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AMELE GRAMMAR

by

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Abstract.

The thesis is a full grammatical description of the Amele language of Papua New Guinea (PNG). The Amele are a group of about 5000 people living on the north coast of PNG just south of the town of Madang. The Amele language is the largest language of the Gum language family, Mabusu Stock, Madang Super-Stock, Madang-Adelbert Range Sub-phylum. Data for the thesis were collected in the area mainly during a period of residence from September 1984 to November 1985 under the auspices of the Summer Institute of Linguistics.

The description follows the format of the Lingua Descriptive Series questionnaire (now Croom Helm Descriptive Series) edited by Prof. Bernard Comrie and Prof. Norval Smith. A full account of the language is given covering the areas of syntax (including direct/indirect speech, question sentences, sentence structure, subordination, coordination, negation, anaphora, reflexives, possession and topic), morphology (including noun and verb inflection and derivational morphology) and phonology (including segments and suprasegmentals and morphophonology) all in some detail. In line with the thinking behind the questionnaire a basic descriptive approach is adopted not leaning towards any particular linguistic model although for the phonology and morphophonology sections the generative model has been used to describe these areas.

Some of the linguistically interesting features of the language are described in detail including the switch-reference system, the modal system, the impersonal verbs and the inalienably possessed nouns. Where these phenomena relate to current linguistic debate these matters are addressed as part of the descriptive analysis. Although the author of the thesis is a fluent speaker of Amele every effort has been made to qualify all aspects of data and analysis with native speaker intuitions. As far as can be ascertained there is no other description of the Amele language in existence so in this respect the data itself should contribute to the database for linguistic research.

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Introduction.

The Amele people inhabit an area of approximately 120 square kilometres between the Gum and Gogol rivers just south of the town of Madang in Papua New Guinea. The area extends from the coast to about 14 kilometres inland. This is traditional Amele land and the Amele people appear to have been resident in this area for several centuries at least since there are local stories of events that happened some time ago such as a major eruption of the volcano on Karkar island and a tidal wave that may or may not have been part of the same event. There is also a mythology, however, that the Amele people at some time in the past came down from somewhere further inland to settle on the coast. This would seem to be confirmed by the fact that, linguistically, the Amele language is typical of many highland Papuan languages. The figures for the 1977 national census issued by the Madang District Office give a population of 5479 Amele persons. It is not clear from these figures if these are all native speakers of Amele or if nonnative speakers of Amele that have taken up residence in the area are also included in the population statistics. Politically the people are governed by two organisations that appear to have an equal say in the running of Amele society. On the one hand is the local government with its system of village courts for airing grievances and on the other hand is the indigenous Lutheran Church which has a large say in how Amele society functions. Lutheran missionaries first came to the Amele area in 1916. They established a church and a hospital. They also established coconut plantations and a shipping company to fund the church and the hospital. Today most Amele people would call themselves "Christian". There is also a Roman Catholic Church established in one Amele village at Aia. The Amele people have therefore been influenced by the outside world for a long period of time but still they maintain their traditional lifestyle of subsistence farming.

As can be seen from the map (p.8) there are a number of roads traversing the Amele area. The Lae-Madang road runs north-south near to the coast. The Jagaum road runs east-west and was constructed by the Lutherans. The Mawan road also runs east-west and was constructed by the Jant timber company. The Amele area is therefore very accessible by road and most people live near to the roads although their gardens may be some way off from where they live. The Amele people do not normally live in large villages. Rather they prefer to live in small hamlets consisting of two or three or four family groups which are usually related by kinship. There is one large Amele village and this is Umuin by the coast where there are some 20 or 30 family groups living. The traditional lifestyle is one of subsistence farming and the agricultural method employed is slash and burn. A new garden is planted each year in December or January at the beginning of the wet season. The staple crops are yams and taro. Other vegetables, fruit and nuts grown include: sweet potato, pumpkin, corn, tapioca, plantains, sago, beans, mustard green, chillies, Chinese cabbage, cress, peppers, spinach, egg plants, tomatoes,

snake gourds, sweet bananas, breadfruit, pawpaw, water melon, pineapple, guava, lemons, limes, soursop, starfruit, avocado, pomelo, mango, custard apple, peanuts, coconut, galip nuts (Tahitian chestnut), New Guinea walnuts and betelnut. Some crops are grown for personal consumption and some as cash crops. The main cash crop is copra (dried coconut). Surplus fruit and vegetables are taken into Madang to sell at the markets there. Pigs and chickens are also domesticated and usually roam freely in the village. Occasionally a pig or chicken is killed for food but people get most of their protein food from the tinned meat that can be purchased either in Madang or in one of the local trade stores. Very little game hunting is practised since most of the game is hunted out in the area. The only fauna that is still plentiful is birds and bats and either of these are a source of food. Most people build their houses raised on stilts off the ground made from traditional material obtained from the forest. It is becoming increasingly difficult to do this, however, since the slash and burn agriculture destroys the forest and the Amele make no attempt to replant trees useful to them.

A community school system provides everyone with an education in English although it seems only a few people come out of the school system being able to understand and speak English fluently. As far as can be ascertained every Amele is fluent in Tok Pisin as well as his own language. Most Amele are also literate in Tok Pisin and can read the material that is available in Amele. The extant Amele literature comprises: extracts from the Gospels called 'A Life of Jesus' by J. Welsch (1942, 1949), a Catechism by A. Wullenkord (1928, 1949) and a hymnal and liturgy (1946, 1953, 1965). There is also a grammar and dictionary 'Wörterbuch und Grammatik der Amelesprache' (circa 1930) by A. Wullenkord but this is not available to the Amele people since there is only one copy. Previously people were taught to read and write their own language but this was discontinued some time in the 1970's. Now all education is conducted in English.

The Amele language is the largest of the Gum family of languages, previously known as the Abaian language family (Z'graggen 1975:13 and Wurm 1975:582). There are five other languages in the Gum family: Sihan, Gumalu, Isebe, Bau, Panim. The Gum language family belongs to the Mabusu Stock, Madang Super-stock of the Madang-Adelbert Range Sub-phylum. There are four distinct dialects of Amele and these are marked areally on the map. The dialects are: (1) Haia, which includes the villages of Kesub, Jahil, Danben and Jelso, (2) Amele, which includes the villages of Sinan, Hobai, Ahob, Balilna, Aia, Salugu and Amele, (3) Huar, which includes the villages of Wagug, Hudini, Banub, Aguru, Sah, Omuru, Sein, Ohuru, Umuin, Bahor and Ord, and (4) Jagahala, which includes the village of Ohu. These dialect boundaries are recognised by the Amele people themselves, hence the local terminology, and have been substantiated by linguistic research (Roberts 1980). There are phonological, grammatical and lexical differences between the four dialects but all are mutually intelligible except possibly for the Jagahala dialect which only has a maximum cognition

rate with the other dialects of 80%. The Jagahala dialect would appear to be more closely related to the neighbouring Isebe language. The present study was conducted primarily in the Haia dialect as this is recognised by the people as the most prestigious of the dialects. Also the existing literature is in the Haia dialect. The only known previous descriptions of the language are Wullenkord (circa 1930) and Roberts (1979, 1980, 1981a, 1981b). As well as Z'graggen (1975 and 1980 and Wurm 1975) the language is also mentioned in Capell (1969). For references to New Guinea Pidgin (Tok Pisin) see Mihalic (1971).

The orthography that is used in this description is basically that proposed by Wullenkord and Welsch but with some modification. The phonemes /b/ and /g/ are represented phonemically with one symbol b and g respectively rather than allophonically with two symbols b/p and g/k as before. The phoneme /ʔ/ is represented in all instances by the symbol ç rather than by the apostrophe symbol ' word initially and by ç in other word places. The long vowels [ɛ:] and [ɔ:] are represented by their underlying forms ee and oo respectively rather than by the dieretic vowels ā and ō. The diphthong sequence /ai/ is represented in all instances by ai. Previously this sequence was sometimes represented by ae as in words like saen 'time' and taen 'cloud'. The diphthong sequence /ei/ is also represented in all instances by ei. Previously, in some verbal conjugations, this sequence was represented by just e, for example fea [ferɛ] 'he saw'.

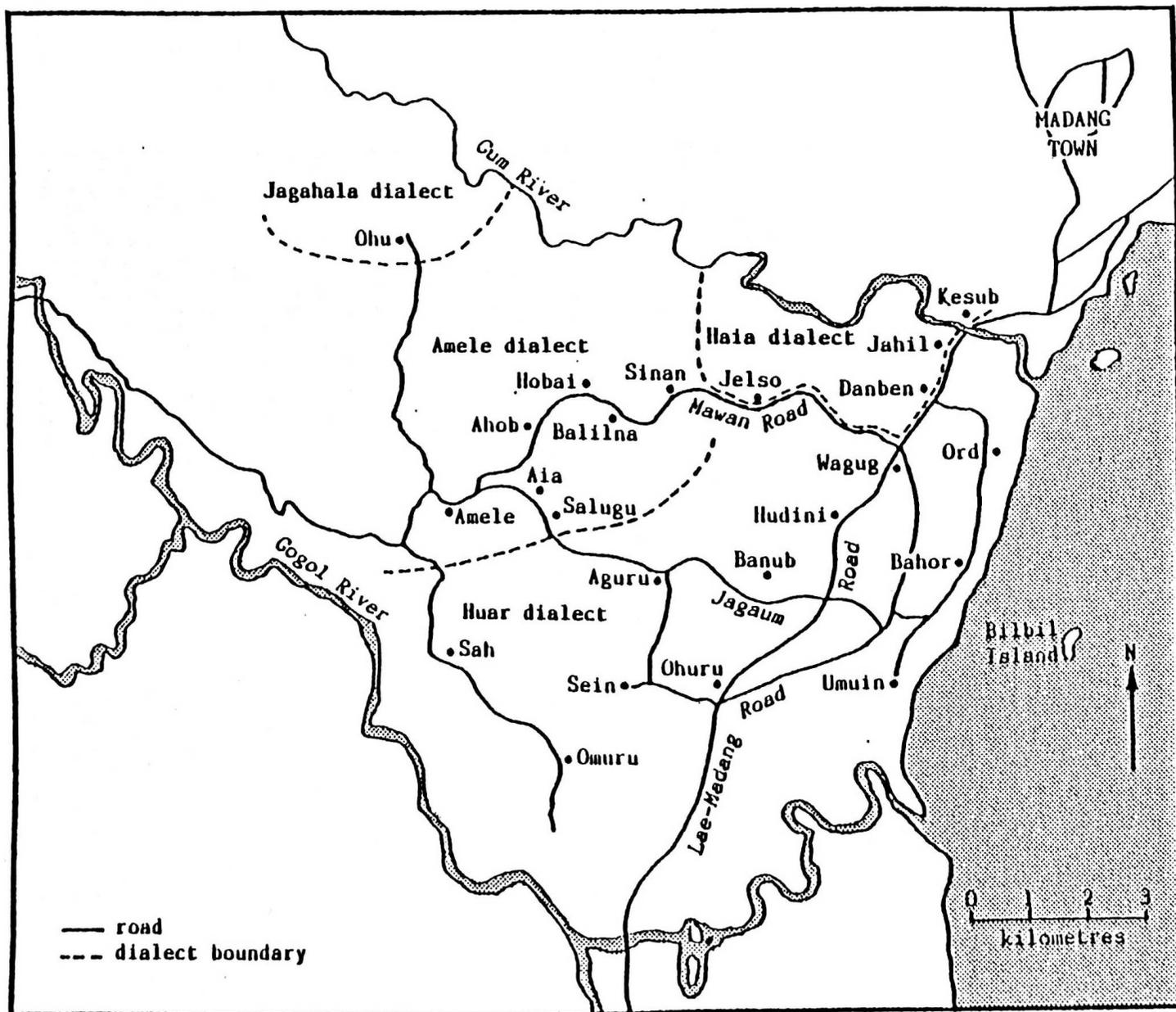
Amele is a typical Papuan language with SOV basic word order, clause chaining, serial verbs and a switch-reference system. Some of the interesting features of the language are (i) how the switch-reference system has taken on a pragmatic/deictic role as well as a syntactic role, (ii) the expression of some seventeen different kinds of mood mainly through sentence postposed particles, (iii) how the switch-reference system interacts with the impersonal verbs to distinguish agentive from nonagentive subjects and (iv) an inalienably possessed noun system that can distinguish the person and number of the possessor as well as the number of the possessee.

The data for this study were collected during periods of residence in Danben village from February 1978 to June 1981 and later from August 1984 to November 1985. The corpus of data included some 35 texts together with much elicited information from native Amele speakers. Work began on researching the answers to the Croom Helm (formerly Lingua) Descriptive Series questionnaire in August 1984 and it was possible to type up a first draft of the whole manuscript on a Sharp PC5000 portable computer in Danben village itself.

During all periods of residence in PNG I was working under the auspices of the Summer Institute of Linguistics and I want to thank the PNG Branch for their encouragement and assistance in completing this project. I would also like to thank my supervising professor, Neil Smith of London University, for all his helpful comments and suggestions on

the earlier drafts of the thesis. Professor Bernard Comrie of the University of Southern California also gave me much helpful advice and assistance during the time he was conducting a workshop for SIL in PNG. I would also like to thank Amele friends whom I worked with closely during my times in PNG, especially Pastor Gulal(now deceased), Pastor Liwa MBE, Israel Liwa, Naus, Misangul and Ruth. While every endeavour has been made to make the answers to the questionnaire as accurate as possible according to native speaker intuitions any errors in fact or analysis remain the responsibility of the author.

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MAP OF AMELE LANGUAGE AREA

Abbreviations.

adj.	adjective
adv.	adverb
art.	article
CAP	certain apprehensive mood
CD	conditional mood
com.	completive aspect
CR/contr.	contrafactual mood
d/du	dual
DB	dubitive mood
dem.	demonstrative adjective/pronoun
dist.	distributive marker
DS	different subject following
dur.	durative aspect
EM	emphatic mood
emph.	emphatic word
excl.	exclusive marker
fut.	future tense
hab.p	habitual past tense
HB	habitual mood
HQ	hortatory mood
imp.	imperative mood
imperf.	imperfective aspect
indef.	indefinite pronoun/article
inf.	infinitive form
intent.	intentional action
inter.	interrogative adjective/pronoun
interj.	interjection
it.	iterative aspect
loc.	locative adjective/demonstrative
neg.f	negative future tense
neg.p	negative past tense
p/pl	plural
PAP	probable apprehensive mood
perf.	perfective aspect
PM	permissive mood
pos.	possessive form
pred.	predicate marker
pres.	present tense
QU	interrogative mood
quant.	quantifier
redup.	reduplicated form
rel.f	relative future tense
rem.p	remote past tense
res.	resultative aspect
RG	regretful mood
s/sg	singular
seq.	sequential action
sim.	simultaneous action
spec.	species
S/R	switch-reference
SS	same subject following
SU	supplicative mood
tod.p	today's past tense
VQ	vocative mood
yest.p	yesterday's past tense
1	first person
2	second person
3	third person

Phonetic symbols.

'	syllable stress
•	phrase stress
√	sentence stress/intonation peak
↘	intonation contour
.	syllable boundary
+	morpheme boundary
\$	syllable
#	word boundary
[]	phonetic or surface form
/ /	phonemic or underlying form

Orthographic symbols.

Symbol Phoneme/phone

a	/a/	[æ], [æ:], [ə], [a], [ɑ]
b	/b/	[b], [p]
c	/ʔ/	[ʔ]
d	/d/	[d]
e	/e/	[ɛ], [e]
f	/f/	[f]
g	/g/	[g], [k]
h	/h/	[h]
i	/i/	[i], [ɪ]
j	/j/	[j], [ʝ]
l	/l/	[l]
m	/m/	[m]
n	/n/	[n]
o	/o/	[ɔ], [o]
q	/gb/	[gb], [p]
s	/s/	[s]
t	/t/	[t]
u	/u/	[u], [v]
w	/w/	[w], [ʋ]
ai	/ai/	[aɪ]
au	/au/	[ɑv]
ei	/ei/	[eɪ]
eu	/eu/	[ɛv]
oi	/oi/	[ɔɪ]
ou	/ou/	[ov]

1. SYNTAX.

1.1. General.

1.1.1. Sentence types.

1.1.1.1. Direct speech and indirect speech.

The language can distinguish direct speech from indirect speech although, while direct quotes are very common in text material, indirect quotes are quite rare.

(1) Direct speech.

The direct quote sentence is normally marked by a speech verb immediately preceding the quoted speech, and a repeat quote predicate, which is a copy of the suffixation of the speech verb, immediately follows the quote. The verb preceding and the verb/verb suffixation following the quote have identical person-number-tense-aspect-mood inflection. While the combination of speech verb preceding and verbal suffixation following is the most common combination in text other combinations can occur. For example a copy of the whole speech verb can occur or, in a series of quotes, the initial speech verb can be omitted and just the copy of the verbal suffixation can remain. The quote is the direct object of the speech verb. Within the embedded quotation sentence the choice and order of constituents is the same as for the normal declarative sentence (see 1.2.1.2.5-6.). The speech verb most commonly used is *mad-ec* 'to say' although others can occur like, *cis-doc* 'to think' or *sisil-doc* 'to ask'. Alternatively *mad-ec* can combine with other verbs in a paratactic construction to produce a variant meaning or can be modified by adverbials.

- (1) *bodo-i mad-ec 'to talk softly'*
soft-pred. say-inf.
- (2) *jahun-i mad-ec 'to talk secretly'*
hide-pred. say-inf.
- (3) *uta-i mad-ec 'to call out'*
call-pred. say-inf.
- (4) *tuma tuma i mad-ec 'to say in awe/wonder'*
pred. say-inf.
- (5) *togo-du mad-ec 'to discuss'*
discuss-3s say-inf.
- (6) *wadac-du mad-ec 'to answer'*
reply-3s say-inf.
- (7) *gel-du mad-ec 'to curse/swear'*
curse-3s say-inf.
- (8) *gagadic mad-ec 'to warn/encourage'*
strong say-inf.

(9) mahuc mad-ec 'to say quickly'
quickly say-inf.

(10) Age togo-du-du made-in, "In jobon
3p discuss-3s-it. say-3p who village

t-i-me-i ja eh-i ne-ce-b
go up-pred.-SS-3s firewood take-pred. come down-DS-3s

sis man-i je-qa-n?"
grasshopper roast-pred. eat-1p-fut.

[3:3]

'They were discussing and said, "Who will go up to the village and bring down firewood so that we can cook and eat the grasshoppers?"'

(11) Mala uqa cudumac ma-don, "Se gai-ni
chicken 3s wallaby say-3s-3s-rem.p hey friend-1s-pos.

eu adi od-og-a? Ele fadale-w-an. Gee
how do-2s-tod.p 1d destroy-1d-fut. not

f-ag-ana fo?" don.
see-2s-pres. QU 3s-3s-rem.p

[4:10]

'The chicken said to the wallaby, "Hey my friend what is that you have done? We will be lost. Don't you see?"'

(12) Caja eu uqa sab cil-i-me-i ma-ad-en,
woman that 3s food boil-pred.-SS-3s say-3p-3s-rem.p

"Age h-u sab i j-i-me-ig due
3p come-pred. food this eat-pred.-SS-3p dance

bele-ig-a le," ad-en.
go-3p-imp. PM 3p-3s-rem.p

[10:13]

'That woman cooked the food and said to them, "Come and eat this food and then you may go to the dance."'

