayan. And for Loniu in the Admiralties, Hamel (1994: 97) gives an example of the preposition: ta ku 'in the pot'.

The other ta, the one that looks like a noun in taking possessive suffixes, may be from the demonstrative t- as seen in many Philippine languages. Can a demonstrative evolve into a locative noun? That's the reverse of the normal order of grammaticalisation. We note ree-'at, in, with, for, to, upon, on' in Woleai (Sohn & Tawerilmang 1976) that is such a noun.

Mosel's (1984) work was a careful and detailed study of the syntax of Tolai, where there is a very strong appearance that ta is a pure preposition. What is striking is that the function of ta follows the basic pattern of di in Malayan or Indonesian, and the basic Case 3 prepositions in the non-Oceanic MP languages. In her table of prepositions for eight syntactic-semantic uses, Mosel (1884:171-172) lists ta in five of the categories (all but purpose, manner, and concern). For category 1, addressee-recipient-beneficiary, ta (glossed: 'to') is the only one. Likewise, in category 2, cause, ta (glossed: 'because of') is the only one. [That's the ta that is also 'because of' in Bikol, Ilokano, Isneg and Pangasinan.] For category 3, instrument, ta shares the area with ta shares the territory with three other prepositions. And for category 5, location, ta (glossed: 'in, at, to, from...') has six rivals for parts of the field:

- (30)a. Nam ra tutana i gam vana ta ra marum.

  DEM ART man he TAM go in ART night

  'The man went off during the night.'
  - b. To Kabiana i ga biti ta nina ra tutana.

    NAME he TAM say to DEM ART man

    'Kabiana said to that man.'
  - c. I ve iau ta nam he inform me about that 'He informed me about that.'
  - d. I ga maur ta ra mapinai.
     he TAM be satisfied by ART leaf
     'He became satisfied by leaves.'
  - e. Diat a ti varubu ta ra en. they.PL TAM TAM fight because.of ART fish 'they will fight because of the fish.'

f. ububu kana vudu ta ra labur. they/PL TAM destroy his banana by ART wind 'they (spirits) destroyed his bananas by wind.'

So it appears that Tolai has the 'all-purpose preposition' ta, much like Indonesian di. But Tolai has another ta, a demonstrative. Mosel's sentence quoted for ma also has ta as 'some'. It is the latter that seems cognate with Ross's (1988:104-105) examples of substantives ta, ti, te, locative nouns (not far from demonstrative pronouns) which take possessive (or object?) pronoun suffixes and move toward becoming prepositions. I suggest that these two ta forms, both found in Tolai, differ in their ancestry.

The preposition ta is thoroughly consistent with the t- prepositions/casemarkers found throughout AN, mostly with a different vowel. In contrast, the ta that is a demonstrative pronoun, and can become a quasi-prepositional locative noun, resembles the tdemonstratives found in Philippine languages, from PAn \*c-:

Isneg to: the, that **Bikol** that, those i-to: that

PamPAngan i-ta':

Pangasinan si-ka-to: he, she, it (independent pronoun)

> he, she, it (topic pronoun after ag 'only') to-a:

In Kosrae, Micronesia (Lee 1975:137-139), both POc \*t and \*s > s before i and e. Preposition se has a wide variety of functional roles: seller, speaker, observer, causer, possessor. When we consider that this phonology is oftener from \*t- than \*s-, and also that other Oceanic languages have prepositions from POc \*te/\*ti and seldom from \*se/\*si, it seems likely that Kosrae preposition se comes from a POc \*t- form. Its object is always human (in contrast to ke). It occurs both with and without a preceding preposition nuh (or nwe), which in Kosrae means 'to, till, up to, all the way to' (despite the 'from' meaning ancestral in the AN family) (Lee 1975:135-145, 1976). One contrast is:

se 'of ([object must be a person] possessor, seller, informer, observer, causer of emotions)'

nuh se 'to or toward a person (receiver, buyer, benefacted, or simply end of movement)'

#### 2.6 Oceanic PCM in d-

The dV particle is not among the most heavily used PCM. Nevertheless its occurrence is scattered broadly throughout the family, summarised as follows.

Li (1978:573) found dV as locative in the extinct Formosan language Pazeh. Starosta (1974:327) showed it in Saisiyat as (sleep) 'on the' (bed), though he failed to list it among the casemarkers. Zeitoun et al. (1996:67) for Nanwang Puyuma called da 'oblique'; and gave an example of it in a sentence glossed '...(drink) da (water)' [apparently accusative].

