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**SCHOOL OF ORIENTAL AND AFRICAN STUDIES,
UNIVERSITY OF LONDON
MA Language Documentation and Description**

Kurap Sumai and Tool Mai:

**a comparative study of Arop-Lokep and Karnai,
two Austronesian languages of Papua New Guinea**

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Abbreviations

1	first person	NMZ	nominalization
2	second person	NON.MED	non-medial
3	third person	NON.PROX	non-proximal
A	addressee	NON.REF	non-referential
ADJ	adjective	NP	noun phrase
AL	Arop-Lokep	PERF	perfective
C	consonant	PL	plural
CAUS	causative	POS	possessor
COMP	complementizer	PROG	progressive
DEF	definite	PROHIB	prohibitive
DET	determiner	PROX	proximal
DEM	demonstrative	QU	question
DIST	distal	REC	reciprocal
DL	dual	REL	relative pronoun
EMPH	emphatic	QUANT	quantifier
EX	exclusive	S	speaker
FOC	focus	SG	singular
FUT	future	SP	species
HAB	habitual	SPEC	specific
IMP	imperative	SYMP	sympathy particle
IN	inclusive	TOP	topic
IRR	irrealis	V	vowel
LOC	locative	VAL	valency
MED	medial	VP	verb phrase
NEG	negative		

Abstract

Arop-Lokep and Karnai are two closely related Austronesian languages of Papua New Guinea. While sharing a high degree of lexical similarity (probably 70-80%), they exhibit considerable grammatical and semantic differences, particularly in the areas of possession in the noun phrase structure, the demonstrative paradigm, aspect and modality, and directional verbs in both space and discourse. Reasons for these differences include, most significantly, close Karnai contact with a number of other Austronesian and non-Austronesian languages; historical change as a consequence of Arop-Lokep migrations away from the Karnai area; and the influence of different (and, for Arop-Lokep, new) geographical contexts on the treatment of space in the language.

Acknowledgements

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Three teachers from Ukarumpa International School, Vera Schmelz, Donna Smith and Jonelle Jones, spent their school holidays on Umboi Island, silk-screen printing story books and an alphabet book for the use of the Karnai community; without their assistance, these publications would have been impossible. A grant from the Morobe National Literacy Fund (S.I.L.) paid for the publication of a number of Karnai literacy Shell Books produced by Chris, Philip and Vera for use in the embryonic Karnai elementary school.

With regard to Arop-Lokep, I am grateful to Jeff and Sissie D'Jernes for making available their unpublished data and for sharing with me their home, their time and their insights into the language. I would also like to thank the three Arop speakers who spent an afternoon explaining Arop directional verbs to me.

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1. Introduction

The purpose of this dissertation is to examine, especially with regard to grammar, the similarities and differences between Arop-Lokep and Karnai, two closely related Austronesian languages of the Korap network (North New Guinea cluster), spoken in the Siassi Islands of the Vitiaz Strait, Papua New Guinea. Arop-Lokep has 3015 speakers (National Census 2000), the Arop dialect being spoken on Long Island, Madang Province, and the Lokep dialect on Tolokiwa Island, Morobe Province. Karnai is spoken by 416 people (according to village records) in one village, Padamot, on Umboi Island, and by an estimated 100 people on the smaller Aronaimutu Island nearby (shared with Mutu speakers). Karnai is the name by which the people refer to themselves and their language; they are known to outsiders, and in most previous linguistic surveys, as Barim¹.


The two languages exhibit a high degree of lexical similarity (possibly as much as 83% - see Section 2), but there is considerable grammatical difference between them. There are three possible reasons for this. Although Arop-Lokep and Karnai originated from a common ancestor (probably located on Umboi Island), the last major migration to Long Island took place about 150 years ago (Raymond & D'Jernes forthcoming) and some differences can therefore be accounted for merely in terms of historical change. Secondly, while Arop-Lokep is comparatively isolated from contact with other languages (apart from, recently, Tok Pisin and to a lesser extent English), Karnai is a small language community co-existing with and in close contact with several other larger language groups on Umboi Island; its nearest neighbour is the non-Austronesian language, Kobai. Thirdly, differences between the languages can be accounted for in terms of geographical factors and other environmental features; this is particularly evident in the directional verb systems, as discussed in Section 4.2.6.

1.1 Sociolinguistic background

The Karnai say that both Long Island and Tolokiwa were originally settled by their ancestors. A cataclysmic volcanic eruption obliterated the original population of Long Island about 300 years ago and it was resettled from Padamot and Tolokiwa

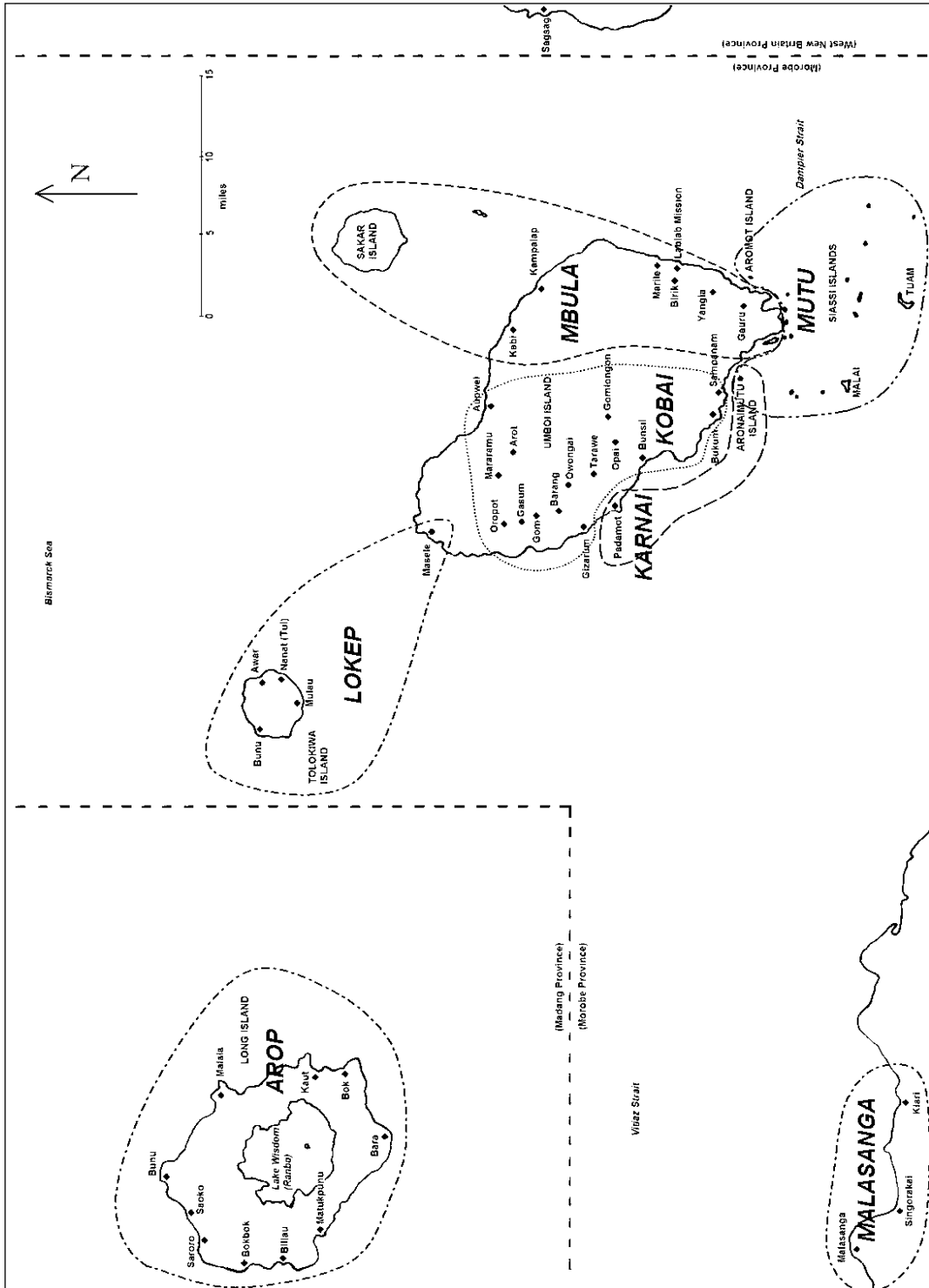
¹ From the Karnai word *barem* meaning 'clanhouse', which early missionaries extended to mean both 'church' and the name of the village.

about 150 years ago. More recently, settlers from Padamot also established new settlements (Kiari, Singorakai and Malasanga) on the Rai Coast; the language spoken in these villages, known as Malasanga (the third member of the Korap network), is probably a dialect of Karnai and is claimed by Karnai speakers to be mutually intelligible.² Arop-Lokep and Karnai are not mutually intelligible; most Karnai adults pick up some Arop-Lokep and can understand it but may resort to answering in Tok Pisin. Similarly, Arop speakers may learn some Karnai, particularly if they attend high school on Umboi Island, but their knowledge of the language tends to be passive and they reply in Tok Pisin.

The sociolinguistic situation of Umboi Island is a complex one. Karnai is the smallest of the five languages spoken on the island; the others include the Austronesian languages Mutu (1624 speakers in the Siassi Islands, including Aronaimutu and one village on Umboi), Mangap-Mbula (2500 speakers), one recent settlement of Arop-Lokep speakers (Lokep dialect, 323 speakers), and the Papuan language Kobai (4500 speakers, directly adjoining and surrounding the Karnai language area).  shows the geographical location of these languages.

² The Ethnologue (2005 edition) gives a population of 915 for Karnai, which includes these Rai Coast villages; however, it also lists Malasanga as a separate language.

Map 1: Arop-Lokep, Karnai and other languages in the Vitiavz Strait



A high level of multilingualism exists in Padamot. Karnai is everyone's first language and is the main language of everyday interaction. People who marry into the group from outside usually learn Karnai. Tok Pisin is the second language and is the language of church, school and of interaction with outsiders (such as government officials and health workers). Formal debates, in which the five Karnai clans participate regularly (on topics such as political independence, family planning and drugs) are conducted in Tok Pisin. English is learned in school and most younger adults speak at least a little. Older adults are fluent in Yabem, the former language of church and education in the area. Older adults also speak the other Umboi Island languages, Mutu, Mbula and Kobai (these groups were traditional trading partners of the Karnai). Younger adults are less likely to speak these languages unless through family connections, but those who attend the high school in Lablab on the other side of the island are likely to acquire some knowledge of these languages too.

Although Padamot is a small and highly multilingual community, the Karnai language itself appears to be vital; the Karnai people are proud of their language, are eager to develop written materials and have plans to start a vernacular elementary school. They believe Karnai will continue to be spoken for many years to come, and this hope does not seem unjustified.

1.2 Previous research and data collection

Arop-Lokep has been extensively described by D'Jernes (2002), Raymond and D'Jernes (forthcoming), Raymond and Parker (2005) and in a number of unpublished grammatical papers made available to me by Jeff and Sissie D'Jernes. A Shoebox dictionary containing approximately 3000 entries, and a substantial and growing text corpus, are in existence, including an interlinearised Shoebox corpus containing 18 modern and traditional stories (1186 lines of text), from which most of the examples in this study have been drawn. Further comparative data from the Arop dialect was provided to me by five Arop speakers during a visit to the S.I.L. headquarters at Ukarumpa, P.N.G., in July 2005.

To date there has been no extensive documentation and description of Karnai. It is mentioned in a number of surveys of Morobe Province languages (Capell 1969, Hooley & McElhanon 1970, McElhanon 1984, Wurm & Hattori 1981, Ross 1988);

Hooley (1971) provides a brief wordlist used for the lexicostatistical purposes of his paper. Dr. Robert Bugenhagen of the Summer Institute of Linguistics (S.I.L.), who has done extensive work on both Mangap-Mbula (Bugenhagen 1995) and Mutu, has provided me with a Shoebox lexicon consisting of 420 words in a trial orthography, some short Scripture portions and a few translated texts intended for literacy purposes (based on S.I.L. Shellbooks, where translated text can be fitted into a standard template for simple local production of vernacular primers, children's stories, health pamphlets and other literature).

The bulk of Karnai material in this study was obtained during six weeks of field research on Umboi Island in June and July, 2005. My language consultants were two fluent mother-tongue Karnai speakers, Chris Lau and Philip Malai, who came to the town of Lablab (in the Mbula language area) for the purposes of the research. I also held a story-writing workshop with Karnai-speaking students at Siassi Lutheran High School, Lablab, and spent ten days in Padamot itself, conducting sociolinguistic interviews with village elders, recording songs and stories, and holding a spelling workshop. Three books were later produced for distribution to the Karnai community, including an alphabet book and two books of stories written by the high school students (Malai et al, 2005a, 2005b, 2005c); these stories also provided me with a database of written texts from which many of the examples in this study are drawn.

Example references in this paper refer to the relevant Shoebox identifier if the example comes from a text; elicited examples are indicated as such; unreferenced examples come from my own knowledge of the languages or are phrases overheard in the community context.

2. Lexical variation

Hooley, in his 1971 survey of Morobe Province languages, reported 68% lexical similarity between Karnai and the Lokep dialect of Arop-Lokep. My own calculations, based on the Swadesh 200 wordlist, suggest a closer relationship, with lexical similarity as high as 83% (see Appendix 1 for details). Examples of key lexical items which are not cognates include:

Arop-Lokep	Karnai	Meaning	Cognates in neighbouring languages
<i>tool</i>	<i>kurap</i>	‘person’	Mangap-Mbula <i>gurapa</i> ‘friend from another language group’
<i>i-kamata</i>	<i>i-got</i>	‘3SG-see’	Mutu <i>ghit(a)</i> ‘see’
<i>porong</i>	<i>wak</i>	‘starch pudding (a staple food)’	Mbula <i>wak</i> , Kobai <i>wak</i> ; Mutu <i>porooŋ</i>
<i>modo-no</i>	<i>gitu-n, tugu-n</i>	‘short-3SG.POS’	Mutu <i>tuuku</i> ‘short’
<i>muka-na</i>	<i>kaskaso-n</i>	‘black-3SG.POS’	AL <i>kaskas</i> ‘charcoal’; Karnai <i>muga-n</i> ‘old-3SG.POS’
<i>matau</i>	<i>nak(a)was</i>	‘axe’	Kobai <i>napagas</i> , Mbula <i>nakapasi</i> ; originally borrowed from New Britain languages such as Kilenge, Lusi or Kabana (Bugenhagen 1992:72-4)
<i>kawa</i>	<i>gawur</i>	‘ashes’	Kobai <i>gabur</i> ‘charcoal’
<i>atu</i>	<i>ta</i>	‘one’	Mbula <i>ta</i>
<i>e</i>	<i>bio</i>	‘yes’	
<i>bu</i>	<i>tukai</i>	‘betelnut’	Proto-Oceanic * <i>buag</i> ; Kobai <i>bu</i> (Oceanic loanword); Mbula <i>mbu</i>
<i>kuta-na</i>	<i>kaikai</i>	‘smoke(-3SG.POS)’	Mbula <i>koi</i>

3. Phonology

The phonology of Arop-Lokep (henceforth AL) has been described in detail in Raymond & D’Jernes (forthcoming). AL and Karnai have very similar phoneme inventories, although there is some variation between the two in terms of vowel quality. A noticeable difference is that Karnai lacks the word-final harmonic vowels commonly found in AL (where the final vowel of a root is a copy of the vowel in the preceding syllable), even though this syllable structure is permitted in Karnai:

Arop-Lokep	Karnai	
<i>i-mata</i>	<i>i-mat</i>	‘3SG-die’
<i>matamat-enge</i>	<i>matmat-eng</i>	‘be.sick-NMZ’
<i>badabada</i>	<i>badbad</i>	‘storehouse’

In a very few words, Karnai has contrastive vowel length, which AL lacks. Interestingly, Karnai long vowels tend to occur in words which have vowel-harmonic cognates in AL.

Arop-Lokep	Karnai	
	<i>dad</i>	‘coral’
<i>dada</i>	<i>daad</i>	‘3SG-die’
<i>tingi</i>	<i>tiing</i>	‘swamp’

Further information on Karnai phonology is provided in Appendix B.

4. Grammar

4.1 Nouns and noun phrases

The following basic NP structure for AL is based on D'Jernes (1992):

NP ⇒ (POS) (SPEC) NOUN (ADJP) (QUANT) (POS) (DET) (DEM) (FOC)

Karnai NP structure is superficially similar to this. The most significant difference is that in AL, the pre-head possessor slot is only occupied by inalienable possessors, while alienable possessors occur post-head. In Karnai, alienable noun possessors can appear either before the head noun with a prepositional proform following, or after the head noun in a prepositional phrase; if before, there is flexibility about whether other modifiers precede or follow the prepositional proform. Inalienable noun possessors, as in AL, precede the head.

The Karnai NP can be summarized in the following structure (a pronoun pre-modifying a noun, as in 13, is treated as an apposition, although D'Jernes treats these, together with the third person plural pronoun and plural marker *di*, as specifiers):

NP ⇒ (POS) NOUN (POS) (ADJP) (POS) (REL) (QUANT) (DET) (DEM)

Alienable noun possession:

- | | | | | | | | |
|----|-------------------------|------------|-------------|----|----------------------|-----------|--------------|
| 1. | N | POS | | 2. | N | POS | |
| | <i>rum</i> | <i>ki</i> | <i>Molo</i> | | <i>rumu</i> | <i>ke</i> | <i>Madim</i> |
| | house | of | Molo | | house | of | Madim |
| | 'Molo's house' (Karnai) | | | | 'Madim's house' (AL) | | |
| 3. | POS | N | POS | | | | |
| | <i>Molo</i> | <i>rum</i> | <i>ki</i> | | | | |
| | Molo | house | of.3SG | | | | |
| | 'Molo's house' (Karnai) | | | | | | |

Inalienable noun possession:

- | | | | | | | |
|----|-------------------------|----------------|--|----|-----------------------|----------------|
| 4. | POS | NOUN | | 5. | POS | NOUN |
| | <i>au</i> | <i>tina-k</i> | | | <i>Tomas</i> | <i>natu-nu</i> |
| | 1SG | mother-1SG.POS | | | Thomas | child-3SG.POS |
| | 'my mother' (AL/Karnai) | | | | 'Thomas's child' (AL) | |
| 6. | POS | NOUN | | | | |
| | <i>Maria</i> | <i>bage-n</i> | | | | |
| | Maria | hand-3SG.POS | | | | |
| | 'Maria's hand' (Karnai) | | | | | |

Further illustration of NP structure:

- | | |
|---|---|
| <p>7. NOUN ADJ QUANT
 <i>garup sumai ta</i>
 woman big one
 ‘a big woman’ (Karnai)</p> | <p>8. NOUN ADJ QUANT
 <i>garup mai atu</i>
 woman big one
 ‘a big woman’ (AL)</p> |
| <p>9. NOUN POS ADJ
 <i>ga ki sumai</i>
 pig of.3SG big
 ‘his big pig’ (Karnai)</p> | <p>10. NOUN ADJ ADJ POS
 <i>bor mai dook ki-di</i>
 pot big good of-3PL
 ‘their big good pot’ (AL)</p> |
| <p>11. NOUN ADJ POS
 <i>ga sumai ki</i>
 pig big of.3SG
 ‘his big pig’ (Karnai)</p> | <p>12. NOUN ADJ ADJ POS
 <i>ga muka-na mai ki-au</i>
 pig black-3SG.POS big of-1SG
 ‘my big black pig’ (AL)</p> |
| <p>13. PN NOUN POS
 <i>am garup ki malal</i>
 1PL.EX woman of village
 ‘we women of the village’ (Karnai)</p> | <p>14. PN/SPEC NOUN POS
 <i>am garup ke Bok</i>
 1PL.EX woman of Bok
 ‘we women of Bok’ (AL)</p> |
| <p>15. NOUN QUANT DEM
 <i>so ru tini</i>
 thing two NON.MED
 ‘these two things’ (Karnai)</p> | <p>16. NOUN DET DEM
 <i>garup tani in</i>
 woman DEF.SG PROX.SG
 ‘that certain woman’ (AL)</p> |
| <p>17. NOUN QUANT DET
 <i>kurap ru sa</i>
 person two NON.REF
 ‘(any) two people’ (Karnai)</p> | <p>18. NOUN DET DEM
 <i>kase ru tina</i>
 child two DEF.PL
 ‘the two children’ (AL)</p> |
| <p>19. NOUN POS ADJ DEM
 <i>nin ki-au sidik tini</i>
 story of-1SG little NON.MED
 ‘this little story of mine’ (Karnai)</p> | <p>20. NOUN DEM
 <i>gaunu i</i>
 dog PROX.SG
 ‘this dog’ (AL)</p> |
| <p>21. NOUN REL
 <i>pul ton a-korkor bus gi</i>
 knife REL 1SG-scrape taro with.3SG
 ‘the knife that I scrape taro with’ (Karnai)</p> | <p>22. NOUN ADJP REL
 <i>pul dook mata yo a-yim-i Lae</i>
 knife good very REL 1SG-buy-SGLae
 ‘the very good knife that I bought (in) Lae’ (AL)</p> |

Inalienable nouns are often NP modifiers (see Sections 4.1.2 and 4.1.5).

Modification of a noun by another alienable noun is allowed, but the nouns permitted as modifiers vary between the two languages, and seem more restricted in AL than in Karnai:

- | | |
|---|--|
| <p>23. <i>urat kum</i>
 work garden
 ‘garden work’ (Karnai)</p> | <p>24. <i>urata ke kumu</i>
 work of garden
 ‘garden work’ (AL)</p> |
| <p>25. <i>di Padamot maimai</i>
 3PL Padamot big.one
 ‘the Padamot elders’ (Karnai)</p> | <p>26. <i>di maimai Poonoo</i>
 3PL big.one Long.Island
 ‘the Long Island elders’ (AL)</p> |

4.1.1 Pronouns and terms of address

AL and Karnai have very similar pronoun paradigms, and verbal subject agreement prefixes are identical:

Table 1: Personal pronouns (subject)

	SG	PL	DL
1EX	<i>au</i>	<i>am</i>	<i>amru</i>
1IN		<i>idi</i> (AL)/ <i>it</i> (K)	<i>aru ~ taru</i> (AL)/ <i>taru ~ ittaru</i> (K)
2	<i>ong</i>	<i>ang</i>	<i>angru</i> (AL)/ <i>kanru</i> (K)
3	<i>ya</i> (A)/ <i>ye</i> (L)/ <i>i</i> (K)	<i>di</i>	<i>yaru</i> (A)/ <i>yeru</i> (L)/ <i>tinru</i> (K)

Table 2: Subject agreement prefixes

	SG	PL
1EX	<i>a-</i>	<i>am-</i>
1IN		<i>ta-</i>
2	<i>ku-</i>	<i>ka-</i>
3	<i>i-</i>	<i>ti-</i>

The Karnai 3SG pronoun *i* is either a borrowing of the Kobai *i* ‘3SG’, or is related to the AL proximal singular demonstrative *i*. The use of a demonstrative as a personal pronoun would not be surprising; AL frequently uses the medial singular demonstrative *in* in the place of the 3SG pronoun. The proximal *i*, however, is not used in this way in AL, and the Kobai borrowing may therefore be a more likely source for Karnai *i* ‘3SG’.

4.1.1.1 Dual pronouns

In AL, dual pronouns have a similar distribution to other pronouns, usually as subject of a clause and with no other modification than the occasional demonstrative (27). In Karnai, however, a dual pronoun can refer to the possessor of a following inalienable noun (which must be a kinship term), together with the inalienable noun itself (28). It can also be used to conjoin two NPs (29). This is common in Oceanic languages (Lichtenberk 2000); what is surprising is that the same construction does not appear in AL.