(13) Ale dana eu ma-do-sin, "Ja nu
3d man that say-3s-3d-rem.p fire for

bo-w-a o," do-sin.
come up-1d-tod.p VO 3s-3d-rem.p

Odo-co-bil, "Eeta man-i jo-was-an?" al-en.
do-DS-3d what cook-pred. eat-2d-fut. 3d-3s-rem.p

"Gee jacas man-i je-w-an." do-sin.
no tobacco cook-pred. eat-1d-fut. 3s-3d-rem.p

"Jacas ite-si-a," al-en.
tobacco 1s-2d-imp. 3d-3s-rem.p

"Gee jacas tutuc," do-sin.
no tobacco short 3s-3d-rem.p

"Aa ite-si-a mo," al-en.
1s-2d-imp. SU 3d-3s-rem.p

[18:26-31]

'They(2) told that man, "We have come for firewood." Then he said to them, "What will you cook?" "No we want to cook tobacco," they said to him. "Give me some tobacco," he said to them. "No there is not enough," they told him. "Ah please give me some," he pleaded.'

Direct quotes can be embedded and at least one level of embedding has been observed in text. Other levels are possible. With such embedding usually only the speech verb on the top-most level is copied to the postquote position or alternatively the copied verb suffixation can be combined to form a "composite" copy of the speech verbs as in (16) below.

(14) Ma-do-sin, "Cois, "Aa," ag-a," do-sin.
say-3s-3d-rem.p OK 2s-imp. 3s-3d-rem.p

[18:61]

'They said to him, "OK say "Ah"."'

(15) Uqa qa-qaj-i bile-i ma-t-en,
3s sim.-cry-pred. be-dur.-3s-SS say-1s-3s-rem.p

"Cesel-i nu-i-me-g dana caja ca
return-pred. go-pred.-SS-2s man woman add

ma-ad-ag-a, "Haun falic-du-me-ig age Christian
say-3p-2s-imp. again turn-3s-SS-2p 2p

kobol haun u-me-ig Cuha fi-fi Jesus na je
custom again get-SS-2p Sunday it.- see of talk

to-du odo-ig-a," t-en.
follow-3s do-2p-imp. 1s-3s-rem.p

[9:18]

'As she cried she said to me, "Go back and tell the people, "You must turn again to the Christian way and obey the words of Jesus as you worship.""'

(16) John mad-en, "Naus uqa ma-t-en, "Liwa uqa
say-3s-rem.p 3s say-1s-3s-rem.p 3s

ma-t-en, "Hina John je falic-doc cabi na
say-1s-3s-rem.p 2s talk turn-NOM/ADJ work with

cesul-d-og-a," te-sin.
help-3s-2s-imp. 1s-3d-rem.p

'John said, "Naus said to me, "Liwa said to me, "You help John with the translation work.""'

(2) Indirect speech.

As stated above indirect speech is rare but it does occur. In text indirect speech is marked only by verbal suffixation following the indirect quote. There is no speech verb. Since the indirect quote can be expressed from either the point of view of the reporter or from the point of view of the reportee (i.e. the one whose speech is being reported)

it can sometimes be difficult to decide whether a particular piece of text is an indirect or direct quote and it seems that the presence or absence of a speech verb is critical in distinguishing direct speech from indirect speech. Some examples are given below of indirect speech recorded in text material (see also indirect questions and commands 1.1.2.2. 3-5.).

- (17) Fufu h-u-me-i mala uqa na dodo heewe-ce-b
wind come-pred.-SS-3s chicken 3s of tail hold-DS-3s
kom i kom i kom i kom i kom i en.
3s-rem.p

[4:4]

'The wind came and took hold of the chicken's tail and made it say/go kom i kom i kom i kom i kom i.'

- (18) Odo-co-b cudumac uqa mala ma-do-n,
do-DS-3s wallaby 3s chicken say-3s-3s-rem.p

"Hina na dodo eu me bahic kom i kom i ena.
2s of tail that good emph. 3s-pres.

Ija hohu-ni eu qee kom i kom i el,"
1s tail-1s-pos. that not neg.p-3s

odi ma-do-n.¹
like say-3s-3s-rem.p

[4:6]

'Then the wallaby said to the chicken, "Your tail is very good the way it says kom i kom i. My tail doesn't say kom i kom i."'

- (19) Ege 24 January jobon cul-du-me-b bel-ec nu
1p village leave-3s-SS-1p go-inf. for
en.
3s-rem.p

[26:5]

'He said we would leave the village on the 24th of January.'

- (20) Mun eu ana tawe-i-a o ana dec buic
banana that where stand-3s-tod.p or where from ripe
ne-i-a i-me-si me-mege-si
come down-3s-tod.p pred.-SS-3d sim.-search-3d-SS

me-mege-si te-sin.
sim.-search-3d-SS go up-3d-rem.p

[17:6]

'They wondered where that banana tree and where the ripe fruit had come down from as they went up searching and searching.'

- (21) Qa gau-gau e-ce-b no-n.
dog DS-3s go down-3s-rem.p

[18:59]

'The dog said gau-gau and it fell down.'

- (22) Uqa ma-do-sin, "Cois "Aa" ag-a," do-sin.
 3s say-3s-3d-rem.p OK 2s-imp. 3s-3d-rem.p

Aa e-ce-b meen ja na mane-sin eu
 DS-3s stone fire of roast-3d-rem.p that

hele-sin.
 throw-3d-rem.p

[18:61-62]

'They(2) told him, "Say "Ah" ". He said "Ah" and they threw down the stones they had cooked in the fire.'

- (23) Mel ono nij-i-me-ig, Eh hina busu-ag-a?
 boy there lie-pred.-SS-3p 2s pass wind-2s-tod.p

Hina busu-ag-a? i-me-ig mel oso casac
 2s pass wind-2s-tod.p pred.-SS-3p boy indef. first

caj-i jobon nu-en.
 arise-pred. village go-3s-rem.p

[19:47]

'The boys lay there and said, 'Did you pass wind? Did you pass wind?' and one got up first and went to the village.'

- (24) Qee nu haun maha gemo i sec o eeta nu
 not for again land middle this way or what for

cain o hamol dih nij-ig-a e-ce-bil
 don't or room just lie-1s-tod.p DS-3p

ma-ade-em, "Jo bagac teg-i-me-ig
 say-3p-1s-rem.p house leaf pull-pred.-SS-2p

eh-i h-u-me-ig weg-i-me-ig
 take-pred. come-pred.-SS-2p weave-pred.-SS-2p

isin-du-te-ce-bil hamol l-i nij-ig-ina."
 repair-3s-1s-DS-2p room go-pred. lie-1s-pres.

[21:58]

'They said again I shouldn't go outside and don't go outside, just stay in the room so I told them, "You pull some leaves for the house, bring them and weave them and repair it for me and then I will go and stay inside."

The above examples illustrate how native speakers express indirect speech in unelicited text however, when questioned as to how indirect speech should be expressed in Amele, native speakers described a different, fuller, form. In this form the indirect quote sentence is marked by a nominalizing postclitic -ec and the indirect quote is then followed by a speech verb. No speech verb precedes the indirect quote and in this respect the indirect quote form differs from the normal direct quote where a speech verb precedes the direct quote. As mentioned previously the indirect quote can be expressed either from the point of view of the reporter as in (25) or the reportee as in (26). There is no problem with ambiguity with these sentences for Amele speakers. In both cases the subject of the embedded

reported quote clause must always refer to the reportee and cannot refer to the reporter.

- (25) Uqa uqadec jobon na h-ugi-an ec
3s tomorrow village to come-3s-fut. NOM

ma-t-en.

say-1s-3s-rem.p

'He told me he would come to the village tomorrow.'

- (26) Uqa uqadec jobon na h-ug-en ec
3s tomorrow village to come-1s-fut. NOM

ma-t-en.

say-1s-3s-rem.p

'He told me he would come to the village tomorrow.'

The full form of indirect speech can be optionally abbreviated in which case the clitic -ec and the verb stem of the quote verb is omitted. cf. (27) and (28) below.

- (27) Ija sab j-ag-a ec ma-te-i-a.
1s food eat-2s-imp. NOM say-1s-3s-tod.p

- (28) Ija sab j-ag-a te-i-a.
1s food eat-2s-imp. 1s-3s-tod.p

'He told me to eat the food.'

Indirect quotes can also be embedded.

- (29) Naus ija Duwe cabi haun wele cehe-i-a ec
1s garden new already plant-3s-tod.p NOM

mad-en ec ma-t-en.

say-3s-rem.p NOM say-1s-3s-rem.p

'Naus told me that Duwe had said she had already planted her new garden.'

It should be noted however that while the above is grammatical a less clumsy way of expressing this would be:

Naus ija mateia Duwe cabi haun wele ceheia ec maden.

1.1.1.2. Interrogative sentences.

There are three basic types of interrogative sentences: yes-no questions (see 1.1.1.2.1.), question word questions (see 1.1.1.2.2.) and alternative questions (see 1.1.1.2.1.3.). All question types are marked by the morphology. The basic intonation pattern is the same as for the declarative sentence (see 3.3.4.1.).

1.1.1.2.1. Yes-no questions.

A distinction can be made between neutral yes-no questions, where the speaker is not predisposed to expect an affirmative or negative response to his question, and leading yes-no questions, where the speaker expects an affirmative response to his question.

1.1.1.2.1.1. Neutral yes-no questions.

The neutral yes-no interrogative sentence, where either a 'yes' or a 'no' response can be expected, expresses the positive and negative propositions as alternatives and normally the positive proposition is expressed first. The neutral yes-no question is marked firstly by the interrogative mood particle *fo* in sentence final position followed by either just the negative particle *qee* and a further interrogative mood particle *fo* or, optionally, if the predicate is verbless, a negation of the positive proposition followed by the interrogative mood particle. Also there is a rising, nonfinal intonation pattern on the first interrogative particle and a falling, final intonation pattern on the final interrogative particle (see also 3.3.4.1.). The structure of the neutral question is as diagrammed in [1].

[1]

$$S_1 [\dots] \text{ fo } qee (S_2 [\dots]) \text{ fo}$$

(30)

A: $\overbrace{Qila \quad Madang \quad nu-eg-an} \quad \overbrace{fo \quad qee \quad fo}^{\vee}$
 today go-2s-fut. QU not QU
 'Are you going to Madang today or not?'

B: *Qee o. Ija qee nu-ig-aun.*
 no is not go-1s-neg.f
 'No, I will not go.'

(31)

A: $\overbrace{Sab \quad i \quad me} \quad \overbrace{fo \quad qee \quad me} \quad \overbrace{qee \quad fo}^{\vee}$
 food this good QU not good not QU
 'Is this food good or not?'

B: *Ao. Sab i me.*
 yes food this good
 'Yes, this is good food.'

The neutral yes-no interrogative sentence can also function as a rhetorical question as in (32) below.

(32) *Anut binan cois sul-ec nu fo qee cain fo?*
 God name OK lift up-inf. for QU not don't QU

[9:28]

'Should we praise the name of God or not?'

1.1.1.2.1.2. Leading yes-no questions.

Leading yes-no question sentences are of two kinds. One expects an affirmative response and the other expects a negative response.

(1) Affirmative leading yes-no question.

The affirmative leading yes-no question expresses the interrogative mood where the speaker expects the hearer to concur with the proposition expressed whether that proposition is positive or negative. The sentence is marked by the interrogative mood particle *fo* in sentence final

position (see also 2.1.3.4.2.). In the case where the affirmative leading yes-no question expresses a negative proposition it is interesting to note that the hearer's concurrence with the proposition is expressed by an affirmative response word (see (35)) and that the hearer's nonconcurrence with the proposition is expressed by a negative response word (see (36)). Thus:

(33)

A: Dana eu f-ag-a fo?
man that see-2s-tod.p QU
'Did you see that man?'

B: Ao, ija f-ig-a.
yes 1s see-1s-tod.p
'Yes, I saw (him).'

(34)

A: Dana eu f-ag-a fo?
man that see-2s-tod.p QU
'Did you see that man?'

B: Qee, ija qee fe-l-em.
no 1s not see-neg.p-1s
'No I didn't see (him).'

(35)

A: Dana eu qee fe-l-em fo?
man that not see-neg.p-2s QU
'Didn't you see that man?'

B: Ao, ija qee fe-l-em.
yes 1s not see-neg.p-1s
'Yes, I didn't see (him).'

(36)

A: Dana eu qee fe-l-em fo?
man that not see-neg.p-2s QU
'Didn't you see that man?'

B: Qee, ija f-ig-a.
no 1s see-1s-tod.p
'No, I saw (him).'

(2) Negative leading yes-no question.

The negative leading yes-no question expresses the dubitative mood where the speaker does not expect the hearer to concur with the proposition expressed whether that proposition is positive or negative. The sentence is marked by the dubitative mood particle *fa* in sentence final position (see also 2.1.3.4.10.).

(37) Ija qila cabi na nu-ig-en fa?
1s now garden to go-1s-fut. DB
'Should I go to the garden now?'

(38) Hina meme-n bil-i-a fa?
2s father-2s-pos. be-3s-tod.p DB
'Is your father there, maybe?'

1.1.1.2.1.3. Alternative yes-no questions.

Questions asking for a choice between alternative propositions are marked in the same way as the neutral leading yes-no question (see 1.1.1.2.1.1.) except that the second alternative must be expressed overtly and the interrogative marker *fo* is optional at the end of the second alternative. Otherwise the marking is the same as for the neutral leading question, i.e. the alternative interrogative conjunction *fo* occurs sentence finally after the first alternative followed by the negative particle *qee*. The alternative can be expressed on any element of the sentence. The second alternative must include the phrase expressing the alternation and the predicate. Other elements than the first alternative are normally deleted in the second alternative sentence. The structure of the alternative yes-no question is diagrammed in [2]. The illustrative sentences exemplify alternation on subject(a), direct object(b), indirect object(c), accompanier(d) temporal(e), locative(f), manner(g), instrument(h), cause(i), ablative(j), directional(k), analogic(l), verb(m) and verbless predicate(n).

[2]

$$S_1 [\dots] \text{ fo qee } S_2 [\dots] (\text{fo})$$

(39)

(a) Cebina-m sab cil-igi-an fo qee
sister-2s-pos. food boil-3s-fut. QU not

ani-n cil-igi-an?
mother-2s-pos. boil-3s-fut.

'Will your sister or your mother cook the food?'

(b) Uqa mala q-ugi-an fo qee ho q-ugi-an?
3s chicken hit-3s-fut. QU not pig hit-3s-fut.

'Will he kill the chicken or the pig?'

(c) Uqa Dege ho ut-en fo qee Aikun ut-en?
3s pig 3s-3s-rem.p QU not 3s-3s-rem.p

'Did he give the pig to Dege or Aikun?'

(d) Uqa Dege ca nu-esi-a fo qee Aikun ca nu-esi-a?
3s with go-3d-tod.p QU not with go-3d-tod.p

'Did he go with Dege or with Aikun?'

(e) Qila Madang nu-eg-an fo qee uqadec nu-eg-an?
today go-2s-fut. QU not tomorrow go-2s-fut.

'Will you go to Madang today or tomorrow?'

(f) Uqa na na bil-igi-an fo qee meen na bil-igi-an?
3s tree on sit-3s-fut. QU not stone on sit-3s-fut.

'Will he sit on the log or on the stone?'

(g) Uqa mahuc ho-i-a fo qee cebit ho-i-a?
3s quickly come-3s-tod.p QU not slowly come-3s-tod.p

'Did he come quickly or slowly?'

- (h) Uqa qa na na qo-i-a fo qee meen na
 3s dog tree with hit-3s-tod.p QU not stone with
 qo-i-a?
 hit-3s-tod.p
'Did he kill the dog with the stick or with the stone.'
- (i) Meme-n nu busal-ag-a fo qee
 father-2s-pos. cause run away-2s-tod.p QU not
 ani-n nu busal-ag-a?
 mother-2s-pos. cause run away-2s-tod.p
'Did you run away because of your father or your mother?'
- (j) Uqa ceheleg dec ho-i-a fo qee cuhulug
 3s up there from come-3s-tod.p QU not down there
 dec ho-i-a?
 from come-3s-tod.p
'Did he come from up there or from down there?'
- (k) Uqa ene i sec no-i-a fo qee ono i
 3s here this way go down-3s-tod.p QU not there this
 sec no-i-a?
 way go down-3s-tod.p
'Did he go down here or down there?'
- (l) Mel eu uqa meme-g we f-ec nu fo qee
 boy that 3s father-3s-pos. like see-inf. for QU not
 uqa ana-g we f-ec nu?
 3s mother-3s-pos. like see-inf. for
'Does that boy look like his father or his mother?'
- (m) Uqa tawe-i-a fo qee bil-i-a?
 3s stand-3s-tod.p QU not sit-3s-tod.p
'Did he stand or did he sit?'
- (n) Sab eu gagadic fo qee bodo-ec?
 food that strong QU not soft-NOM/ADJ
'Is that food strong or soft?'

1.1.1.2.2. Question word questions.

The question words are as follows:

adi/adec	<i>'how/what kind'</i>
ai	<i>'where/which'</i>
ana	<i>'where'</i>
cel	<i>'which (sg)'</i>
ail	<i>'which (pl)'</i>
eeta	<i>'what'</i>
ganic	<i>'how much/manx'</i>

in *'who(sg)'*
 an *'who(pl)'*

cel sain *'when (what time)?'*
 sain ganic *'what time is it?'*

It is apparent that the interrogative element of a number of interrogative words is the vowel 'a'. This can be seen when the interrogative word is compared with its noninterrogative equivalent.

cf. adi *'how'* and edi *'like this'*
 odi *'like that'*

ai *'which'* and i *'this'*
 eu *'that'*
 ou *'that'*

ana *'where'* and ene *'here'*
 ono *'there'*

Within the interrogative word series itself the vowel 'a' also indicates plurality (see also 2.1.2.6.1.).

cf. cel and ail
 in and an

In a question asking for the specification of a location the interrogative ai is used when the location is proximal i.e. within view, and the interrogative ana is used when the location is not proximal i.e. not necessarily within view. The interrogative ganic can be used to question either countable or noncountable quantity.

1.1.1.2.2.1. Elements of the sentence that can be questioned.

1.1.1.2.2.1.1. Constituents of the main clause that can be questioned.

Any constituent of the main clause can be questioned. The subject(a), direct object(b), indirect object(c), locative-proximal(d), locative-distal(e), manner(f) and quote(g) constituents can be questioned directly as in the following examples:

(40)

(a) In ho-na?
 who come-3s-pres.
 'who is coming?'

Eeta nij-i-a?
 what lie-3s-tod.p
 'what is that?'

(b) In f-ag-a?
 who see-2s-tod.p
 'whom did you see?'

- Eeta f-ag-a?
what see-2s-tod.p
'What did you see?'
- (c) Sab in ut-ag-a?
food who 3s-2s-tod.p
'To whom did you give food?'
- (d) Ija na jool ai m-ag-a?
1s of bag where put-2s-tod.p
'Where did you put my string bag?'
- (e) Jobon eu ana nij-i-a?
village that where lie-3s-tod.p
'Where is that village?'
- (f) Dana eu adi ho-i-a?
man that how come-3s-tod.p
'How did that man come?'
- (g) Eeta ag-a?
what 2s-tod.p
'What did you say?'

The object of the postposition can be questioned in the postpositional phrases functioning as accompanier(h), locative(i), instrument(j), circumstance(k), cause(l), source(m), direction (n) and analogic(o).

- (h) In ca ho-si-a?
who with come-2d-tod.p
'With whom did you come?'
- (i) Wa eeta na m-ag-a?
water what in put-2s-tod.p
'In what did you put the water?'
- (j) Qa eeta na q-og-a?
dog what with hit-2s-tod.p
'With what did you hit the dog?'
- (k) Boh eu eeta ca?
plate that what have
'What is that plate for?'
'What goes with that plate?'
- (l) Age cel/eeta nu qo-ig-a?
2p which/what cause hit-2p-tod.p
'Why do you fight?'
- In nu mad-ag-ana?
who cause say-2s-pres.
'About whom are you talking?'
- (m) Dana eu ana dec ho-i-a?
man that where from come-3s-tod.p
'From where has that man come?'
- (n) Dana eu ai sec nu-i-a?
man that which way go-3s-tod.p

'Which way did that man go?'