In non-Oceanic MP languages, including Bikol, Bisayan, Malay and Indonesian, di has locative and accusative-like casemarking semantics. In Malay and Indonesian it is the left preposition in embedded PP phrases of the 'on top of' type. Just as in English, 'on top of' has optionally grammaticalised to 'atop', so in Malay and Indonesian the left preposition dVhas come to meld with the locational noun, while the right preposition is reduced to zero. This irreversible process in which an old locational noun, by lenition and grammaticalisation,

is reanalysed as a preposition (or postposition in Mandarin today) is evidently a diachronic part of Universal Grammar.

In Oceanic languages, where d > r, both accusative-like and locative/allative uses of rV persist. For Arosi, Fox (1978) defines r as 'verb transitive suffix'. For Maori Polynesian, Williams and Williams (1956:14) defined preposition ra 'by way of, through, of direction'.

# 2.6.1 Oceanic PCMs du > ru, old Case 3

In Formosa, no du has been reported.

Non-Oceanic examples of *ru* are found in some WMP languages. For example, Fatakai (Nuaulu), a language of Seram in the Central Moluccas (Stokhof 1981:80) has *ru-ike* 'at, on, till'.

In Yap, probably an Oceanic language, the du>ru preposition appears as roo- 'of', 'from', 'for'. Its object must be a suffixed possessive pronoun, and it is considered as replacing the preposition u in that context. See also §2.6.2 below.

In the Oceanic language Tinrin (Grand Couli) in New Caledonia, Osumi (1995:78-89, 165-167) shows ru 'at, in, on', as well as dru 'on account of, because of', and rugi 'at, on, about, locative, temporal and referential', made by adding the preposition gi 'at' (< \*ki). There is also nro, 'for (purposive, as in 'horse for children' and 'the day for his going'). The phonology of this language is complex and its diachrony has not been addressed.

# 2.6.2 Oceanic PCMs di > ri, old Case 3

Li (1978:573, 576-578) reported di as 'the locative or directional marker' in the extinct Formosan language Pazeh. In various examples it was glossed 'in', 'at', 'to', and 'from'. Li took care to distinguish it from the homophonous demonstrative di.

Zorc and others have recognised *di* as one of the basic PCMs for Case 3 in Philippine languages. In Indonesian and Malayan it is the all-purpose preposition for space relation. It is found in many of Stokhof's lists of Indonesian languages. Sarumpaet (1986:82-83) glosses it as 'for'.

In Yap, probably an Oceanic language, the du > ru preposition roo- 'of', 'from', 'for' (already noted in §2.6.1) has a 'special impersonal form' riy 'of it', 'at it', 'from it'. The form may be from \*ru ia, but \*ri (i)a is also plausible.

Arosi, as noted above in  $\S 2.6.1$ , use ri as a genitive 'of', and the same is true of Lau (Fox 1974).

Kii (Espiritu Santo, Vanuatu) has ri 'direction marker'.

For Grand Couli, New Caledonia, Grace (1976) shows re 'at, to'. For Tinrin, virtually the same dialect, Osumi (1995:165) shows  $nr\hat{\imath}$  'in, with' (temporal and instrumental): 'life in those days', 'run with legs', while Kii (Espiritu Santo, Vanuatu) has ri 'direction marker'.

In Carolinian Micronesian two similar forms occur (Jackson & Marck 1991) that need to be distinguished: *lee-* and *ree-*. The *lee-* form is called a preposition, defined: 'at the place or time of'. Diachronically, its phonology fits either the *ni* or the *lallo* preposition. After the hyphen is a noun, such as 'farm', 'sea', or 'evening'. The *ree-* form is called a relational noun [locative noun], defined: 'at, for, with, by, because of'. Diachronically it seems to be \*dia, as in Indonesian, < PMP \*di-(i)a. After the hyphen comes a severely reduced possessive pronoun, which may or may not be followed by a noun. This seems to be the demonstrative and third person pronoun, with bleached casemarking as in Indonesian, and in the Caroline

Islands assimilated to the set of locative nouns. In the example, I have had to supply the word-for-word gloss:

(31) Aa lo' ree-l imwa-l Juan. he PAST.go at.that-of.him house-of.him John 'He went to John's house.'