27. *Nookoot nga ta-kamata di yaru ngan ti-par-tattadai.*
 now PROX.TIME 1PL.IN-see 3PL 3DL MED.PL 3PL-REC-fear
 ‘Now we see (that) those two are afraid of each other.’ (AL, Ook 120)

28. *Mangan ta amru tina-k am-la kum.*
 time one 1DL.EX mother-1SG.POS 1PL.EX-go garden
 ‘One time my mother and I went to the garden.’ (Karnai, CLJ2 001)

29. *Jon tinru tama-n ti-la karam.*
 John 3DL father-3SG.POS 3PL-go bush
 ‘John and his father went to the bush.’ (Karnai, E045)

A dual pronoun in Karnai can also be preceded by the corresponding plural pronoun (30); there are no examples of this in the current AL database. The juxtaposition of plural and dual pronouns like this is typologically unusual. It may be explained in terms of the derivation of Karnai dual pronouns from as compounds of the subject agreement prefixes *am-*, *ta-*, *ka-* and *ti-* with the quantifier *ru* ‘two’ (whereas AL dual pronouns derive mainly from the pronoun paradigm); for pronouns to co-occur with the subject prefixes is not unusual.

30. *Ang kanru ka-pa balai ton ka-ma?*
 2PL 2DL 2PL-walk how COMP 2PL-come
 ‘You two, how did you walk (so) that you came (here)?’ (Karnai, JS1.017)

4.1.1.2 Plurality

In both languages, the 3PL pronoun *di* is used to indicate plurality (31, 32). In AL *di* is almost always present on count nouns except in very restricted circumstances; in Karnai it is optional, particularly on non-subject NPs (33). The plural marker can also occur at the end of the NP rather than the beginning in Karnai, as in 34.

31. *Di garup tina ngan ti-kumu, ti-kumu le moorook mata-mata di.*
 3PL woman DEF.PL MED.PL 3PL-garden 3PL-garden and thirst die-die 3PL
 ‘Those same women gardened, gardened and thirst was killing them.’ (AL, Pon 014)

32. *Suar ta a-ge di budbudeng ki-au be di dade-k am-la*
 time one 1SG-with 3PL teacher of-1SG and 3PL associate-1SG.POS 1PL.EX-go
gi kawal molo...
 to mountain long
 ‘One time I went with my teachers and my classmates to the long mountain...’ (Karnai, AL1.002)

33. *Am-poi am-la be am-got pon ti-purmum...*
 1PL.EX-paddle 1PL.EX-go and 1PL.EX-see turtle 3PL-turtles.swim.together
 ‘We paddled (and) went and we saw turtles swimming together...’ (Karnai, SLB1.004)

34. *E man giu di ti-si tima ga nen...*
 but bird starling 3PL 3PL-down 3PL-come and like.that
 ‘But the starlings came down like that...’ (Karnai, ME1a.027)

4.1.1.3 Sympathy particles

Karnai has a particle *ro* which can be used pronominally or added to common or proper nouns or pronouns to express sympathy.

35. *Ko ro tamar ki-di i-si i-la...*
 2SG.take SYMP meal of-3PL 3SG-down 3SG-go
 ‘Take their food down (to) the poor fellows...’ (Karnai, PK1a.011)
36. ...*ga-ne tina-n ro i-ka iu ki i-du i-ma*
 and-MED mother-3SG.POS SYMP 3SG-get spear of.3SG 3SG-out 3SG-come
ga-ne i-bilis...
 and-MED 3SG-strike
 ‘...then the poor mother got her spear out and struck him...’ (Karnai, ME1a.034)
37. *Au ro a-kiu ong.*
 1SG SYMP 1SG-call 2SG
 ‘I (sorrowfully) call out to you.’ (Karnai, church song)

Ro is also combined with the inalienable noun *sia* ‘bad’ and is used as a term of address to friends (39). *Sia* on its own also expresses sympathy, particularly in the inalienable noun compound *ae-sian* ‘friend’ (40).

38. *O biang sia-n-ro i-tang be i-kaurau balai surit ki ga*
 oh fruit.bat bad-3SG.POS-SYMP 3SG-cry and 3SG-crawl because bone of.3SG and
suga-n ton naolmai teltelbe mot.
 bodypart-3SG.POS REL all broken PERF
 ‘Oh poor fruit bat cried and crawled because his bones and all his bodyparts were broken.’
 (Karnai, JSY2a.054)
39. *Sia-m-ro ong ku-nep si be am am-yoi so tini.*
 bad-2SG-SYMP 2SG 2SG-stay not and 1PL.EX 1PL.EX-do thing NON.MED
 ‘My friend, you weren’t here and we did this thing.’ (Karnai, Elicitation080)
40. *Ae-mam-sian i-long i-ma...*
 friend-1PL.EX- 3SG-in 3SG-come
 ‘Our friend came inland...’ (Karnai, NC1.004)

Neither *ro* nor *sia* has an equivalent in AL.

4.1.2 Nouns

Like other Austronesian languages, both AL and Karnai distinguish alienable and inalienable nouns. There is no significant difference between the languages in the semantic classes treated as inalienable; they include kinship terms, body parts and noun attributes such as basic colour terms and other qualities. Attributive inalienable nouns tend to modify other nouns (see also Section 4.1.5).

Both languages have productive verb nominalization suffixes to derive alienable and inalienable nouns. Derived inalienable nouns are formed using the inalienable possession-marking suffixes; alienable nouns take the suffix -VŋV in AL and -Vŋ in Karnai (the vowels are lexically specified for each verb and are harmonic in AL; the same vowels are used for the AL 3SG object suffix and D’Jernes calls them class markers, although there is no semantic basis for their distribution). A dissimilation process affects the alienable -Vŋ(V) suffix following a stem-final ŋ.

Derived inalienable nouns often describe a quality of another noun and are likely to appear as noun modifiers; however, they may also refer to concrete objects such as AL *matene* ‘corpse’ and *luana* ‘yam seedling’. Derived alienable nouns usually refer to the same action as expressed by the verb, or to the actor or a related nominal concept which may be more or less abstract. Karnai seems slightly more likely than AL to refer to the actor rather than the action with a derived alienable noun, although both languages do so.

Table 3: Derived alienable and inalienable nouns

	Arop-Lokep		Karnai	
	root	nominalization	root	nominalization
Derived alienable nouns	<i>mata</i> ‘to die’	<i>mat-enge</i> ‘dying’	<i>mat</i> ‘to die’	<i>mat-eng</i> ‘dying’
	<i>mi</i> ‘to dream’	<i>mi-anga</i> ‘dream’	<i>mi</i> ‘to dream’	<i>mi-ng</i> ‘dream’
	<i>mugu</i> ‘to go first’	<i>mug-anga</i> ‘leader’	<i>mug</i> ‘to go first’	<i>mug-ang</i> ‘leader’
	<i>potomonai</i> ‘to teach’	<i>potomona-ingi</i> ‘teaching’; <i>tool ke potomona-ingi</i> ‘person of teaching’	<i>bod</i> ~ <i>bodbod</i> ‘to write’	<i>bod-eng</i> ‘writing’; <i>bobod-eng</i> ‘teacher’
	<i>pidi</i> ‘to poison’	<i>pid-anga</i> ‘poison’; <i>tool ke pid-anga</i> ‘person of poisoning’	<i>seb</i> ‘to help’	<i>seb-ong</i> ‘helper, saviour’
Derived inalienable nouns	<i>mata</i> ‘to die’	<i>mat-ene</i> ‘corpse-3SG.POS’	<i>mat</i> ‘to die’	<i>mat-en</i> ‘corpse-3SG.POS’
	<i>yes</i> ‘be.hot’	<i>yes-ene</i> ‘hot-3SG.POS’	<i>lut</i> ‘be.hot’	<i>lut-an</i> ‘hot-3SG.POS’
	<i>muku</i> ‘blacken’	<i>muk-ana</i> ‘black-3SG.POS’	<i>silil</i> ‘be wet’	<i>silla-n</i> ‘wet-3SG.POS’
	<i>lu</i> ‘plant.yam’	<i>lu-ana</i> ‘yam.seedling’	<i>kapkap</i> ‘crazy (ADJ)’	<i>kapkap-an</i> ‘crazy.one-3SG.POS’

From certain verbs, both alienable and inalienable nouns can be derived. Generally speaking, the inalienable form of this verb is attributive and modifies other nouns (41), while the alienable noun refers to (often abstract) concepts, or to qualities which they predicate to other nouns (42).

41. *Ran tini ni tau sil-ang ki.*
 water NON.MED NON.MED NEG cold-NMZ of.3SG
 ‘This water, it isn’t cold (lit. it doesn’t have its coldness).’ (Karnai, PCdic)
42. *A-riu gi ran sil-an.*
 1SG-wash in water cold-3SG.POS
 ‘I washed in cold water.’ (Karnai, PCdic)

This separation of the functions of alienable and inalienable nouns does not always apply, however, as illustrated by 43, where a derived alienable noun describes an attribute of the noun it modifies.

43. *Di ngarpang ti-nep ni tarko-ng.*
 3PL dwarf 3PL-live place hide-NMZ
 ‘The dwarves live (in a) hidden place.’ (Karnai, PCdic)

4.1.3 Demonstratives and determiners

The demonstrative paradigms of AL and Karnai look very different although they cover a similar range of functions. AL distinguishes proximal, medial and distal, singular and plural in the following paradigm (both as demonstrative pronouns and modifiers):

Arop-Lokep demonstratives:

	singular	plural
proximal	<i>i</i>	<i>nga</i>
medial	<i>in</i>	<i>ngan</i>
distal	<i>ni</i>	<i>ngo</i>

In and *ngan* occur frequently in the NP as indicators of specificity. *Nga* and *ngan* are also used to express proximal and medial time (44, 45), and *in* tends to be used in the place of the third person singular pronoun *ya/ye*. In addition, AL has the definite determiners *tani/tini* (SG) and *tina* (PL.), which can co-occur with the medial demonstratives as in 46. AL uses the quantifier *atu* ‘one’ as an indefinite determiner; *atu* too can co-occur with the medial *in*, as in 47, to refer to indefinite specific entities.

44. *Nga be a-gasa barau pong.*
 PROX.TIME IRR 1SG-tell story to.2SG
 ‘Now I will tell you a story.’ (AL)

45. *Be ti-du Mandang, lo ngan be ti-sere dada pang*
 IRR 3PL-go.down Madang go.up MED.TIME IRR 3PL-search.for road to
Hagen.
 Hagen
 ‘They will go to Madang, then they will look for a way to Hagen.’ (AL, GrmEss99:471)
46. *Motong la du, tamoto tani in i-pie.*
 after FOC go.down man DEF.SG MED.SG 3SG-paddle
 ‘Then having gone down, that same man paddled.’ (AL, Rimadi 104)
47. *Garup atu in i-kere pau-nu inbe kapo-no somai.*
 female one MED.SG 3SG-marry new-3SG.POS and stomach-3SG.POS big
 ‘A certain woman was newly married and she was pregnant (lit. her stomach big).’ (AL, Poo 001)

By contrast, and unusually for an Oceanic language of this area, Karnai makes only a medial-non-medial demonstrative distinction, and does not distinguish singular and plural. The medial demonstratives seem to cover a spatial range similar to the AL medial demonstratives, occurring comparatively rarely in discourse. The non-medials are the default demonstratives and are always used for proximal reference; they also tend to be used for very distant, invisible or anaphoric reference. This is not dissimilar to the neighbouring Papuan language, Kobai, which has proximal, medial and anaphoric/invisible demonstratives with no distinction between singular and plural (Brown 1992).

Simple and compound demonstratives occur in the final position of the noun phrase and both can also be pronominal; the independent demonstratives *ne* and *ni* are only used pronominally, typically in presentative constructions, verbless clauses and questions.

Karnai demonstratives:

	simple	compound	independent
non-medial	<i>tini</i>	<i>tinen</i>	<i>ni ~ ini</i>
medial	<i>tone</i>	<i>tonen</i>	<i>ne ~ ine</i>

The simple demonstratives appear to be cognates of the AL definite determiners but behave like the demonstratives: the non-medial *tini* can co-occur with *ta* ‘one’ to refer to indefinite specific NPs (48) (definite-specific is not expressed as such), and is occasionally used to express proximal time (49), although its medial correspondent *tone* is not.

48. ...*be las ta tini so ku-la poko, balai kurit sumai ton songa*
 but reef one NON.MED HAB 2SG-go PROHIB because octopus big FOC HAB
i-nepep ni tini...
 3SG-stay.PROG place NON.MED
 ‘...but (there is) one reef you must not go to, because a big octopus lives (in) that place...’
 (Karnai, ME1a.022)
49. *Ku-wet ku-ken tini?*
 2SG-want 2SG-sleep NON.MED
 ‘Do you want to sleep now?’ (Karnai)

The compound demonstratives *tinen* and *tonen* are used to express contrast (50) or to select a particular member of a group (51); they can also be used anaphorically.

50. *Kap tini kai rau-n gamtan. Kap tonen ni pur.*
 cup NON.MED tree leaf-3SG.POS colour cup MED.EMPH NON.MED red
 ‘This cup (here) is green. That cup (over there) is red.’ (Karnai, elicitation)
51. *Ko tinen.*
 2SG.get NON.MED.EMPH
 ‘Bring that one (not the other one).’ (Karnai, elicitation)

The independent demonstratives *(i)ne* and *(i)ni* cannot be used as noun modifiers but occur in a variety of other contexts, particularly in verbless clauses (52) and presentative constructions (53).

52. *Kaning gurun ki-am ne bit be kuikui.*
 eat-NMZ old-3SG.POS of-1PL.EX MED yam.SP and yam.SP
 ‘Our traditional food is (two species of yams).’ (Karnai, CM2.011)
53. *Ine ig sumai ki-t.*
 MED fish big of-1PL.IN
 ‘That is our big fish.’ (Karnai, LJ1.008)

They often occur in information questions (and answers) with words such as *sige* ‘who’ and *soi* ‘what’:

54. *Ne sige kap ki i-ken hat parma-n.*
 MED who cup of.3SG 3SG-lie hat under-3SG.POS
 ‘Whose cup is that under the hat?’ (Karnai, elicitation)
55. *Ni soi ton rotu-n? Ne volcano rotu-n.*
 NON.MED what REL noise-3SG.POS MED volcano noise-3SG.POS
 ‘What’s this noise?’ ‘That’s the noise of the volcano.’ (Karnai, elicitation)

Ne and *ni* are used temporally in discourse with a distribution similar to AL *nga* and *ngan*.

56. *Ne a-la a-ka pariu anut i-ma a-ro.*
 MED.TIME 1SG-go 1SG-get drum white.person 3SG-come 1SG-hit
 ‘Then I went (and) got the guitar (and) played.’ (Karnai, CLJ1.004)
57. *...ku-pel ku-la ni ku-la mata-n ton ti-wet Umban.*
 2SG-walk.on.beach 2SG-go NON.MED.TIME 2SG-go eye-3SG.POS REL 3PL-say Umban
 ‘...you go along the beach then you go (to) the point that they call Umban.’ (Karnai, PK/CMa.018)

The independent demonstratives can function as conjunctions, particularly in their full form (*ine, ini*) as in 58. They also form compounds with other conjunctions, especially in the language of the more fluent storytellers. The conjunctions involved include *lo* ‘future’, *ga* ‘and’, *nga* ‘so that’, *moto* ‘then’ and *ko* ‘therefore’. There does not appear to be a significant meaning difference in the use of *ni* and *ne* in these compounds. Conjunction-demonstrative compounds generally seem to introduce clauses which are consequentially linked to the previous clause.

58. *Tod ton tod ine kui i-miliol.*
 dark EMPH dark MED rain 3SG-fall.PROG
 ‘(It was) very dark and rain was falling.’ (Karnai, JS1.005)
59. *Ku-la lo-ne i-ro ong ben i-ro to-m.*
 2SG-go FUT-MED 3SG-hit 2SG like 3SG-hit older.sibling-2SG
 ‘(If) you go he will hit you like he hit your older brother.’ (Karnai, ME1a.022)
60. *I-tut bage-n ko-ne rar i-si.*
 3SG-hit.accidentally hand-3SG.POS therefore-MED blood 3SG-down
 ‘She struck her hand so that the blood (ran) down.’ (Karnai, ME1a.008)
61. *I-tar lal pi-di gi ti-ma nga-ne ti-ge ti-la be*
 3SG-put time to-3PL COMP 3PL-come so.that-MED 3PL-with.3SG 3PL-go and
ti-ro kurit sumai tini. Ga-ne ti-ma, ti-ma gi motmot ga
 3PL-hit octopus big NON.MED and-MED 3PL-come 3PL-come to island and
ti-ge ti-yep moto-ni ti-du ti-la...
 3PL-with.3SG 3PL-stay then-NON.MED 3PL-out 3PL-go
 ‘He set a time for them to come so that they (would) go with him and hit that big octopus. So they came, they came to the island and they stayed with him then they went out...’ (Karnai, ME1a.024)

It is possible that the independent demonstratives are Kobai borrowings, the Kobai full demonstratives being *ine* ‘proximal’ and *ina* ‘medial’ (with the reduced forms *ne* and *na* respectively; the paradigm is completed with the anaphoric demonstrative *ira* ~ *ra*) (Brown 1992). Example 62 (also discussed in Section 4.1.6) is identical in structure to the Karnai presentative structure described above.

62. *Ine nek ge y-ong?*
 MED who pig 3SG-POS
 ‘Whose pig is this?’ (Kobai, Bugenhagen 1994:92)

There is no Karnai equivalent of the AL definite determiners, or of the *tani in* (DEF DEM) construction described above; nor does this construction occur in the neighbouring Austronesian languages Mangap-Mbula and Mutu. Both functionally and phonologically, the Karnai (and Kobai) demonstratives are more similar to these languages than to AL. The Mbula and Mutu demonstrative paradigms are given in Table 4.

Table 4: Mangap-Mbula and Mutu demonstratives (Bugenhagen 1995 and p.c.)

	Demonstrative pronouns	Demonstrative compounds	
Mangap-Mbula			
		(with <i>ta</i> 'COMP')	(with <i>ti</i> 'DEM')
proximal	<i>iŋgi</i>	<i>taiŋgi</i>	<i>tiŋgi</i>
medial	<i>ina</i>	<i>tana</i>	<i>tina</i>
distal	<i>iŋga</i>	<i>taŋga</i>	<i>tiŋga</i>
Mutu			
proximal	<i>ene</i>	<i>tane</i>	
medial	<i>ena</i>	<i>tana</i>	
distal	<i>ewa</i>	<i>tawe</i>	

Both AL and Karnai have a non-specific or non-referential determiner *sa*, which occurs in the same position in the NP and in complementary distribution with the indefinite determiners *ta* and *atu*.

63. *Tooltool sa i-yepe tiap.*
 person NON.REF 3SG-stay not
 'Nobody stayed (in the village).' (AL, Kaning 006)

64. *Ku-ka ka-m kurap ru sa ku-yoi tamar pi-di ibe la*
 2SG-get possession-2SG.POS person two NON.REF 2SG-make meal to-3PL and go
ka-ka sal.
 2PL-get floor
 'Get a couple of men, make food for them and then go and get the floor (for the house).'

(Karnai, CM1a.025)

In Karnai, *sa* can also be used pronominally where there is doubt about the identity of the entity referred to; I have no examples of this in AL.

65. *Tama-k i-bet sa ig tangir.*
 father-1SG.POS 3SG-say NON.REF fish mackerel
 'My father said it was a mackerel (but it wasn't).' (Karnai, LJ1.006)

66. *A-long be a-bet sa lalo.*
 1SG-hear and 1SG-think NON.REF thunder
 'I heard (the volcano) and I thought it was thunder.' (Karnai, BJ1.003)

An additional determiner in Karnai, which has no AL equivalent, is *geu*. *Geu* indicates specificity but is often indefinite, and is particularly used to identify one object or set of objects (or participants) from a larger group. It can refer to singular NPs (67), or plural (68), and can also be pronominal (67).

67. *Tabel geu i-ken gi bage-m ngas ne Sawai, be geu*
 beach SPEC 3SG-lie LOC hand-2SG.POS left MED Sawai and SPEC
i-ken gi bage-m o-n ne Waii.
 3SG-lie LOC hand-2SG.POS right-3SG.POS MED Waii.
 ‘The beach on your left hand is Sawai, and the one on your right hand is Waii.’ (Karnai, CM2.008)

68. *Mangan naol lapau au songa a-tadad di kasenen geu maimai balai*
 time all too 1SG HAB 1SG-fear.PROG 3PL children SPEC big because
mangan geu ku-yol mong sidik sa ne lo ti-ro ong kanon.
 time SPEC 3PL-pull trouble little NON.REF MED FUT 3PL-hit 2PL really
 ‘All the time too I was afraid of the children (who were) big because when you make a little trouble they really hit you.’ (Karnai, NM1 005)

Geu is unusual as a determiner in that it requires a post-modifier in almost all circumstances, either in the form of another NP modifier (an adjective or demonstrative (68)), or a relative clause (67). If adjectival post-modifiers are understood as being verbless relative clauses, it can be argued that *geu* is in fact a relative clause complementiser with certain demonstrative or determiner properties (specificity, ability to be pronominal). However, *geu* can also be modified by a relative clause headed by the more common relative complementiser, *ton*, as in 69.

69. *Mata-n geu ton malal i-ken i-sai po-n ni e-n*
 eye-3SG.POS SPEC REL village 3SG-lie 3SG-up top-3SG.POS NON.MED name-3SG.POS
ton Ambunan mata-n.
 FOC Ambunan eye-3SG.POS
 ‘This point where the village lies up on it, the name of this place is Point Ambunan.’ (Karnai, PK/CM 019)

Geu must therefore be treated as a specific determiner or demonstrative, but has the requirement that its specific referent be explicitly identified in the same phrase. Prenominal *geu* can also be used in questions as in 70, where *ngai* ‘where’ is treated as a relative clause.

70. *Geu ngai? Geu i-ken ngas.*
 SPEC where SPEC 3SG-lie left
 ‘Which one? The one on the left.’ (Karnai, elicitation)

71 is an example from a translated text where *geu* is both pronominal and is not followed by a relative clause; possibly a relative clause would be redundant

information because the very specific referents of *geu* are clearly understood from the preceding clause.

71. *Aiyo, Maro i-pudu kong, be kong tonen i-pot ran*
 so God 3SG-create fence and fence MED.EMPH 3SG-separate water
i-yoi ru. Geu i-ken et, be geu i-ken po.
 3SG-make two SPEC 3SG-lie above and SPEC 3SG-lie below
 ‘So God made a fence, and that fence separated the water to make two. Part was above, and part was below.’ (Karnai, Genesis 1:7)

4.1.4 Numerals

AL has a quinary numeric system with a separate word meaning ‘ten’; all other numbers are based on these, hence:

<i>atu</i>	1	<i>limi be atu</i>	6 (5 and 1)	<i>sangaul ru</i>	20
<i>ru</i>	2	<i>limi be ru</i>	7 (5 and 2)	<i>sangaul ru be atu</i>	21
<i>tol</i>	3	<i>limi be tol</i>	8	<i>sangaul ru be limi be atu</i>	26
<i>pai</i>	4	<i>limi be pai</i>	9	<i>sangaul tol</i>	30
<i>limi</i>	5	<i>sangaul</i>	10	<i>sangaul sangaul</i>	100

The Karnai numerals up to 19 are similar to AL but the system thenceforth is ventesimal and a separate classifier unit, *kanon* (also meaning ‘fruit’; *tamot* ‘20’ also means ‘male’) is used to add numbers under ten in the even decades (21-29, 41-49, 61-69, etc.). There is a separate number for 100 (*dingding*, also meaning ‘grass’).