- (o) Uqa f-ec nu in we?
3s see-inf. for who like
'Whom does he look like?'

The temporal constituent is questioned by an interrogative phrase(p).

- (p) Uqa cel sain h-ugi-an?
3s which time come-3s-fut.
'When will he come?'

The possessor can be questioned directly in the inalienably possessed NP(q) and the possessor can be questioned in the alienably possessed NP when it functions as the object of the postposition(r).

- (q) In ana-g ho-i-a?
who mother-3s-pos. come-3s-tod.p
'Whose mother is coming?'

- (r) In na mala heje o-i-a?
who of chicken illicit take-3s-tod.p
'Whose chicken did he steal?'

The verb can be questioned by an interrogative word and a dummy verb(s).

- (s) Eeta od-og-ona?
what do-2s-pres.
'What are you doing?'

In equational sentences only the predicate can be questioned.

(41)

- A: Dana eu in?
man that who
'That man is whom?'

- B: Dana eu ija wal-i
man that is brother-1s-pos.
'That man is my brother.'

cf.

- (42) *In dana eu?
who man that
'Who is that man?'

(43)

- A: Eu eeta?
that what
'That is what?'

- B: Eu cololo.
that bamboo flute
'That is a bamboo flute.'

cf.

- (44) *Eeta eu?
 what that
"What is that?"

In verbal copular sentences any element except the verb can be questioned.

- (45) In bil-i-a?
 who be-3s-tod.p
"Who is there?"
- (46) Uqa Jelso cel sain bil-en?
 3s which time be-3s-rem.p
"When was he in Jelso?"
- (47) Ija na signin ana nij-i-a?
 1s of knife where lie-3s-tod.p
"Where is my knife?"
- (48) Ani-n adi bil-i-a?
 mother-2s-pos. how be-3s-tod.p
"How is your mother?"
- (49) Dana eu in ca tawe-si-na?
 man that who with stand-3d-rem.p
"Who is that man with?"
- (50) Dana eu cel nu tawe-i-a?
 man that what cause stand-3s-tod.p
"Why is that man there?"
- (51) Dana eu eeta bilo-lo-i?
 man that what be-hab.p-3s
"What did that man used to be?"

1.1.1.2.2.1.2. Constituents of subordinate clauses that can be questioned.

It is possible to question any constituent in the subordinate clause with a question word either as a non-echo question or as an echo question. When questioned as a non-echo question the questioned element is moved to the preverbal focus position normally occupied by the direct object. When questioned as an echo question the questioned element remains in its normal clausal position.

Manner clause: non-echo question.

- (52) Dana age in ma-ad-en odi to-du od-oin?
 man 3p who say-3p-3s-rem.p like follow-3s do-3p-rem.p
"Who told the men to do as they did?"

Manner clause: echo question.

- (53) In dana age ma-ad-en odi to-du od-oin?
 who man 3p say-3p-3s-rem.p like follow-3s do-3p-rem.p
"The men did as who told them?"

Purpose clause: non-echo question.

- (54) Sab in faj-ec nu ho-i-a?
 food who buy-inf. for come-3s-tod.p
'Who came to buy food?'

Purpose clause: echo question.

- (55) In sab faj-ec nu ho-i-a?
 who food buy-inf. for come-3s-tod.p
'Who came to buy food?'

Cause clause: non-echo question.

- (56) Sab in faj-en eu nu ho-i-a?
 food who buy-3s-rem.p that cause come-3s-tod.p
'Who bought food and therefore came?'

Cause clause: echo question.

- (57) In sab faj-en eu nu ho-i-a?
 who food buy-3s-rem.p that cause come-3s-tod.p
'Who bought food and therefore came?'

Condition clause.

Any element can be questioned in the conditional clause but if the subject is questioned in the subordinate clause it cannot be marked as coreferential with the subject of the matrix clause. Similarly if the subject is questioned in the matrix clause the subject of the subordinate clause cannot be marked as coreferential with it. Rather when the subject of either the subordinate conditional clause or the subject of the matrix clause is questioned then the verb in the subordinate clause must be marked for noncoreferential subject following. When the subject of the subordinate clause is questioned then the subordinate clause must be end-shifted to the end of the sentence.

Non-echo question - subject.

- (58) Uqa sab man-i j-igi-an ja in
 3s food roast-pred. eat-3s-fut. fire who
 hude-ce-b fi?
 open-DS-3s CD
'She will cook and eat the food if who lights the fire?'

Echo question - subject.

- (59) Uqa sab man-i j-igi-an in ja
 3s food roast-pred. eat-3s-fut. who fire
 hude-ce-b fi?
 open-DS-3s CD
'She will cook and eat the food if who lights the fire?'

cf.

(60) Lufani eeta hud-i-fe-i sab man-i
 what open-pred.-CD/SS-3s food roast-pred.

j-igi-an?
 eat-3s-fut.

'Lufani will cook food and eat if she opens what?'

Contrafactual clause.

Any element in the contrafactual clause can be questioned. If, however, the subject of the contrafactual clause is questioned then the clause is end-shifted to the end of the sentence.

(61) Uqa sab man-i jo-u-b ja in
 3s food roast-pred. eat-contr.-3s fire who

hudo-u-b mi?
 open-contr.-3s CR

'She would have cooked the food if who had lit the fire?'

Apprehension clause: non-echo question.

(62) Wa na no-co-min ija eeta q-it-i j-ec dain?
 water in go up-DS-1s 1s what hit-1s-pred. eat-inf. CAP
 'What will eat me if I don't get out of the water?'

Apprehension clause: echo question.

(63) Wa na no-co-min eeta ija q-it-i j-ec dain?
 water in go up-DS-1s what 1s hit-1s-pred. eat-inf. CAP
 'I had better get out the water lest what eat me?'

Optative clauses: non-echo question.

(64) Ma in ceh-ag-a do-na?
 taro who plant-2s-imp. 3s-3s-pres.
 'Who wants to plant taro?'

(65) Ceb in j-ec nu qee gale do-na?
 betelnut who eat-inf. for not desire 3s-3s-pres.
 'Who doesn't like to eat betelnut?'

(66) Hina na ceta in j-en do-u-b?
 2s of yam who eat-3s-rem.p 3s-contr.-3s
 'Who would have wanted to have eaten your yams?'

Optative clauses: echo question.

(67) In ma ceh-ag-a do-na?
 who taro plant-2s-imp. 3s-3s-pres.
 'Who wants to plant taro?'

(68) In ceb j-ec nu qee gale do-na?
 who betelnut eat-inf. for not desire 3s-3s-pres.
 'Who doesn't like to eat betelnut?'

- (69) In hina na ceta j-en do-u-b?
 who 2s of yam eat-3s-rem.p 3s-contr.-3s
'Who would have wanted to have eaten your yams?'

Reciprocal clause.

Only the verb in the embedded reciprocal clause can be questioned.

- (70) Age eeta od-udo-co-b od-udo-co-b eig-a?
 3p what do-3s-DS-3s do-3s-DS-3s 3p-tod.p
'They did what to each other?'

Adjective (relative) clause.

Any element of the adjective clause can be questioned with a question word as an echo question including the subject of the adjective clause. It is not possible to produce a non-echo question by moving the questioned element to the preverbal focus position since the relativized NP must occur as the first element in the adjective clause (see 1.1.2.3.3.). cf. (75) below.

(71)

- A: Ahul maha na ton-en eu qala
 coconut ground to fall-3s-rem.p that shoot

be-na.

come up-3s-pres.

'The coconut that fell to the ground is shooting.'

- B: Eeta maha na ton-en eu qala
 what ground to fall-3s-rem.p that shoot

be-na.

come up-3s-pres.

'The what that fell to the ground is shooting?'

(72)

- A: Sigin hina jo bisalu na me-em eu oso
 knife 2s house under at put-2s-rem.p that indef.

on.

take-3s-rem.p

'Someone has taken the knife that you put under the house.'

- B: Eeta ija jo bisalu na me-em eu oso
 what 1s house under at put-1s-rem.p that indef.

on?

take-3s-rem.p

'Someone has taken the what that I put under the house?'

(73)

- A: Ho Dege ut-en eu cal m-en.
 pig 3s-3s-rem.p that dead become-3s-rem.p

'The pig that he gave to Dege has died.'

B: Ho in ut-en eu cal m-en?
 pig who 3s-3s-rem.p that dead become-3s-rem.p
'The pig that he gave to whom has died?'

(74)

A: Mel uqa Madang nu-i-a eu Liwa mela-h.
 boy 3s go-3s-tod.p that son-3s-pos.
'The boy that went to Madang is Liwa's son.'

B: Mel uqa ana nu-i-a eu Liwa mela-h?
 boy 3s where go-3s-tod.p that son-3s-pos.
'The boy that went where is Liwa's son?'

(75) *Ija jo bisalu na eeta me-em eu oso
 1s house under at what put-1s-rem.p that indef.

on?

get-3s-rem.p

**'What that I put under the house someone has taken?'*Noun clauses.

Any element in a noun clause can be questioned as an echo question. This is the only means of questioning a noun clause. (cf. 1.1.2.2. for different types of noun clause.)

(76) In uqa na ho qo-i-a eu me qee?
 who 3s of pig hit-3s-tod.p that good not
'That who killed his pig is not good?'

(77) In uqa na ho qo-i-a eu d-og-a?
 who 3s of pig hit-3s-tod.p that know-2s-tod.p
'You know that who killed his pig?'

(78) In uqa na ho q-oc nu gale he-na?
 who 3s of pig hit-inf. for desire 2s-3s-pres.
'You want who to kill his pig?'

(79) In uqa na ho adi qo-i-a eu d-og-a?
 who 3s of pig how hit-3s-tod.p that know-2s-tod.p
'You know how who killed his pig?'

(80) In uqa na ho qo-i-a fo qee fo eu
 who 3s of pig hit-3s-tod.p QU not QU that

d-ug-a fo?

know-1s-tod.p QU

'Do I know if who killed his pig or not?'

(81) In na od-oc eu fil?
 who of do-NOM/ADJ that different
'Whose way of doing things is different?'

(82) An qo-gi-na f-ag-a?
 who(pl) hit-3p-pres. see-2s-tod.p
'You saw who fighting?'

(83) In nu-en ho-u-b?
 who go-3s-rem.p 2s-contr.-3s
'You would have liked who to have gone?'

1.1.1.2.2.1.3. Constituents of the noun phrase that can be questioned.

There are five types of noun phrase (see 1.2.5.). Each can be questioned as follows:

(1) Postmodified noun phrase.

The postmodified noun phrase consists of either a pronoun, noun, adjective, indefinite article, quantifier or demonstrative adjective alone or a noun, postmodified noun phrase, compound noun phrase or inalienably possessed noun phrase functioning as head with one or more modifiers following. The head element can be questioned and the attributive elements of quality, quantity and determinancy can also be questioned. The elements of quality and quantity are questioned by a question word following the head of the noun phrase while the element of determinancy is questioned by a question word preceding the head of the noun phrase.

(84) In ho-na?
who come-3s-pres.
'Who is coming?'

(85) Eu eeta?
that what
'What is that?'

(86)
A: Ana nu-ugu-na?
where go-2s-pres.
'Where are you going?'

B: Ija Danben nu-igi-na.
is go-1s-pres.
'I am going (to) Danben.'

(87)
A: Ail dana ho-ig-a?
which(pl) man come-3p-tod.p
'Which men came?'

B: Dana eu age ho-ig-a.
man that 3p come-3p-tod.p
'Those men came.'

(88)
A: Cel jo ceh-eg-a?
which house build-2s-tod.p
'Which house did you build?'

B: Jo i ceh-ig-a.
house this build-1s-tod.p
'I built this house.'

(89)
A: Sab eu ad-ec?
food that how-inf.
'What is that food like?'

B: Sab eu me.
 food that good
'That food is good.'

(90) Mala ganic faj-ag-a?
 chicken how many buy-2s-tod.p
'How many chickens did you buy?'

(91) Sab ganic nij-i-a?
 food how much lie-3s-tod.p
'How much food is there?'

(2) Premodified noun phrase.

The premodified noun phrase consists of a noun or noun phrase preceded by a postpositional phrase or a nominalizing clause. Only the attributive premodifying element can be questioned.

(92)
 A: Eu cel boh?
 that which plate
'Which plate is that?'

B: Eu ceb boh.
 that betelnut plate
'That is a betelnut plate/a plate of betelnut.'

(93) *Eu ceb cel/eeta?
 that betelnut which/what

(94)
 A: Eu cel cudun?
 that which place
'What place is that?'

B: Eu cabi gel haun ceh-ec nu cudun.
 that garden new plant-inf. for place
'That is the place to plant the new garden.'

(95)
 A: Eu in na jo?
 that who of house
'That house is whose?'

B: Eu ija na jo.
 that is of house
'That house is mine.'

(3) Compound noun phrase.

The compound noun phrase consists of two juxtaposed nouns or noun phrases. Where there is just two juxtaposed nouns they usually form a composite meaning and only the noun phrase as a whole can be questioned. Otherwise it is possible to question parts of the compound noun phrase as an echo question.

(96)

A: Eu eeta ho-na?
that what come-3s-pres.
'What is that coming?'

B: Eu man wag ho-na.
that bird canoe come-3s-pres.
'That is an aeroplane coming.'

(97)

A: Meb nah ben jo.
kwila post big house
'A big kwila post house.'

B: Eeta nah ben jo?
what post big house
'A big what post house?'

or

B: Meb eeta ben jo?
kwila what big house
'A big kwila what house?'

but not

B: *Meb nah ben eeta?
kwila post big what
'A big kwila post what?'

(4) Duplicated noun phrase.

The duplicated noun phrase consists of a duplicated noun. Only the noun phrase can be questioned.

(98)

A: Uqa adi nu-i-a?
3s how go-3s-tod.p
'How did he go?'

(99) Uqa bic bic nu-i-a.
3s tail tail go-3s-tod.p
'He went backwards (lit: tailwards).'

(5) Inalienably possessed noun phrase.

The inalienably possessed noun phrase consists of an inalienably possessed noun optionally preceded by a noun, noun phrase or postpositional phrase functioning as possessor with an optional free pronoun occurring between the possessor and the possessed noun. Only the possessor can be questioned.

(100)

A: In mela-h ho-na?
who son-3s-pos. come-3s-pres.
'Whose son is coming?'

B: Adeg mela-h ho-na.
son-3s-pos. come-3s-pres.
'Adeg's son is coming.'

but not

- (101)*Adeg cel/eeta/in ho-na?
 which/what/who come-3s-pres.
'Adeg's which/what/who is coming?'

1.1.1.2.2.1.4. Elements of postpositional phrases that can be questioned.

Postpositional phrases consist of a noun, an adjective, a noun phrase, a postpositional phrase or a clause followed by a postposed particle. The particle can be simple or compound. The postpositional phrases expressing location and proximal direction/location are replaced by a question word. In the postpositional phrase expressing origin with the compound postposition eundec the attributive element of the object of the postposition can be questioned. In other cases the object of the postposition can be questioned directly.

(102)

- A: Ana nu-ug-una?
 where go-2s-pres.
'Where are you going?'

- B: Jic ben na nu-ig-ina.
 road big to go-1s-pres.
'I am going to the main road.'

(103)

- A: Jobon eu ana nij-i-a?
 vilage that where lie-3s-tod.p
'Where is that village?'

- B: Jobon eu ono ca nij-i-a.
 vilage that there add lie-3s-tod.p
'That village is a long way away.'

(104)

- A: Ija na sign ai?
 is of knife where
'Where is my knife?'

- B: Hina na sign i hen.
 you of knife this here
'Your knife is here.'

- (105)Aluh ja cel sain na cal-en?
 mountain fire what time at arise-3s-rem.p
'When did the volcano erupt?'

- (106)Man fulul-ec cel na gus-i
 creature flap-NOM/ADJ what with shoot-pred.
 q-og-a?
 hit-2s-tod.p
'With what did you shoot the bird?'

- (107)In na jo mane-i-a?
 who of house burn-3s-tod.p
'Whose house burned down?'

- (108) Naus in ca ho-si-a?
 who with come-3d-tod.p
'With whom did Naus come?'
- (109) Age ma ca ceta ca eeta ca je-gi-na?
 3p taro add yam add what add eat-3p-pres.
'They are eating taro, yam and what?'
- (110) In nu mad-ag-ana?
 who about say-2s-pres.
'About whom are you speaking?'
- (111) Uqa cel/eeta nu q-og-a?
 3s what/what cause hit-2s-tod.p
'Why did you hit him?'
- (112) Dana in dec?
 man who from
'Who is that man (i.e. what is his origin/background)?'
- (113) Dana ana dec?
 man where from
'Where is that man from?'
- (114) Mel eu ai sec busale-i-a?
 boy that which way run away-3s-tod.p
'Which way did that boy run off?'
- (115) Uqa f-ec nu in we?
 3s see-inf. for who like
'Who does he look like?'
- (116) Eu f-ec nu eeta we?
 that see-inf. for what like
'What does that look like?'
- (117) Cel dana eundec?
 which man kind of
'What kind of man is he?'

1.1.1.2.2.1.5. Elements of coordinate structures that can be questioned.

Noun phrases and sentences are the two structures that can be coordinated (see 1.3) and in each case either conjunct can be questioned as an echo question. Any constituent within the conjunct can also be questioned. On questioning elements within the NP see 1.1.1.2.2.1.3. and on questioning elements within the clause see 1.1.1.2.2.1.1.

(118)

A: Dana caja ca in ca due-gi-na?
 man woman add who add dance-3p-pres.

'The men and women and who are dancing?'

B: Dana caja ca mel mel aid ca due-gi-na.
 man woman add boy boy female add dance-3p-pres.

'The men and women and the boys and girls are dancing.'

(119)

A: Dana caja age h-u-me-ig eeta odo-in?
 man woman 3p come-pred.-SS-3p what do-3p-rem.p
'The people came and did what?'

B: Dana caja age h-u-me-ig due due-in.
 man woman 3p come-pred.-SS-3p dance dance-3p-rem.p
'The people came and danced.'

1.1.1.2.2.1.6. Number of sentence constituents that can be questioned.

In theory any number of sentence elements can be questioned at once in the form of an echo question. In practice, however, such sentences hardly ever occur.

(120) Uqa in ca eeta q-ugi-a bil-i ana
 3s who with what hit-3s-rel.f be-pred. where

nue-si-a?
 go-3d-tod.p
'He has gone where to kill what with whom?'

1.1.1.2.2.2. Position of questioned element.

The questioned element in the interrogative sentence occupies the same position as the corresponding element in the declarative sentence if the sentence is an echo question (see 1.1.1.2.3.). If the sentence is a non-echo question (see 1.1.1.2.2.) the questioned element is moved to a position immediately preceding the verb normally occupied by the object NP. In each case the questioned element carries the sentence intonation nucleus. More than one element can only be questioned with an echo question, in which case the questioned element remains in its equivalent declarative position.

(121) Naus Dege ho ut-en. STATEMENT
 pig 3s-3s-rem.p
'Naus gave Dege the pig.'

(122) Naus in ho ut-en? ECHO QUESTION
 who pig 3s-3s-rem.p
'Naus gave who the pig?'

(123) Naus ho in ut-en? NONECHO QUESTION
 pig who 3s-3s-rem.p
'Whom did Naus give the pig to?'

(124) Uqa jo na sab cil-en. STATEMENT
 3s house in food boil-3s-rem.p
'She cooked the food in the house.'

(125) Uqa ana sab cil-en? ECHO QUESTION
 3s where food boil-3s-rem.p
'She cooked the food where?'