The *ree* is also a substantive, from the usual fusion of PCM with \*iya descendants, and so forms a left half of compound deictics.

The *ree*- morph also appears in Woleai (Sohn & Tawerilmang 1976), meaning 'at, in, with, for, to, upon, by, because of', considered to be a locative noun, though it seems to come down from \*di + \*(i)a. In Ponape (Rehg 1979) it called a prepositional noun and defined 'location of (him, her, it)'. It is the most used of all the locational nouns in the languages, and the only one that appears to come from an i PCM + \*(i)a. The rest of them in Micronesian languages clearly arose as nouns, and the l/n ones in Micronesian languages have the same lalo ancestry as in Ross's Western Melanesian languages.

Woleai has a *re*-prefix to nationality. It may be a shortened form of *ree*; or it may be straight from POc \**ri* with no history of coalescence with the demonstrative.

In Gilbertese (Tungaru) POc \*r is lost. So, if the ri preposition survives, it has been merged into i and is no longer distinguishable. Kosrae has liki 'from, than'. As \*l and \*r merge in that language, the morph l could come from PMP \*d or from the word coined in POc \*l that is not ancestral.

#### 2.6.3 Oceanic PCMs da > ra, old Case 3

Outside Oceanic, a few da or ra forms occur in Philippine languages, as Case 1 or Case 3.

The ra form occurs in Polynesian: Maori (Williams & Williams 1956:14) shows raa 'by way of, through': ko nga mo kaikai tukua ra uta. [not translated].

Tuamotu (Stimson & Marshall 1964) has ra(a) 'for, belonging to (syn naa)', an example of a Case 3 form beginning to acquire Case 2 genitive use.

In Kapingamarangi, Lieber and Dipeka (1974:xliii, 100) define preposition laa (< \*raa < \*daa) 'toward, around by, -ward' and 'in or from the general direction of'. Example:

(32) Mee gu hana laa nngaaga. he TAM go toward south 'He went southward.'

In Nukuoro, Carroll (1973:251) shows at least two idioms with *laa* seeming to mean 'beyond, at the end of'.

#### 2.7 Oceanic PCM in n-

As I have noted, the occurrence of this consonant, with all three vowels in PCMs in AN languages, is far better established than for any other consonant. This consonant also has a more clearly established syntactic-semantic function than any other; it was used as genitive (hanging noun from noun) and as ergative (marked agent, agent that is not focus or

nominative). Such words regularly descend from ablative 'from' prepositions, and some languages, including Maori, retain that as one of its uses.

#### 2.7.1 Oceanic PCMs nu, old Case 2

Donohue (1995), in a study of Tukang Besi on Sulawesi, gives examples of *nu* labeled genitive, with various semantic roles.

Found in Chamorro and some Philippine and Indonesian languages, this particle has not been found, to my knowledge, in Oceanic. Of course, the less archaic forms of the *n*-particle (*ni* and *na*) are well known in Oceanic.

#### 2.7.2 Oceanic PCMs ni, old Case 2

The best established PCM of all, *ni* is well attested in Formosan and Philippine languages, and its status outside Oceanic need not be reviewed here.

In Chamorro, where Topping and Dungca (1973:133-135) find nu and i merging to nui and then ni, the contemporary nu, nui, ni set may keep the ancient formation frozen in process, Topping is puzzled to find also ni i. That may reflect a reanalysis in which PAn PCM \*i plus demonstrative a is taken as a simple demonstrative a (fooling Dempwolf, as we have noted). In earlier work I followed Dempwolf.

Though i/ni alternation has been reported in two languages (ni after vowels and i after consonants) Hooper (1985) was right in rejecting any diachronic significance thereof. Both i and ni are very well reconstructed in PAn. Alternation in any language must be a recent development that could occur if the two prepositions came to have a broadly overlapping range of uses (as Fox (1978) reports they have in Arosi). The ni are too well known in Oceanic to need exemplification here.

In Yap the form is nga < \*ni + \*ia through the 'palatalisation' in POc described by Blust (1977). It is glossed 'to, for' (Jensen 1977:54, 167, 238).

In Polynesian *ni* is openly present in Nukuoro and Kapingamarangi, thinly disguised as *ni*in West Futuna, and in most other Polynesian languages disguised by melding with
possession classifiers *o* and *a* as *no*, *na*.