<i>ta</i>	1	<i>tamot ta</i>	20	<i>tamot ru</i>	40
<i>ru</i>	2	<i>tamot ta kanon ta</i>	21	<i>tamot ru kanon ta</i>	41
<i>tol</i>	3	<i>tamot ta kanon lim be ta</i>	26	<i>dingding (ta)</i>	100
<i>pang</i>	4	<i>tamot ta sangul</i>	30	<i>dingding ta kanon ta</i>	101
<i>lim</i>	5	<i>tamot ta sangul be ta</i>	31	<i>dingding ta tamot ta</i>	120
<i>sangul</i>	10	<i>tamot ta sangul be lim be ta</i>	36		

The Mangap-Mbula system is also ventesimal but does not use the ‘fruit’ classifier, although this is not uncommon in other Oceanic languages; according to Lynch et al (2002: 73), **puaq* ‘fruit’ was probably the proto-Oceanic numeral classifier for all numerals, although in Karnai it is preserved only in the even decades. Morota (layers of sago palm leaves used for thatch) is counted differently and comes in pairs: a single unpaired layer is *gegen* ‘half’; one pair is *kanon ta*; three layers are *kanon ta gegen (ta)*; two pairs (four layers) are *kanon ru*, and so forth.

4.1.5 Adjectives and nominal modifiers

D’Jernes (2002) identifies two open classes of post-nominal modifiers in AL: true adjectives and inalienably possessed noun attributes. Words of both classes can be predicative. The true adjectives are comparatively few and are listed below (based on D’Jernes 1992). It will be noted that Karnai has separate lexemes for the opposing pairs ‘good/bad’ and ‘big/little’, where AL uses negation.

Arop-Lokep		Karnai	
<i>dook</i>	‘good’	<i>dawok</i>	‘good’
<i>mai</i>	‘big’		
<i>somai</i>	‘big’	<i>sumai</i>	‘big’
<i>dook tiap</i>	‘good not’	<i>sian, sinsian</i>	‘bad, bad.PL’
<i>mitiap</i>	‘big-not’	<i>sedek</i>	‘little’

There are also a number of uninflected adjectives that can also act as nouns; examples include:

Arop-Lokep		Karnai	
<i>kase</i>	‘little; child’	<i>kasan</i>	‘little; child’
<i>pakara</i>	‘female animal’	<i>pagar</i>	‘female animal’
<i>kapa</i>	‘crazy’	<i>kapkap</i>	‘crazy; crazy one’

Attributive inalienable nouns are frequent as NP modifiers, particularly to describe qualities of an entity such as temperature, colour and texture. They are often derived from verbs or other adjectives (see Section 4.1.2). Examples include:

Arop-Lokep		Karnai	
<i>guru-nu</i>	‘old-3SG.POS’	<i>guru-n</i>	‘old-3SG.POS’
<i>rornga-na</i>	‘multicoloured-3SG.POS’	<i>mimisa-n</i>	‘coarse-3SG.POS’
<i>kauakaue-ne</i>	‘greyheaded-3SG.POS’	<i>tuptupa-n</i>	‘fat-3SG.POS’
<i>kapa(kapa)-na</i>	‘crazy-3SG.POS’	<i>kapkapa-n</i>	‘crazy-3SG.POS’

The basic colour terms in both languages are inalienable nouns, but there is variation in what colours are included.

Arop-Lokep		Karnai	
<i>kookoo-noo</i>	‘white’	<i>koko-n</i>	‘white’
<i>muka-na</i>	‘black’	<i>kaskaso-n</i>	‘black’
<i>kooroo-noo</i>	‘red’	<i>inngo-n</i>	‘yellow’
<i>yoongoo-noo</i>	‘green/yellow/blue’ ³	<i>kadkadnga-n</i>	‘blue’

Karnai speakers gave me a range of other non-basic colours derived from nouns denoting natural objects, including *tan* ‘ground/brown’, *gawur* ‘ashes/grey’, *pur* ‘seed species/red’ and *kai raun gamtan* ‘tree leaf colour/green’.⁴

4.1.6 Possession

Inalienable nouns include kinship terms, body parts and some attributes. Direct possession is marked in both languages with a noun suffix:

Table 5: Inalienable possession suffixes

	SG	PL
1EX	<i>-k</i>	<i>-mam</i>
1IN		<i>-dV (AL)/ -d (K)</i>
2	<i>-m</i>	<i>-mim (A)/ -mu (L)/ -mi (K)</i>
3	<i>-nV (AL)/ -n (K)</i>	<i>-di</i>

Possession of a small number of kinship terms in AL is marked with infixes; these have been lost in Karnai, the AL 3SG infix being fossilized in the lexeme.

- | | |
|--|---|
| 72. <i>ni-k-tooroo</i>
husband-1SG.POS-
‘my husband’ (AL) | 73. <i>nantoro-k</i>
husband-1SG.POS
‘my husband’ (Karnai) |
| 74. <i>ni-n-tooroo</i>
husband-3SG.POS-
‘her husband’ (AL) | 75. <i>nantoro-n</i>
husband-3SG.POS
‘her husband’ (Karnai) |

Inalienable possessors are expressed with a pronoun or noun preceding the possessed noun.

³ *Yoongoo-noo* is usually accompanied with a clarifying statement, i.e. *yoongoo-noo ben pon taltal* ‘yellow like turtle fat’, *yoongoo-noo ben lama kosono* ‘blue like the deep sea’ and *yoongoo-noo ben kai raunu* ‘green like tree leaves’.

⁴ Karnai has a verb *i-kor* ‘3SG-be.red’, from which is derived *koron* meaning ‘clay’; both are cognate with AL *i-kooroo* ‘3SG-be.red’ and *kooroo-noo* ‘red-3SG.POS’. *Kaskaso-n* ‘black-3SG.POS’ is a cognate of AL *kaskas* ‘charcoal’.

All other nouns are alienable. If possessed, possession is marked with a prepositional phrase consisting of *ke* (AL) or *ki* (K) ‘of’ and the possessor, or by the following prepositional proforms:

Table 6: Alienable possession / *ke* and *ki* prepositional proforms

	SG	PL
1EX	<i>kiau</i>	<i>kiam</i>
1IN		<i>kiidi</i> (AL)/ <i>kit</i> (K)
2	<i>kiam</i>	<i>kiang</i>
3	<i>ki</i>	<i>kidi</i>

As mentioned earlier, alienable possessors in AL always follow the head noun, but in Karnai they may also precede, with the appropriate proform following:

76. *Am-noto dad am-sai am-la Kanakeng ma rum ki-di.*
 1PL.EX-follow road 1PL.EX-up 1PL.EX-go Kanakeng and.others house of-3PL
 ‘We followed the road up to Kanakeng’s (and the others’) house.’ (Karnai, JS1.015)

Where the possessor precedes the head noun, the order of the *ki*-proform and other modifiers is flexible. A possessor following the head noun must follow other modifiers.

77. *pasto rum ki sedek* ‘the pastor’s little house’ (Karnai, elicitation)
 pastor house of.3SG little
78. *pasto rum sedek ki*
 pastor house little of.3SG
79. *rum sedek ki pasto*
 house little of pastor
80. *#rum ki pasto sedek* ‘the house of the little pastor’ (Karnai, elicitation)
 house of pastor little

In neighbouring Kobai, inalienable possessors precede the head noun and alienable possessors normally follow. This is unusual for a Finisterre-Huon language, where all possessors would normally precede (McElhanon 1973:8, in Bugenhagen 1994:91). Kobai also has an alternative construction, used particularly where there is pragmatic focus on the possessor; this construction is identical to Karnai, the possessor preceding the head noun and a pronoun copy following.

81. *Ine nek ge y-ong?*
 DEM who pig 3SG-POS
 ‘Whose pig is this?’ (Kobai, Bugenhagen 1994:92)

82. *Jon i-yir gi sege og ki?*
 John 3SG-board on who canoe of.3SG
 ‘Whose canoe did John board?’ (Karnai, Elicitation015)

Bugenhagen (1994:92-93) argues that Kobai NP structure has been influenced by neighbouring Austronesian languages, rather than the other way around, given that Kobai is a SOV language and the possessor-head order is typologically more typical of the Austronesian SVO languages. The Kobai possessor-head construction is similar to the Mangap-Mbula thematised possessor construction:

83. *Iggi asig nge k-ni?*
 this who pig LOC-3SG
 ‘Whose pig is this?’ (Mangap-Mbula, Bugenhagen 1994:92)

It is impossible to tell from the current data whether the possessor-head construction once existed in AL and was then lost, whether Karnai borrowed it from Kobai or its other neighbours, or indeed which of its Austronesian neighbours Kobai borrowed it from. Interestingly, while in Mangap-Mbula and Kobai the possessor-head construction focuses the possessor role (the following proform being interpreted as a resumptive element), in Karnai the possessor is not necessarily new information and there are no apparent restrictions on the distribution of the construction:

84. *Barem pau-n gigi-n ni pasto rum ki, pasto rum ki, be ku-wet ku-bele pasto rum ki be ku-long ku-la ni ku-la field.*
 church new-3SG.POS next-3SG.POS NON.MED pastor house of.3SG pastor house of.3SG and 2SG-want 2SG-leave pastor house of.3SG and 2SG-in 2SG-go NON.MED.TIME 2SG-go field
 ‘Next to the new church is the pastor’s house, the pastor’s house, and if you leave the pastor’s house and go inland then you go to the (school) field.’ (Karnai, PK/CMa.011)

Both AL and Karnai speakers sometimes add an extra *ki*-proform after a post-modifying possessor. This is more frequent in Karnai than in AL, but speakers of both languages tend to judge it as incorrect, Arop speakers identifying it as a typical Karnai feature.

85. *Tanga ke Ariaki ki.*
 bilum of Ariaki of.3SG
 ‘(That’s) Ariaki’s bilum.’ (Arop, JA)

86. *Rum ki Rufus ki.*
 house of Rufus of.3SG
 ‘Rufus’s house.’ (Karnai, PC)

Both languages allow reduplication of plural possessors to express individual possession:

87. *Ka-la rumu ki-ang ki-ang!*
 2PL-go.across house of-2PL of-2PL
 ‘You go (to your own) houses!’ (AL, elicitation)
88. *...ti-yau ki-d ki-di ga ti-migir pi ni ki-di...*
 3PL-gather of-3PL of-3PL and 3PL-go.separate.ways to place of-3PL
 ‘...they (each) gathered their own and they went separate ways to their places...’ (Karnai, ME1a.035)

In both languages, possession can be expressed in clauses with the inalienable noun *ka-* acting as predicate (89, 90).

89. *Am ka-mam rum ki ka-ung wer be rum ki*
 1PL.EX possession-1PL.EX.POS house of get-NMZ wisdom and house of
mamat-eng.
 sick-NMZ
 ‘We have (in Padamot) a school and a health centre.’ (Karnai, CM2.005)
90. *Idi nga ka-da rara sa lapau, too tiap?*
 1PL.IN PROX.PL possession-1PL.IN blood NON.REF too or not
 ‘(What about) us, have we got some family too, or not?’ (AL, Sokorai 018)

Ka- is often negated with the particle *tau*. In AL, *tau* only occurs in the compound *tau-ka* ‘a state of being without’; in Karnai, it can also occur alone.

91. *Kene tani in ngan am tau-ka-mam ookoo*
 time DEF.SG MED.SG NON.PROX.TIME 1PL.EX NEG-possession-1PL.EX.POS canoe
be am-pa ye.
 IRR 1PL.EX-travel with.3SG
 ‘At that time we had no canoe that we could travel with.’ (AL, D’Jernes p.c.)
92. *Oi, ong sige tau ka-m ura-m?*
 hey 2SG who NEG possession-2SG.POS strength-2SG.POS
 ‘Hey, who are you without strength?’ (Karnai, JSY2a.044)
93. *Au a-la ni tau ran.*
 1SG 1SG-go place NEG water
 ‘I go to a place without water.’ (Karnai, song)

Karnai also has an inalienable noun root *muti-*, meaning ‘to have plenty’, which, like *ka-*, can be used as a predicate expressing possession. *Muti-* is used only with uncountable and mass nouns; these are frequently, but not always, inalienable and other nouns denoting attributes very closely associated with the possessor.

94. *I lapau muti-n gargara-n be taloko*
 3SG too have.plenty-3SG.POS skin.hair-3SG.POS and but
mida-n nanang ki kan-ing.
 meat-3SG.POS nice of eat-NMZ
 ‘He (the tree kangaroo) also has lots of hair but his meat is good to eat.’ (Karnai, JP1.005)
95. *Kurap tini muti-n wer.*
 person NON.MED have.plenty-3SG.POS wisdom
 ‘That man has much wisdom.’ (Karnai, PC)

4.1.7 Relative clauses

In both Karnai and AL, relative clauses post-modify the head noun. Subjects, objects and obliques can be relativised; the head is marked anaphorically within the relative clause by means of subject and object affixes and prepositional proforms. AL allows a resumptive pronoun at the beginning of the relative clause, but Karnai apparently does not.

Relative clauses in AL are optionally introduced by the relative complementiser *yo* and optionally closed by the proximal demonstrative pronouns *i* and *nga*. In topicalized constructions *i* often closes the relative clause and is followed by a medial *in* resumptive pronoun before the main verb (regardless of the grammatical role of the relativized NP (95)). It is also possible for the relative clause to consist only of the relative complementiser and the demonstrative *i* (96).

96. *I-kaua pul (yo) a-sup bus ye.*
 3SG-get knife REL 1SG-scrape taro with.3SG
 ‘He got the knife that I scrape taro with.’ (AL, DJ2002 2.8)
97. *Tamoto koskos yo i-man mugu a amru am-yepe i,*
 male bachelor REL 3SG-come.across first and 1DL.EX 1PL.EX-stay PROX.SG
in a-wete panga ngan ya i-rau koo-k tiap.
 MED.SG 1SG-say to.3SG MED.TIME 3SG 3SG-return mouth-1SG.POS not
 ‘That bachelor that came across first and we two stayed, him I spoke to and he didn’t throw my words (back at me).’ (AL, Rimadi 175)
98. *Garup yo i, garup dook mata san.*
 female REL PROX.SG female good very very
 ‘This woman was a very good woman.’ (AL, Rimadi 087)

Ton (~*to*) is the Karnai relative complementiser. Like *yo* it is optional. There are no examples in the current database of demonstratives used to close a relative clause.⁵

99. *Ku-tar kai ton ku-wet ku-sap og gi.*
 2SG-cut tree COMP 2SG-want 2SG-shape canoe with.3SG
 ‘Cut down the tree that you want to shape the canoe from.’ (Karnai, PK1a.003)

Unlike AL *yo*, which only occurs in relative clauses and occasionally as a subordinate clause complementiser, Karnai *ton* has at least four other functions. Its role as a locative preposition is discussed in Section 4.2.5; it is also used to introduce adverbial phrases, to indicate topic or focus, and to conjoin reduplicated words or phrases in an intensifying construction. Like *yo* it can be used as a subordinate clause complementiser.

Ton is used to introduce adverbial phrases, often in fixed collocations such as *ton namen* ‘like that’ and *ton pilaisi* ‘very much’, which have a high frequency in discourse. Such phrases occasionally follow nouns (100) but can also refer to the verbal predicate of a preceding clause (101, 102). *Ton* in these contexts can still be treated as a relative complementiser, but introduces a relative clause that can refer not only to a noun but also to an action expressed by a verb or other predicate.⁶

⁵ The role of the independent demonstratives as resumptive pronouns in the following two Karnai examples is worth further consideration; the two NPs obviously have a similar structure but there is no overt relative clause construction in b:

- a. *Kurap ton matan pi malal ne Makuk Isaac.*
 person rel eye-3SG.pos to village MED Makuk Isaac
 ‘The person who watches over the village is Makuk Isaac.’ (Karnai, CM2.012)
- b. *Rum ki-au ne i-ken ran Kubuk gigi-n be Philip rum*
 house of-1SG MED 3SG-lie water Kubuk near-3SG.POS and Philip house
ki ne i-ken gi tabel gigin paitoi gi rum ki
 of.3SG MED 3SG-lie to beach near-3SG.POS close to house of
par-ang matuk.
 smoke-NMZ coconut
 ‘My house is near the Kubuk stream and Philip’s house is near the beach close to the coconut smoking house.’ (Karnai, CM2.009)

⁶ In AL, certain verbs in subordinate clauses can also refer to and agree with a previous action rather than the agent of the action, particularly the verb *mot* ‘to be finished’. This is discussed in Section 4.2.3.

- a. *Ti-kumu a i-mot, motong ti-mulu pang malala.*
 3PL-cut.weeds and 3SG-finish after 3PL-return to village
 ‘They gardened (until) it was finished, then they returned to the village.’ (AL, Taukasek 003)

100. *Am-la am-kidiod be kanning ton pilaisi...*
 IPL.EX-go IPL.EX-stand.PROG and mosquito REL much
 ‘We went (and) stood and (there were) masses of mosquitos...’ (Karnai, JS1.014)

101. *Au a-tad ton pilaisi...*
 1SG 1SG-be.afraid REL much
 ‘I was really afraid...’ (Karnai, NT1.002)

102. *I-wo ton namen be garup tini i-sai...*
 3SG-sing REL like.that and woman NON.MED 3SG-up
 ‘He sang like that and the woman got up...’ (Karnai, JSY2a.010)

Ton can be used to indicate either focus or topic, often corresponding to the AL focus particle *la* or to the determiners *tani* and *tina* in their topic marking role. The latter is perhaps similar to the use of AL *yo i* ‘REL PROX.SG’ as a minimal relative clause, but in Karnai the demonstrative is not required.

103. *Tool atu, e-ne la Tau, in i-ye rima-na ti-yepe...*
 person one name-3SG.POS FOC Tau MED.SG 3SG-with wife-3SG.POS 3PL-live
 ‘A man, his name was Tau, he and his wife lived...’ (AL, Taukasek 001)

104. *E-k ton Helen Alkam.*
 name-1SG.POS FOC Helen Alkam
 ‘My name is Helen Alkam.’ (Karnai, HA1.013)

105. *Gasa-nga ke Tau Kasek tani i i-se i-mot nanga.*
 story-NMZ of Tau Kasek DEF.SG PROX.SG 3SG-come.up 3SG-finish here
 ‘The story of this Tau Kasek, it comes up and finishes here.’ (AL, Taukasek 078)

106. *Nin ki-au ton i-ma i-mul ton namen.*
 story of-1SG TOP 3SG-come 3SG-end REL like.that
 ‘This story of mine comes (and) ends like this.’ (Karnai, NC2.004)

Ton also appears in an intensifying construction as a conjunction connecting the sequence of reduplicated words or phrases (noun, verb or whole short clause) that the speaker wishes to emphasise.

107. *Mangan ton a-tuwe gi a-ro pariu anut*
 time REL 1SG-know COMP 1SG-hit drum white.person
lo-k dawok ton lo-k dawok.
 insides-1SG.POS good EMPH insides-1SG.POS good
 ‘That time I learned to play the guitar (white person’s drum) I was really happy.’ (Karnai, CLJ1 002)

108. *Mangan geu a-long a-la ni ki ka-ung wer au*
 time SPEC 1SG-in 1SG-go place of take-NMZ wisdom 1SG
mamai au ton pilaisi balai yol ton yol.
 shame 1SG REL much because crowd EMPH crowd
 ‘When I came to school I was really ashamed because (there were) crowds and crowds (of people).’ (Karnai, NM1 003)

109. *Be so san a-la gi ni, a-kan bus to bus be*
 and thing other 1SG-go to NON.MED 1SG-eat taro REL taro and
a-yin ran sila-n ton ki kawal be taloko ni
 1SG-drink water cold-3SG.POS REL of mountain and however place
tini i-sil ton i-sil gi bong.
 NON.MED 3SG-cold EMPH 3SG-cold at night
 ‘And another thing about it (was that) I ate (lots of) taro and I drank cold water that (came)
 from the mountain, but that place was (really) cold at night.’ (Karnai, WM1 004)

4.2 Verbs and verb phrases

4.2.1 Verb morphology

Subject person and number are marked with verbal prefixes in both AL and Karnai; see Table 2 for the paradigm.

Both languages have the typical Oceanic causative prefix *pa-*. AL also has reciprocal *par-*, which proved, however, to be impossible to elicit in Karnai and was only once overheard by chance:

110. *Di ga ti-par-kan.*
 PL pig 3PL-REC-eat
 ‘The pigs fight.’ (Karnai)

There was a strong preference in elicitation sessions for expressing reciprocal action with a plural form of the inalienable noun *tau* ‘self’ as object, as in 111 (*tau* is also used as a reflexive); the above example, with its idiomatic meaning, is probably fossilized in the lexicon (in AL, 110 means ‘The pigs bite each other’).

111. *Di kidio tini songa ti-seb tau-di gi urat ki kum.*
 PL clan NON.MED HAB 3PL-help self-3PL with work of garden
 ‘The people help each other with garden work.’ (Karnai, Elicitation042)

With the exception of the third person singular, objects are not marked on the verb but can be expressed using pronominal or clitic forms identical to the subject pronoun paradigm described in Section 4.1.1. AL marks pronominal 3SG objects with a -V suffix which is lexically specified for each verb; AL verbs also distinguish singular and plural fully-specified NPs, the final vowel of the root being reduplicated for singular objects. In Karnai 3SG objects are unspecified except with a full NP; where a full NP object occurs, there is no change in the verb for singular or plural objects. It is assumed that these distinctions were lost with the loss of Karnai final vowels (see Section 3).

Table 7: Object-marking suffixes

	Arop-Lokep			Karnai
	intransitive verb or verb with plural object NP	verb with singular object NP	verb with pronominal 3 rd person singular object	
‘eat’	<i>i-kan</i>	<i>i-kan-a</i>	<i>i-kan-i</i>	<i>i-kan</i>
‘hit’	<i>i-rau</i>	<i>i-rau-a</i>	<i>i-rau-u</i>	<i>i-ro</i>
‘wash’	<i>i-yin</i>	<i>i-yin-I</i>	<i>i-yin-u</i>	<i>i-yin</i>

AL also has a valency-increasing suffix *-Cai(a)* which may once have been a productive transitive marker but the use of which is now restricted to certain verbs. I came across only one example in Karnai (further examples proved impossible to elicit):

112. ...*be am-sur-mai gane am-si mul am-ma pi malal*
 and 1PL.EX-pole.canoe-VAL and.then 1PL.EX-down again 1PL.EX-come to village
pagi ga tini.
 with pig NON.MED
 ‘...and we poled (the canoe) and then we came down again to the village with that pig.’
 (Karnai, NA1a.014)

Progressive action in AL is indicated by partial reduplication of either the final syllable of the root, or the final consonant and the class marking vowel. The whole root can also be reduplicated.

Final syllable reduplication (AL):

i-kodo ‘3SG-stand’ *i-kododo (~ ikodede)* ‘3SG-stand.PROG’
i-ken ‘3SG-lie’ *i-kenen* ‘3SG-lie.PROG’
ti-par-sulu ‘3PL-REC-argue’ *ti-par-sululu* ‘3PL-REC-argue.PROG’

Final consonant and CM vowel (AL):

i-kono ‘3SG-fish’ *i-konana* ‘3SG-fish.PROG’
i-pas ‘3SG-jump’ *i-pases* ‘3SG-jump.PROG’

Whole root reduplication (AL):

i-wete ‘3SG-speak’ *i-wete-wete* ‘3SG-speak-speak’
i-wodo ‘3SG-dry’ *i-wodo-wodo* ‘3SG-dry-dry’

Karnai, however, reduplicates either the rhyme of the final syllable of the root (if it ends in a consonant) or inserts a sequence *-iCi-* before the final rhyme, where C is a copy of the final consonant (this appears only to affect single syllable verb roots, but the whole word is affected if the root is also reduplicated, as in *i-ting-tingiang* ‘3SG-cry-cry.PROG’ from the root *tang* ‘cry’). If the verb ends in a vowel the suffix *-ai* is

added, sometimes with a change to the quality of the final vowel. The whole final syllable or whole root can also be reduplicated.