(126) Uqa sab ana cil-en? NONECHO QUESTION
 3s food where boil-3s-rem.p
'Where did she cook the food?'

B: "Wagol ceh-it-en," ag-a?
 build-1s-3s-rem.p 2s-tod.p
 'You said, "Wagol built it for me."?'

or

B: Wagol ceh-ih-en ec ag-a?
 build-2s-3s-rem.p NOM/ADJ 2s-tod.p
 'You said Wagol built it for you?'

A: Ese.
 yes
 'Yes.'

[21:39-40]

(135)

A: Ija Danben nu-ig-en.
 1s go-1s-fut.
 'I will go to Danben.'

B: Hina Danben nu-eg-an fo?
 2s go-2s-fut. QU
 'You are going to Danben?'

A: Ese.
 yes
 'Yes.'

1.1.1.2.3.2. Question-word echo-questions.

In the question-word echo-question the questioned element is replaced by a question word or phrase. The response to the echo-question is normally a single word or phrase if the original utterance was a statement. If the original utterance was a question then the answer is a full repetition of the original question with emphatic stress on the element that constitutes the answer.

(136)

A: Kefe uqa Dege ho ute-i-a.
 3s pig 3s-3s-tod.p
 'Kefe gave Dege a pig.'

B: Kefe uqa in ho ute-i-a?
 3s who pig 3s-3s-tod.p
 'Kefe gave who a pig?'

A: Dege.
 'Dege.'

(137)

A: Cel nu Naus qa qo-na?
 what for dog hit-3s-pres.
 'Why is Naus hitting the dog?'

B: Cel nu in qa qo-na?
 what for who dog hit-3s-pres.
 'Why is who hitting the dog?'

A: Cel nu Naus qa qo-na?
 what for dog hit-3s-pres.
'Why is Naus hitting the dog?'

1.1.1.2.3.3-4. Question echo-questions.

Yes-no echo-questions can occur but question-word echo-questions do not usually occur.

(138)

A: Hina Madang nu-eg-an fo?
 2s go-3s-fut. QU
'Will you go to Madang?'

B: Ija Madang nu-ig-en fo? Ija qee d-ugi-na.
 1s go-1s-fut QU 1s not know-1s-pres.
'Will I go to Madang? I don't know.'

1.1.1.2.3.5-7. Elements of the sentence that can be subject to echo-questioning.

All elements of the sentence can be subject to echo-questioning and in theory any number of elements can be questioned simultaneously but it is rare to question more than one or two elements in the same sentence. There is no restriction on which elements can be questioned simultaneously. For examples of how different elements are questioned see 1.1.1.2.2.

1.1.1.2.4. Answers.

1.1.1.2.4.1. Answers marked as a distinct speech act.

The constituent which provides the answer to the question, whether yes-no question, question-word question, alternative question or echo-question is marked by the sentence intonation nucleus bearing increased intensity on its stressed syllable. Answers to questions are also further marked by the syntax, see below.

1.1.1.2.4.1.1. Answers to yes-no questions.

An answer to a yes-no question can also be marked as a distinct speech act by a response particle which agrees or disagrees with the truth of the proposition contained in the question or by a statement of inability to assess the truth or falsity of the statement. It should also be noted in this respect that a speaker will respond to a negative question with an affirmative response if he agrees with the negative proposition (see (140) below).

(139)

A: Cum witic dolo-g f-ag-an fo?
 yesterday night ghost-3s-pos. see-2s-yest.p QU
'Did you see a ghost last night?'

B: Ao. (Ija dolo-g f-ig-an.)
 yes 1s ghost-3s-pos. see-1s-yest.p

'Yes. (I saw a ghost.)'

or

B: Qee. Ija dolo-g qee fe-l-em.
no is ghost-3s-pos. not see-neg.p-1s
'No. I didn't see a ghost.'

or

B: Ija dolo-g f-ig-an fo qee fo?
is ghost-3s-pos. see-1s-yest.p QU not QU

Ija qee d-ugi-na.

is not know-1s-pres.

'Did I see a ghost last night or not, I don't know.'

(140)

A: Cum witic dolo-g qee fe-l-em fo?
yesterday night ghost-3s-pos. not see-neg.p-2s QU
'Didn't you see a ghost last night?'

B: Ao. (Ija dolo-g qee fe-l-em.)
yes is ghost-3s-pos. not see-neg.p-1s
'Yes. (I didn't see a ghost.)'

1.1.1.2.4.1.2. Answers to question-word questions.

The answer to a question-word question is also marked as a distinct speech act by the fact that the focus of the answer to the question-word must occupy the same preverbal position as the question-word question (see 1.1.1.2.2.2.). The element constituting the answer also carries the sentence intonation nucleus.

(141)

A: Hina Madang in ca nue-si-a?
2s who with go-2d-tod.p
'With whom did you go to Madang?'

B: Ija Madang wal-i ca nu-ow-a.
is brother-1s-pos. with go-1d-tod.p
'I went to Madang with my brother.'

1.1.1.2.4.1.3. Answers to echo-questions.

The answers to echo-questions are only marked by the sentence intonation as distinct speech acts. There is no independent syntactic marking (see 1.1.1.2.3.2.).

1.1.1.2.4.2. Answers in the form of incomplete sentences.

1.1.1.2.4.2.1. Incomplete sentences as answers to yes-no questions.

Answers to yes-no questions can be a one word response such as ao, ese, cm cm 'yes' or qee 'no' constituting an incomplete sentence. With a negative response denying the proposition the speaker can give a reply correcting the focus of the question which can be an incomplete sentence.

(142)

A: Naus uqa dodoc na ho qo-i-a fo?
 3s self of pig hit-3s-tod.p QU
'Did Naus kill his own pig?'

B: Qee. Walia-g na qo-i-a.
 no brother-3s-pos. of hit-3s-tod.p
'No. He killed his brother's.'

1.1.1.2.4.2.2. Incomplete sentences as answers to question-word questions.

In the case of question-word questions an answer (unless a statement of inability to give a conclusive answer) must minimally contain the element questioned and may or may not contain the verbal element and other constituents.

(143)

A: Eeta gus-i q-og-a?
 what shoot-pred. hit-2s-tod.p
'What did you shoot?'

B: Man fulul-ec (gus-i q-ug-a).
 creature flap-NOM/ADJ shoot-pred. hit-1s-tod.p
'A bird. / I shot a bird.'

1.1.1.3. Imperative sentences.

Imperative sentences can be positive (command) or negative (prohibition). In each case the sentence is marked as imperative by special suffixation of the verbal element or of the final verbal element in a coordinated verb series. In the latter case the imperative mood encompasses all the verbs in the sentence. The negative imperative sentence contains the prohibitive particle cain 'don't' preceding the verb as part of the verb phrase and the verb is also marked for negative future tense. The imperative mood, like the debitive, hortatory and prescriptive moods (see 2.1.3.4.8, 12 and 19), indicates a necessity for a situation to take place. The imperative mood prescribes a situation relating to the immediate time and place and the speaker requires immediate compliance. The degree of compulsion is high.

1.1.1.3.1. Positive imperative forms.

The positive imperative verb takes the same form as the today's past tense (see 2.1.3.2.) but only the second person singular, dual and plural forms apply. The subject must always be expressed in the verb and an optional pronoun or nominal can also occur.

(Hina) h-og-a! *'Come!'*
 2s come-2s-imp.

(Ale) ho-si-a! *'Come!'*
 2d come-2d-imp.

(Age) ho-ig-a! *'Come!'*
 2p come-2p-imp.

(Hina) f-ag-a! 'Look!'
2s see-2s-imp.

(Ale) fe-si-a! 'Look!'
2d see-2d-imp.

(Age) fe-ig-a! 'Look!'
2p see-2p-imp.

(144) Sapol u-me-g ono l-i-me-g na eu
axe take-pred.-SS-2s there go-pres.-SS-2s tree that

qet-ag-a!
cut-2s-imp.
'Take the axe and go over there and cut down that tree!'

The imperative verb also occurs as an embedded clause in the desiderative verb (optative-impulsive mood (see 2.1.3.4.6.)).

(145) Ija nu-ug-a te-na.
1s go-2s-imp. 1s-3s-pres.
'I want to go.'

1.1.1.3.1.1. Imperative person-number combinations.

The imperative mood is only expressed in the second person, which can be singular, dual or plural. Necessary actions can be expressed in other persons by:

(1) The debitive mood which can be expressed in the first, second or third person (see also 2.1.3.4.8.).

(146) Ija nu-ec bahic nu-ig-en.
1s go-inf. emph. go-1s-fut.
'I must go.'

(147) Hina nu-ec bahic nu-eg-an.
2s go-inf. emph. go-2s-fut.
'You must go.'

(148) Uqa nu-ec bahic nu-igi-an.
3s go-inf. emph. go-3s-fut.
'He must go.'

(2) The hortatory mood which can be expressed only in the first person plural (see also 2.1.3.4.11.).

(149) Bel-ec nu.
go(pl)-inf. HO
'Let us go.'

1.1.1.3.1.2. Different degrees of imperative.

The degree of peremptoriness is indicated by the use or non-use of the peremptory intonation contour (see 3.3.4.3.).

- (150) Hina ma-d-og-a!
 2s say-3s-2s-imp.
 'You tell him!'

1.1.1.3.2. Negative imperative.

The negative imperative seeks to prohibit a situation from occurring. As with the positive imperative, the situation relates to the immediate time and place, the speaker requires immediate compliance, and the degree of compulsion is high. The verb is marked with the negative future tense forms and is preceded by the prohibitive particle cain 'don't'. As with the positive imperative the person can only be second. In a series of coordinated serial verbs the scope of the prohibition is governed by the placement of the prohibitive particle. All verbs following the prohibitive particle are within the scope of the prohibition.

Cain nu-ag-aun! 'Don't go!'
 don't go-2s-neg.f

Cain nu-owas-in! 'Don't go!'
 don't go-2d-neg.f

Cain nu-ow-ain! 'Don't go!'
 don't go-2p-neg.f

- (151) Madang nu-i-me-g mala haun cain faj-ag-aun.
 go-pred.-SS-2s chicken more don't buy-2s-neg.f
 'Go to Madang and don't buy any more chickens.'

- (152) Madang cain nu-i-me-g mala haun faj-ag-aun.
 don't go-pred.-SS-2s chicken more buy-2s-neg.f
 'Don't go to Madang and buy any more chickens.'

1.1.1.3.2.1. Negative imperative person-number combinations.

The negative imperative mood is only expressed in the second person, which can be singular, dual or plural. Necessary actions can be expressed in other persons by:

- (1) The debitive mood which can be expressed in the first, second or third person (see also 2.1.3.4.8.).

- (153) Ija qee bahic nu-ig-en.
 1s not emph. go-1s-fut.
 'I must not go.'

- (154) Hina qee bahic nu-eg-an.
 2s not emph. go-2s-fut.
 'You must not go.'

- (155) Uqa qee bahic nu-igi-an.
 3s not emph. go-3s-fut.
 'He must not go.'

(2) The hortatory mood which can be expressed only in the first person plural (see also 2.1.3.4.11.).

(156) Qee bel-ec nu.
not go(pl)-inf. H0
'Let us not go.'

1.1.1.3.2.2. Different degrees of negative imperative.

The degree of peremptoriness can be indicated either by the use or non-use of the peremptory intonation contour (see 3.3.4.3.) or by use of the certain apprehensive mood (see 2.1.3.4.17).

(157) Wa na cain n-ug-aun.
water in don't go down-2s-neg.f

Waga q-it-i j-ec dain.
crocodile eat-1s-pred. eat-inf. CAP
'Don't go down into the river or else the crocodile will eat you.'

1.1.1.4. Other sentence types.

Other sentence types are marked by postposed sentence particles or special verbal suffixation or both. The sentence types with postposed particles are described under mood (see 2.1.3.4.) and these are:

(1) Conditional mood.

The conditional mood is marked with the postposed sentence particle *fi*.

(2) Supplicative mood.

The supplicative mood is marked with the postposed sentence particle *mo*.

(3) Permissive mood.

The permissive mood is marked with the postposed sentence particle *le*.

(4) Emphatic mood.

The emphatic mood is marked with the postposed sentence particle *om/ijom*.

(5) Dubitive mood.

The dubitive mood is marked with the postposed sentence particle *fa*.

(6) Hortatory mood.

The hortatory mood is marked with the postposed sentence particle *nu*. The verb must also be in the infinitive form.

(7) Certain apprehensive mood.

The certain apprehensive mood is marked with the postposed sentence particle *dain*. The verb must be marked either for the infinitive form or for the negative future form with no preverbal negative particle.

(8) Probable apprehensive mood.

The probable apprehensive mood is marked with the postposed sentence particle *do*.

(9) Habitual mood.

The habitual mood is marked with the postposed sentence particle *nu*. The verb must be marked for present tense. This mood only applies to present continuous time and contrasts with the habitual past tense which is marked by verbal suffixation.

(10) Contrafactual mood.

The contrafactual mood is marked with the sentence postposed particle *mi*.

(11) Regretful mood.

The regretful mood is marked with the postposed sentence particle *da*.

(12) Vocative mood.

The vocative mood is marked by the postposed sentence particles *o* or *e*.

The sentence types with special verbal markings are:

(1) Optative-impulsive mood.

The optative-impulsive(desiderative) mood is marked by (i) special verbal suffixation which must always be third person singular subject, and (ii) an embedded imperative clause.

(2) Optative-habitual mood.

The optative-habitual(habitual desiderative) mood is marked by (i) special verbal suffixation which must always be third person singular subject, and (ii) an embedded postpositional phrase with an infinitive verb.

(3) Optative-contrafactual mood.

The optative-contrafactual mood is marked by (i) special verbal suffixation which must always be third person singular subject and also contrafactual mood, and (ii) an embedded finite clause.

(4) Debitive mood.

The debitive mood is marked by a special adverbial phrase which contains the emphasized infinitive form of the main verb.

(5) Prescriptive mood.

The prescriptive mood is marked by contrafactual mood suffixation on the verb.

(6) Contrafactual mood.

The contrafactual mood is marked by contrafactual mood suffixation on the verb.

1.1.1.5. Sentence types regularly used in functions other than their normal ones.

A medial simultaneous action verb can be used as a final verb to express a polite command or request.

(158) Ma-a1-en, "B-i bi-bile-bil,"
say-3d-3s-rem.p come up-pred. sim.-sit-2d-DS

a1-en.
3d-3s-rem.p

[17:8]

'He said to them(2), "Come up and sit with me."'

A speaker will sometimes end a sentence with a medial verb form implying that there is more to follow.

(159) Ija nu-i f-i-m-ig.
1s go-pred. see-pred.-SS-1s
'I will go and see.'
(implying that he will come back to report his finding)

1.1.2. Subordination.

There are two kinds of medial clause in Amele - those that have subordinate medial verbs and those that have coordinate medial verbs. The distinction between these two types of clause lies in (i) their structure within the sentence, (ii) the possibility of tense/mood desinence on the verb, (iii) the scope of negation across clauses and (iv) subject NP coreference by the switch-reference system. A subordinated clause is embedded within another clause having the structure $_{\text{S}}[_{\text{S}}[_{\text{S}}[]...]]...$ and is syntactically on a different level of structure from the superordinate clause in which it is embedded. The subordinate medial verb can therefore be specified for independent tense/mood desinence from the superordinate matrix verb. This contrasts with coordinate medial clauses (see 1.3.1.1.4.) which have the structure $_{\text{S}}[_{\text{S}}[]_{\text{S}}[]_{\text{S}}[]...]$ and are on the same level of syntactic structure as other clauses in the coordinate chain. With coordinate medial verbs tense/mood desinence is dependent on the tense/mood desinence of the final verb in the coordinate clause chain which is usually the final clause in the sentence.³ This is illustrated in (160) below. The subordinated sentence is set off with square brackets. The final verb in this sentence, *meciegina*, is specified for present tense whereas the final verb in the matrix sentence, *jom*, is specified for remote past tense. The particle that negates the verb can also determine what is a subordinate clause and what is a coordinate clause. The scope of a negating particle is limited to the subordinate clause in which it occurs and does not carry over into the superordinate clause whereas the scope of a negating particle applies to all the clauses in a coordinate clause chain which follow the clause in which the negating particle occurs (see 1.4.4-5.). Another factor that determines a subordinate clause from a coordinate clause is how subject NP's are coreferenced by the switch-reference system (see also

2.1.3.6.7.). Where there is a chain of coordinate clauses the switch-reference markers will coreference the immediately following clause as having same or different subject (SS or DS). However where the following clause is subordinated the switch-reference will skip over this clause and coreference the next clause on the same grammatical level. This is illustrated by (160) below. The crucial verb *bimeb* 'we came up-SS' is underlined. This verb does not coreference the subject of the immediately following verb *mudimeig* 'they make' since it belongs to a subordinated sentence, the final verb of which is *meciegina* 'they see'. *bimeb* in fact coreferences the subject of the final verb of the matrix sentence *jom* 'we ate' which happens to be the final verb in the coordinate clause chain of the matrix sentence. Notice that the subordinated sentence also has a coordinate clause chain within itself containing two clauses.

(160) Aluh gemo na b-i-me-b [cudun oso
 mountain middle to come up-pred.-SS-1p place indef.

jain mud-i-me-ig meci-egi-na eu na] ono
 rest make-pred.-SS-3p look-3p-pres. that at there

ege ege na cahineg sab j-om.
 1p 1p of day food eat-1p-rem.p

[27:30]

'We came up to the middle of the mountain and at the place where they stop to look at the view we ate our lunch.'

Subordinate clauses can also be marked by word order, subordinating particles and clitics, and other means (see below).

1.1.2.1. General markers of subordination.

Subordinate clauses can be marked by the following means:

(i) Word order.

A subordinate clause normally precedes the verb of the superordinate clause and any arguments of that verb which are not expressed in the subordinate clause itself. A clause can function as a subordinate clause with no special marking and in this case it must precede the verb in the superordinate clause. A clause can function as the embedded quote clause in the quotation sentence and in this case the quote verb functions as the special marking of the subordinate quote clause. The quote verb normally precedes the quote clause with verbal suffixation copied from the quote verb following the quote (see 1.1.1.1.).

(161) Dana nu ma-h-ig-a ho-na.
 man about say-2s-1s-tod.p come-3s-pres.
'The man I told you about is coming.'

(162) Ija sab faj-ig-en h-ug-a.
 1s food buy-1s-fut. come-1s-tod.p

'I came to buy food.'

(ii) Subordinating particles.

Mood particles, postpositions and demonstratives can all function as subordinating particles.

(1) Mood particles.

The conditional mood particle *fi* 'if' functions as a subordinating particle and follows the subordinated clause. The subordinated conditional clause normally precedes the superordinate clause but it can be end-shifted for special focus. The subordinated clause can contain a nonfinite medial verb or a finite verb. When the verb is a medial verb with same subject following the conditional mood particle is incorporated in the verb suffixation and replaces the same subject suffixation (see 1.1.2.4.2.7. and 2.1.3.4.4.).

The contrafactual mood particle *mi* 'if' functions as a subordinating particle and follows the subordinated clause. The subordinated contrafactual clause normally precedes the superordinate clause but it can be end-shifted for special focus. Where there is a clause final verb in the subordinated clause it must be marked for contrafactual mood (see 1.1.2.4.2.8. and 2.1.3.4.20.).

The certain apprehensive particle *dain* 'lest' can function as a subordinating particle in which case it follows the subordinated clause. In this construction the subordinate apprehensive clause follows the superordinate clause. The verb in the subordinate clause must be either an infinitive verb or marked for negative future tense (see also 1.1.2.4.2.11. and 2.1.3.4.17.). The subordinate clause is in square brackets in the example (163) below.

(163) *Wa na no-co-min [waga q-it-i*
water in go down-DS-1s crocodile hit-1s-pred.

j-ec dain.]

eat-inf. CAP

'If I go down into the river the crocodile might eat me.'