#### 2.7.3 Oceanic PCMs na, old Case 2

Ross (1988:112) considers Oceanic preposition *na* to be from *ni* plus article *a*. But with *na* well attested in Formosan and Western MP languages, it must have been present in PAn and PMP; so it seems redundant to have it created anew in Oceanic.

As we have noticed, Polynesian also has possessive forms that are na from PCM ni + possession classifier a; and have corresponding o forms from the other classifier. These are not to be confused with the true ancestral na forms, which have no corresponding no forms.

The ancestral na forms in Oceanic are, in all or most cases, not genitive but agentive, the other main function of the Case 2 'genitives' in PAn. These are 'marked agent' (in somewhat different senses in Oceanic from those in Philippine and Formosan languages). In languages such as Hawai'ian, Maori, and Tuamotu, na puts greater emphasis on the subject than does the other agentive PCM, oblique e.

It is distressing to see that the greatest experts in Polynesian languages have failed to make the distinction between the two na words of different ancestry, and have treated the two as a single word. Williams and Williams (1956) define it in Maori as 'of, belonging to, by...'. Puku'i and Elbert (1957 and later editions) define it in Hawai'ian as 'by, for, belonging to (a form)'. Stimson and Marshall (1964) define it for Tuamotu as 'of, for, by,...by way of'. All regard it simply as the a form corresponding to no. All of them correctly include the gloss 'by' for na and not for no; but they fail to draw the conclusion that the na 'by' word is not the na word that has a corresponding no form.

# 2.8 Oceanic PCM, others

# 2.8.1 Comitative preposition ma 'with'

Briefly, we mention the POc preposition ma, with locative uses as well as meaning 'with' in the comitative sense. Like English 'with', after it became comitative, it also acquired instrumental uses. Here is one from Mosel's (1984:175) Tolai:

(33) Ma una tumu ra mata=na ma ta kabang. and you.SG+TAM paint ART eye=his with some lime 'And paint his eyes with lime.'

In Oceanic, as in Indo-European, locatives become comitatives and then are reanalysed into conjunction 'and' joining nouns. The locative that was *anti* in Greek and *ante* in Latin is *and* in English. Its old spatial meaning was 'over against, opposite'.

In Polynesian this has happened both with ma and with ka.

In a further step, the 'and' connecting nouns can become an 'and' connecting verbs or clauses. That also has happened both with *ka* and with *ma*.

For ka, in Tuvalu Polynesian (my fieldwork) a sentence or clause beginning 'And' will be (if a NP follows) ka-ko (presentive PCM 'ko'); or (if a verb follows) ka-e (neutral TAM e).

For ma, in Gilbertese (Tungaru Traditions, Grimble 1989:9) comitative ma as 'and' can also connect verbs:

(34) Bubunge ma bonotai. begin and protect 'Begin and protect me.'

# 2.8.2 The \*1- prepositions of Oceanic

Ross (1988:286-287, 292) constructs for Proto New Ireland a locative preposition \*la/\*lo, not found in Meso-Melanesian languages outside New Ireland. He derives it plausibly from the locative noun lalo 'inside'. (In Polynesian, lalo is 'bottomside' and loto 'inside'.)

Hamel (1994:268) finds that PCM in Loniu, in the eastern Admiralty Islands:

(35) *Ime lo um*.

3SG.come in house
'He came into the house.'6

<sup>6</sup> Um is a reflex of PAn \*Rumah 'house'.

As we have noted in the subsections of §2.6, some Micronesian languages have forms from *lalo* that need to be distinguished from forms deriving from the \*d->\*r- PCMs. Note that in Carolinian, Woleai and Ulithi, but not the other Micronesian languages, ancestral \*l and \*n merge.

#### 2.9 Possible Case 1 d

Both t- and d- > \*r- forms appear in Eastern Oceanic languages as neutral articles, as though coming from Case 1. I have spoken of this as 'bleached casemarking'. But perhaps there was Case 1 nominative ancestry. Evidence from Indonesian and from Reid's (1974) Central Cordilleran suggests the possibility of \*d as marker of Case 1. Malay/Indonesian has dia as a nominative third person singular pronoun 'he, she, it', more emphatic than ia. For the earliest Proto Central Cordilleran Reid reconstructs nominative singular \*'di' for general and 'di nan' for specific.

# 3 Summary and conclusion

We have reviewed a number of prepositions or casemarkers which seem likely to have been present in Proto Oceanic, with emphasis on those whose phonology makes it plausible that they derive from Proto Malayo-Polynesian, and even PAn.