Rhyme reduplication (Karnai):

<i>i-mir</i>	‘3SG-run’	<i>i-mirir</i>	‘3SG-run.PROG’
<i>i-pang</i>	‘3SG-wake.s/o.’	<i>i-pangang</i>	‘3SG-wake.s/o.PROG’
<i>i-rak</i>	‘3SG-climb’	<i>i-rakak</i>	‘3SG-climb.PROG’

Whole root or final syllable (Karnai):

<i>i-tor</i>	‘3SG-ask’	<i>i-tor-tor</i>	‘3SG-ask-ask’
<i>i-wet</i>	‘3SG-speak’	<i>i-wetwet (~ i-wetet)</i>	‘3SG-speak-speak’
<i>i-noto</i>	‘3SG-follow’	<i>i-notototo</i>	‘3SG-follow.PROG’

-iCi- insertion (Karnai):

<i>i-kod</i>	‘3SG-stand’	<i>i-kidiod</i>	‘3SG-stand.PROG’
<i>i-kan</i>	‘3SG-eat’	<i>i-kinian</i>	‘3SG-eat.PROG’
<i>i-mol</i>	‘3SG-fall’	<i>i-miliol</i>	‘3SG-fall.PROG’
<i>i-pas</i>	‘3SG-jump’	<i>i-pisias</i>	‘3SG-jump.PROG’
<i>i-tang</i>	‘3SG-cry’	<i>i-tingiang</i>	‘3SG-cry.PROG’
		<i>i-ting-tingiang</i>	‘3SG-cry-cry.PROG’

-ai suffixation (Karnai):

<i>i-pe</i>	‘3SG-plant’	<i>i-peai</i>	‘3SG-plant.PROG’
<i>i-te</i>	‘3SG-dig’	<i>i-tiai</i>	‘3SG-dig.PROG’

In Karnai the verb root *la* ‘go’ can also be used, following the main verb, to indicate progressive or continuous action.

113.E, *tinru ti-yep, ti-yep la la i-du la i-yos mul.*
 then 3DL 3PL-stay 3PL-stay go go 3SG-down go 3SG-fish.with.net again
 ‘After that, the two of them stayed, they stayed (for a while, then) he went down to fish again.’ (Karnai, ME1a.021)

4.2.2 Basic VP structure

The minimal AL or Karnai verb phrase is a verb with an obligatory subject prefix. For transitive verbs, objects are marked with pronouns or clitics identical to the subject pronoun paradigm, with the exception of the third person singular (as discussed above).

114. *A-got di.*
 1SG-see PL
 ‘I saw them.’ (Karnai)

115. *A-kamata di.*
 1SG-see PL
 ‘I saw them.’ (AL)

116. *I-ro-mat.*
 3SG-hit-die
 ‘She killed him.’ (Karnai)

117. *I-pa-mul-e*
 3SG-CAUS-return-3SG
 ‘He returned it.’ (AL)

Both languages have a range of pre- and post-verbal adverbs expressing time, modality, manner, location and negation. Modal adverbs generally precede the predicate, either before or after the subject NP; temporal adverbs precede or follow the predicate; adverbs of aspect, manner, location, degree and negation usually follow. Table 8 (AL data from D’Jernes 1992) gives examples of a range of adverbs from both languages. Modal adverbs are summarised in Table 9 and discussed in Section 4.2.3.

Table 8: Adverbs

	Arop-Lokep	Karnai
Temporal	<i>mugu, mukoot</i> (long ago) <i>mur</i> (later) <i>nookoot</i> (now) <i>airi</i> (two.days.ago)	<i>mug, mugmug</i> (before, long ago) <i>mur</i> (later) <i>napai</i> (now, today) <i>uri</i> (two.days.ago)
Manner	<i>karatingi</i> (carefully) <i>mosmos</i> (slowly) <i>tarai</i> (quickly) <i>(pal)palbe</i> ((very) fast) <i>nen</i> (like that)	<i>karengting</i> (slowly) <i>mosbe</i> (slowly) <i>tatarai</i> (quickly) <i>(per)perbe</i> ((very) fast) <i>namen</i> (like that)
Negation	<i>tiap</i> (no) <i>tiao</i> (not yet) <i>siap</i> (none) <i>siao</i> (none yet) <i>be</i> (prohibitive, negative habitual)	<i>tasi</i> (no) <i>tiab</i> (not yet) <i>poko</i> (prohibitive)
Aspect	<i>koot</i> (perfective; perfective interrogative) <i>oo</i> (already) <i>i-mot</i> (3SG-finish (verb)) <i>go</i> (yet, still)	<i>ko</i> (perfective interrogative) <i>lak, -k</i> (already); <i>i-lak</i> (3SG-finish (verb)) <i>mot</i> (perfective) <i>kuten, kutenen</i> (perfective)
Degree	<i>kaye</i> (plenty) <i>yege</i> (very) <i>mai</i> (very) <i>so</i> (very) <i>mata</i> (very) <i>san</i> (very) <i>wele</i> (very) <i>ookoo</i> (very)	<i>kaigi</i> (very) <i>taun</i> (very) <i>mai</i> (very) <i>maigi</i> (at all) <i>mat</i> (very) <i>pilaisi</i> (very much) <i>naol</i> (plenty) <i>naolmai</i> (much, all)
Position	<i>potai</i> (near) <i>ete</i> (above) <i>lobo</i> (below) <i>meneng</i> (yonder) <i>petinana</i> (very near)	<i>paitoi</i> (near) <i>et</i> (above) <i>malu</i> (far away) <i>po</i> (below)

	Arop-Lokep	Karnai
Limiting adverbs	<i>lapau</i> (also) <i>mulu</i> (again) <i>leu</i> (only) <i>dookoot</i> (enough) <i>siesi</i> (slightly) <i>san</i> (too much)	<i>lapau</i> (also) <i>mul</i> (again) <i>loko</i> (only)

4.2.3 Modality

Modality, including concepts such as possibility, potential ability, intention and habituality, is usually marked with pre-verbal adverbs; the principal modal adverbs are summarised in the following table. It should be noted that in a couple of cases Karnai uses verbs to convey concepts expressed in AL with adverbs. Prohibitives will be dealt with more fully in Section 4.2.4 but the negative habitual and prohibitive adverbs have been included in the table because of their involvement in the expression of habituality.

Table 9: Modal adverbs

Meaning	Arop-Lokep		Karnai	
possibility, deduction	<i>o</i>	pre-verbal	<i>salo</i>	pre-verbal
future	<i>ole, lo</i>	pre-verbal	<i>lo</i>	pre-verbal
desire, intention	<i>be</i> (A); <i>bet</i> (L)	pre-verbal	<i>wet</i>	verb
potential, ability	<i>ke be, ye be</i>	pre-verbal	<i>ge ~ ige</i>	verb pre-verbal
habitual	-	-	<i>songa</i>	pre-verbal, post-NP subject
negative habitual	<i>be</i>	post-verbal	<i>songa... si</i>	pre-/post-verbal
prohibitive			<i>(songa...) poko</i>	(pre-)/post-verbal

The pre-verbal adverb *be* in Arop (Lokep *bet*; not to be confused with the post-verbal negative imperative *be*) has a range of functions; it is the default irrealis marker for non-realised events in any time frame, and is also used to express intention, purpose and desire. *Be* also occurs in the compounds *ke be* and *ye be* which denote ability/possibility and ability/missibility respectively.

The functions encoded by AL *be/bet* are expressed in various ways in Karnai: by the adverbs *salo* (non-factual/irrealis, possibility) and *lo* (future, intention), and by the verb *wet* ‘to want (intention, desire). Historically, Karnai *wet* and AL *be/bet* are probably cognate, and I suggest that the AL adverbs probably originated as verbs;

they may also share origins with the Karnai verb *bet* ~ *wet* ‘to speak’ (Lokep *bete*, Arop *wete*).

Non-factual or irrealis marking, where Arop *be* corresponds to Karnai *salo*, is illustrated in the following:

118. *Salo Pita lo i-yir gi og ki.*
 IRR Peter FUT 3SG-board LOC canoe 3SG.POS
 ‘Peter might board his canoe.’ (Karnai, Elicitation019)

119. *Ku-wete be au i a-re rumu nen too?*
 2SG-speak IRR 1SG PROX.SG 1SG-build house like.that or
 ‘Are you saying (that) I would build a house like that, or (what)?’ (AL, Apisak 010)

Be frequently expresses intention, for which Karnai tends to use the future adverb *lo*.

120. *Nga be a-gasa barau ke gaunu i-ye ook.*
 PROX.TIME IRR 1SG-tell story of dog 3SG-with tree.kangaroo
 ‘Now I’m going to tell the story of the dog and the tree kangaroo.’ (AL, Ook 001)

121. *Au lo a-ka bing gi malal ki-au.*
 1SG FUT 1SG-give account about village of-1SG
 ‘I will give an account of my village.’ (Karnai, CM2.003)

The verb *wet* occurs very frequently in Karnai to express desire and intention. AL, having no verbal equivalent, tends to use irrealis *be*, often in the idiomatic construction *lo- be* ‘my insides would’, as in 122.

122. *Ngan natu-k lo-no be i-re rumu atu.*
 MED.TIME child-1SG.POS insides-3SG.POS IRR 3SG-build house one
 ‘Then my child wanted to build a house.’ (AL, Apisak 001)

123. *A-wet a-yoi nin sidik ki malal ki-au Padamot.*
 1SG-want 1SG-do story little of village of-1SG Padamot
 ‘I want to tell a little story about my village, Padamot.’ (Karnai, PK/CMa.001)

Potential or ability in Karnai is also expressed with a verb *ge* ‘to be able’, corresponding to and probably cognate with the Arop modal adverb *ke be* (Lokep *ke bet*). The Karnai verb *ge*, however, only occasionally takes the appropriate subject agreement prefix (usually in formal or careful speech; I have no recorded examples except in elicited or translated texts). Most commonly it is realised as *ige*, regardless of the person and number of the subject, and it appears to be in a state of transition

between verb and adverb. AL *ke be* is exemplified in 124⁷, and the variation between Karnai *ge* as a verb and *ige* as an adverb is shown in 125 and 126.

124. *Ngan gaunu rima-na tini in nookoot i-pasui nen,*
 MED.TIME dog wife-3SG.POS DEF.SG MED.SG now 3SG-give.birth like.that
le ke be i-pa tiap.
 and.so ability IRR 3SG-walk not
 ‘Then that dog’s wife gave birth, and so she wasn’t able to walk.’ (AL, Ook 004)

125. *Kel i-ge gi i-long og rotu-n be taloko au*
 Kel 3SG-able COMP 3SG-hear canoe noise-3SG.POS but however 1SG
a-ge gi a-long si.
 1SG-able COMP 1SG-hear not
 ‘Kel can hear the noise of the ship but I can’t hear it.’ (Karnai, elicitation)

126. *Au ige kano-k tange-au a-la a-konon.*
 1SG ability body-1SG.POS by.oneself-1SG 1SG-go 1SG-fish.PROG.
 ‘I can go fishing by myself.’ (Karnai, NT1.004)

AL *ole* and *o* are used to express future irrealis; *ole* usually denotes likely future events (127) or intentions (128), and *o* indicates conceivable but hypothetical events (129) and advice (130); it is more deductive in nature, often indicating the speaker’s opinion based on logical reasoning from realis situations (see also 137 below).

127. *Natu-k, ole a-mata.*
 child-1SG.POS IRR 1SG-die
 ‘My child, I am going to die.’ (AL, DJmodality 9)

128. *Ong ole ku-la ye sia-nga lapau?*
 2SG IRR 2SG-go.across to dance-NMZ also
 ‘Are you going to the dance too?’ (AL, GrmEss99)

129. *O ei i-kana natu-k!*
 IRR fire 3SG-eat child-1SG.POS
 ‘The fire might burn my child!’ (AL, Ook 075)

130. *Nga bong oo, o ku-mulu tiap.*
 PROX.TIME night already IRR 2SG-return not
 ‘It’s already night, you shouldn’t return (now).’ (AL GrmEss99 742)

In Karnai *lo* is the default marker for future action, in addition to indicating intention as discussed above. The use of *lo* seems to overlap with the different senses of *ole* and *o* (maybe also AL *lo*). In 131, *lo* expresses future probability,

⁷ AL *ye be* also denotes ability but tends to range into the area of permissibility (D’Jernes p.c.). No corresponding distinction can be made on the basis of the available Karnai data, but the following translated example suggests that *ige* can also be used for permission:

a. *Tasi, ang lo ige ka-seb au si. Lo a-ge di natu-k loko.*
 no 2PL FUT ability 2PL-help 1SG not FUT 1SG-with 3PL children-1SG.POS only
 ‘No, you can’t help me (because you didn’t help me before). Only I and my children will (eat).’
 (‘Who will help me?’ Karnai, Shell Book)

corresponding to *ole*. In 132 it indicates a hypothetical possibility and in 133 it indicates a definite consequence of a hypothetical action.

131. *Malal lo-n lo ku-got rum ben barem lo ku-got ben rum*
 village inside-3SG.POS FUT 2SG-see house like clan.house FUT 2SG-see how house
pang i-ken malal kate-n.
 four 3SG-lie village middle-3SG.POS
 ‘In the village you will see a house like a clan house (and) you will see how there are four houses in the middle of the village.’ (Karnai, PK/CM020)

132. *Mangan ton a-got og, au a-tad be a-wet namen, “It*
 time FOC 1SG-see ship 1SG 1SG-be.afraid and 1SG-speak like.that 1PL.IN
lo ta-patud.”
 FUT 1PL.IN-sink
 ‘When I saw the ship I was afraid and I spoke thus, “We will capsize.”’ (Karnai, RM1.002)

133. *Le ku-noto tutung tini si, ong lo ku-mat.*
 and 2SG-follow law NON.MED not 2SG FUT 2SG-die
 ‘And (if) you don’t follow these laws, you will die.’ (Karnai, KTMA.023)

Karnai *lo* is probably cognate with the AL directional verb *lo* ‘go up’, which is lacking from the Karnai directional verb paradigm (see Section 4.2.6). *Lo* in AL also has a modal function, again indicating future action or intention:

134. *Ona, lo a-ye natu-k am-ken ngai?*
 hey go.up 1SG-with child-1SG.POS 1PL.EX-sleep where
 ‘Hey, where will I and my child sleep?’ (AL, Ook 072)

135. *Nga ole bong lo a-rau-mata tama-k i a i-mata...*
 PROX.TIME IRR night go.up 1SG-hit-die father-1SG.POS PROX.SG and 3SG-die
 ‘When it’s night I will kill this father of mine and he will die...’ (AL, Kai 063)

AL also uses *lo* as a connective with the sense of going up or forward in time, particularly in the phrase *lo ngan be*:

136. *Nga be bong, le nga ole aru ta-kien ngan, le*
 PROX.TIME IRR night and.so PROX.TIME IRR 1DL.EX 1PL.EX-lie MED.TIME and.so
mongmong muntu lo ngan be ku-la pang malala ki-ong.
 tomorrow morning go.up MED.TIME IRR 2SG-go.across to village of-2SG
 ‘Now (it will soon be) night, and so (let the) two of us sleep, and then tomorrow morning you can go across to your village.’ (AL, Rimadi 045)

As mentioned above, AL *o* is used to indicate states or events that can be deduced or asserted on the basis of other known facts. In Karnai, *salo* is used for this purpose.

137. *Le lo-n wete, “Natu-k la o i-rau ga i.”*
 and.so insides-3SG.POS say child-1SG.POS FOC IRR 3SG-kill pig PROX.SG
 ‘And so she thought, “My child (the crocodile) must have killed this pig.’ (AL, Poo 113)

138. *Kone lo-n tar ben pat i salo ka-n gumo-n.*
 therefore insides-3SG.POS put how stone 3SG IRR possession-3SG.POS hole-3SG.POS
 ‘So he thought that the stone must have a hole.’ (Karnai, KTMA.008)

Karnai has a habitual adverb *songa* which has no equivalent in positive statements in AL. *Songa* always occurs between the subject and the verb, never clause-initially like the other pre-verbal adverbs, unless no subject NP is present, as in 140.

139. *I songa i-nepep karam lo-n be i-rakak kai.*
 3SG HAB 3SG-stay.PROG bush inside-3SG.POS and 3SG-climb.PROG tree
 ‘He lives in the bush and climbs trees.’ (Karnai, JP1 002)

140. *Songa a-long di kurap ti-koau nin gi di kurap tini-di*
 HAB 1SG-hear PL person 3PL-give.PROG story of PL person skin-3PL.POS
kakaso-n be songa a-got di si.
 black-3SG.POS but HAB 1SG-see PL not
 ‘I had heard people tell stories about people with black skin but I hadn’t seen them.’ (Karnai, HA1 002)

There appears to be no designated habitual marker in AL except in negation, where the negative particle *be* (typically used for prohibitive, as discussed below) may be used, hence the contrast between 141 and 142.

141. *A-kan i tiap.*
 1SG-eat fish not
 ‘I didn’t eat the fish.’ (AL, D’Jernes p.c.)

142. *A-kan i ke bor be.*
 1SG-eat fish of pot NEG.HAB
 ‘I don’t eat tinned fish.’ (AL, D’Jernes p.c.)

Occasionally the irrealis markers *ole* and *be* can be used to refer to actions or behaviour that are habitual, but with the additional sense of (relative) future or irrealis, as in the following example:

143. *Bong nga ti-yepe le be garup tani be lo-no*
 but PROX.TIME 3PL-live and.so IRR(condition) female DEF.SG IRR(HAB) insides-3SG.POS
be ikap asara pang i-ye di natu-nu nga, ngan
 IRR.intent 3SG-get meat to 3SG-with PL child-3SG.POS PROX.TIME MED.TIME
ole i-pa le du i-kodo ran koo-noo inbe
 IRR(HAB) 3SG-walk and.so go.down 3SG-stand water mouth-3SG.POS and
i-wete-wete pangdi i tina inbe i-kiu di.
 3SG-talk-talk to.3PL fish DEF.PL. and 3SG-call 3PL
 ‘But then they would continue for a while until that woman would desire to get meat for herself and her children, then she would walk and go down to stand at the mouth of the river and she would talk to those fish and call them.’ (AL, DJmodality)

4.2.3 Aspect

By default, aspect is not marked in AL and Karnai clauses. Progressive aspect is the only morphologically marked aspect, and is described in Section 4.2.1. Most other aspectual meaning is expressed adverbially.

AL has two perfective adverbs, *koot* and *oo*. A third means of indicating completion, either of an action or of a group of participants, utilizes the verb *mot* ‘be finished’. Karnai has the perfective adverbs *ko*, *kuten* and its reduplicated form *kutenen*, *lak* and the related suffix *-k*, and *mot*. Unlike its AL cognate, Karnai *mot* is probably not a verb, or at least does not perform the full range of verbal functions and never takes subject prefixes; *lak*, however, can act either as a verb (with subject prefix) or as an adverb.

AL *oo* forms compounds with the negatives *siap* ‘none’ (> *siaoo* ‘none yet’) and *tiap* ‘not’ (> *tiaoo* ‘not yet’); *koot* forms compounds with the adjective *dook* ‘good’ (> *dookoot* ‘enough’) and also appears in temporal adverbs such as *mukoot* ‘long time’ and *nookoot* ‘now’. I am not aware of any compounds involving Karnai perfectives.

144. *A-pot* *pombe ye rumu ki-au ngan ni-k-tooroo*
 1SG-come.seaward arrive at house of-1SG MED.TIME husband-1SG.POS-
i-madit tiaoo, i-ken-en mata go.
 3SG-get.up not.yet 3SG-lie.PROG die yet
 ‘I came (to the village) and arrived at my house then my husband hadn’t got up yet, he was still sleeping.’ (AL, Ei ikana 004)

The functions of AL *koot* and *oo* are not easily distinguished in declarative sentences, as exemplified by 145 and 146.

145. *Ei i-kan-a rumu ki-idi oo.*
 fire 3SG-eat-SG house of-1PL.IN PERF
 ‘The fire has burnt our house (completely).’ (AL, Ei ikana 022)

146. *Bong katai nga la a-kamat-a koot nga.*
 but today PROX.TIME FOC 1SG-see-3SG PERF PROX.TIME
 ‘But today I have seen him.’ (AL, Poo 128)

They are distinguished in questions, where only *koot* can be used (147); *oo* is frequently used when replying to questions containing *koot* (148).

147. *I-mot koot?*
 3SG-finish PERF
 ‘Is it finished?’ (AL)

148. *I-mot oo. / I-mot tiaoo.*
 3SG-finish PERF 3SG-finish not.yet
 ‘It’s finished./ It isn’t finished yet.’ (AL)

D’Jernes (p.c.) suggests that while *oo* only occurs in independent and realis clauses, *koot* often expresses some degree of irrealis. This is not exceptionless and further investigation is needed, but the following generalisations can be made, and

lend some support to the suggestion: i) only *koot* appears in questions; ii) *koot* often appears in subordinate clauses with the complementiser *yo* (149), whereas *oo* never occurs in subordinate clauses; iii) *koot* never appears in verbless clauses (in the current database), whereas *oo* frequently does (150).

149. *Inbe be mata-k pang ye ni yo rumu ki-am i-kodo ye*
 and IRR eye-1SG.POS to with place REL house of-1PL.EX 3SG-stand with
i, ngan a-kamata tina yo ei i-kan-i koot nga.
 PROX.SG MED.TIME 1SG-see thus REL fire 3SG-eat-3SG PERF PROX.TIME
 ‘And my eye went towards the place where our house stood, then I saw thus that the fire had burnt it completely.’ (AL, Ei.ikana 019)

150. *Bus dook oo.*
 taro good PERF
 ‘The taro is ready.’ (AL, Taukasek 042)

Karnai *ko* and *kuten(en)* seem to split the functions of AL *koot*. *Ko* is the perfective interrogative marker (151); there are no examples in the current database of *ko* in a declarative sentence, and attempts to elicit it were unsuccessful.

151. *Philip i-la ko?*
 Philip 3SG-go PERF.QU
 ‘Has Philip gone?’ (Karnai, elicitation)

Kuten(en) can be used in both questions and declaratives. Like AL *koot*, it requires the presence of a verb, examples such as 153 being rejected as ungrammatical. There is no significant meaning difference with the reduplicated form, except perhaps in intensity.

152. *Ku-yin kutenen? / A-yin kuten.*
 2SG-drink PERF 1SG-drink PERF
 ‘Have you finished drinking? / I have finished drinking.’ (Karnai, elicitation)

153. **Urat ki-t kutenen.*
 work of-1PL.IN PERF
 *‘Our work is finished.’ (Karnai, elicitation)

Kuten(en) can also occur in clauses which are understood as having (unmarked) future or irrealis modality:

154. *A-wo gi bong ki ma i-la kuten gi suga-n san*
 1SG-sing about sing-NMZ of.3SG come 3SG-go PERF to part-3SG.POS another
ibe napai ni a-wet a-ka, a-wet a-wet gi nin ki biang.
 and now NON.MED 1SG-want 1SG-give 1SG-want 1SG-speak about story of fruit.bat
 ‘I (will) sing his song (later) at another time but now I want to give, I want to talk about the story of the fruit bat.’ (Karnai, JSY2a.002)

155. *I-wet-et sorok kurap ma i-si lak kutenen.*
 3SG-speak-PROG without.purpose person come 3SG-down PERF PERF
 ‘She was speaking without purpose (so that) the person would come down.’ (Karnai, JSY2a.046)

Both AL *koot* and Karnai *kuten(en)* can, however, occur in realis declarative sentences, although these are comparatively rare:

156. *Jon i-ge-di tai-n ti-ka narogo kuten.*
 John 3SG-with-3PL younger.sibling-3SG.POS 3PL-do dance PERF
 ‘John and his brothers have already danced.’ (Karnai, Elicitation025)

157. *I-wutu inbe kai bou le giwi ki i-soraka koot ni.*
 3SG-overgrow and tree tree.SP and tree.SP of.3SG 3SG-cover PERF place
 ‘It was overgrown and its bou and giwi trees covered the place completely.’ (AL, Taukasek 055)

In AL, the verb *mot* ‘finish’ is used to indicate a completed action. It usually appears in the phrase *a i-mot* or *le i-mot* ‘and it was finished’, where the 3SG subject prefix is in semantic concord with the action or predicate (rather than the subject or agent) of the previous clause. *I-mot* can also refer to a plural noun or pronoun, meaning ‘all of them’ (159) and can be the main verb in a sentence (160).