The apparent mood particle *we* 'like' can function as a subordinating particle in the equative adverbial clause. The subordinating particle follows the subordinate clause which precedes the superordinate verb (see 1.1.2.4.2.12.).

(2) Postpositions.

The postposition *na* 'in/at/with' functions as a subordinating particle in the time, place and instrument adverbial clauses (see 1.1.2.4.2.1-3). The postposition *nu* 'cause/for' functions as a subordinating particle in the purpose and cause adverbial clauses (see 1.1.2.4.2.5-6.).

(3) Demonstrative.

The demonstrative *eu* 'that' functions as the optional subordinating conjunction in the relative clause (see 1.1.2.3.).

(iii) Subordinating clitic.

The clitic -ec/-oc functions to subordinate the quote in the indirect quotation sentence (see 1.1.1.1.). The clitic follows the indirect quote clause which precedes the quote verb. The clitic -ec/-oc also functions as a subordinating element in the premodified noun phrase. It nominalizes the clause preceding the head noun (see 1.1.2.2. and 1.2.5.).

(iv) Verbal subordinators.

The verbal element *odi* 'like that' functions as a subordinator in the manner adverbial clause following the subordinated clause (see 1.1.2.4.2.4.). The verbal element *bili* 'to be' functions as a subordinator in the purpose adverbial clause (see 1.1.2.4.2.5.). It functions as an optional element following the subordinated clause.

1.1.2.2. Noun clauses.1.1.2.2.1. General marking of noun clauses and their position relative to their superordinate clause.

Noun clauses can be marked by either (i) the subordinating particles *eu* 'that' or *nu* 'for', (ii) the subordinating clitic -ec/-oc, (iii) appositional position to a noun phrase or (iv) have no special marking.

1.1.2.2.2. Types of noun clause.

(1) A finite *eu* 'that' clause can function as subject of the verbless equative clause or as object of another finite clause.

(164) Naus uqa uqa na ho qo-i-a eu me qee.
 3s 3s of pig hit-3s-tod.p that good not
 'That Naus killed his pig is not good.'

(165) Naus uqa uqa na ho qo-i-a eu ija d-ug-a.
 3s 3s of pig hit-3s-tod.p that is know-1s-tod.p
 'I know that Naus killed his pig.'

(2) An infinitive *nu* 'for' clause can function as subject in the verbless equative clause or as object complement in the impersonal verb clause.

(166) Naus uqa na ho q-oc nu eu me qee.
 3s of pig hit-inf. for that good not
 'For Naus to kill his pig is not good.'

(167) Naus uqa na ho q-oc nu ija gale te-na.
 3s of pig hit-inf. for 1s desire 1s-3s-pres.
 'I want (desire for) Naus to kill his pig.'

(3) A question-word question clause can function as subject or object.

(168) Eeta wale-na eu uqa na sign.
 what search-3s-pres. that 3s of knife

'What he is searching for is his knife.'

(169) Naus uqa na ho adi qo-i-a eu
 3s of pig how hit-3s-tod.p that
 ija d-ug-a.
 1s know-1s-tod.p
'I know how Naus killed his pig.'

(4) An alternative question clause can function as object.

(170) Naus uqa na ho qo-i-a fo qee fo eu
 3s of pig hit-3s-tod.p QU not QU that
 d-og-a fo?
 know-2s-tod.p QU
'Do you know whether Naus killed his pig or not?'

(5) A structure derived from a clause or a sentence by the attachment of the suffix *-ec/-oc* to the stem of the final verb can function as a subject or object nominalized clause in the sentence or as a premodifying element in the noun phrase (see 1.2.5.).

(171) Uqa na od-oc eu fil.
 3s of do-NOM/ADJ that different [22:241]
'His way of doing things is different.'

(172) Ege na jic cob-oc eu sanan mo-m.
 1p of road walk-NOM/ADJ that start put-1p-rem.p [27:6]
'We started on our way.'

(6) A structure derived from a direct quote by the clitic *-ec* postposed to the quote clause can function as direct object of the quote clause in the indirect quote sentence (see 1.1.1.1.).

(7) A finite clause or sentence can function as a noun clause appositive to the subject, direct object or indirect object.

(173) Dana eu oso cum f-ig-an eu uqa
 man that indef. yesterday see-1s-yest.p that 3s
 ho-na.
 come-3s-pres.
'That man, the one I saw yesterday, is coming.'

(8) A finite clause can function as the object of a following verb with no special marking.

(174) Age qo-gi-na f-ig-a.
 3p hit-3p-pres. see-1s-tod.p
'I saw them fighting.'

(9) A finite clause can function as object complement in the impersonal verb constructions expressing desire and contrafactuality (see also 2.1.3.4.6. and 20. and 2.1.3.8.).

(175) Ija Naus nu-ug-a te-na.
 1s go-2s-imp. 1s-3s-pres.
'I want Naus to go.'

(176) Ija Naus nu-en t-ou-b.
 1s go-3s-rem.p 1s-contr.-3s
'I would have liked Naus to have gone.'

1.1.2.2.3-5. Indirect statements, questions and commands.

Indirect statements are described under 1.1.1.1. Indirect questions and commands are structured in a similar way to indirect statements i.e. the clitic -ec is attached to the end of the indirect question or command which then functions as the object of the following quote verb.

(177) Naus uqa ege qila bele-q-an fo ec sisil-t-en.
 3s 1p today go-1p-fut. QU NOM ask-1s-3s-rem.p
'Naus asked whether we would go today.'

(178) Naus uqa in nu-igi-an ec sisil-t-en.
 3s who go-3s-fut. NOM ask-1s-3s-rem.p
'Naus asked who would go.'

(179) Naus ija sab j-ag-a ec ma-t-en.
 1s food eat-2s-imp. NOM say-1s-3s-rem.p

or

(180) Naus ija sab j-ag-a t-en.
 1s food eat-2s-imp. 1s-3s-rem.p
'Naus told me to eat my food.'

1.1.2.2.6. Nonfinite noun clauses.

The nominalized clause functioning in the nu clause in (2) of 1.1.2.2.2. must be in the infinitive form and the derived nominalized clause functioning as a premodifying element in the noun phrase in (5) of 1.1.2.2.2. must also be in the nominalized/infinitive form in which case the categories of subject agreement, and tense/aspect/mood are deleted and replaced by the infinitive or nominalizing clitic -ec/-oc (see also 2.1.3.5.).

1.1.2.3. Adjective clauses (relative clauses).

1.1.2.3.1. Marking of the relative clause.

The adjective or relative clause functions as a subordinate clause within the matrix sentence and as such is marked with a nonfinal intonation pattern (see 3.3.4.1.) and optionally by the subordinating demonstrative conjunction eu 'that' which follows the relative clause. The relative clause is further marked by the fact that the head noun (rel NP) (i.e. the relativized element within the relative clause) is front-shifted and always occurs in the clause initial position regardless of its syntactic relationship within the clause. The relativized head noun also preferably occurs as the first element in the matrix sentence although this is not obligatory. The relative clause can also be marked in the cases where the relativized

element is functioning as temporal, locative or instrument in the matrix sentence. In these cases the postposition na 'at/in/by/with' follows the subordinating conjunction eu. The antecedent noun phrase (ant NP) is normally deleted if it is not required for purposes of disambiguation or emphasis. The ant NP, when present, occurs preceding the matrix superordinate verb in its normal syntactic position. Amele therefore has a replacive relative clause strategy as its primary relativizing strategy.⁴ The structure of the relative clause in relation to the matrix sentence is as diagrammed in [3] below.

[3]

$$S \left[\begin{array}{l} \text{RC} \\ \text{[rel NP Verb(rel)](dem) .. } \left\{ \begin{array}{l} \emptyset \\ \text{ant NP} \end{array} \right\} \text{.. Verb} \end{array} \right]$$

1.1.2.3.2. The distinction between restrictive and nonrestrictive relative clauses.

The nonrestrictive relative clause is syntactically similar to the restrictive relative clause (see 1.1.2.3.1.) but is distinct from the restrictive relative clause in several respects. The nonrestrictive relative clause functions as a nominal clause in apposition to the preceding nominal. As such it is set apart by its own nonfinal intonation pattern (see 3.3.4.1.). Also the nonrestrictive relative clause can be end-shifted to the end of the matrix sentence whereas the restrictive relative clause cannot be. The nonrestrictive clause cannot by itself be a distinct intonational unit or by itself manifest a distinct syntactic function whereas the restrictive clause usually does do both. The nonrestrictive clause can function as appositive to any element in the sentence.

(181) $\overbrace{\text{Kamal, mel mel aid}}^{\checkmark}$ $\overbrace{\text{qo-i-a eu, ho-na.}}^{\checkmark}$
 boy boy female hit-3s-tod.p that come-3s-pres.
 'Kamal, the boy that hit the girl, is coming.'

or

(182) $\overbrace{\text{Kamal ho-na,}}^{\checkmark}$ $\overbrace{\text{mel mel aid qo-i-a eu.}}^{\checkmark}$
 come-3s-pres. boy boy female hit-3s-tod.p that
 'Kamal is coming, the boy that hit the girl.'

1.1.2.3.3-4. The position of the head noun and the treatment of the relativized element.

The Amele relative clause is analyzed as a replacive relative clause strategy. In this strategy the head noun (HN) is replaced by the relative clause (RC) itself, although the RC contains an element corresponding to the HN i.e. the relativized element (rel NP). The replacive strategy is normal and in this case no HN or antecedent noun phrase (ant NP) occurs in the superordinate clause. Occasionally, however, it is necessary to repeat the rel NP in the superordinate clause for the purpose of disambiguating the content of the rel NP in the RC or for

emphasizing the rel NP. In this case the repeated rel NP is functioning as a ant NP. For example in (183) there would be two possible interpretations as to the content of the rel NP. The two possibilities can be resolved by repetition of the rel NP in the superordinate clause as in (184) and (185).

(183) Dana uqa na mala mel heje on
 man 3s of chicken boy illicit take-3s-rem.p
 eu ene bil-i-a.
 that here be-3s-tod.p
'The man whose chicken the boy stole is here.'
'The man's chicken that the boy stole is here.'

(184) rel NP[Dana] uqa na mala mel heje on
 man 3s of chicken boy illicit take-3s-rem.p
 eu ant NP[dana eu] ene bil-i-a.
 that ant NP man that here be-3s-tod.p
'The man whose chicken the boy stole is here.'

or

(185) rel NP[Dana uqa na mala] mel heje on
 man 3s of chicken boy illicit take-3s-rem.p
 eu ant NP[mala eu] ene bil-i-a.
 that ant NP chicken that here be-3s-tod.p
'The man's chicken that the boy stole is here.'

With some ambiguities, however, expression of the antecedent noun phrase does not necessarily resolve the ambiguity and the true meaning of such sentences can only be determined by the situational context.

(186) Mel mel aid qo-i-a eu ho-na.
 boy boy female hit-3s-tod.p that come-3s-pres.
'The boy that hit the girl is coming.'
'The boy that the girl hit is coming.'

Expression of the antecedent noun phrase in this case does not resolve the ambiguity of who hit whom. The object NP can be front-shifted to be the relativized element and there is no way syntactically of telling in this case which NP is subject and which is object.

(187) Mel mel aid qo-i-a eu mel eu
 boy boy female hit-3s-tod.p that boy that
 ho-na.
 come-3s-pres.
'The boy that hit the girl is coming.'
'The boy that the girl hit is coming.'

1.1.2.3.5. Position of the relativized element in the relative clause.

The relativized element is always front-shifted to the beginning of the RC and occurs, preferably, as the first

element in the superordinate sentence. So (188) below is preferred to (189).

(188) Mala mel heje on eu ija f-ig-a.
 chicken boy illicit take-3s-rem.p that 1s see-1s-tod.p
'I saw the chicken that the boy stole.'

(189) Ija mala mel heje on eu f-ig-a.
 1s chicken boy illicit take-3s-rem.p that see-1s-tod.p
'I saw the chicken that the boy stole.'

1.1.2.3.6. Headless relative clauses.

Headless or antecedentless relative clauses do occur. A question word functions as the relativized element which occurs as the first element in the RC. Otherwise the headless RC is syntactically the same as the restrictive RC (see 1.1.2.3.1.).

(190) In oso ono nu-i-na ono gaid bili-na.
 who indef. there go-3s-pres. there always be-3s-pres.
'Whoever goes there always stays there.'

(191) Eeta u j-en gee cal m-en.
 what take-pred. eat-3s-rem.p not dead become-3s-rem.p
 [18:65]
'Whatever he ate he did not die.'

(192) Ana nu-eg-an ija nu-ig-en.
 where go-2s-fut. 1s go-1s-fut.
'Wherever you go I will go.'

1.1.2.3.7. Elements which can be relativized.

All noun phrases in the relative clause can be relativized. There is no restriction on the accessibility hierarchy⁵ as to which grammatical elements can be relativized. The examples below illustrate relativization on subject(a), direct object(b), indirect object(c), accompanier(d), possessor(e), temporal(f), locative(g), instrument(h) and object of comparison(i).

(193)

(a) Mel mala heje on (eu) busal-i
 boy chicken illicit take-3s-rem.p that run away-pred.

nu-i-a.
 go-3s-tod.p
'The boy that stole the chicken has run away.'

(b) Mala mel heje on (eu) ene bil-i-a.
 chicken boy illicit take-3s-rem.p that here be-3s-rem.p
'The chicken that the boy stole is here.'

(c) Mala mel sab ut-en (eu) cal m-en.
 chicken boy food 3s-3s-rem.p that dead become-3s-rem.p
'The chicken that the boy gave food has died.'

(d) Dana Naus ca nue-si-a (eu) ija f-ig-a.
 man with go-3d-tod.p that 1s see-1s-tod.p

'I saw the man that went with Naus.'

- (e) Dana uqa na mala mel heje on
man 3s of chicken boy illicit take-3s-rem.p

(dana) (eu) ho-na.

man that come-3s-pres.

'The man whose chicken the boy stole is coming.'

- (f) Sain cabi meul ceh-ig-en eu na ija ma ca,
time garden new plant-1s-fut. that at is taro add

ceta ca, mun ca, manin ca ceh-ig-en.

yam add banana add bean add plant-1s-fut.

'When I plant my new garden I will plant taro, yam, banana and beans.'

- (g) Jo uqa sab mane-na eu na tone-i-a.
house 3s food cook-3s-pres. that in fall-3s-tod.p
'The house that she cooks food in has fallen down.'

- (h) Sapol haun ija faj-ig-a eu na qatan-ag-a.
axe new 1s buy-1s-tod.p that with split-2s-imp.
'Split it with the new axe that I bought.'

- (i) Dana cecela ija qa wol-du-gi-na eu
man tall is but surpass-3s-1s-pres. that

ho-na.

come-3s-pres.

'The man that I am taller than is coming.'

Possession can be relativized as a nonsubject when it is alienable possession (see (e) above) and as a subject when it is inalienable possession (see (j) below) but not vice versa.

- (j) Wal-i ija na mala heje on
brother-1s-pos. is of chicken illicit get-3s-rem.p

eu ho-na.

that come-3s-pres.

'My brother who stole my chicken is coming.'

With most subordinate clauses there is no restriction on relativizing on a subject or nonsubject element. With the purpose, debitive and optative-impulsive adverbial clauses, however, it is not possible to relativize on the subject.

Manner: relativizing on subject in the subordinate clause.

- (194) Dana Danben bili-gi-na age caja toia ma-ad-en
man be-3p-pres. 3p woman old say-3p-3s-rem.p

odi to-du odo-in.

like follow-3s do-3p-rem.p

'The men that live in Danben did as the old woman told them.'

Manner: relativizing on nonsubject in the subordinate clause.

(195)Caja toia dana age fe-in eu ma-ad-en
 woman old man 3p see-3p-rem.p that say-3p-3s-rem.p

odi to-du odo-in.

like follow-3s do-3p-rem.p

'The men did as the old woman that they saw told them.'

Purpose: relativizing on nonsubject in the subordinate clause.

(196)Ceta Naus ite-i-a eu ceh-ec nu nu-ig-ina.
 yam 1s-3s-tod.p that plant-inf. for go-1s-pres.

'I am going to plant the yams that Naus gave me.'

Cause: relativizing on subject in the subordinate clause.

(197)Dana hatin na niji-na eu sab ca qee eu
 man cave in lie-3s-pres. that food have not that

nu sab faj-ec nu ho-i-a.
 cause food buy-inf. for come-3s-tod.p

'The man that lives in the cave had no food so he came to buy food.'

Cause: relativizing on nonsubject in the subordinate clause.

(198)Ho f-ig-a eu ija na cabi hun-en eu
 pig see-1s-tod.p that 1s of garden dig-3s-rem.p that

nu ija ho eu q-ug-a.
 cause 1s pig that hit-1s-tod.p

'The pig that I saw dug up my garden so I killed that pig.'

Condition: relativizing on subject in the subordinate clause.

(199)Dana hatin niji-na qee ho-co-b fi ija
 man cave lie-3s-pres. not come-DS-3s CD 1s

h-ug-en.
 come-1s-fut.

'If the man that lives in the cave does not come I will come.'

Condition: relativizing on nonsubject in the subordinate clause.

(200)Ho ija f-ig-a eu cesel-i
 pig 1s see-1s-tod.p that return-pred.

h-u-fe-i ija na cabi hun-igi-an.
 come-pred.-CD/SS-3s 1s of garden dig-3s-fut.

'If the pig that I saw comes back it will dig up my garden.'

Contrafactual: relativizing on subject in the subordinate clause.

(201) Dana hatin niji-na ho-u-b mi
man cave lie-3s-pres. come-contr.-3s CR

ija qee ho-u-m.

1s not come-contr.-1s

'If the man that lives in the cave had come I would not have come.'

Contrafactual: relativizing on nonsubject in the subordinate clause.

(202) Ho q-ug-a eu ene ho-u-b mi
pig hit-1s-tod.p that here come-contr.-3s CR

ija na cabi huno-u-b.

1s of garden dig-contr.-3s

'If the pig that I killed had come here it would have dug up my garden.'

Apprehension: relativizing on subject in the subordinate clause.

(203) Ija ohis ono no-co-min dana hatin na niji-na
1s above there go up-DS-1s man cave in lie-3s-pres.

eu o-it-ec dain.

that get-1s-inf. CAP

'If I go up there the man that lives in the cave might get me.'

Apprehension: relativizing on nonsubject in the subordinate clause.

(204) Ija cabi ene cehe-ce-min ceta Naus ite-i-a eu
1s garden here plant-DS-1s yam 1s-3s-tod.p that

hulu-ec dain.

rot-inf. CAP

'If I plant the garden here the yams that Naus gave me might rot.'

Debitive: relativizing on nonsubject in the subordinate clause.

(205) Ana uqa nu-igi-an eu ija nu-ec bahic nu-ig-en.
where 3s go-3s-fut. that 1s go-inf. emph. go-1s-fut.
'Wherever he goes I must go.'

Optative: relativizing on subject in the subordinate clause.

(206) Dana hatin niji-na eu ceb j-ec nu
man cave lie-3s-pres. that betelnut eat-inf. for

qee gale do-na.

not desire 3s-3s-pres.

'The man that lives in the cave does not like to eat betelnut.'

(207) Dana hatin na niji-na eu ho-i-a
 man cave in lie-3s-pres. that come-3s-tod.p

do-u-b.

3s-contr.-3s

'The man that lives in the cave would like to have come.'

Optative: relativizing on nonsubject in the subordinate clause.

(208) Ceta Naus ite-i-a eu ceh-ag-a te-i-a.
 yam 1s-3s-tod.p that plant-2s-imp. 1s-3s-tod.p

'I wanted to plant the yams that Naus gave me.'