For n-, forms with all three vowels were clearly present in late PAn. The vowel depended on the classes of substantives governed by the PCM.

For some initial consonants and possibly for all, there is evidence suggesting that the ancient vowel was u, and that the -i and -a variants arose from addition of articles (or classifiers of nouns) on the right, and later deletion of the u. Certain attested languages have forms in -ui and -ua which, in this theory, are survivals of the intermediate stages of development.

Case 1 may have begun (as in Amis) as two cases: k- for the normal absolutive or nominative, and zero initial for predicate nouns and topics. Both may have had vowel variation, like n's, from the beginning, with u the most ancient vowel. The k- probably began either as a topic marker or as a sign of specificity or referentiality, as topics are almost always specific. The ancient Case 1 marker with zero initial consonant may also have begun as a topic marker. If so, its progression to absolutive or nominative came later than that of k-

For some initial consonants of PCMs, PAn may have had only vowel -i, and forms with the other vowels may have arisen by analogy with n- PCMs. The Case 3 locatives with initial consonants zero and d- are likely candidates for this course.

The s- initials probably began as two completely independent forms, an allative Case 3 with a vowel, and an honorific Case 1 with i vowel, the latter used only for proper names of persons.

Initial MP t (descending from both t and t in PAn) shows hints that its early uses may have been not only for locatives and allatives but also for accusative, for emphatic, and perhaps for nouns of time, especially past. And t may have been honorific for females.

Polynesian, despite its phonological simplification and its swing from accusative to ergative syntax and back again, is a conservative language that keeps major portions of the PMP and even PAn system of prepositions and of casemarking.

#### References

- Abo, Takaji, Byron W. Bender, Alfred Capelle and Tony DeBrum, 1976, Marshallese-English dictionary. Honolulu: University of Hawai'i Press.
- Anceaux, J.C., 1987, Wolio dictionary. Dordrecht: Foris.
- Anonymous [Toni Hooper, Judith Huntsman], 1986, Tokelau-English dictionary. Apia: Office of Tokelau Affairs.
- Benton, Richard A., 1971, Pangasinan dictionary. Honolulu: University of Hawai'i Press.
- Blust, Robert A., 1977, The Proto-Austronesian pronouns and Austronesian subgrouping: a preliminary report. Working Papers in Linguistics, 9/2:1-15. Honolulu: University of Hawai'i Press.
- Capell, A., 1968, A new Fijian dictionary. Suva: Government Printer.
- Carroll, Vern, 1973, Nukuoro lexicon. Honolulu: University of Hawai'i Press.
- Chen, Teresa M., 1987, Verbal constructions and verbal classification in Nataoran-Amis. Canberra: Pacific Linguistics.
- Churchward, C. Maxwell, 1940, *Rotuman grammar and dictionary*. Sydney: Australasian Medical Publishing Company.
  - 1959, Tongan dictionary. London: Oxford University Press.
- Collins, James T., 1983, The historical relationships of the languages of Central Maluku, Indonesia. In W.A.L. Stokhof, ed., Materials in languages of Indonesia. No.13, Canberra: Pacific Linguistics.
- Constantino, Ernesto, 1971, Ilokano dictionary. Honolulu: University of Hawai'i Press.
- Crowley, Susan Smith, 1986, Tolo dictionary. Canberra: Pacific Linguistics.
- Deck, Norman, 1933, A grammar of the language spoken by the Kwara'ae people of Mala, British Solomon Islands. Polynesian Reprint No.5. Wellington: Polynesian Society.
- Dempwolff, Otto, 1938, Vergleichende Lautlehre des Austronesischen Wortschatzes. 3. Band: Austronesisches Wörterverzeichnis. Beihefte zur Zeitschrift fur Eingeborenensprachen. Berlin: Dietrich Reimer.
- Donohue, Mark, 1995, The thematic hierarchy: evidence from causatives and applicatives in Tukang Besi. Read at the 1995 AFLA meeting, McGill University.
- Dougherty, Janet W.D., 1983, West Futuna-Aniwa: an introduction to a Polynesian outlier language. Berkeley: University of California Press.
- Durie, Mark, 1988, Verb serialization and 'verbal prepositions'. In Oceanic languages. *Oceanic Linguistics*, 27:1-23.
- Egerod, Soren, 1966, Word order and word classes in Atayal. Language, 42:346-369.
- Elkins, Richard A., 1966, *Manobo-English dictionary*. Oceanic Linguistics Special Publication 3. Honolulu: University of Hawai'i Press.
- Ferrell, Raleigh, 1981, Paiwan dictionary. Canberra: Pacific Linguistics.
- Finney, Joseph C., 1997, Casemarking and the \*-ia demonstratives. In Cecilia Odé and Wim Stokhof, eds, *Proceedings of the Seventh International Conference on Austronesian Linguistics*. 552-574. Leiden: University of Leiden.
- Finney, Joseph C. and James D. Alexander, 1998, The Rapanui language of Easter Island: Where does it fit in the Polynesian family tree? In Christopher M. Stevenson, Georgia Lee and F.J. Morin, eds, Easter Island in Pacific context: South Seas symposium. Proceedings of the Fourth International Conference on Easter Island and East