158. *Ti-kan a i-mot, inbe ti-yepe, ti-yepe...*
 3PL-eat and 3SG-finish and 3PL-stay 3PL-stay
 ‘They ate and it was finished, and they stayed, stayed...’ (AL, Pon 067)

159. *Di tooltool ke Barei le i-mot ti-yau moro ki-di le*
 PL person of Barei and 3SG-finish 3PL-gather decoration of-3PL and
i-mot a ti-la pang balim.
 3SG-finish and 3PL-go.across to uninhabited.beach
 ‘All the people of Barei gathered all their decorations and went across to an uninhabited beach.’ (AL, Kaning 005)

160. *Le barau i i-mot nanga.*
 and story PROX.SG 3SG-finish here
 ‘And this story finishes here.’ (AL, Kai 074)

Mot also occurs in Karnai but never takes a verbal prefix; it can either immediately follow the VP like the other perfective adverbs (161), or can occur as a separate clause conjoined to the main clause with *le*, as in AL (162); however, unlike AL, *mot* in Karnai always follows and refers to another predicate; it cannot occur as the main verb. A possible exception is 163, in which it would be convenient to treat *mot* as a verb because *kutenen* occurs in no other verbless clauses, and only the presence of *mot* makes it permissible here (see also 153 above).

161. *A-ge tina-k am-la am-nim ran mot.*
 1SG-with mother-1SG.POS 1PL.EX-go 1PL.EX-bail water finish
 ‘I and my mother bailed the water.’ (Karnai, MM3.007)

162. *Ti-duwai kan-ing ki-di le mot.*
 3PL-cook eat-NMZ of-3PL and finish
 ‘They cooked their food and (it was) finished.’ (Karnai, KTMa.007)

163. *Urat ki-t mot (kutenen).*
 work of-1pl.IN finish PERF
 ‘Our work is finished.’ (Karnai, elicitation)

Mot can also co-occur with the Karnai perfectives *ko* and *lak*.

164. *Ku-yin mot ko?*
 2SG-drink finish PERF.QU
 ‘Have you finished drinking?’ (Karnai, elicitation)

165. *A-yin mot lak.*
 1SG-drink finish PERF
 ‘I’ve finished drinking.’ (Karnai, elicitation)

Karnai *lak* and the suffix *-k* have no AL cognate or exact functional equivalent. They occur frequently but not exclusively with directional verbs; indeed, in the current database *-k* only appears on the two basic directional verbs *ma* ‘come’ and *la* ‘go’; further investigation is needed to establish whether other directionals can take it or whether it can affix to other verbs.

166. *Keu i-du lak.*
 sun 3SG-down PERF
 ‘The sun has gone down.’ (Karnai, elicitation)

167. *I-ma i-la-k.*
 3SG-come 3SG-go-PERF
 ‘He’s been and gone.’ (Karnai, elicitation)

168. “*Awu, Awu, ku-ma Awu ku-ma kurap ton i-kan kan-ing
 grandma grandma 2SG-come grandma 2SG-come person REL 3SG-eat eat-NMZ
 ki-ong ton i-ma-k.*”
 of-2SG FOC 3SG-come-PERF
 ‘“Grandma, Grandma, come Grandma, come, the person that ate your food has come.”’
 (Karnai, JSY2a.049)

Lak can also act as a full verb, complete with appropriate subject marking, in its own right (but differs in distribution from the AL perfective verb *mot* ‘finish’, and can co-occur with the Karnai adverb *mot*).

169...*am-sai am-la Kanakeng ma rum ki-di ine di*
 1PL.EX-up 1PL.EX-go Kanakeng and.others house of-3PL MED PL
ti-ken mot ti-lak.
 3PL-sleep PERF 3PL-PERF
 ‘...we went up to the house of Kanakeng and (his family but) they were already asleep.’
 (Karnai, JS1.015)

4.2.4 Imperatives and prohibitives

Positive imperatives in AL are unmarked and are structurally similar to realis declaratives (which are also unmarked for modality). Karnai has an optional post-verbal imperative particle *pa*:

170.*Ka-la rum pa!*
 2PL-go house IMP
 ‘Go home!’ (Karnai)

Negative imperatives are marked with the clause-final prohibitive adverb *be* in AL (also used for negative habitual) and *poko* in Karnai:

171.*Ngan rima-na i-wete panga, “Kouo kaningi dook tiap in*
 MED.TIME wife-3SG.POS 3SG-say to.3SG 2SG-bring food good not MED.SG
pam be.”
 to.1PL.EX NEG.IMP
 ‘Then his wife said to him, “Don’t bring that nasty food to us.” (AL, Kaning 036)

172.*Tama-k i-bet, “Ka-tad poko, ine ig sumai kit.”*
 father-1SG.POS 3SG-say 2PL-fear NEG.IMP MED fish big of.1PL.IN
 ‘My father said, “Don’t be afraid, that’s our big fish.”’ (Karnai, LJ1 008)

In Karnai prohibitions are frequently also marked as habitual with the pre-verbal adverb *songa*. Given that habituality in AL can only be expressed with the prohibitive *be*, AL has no possibility of distinguishing habitual and non-habitual prohibitions.

173.*Songa ku-nep barem Bongar be ku-pasak poko.*
 HAB 2SG-stay clan.house Bongar and 2SG-be.angry NEG.IMP
 ‘Don’t stay in the Bongar clanhouse (when) you are angry.’ (Karnai, KTM019)

4.2.5 Prepositional phrases

AL has three prepositions encoding peripheral arguments: *ke* (source; also used for indirect possession), *pang* (goal, beneficiary) and *ye* (instrument, comitative). Karnai uses *ki*, *pi* and *gi* respectively to express these roles, but in addition has the prepositions *ge* (comitative – subject only), *pagi* (comitative – non-subject only) and *ton* (location).

174. *Motong la a-mulu ke Tapsa a a-si, ngan i-yepe ye*
 after FOC 1SG-return from Tapsa and 1SG-come.down MED.TIME 3SG-stay at
ni tani yo i-kum-a i.
 place DEF.SG REL 3SG-garden-3SG PROX.SG
 ‘Then I returned from Tapsa and came down, then he stayed at that place that he gardened.’
 (AL, Ei.ikana 015)

175. *Le nga a-wete pang ni-k-tooroo.*
 and.so PROX.TIME 1SG-speak to husband-1SG.POS-
 ‘And so now I spoke to my husband.’ (AL, Ei.ikana 020)

176. *Di ti-ko ti-ma pi malal.*
 3PL 3PL-run 3PL-come to village
 ‘They ran (and) came to the village.’ (Karnai, JS/MEa.040)

177. *Om sila-n ki kawal uto-n i-tok am be*
 mountain.breeze cold-3SG.POS of mountain head-3SG.POS 3SG-hold 1PL.EX and
ngernger am ton pilaisi.
 chill 1PL.EX REL much
 ‘A cold breeze from the top of the mountain (blew on) us and really chilled us.’ (Karnai,
 AL1.006)

178. *Ni nin ki-au sidik gi pariu amut.*
 MED story of-1SG little about drum white.person
 ‘That’s my little story about a guitar.’ (Karnai, CLJ1.005)

In both languages, the prepositions *ke/ki*, *pang/pi* and *ye/gi* have inflected proforms encoding person and number of the peripheral argument. The proforms for *pang/pi* and *ye/gi* are summarised in Table 10; for *ke/ki* see Table 6.

Table 10: Prepositional proforms

	SG	PL	SG	PL	SG	PL
	<i>pang</i> (AL) / <i>pi</i> (K)		<i>ye</i> (AL)		<i>gi</i> (K)	
1EX	<i>pau</i>	<i>pam</i>	<i>yau</i>	<i>yam</i>	<i>giâu</i>	<i>giam</i>
1IN		<i>paidi</i> (AL) / <i>pit</i> (K)		<i>yidi</i>		<i>git</i>
2	<i>pong</i>	<i>pang</i>	<i>yong</i>	<i>yang</i>	<i>giong</i>	<i>giang</i>
3	<i>panga</i> (AL) / <i>pi</i> (K)	<i>pangdi</i> (AL) / <i>pidi</i> (K)	<i>ye</i>	<i>yedi</i>	<i>gi</i>	<i>gidi</i>

179. *Bong lo-k be a-wete pang-a ye mulu tiap.*
 but insides-1SG.POS IRR 1SG-speak to-3SG about.3SG again not
 ‘But I didn’t want to speak to him again about it.’ (AL, Apisak 015)

180. *Ti-goror be ong ku-yoi kan-ing pi-di.*
 3PL-bind and 2SG 2SG-make eat-NMZ for-3PL
 ‘(Let) them bind (the canoe together) and you make food for them.’ (Karnai, PK1a.009)

181. *Am-la am-du gi-di be ti-tor am...*
 1PL.EX-go 1PL.EX-down to-3PL and 3PL-ask 1PL.EX
 ‘We went down to them and they asked us...’ (Karnai, JS1.017)

In AL, *ye* is also used with subject (and object) affixes to conjoin (usually animate/human) NPs. Both full NPs (182) and pronominal referents (183) can be conjoined in this way. In Karnai the conjunction *ge* ‘with’ performs this function, also

with subject (and object) affixes (184, 185). Both *ge* and *gi* in Karnai are probably cognate with AL *ye*. *Gi* is also used as a complementiser of purposive clauses, as in 185.

182. *Ngan markiaua tamoto atu i-ye natu-nu ti-pa karam*
 MED.TIME spirit.being male one 3SG-with child-3SG.POS 3PL-walk bush
lo-no a ti-sere asara pang-di lapau.
 inside-3SG.POS and 3PL-seek meat to-3PL too
 ‘Then a male spirit being and his child walked into the bush and searched for meat for themselves too.’ (AL, Gingin 010)

183. *Le taun i-ye-di ti-pa pang ye malala tani.*
 and.so now 3SG-with-3PL 3PL-walk to with village DEF.SG
 ‘And so now he and they travelled towards the village.’ (AL, Poo 142)

184. *Au a-ge tina-k am-la am-seng kai.*
 1SG 1SG-with mother-1SG 1PL.EX-go 1PL.EX-break wood
 ‘I and my mother went to break wood.’ (Karnai, SN1.002)

185. *I-tar lal pi-di gi ti-ma nga-ne ti-ge ti-la be*
 3SG-put time to-3PL COMP 3PL-come so.that-MED 3PL-with.3SG 3PL-go and
ti-ro kurit sumai tini.
 3PL-hit octopus big NON.MED
 ‘He set a time for them to come so that they (would) go with him and hit that big octopus.’ (Karnai, ME1a.024)

The Karnai preposition *pagi* ‘together with’ (Tok Pisin *wantaim*) is uninflected and again its function overlaps with AL *ye*, also being used to conjoin (non-subject) NPs, as in 186. The first NP may be unexpressed (with anaphoric reference to another argument of the main verb), as in 187. As there are no proforms for *pagi*, the second NP is obligatory.

186. *A-kan ig pagi put.*
 1SG-eat fish with banana
 ‘I ate fish with bananas.’ (Karnai, Elicitation093)

187. *A-kon ig tol be a-kan pagi put. (*put pagi)*
 1SG-catch fish three and 1SG-eat with banana (*banana with)
 ‘I caught three fish and I ate (them) with bananas.’ (Karnai, elicitation)

Pagi tends to refer to inanimate or non-human NPs, whereas animate and human NPs are conjoined with *ge*; in 188, either is possible. The inanimate/non-human condition, however, is a tendency for *pagi* rather than an absolute rule, as illustrated by 189:

188. *Au a-got gaun i-ge/pagi di ga ti-mir ti-la.*
 1SG 1SG-see dog 3SG-with/with 3PL pig 3PL-run 3PL-go
 ‘I saw the dog running away with the pigs.’ (Karnai, elicitation)

189. *Maro i-nep pagi ang.*
 God 3SG-be with 2PL
 ‘God be with you.’ (Karnai)

Pagi is also used to coordinate clauses, and where it has clausal scope it follows the clauses it refers to. This is also allowed with Tok Pisin *wantaim* (191), but is impossible in AL.

190. *Mangan ton a-ge tama-k ga tina-k am-mir gi*
 time FOC 1SG-with father-1SG.POS and mother-1SG.POS 1PL.EX-run with
kaenpang am-la rum, au a-tad be a-tingiang pagi.
 truck 1PL.EX-go house 1SG 1SG-be.afraid and 1SG-cry.PROG with
 ‘That time I and my mother and father went on a truck (to) go to the house, I was afraid and I cried (at the same time).’ (Karnai, TJ1.003)

191. *Mi pret na mi krai wantaim.*
 1SG fear and 1SG cry with
 ‘I was afraid and I cried (at the same time).’ (Tok Pisin)

The proto-Oceanic prepositional verb **pani* ‘to/for’ is probably the origin of AL *pang* and Karnai *pi* (Ross 1988: 103). *Pagi* is more likely to have originated from *i-pa gi* ‘it walks with’, which occurs in AL as *i-pa ye* in similar NP conjunction environments (192) (but not in clause coordination).

192. *A-kan i i-pa ye pur.*
 1SG-eat fish 3SG-walk with banana
 ‘I ate fish with bananas.’ (AL, elicitation)

Ton, although its principal function seems to be that of a relative clause complementiser (described in Section 4.1.7), also acts as a preposition indicating physical location:

193. *Chris rum ki i-ken ton ran Kubuk.*
 Chris house of.3SG 3SG-lie LOC water Kubuk
 ‘Chris’s house is by the Kubuk stream.’ (Karnai, PK/CM 016)

194. *Am-ko am-la ton ran Motor kae-n dengbe ne am-mer.*
 1PL.EX-run 1PL.EX-go LOC water Motor leg-3SG.POS straight MED 1PL.EX-sink
 ‘We went as far as the mouth of the Motor river then we sank.’ (Karnai, HA2 008)

In AL, the sequence *pang ye* expresses movement towards a physical location or goal, as *ton* sometimes does (194); however, *ton* can also encode a static location (193).

195. *Motong la ni-n-tooroo i-pa pang ye urata ki-di mulu inbe*
 after FOC husband-3SG.POS- 3SG-walk to with work of-3PL again and
ya i-mulu pang ye ne-ne mulu a i-du.
 3SG 3SG-return to with place-3SG.POS again and 3SG-go.down
 ‘Then her husband went to their work again and she returned to her place again and went
 down.’ (AL, Poo 022)

4.2.6 Directional verbs

Directional verbs behave somewhat differently from other verbs, and there is considerable difference in their usage both semantically and syntactically between AL and Karnai.

AL has a complex paradigm of directional verbs, encoding basic movement on at least four dimensions: up-down, across, coastward-bushward on land, and seaward-landward on the sea. ‘Come’ and ‘go’, or speaker-centred versus addressee-centred deixis, are only distinguished as separate lexemes for movement up, down and across (Figure 1); for the other dimensions, the deictic centre is usually understood as the home village of the speaker, addressee or other main participant, all villages being located on the coast (between the domains of the land-based and sea-based directionals; Figure 2).

Table 11: Arop-Lokep directional verbs

		up	down	across	coastward- bushward	seaward-landward
Arop- Lokep	come	<i>se</i>	<i>si</i>	<i>man</i>	<i>pot</i> (movement towards coast)	<i>long</i> (movement towards island over sea)
	go	<i>lo</i>	<i>du</i>	<i>la</i>	<i>di</i> (movement towards bush)	<i>du</i> (movement away from island over sea)
	split	<i>silā</i>		<i>mala</i>	<i>pola</i>	-

Figure 1: ‘Come’ and ‘go’ dimensions in AL (deictic centre dependent on location of speaker (S) or addressee (A))

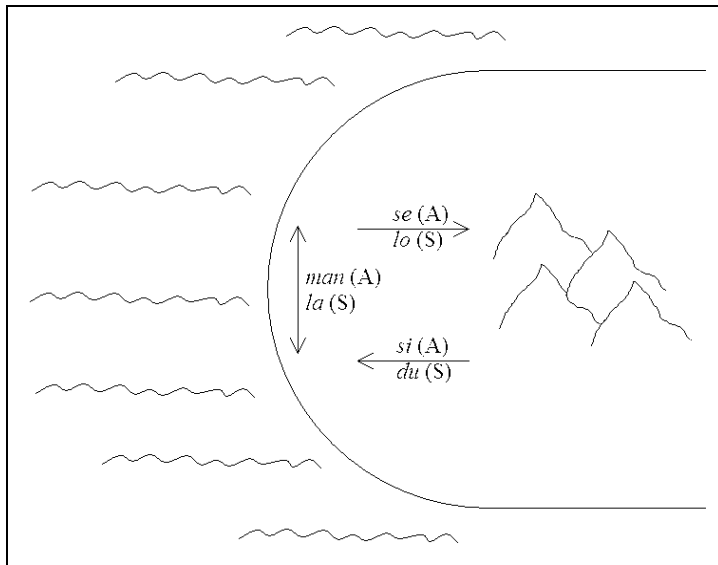
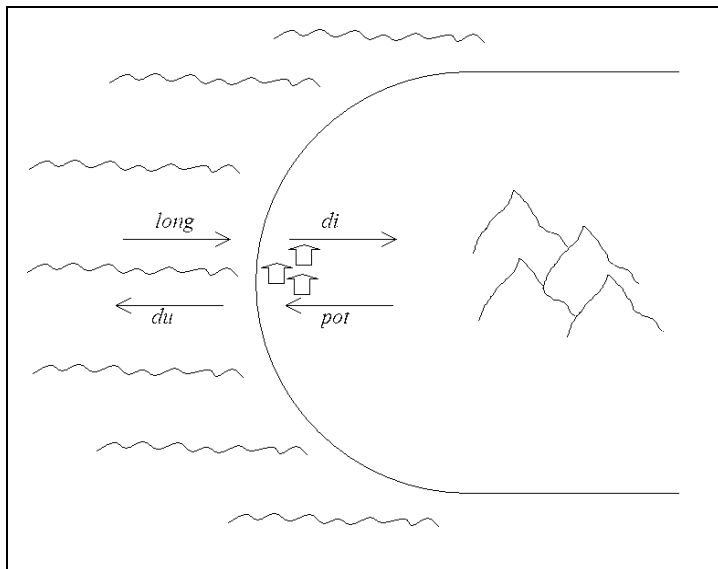


Figure 2: Geographical or absolute dimensions in AL (with home village as understood deictic centre)



As shown in Table 11, AL also has complex or ‘split’ directionals, consisting of compounds of the various simple forms on the up-down, across and coastward-bushward dimensions, but not on the seaward-islandward dimension. Split directionals involve the separate behaviour of two or more participants or groups of participants moving in different directions or at different times (see Section 4.2.6.2).

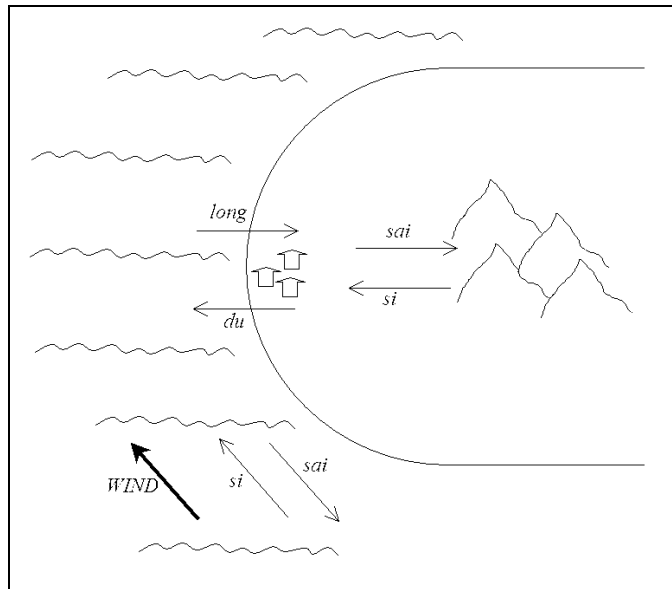
The Karnai directional system contains obvious cognates of the AL complex, but varies significantly in meaning and usage. The verbs *ma* and *la* mean ‘come’ and ‘go’

respectively, and are used regardless of direction, deictic center being either the speaker, addressee or other participant, or the home village. Geographical direction is encoded on only two dimensions: up-down and in(bushward)-out(seaward); the AL coastward-bushward and seaward-islandward distinction is collapsed into one. The up-down dimension incorporates movement across, the choice of *sai* ‘up’ and *si* ‘down’ being determined by the direction of the prevailing wind.

Table 12: Karnai directional verbs

	movement in any direction	up	down	in-out or seaward-landward
come	<i>ma</i>	<i>sai</i>	<i>si</i>	<i>long</i>
go	<i>la</i>			<i>du</i>

Figure 3: Karnai directional verbs

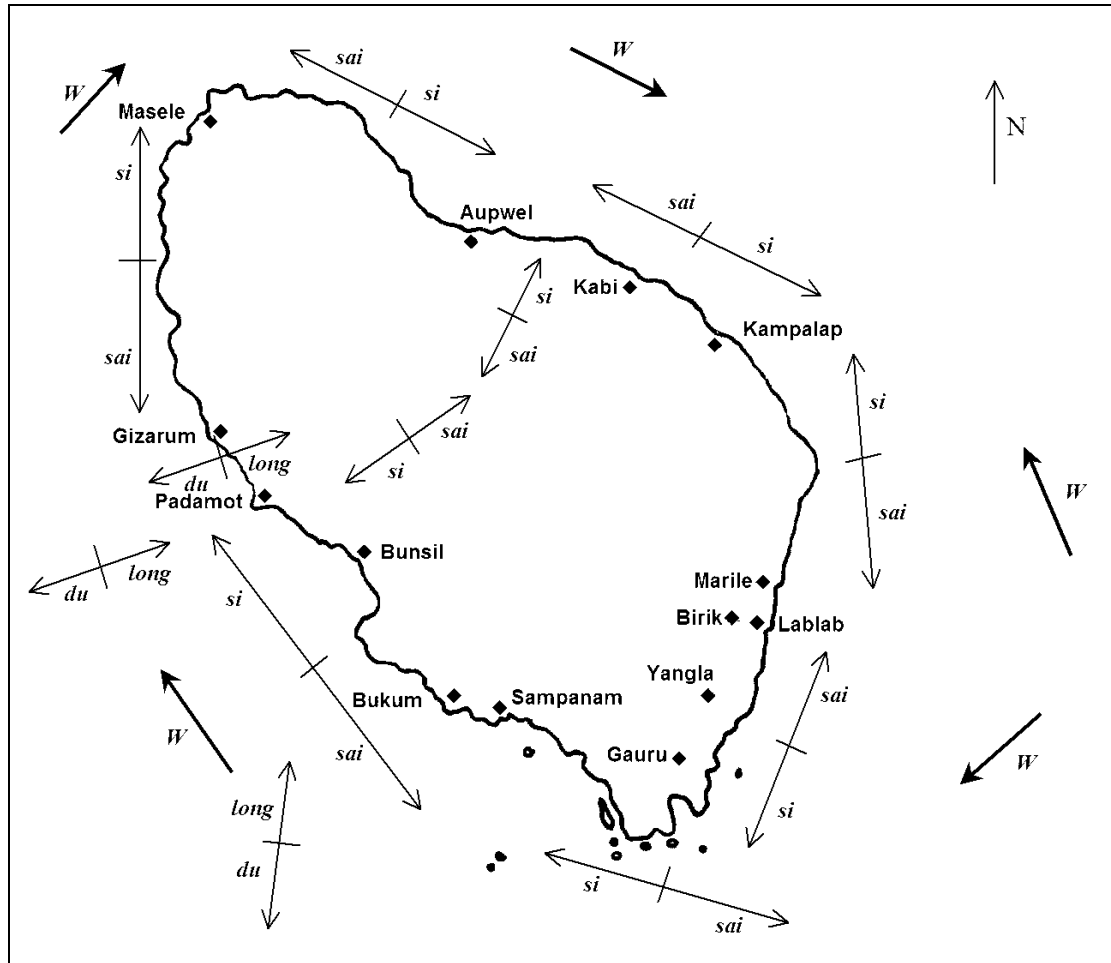


4.2.6.1 Directional verbs and travel

Directions of movement around their respective islands are described differently by Karnai and AL speakers. One might expect the main influencing factors to include the very different shapes of the islands (both Long and Tolokiwa Islands being round, and Umboi much more elongated with a mountain range rather than a single mountain in the middle), and the fact that Arop and Lokep speakers occupy the whole of their islands, whereas Karnai speakers own only a single village. In reality, however, land ownership seems to have little impact on either system; what is relevant for Karnai is island geography and the wind, while for Arop, the origins of the people themselves is far more important.