(209) Ceb Naus ite-na eu j-ec nu
 betelnut 1s-3s-pres. that eat-inf. for

gale te-na.

desire 1s-3s-pres.

'I like to eat the betelnut that Naus gives me.'

(210) Ceb Naus ite-i-a eu j-ig-a
 betelnut 1s-3s-tod.p that eat-1s-tod.p

to-u-b.

1s-contr.-3s

'I would like to have eaten the betelnut that Naus gave me.'

1.1.2.3.8. Movement of elements in the relative clause other than the relativized element.

No element other than that of which the relativized element is a constituent can be moved (see 1.1.2.3.5.).

1.1.2.3.9. Nonfinite relative clauses.

Relative clauses must always be finite.

1.1.2.4. Adverb clauses.

1.1.2.4.1. General marking of adverb clauses.

Adverbial clauses can be marked by either (i) sentence initial or final position, (ii) the postpositions na or nu, (iii) the demonstrative pronoun eu 'that', (iv) a subordinating conjunction like fi, mi 'if', dain 'lest' or we 'like', (v) a subordinating verbal particle like odi or bili or (vi) an infinitival clause.

1.1.2.4.2. Marking of particular types of adverb clause.

Adverbial clauses of time, place, instrument, manner, purpose, cause, conditionality, contrafactuality, apprehension, degree and desire are described below.

1.1.2.4.2.1. Time.

The time adverbial clause is marked by the postposition na 'at' occurring at the end of the time clause and is basically a relative clause relativizing on the time word sain 'time'. Unlike other relative clauses, however, (see 1.1.2.3.3.) the time word, which functions as the head noun of the RC, normally occurs following the RC immediately preceding the postposition although it can be front-shifted and occur as the first element in the RC.

1.1.2.4.2.1.1. Past time.

(211) Mei Ud uqa Kristen m-en sain eu na
 father 3s Christian become-3s-rem.p time that at

ija ha Kristen me-em.
 1s also Christian become-1s-rem.p

[8:3]

'When my father, Ud, became a Christian I also became a Christian.'

1.1.2.4.2.1.2. Present.

(212) Age sign heewe-ce-b age sain eu na age jacas
 3p knife hold-DS-3s 3p time that at 3p tobacco

qee je-gi-na ceb qee je-gi-na.
 not eat-3p-pres. betelnut not eat-3p-pres.

[20:9]

'When he circumcises them they don't smoke tobacco or chew betelnut.'

1.1.2.4.2.1.3. Future.

(213) Ija cabi meul ceh-ig-en sain eu na ma ca
 1s garden new plant-1s-fut. time that at taro add

ceta ca mun ca manin ca ceh-ig-en.
 yam add banana add bean add plant-1s-fut.

'When I plant my new garden I will plant taro, yam, banana and beans.'

Past in future.

(214) Cam sain cal-igi-an sain eu na ija maha fil
 sun time arise-3s-fut. time that at 1s land different

oso na wele nue-em.
 indef. to already go-1s-rem.p

'When the dry season comes I will have already gone to another place.'

1.1.2.4.2.2. Place.

The place adverbial clause is marked by the postposition na 'at/in' occurring at the end of the place clause and is basically a relative clause relativizing on the nominal element functioning as the place noun.

(215) Aluh gemo na b-i-me-b cudun oso
 mountain middle at come up-pred.-SS-1p place indef.

jain mud-i-me-ig meci-egi-na eu na ono ege
 rest make-pred.-SS-3p see-3p-pres. that at there 1p

jain mi-mi bil-eb ege ege na cahineg sab
 rest sim.-put be-1p-SS 1p 1p of day food

j-om.
 eat-1p-rem.p

[27:30]

'We came up to the middle of the mountain and at the place where they stop to rest and enjoy the view there we rested while we ate our lunch.'

(216) Ege bo-co-mun jo nag oso ig-ein eu
 1p come up-DS-1p house small indef. 1p-3p-rem.p that

na bilo-qo-na.
 in sit-1p-pres.

[23:20]

'We have come up and are staying in the small house that they gave us.'

1.1.2.4.2.3. Instrument.

The adverbial clause of instrument is marked by the postposition *na* 'with' which occurs following the clause relativizing on the instrument nominal.

(217) Sapol haun faje-em eu na na get-ig-a.
 axe new buy-1s-rem.p that with tree cut-1s-tod.p
'I cut down the tree with the new axe I bought.'

1.1.2.4.2.4. Manner.

The manner adverbial clause is marked by the verbal element *odi* 'like that' which occurs at the end of the manner clause.

(218) H-u-me-si caja toia ma-al-en odi
 come-pred.-SS-3d woman old say-3d-3s-rem.p like that

to-du ale casac ale n-i bele-sin.
 follow-3s 3d first 3d come down-pred. go-3d-rem.p

[10:23]

'They(2) did as the old woman had told them and came down first.'

(219) Ahul gel-ec nu iha-h-ig-a odi
 coconut scrape-inf. for show-2s-1s-tod.p like that

gel-eg-a.
 scrape-2s-imp.

'Scrape the coconut the way I showed you to.'

1.1.2.4.2.5. Purpose.

The purpose adverbial clause can be marked in two ways: (i) by the postposition *nu* 'for' occurring at the end of the clause. In this construction the verb in the purpose clause must be either in the future tense or in the infinitive form. When the verb is in the future tense the notion of 'purpose' is more strongly expressed than with just the infinitive form, and (ii) by the relative future tense (see 2.1.3.2.) expressing the notion of 'being about to do something'. The purpose clause realized by a relative future tense verb can be optionally followed by the verbal particle *bili* expressing durative aspect (see 2.1.3.3.2.1. 11.).

(220) Ija sab faj-ig-en nu h-ug-a.
 1s food buy-1s-fut. for come-1s-tod.p
'I came for the purpose of buying food.'

(221) Ija sab faj-ec nu h-ug-a.
 1s food buy-inf. for come-1s-tod.p
'I came to buy food.'

(222) Uqa lotoc oso faj-igi-a bili wau-g
 3s clothing indef. buy-3s-rel.f dur. stomach-3s-pos.
 ben tau-en.
 big stand-3s-rem.p

[32:5]

'He stood there proudly about to buy some clothing.'

The fact that the two syntactic methods of expressing purpose are closely related semantically can be demonstrated in that negation of the purpose clause would be the same form for either a future tense verb or infinitive verb plus *nu* or a relative future tense verb. This form would be *nu* following a negative future verb.

(223) Ija sab qee faj-ig-aun nu h-ug-a.
 1s food not buy-1s-neg.f for come-1s-tod.p
'I came not to buy food.'

1.1.2.4.2.6. Cause.

The cause adverbial clause is indicated by the postposition *nu* 'cause' following the clause. There can be an optional *eu* 'that' preceding the *nu*. The verb in the cause clause must be in the present or a past tense.

(224) Ija sab faj-ig-a (eu) nu h-ug-a.
 1s food buy-1s-tod.p that cause come-1s-tod.p
'I bought the food therefore/so I came.'

(225) Cuamu eu halu gagadic oso na qag-ec
 room that rope strong indef. with tie-NOM/ADJ
 tawe-na nu ono dec cebit cebit
 stand-3s-pres. cause there from slow slow

no-n.
come down-3s-rem.p

[25:28]

'That room (elevator) was tied with a strong rope so it came down from there very slowly.'

(226) Ono sab madi bahic fe-i-a nu ji-ji
there food much emph. see-3s-tod.p cause it.-eat

nij-i-a.
lie-3s-tod.p

[3:11]

'He saw lots of food there so he stayed to eat.'

1.1.2.4.2.7. Condition.

The conditional adverbial clause can be expressed by the particle *fi* 'if' postposed to the clause. Where the final verb of the conditional clause is nonfinite, perfective aspect and same subject following, the conditional particle occurs attached to the verb replacing the SS marker (see also 2.1.3.4.4.). Conditional adverbial clauses normally precede the superordinate clause but can be end-shifted for stylistic effect.

(227) Qali gus-i-me-ig age qolo-du-fe-ig
bow shoot-pred.-SS-3p 3p miss mark-3s-CD/SS-3p

age eben-aga gesis qee.
3p hand-3p-pos. bow not

[16:27]

'If they shoot their bow and arrow and miss then they are not bowmen.'

(228) Ene qee ho-co-m fi ceb qee ih-ig-aun.
here not come-DS-2s CD betelnut not 2s-1s-neg.f

'If you don't come here I won't give you betelnut.'

(229) "Qaga-h-ig-en," d-on, "Qee j-i
kill-2s-1s-fut. 3s-3s-rem.p not eat-pred.

he-du-fe-g."
finish-3s-CD/SS-2s

[19:39]

'He said, "I will kill you if you do not eat it all."'

(230) Mel madi ca qee fi age jo nag ihoc we
boy many have not CD 3p house small enough like

ceho-qag-an.
build-3p-fut.

[30:36]

'If there are not many boys then they will build a small house that is sufficient.'

(231) Ege camac cagin jo-qo-na fi ege ahul wa
1p sago sticky eat-1p-pres. CD 1p coconut water

geh qee qelo-qo-na.
much not throw-1p-pres.

[31:12]

'If we are eating sticky sago then we do not throw in lots of coconut water.'

Condition can also be expressed by two coordinate clauses conjoined by *qa* 'but'.

(232) Ene qee h-og-a qa ceb qee ih-ig-aun.
 here not come-2s-imp. but betelnut not 2s-1s-neg.f
'If you do not come here I will not give you betelnut.'

(233) Uqa na qee qatan-igi-a qa ija sab qee
 3s wood not split-3s-rel.f but 1s food not
 man-ig-aun.
 roast-1s-neg.f
'If he doesn't split the wood I won't cook the food.'

1.1.2.4.2.8. Contrafactual.

The contrafactual adverbial clause is marked by the particle *mi* 'if' postposed to the clause. The final verb in the clause must also be marked for contrafactual mood (see also 2.1.3.4.20.). Contrafactual adverbial clauses normally precede the superordinate clause but can be end-shifted for stylistic effect.

(234) Mam Gulal uqa gami bo-u-m mi
 father 3s with come up-contr.-1p CR
 ihoc o-wo-na.
 sufficient say-1d-pres.
 [23:45]
'If papa Gulal had come up with us he would say that is enough.'

(235) Dalam aig eu cenal batak na tawo-u-b mi
 gourd seed that galip branch on stand-contr.-3s CR
 ija n-i mede-mi geh bahic ce-b
 1s come down-pred. nose-1s-pos. much emph. DS-3s
 cal mo-u-m.
 dead become-contr.-1s
 [14:11]
'If that gourd seed had been on the galip branch it would have fallen on my nose very hard and I would have died.'

(236) Eu qa qasil b-i meci-to-u-m mi
 that but morning come up-pred. see-1s-contr.-2s CR
 ija ene nij-ig-a.
 1s here lie-1s-tod.p
 [21:91]
'If you had come up to see me this morning I was here.'

(237) Ija Anut mi qa dalam eu cenal batak na
 1s God CR but gourd that galip branch on

mo-u-m.
put-contr.-1s

[14:7]

'But if I were God I would have put that gourd on the galip branch.'

1.1.2.4.2.9. Concession.

Concession is expressed by two clauses conjoined by the adversative conjunction *qa* 'but'.

(238) Wa ben ho-i-a qa age cuha jo
water big come-3s-tod.p but 3p Sunday house

ho-ig-a.
come-3p-tod.p

'They came to church although it rained heavily.'

1.1.2.4.2.10. Result.

Result is expressed by a coordinate relationship between clauses and not by a subordinate adverbial clause. The following clause in the coordinate series expresses the result of the action of the verb in the preceding clause (see also 2.1.3.1.3.1.7.).

(239) Mim od-ige-ce-b ija na jo qah-en.
earthquake do-1p-DS-3s 1s of house break-3s-rem.p

[21:43]

'The earthquake made my house fall apart.'

(240) Uqa ho nu made-ce-b ege ho uto-go-na.
3s pig for say-DS-3s 1p pig 3s-1p-pres.

[20:26]

'He asks for a pig and we give him a pig.'

(241) Caja oso uqa n-oc nu cul-en qa
woman indef. 3s go down-inf. for leave-3s-rem.p but

cesus-do-co-bil n-on.
persuade-3s-DS-3p go down-1p-rem.p

[25:22]

'One woman did not want to go down but we persuaded her and we went down.'

(242) Ija od-it-i-m-ig nu-ig-a.
1s do-1s-pred.-SS-1s go-1s-tod.p

'I made myself go.'

1.1.2.4.2.11. Apprehension.

The apprehension adverbial clause is marked with the particle *dain* 'lest' postposed to the clause. The final verb in the clause must be in either the infinitive, future or negative future form. It is not possible in the final verb of the apprehension clause to indicate a reflexive action i.e. for subject and object to be coreferential. Instead an impersonal verb is used and the subject is always third person singular when marked (see (245) and (246) below). Unlike other adverbial clauses the apprehension

adverbial clause normally occurs following the superordinate clause although it can be front-shifted for stylistic effect.

(243) Ohis tob-ec we qee. Cun beges-ade-ce-b
above climb up-inf. able not feet slide-dist.-DS-3s

n-i q-it-ec dain.
go down hit-1s-inf. CAP

[21:59]

'I am not able to climb up. My feet slide everywhere and I might fall and hurt myself.'

(244) L-i jahun-ec dain eu nu jaqo-co-mun
go-pred. hide-inf. CAP that for write-DS-1p

nij-igi-an.
lie-3s-fut.

[21:15]

'Lest it disappear we will write it down and it will endure.'

(245) Na tobe-ce-min ton-i
tree climb up-DS-1s fall down-pred.

q-it-ec / q-it-i-aun dain.
hit-1s-inf. hit-1s-3s-neg.f CAP

'If I climb the tree I might fall and get hurt.'

(246) *Na tob-i-m-ig ton-i
tree climb up-pred.-SS-1s fall down-pred.

q-it-ec / q-it-ig-aun dain.
hit-1s-inf. hit-1s-1s-neg.f CAP

1.1.2.4.2.12. Degree.

1. Comparative degree.

Comparative degree can be expressed by two clauses conjoined by the conjunction qa *'but'*.

(247) Ija sab geh bahic j-ig-a qa uqa
1s food much emph. eat-1s-tod.p but 3s

wol-te-i-a.
surpass-1s-3s-tod.p

'I ate a lot of food but he ate more than me.'

2. Superlative degree.

Superlative degree can be expressed by two clauses conjoined by the conjunction qa *'but'*.

(248) Ege sab geh bahic jo-q-a qa uqa cunug
1p food much emph. eat-1p-tod.p but 3s all

wol-ade-i-a.
surpass-3p-3s-tod.p

'We ate a lot of food but he ate more than us all.'

3. Equative.

Equative degree can be expressed by an adverbial clause functioning as object of the postposition *we* 'like'.

- (249) Dana eu uqa sab j-ec eu odi we
 man that 3s food eat-inf. that like that like
 ija ha sab j-ig-a.
 1s also food eat-1s-tod.p
 'That man ate as much food as me.'

1.1.2.4.2.13. Debitive.

The debitive mood (compulsive desire) is expressed by an infinitive adverbial clause (see also 2.1.3.4.8.).

- (250) Ija nu-ec bahic nu-ig-en.
 1s go-inf. emph. go-1s-fut.
 'I must go.'

1.1.2.4.2.14. Optative.

The optative or desiderative adverbial clause can express impulsive, habitual or contrafactual desire. The superordinate clause for each must have an impersonal verb. The verb in the impulsive clause must be in the imperative mood. The verb in the habitual clause must be in the infinitive form. The verb in the contrafactual clause must be in the remote past tense form and the verb in the superordinate clause must be in the contrafactual mood form (see also 2.1.3.4.6.).

Impulsive desire clause.

- (251) Ija j-ag-a te-i-a.
 1s eat-2s-imp. 1s-3s-tod.p
 'I wanted to eat.'

Habitual desire clause.

- (252) Ija ceb j-ec nu gale te-na.
 1s betelnut eat-inf. for desire 1s-3s-pres.
 'I like to eat betelnut.'

Contrafactual desire clause.

- (253) Ija nue-em to-u-b
 1s go-1s-rem.p 1s-contr.-3s
 'I would like to have gone.'

1.1.2.4.3. Nonfinite adverb clauses.

Time, place and instrument adverbial clauses must always be finite since they are relative clauses relativized on temporal, locative and instrumental nominals. Manner adverbial clauses are infinitive when the manner word is interrogative otherwise they are finite. Purpose adverbial clauses can have a future tense or infinitive verb form. Cause adverbial clauses must have finite verb forms.

Conditional adverbial clauses can be finite or nonfinite or verbless equative clause forms. Contrafactual adverbial clauses can only be nonfinite when verbal since the verb must be marked for the contrafactual mood and cannot be marked for tense. Otherwise the contrafactual adverbial clause can be a verbless equative clause. Apprehensive adverbial clauses can be finite or infinitive. The equative degree adverbial clauses must be infinitive. The debitive adverbial clause must be infinitive. The impulsive desire adverbial clause must be finite and the contrafactual and habitual desire adverbial clauses must be nonfinite (see 2.1.3.5. for a description of finite and nonfinite verb forms).

1.1.2.5. Sequences of tenses.

Tense sequencing only occurs with coordinate medial verbs (see 1.3.1.1.4.) and not between subordinate medial verbs and the matrix superordinate verb (see 1.1.2.). Since then all the adverbial clauses described under 1.1.2.4.2. above are subordinate medial clauses tense sequencing does not apply.

1.2. Structural questions.

1.2.1. Internal structure of the sentence.

1.2.1.1. Copular sentences.

A copular verb is a verb whose main meaning is taken from the preceding nominal, adjectival or adverbial complement. There is no overt 'be'-copula verb as in English; rather copular sentences can be verbal with the verbs bil-ec 'to sit/be', nij-ec 'to lie/be', taw-ec 'to stand/be', m-ec 'to put/become' and q-oc 'to hit/have' functioning as copular verbs. All copular verbs can also function as regular verbs. Copular sentences can also be nonverbal equational sentences with a nominal, adjective or adverbial functioning as predicate. The order of constituents in the verbal copular sentence is the same as the order of constituents in the noncopular verbal sentence (see 1.2.1.2.6.).

1.2.1.1.1. Verbal copular sentences with nominal complement.

The nominal complement can be a noun or noun phrase and is not marked in any special way.

(254) Age waw-aga osol bil-eig-a.
 3p stomach-3p.-pos. one be-3p-tod.p
 'They are in agreement (lit: sit one stomach).'

(255) Uqa hag nij-i-a.
 3s sickness lie-3s-tod.p
 'He is sick (lit: lies sick).'

(256) Uqa cot-ig wau-g tawe-i-a.
 3s brother-3s-pos. stomach-3s-pos. stand-3s-tod.p
 'He stands by his brother (lit: his stomach stands with him).'

(257) Uqa caf me-i-a.
 3s invalid become-3s-tod.p
'He has become an invalid.'

(258) Uqa hag qo-i-a.
 3s sickness have-3s-tod.p
'He is sick.'

1.2.1.1.2. Verbal copular sentences with adjectival complement.

The adjective complement can be an adjective or an adjective phrase and is not marked in any special way.

(259) Uqa me bil-i-a.
 3s good be-3s-tod.p
'He is well.'

(260) Man sonon-ec cebac nij-i-a.
 creature glide-NOM/ADJ alive lie-3s-tod.p
'The snake is alive.'

(261) Jo eu gagadic tawe-i-a.
 house that strong stand-3s-tod.p
'That house is strong.'

(262) Jo eu me qee me-i-a.
 house that good not become-3s-tod.p
'That house has become no good.'

(263) Na eu me qo-i-a.
 tree that good have-3s-tod.p
'That tree has fruited.'

1.2.1.1.3. Verbal copular sentences with adverbial complement.

An adverbial or adverbial phrase can function as the complement of a copular verb.