- *Polynesia*. The Easter Island Foundation Occasional Paper 4. 20-32. Los Osos CA: The Easter Island Foundation.
- Fox, Charles E., 1974, Lau dictionary. Canberra: Pacific Linguistics.
  - 1978, Arosi dictionary. Canberra: Pacific Linguistics.
- Geraghty, Paul, 1983, *The history of the Fijian languages*. Oceanic Linguistics Special Publication 19. Honolulu: University of Hawai'i Press.
- Grace, George William, 1976, Grand Couli dictionary. Canberra: Pacific Linguistics.
- Grimble, Arthur Francis, 1989, Tungaru traditions. Honolulu: University of Hawai'i Press.
- Hamel, Patricia J., 1994, A grammar and lexicon of Loniu, Papua-New Guinea. Canberra: Pacific Linguistics.
- Hartung, Patricia M., 1975, Clause-modifying particles in Ata Manobo. In Hooker, Behrens and Hartung, eds, *Papers in Philippine Linguistics* No.7:29-60. Canberra: Pacific Linguistics.
- Hooper, Robin, 1985, Proto-Oceanic \*qi. In Andrew Pawley and Lois Carrington, eds, Austronesian linguistics at the 15th Pacific Science Congress. 141-167. Canberra: Pacific Linguistics.
- Huang, Lillian M., 1993, A study of Atayal syntax. Taipei: Crane. 1994, A study of Mayrinax syntax. Taipei: Crane.
- Jackson, Frederick H. and Jeffrey C. Marck, 1991, *Carolinian-English dictionary*. Honolulu: University of Hawai'i Press.
- Jensen, John Thayer, 1977, Yapese reference grammar. Honolulu: University of Hawai'i Press.
- Johnston, Raymond L., 1978, Nakanai syntax. PhD dissertation: Australian National University.
- Keesing, Roger, 1985, Kwaio grammar. Canberra: Pacific Linguistics.
- Kennedy, Donald Gilbert, 1945, Te ngangana a te Tuvalu: handbook on the language of the Ellice Islands. Suva: Government Printer.
- Lee, Kee-dong, 1975, *Kusaien reference greammar*. Honolulu: University of Hawai'i Press. 1976, *Kusaien-English dictionary*. Honolulu: University of Hawai'i Press.
- Li, Paul J.-K., 1978, The case-marking systems of the four less known Formosan languages. In S.A. Wurm and Lois Carrington, eds, Second International Conference on Austronesian Linguistics: Proceedings. 569-695 Canberra: Pacific Linguistics.
  - 1995, The case-marking system in Mayrinax, Atayal. Bulletin of the Institute of History and Philology, Academia Sinica 66. Part 1:23-52.
  - 1997, A syntactic typology of Formosan languages: case markers on nouns and pronouns. Symposium Series of the Institute of History and Philology, Academia Sinica. 2:343-378.
- Lieber, Michael D. and Kalio H. Dipeka, 1974, *Kapingamarangi lexicon*. Honolulu: University of Hawai'i Press.
- Lindstrom, Lamont, 1986, Kwamera dictionary. Canberra: Pacific Linguistics.
- Lynch, John, 1982, Anejom grammar sketch. In John Lynch, ed., *Papers in Linguistics of Melanesia*, No.4, 93-154. Canberra: Pacific Linguistics.
- McKaughan, Howard P., 1962, Overt relation markers in Maranao. Language, 38:47-51.
- Milner, George, 1966, Samoan dictionary. Oxford: Oxford University Press.
- Mintz, Malcolm W., 1971, Bikol dictionary. Honolulu: University of Hawai'i Press.