The direction of travel for a Karnai speaker going around Umboi Island is determined to be up (*si*) or down (*sai*) according to the direction of the prevailing SE wind (down being with the wind, and up against; as far as I was able to establish, these directions are not affected by seasonal changes in wind direction). *Si* and *sai* are also used for going up into and down from the mountainous centre of the island.

Map 2: Directions of travel around and across Umboi Island (Karnai). Wind direction is affected by the high mountains in the north of the island.



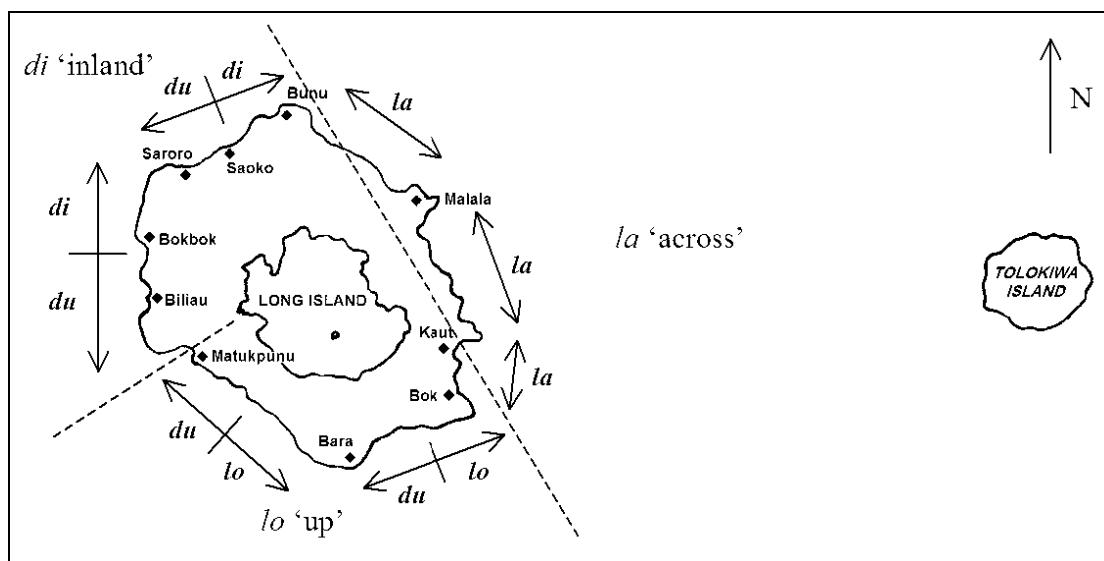
The *du-long* or in-out dimension is expressed more often than the *sai-si* dimension and seems cognitively stronger in the minds of the speakers; it is used even to refer to movement between neighbouring houses where one house is nearer to the sea (obligatorily expressed in AL because of the constraints of the system). *Du* and *long* (but not *sai* and *si*) also translate consistently into Karnai speakers' Tok Pisin as *go insait* and *go outsait*, a phenomenon I never observed in AL speakers:

196. *Mi go autsait long haus bilong Filip.*
 1SG go out to house of Philip
 ‘I am going (seaward/outside) to Philip’s house (used whether or not I am already outdoors).’
 (Tok Pisin)

197. *Mi go insait long haus bilong Mari.*
 1SG go in to house of Mary
 ‘I am going (inland/into) Mary’s house (used whether or not I intend to go into the house).’
 (Tok Pisin)

Describing movement around the island in Arop is more complex than in Karnai, partly because there are more choices available and partly because the system changes depending on the speaker’s home village (whether because of dialectal variation or because of the orientation of the island is impossible to establish on the basis of the current data). The key to the Arop system is that movement is described not in relation to Long Island itself, but to neighbouring Tolokiwa, from which Long Island was primarily settled. Map 3 shows that where Tolokiwa is visible, movement on a horizontal axis to Tolokiwa is described as ‘across’. All movement away from Tolokiwa is ‘down’ (*du*, also used for departure from Long Island itself in any direction), while movement on Long Island towards Tolokiwa is ‘inland’ (*di*) on the north coast and *lo* (‘up’) on the south. The variation between villages mainly affects which sectors of the west coast are described with *di* and which with *lo*; *la* ‘across’ may also occur.

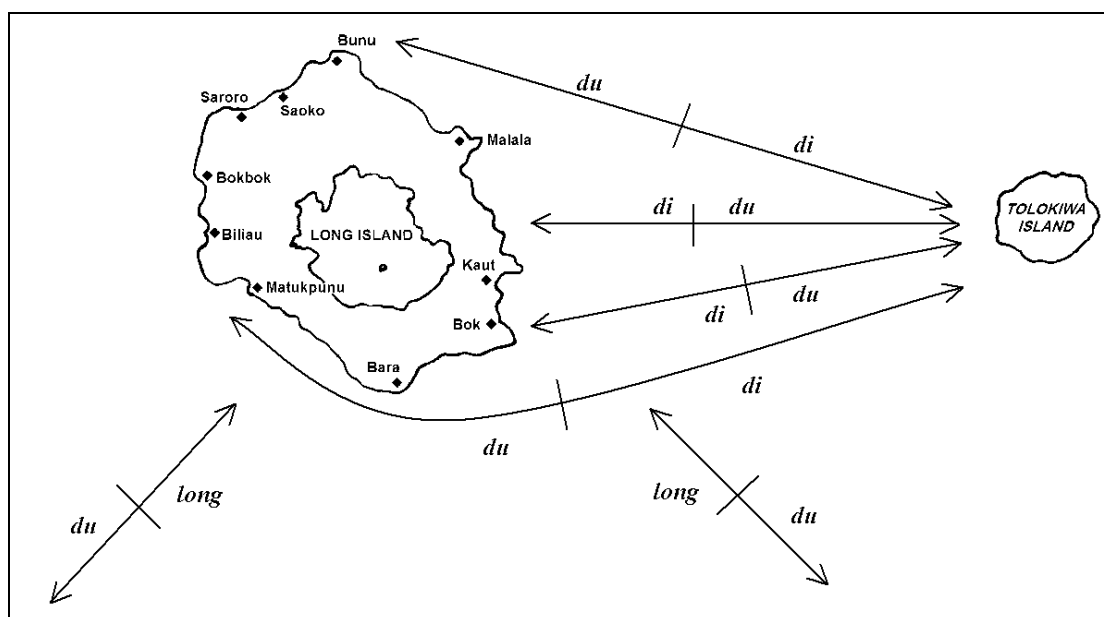
Map 3: Directions of travel on Long Island (Arop)



Map 4 shows movement between Tolokiwa and Long Island for Arop speakers. Again the visibility of Tolokiwa is important; for travel to or from Long Island

villages where Tolokiwa is visible, *du* is used for the outward journey (away from Long Island; thus *du* is used in its usual sense, meaning departure from the home village across the sea), and *di* ‘go inland’ for the return (rather than the more typical *long*). For villages out of sight of Tolokiwa, *di* is used for the outward journey and *du* (as for all travel away from Tolokiwa on the far side of Long Island) for the return.

Map 4: Directions of travel between Long Island, Tolokiwa and the rest of the world (Arop).



I suggest that, while Arop may originally have had a system similar to Karnai, oriented to fixed or variable natural phenomena, this system developed as a consequence of the gradual settlement of Long Island from Tolokiwa. Settlement began on the eastern side nearest to Tolokiwa, which was at first perceived as ‘home’. Settlements on the west coast were therefore a movement away not only from Tolokiwa itself but also from the original east coast settlements, hence the use of terms such as *di* ‘go inland’, for returns to those villages from a frontier that, like the sea, was comparatively unknown.⁸

4.2.6.2 Directional verbs in grammar and discourse

Directional verbs in AL are frequently used in serialisation with other verbs (198). Non-finite directional verbs (stripped of the subject prefix) often precede other finite

⁸ The use of directionals for Lokep dialect speakers on Tolokiwa itself has not been investigated. It is known to be significantly different from the Arop system and might be expected to be more like Karnai, given that Tolokiwa has been inhabited by the Lokeps for a much longer period and its inhabitants are therefore less likely to orient to an earlier place of origin.

verbs, frequently (although not always) as copies of a finite directional verb in the previous clause (199). Non-finite directional verbs can be part of a conjunctive sequence (*lo* in 200 having a sense of ‘going up’ in time; see also Section 4.2.3), and may function as directional prepositions, as in 201.

198. *I-du* *i-wudud* *a* *i-sis* *serek* *ki* *inbe* *nga* *i-nama*
 3SG-go.down 3SG-sit.PROG and 3SG-shred skirt of.3SG and PROX.TIME 3SG-wait
poo *be* *i-mulu* *a* ***i-long*** ***i-kaua*** *ka-n* *so*
 crocodile and 3SG-return and 3SG-come.inland 3SG-give possession-3SG.POS thing
sa *mulu*.
 NON.REF again
 ‘She went down (and) sat and shredded (grass to make) her skirt and waited for the crocodile to return and come inland (and) bring her something again.’ (AL, Poo 058)

199. *I-du* *le* *du* *i-wudud* *a* *i-sis* *serek* *ki* *inbe*
 3SG-go.down and go.down 3SG-sit.PROG and 3SG-strip.leaves skirt of.3SG and
poo *somai* *tani* *i-mulu* *a* ***i-long*** *le* ***long***
 crocodile big DEF.SG 3SG-return and 3SG-come.inland and come.inland
i-tar *yege* *ne-ne* *tani* ***inbe lo*** ***i-solo*** *mulu*.
 3SG-put leave.behind place-3SG.POS DEF.SG and go.up 3SG-come.ashore again
 ‘She went down and going down she sat and stripped (leaves for) her skirt and the big crocodile came back and came inland and so coming inland it passed her place and going up it came ashore again.’ (AL, Poo 031)

200. *Ngan* *luana* *i* *ku-wete* *pang* *ni-m-tooroo* *ka-kumu*
 NON.PROX.TIME seedling PROX.SG 2SG-speak to husband-2SG.POS- 2PL-weed
kumu, lo ***ngan*** *be* *ni-m-tooroo* *i-tara* *kai* *maimai* *i-du*
 garden go.up NON.PROX.TIME IRR husband-2SG.POS- 3SG-cut tree big 3SG-go.down
tana *le* *i-mot...*
 ground and 3SG-finish
 ‘Then this seedling, you say to your husband (that) you (must) clear the garden, and then your husband (should) cut all the big trees down to the ground...’ (AL, Kaning 028)

201. *Ti-long,* *motong* *i-kau-u* *lo* *rumu* *lo-no* *a*
 3PL-come.inland after 3SG-get-3SG go.up house inside-3SG.POS and
si-la *yaru* *ti-yepe*.
 come.down-go.across 3DL 3PL-stay
 ‘They came inland, then she took him up into the house and the two of them stayed (there).’
 (AL, Pon 030)

Split directionals may involve the movement of two participants separately between locations (often one staying and one leaving). More commonly, however, they are a discourse marker involving either the separation of two participants who have been acting together (202), or the joint action of two participants who have been acting separately (203). They are usually non-finite, only rarely taking subject prefixes. *Sila* is the most common.

202. *Motong la natu-nu le roo-noo le tiu-nu*
 after FOC child-3SG.POS and child.in.law-3SG.POS and grand.relation-3SG.POS
ti-pa, inbe yataleu si-la i-yepe malala.
 3PL-walk and 3SG.alone come.down-go.across 3SG-stay village
 ‘Then his son and his daughter-in-law and his grandchild walked, and he alone stayed in the village.’ (AL, Kai 032)

203. *I-kau-u a lo yaru ti-wud kata po-no be lo-n*
 3SG-get-3SG and go.up 3DL 3PL-sit canoe.platform on-3SG.POS and insides-3SG.POS
pona-na ye be i-kana koo-noo be i-sur-u a
 happy-3SG.POS with.3SG and 3SG-eat mouth-3SG.POS and 3SG-cradle-3SG and
si-la yaru ti-wud.
 come.down-go.across 3DL 3PL-sit
 ‘He got her and going up the two of them sat on the canoe platform and he was happy with her and he kissed her mouth and he cradled her and the two of them sat.’ (AL, Rimadi 101)

In Karnai, the verbs *ma* ‘come’ and *la* ‘go’ are by far the most common, and can occur with no indication of the direction of movement. Direction is optionally encoded by the juxtaposition of one of the verbs *sai* ‘up’, *si* ‘down’, *du* ‘out/seaward’ or *long* ‘in/bushward’, either as a compound (204) or more usually as a sequence of verbs (205); these verbs tend not to appear alone.

204. *Mata-k i-sai-la be a-got ran i-pas ton et ne be*
 eye-1SG.POS 3SG-up-go and 1SG-see water 3SG-jump LOC top MED and
i-si-ma, be a-tad.
 3SG-down-come and 1SG-be.afraid
 ‘My eye went up and I saw water jumping down from the top there and coming down, and I was afraid.’ (Karnai, CJ2 004)

205. *Am-to ran Baim am-sai am-la be a-tad gi*
 1PL.EX-follow water Baim 1PL.EX-up 1PL.3x-go and 1SG-be.afraid COMP
a-pas sai la pat maimai po-n.
 1SG-jump down go stone big on-3SG.POS
 ‘We followed the river Baim (and) went up and I was afraid to jump up on the big stones.’ (Karnai, CJ2 002)

Any simple or compound directional verb, without a subject prefix, can be used as a preposition in Karnai (206), similarly to AL (201). The only other non-finite directional verb found in Karnai is *la*, which can be used following a finite verb to indicate progressive or continuous action (207), similar to Tok Pisin *i go*.

206. *...ti-sili la pat gumo-n be ti-yit sai-la og po-n.*
 3PL-put.through go stone hole-3SG.POS and 3PL-lift up-go canoe on-3SG.POS
 ‘They put it through the stone’s hole and they lifted (it) up onto the canoe.’ (Karnai, KTM012)

207. *Amru tina-k am-konon la be kui sumai i-mol...*
 1DL.EX mother-1SG.POS 1PL.EX-hook.fish.PROG go and rain big 3SG-fall
 ‘My mother and I fished (for a long time) and a big rain fell...’ (Karnai, MM3 005)

5. Conclusion

As established in Section 2, Arop-Lokep and Karnai exhibit a high degree of lexical similarity, possibly as much as 83%, and clearly originate from a common ancestor. However, considerable variation is found in all areas of language, including phonology, many aspects of grammar, and semantics. Three major factors have contributed to this situation.

The long period of separation between the language groups after the settlement of Long and Tolokiwa Islands (the most recent settlement of Long Island probably took place about 150 years ago, but the original move to Tolokiwa may have happened some centuries before) probably accounts for much of the phonological variation.

Karnai contact with other languages, particularly Mangap-Mbula and its nearest neighbour, the Papuan (Finisterre-Huon) language Kobai, accounts for the vast majority of non-cognate lexical items (Long Island being more remote and consequently more isolated from contact-induced change). Certain grammatical differences may also be accounted for as a consequence of Karnai contact; it seems probable that at least part of the Karnai demonstrative system is borrowed from or influenced by Kobai, and the rest of the system appears functionally and phonologically more similar to Mbula and Mutu than to Arop-Lokep. Differences in NP structure, in particular in alienable possession NPs, may also be a result of influence either from Kobai or from Mbula; however, as Kobai itself seems to have borrowed this construction from Mbula, it is hard to tell whether this was always a feature of Austronesian languages on Umboi Island which Arop-Lokep subsequently lost, whether it was always a feature of Karnai or whether Karnai borrowed it from either of its neighbours at a later stage.

A third factor is responsible for semantic and pragmatic-deictic variation in the directional verb systems of the two languages. The evidence suggests that a move (or several moves at different stages) to a new geographical location had a significant impact, perhaps not so much on the directional verb paradigm itself, or the behaviour of directional verbs in discourse (although there is considerable variation between the languages on these points) but on the use of directional verbs to orient the people and their land in space. In this area it seems likely that change occurred in Arop rather than Karnai. Karnai speakers remained in their traditional location and continued to

orient themselves in relation to a natural phenomenon which was fundamentally important to their lives, namely the wind, while for Arop speakers, where they themselves originated from became a far more significant compass by which to navigate and explore their new territory.

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Appendix A: Lexical variation

On the basis of the Swadesh word list, Arop-Lokep and Karnai are calculated to be 83% cognate. The details are shown in Table 14. Table 13 lists the non-cognate forms and the corresponding lexical items (where available) in the other neighbouring languages, (Mangap-)Mbula, Mutu/Saveeng, Kovai and Malasanga (Mbula and Mutu data, Bugenhagen p.c.; Kobai data, Brown p.c.; Malasanga data, Hooley 1971).

Table 13: Non-cognate forms and corresponding items in neighbouring languages

Swadesh wordlist	Arop-Lokep	Karnai	Mbula	Mutu/Saveeng (T = Tuam dialect, O = Oov dialect)	Kobai	Malasanga
ashes	<i>kawa</i>	<i>gawur</i>	<i>kou</i> (lime), <i>gubu-</i> 'dust, ashes, residue' <i>kokou</i> 'white ashes'	<i>ab</i> (T)/ <i>av</i> (O) 'lime', <i>avav</i> (T) / <i>avab</i> (O) 'white ashes'	<i>gabur</i> 'charcoal'	<i>garapana</i>
bad	<i>dook tiap</i>	<i>(sin)sian</i>	<i>sanangana</i>	<i>saghati</i>		<i>sinsiana</i> 'small'
black	<i>muka-na</i>	<i>kaskaso-n</i>	<i>koskoozo</i> 'charcoal'	<i>asosooŋa</i> (O)		<i>mukwana</i>
count	<i>i-kinkata</i>	<i>i-pat</i>	-- <i>paata</i> 'call, read, name'	-- <i>waato</i> (T) / -- <i>waata</i> (O) 'call, read, name'		
feather	<i>bulbuli-ni;</i> <i>bali-ni</i> 'wing'	<i>bali-n</i>				<i>banina</i> 'wing'
float	<i>i-dau, i-we</i>	<i>i-pot</i>	-- <i>potpot</i> 'float'	-- <i>pot</i> 'float'	<i>poti</i> 'float-3sg.past'	
flower	<i>ol</i>	<i>ruku-n</i>	-- <i>ruŋ</i> 'to bloom'	<i>ruŋgu-</i> 'flower (noun)' -- <i>ruŋ</i> 'to flower'		
green	<i>yoongoo-noo</i>	<i>kai rau-n</i> <i>gamtan</i>				
he (3sg)	<i>ya</i>	<i>i</i>	<i>n-i</i> (nom) <i>i</i> (accusative)	<i>i</i> (T), <i>ye</i> (O)	<i>i</i>	
laugh	<i>i-ngele</i>	<i>i-mal</i>	<i>isiŋge</i>	<i>iŋin</i>		<i>imal</i>
not	<i>tiap</i>	<i>tasi</i>				
old	<i>guru-nu</i>	<i>muga-n</i>	<i>muŋguŋa-na</i>	<i>muŋgaana</i> (T) / <i>muŋgina</i> (O)		<i>muŋana</i>
one	<i>atu</i>	<i>ta</i>	<i>ta</i>	<i>ee(z)</i>		<i>emoŋ</i>
person	<i>tool</i>	<i>kurap</i>	<i>tomtom;</i> <i>gurapa</i> 'friend from another language'	<i>tamtamon</i> (T), <i>tamtoghon</i> (O)		<i>kurap</i> 'man'
push	<i>i-suku</i>	<i>i-sor</i>	-- <i>pusuk</i> 'push'; -- <i>suk</i> 'push down or away'; -- <i>zooro</i> 'resist, push against a resisting force'	-- <i>zoor</i> 'resist, push against'		
red	<i>kooroo-noo</i>	<i>pur</i>				
right (correct)	<i>moodoom</i>	<i>dengbe</i>	-- <i>ndeeŋe</i> 'be correct, straight'	-- <i>deŋia</i> 'be correct, straight' (O)		
rotten	<i>bia-na</i>	<i>ngarngar</i>				

Swadesh wordlist	Arop-Lokep	Karnai	Mbula	Mutu/Saveeng (T = Tuam dialect, O = Oov dialect)	Kobai	Malasanga
rub	<i>i-wodo</i>	<i>i-ngas</i>				
see	<i>i-kamata</i>	<i>i-got</i>		<i>-ghit(a)</i> ‘see’		<i>iwotao</i>
short	<i>modo-no</i>	<i>tugu-n</i>		<i>tuuku</i>		<i>momorona</i>
smoke	<i>kuta-na</i>	<i>kaikai</i>	<i>koi</i>			<i>kakina</i>
straight	<i>dada-na</i>	<i>dengbe</i>	<i>-ndeeŋe</i> ‘be correct, straight’	<i>deŋia</i> ‘be correct, straight’ (O)		
swim	<i>i-we</i>	<i>i-yel</i>	<i>-we</i>			
that	<i>in</i>	<i>tone</i>	<i>ta-na</i>	<i>ta-na, to-nenen</i>	<i>ina</i>	
this	<i>i</i>	<i>tini</i>	<i>ti ~ taiŋgi ~ tiŋgi</i>	<i>tane</i> (T), <i>tonene</i> (O)	<i>ine</i>	
tie	<i>i-witi</i>	<i>i-buk</i>				
starch pudding	<i>porong</i>	<i>wak</i>	<i>wak</i>	<i>porooŋ</i>	<i>wak</i>	
yes	<i>e</i>	<i>bio</i>				

Table 14: Swadesh wordlist for Arop-Lokep and Karnai

	Cognate	Meaning	Arop-Lokep	Karnai	Note
1	1	all	<i>(le) imot</i>	<i>(le) mot</i>	
2	1	and	<i>(in)be</i>	<i>(i)be</i>	
3	1	animal	<i>asara</i>	<i>usar</i>	
4	0	ashes	<i>kawa</i>	<i>gawur</i>	see 34
5	1	at	<i>pang</i>	<i>pi</i>	
6	1	back	<i>baba-na</i>	<i>baba-n</i>	
7	0	bad	<i>dook tiap</i>	<i>(sin)sian</i>	
8	1	bark	<i>kuli-ni</i>	<i>kuli-n</i>	
9	1	because	<i>belei</i>	<i>balai</i>	
10	1	belly	<i>kapo-no</i>	<i>kapo-n</i>	
11	1	big	<i>maimai</i>	<i>sumai</i>	
12	1	bird	<i>man</i>	<i>man</i>	
14	0	black	<i>muka-na</i>	<i>kaskaso-n</i>	
15	1	blood	<i>rara</i>	<i>rar</i>	
17	1	bone	<i>tura-na</i>	<i>tura-n</i>	
20	1	child	<i>natu-nu</i>	<i>natu-n</i>	
21	1	cloud	<i>engtene</i>	<i>engtagen</i>	
22	1	cold	<i>i-sili, sile-ne</i>	<i>i-sil, sila-n</i>	
23	1	come	<i>i-man</i>	<i>i-ma</i>	
24	0	count	<i>i-kinkata</i>	<i>i-pat</i>	
25	1	cut	<i>i-tara</i>	<i>i-tar</i>	
27	1	die	<i>i-mata</i>	<i>i-mat</i>	
28	1	dig	<i>i-taia</i>	<i>i-te</i>	
30	1	dog	<i>gaunu</i>	<i>gaun</i>	
31	1	drink	<i>i-yin(-i)</i>	<i>i-yin</i>	
32	1	dry	<i>i-wod(-o)</i>	<i>i-bodbod</i>	
34	1	dust	<i>gauru</i>	<i>gawur</i>	
35	1	ear	<i>talnga-na</i>	<i>talnga-n</i>	