(264) Age dunuh bil-eig-a.
 3p inside be-3s-tod.p
'They are inside.'

(265) Jobon ono nij-i-a.
 village there lie-3s-tod.p
'The village is there.'

(266) Jo eu gauc tawe-i-a.
 house that useless stand-3s-tod.p
'That house is useless/empty.'

(267) Ija bal ihoc mi-gi-na.
 1s ball enough become-1s-pres.
'I am practising football.'

(268) Uqa geh qo-i-a.
 3s much have-3s-tod.p
'He was hurt badly.'

1.2.1.1.4. Verbless copular sentence.

The verbless copular sentence - the equational sentence - consists of a nominal subject element and a predicate which can be a nominal, adjectival or adverbial element. Tense, aspect and mood cannot be expressed as verbal categories since there is no verb but mood can be expressed if it is expressed by a sentence postposed particle (see 2.1.3.4.).

(269) Jo i nag.
house this small
'This house is small.'

(270) Dana eu iwai-ad-ec dana.
man that teach-3p-NOM/ADJ man
'That man is a teacher.'

(271) Sab eu tin ca bahic.
food that sweet with emph.
'That food is very sweet.'

(272) Jobon ben eu ono ca.
village big that there with/emph.
'That big village is a long way off.'

(273)
A: Eu ho fo?
that pig QU
'Is that a pig?'

B: Eu ho.
that pig
'That is a pig.'

(274) Ija gagadic mi na eu u helo-u-m.
is strong CR tree that take-pred. throw-contr.-is
'If I had been strong enough I would have thrown that log.'

1.2.1.1.5. Omission of copula.

There is no 'be'-copula verb.

1.2.1.1.6. Different types of copula.

While there is no 'be'-copula verb the different types of copula can be expressed by an equational sentence (see also 2.1.1.2.9.).

1.2.1.1.6.1. Defining.

(275) Uqa dana ben.
3s man big
'He is a leader (lit: big man).'

1.2.1.1.6.2. Identity.

(276)Eu Jelso.
 that
 'That is Yelso.' (a village)

1.2.1.1.6.3. Role.

(277)Uqa iwal-ad-ec.
 3s teach-3p-NOM/ADJ
 'He is a teacher.'

1.2.1.2. Verbal sentences.1.2.1.2.1. Subject.

A subject is obligatory with all predicates - transitive, intransitive, ditransitive, quotation, copular and nonverbal (see 1.2.1.1.4.) except where the verb is in the infinitive form when an overt subject NP is optional. Except for the infinitive form person and number of the subject is obligatorily indicated by suffixation on the verb (see 2.1.3.6.1.1.). The subject can be either first, second or third person and either singular, dual or plural number. For all forms of the verb except the impersonal verb an overt subject (nominal or pronominal) is optional. For the impersonal verb (see 2.1.3.8.) an overt subject NP is obligatorily present when the verb is type (i) expressing a cause and obligatorily absent when the verb is type (ii) expressing no overt cause. An overt subject NP is also obligatorily absent in a certain verbal construction of the subordinated certain apprehension clause where the subject of the superordinate verb is coreferential with the object of the subordinate verb in the apprehensive clause as in (281) below (see also 1.1.2.4.2.11.). The subject is usually identified by either a noun phrase or a pronoun but where identity is clearly established, e.g. in dialogue or narrative, the subject can be indicated by verbal suffix alone. Also clause chaining occurs such that many clauses can occur in a single sentence and in these clauses the verb has morphology which indicates the identity of the subject of the following clause as to whether it is the same or different from the preceding clause (see 2.1.3.6.7.).

(278)(uqa) qa qo-i-a.
 3s dog hit-3s-tod.p
 'He hit the dog.'

(279)(uqa) ho-i-a.
 3s come-3s-tod.p
 'He came.'

(280)(uqa) (ija) sab ite-i-a.
 3s 1s food 1s-3s-tod.p
 'He gave me food.'

(281)Na tobe-ce-min ton-i q-it-i-aun dain.
 tree go up-DS-1s fall-pred. hit-1s-3s-neg.f CAP
 'If I climb the tree I might fall and get hurt.'

1.2.1.2.2. Direct object.

The category of direct object can be established on the basis of word order and special object suffixation on the verb (see 2.1.3.6.1.2-3.). There are distinct classes of verbs based on whether they can occur with an overt object NP - transitive and intransitive. However verbs can also be divided into what is termed 'goal-oriented' vs. 'agent-oriented' verbs depending on whether an object clitic is obligatorily present or absent in the infinitive form of the verb and the categories of transitive and intransitive verbs vs. goal-oriented and agent-oriented verbs do not necessarily coincide. (see 2.1.3.6.1.2-3. for further description and illustrations.) If an intransitive verb occurs in a paratactic sequence with a transitive verb the predicate is transitive (see also 2.1.3.7.). The semantic functions of the direct object are accusative and experiencier.

(282) Uqa sab je-i-a.
3s food eat-3s-tod.p
'He ate food.'

(283) Uqa je-i-a.
3s eat-3s-tod.p
'He ate.'

DO

(284) Mou ben je-ih-igi-an.
python big eat-2s-3s-fut.
'The big python will eat you.'

DO

(285) Dana caja gaban-do-ig-a.
man woman gather-3s-3p-tod.p
'The people gathered together.'

DO

(286) Hina cesul-d-oc nu h-og-a fo?
2s help-3s-inf. for come-2s-tod.p QU
'Have you come to help?'

DO

(287) Age cesus-do-co-bil uqa ho-n.
3p persuade-3s-DS-3p 3s come-3s-rem.p
'They persuaded him to come.'

(288) Sab u l-ag-a.
food take-pred. go-2s-imp.
'Take the food and go.'

DO IO

(289) Eh-du-i nu-g-eg-an fo?
take-3s-pred. go down-1p-2s-fut. QU
'Will you take him down for us?'

1.2.1.2.3. Indirect object.

The category of indirect object can be established on the basis of word order and object suffixation on the verb. The direct object pronominal clitic attaches directly to the verb stem with no intervening predicate marker. The indirect object pronominal clitic, on the other hand, attaches to the verb with an intervening predicate marker (see 2.1.3.6.12.1.11. and 2.1.3.6.1.2-3.). The indirect object can occur either as an overt NP or as a pronominal clitic on the verb or as both, although most commonly the indirect object occurs only as a pronominal clitic on the verb. The semantic functions of the indirect object are recipient, benefactive, malefactive, allative and ablative.

IO

(290) Jo eu ihac-i-ad-ig-en.
house that show-pred.-2p-1s-fut.
'I will show that house to you(pl).'

IO

(291) Uqa ho q-u-te-i-a.
3s pig hit-pred.-1s-3s-tod.p
'He killed the pig for me.'

DO IO

(292) Sul-d-u-t-ag-a.
send-3s-pred.-1s-2s-imp.
'Send him to me.'

1.2.1.2.4. Other verbal arguments.

Other verbal arguments that are obligatory but are not encoded in the predicate are (i) the quote clause in the quotation sentence (see 1.1.1.1.) and (ii) the subject in the equative clause (see 1.2.1.1.). All other verbal arguments are optional and include: (i) the time, place, instrument, manner, purpose, cause, condition, contrafactual, apprehension, equative degree, debitive and optative adverbial arguments and (ii) the comitative directional and ablative postpositional arguments.

1.2.1.2.5. Combinations of arguments.

In the transitive, intransitive and ditransitive sentence there is no restriction on combinations of optional elements given in 1.2.1.2.4. but rarely do more than two or three optional elements occur in one clause in text. Quote and complement do not occur in these sentences. With the equative(verbless) copular sentence optional elements are restricted to temporal, locative, accompanier, conditional and ablative. For the transitive clause subject and direct object are obligatory and there is no indirect object. For the intransitive clause subject is obligatory, and direct and indirect object do not occur. For the ditransitive clause subject, direct and indirect object are obligatory. For the equative copular clause subject and complement are obligatory, and direct and indirect objects do not occur. For the quotation sentence the quote functioning as direct

object is obligatory. Where a sentence with many optional arguments occurs as in (293) below the order of the optional elements is not rigid (see also 1.2.1.2.6.).

- (293) Cum qasil na walag da-dan-en qa
 yesterday morning at dawn sim.-break-3s-DS but
- ija Bunag ca Hilu jobon na ceheleg i sec
 is with village at up there this way
- ho qaga-du hel-i-to-w-an, ija na cabi
 pig hit-3s throw-pred.-3s-1d-yest.p is of garden
- neg-on eu nu.
 dig up-3s-rem.p that because
*'But yesterday morning just as the dawn was breaking
 Bunag and I threw (spears) at a pig to kill it up near
 Hilu village because it had dug up my garden.'*

1.2.1.2.6. Order of constituents.

A statistical count was made of six representative texts to determine the unmarked (i.e. statistically the most frequent) order of constituents. The six texts were transcribed oral texts from six different authors. The types and sizes of the texts varied. There were two historical narratives, two folk tales, one procedural and one expository (sermon) text. The lengths varied from 24 sentences (82 clauses) for one of the historical narratives to 75 sentences (241) clauses for one of the folk tales. The maximum number of clauses per sentence in any one text was 13 in text no. 17, a historical narrative and the average number of clauses per sentence over the whole corpus of data was 3 clauses per sentence. The overall quantity of text was 284 sentences (853 clauses). Details of the statistics for each text is charted below. The chart details the occurrences of various orders of the main constituents viz. S (Subject), IO (Indirect object), DO (Direct object) and V (Verb) and also some of the more common optional constituents viz. temporal, locative and instrument. The patterns that emerge from this analysis is that the unmarked order for the main constituents is S IO DO V. This order can vary, however, since there are two possible landing sites for moved elements preceding the verb. These are sentence initial thematic position and the preverbal object focal position. Thus it is possible for an object NP to be front-shifted to the thematic position and for a subject NP to be shifted to the preverbal position. Where an indirect object and direct object NP occur in the same sentence the indirect object always precedes the direct object. With the optional elements order is more fluid between themselves and a count was made only with some of the more common constituents and only with regard to their position in relation to the main constituents. The analysis reveals that the Subject NP invariably precedes any other NP, optional or otherwise, and occupies the sentence initial position although again this is not rigidly fixed. The analysis also reveals that optional elements like instrument tend to precede the direct object NP although they can

follow the direct object and occur in the preverbal position.

Text no./ Const. order	2	16	17	19	24	25	Totals
S DO V	15	11	14	13	29	6	88
DO S V	-	-	1	-	2	1	4
S IO V	1	-	1	1	14	-	17
IO S V	-	-	2	1	-	1	4
IO DO V	-	-	2	2	12	-	14
DO IO V	-	-	-	-	-	-	0
S Loc V	1	1	4	5	1	6	18
Loc S V	-	-	2	-	-	3	5
S Temp V	3	4	2	2	2	-	13
Temp S V	2	-	1	5	-	1	9
Inst DO V	-	-	2	1	-	1	4
DO Inst V	-	-	1	-	-	1	2
Sentences	24	33	46	75	65	41	284
Clauses	82	111	198	241	97	124	853
Max. cl per S	12	8	13	10	6	10	
Av. cl per S	3.4	3.4	4.3	3.2	1.5	3.0	3.0
Text 2: historical				Text 19: folk tale			
Text 16: procedural				Text 24: expository			
Text 17: folk tale				Text 25: historical			

The fact that word order for optional elements is fairly free is demonstrated by the following illustrative sentences (294) which show that the adverbial elements of manner, *mahuc* 'quickly', time *cum* 'yesterday', and place *ene* 'here', can occur in any position preceding the verb. The sentences are all grammatical alternatives.

(294)

- (a) Naus uqa cum ene qa sab mahuc ute-i-an.
 3s yest. here dog food quick 3s-3s-yest.p
'Yesterday Naus quickly gave the dog food here.'
- (b) Naus uqa cum ene qa mahuc sab ute-i-an.
- (c) Naus uqa cum ene mahuc qa sab ute-i-an.
- (d) Naus uqa mahuc cum ene qa sab ute-i-an.

- (e) Mahuc Naus uqa cum ene qa sab ute-i-an.
 (f) Cum Naus uqa ene qa mahuc sab ute-i-an.
 (g) Naus uqa ene qa mahuc sab cum ute-i-an.
 (h) Ene Naus uqa cum qa mahuc sab ute-i-an.
 (i) Naus uqa cum qa mahuc sab ene ute-i-an.

See also 1.11. for emphasis of constituents by movement to the preverbal position, 1.13. for movement of heavy constituents, 1.1.2.3. for movement within the adjective clause and 1.12. for the order of subject/topic elements in the impersonal verb construction.

1.2.1.3. Adverbials.

1.2.1.3.1. Types of adverbials.

The class of word 'adverb' is not formally distinguished from noun and adjective (see 1.16.7.) and the items in this section are described on the basis of adverbial function alone. Adverbs have the following syntactic and semantic functions:

- (1) Adverbials in the sentence functioning as adverbs of
 Time
 Place
 Manner
 Degree
 Interrogation (interrogative adverbs)
 Affirmation
 Negation
 Independent adverbs
- (2) Adverbial modifier of
 adjective
 adverb
 postpositional phrase
 determiner
 noun phrase

(3) Complement of a postposition.

An adverb can be simple, compound, reduplicated or duplicated. Elements that can have an adverbial function apart from adverbial words are an adverbial phrase (see 1.2.3.), an adverbial clause (see 1.1.2.4.), a noun phrase and a postpositional phrase. All adverbials precede the verb.

1.2.1.3.1.1. Adverbs.

Adverbs can have the following structure:

(1) Simple.

haun	'again'
mahuc	'quickly'

isi	"soon"
qila	"now"

(2) Compound.

nag odi	"nearly"
ihul ahal	"disorderly"
ihoc na na	"same"
hib na	"later"

(3) Reduplicated.

tu-tuc	"straight"
ne-nel	"head downwards"
ha-hawan	"first"
ga-gadic	"strongly"

(4) Duplicated.

gaid gaid	"always"
cebit cebit	"slowly"
bic bic	"backwards (lit: tail tail)"
ca ca	"same (lit: add add)"

Adverbs can function as adverbs of time, place, manner, degree, interrogation, affirmation, negation and as independent adjunctive adverbs.

Adverbs of time.

casac	"first"
gaid	"always"
hahawan	"first"
hib na	"later"
isi	"soon"
qila	"now/today"
sain	"time"
waig	"a long period of time"
wele	"before"
wele ca	"long time ago"

See 2.1.1.6. for more temporal adverbial expressions.

Adverbs of place.

abes	"aside"
anse	"on the left"
bisalag	"underneath"
ceheleg	"up there"
cemenug	"near"
cuhulug	"down there"
duducul	"near"
dunuh	"inside"
ene	"here"
gemo	"middle"
hagen	"other side"
hamol	"inside"
ilag	"inside"
launo	"middle"
meula	"on the right"

ohis	'above'
ono	'there'
ono ca	'a long way off'

Adverbs of manner.

bical	'naked'
cebac	'alive'
cebit	'slowly'
cecela	'long'
cuhanuc	'alone'
(i) edi	'like this'
fil	'differently'
gad	'with permission'
gag	'boiling'
gagadic	'strongly'
gami	'together'
gauc	'uselessly'
gohic	'short'
haun	'again'
heje	'illicitly'
hetec	'easily'
ititom	'rightly'
jah	'stealthily'
mahuc	'quickly'
malol	'peacefully'
manin	'still'
me	'well'
mele	'truly'
(eu) odi	'like that'
ologais	'loosely'
oso ben	'together'
sosog	'narrowly'
tanac	'empty'
tutuc	'straight'

Adverbs of degree.

bahic	'very'
ben	'greatly'
cunug	'all'
dih	'just/only'
geh	'much'
ha	'also/too'
himec	'only/just'
ihoc	'sufficiently'
ijed	'thrice'
lecis	'twice'
madi	'many'
nag	'little'
nag odi	'almost'
osahic	'once'

Interrogative adverbs.

Interrogative adverbs are described under interrogative pronouns (see 2.1.2.6.1.).

Adverbs of affirmation.

ao	'yes'
cece	'yes'
cese	'yes'
cois	'OK'
mele	'true'

Adverbs of negation.

cain	'don't'
qee	'no'

Independent adverbs.

au e	'O mother'
aria	'alright'
se	'hey'
gec	'interjection'

1.2.1.3.1.2. Postpositional phrases as adverbials.

Postpositional phrases can function as the following adverbials. The postposition na 'at/on/with/by' can function in the temporal, locative and instrumental adverbial phrases. The postposition ca 'with/add' can function in the accompanier adverbial phrase and also as an emphatic element in the temporal and locative adverbial phrase. The postposition nu 'for/cause' functions in the purpose and cause adverbial phrases. The postposition dec 'from' functions in the ablative adverbial phrase (see 1.2.4. and 1.16.5.).

(295) Cahel sain na age ceta cogo eu casac jo-lo-ig.
 famine time at 3p yam spec. that first eat-hab.p-3p
 [12:26]
'In a time of famine they used to eat the small yams first.'

(296) Due be-bele-igin jic na caja toia oso bil-en.
 dance sim.-go-3p-DS road at woman old one be-3s-rem.p
 [10:12]
'As they went to the dance there was an old woman on/at the road.'

(297) Am-ige na dih mec-ii taw-om.
 eye-1p-pos. with just see-pred.-it. stand-1p-rem.p
 [25:31]
'We stood just looking with our eyes.'

(298) Wele ca caja mel sim ca age ceb eu
 before emph. woman child with 3p betelnut that
 j-ec nu eu gun bahic.
 eat-inf. cause that forbidden emph.
 [29:8]
'A long time ago women and children were completely forbidden from eating that betelnut.'

- (299) Eu he-du-me-i uqa ceb boh na dec
 that finish-3s-SS-3s 3s betelnut plate in from
 eu ced-i-me-i dana siw-i-ado-lo-i.
 that take-pred.-SS-3s man share-pred.-3p-hab.p-3s
 [29:6]
'After that was finished he would take (betelnut) from out of the betelnut plate and share them out to the men.'

- (300) Age sis nu cobo-in.
 3p grasshoppers for walk-3s-rem.p
 [3:2]
'They walked for grasshoppers.'

Also a few adverbial phrases have duplicated postpositions.

ca ca 'same (lit: add add)'
 ihoc na na 'same (lit: sufficient at at)'

1.2.1.3.1.3. Noun phrases as adverbials.

Noun phrases functioning as adverbials can have a temporal, locative, manner or degree function.

Temporal.

- (301) Ono bi-bil-igin cuha ijed eu o-co-b ija
 there sim.-be-1s-DS week three that take-DS-3s 1s
 ija na jic sacia-du-m-ig man wag u-m-ig
 1s of road prepare-3s-SS-1s bird canoe get-SS-1s
 Ethiopia l-i tone-em.
 go-pred. go down-1s-rem.p
 [9:85]
'I stayed there for three weeks. Then I prepared my journey and took a plane down to Ethiopia.'

- (302) Age deel deel ho-gi-na.
 3p day day come-3p-pres.
'They come every day.'

Locative.

- (303) N-eb Waliom cu-cul-d-eb Urigina
 go down-1p sim.-leave-3s-1p-SS
 cu-cul-d-eb agas-om.
 sim.-leave-3s-1p-SS stick-1p-rem.p
 [27:16]
'We went on down and as we left Waliom and Urigina we got stuck.'

- (304) Dana caja madi bahic age Danben qee bile-gi-na.
 man woman many emph. 3p not be-3p-pres.
'There are not many people living in Danben.'

Manner.

(305) Dana eu jai-h h-on.
 man that leg-3s-pos. come-3s-rem.p
'That man came by foot.'

(306) Uqa us nij-i-na.
 3s sleep lie-3s-pres.
'He is sleeping.'