- Mosel, Ulrike, 1984, Tolai syntax and its historical development. Canberra: Pacific Linguistics.
- Osumi, Midori, 1995, Tinrin grammar. Oceanic Linguistics Special Publication 25. Honolulu: University of Hawai'i Press.
- Pawley, Andrew K., 1973, Some problems in Proto Oceanic grammar. Oceanic Linguistics, 12:103-188.
- Puku'i, Mary Kawena and Samuel H. Elbert, 1957, Hawai'ian-English dictionary. Honolulu: University of Hawai'i Press.
- Rau, Der-hwa Victoria, 1992, A grammar of Atayal. Taipei: Crane.
- Rehg, Kenneth L., 1979, Ponape dictionary. Honolulu: University of Hawai'i Press.
- Reid, Lawrence A., 1974, The central Cordilleran subgroup of Philippine languages. Oceanic Linguistics, 13, 511-560.
  - 1978, Problems in the reconstruction of Proto-Philippine construction markers. In S.A. Wurm and Lois Carrington, eds, Second International Conference on Comparative Austronesian Linguistics: proceedings. Fascicle 1: Western Austronesian. 33-64. Canberra: Pacific Linguistics.
- Ross, Malcolm D., 1988, Proto-Oceanic and the Austronesian languages of Western Melanesia. Canberra: Pacific Linguistics.
- Sabatier, Father E., tr. Sister Oliva, 1971, Gilbertese-English dictionary. Sydney: South Pacific Commission.
- Sarumpaet, J.P., 1986, The Samosir dialect of Toba-Batak. In Paul Geraghty, Lois Carrington and S.A. Wurm, eds, FOCAL II: Papers from the Fourth International Conference on Austronesian Linguistics. Canberra: Pacific Linguistics.
- Schachter, Paul and Fe T. Otanes, 1972, Tagalog reference grammar. Honolulu: University of Hawai'i Press.
- Schütz, Albert J., 1969a, Nguna grammar. Oceanic Linguistics Special Publication 5. Honolulu: University of Hawai'i Press.
  - 1969b, Nguna texts. Oceanic Linguistics Special Publication 4. Honolulu: University of Hawai'i Press.
- Sohn, Ho-min and Anthony F. Tawerilmang, 1976, Woleaian-English dictionary. Honolulu: University of Hawai'i Press.
- Starosta, Stanley, 1974, Causative verbs in Formosan languages. Oceanic Linguistics, 13:1-2, 279-369.
- Stimson, J. Frank and Donald Stanley Marshall, 1964, A dictionary of some Tuamotu dialects of the Polynesian language. Salem MA: Peabody Museum.
- Stokhof, W.A.L., 1981, Holle lists: vocabularies in languages of Indonesia. Vol.3/2. Canberra: Pacific Linguistics.
  - 1982a, Holle lists: vocabularies in languages of Indonesia. Vol.3/3. Canberra: Pacific Linguistics.
  - 1982b, Holle lists: vocabularies in languages of Indonesia. Vol.4. Canberra: Pacific Linguistics.
  - 1983, Holle lists: vocabularies in languages of Indonesia. Vol.7/1. Canberra: Pacific Linguistics.
  - 1985, Holle lists: vocabularies in languages of Indonesia. Vol.7/4. Canberra: Pacific Linguistics.
  - 1986, Holle lists: vocabularies in languages of Indonesia. Vol.8. Canberra: Pacific Linguistics.

- 1987, Holle lists: vocabularies in languages of Indonesia. Vol.10/3. Canberra: Pacific Linguistics.
- Tampubolon, D.P., 1983, Verbal affixations in Indonesian: a semantic exploration. Canberra: Pacific Linguistics.
- Topping, Donald M. and Bernadita C. Dungca, 1973, *Chamorro reference grammar*. Honolulu: University of Hawai'i Press.
- Williams, W.L. and H.W. Williams, 1862, *First lessons in Maori*. (Revised edition W.A. Bird, 1956). Christchurch: Whitcombe and Tombs.
- Zeitoun, Elizabeth, Lillian M. Huang, Marie M. Yeh, Anna H. Chung and Joy, J. Wu, 1996, The temporal, aspectual, and modal systems of some Formosan languages: a typological perspective. *Oceanic Linguistics*, 35(1):21-56.

# Part 2 Languages of Melanesia