	Cognate	Meaning	Arop-Lokep	Karnai	Note
36	1	earth	<i>tana</i>	<i>tan</i>	
37	1	eat	<i>i-kan(-a)</i>	<i>i-kan</i>	
38	1	egg	<i>katulnga-na</i>	<i>katulnga-n</i>	
39	1	eye	<i>mata-na</i>	<i>mata-n</i>	
40	1	fall	<i>i-mol</i>	<i>i-mol</i>	
42	1	grease	<i>goronga-na</i>	<i>gurunga-n</i>	
43	1	father	<i>tama-na</i>	<i>tama-n</i>	
44	1	fear	<i>i-tattadai(-a)</i>	<i>i-tad</i>	
45	0	feather	<i>bulbuli-ni</i>	<i>bali-n</i>	see 192
47	1	fight	<i>i-patoko</i>	<i>i-potok</i>	
48	1	fire	<i>ei</i>	<i>ei</i>	
49	1	fish	<i>i</i>	<i>ig</i>	
50	1	five	<i>limi</i>	<i>lim</i>	
51	0	float	<i>i-dau, i-we</i>	<i>i-pot</i>	
53	0	flower	<i>ol</i>	<i>ruku-n</i>	
54	1	fly	<i>langa</i>	<i>lang</i>	
57	1	four	<i>pai</i>	<i>pang</i>	
59	1	fruit	<i>kano-no</i>	<i>kano-n</i>	
60	1	give	<i>i-kau(-a)</i>	<i>i-ka</i>	
61	1	good	<i>dook</i>	<i>dawok</i>	
62	1	grass	<i>dingding</i>	<i>dingding</i>	
63	0	green	<i>yoongoo-noo</i>	<i>kai rau-n gamtan</i>	see 200
65	1	hair	<i>rau-nu</i>	<i>rau-n</i>	
66	1	hand	<i>bae-ne</i>	<i>bage-n</i>	
67	0	he (3sg)	<i>ya</i>	<i>i</i>	
68	1	head	<i>kuto-no</i>	<i>uto-n</i>	
69	1	hear	<i>i-longo</i>	<i>i-long</i>	
71	1	heavy	<i>i-moo</i>	<i>i-mo</i>	

	Cognate	Meaning	Arop-Lokep	Karnai	Note
73	1	hit	<i>i-rau(-a)</i>	<i>i-ro</i>	
77	1	husband	<i>ni-n-tooroo</i>	<i>nantoro-n</i>	
78	1	I	<i>au</i>	<i>au</i>	
81	1	in	<i>lo-no</i>	<i>lo-n</i>	
82	1	kill	<i>i-rau-mata</i>	<i>i-ro-mat</i>	
84	1	lake	<i>ran</i>	<i>ran</i>	
85	0	laugh	<i>i-ngele</i>	<i>i-mal</i>	
86	1	leaf	<i>rau(-nu)</i>	<i>rau(-n)</i>	
87	1	left	<i>ngas</i>	<i>ngas</i>	
88	1	leg	<i>ke-ne</i>	<i>kae-n</i>	
89	1	lie	<i>i-llungu</i>	<i>i-pulung</i>	
90	1	live	<i>i-yepe</i>	<i>i-nep</i>	
91	1	liver	<i>kata</i>	<i>kate-n</i>	
92	1	long	<i>mooloo-noo</i>	<i>molo</i>	
93	1	louse	<i>kut</i>	<i>kut</i>	
94	1	man/male	<i>tamoto</i>	<i>tamot</i>	
95	1	many	<i>kaye</i>	<i>kaigi</i>	
96	1	meat/flesh	<i>meda-na</i>	<i>mida-n</i>	
97	1	mother	<i>tina-na</i>	<i>tina-n</i>	
98	1	mountain	<i>kawal</i>	<i>kawal</i>	
99	1	mouth	<i>koo-noo</i>	<i>ko-n</i>	
100	1	name	<i>e-ne</i>	<i>e-n</i>	
102	1	near	<i>potai</i>	<i>paitoi</i>	
103	1	neck	<i>guri-ni</i>	<i>guri-n</i>	
104	1	new	<i>pau-nu</i>	<i>pau-n</i>	
105	1	night	<i>bong</i>	<i>bong</i>	
106	1	nose	<i>kadu-nu</i>	<i>kadu-n</i>	
107	0	not	<i>tiap</i>	<i>tasi</i>	
108	0	old	<i>guru-nu</i>	<i>muga-n</i>	

	Cognate	Meaning	Arop-Lokep	Karnai	Note
109	0	one	<i>atu</i>	<i>ta</i>	
110	1	other	<i>san</i>	<i>san</i>	
111	0	person	<i>tool</i>	<i>kurap</i>	
112	1	play	<i>i-llewe</i>	<i>i-lebleb</i>	
113	1	pull	<i>i-yolo</i>	<i>i-yol</i>	
114	0	push	<i>i-suku</i>	<i>i-sor</i>	
115	1	rain	<i>ki</i>	<i>kui</i>	
116	0	red	<i>kooroo-noo</i>	<i>pur</i>	
117	0	right (correct)	<i>moodoom</i>	<i>dengbe</i>	
118	1	right (side)	<i>oo-noo</i>	<i>o-n</i>	
120	1	road	<i>dada</i>	<i>dad</i>	
122	1	rope	<i>rere</i>	<i>ririai</i>	
123	0	rotten	<i>bia-na</i>	<i>ngarngar</i>	
124	0	rub	<i>i-wodo</i>	<i>i-ngas</i>	
126	1	sand	<i>karakara</i>	<i>karkar</i>	
127	1	say	<i>i-wete (Lokep i-bete)</i>	<i>i-bet</i>	
128	1	scratch	<i>i-korok</i>	<i>i-golok</i>	
129	1	sea	<i>tiek</i>	<i>tek</i>	
130	0	see	<i>i-kamata</i>	<i>i-got</i>	
131	1	seed	<i>patu-nu</i>	<i>patu-n</i>	
134	0	short	<i>modo-no</i>	<i>tugu-n</i>	
135	1	sing	<i>i-wou</i>	<i>i-bo</i>	
136	1	sit	<i>i-wud</i>	<i>i-bot</i>	
137	1	skin	<i>tini-ni</i>	<i>tini-n</i>	
138	1	sky	<i>lang kate-ne</i>	<i>lang</i>	
139	1	sleep	<i>i-ken-mata</i>	<i>i-ken</i>	
140	0	small	<i>mitiap</i>	<i>sedek</i>	
142	0	smoke	<i>kuta-na</i>	<i>kaikai</i>	
144	1	snake	<i>moto</i>	<i>mot</i>	

	Cognate	Meaning	Arop-Lokep	Karnai	Note
146	1	some	<i>sa</i>	<i>sa</i>	
148	1	split	<i>i-sieng</i>	<i>i-seng</i>	
150	1	stab/pierce	<i>i-so</i>	<i>i-so</i>	
151	1	stand	<i>i-kodo</i>	<i>i-kod</i>	
152	1	star	<i>boi</i>	<i>boi</i>	
154	1	stone	<i>pat</i>	<i>pat</i>	
155	0	straight	<i>dada-na</i>	<i>dengbe</i>	see 117
157	1	sun	<i>ke</i>	<i>keu</i>	
159	0	swim	<i>i-we</i>	<i>i-yel</i>	
160	1	tail	<i>ini</i>	<i>wi-n</i>	
161	0	that	<i>in</i>	<i>tone</i>	
163	1	they	<i>di</i>	<i>di</i>	
167	0	this	<i>i</i>	<i>tini</i>	
168	1	thou	<i>ong</i>	<i>ong</i>	
169	1	three	<i>tol</i>	<i>tol</i>	
170	1	throw	<i>i-katte</i>	<i>i-katgi</i>	
171	0	tie	<i>i-witi</i>	<i>i-buk</i>	
172	1	tongue	<i>me-ne</i>	<i>me-n</i>	
173	1	tooth	<i>donga-na</i>	<i>dunga-n</i>	
174	1	tree	<i>kai</i>	<i>kai</i>	
176	1	two	<i>ru</i>	<i>ru</i>	
177	1	vomit	<i>i-llu</i>	<i>i-llu</i>	
178	1	walk	<i>i-pa</i>	<i>i-pa</i>	
179	1	warm	<i>i-lut, lute-ne</i>	<i>i-lut, luta-n</i>	

	Cognate	Meaning	Arop-Lokep	Karnai	Note
180	1	wash	<i>i-rrii(-i)</i>	<i>i-rii</i>	
182	1	we (excl)	<i>am</i>	<i>am</i>	
182	1	we (incl)	<i>idi</i>	<i>it</i>	
184	1	what	<i>so</i>	<i>soi</i>	
185	1	when	<i>nge</i>	<i>nge</i>	
186	1	where	<i>ngai</i>	<i>ngai</i>	
187	1	white	<i>kookoo-noo</i>	<i>koko-n</i>	
188	1	who	<i>sei</i>	<i>sige</i>	
190	1	wife	<i>rima-na</i>	<i>rima-n</i>	
191	1	wind	<i>eng</i>	<i>eng</i>	
192	1	wing	<i>bali-ni</i>	<i>bali-n</i>	
194	1	with	<i>ye</i>	<i>ge</i>	
195	1	woman	<i>garup</i>	<i>garup</i>	
196	1	woods	<i>karam</i>	<i>karam</i>	
197	1	worm	<i>motomoto</i>	<i>motmot</i>	
198	1	ye	<i>ang</i>	<i>ang</i>	
199	1	year	<i>rai</i>	<i>rai</i>	
200	1	yellow	<i>yoongoo-noo</i>	<i>ingngo-n</i>	
201	1	breast	<i>sui</i>	<i>sui-n</i>	
202	1	claw	<i>kuku-nu</i>	<i>kuku-n</i>	
203	1	full	<i>i-songo, songa-na</i>	<i>i-sung, sungu-n</i>	
206	1	moon	<i>taudu</i>	<i>tawud</i>	

Appendix B: Karnai phonology

1. Consonants

Karnai has the following consonant phonemes, which are identical to those found in Arop-Lokep:

Table 15: Consonant phonemes in Karnai

	Bilabial	Alveolar	Velar
Plosive	b p	d t	g k
Nasal	m	n	ŋ
Trill		r	
Fricative		s	
Lateral		l	

The phonemic status of the bilabial consonants /p b m w/ is established by the following examples:

	word-initial		word-medial		word-final	
/p/	put	‘banana’	kapon	‘stomach-3SG’	garup	‘female’
/b/	bit	‘yam.SP’	baban	‘back-3SG’	kabkab	‘veranda’
/m/	moj	‘mat’	muman	‘wild.sago’	rum	‘house’
/w/	wak	‘porridge’	dawok	‘good’	kawkaw	‘bamboo’

The phonemic status of the alveolar consonants /t d n l r s/ is established by the following examples:

	word-initial		word-medial		word-final	
/t/	tun	‘eel’	matuk	‘coconut’	mot	‘snake’
/d/	duŋan	‘teeth’	sədək	‘small’	tawud	‘moon’
/n/	naol	‘many/all’	tinak	‘mother-1SG’	pon	‘turtle’
/l/	lim	‘five’	mɔlɔ	‘long’	kawal	‘mountain’
/r/	rar	‘blood’	kare	‘basket’	pur	‘red/seed.SP’
/s/	sumaj	‘big’	tasi	‘NEG’	kes	‘crab’

The phonemic status of the velar consonants /k g ŋ/ and the palatal /j/ is established by the following examples:

	word-initial		word-medial		word-final	
/k/	kɛw	‘sun’	tukai	‘betelnut’	tek	‘ocean’
/g/	gaun	‘dog’	ɛŋtagen	‘cloud’	rig	‘fishtrap’
/ŋ/	ŋasŋas	‘charcoal’	duŋan	‘teeth-3SG’	tiŋ	‘swamp’
/j/	jo	‘fishing.line’	pojoj	‘wild.duck’	oj	‘mango’

1.1 Phonological processes affecting consonants

Voiceless plosives in Karnai, as in AL, are unreleased word-finally:

[putʰ]	‘banana’
[matakʰ]	‘eye-1SG’
[sipʰ]	‘comb’

The voiced plosives /b/ and /g/ are affricated word-medially and finally to [β] and [ɣ] respectively. Word-medially /b/ is, in some instances, in free variation with [w]. The alveolar plosive /d/ is comparatively rare and affrication has not been observed to affect it.

/baban/	[baβan]	‘back-3SG.POS’
/kabkab/	[kaβkaβ]	‘veranda’
/ibet/	[iβetʰ] ~ [iwetʰ]	‘3SG-say’
/mugan/	[muɣan]	‘old-3SG.POS’
/rig/	[riɣ]	‘fishtrap’

In /j/-initial verb roots following the subject prefix *ku-* ‘2SG’, the initial /j/ becomes [w] in the environment of a following high front vowel:

/kujit/	[kuwit]	‘2SG-lift’
/kujol/	[kujol]	‘2SG-marry’

2. Vowels

Like Arop-Lokep (and unlike most of the other Vitiaz Strait languages, which tend to have 5 vowels), Karnai has a 7-vowel system. The following vowel phonemes are found in Karnai; they are similar to AL with the exception of /e/, which in AL has a much more central quality and is transcribed as /i/:

	<i>front</i>		<i>back</i>
<i>close</i>	i		u
<i>close-mid</i>	e		o
<i>open-mid</i>	ɛ		ɔ
<i>open</i>			ɑ

The phonemic status of the front vowel series is shown by the following minimal or contrastive pairs.

/i, e/	ni	NON.MED	ne	MED
	itirir	3SG-watch	iterer	3SG-wade
	giu	starling	geu	SPEC
/e, ɛ/	ire	3SG-build	ire	3SG-leave
	ipe	3SG-lift	ipe	3SG-plant
	ijel	3SG-step.on	ijel	3SG-swim
/ɛ, ɑ/	ɛŋ	wind	ɑŋ	2PL
	iyɛl	3SG-swim	iyal	3SG-miss
	ipe	3SG-plant	ipa	3SG-walk

The phonemic status of the back vowel series is shown by the following minimal pairs.

/u, o/	pun	‘base-3SG.POS’	pon	‘sea.turtle’
	isuŋ	‘3SG-worship’	isoŋ	‘3SG-chew.betelnut’
	ru	‘two’	ro	‘SYMP’
/o, ɔ/	iro	‘3SG-fly’	irɔ	‘3SG-hit’
	to	‘comp’	tɔ	‘or’
	ijol	‘3SG-pull’	ijɔl	‘3SG-marry’
/ɔ, ɑ/	pɔ	‘below’	pɑ	‘imperative’
	kɔn	‘mouth-3SG.POS’	kɑn	‘having-3SG.POS’
	imɔ	‘3SG-difficult’	imɑ	‘3SG-come’

3. Syllable structure

The syllable template for both AL and Karnai is (C)V(C). In both languages, consonant clusters consisting of any two consonant phonemes are permitted across syllable boundaries. Geminate consonants also occur, as in the following Karnai minimal pairs; they are analysed as consonant sequences across syllable boundaries

rather than as phonemically long consonants. They often originate from processes of reduplication and contraction, as in AL.

kaniŋ	‘eat-NMZ’	kaniŋ	‘mosquito’ (< kankaniŋ)
silan	‘cold-3SG.POS’	sillan	‘wet-3SG.POS’ (< sililan)
ti-re	‘3PL-build’	ti-rre	‘3PL-line.up’ (< **ti-rere)

No consonant clusters are permitted within the syllable in AL. In Karnai, the sequence Cw occurs, producing contrastive pairs such as the following:

kuj	‘rain’	kwi	‘rat’
pua-di	‘fruit-3PL.POS’	pwa	‘crocodile’

It has been argued (Raymond & D’Jernes forthcoming) that AL [u] and [w] are allophones of a single phoneme /u/. In Karnai, because of examples such as the above, it is preferable to treat /u/ and /w/ as independent phonemes. By analogy, /i/ and /j/ are also regarded as independent; /j/ is a comparatively rare phoneme and no minimal pairs are available but Cj clusters occur in progressive verb morphology (see Section 4.2.1) and in a few other words, giving the following contrastive pairs.

ikinjan	‘3SG-eat.PROG’	nian	‘place-3SG.POS’
kidjo	‘people’	didiu	‘fish.SP’

4. Comment on orthography

For both AL and Karnai, the representation of the mid-vowels /ε i ɔ o/ (AL) and /ε e ɔ o/ (Karnai) is the main challenge to developing an orthography. In AL, /o/ is represented as “o” and /ɔ/ as “oo”; /ε/ and /i/ are both written as “e” except in a few minimal pairs, where /i/ is written as “ie”. Examples are *tiek* ‘sea’ and *tek* ‘faeces-1SG.POS’, *ipie* ‘3SG-paddle’ and *ipe* ‘3SG-plant’. In the proposed orthography for Karnai it has not been considered necessary to differentiate the pairs /ε e/ and /ɔ o/, as very few minimal pairs exist and the meaning is usually clear from the context.⁹

The choice between “u” and “w”, “i” and “y” to represent high and semivowels also presents difficulties for AL and Karnai writers. For AL, Raymond and D’Jernes (forthcoming) proposed writing “w” and “y” word initially (e.g. *was* ‘bird.SP’, *yelei* ‘why’) and verb root initially (e.g. *i-yimi* ‘3SG-buy’, *ku-wuk* ‘2SG-cough’), with “u”

⁹ A trial orthography was agreed at an open meeting and spelling workshop in Padamot village on 20th June 2005.

and “i” in all other environments (e.g. *poi* ‘wild.duck’, *i-rii* ‘3SG-wash’). In Karnai, speakers had a strong inclination to write “y” and “w” intervocally as well as word and root-initially (e.g. *poi* ‘wild.duck’, *tawud* ‘moon’); “i” and “u” are only used word-finally and adjacent to consonants (e.g. *i-kinian* ‘3SG-eat.PROG’, *kaukau* ‘bamboo’).

In both languages, the digraph “ng” represents /ŋ/.

Appendix C: Sample texts

Pokai

‘Custard apple’

Author: Joe Ande, Bunu Village, Long Island

Arop-Lokep (Arop dialect)

Kene atu in tamoto kase atu i-ye too-noo
time one MED.SG male small.one one 3SG-with older.sibling-3SG.POS

ti-pelele a ti-la pang ye ni balim atu.
3PL-beachcomb and 3PL-go.across to with place uninhabited.beach one

One day a small boy and his older brother combed (the) beach and they went across to an uninhabited beach.

Yaru ti-pa a ti-la le nga ti-kamata moolooi atu.
3DL 3PL-walk and 3PL-go.across and.so now 3PL-see riverbed one

(The) two of them walked and went across and so now they saw a riverbed.

Motong la nga yaru ti-too moolooi tani a ti-di.
after FOC now 3DL 3PL-follow riverbed DEF.SG and 3PL-go.inland

So then (the) two of them followed that riverbed and they went inland.

Ti-pa a ti-di inbe mata-di lo pang moolooi
3PL-walk and 3PL-go.inland and eye-3PL.POS go.up to riverbed
koo-noo ngan ti-kamata pokai atu in i-pu, pu le
mouth-3SG.POS then 3PL-see custard.apple one MED.SG 3SG-bear.fruit bear.fruit and.so
be i-sareng-kata bae-ne.
IRR 3SG-bend-break branch-3SG.POS

They walked and they went inland and their eyes went up to the mouth of the riverbed, and then they saw a custard apple tree there (that) was bearing fruit so that it (was about to break) (a) branch.

Le nga too-noo in iwete pang tai-ni.
and.so now older.sibling-3SG.POS MED.SG 3SG-speak to younger.sibling-3SG.POS

So then that older brother spoke to (the) younger brother.

I-yei ne, "Alei tai-k, nga ole ong mai-tiap a
3SG-do like.this sorry younger.sibling-1SG.POS now IRR 2SG big-not and
ku-kodo tana, e au mai a a-rookoo pokai ki-idi i."
2SG-stand ground but 1SG big and 1SG-climb custard.apple of-1PL.IN PROX.SG

He (spoke) like this, "Sorry little brother, now you aren't big (so) you stand (on the) ground, but I am big (so) I (will) climb this custard apple tree of ours."

Ngan tai-ni iyei ne, "I be! Ong mai a kukodo
 then younger.sibling-3SG.POS 3SG-do like.this PROX.SG not 2SG big and 2SG-stand
tana, e au kase a a-rookoo pokai ki-idi."
 ground but 1SG small.one and 1SG-climb custard.apple of-1PL.IN

Then (the) younger brother (spoke) like this, "Not (so)! You (are) big (so) you stand (on the) ground, but I (am) small (so) I (will) climb our custard apple tree."

Yaru ti-parsu ye rookoongoo bong ngan kase koo-n
 3DL 3PL-debate about climbing but then small.one mouth-3SG.POS
mede san le nga too-noo mai in i-malum panga.
 strong very and.so now older.sibling-3SG.POS big MED.SG 3SG-consent to.3SG

(The) two of them debated about climbing, but (the) younger (brother) spoke very strongly and so that big older brother consented to him.

I-yei ne, "Dookoot, ngan ku-mangmang a ole ku-rookoo, e au
 3SG-do like.this enough then 2SG-beg and IRR 2SG-climb but 1SG
a-kodo tana, bong kin ku-rookoo karatingi dook le mata-m pang
 1SG-stand ground but must 2SG-climb carefully good and.so eye-2SG.POS to
ye pokai tani inbe ku-rookoo."
 with custard.apple DEF.SG and 2SG-climb

He (spoke) like this, "Enough, you (have) begged and (so) you will climb, and I (will) stand (on the) ground, but you climb very carefully, and you climb with your eye on that custard apple tree."

I-rookoo rookoo le i-lo meneng pokai kuto-no ete ni
 3SG-climb climb and.so 3SG-go.up over.there custard.apple head-3SG.POS above DIST.SG
inbe bianga atu i-pididi ye pokai bae-ne a i-man
 and fruitbat one 3SG-hand.walk with custard.apple branch-3SG.POS and 3SG-come.across
tina le i-kana kase tani in bae-ne, le nga i-mol.
 thus and.so 3SG-consume small.one DEF.SG MED.SG branch-3SG.POS and.so now 3SG-fall

He climbed and climbed until he (had) gone up (to the) head of (the) custard apple tree, and a flying fox was crawling in the custard apple tree's branches and it came across and bit that little (boy's) hand, and so it was that he fell.

I-mol tina meneng pokai kuto-no ete ni le du
 3SG-fall thus yonder custard.apple head-3SG.POS above that and.so go.down
pumbe tana le i-mata, le nga too-noo i-dada
 thump ground and.so 3SG-die and.so now older.sibling-3SG.POS 3SG-run
du i-kau-u inbe i-poongoo, ngan i-madit tiap.
 go.down 3SG-get-3SG and 3SG-awaken then 3SG-arise not

He fell (from the) head of (the) custard apple tree above (all the way) down thumping (onto the) ground, and he died. And his older brother (came) running (and bending) down he got him and (tried to) wake him, (but) he didn't wake up.

Motong la i-yop-a tina ngan le i-tang be i-pa pang tiek.
 after FOC 3SG-carry.piggyback-3SG thus then and.so 3SG-cry and 3SG-walk to sea

Then he carried (the younger brother) piggyback and he cried and he walked to (the) beach.

I-tang nen, "Tai-k, ku-tang ye pokai be, bianga o-o
 3SG-cry like.that younger.sibling-1SG.POS 2SG-cry with custard.apple not flying.fox oh
i-koko bae-m be."
 3SG-nip hand-2SG.POS not

He cried like that, "Little brother (if) you (had) not cried for (a) custard apple, (the) flying fox oh would not (have) nipped your hand."

Le nga ti-du pombe tiek, motong la i-suku du tana
 and.so now 3PL-go.down arrive sea after FOC 3SG-put.down go.down ground
inbe i-taia ran atu a be i-pa-yin-u ye.
 and 3SG-dig water one and IRR 3SG-CAUS-drink-3SG with.3SG

And thus they went down (and) arrived (at the) beach, then he put him down (on the) ground and he dug (for) water (to give) him a drink with.

Le nga be i-kut lo koo-noo, ngan ran i-malingling ye
 and.so now IRR 3SG-scoop go.up mouth-3SG.POS then water 3SG-dribble with
koo-noo.
 mouth-3SG.POS

And thus he (tried to) scoop (water) into his mouth, then (the) water dribbled out of his mouth.

Motong la i-yitmak-i mulu se i-yop-a inbe i-tang a
 after FOC 3SG-lift.up-3SG again come.up 3SG-carry.piggyback-3SG and 3SG-cry and
i-pa mulu.
 3SG-walk again

Then he lifted him up again and coming up he carried him piggyback and he cried and he walked again.

I-tang nen, "Tai-k, ku-tang ye pokai be, bianga o-o
 3SG-cry like.that younger.sibling-1SG.POS 2SG-cry about custard.apple not flying.fox oh
i-koko bae-m be."
 3SG-nip hand-2SG.POS not

He cried like that, "Little brother (if) you (had) not cried for (a) custard apple, (the) flying fox oh would not (have) nipped your hand."

Ti-pa kasin a ti-la ngan i-kamata ran san mulu rongrongbe tiek.
 3PL-walk a.bit and 3PL-go.across then 3SG-see water another again trickle sea

They walked a little and they went across, then he saw another (bit of) water trickling (into the) sea.

Motong la i-suku tai-ni tani idu tana inbe
 after FOC 3SG-put.down younger.sibling-3SG.POS DEF.SG 3SG-go.down ground and
i-wono ran tani, motong la i-kut lo tai-ni koo-noo,
 3SG-block water DEF.SG after FOC 3SG-scoop go.up younger.sibling-3SG.POS mouth-3SG.POS
ngan i-yin tiap, bong ran i-malingling ye koo-noo mulu.
 then 3SG-drink not but water 3SG-dribble from mouth-3SG.POS again

Then he put his little brother down (on the) ground and he blocked (the) water, then he scooped it into his little brother's mouth, and he didn't drink, but (the) water dribbled out of his mouth again.

Le nga i-yitmaka tai-ni tani lo i-yop-a mulu inbe
 and.so now 3SG-lift.up younger.sibling-3SG.POS DEF.SG go.up 3SG-carry.piggyback-3SG again and
i-tang a i-pa mulu.
 3SG-cry and 3SG-walk again

And thus he lifted his little brother up and carried him piggyback again and he cried and he walked again.

I-tang nen, "Tai-k, ku-tang ye pokai be, bianga o-o
 3SG-cry like.that younger.sibling-1SG.POS 2SG-cry with custard.apple not flying.fox oh
i-koko bae-m be."
 3SG-nip hand-2SG.POS not

He cried like that, "Little brother (if) you (had) not cried for (a) custard apple, (the) flying fox oh would not (have) nipped your hand."

Tooltool tani i-yopo tai-ni inbe i-tang be i-pa
 person DEF.SG 3SG-carry.piggyback younger.sibling-3SG.POS and 3SG-cry IRR 3SG-walk
le nga potai kasin pang malala.
 and.so now near a.bit to place

(The older brother) carried his little brother piggyback and he cried and he walked and thus (he came) near to (the) village.

Le nga tina-di talnga-na i-longo so ben tangini, le nga
 and.so now mother-3PL.POS ear-3SG.POS 3SG-hear something like crying and.so now
i-wete pang ni-n-tooroo.
 3SG-speak to husband-3SG.POS-

And thus their mother heard something like crying, and thus she spoke to her husband.

I-yei ne, "Ai, so atu la a-long-a ben tooltool i-tang a ku-tar
 3SG-do like.this hey something one FOC 1SG-hear-3SG like person 3SG-cry and 2SG-put
talnga-m ole ku-longo lapau, too tiap?"
 ear-2SG.POS IRR 2SG-hear also or not

She (spoke) like this, "Hey, (there's) something I hear like (a) person crying, you listen, (do) you hear (it) too, or not?"

Inbe kase tani too-noo i-suku du tana mulu inbe i-taia
 and small.one DEF.SG older.sibling-3SG.POS 3SG-put.down go.down ground again and 3SG-dig
ran san mulu inbe i-kut lo koo-noo ngan se kale-ne
 water another again and 3SG-scoop go.up mouth-3SG.POS then come.up throat-3SG.POS
kootbe ye inbe mata-n galanga kasin.
 drink with.it and eye-3SG.POS be.clear a.bit

And that little (boy's) older brother put him down again and he dug (for) water again and he scooped it into (the little boy's) mouth and his throat drank it and he (seemed to come to a) little.

Le nga i-yitmak-i mulu se i-yop-a inbe i-tang mulu.
 and.so now 3SG-lift.up-3SG again come.up 3SG-carry.piggyback-3SG and 3SG-cry again

And so he lifted him up again (and) he carried him piggyback and he cried again.

I-tang nen, "Tai-k, ku-tang ye pokai be, bianga o-o
 3SG-cry like.that younger.sibling-1SG.POS 2SG-cry with custard.apple not flying.fox oh
i-koko bae-m be."
 3SG-nip hand-2SG.POS not

He cried like that, "Little brother (if) you (had) not cried for (a) custard apple, (the) flying fox oh would not (have) nipped your hand."

Tina ngan le tama-di i-longo natu-nu tani kalnga-na inbe i-kilala,
 thus then and.so father-3PL.POS 3SG-hear child-3SG.POS DEF.SG voice-3SG.POS and 3SG-recognize
le nga i-wete pang rima-na.
 and.so now 3SG-speak to wife-3SG.POS

And so (it was) then (that) their father heard his child's voice and recognized it, so he spoke to his wife.

I-yei ne, "Oi, ku-wud yesoo? Ku-dada pang tiek du ku-kamata
 3SG-do like.this oh.no 2SG-sit why 2SG-run to sea go.down 2SG-see
di tooltool ngo too, ngo ti-yei belei? A-longo tooltool i-tangtang i,
 3PL person those or those 3PL-do what 1SG-hear person 3SG-cry-cry PROX.SG
kalnga-na ngan ben natu-k mai i."
 voice-3SG.POS then like child-1SG.POS big PROX.SG

He (spoke) like this, "Oh no, why are you sitting (here)? You run down to (the) beach (and) see (if it's) them or (not), (and) what are) they doing there? I hear this person crying, (and his) voice is like my older child."

Le taun rima-na i-dada du i-pakele ngan i-kilala di natu-nu
 and.so now wife-3SG.POS 3SG-run go.down 3SG-scrutinize then 3SG-recognize 3PL child-3SG.POS
tina yo mai in i-yopo kase nga, le nga koo-noo
 DEF.PL that big MED.SG 3SG-carry.piggyback small.one now and.so now mouth-3SG.POS
pang ni-n-tooroo.
 to husband-3SG.POS-

So immediately his wife ran down peered out, (and) then she recognized her children, (the) larger carrying (the) smaller piggyback, and so (she) called to her husband.

I-yei ne, "Ai, ku-wud yesoo? Di natu-du tina di na-nga la
 3SG-do like.this hey 2SG-sit why 3PL child-1PL.IN.POS DEF.PL 3PL LOC-MED.PL FOC
ti-man nga. O ti-yei belei nga le nga kase na-ni la
 3PL-come.across now IRR 3PL-do what now and.so now small.one loc-DIST.SG FOC
mai i-yop-a ni."
 big 3SG-carry.piggyback-3SG that

She (spoke) like this, "Hey, why are you sitting (there)? Our children (are) here, (it's) them coming now. What did they do, so (as for the) younger one, (the) older is carrying him piggyback there?"

Le nga ni-n-tooroo i-madit le i-dada le i-mugu inbe rimana
 and.so now husband-3SG.POS- 3SG-arise and.so 3SG-run and.so 3SG-preceed and wife-3SG.POS
i-too a ti-dada kala di natu-di tina.
 3SG-follow and 3PL-run join 3PL child-3PL.POS DEF.PL

And thus her husband got up and he ran first, and (the) wife followed and they ran (and) joined their children.

Ti-la tina le tama-di i-palala natu-nu kase in bae-ne
 3PL-go.across thus and.so father-3PL.POS 3SG-separate child-3SG.POS small.one that hand-3SG.POS
ye too-noo baba-na a i-kau-u inbe ti-toro natu-di mai i.
 from older.sibling-3SG.POS back-3SG.POS and 3SG-get-3SG and 3PL-ask child-3PL.POS big PROX.SG
 (So) they went across and their father separated (the) smaller child's hand from his older sibling's back and he got it and they questioned their older child.

Ti-yei ne, "Ai, tai-m i nga yelei?"
 3PL-do like.this hey younger.sibling-2SG.POS PROX.SG now why
 They (spoke) like this, "Hey, (how is it that) your younger brother (is) like this?"

Ngan se natu-di mai in i-yei ne, "Atoo, di tama-k le
 then come.up child-3PL.POS big MED.SG 3SG-do like.this oh.boy 3PL father-1SG.POS and
tina-k nga be ka-tor yesoo? Bong a-ye tai-k nga
 mother-1SG.POS now IRR 2PL-ask why but 1SG-with younger.sibling-1SG.POS now
am-pelele a am-la balim ni, motong la am-too
 1PL.EX-beachcomb and 1PL.EX-go.across uninhabited.beach DIST.SG after FOC 1 PL.EX-follow
moolooi atu a am-di ngan am-kamata pokai atu in i-pu, pu
 riverbed one and 1 PL.EX-go.inland then 1 PL.EX-see custard.apple one MED.SG 3SG-bear bear
le be i-sareng-kata bae-ne, le nga a-wete panga be ya kase
 and.so IRR 3SG-bend-break hand-3SG.POS and.so now 1SG-speak.to.3SG IRR 3SG small.one
a i-kodo tana e au mai a a-rookoo, ngan tiap. I-wete be au mai
 and 3SG-stand ground but 1SG big and 1SG-climb then not 3SG-speak IRR 1SG big
a a-kodo tana e ya kase a i-rookoo pokai. Ngan la le
 and 1SG-stand ground but 3SG small.one and 3SG-climb custard.apple then FOC and.so
i-rookoo inbe a-kodo tana, bong ngan i-rookoo, rookoo le, le i-lo meneng
 3SG-climb and 1SG-stand ground but then 3SG-climb climb and.so and.so 3SG-go.up yonder
pokai kuto-no ni, inbe bianga atu i-pididi ye pokai bae-ne
 custard.apple head-3SG.POS DIST.SG and flying.fox one 3SG-hand.walk with custard.apple hand-3SG.POS
a i-man tina le i-kana bae-ne i. Ngan la le i-mol
 and 3SG-come.across DEF.PL and.so 3SG-eat hand-3SG.POS PROX.SG then FOC and.so 3SG-fall
si pumbe be a-kau-u a a-poongoo, ngan i-mata oo. Motong la
 come.down thump and 1SG-get-3SG and 1SG-awaken then 3SG-die PERF after FOC
a-yop-a a am-pot pang tiek nga."
 1SG-carry.piggyback-3SG and 1PL.EX-come.seaward to sea now

Then their older child (spoke) like this, "Oh, boy, my father and mother, now why do you question (me)? But my little brother and I beachcombed and we went across (to) that uninhabited beach, then continuing across we followed a riverbed and we went inland, then we saw a custard apple tree that was bearing so that its branches (were about to) break, thus I said to him, (since) he (is) small, (to) stand (on the) ground while I, (who am) bigger, climb, (but) no. He said (that) I (was too) big, so I (should) stand (on the) ground, but he (was) smaller so he (would) climb (the) custard apple tree. So then (it was he who) climbed and I stood (on the) ground, but then he climbed and climbed, until he went up (to the) head (of the) custard apple tree there, and (a) flying fox was moving around (in the) custard apple's branches and it came across and it bit his hand. Then (it was that he) fell coming down and thumping (on the ground), and I got him and I (tried to) awaken him, and he had completely died. Then I carried him piggyback and we came seaward toward (the) ocean."

I-gasa pang di tama-na le tina-na a i-mot, motong la ti-kap ran
 3SG-tell to 3PL father-3SG.POS and mother-3SG.POS and 3SG-finish after FOC 3PL-get water
a ti-rruii kase tani inbe ti-maia kadu-nu le se kate-ne
 and 3PL-bathe small.one DEF.SG and 3PL-blow nose-3SG.POS and.so come.up chest-3SG.POS
katbe inbe mata-n galanga mulu, le tama-na le tina-na le
 breathe and eye-3SG.POS be.clear again and father-3SG.POS and mother-3SG.POS and
too-noo ti-kamata yo i-madit mulu nga le lo-di ponana welewele.
 older.sibling-3SG.POS 3PL-see that 3SG-arise again now and.so insideSG-3PL.POS be.happy plenty

He told his father and mother all (about it), then they got water and they bathed (the) younger brother and they blew (in) his nose until his chest breathed and his eyes were clear again, and his father and mother and older brother they saw that he woke again and they were very happy.

Le barau i a-gasa le se i-mot nanga.
 and.so story PROX.SG 1SG-tell and.so come.up 3SG-finish LOC-now

And (so) this story I am telling is finished now.

Pat Biak

'The Biak Stone'

Author: Kao Thomas, Padamot Village, Umboi Island

Karnai

Au Kao Thomas a-bet a-yoi nin ki Pat Biak
1SG Kao Thomas 1SG-want 1SG-make story of stone Biak

I am Kao Thomas, I want to tell the story of the Biak Stone.

Nin tone a-long gi tama-k Joshua Malai gi tawud June be rai 2005.
story MED 1SG-hear from father-1SG.POS Joshua Malai in moon June and year 2005

This story I heard from my father, Joshua Malai, in the month of June and the year 2005.

Nin tone i namen
story MED 3SG like.this

The story is like this.

Di kolman ki Barem Bongar e-di tone Malai, Sukurum, Uwuk.
PL elder of men's.house Bongar name-3PL.POS MED Malai Sukurum Uwuk

The elders of Bongar clan, their names are Malai, Sukurum, (and) Uwuk.

Ti-ge-di natu-di ton Alkam Elia, Namo Elisha, Naron Yonah, Namo Thomas, Biak Manasseh.
3PL-with-PL child-3PL.POS REL Alkam Elia Namo Elisha Naron Yonah Namo Thomas Biak Manasseh

They and their sons Alkam Elia, Namo Elisha, Naron Yonah, Namo Thomas, Biak Manasseh.

Mangan ta tini ti-la ti-yos, ti-yos mot be ti-long ti-la
time one NON.MED 3PL-go 3PL-fish.with.net 3PL-fish.with.net finish and 3PL-in 3PL-go
tabel ti-duwai.
beach 3PL-cook

A certain time they went fishing, they finished fishing and they went in to the beach to cook.

Ti-duwai kaning ki-di le mot, tika kaning kidi, be ti-surme og
3PL-cook food of-3PL and finish 3PL-get food of-3PL and 3PL-push.with.hands canoe
ki-di i-du be ti-du ti-la ti-moi be ti-kan kaning ki-di.
of-3PL 3SG-out and 3PL-out 3PL-go 3PL-drift and 3PL-eat food of-3PL

They cooked their food and (it was) done, they took their food, and they pushed their canoe out and they went out and drifted and ate their food.

Biak tini i-kinian be i-panak ig, ig tura-n i-la tek, mata-n
Biak NON.MED 3SG-eat.PROG and 3SG-throw fish fish bone-3SG.POS 3SG-go sea eye-3SG.POS
i-noto ig tura-n tini i-la tek lo-n, ibe i-got ig
3SG-follow fish bone-3SG.POS NON.MED 3SG-go sea inside-3SG.POS and 3SG-see fish
boron i-ko i-long i-du gi pat tini, ko-ne lo-n tar ben
fish.SP 3SG-swim 3SG-in 3SG-out of stone NON.MED therefore-MED insides-3SG.POS put how

pat i salo ka-n gumo-n.
 stone 3SG IRR possession-3SG.POS hole-3SG.POS

This Biak ate and threw away the fish, fish bones into the sea, his eye followed those fish bones into the sea, and he saw a boron fish swimming in (and) out of the stone, then he thought how this stone must have a hole.

Lo tar ki tini, i-yoi ga i-pas si-la tek, be bage-n
 inside put of.3SG NON.MED 3SG-make and 3SG-jump down-go sea and hand-3SG.POS
la i-bet i-tok pat tini. Bage-n la le bage-n i-paso
 go want 3SG-hold stone NON.MED hand-3SG.POS go and hand-3sg.pos 3SG-go.through
i-noto pat gumo-n tini i-la i-du kapal.
 3SG-follow stone hole-3SG.POS NON.MED 3SG-go 3SG-out other

His thinking was thus, he (did this thinking) and jumped into the sea, and his hand wanted to touch this stone. His hand went and his hand went through (and) followed the hole in the stone through and out the other (side).

Ko-ne i-bet pi di tai-n ga to-n,
 therefore-MED 3SG-say to 3PL younger.sibling-3SG.POS and older.sibling-3SG.POS
 “*Ka-ka to ma be ta-sili la pat tini gumo-n be*
 2PL-take canoe.pole come and 1PL.IN-put.through go stone NON.MED hole-3SG.POS and
ta-yit sai-ma-la og.”
 1PL.IN-lift up-come-go canoe

So he said to his younger and older brothers, “Take the pole and we'll put it through the hole in this stone and lift it up onto the canoe.”

Di tai-n ga to-n tini ti-ka to ti-la ga
 PL younger.sibling-3SG.POS and older.sibling-3SG.POS NON.MED 3PL-get canoe.pole 3PL-go and
ti-sili la pat tini gumo-n be ti-yit sai-la og po-n.
 3pl-put.through go stone NON.MED hole-3SG.POS and 3pl-lift up-go canoe top-3SG.POS

His younger and older brothers got the pole (and) they went and put it through the hole in this stone and they lifted (it) up onto the canoe.

Mangan ton ti-yit sai-la og po-n ti-got pat tini gumo-n sumai
 time FOC 3PL-lift up-go canoe top-3SG.POS 3PL-see stone NON.MED hole-3SG.POS big
tina-n i-la i-du kapal, be dawok mat ton pilaisi gi mata-di.
 mother-3SG.POS 3sg-go 3sg-out other and good really REL much to eye-3PL.POS

When they lifted the stone onto the canoe they saw (that) the mama-sized hole in the stone went out to the other side, and it was really good in their eyes.

Yaton Biak tini i-bet, "Pat tone e-n "Pat Biak." Au e-k,
 therefore Biak NON.MED say stone MED name-3SG.POS stone Biak 1SG name-3SG.POS
a-pat la gi pat tone balai au a-got mug be a-si-la a-tok mug."
 1SG-call go to stone MED because 1SG 1SG-see first and 1SG-down-go 1SG-hold first

So then that Biak, he said "That stone's name is Pat Biak, my name, I (give my name) to the stone because I saw it first and I went down and touched it first."

Yaton di tai-n ga to-n lo-di ta-loko

therefore PL younger.sibling-3SG.POS and older.sibling-3SG.POS insides-3PL.POS one-only

gi bitang ki.
about talk of.3sg

So then his younger and older brothers agreed with his talk.

Ibe ti-yui pat tini ga ti-ka ti-ma malal be ti-tar la
and 3PL-transport stone NON.MED and 3PL-take 3PL-come village and 3PL-put go
kalang ki-di lo-n.
flowerbed of-3PL inside-3SG.POS

And they transported the stone and they took it to the village and they put it in their flowerbed.

Aiyo ti-nep be ti-pinin wer gi ti-karat tutung ki pat tini.
so 3PL-stay and 3PL-see wisdom about 3PL-fix law of stone NON.MED

After that they stayed and sought wisdom about (how to) arrange the laws of this stone.

Yaton ti-pudu tutung ki Pat Biak tone i namen:
therefore 3PL-create law of stone Biak MED 3SG like.this

So then they created the laws of this Biak Stone like this:

Songa ko iu sai-la barem Bongar poko.
HAB 2SG.do spear go.up clan.house Bongar PROHIB

Don't take a spear into the Bongar clan house.

Songa ku-nep barem Bongar be ku-pasak poko.
HAB 2SG-stay clan.house Bongar and 2SG-be.angry PROHIB

Don't stay in the Bongar clan house when you are angry.

Malmal i-sai be ku-mir ku-la barem Bongar, songa ti-ro ong poko.
fight 3SG-up and 2SG-run 2SG-go clan.house Bongar HAB 3PL-hit 2SG PROHIB

If there's a fight and you run to the Bongar clan house, they can't hit you.

Songa ku-tit ko-m poko. Songa ku-panao poko. Songa ku-yoi aris poko.
HAB 2SG-gossip mouth-2SG.POS PROHIB HAB 2SG-steal PROHIB HAB 2SG-make adultery PROHIB

Don't gossip. Don't steal. Don't commit adultery.

Songa mata-m la gi rum, garup, baling be bang ki-di kurap poko.
HAB eye-2SG.POS go to house woman valuables and plantation of-3PL person PROHIB

Don't let your eye go to the house, woman, valuables and plantations of others.

Le ku-noto tutung tini si, ong lo ku-mat.
and 2SG-follow law NON.MED not 2SG FUT 2SG-die

If you don't follow these laws, you will die.

Yaton gi tiwu-mam ne be i-ma ti-pat Barem Bongar
therefore from grand.relation-1PL.EX.POS MED and 3SG-come 3PL-call clan.house Bongar

ti-wet barem Maro.
3PL-say clan.house God

So then from (the time of) our ancestors until (now) they call Clan Bongar God's clan.

Moto tutung tini.
then law NON.MED

Then this (is the) law.

Yaton "Biak" am barem ton Bongar, o am rar tini am
therefore Biak 1PL.EX clan.house REL Bongar first 1PL.EX blood NON.MED 1PL.EX

e-mam tone.
name-1PL.EX.POS MED

So then "Biak", we are Bongar clan, first we are this bloodline, that is our name.

Di tiwu-mam ti-pat, i-ma di tama-mam ti-pat, be i-ma
PL grand.relation-1PL.EX.POS 3PL-call 3SG-come PL father-1PL.EX.POS 3PL-call and 3SG-come
am napai lapau am-pat be di natu-mam lapau lo ti-pat be
1PL.EX now too 1PL.EX-call and PL child-1PL.EX.POS too FUT 3PL-call and
i-ken ton namen i-la.
3SG-lie REL like.this 3SG-go

Our grandfathers called it (that), it came (and) our fathers called it (that), and it came (and) we too now call it (that) and our children too will call it that and (it will always be like that).

Nin ki-au gitu-n i-ma i-mul namen.
story of-1SG short-3SG.POS 3SG-come 3SG-end like.this

My short story comes (and) ends like this.