(307) Mel sim age ho ho cobo-gi-na.
 child 3p pig pig walk-3p-pres.
'Babies crawl (lit: walk like pigs).'

Degree.

(308) Age osahic osahic ho-ig-a.
 3p one one come-3p-tod.p
'They came one at a time.'

(309) Uqa cabi naha naha ode-na.
 3s work half half do-3s-pres.
'He does sloppy work / works sloppily.'

1.2.1.3.1.4. Adverbial clauses.

Adverbial clauses are also described under 1.1.2.4.

There are five subtypes of adverbial clause:

- (1) Those in which the verb carries verb-final inflection and the clause functions as a relative clause modifying a temporal, locative or instrumental nominal.
- (2) Those in which the clause functions as object of the postposition in the purpose, cause and apprehension adverbial clauses.
- (3) Those in which the clause is subordinated by a subordinating particle i.e. the adverbial clauses of manner, purpose, conditionality and contrafactuality.
- (4) Those in which the clause functions as complement in an impersonal verb construction.

1.2.1.3.2. Position of adverbials and relative order of cooccurring types.

The position and order of adverbials is not rigid (see 1.2.1.2.6.). The adverbial expressing manner normally immediately precedes the verb following a direct object if there is one present. Otherwise adverbial elements normally occur between the subject and the object (direct or indirect). The adverbial postpositional phrase expressing accompaniment must immediately follow the subject except when questioned in the nonecho question in which case it is moved to the preverbal object position (see 1.1.1.2.2.2.). A normal ordering for adverbial elements where they do cooccur would be:

Accompanier/Temporal/Locative/ { Instrument }
 { Purpose } Manner
 { Cause }

1.2.1.3.3. Obligatoriness of adverbials.

Adverbials are only obligatory in the impersonal verb constructions expressing debitive and optative mood (see 1.1.2.4.2.13-14.). Otherwise adverbials are not obligatory in any constructions.

1.2.2. Adjective phrases.1.2.2.1. Operational definition of adjective phrase.

A nonderived adjective phrase comprises either (i) an adjective, (ii) a duplicated adjective which can indicate plurality or intensity, or (iii) an adjective followed by an adjectival or adverbial modifier. An adjective phrase can be the sole manifestation of the subject, object or complement NP and can also occur as a discontinuative constituent separate from the head noun in the post-modified NP.

(310) Man fulul-ec cunug nag nag ca man ben ben ca
bird fly-NOM/ADJ all small small add bird big big add
age gaban-du-me-ig sis nu cobo-in.
3p gather-3s-SS-3p grasshopper for walk-3p-rem.p
[3:2]

'The small birds and the big birds they all gathered together to look for grasshoppers.'

(311) Dana ono bile-in eu dana ben ben, dana cito-ec.
man there be-3p-rem.p that man big big man giant
[10:30]

'The men that live there are very big men, giants.'

(312) Caub ha ene madi bahic bile-gi-na.
white also here many emph. be-3p-pres.
[23:18]

'There are also very many white (people) living here.'

(313) Mel madi bahic fi age jo nag ben ca ceho-qag-an.
boy many emph. if 3p house small big add build-3p-fut.
[30:35]

'If there are many boys they will build a house that is a bit bigger.'

(314) Oso jic cecela bahic gus-i go-co-b fi
indef. road long emph. shoot-pred. hit-DS-3s if

made-gi-na, "O mel eu eben gesis bahic," odi
say-3p-pres. boy that hand bow emph. like

made-gi-na.
say-3p-pres.

[16:8]

'If one of the boys shoots for a long way they say that boy is a real bowman.'

(315) Sab i me bahic.
food this good emph.
'This food is very good.'

A derived adjective phrase can be comprised of: (i) a noun, NP or adverb followed by the postposition *ca* 'add', 'have', (ii) a noun, NP, adjective, AdjP, adverb, PP or nominalized clause followed by the postposition *we* 'like', 'able', (iii) a verb, VP or clause followed by the adjectivalizing clitic *-ec/-oc*, or (iv) two juxtaposed nouns.

- (316) *Caja teful ca ho-na.*
 woman bone-3s-pos. add come-3s-pres.
'The boney(skinny) woman is coming.'
- (317) *Jobon eu ono ca bahic.*
 village that there add emph.
'That village is a long way off.'
- (318) *Jo nag nege ca we eu na bil-om.*
 house small big add like that in be-1p-rem.p [27:48]
'We stayed in a house that seemed a little bit bigger.'
- (319) *Na batoc eu qalac-d-oc we*
 tree branch that break-3s-NOM/ADJ like
me-me-n f-en.
 sim.-become-3s-DS see-3s-rem.p [14:6]
'He saw that that tree branch was about to break.'
- (320) *Uqa jobon nu-ec we qee.*
 3s village go-NOM/ADJ able not [19:42]
'He was unable to go to the village.'
- (321) *Ege na bil-ec cudun eu me bahic.*
 1p of be-NOM/ADJ place that good emph.
'Our living place is very good.'
- (322) *Uqa dana co caf q-oc.*
 3s man mouth close hit-NOM/ADJ [17:14]
'He is the man with the closed mouth.'
- (323) *Lotoc i bagac bagac.*
 cloth this leaf leaf
'This cloth is very thin (lit: leaflike).'

1.2.2.2. Adjectives and their arguments.

Adjectives can take subject arguments when they function as the complement element in the equative clause.

- (324) *Sab eu me.*
 food that good
'That food is good.'
- (325) *Jic eu cecela.*
 road that long
'That road is long.'

Adjectives do not take object arguments directly but as in English examples like 'proud of him' and 'good to me' an adjective can take a postpositional phrase as an argument.

(326) Uqa ija nu me bahic.
 3s 1s for good emph.
'He is good to me.'

(327) Uqa cabi nu toia bahic.
 3s work for old emph.
'He is too old to work.'

Derived adjectives that are adjectivalized verbs can take object arguments as in the following examples.

(328) Uqa ija wol-t-ec.
 3s 1s surpass-1s-NOM/ADJ
'He is my superior.'

(329) Uqa hina iwal-h-ec.
 3s 2s teach-2s-NOM/ADJ
'He is your teacher.'

Adjectives can also take an object argument when they are incorporated in a compound verb phrase (see 2.1.3.6.12.1.6.).

(330) Hina na je camasac m-ag-a.
 2s of talk clear put-2s-imp.
'Make your talk clear.'

(331) Ija gesis gus-ec nu ihoc mi-gi-na.
 1s bow shoot-inf. for sufficient put-1s-pres.
'I am practising to shoot my bow.'

1.2.2.3. Adverbial modifiers of adjectives.

An adjective can be modified by another adjective, duplication of itself, an emphatic word, the particle we 'like' or the negative particle qee 'not'. The modifying element always follows the adjective.

(332) Jo eu ben nag.
 house that big little
'That house is a little bit big.'

(333) Jo eu ben ben.
 house that big big
'That house is very big.'

(334) Jo eu ben bahic.
 house that big emph.
'That house is very big.'

(335) Jo eu ben we.
 house that big like
'That house is like a big one.'

(336) Jo eu ben qee.
 house that big not

'That house is not big.'

1.2.3. Adverbial phrase.

1.2.3.1. Operational definition for adverbial phrase.

An adverbial phrase comprises either: (i) an adverb, (ii) a duplicated adverb, (iii) an adverb followed by another adverb, (iv) an adverb followed by an emphatic word, (v) an adverb followed by a postposition or postpositional phrase, (vi) an adverb followed by the negative particle qee 'not', or (vii) duplicated nouns or duplicated postpositions. An adverbial phrase of manner normally immediately precedes the verb.

(337) Uqa cebit cebit cobo-na.

3s slow slow walk-3s-pres.

'He walks very slowly.'

(338) Wag nag odi sun-d-og-a.

canoe little like push-3s-2s-imp.

'Push the canoe a little bit.'

(339) Camac ta ihul ahal nije-i-a.

sago scraps disorderly lie-3s-tod.p

'The sago scraps lay all over the place.'

(340) Uqa mahuc bahic busale-i-a.

3s quickly emph. run away-3s-tod.p

'He ran away very quickly.'

(341) Uqa hib na cesel-i h-ugi-an.

3s behind at return-pred. come-3s-fut.

'He will come back later.'

(342) Uqa mahuc qee nue-l.

3s quickly not go-neg.p-3s

'He did not go quickly.'

(343) Uqa bic bic nu-i-a.

3s tail tail go-3s-tod.p

'He went backwards.'

(344) Ca ca m-ag-a.

add add put-2s-imp.

'Put them together.'

1.2.3.2. Adverbial modifiers of adverbials.

An adverbial can be modified by another adverb, an emphatic word or a negative particle (see 1.2.3.1.).

1.2.3.3. Order of modifying and modified adverbials.

The modifying adverb always follows the modified adverb (see 1.2.3.1.).

1.2.3.4. Restrictions on modifying adverbials.

There are no restrictions on which modifying adverbials can cooccur with which modified adverbials.

1.2.4. Postpositional phrases.1.2.4.1. Operational definition for postpositional phrases.

Postpositional phrases consist of a noun, an adjective, a noun phrase, a postpositional phrase or a clause followed by a postposed particle and express temporal, locative, instrument, alienable possession, purpose, cause, comitative, circumstantial, comparative, reflexive, ablative, analogic, directional and origin functions (see also 2.1.5.).

(345) Cahel sain na ege sab ca qee.
famine time in 1p food have not
'In a time of famine we have no food.'

(346) Uqa jic na no-i-a.
3s road to go down-3s-tod.p
'He went down to the road.'

(347) Uqa qa na na qo-i-a.
3s dog stick with hit-3s-tod.p
'He hit the dog with a stick.'

(348) Eu ija na qa.
that 1s of dog
'That is my dog.'

(349) Gulal Bunag ca ho-si-na.
with come-3d-pres.
'Gulal and Bunag are coming.'

(350) Ija hag ca.
1s sickness have
'I am sick.'

(351) Age jo eu ben ca cehe-ig-a.
3p house that big add build-3p-tod.p
'They built that house bigger.'

(352) Ija ija dodoc q-ug-a.
1s 1s self hit-1s-tod.p
'I hit myself.'

(353) Uqa Jelso dec ho-i-a.
3s from come-3s-tod.p
'He came from Jelso.'

(354) Uqa qa we.
3s dog like
'He is like a dog.'

(355) Age sis nu cobo-in.
3p grasshoppers for walk-3p-rem.p

'They walked for grasshoppers.'

(356) Ija ceed nu ma-d-ug-a.
1s bamboo cause say-3s-1s-tod.p
'I talked to him about the bamboo.'

(357) Jic i sec nu-ug-a.
road this way go-2s-imp.
'Go along this road.'

(358) Hina na jool hamol eu hen bil-i-a.
2s of bag room that way be-3s-tod.p
'Your string bag is in that room.'

(359) Jo eundec na dana uqa ca talacul gami
house that kind in man 3s with family together

us nije-gi-na.
sleep lie-3p-pres.

[30:3]

'A man lives together with his family in one of those kind of houses.'

1.2.4.2. Postpositions and their arguments.

1.2.4.2.1. Postpositions and their arguments.

Only the postposition *eundec* expressing origin can occur without an argument.

(360) Eundec me qee.
that kind of good not
'One of those kind is not good.'

The postposition *ca* can occur in a duplicated form as an adverbial phrase.

(361) Ceta ca ca m-ag-a.
yam add add put-2s-imp.
'Put the yams together.'

1.2.4.2.2. Postpositions with more than one argument.

Postpositions cannot occur with more than one argument.

1.2.4.2.3. Postpositions with arguments other than noun phrases.

The postposition *nu* can occur with a clause as an argument in the purpose and cause adverbial clauses (see 1.1.2.4.2.5-6.). The postposition *na* can occur with a clause as an argument in the temporal, locative and instrumental adverbial clauses (see 1.1.2.4.2.1-3.). The postpositions *nu*, *na* and *dec* can occur with a postpositional phrase as an argument (see also 1.2.4.).

(362) Uqa uqa dodoc nu sab uto-i-a.
3s 3s self cause food 3s-3s-tod.p
'He gave the food to himself.'

(363) Uqa uqa dodoc na jo mane-i-a.
 3s 3s self of house burn-3s-tod.p
'He burnt his own house.'

(364) Uqa ceta catei na dec cede-i-a.
 3s yam store at from take-3s-tod.p
'She got the yams from out of the yam store.'

1.2.4.2.4. Stranding of postpositions.

Postpositions cannot be stranded by movement processes (see 1.1.1.2.2.2.).

1.2.4.3. Modifiers of postpositions.

The postpositions *ca* 'with', *we* 'like' and *na* 'of' can be modified by the negative particle *qee* 'not'.

(365) Ija hag ca qee.
 1s sickness have not
'I am not sick.'

(366) Uqa qa we qee.
 3s dog like not
'He is not like a dog.'

(367) Jo i ija na qee.
 house this 1s of not
'This is not my house.'

1.2.4.4. Postpositions and case government.

There is no case marking.

1.2.5. Noun phrase.

1.2.5.1. Operational definition for noun phrase.

The noun phrase is the structural unit which manifests the subject, direct object, indirect object, temporal, locative, manner and complement functions of the clause and as equational predicate in the equational clause. It also functions as the object of the postposition in the temporal, locative, instrument, alienably possessed, comitative, circumstantial, reflexive, purpose, cause, ablative, analogic, directional and origin postpositional phrases. There are five types of noun phrase. The first three types i.e. postmodified, premodified and compound noun phrase can manifest any of the above functions. The fourth type, the duplicated noun phrase, most commonly has an adjectival or adverbial function (see 1.2.2.1. and 1.2.1.3.1.1.). The inalienably possessed noun phrase can only manifest the functions of subject, direct or indirect object and complement and also functions as object in the comitative, reflexive, purpose, cause, analogic and directional postpositional phrases.

(1) The postmodified noun phrase consists of either a pronoun, noun, adjective, indefinite article, quantifier, or demonstrative adjective alone or a noun, postmodified noun

phrase, compound noun phrase or inalienably possessed noun phrase functioning as head with one or more modifiers following. The following modifiers can be an adjective, adjective phrase, adjectivalizing clause indefinite article, quantifier, demonstrative adjective, emphatic word, interrogative adjective, negative particle, or finite adjectivalizing past participle. The relative clause adopts a replacive strategy (see 1.1.2.3.). There are no possessive adjectives; rather alienable possession is expressed by a postpositional phrase (see 1.2.4., 1.2.5.2.3. and 2.1.1.4.6.1.) and inalienable possessedness is expressed by a closed set of nouns (see 2.1.1.4.7.1.). Possession can also be expressed by a compound noun phrase (see (3) below).

(368) Uqa ho-i-a.

3s come-3s-tod.p

'He came.'

(369) Dana ho-i-a.

man come-3s-tod.p

'The man came.'

(370) Caub ho-i-a.

white come-3s-tod.p

'The white(man) came.'

(371) Oso ho-i-a.

indef. come-3s-tod.p

'Someone came.'

(372) Madi ene bile-ig-a.

many here be-3p-tod.p

'There are many here.'

(373) Eu me.

that good

'That is good.'

(374) Dana caub oso ho-na.

man white indef. come-3s-pres.

'A white man is coming.'

(375) Dana caja caub madi bahic Ukarumpa bile-ig-a.

man woman white many emph. be-3p-tod.p

'There are many white people at Ukarumpa.'

(376) Dana eu qa bahic.

man that dog emph.

'That man is a real dog.'

(377) Ho ganic je-ig-a?

pig how many eat-3p-tod.p

'How many pigs did you eat?'

(378) Mel eu uqa qa qee.

boy that 3s dog not

'That boy is not a dog.'

(379) Dana iwal-ad-ec lecis ho-si-a.

man teach-3p-NOM/ADJ two come-3d-tod.p

'Two teachers came.'

(380) Mun cod-on, ma hun-en, ceta
banana chop-3s-rem.p taro dig up-3s-rem.p yam

tac-en ne-ce-b m-i-al-en.
store-3s-rem.p come down-DS-3s put-pred.-3d-3s-rem.p

[17:9]

'He came down and put the chopped banana, the dug up taro and the stored yam for those two.'

(2) The premodified noun phrase consists of a noun or noun phrase preceded by an interrogative adjective, a postpositional phrase or a nominalizing clause. The premodifying PP can have a possessive or purpose function.

(381) Cel dana ho-na?
which man come-3s-pres.
'Which man is coming?'

(382) Eu ija na jo.
that is of house
'That is my house.'

(383) Eu sab ceh-ec nu cudun.
that food plant-inf. for place
'That is a place for planting food.'

(384) Eu hat man-ec boh
that sugar cane roast-NOM/ADJ plate
'That is a plate of roast sugar cane.'

(3) The compound noun phrase consists of either juxtaposed nouns or noun phrases. Where two juxtaposed nouns form a compound noun phrase often it has a composite meaning which may not be possible to predict from the meanings of the individual nouns.

(385) cabi gel *'year'*
garden fence

(386) mel gah *'twins'*
boy fly

(387) man wag *'aeroplane'*
bird canoe

(388) dana caja *'men and women/people'*
man woman

(389) dodol gee-g *'larynx'*
throat penis

(390) ceb boh daul *'long betelnut plate'*
betelnut plate long

(391) meb nah ben jo *'big kwila post house'*
kwila post big house

- (392) dana caub caja *'white man's woman'*
 man white woman
- (393) mel ana-g meme-g *'boy's mother and father'*
 boy mother father

(4) The duplicated noun phrase consists of a duplicated noun.

- (394) cete h cete h *'things'*
 thing thing
- (395) bagac bagac *'leaflike i.e. thin'*
 leaf leaf
- (396) ho ho *'piglike'*
 pig pig
- (397) bic bic *'tailwards'*
 tail tail

(5) The inalienably possessed noun phrase is the only noun phrase marked morphologically for person and number. The inalienably possessed noun can be marked for first, second or third person and singular, dual or plural number of the possessor. Kinship terms can also be marked for singular and plural number of the possessee (see 2.1.1.4.7.1.). The inalienably possessed noun phrase consists of an inalienably possessed noun optionally preceded by a noun, noun phrase or postpositional phrase functioning as possessor with an optional free pronoun occurring between the possessor and the possessed noun which agrees in person and number with the possessor.

- (398) Naus uqa mela-h-ul ho-gi-na.
 3s son-3s-pos.-p come-3p-pres.
 'Naus's sons are coming.'
- (399) Naus Kefa ca cot-ola ho-na.
 add brother-3d-pos. come-3s-pres.
 'Naus and Kefa's brother is coming.'
- (400) Uqa jic ana-g na nu-i-a.
 3s road mother-3s-pos. to go-3s-tod.p
 'He has gone to the main road.'

1.2.5.2. Modifiers of noun phrase.

1.2.5.2.1. Adjective.

The nominal head of a noun phrase can be modified by one or more adjectives, adjective phrases or an adjectivalizing clause. An adjective can be simple, reduplicated or derived from a verb by the postclitic -ec (see 1.16.4.). Adjectives, adjective phrases and adjective clauses must always follow the head which they modify. An adjective can be the sole manifestation of the noun phrase.

- (401) Eu jo hilah.
 that house old

'That is an old house.'

(402) Eu jo ce-celac.
that house long
'That is a long house.'

(403) Sab bodo-ec eu me qee.
food soft-NOM/ADJ that good not
'Soft food is no good.'

(404) Caub ho-na.
white come-3s-pres.
'The white (man) is coming.'

An adjective phrase can be an adjective, a duplicated adjective, or a noun followed by an adjectival or adverbial modifier or it can be derived from a noun, adverb or verb phrase (see 1.2.2.1. and 1.2.5.3.). Adjective phrases follow the head which they modify.

An adjectivalizing clause is derived by the postclitic -ec/-oc. Adjectivalizing clauses follow the head which they modify (see 1.2.5.).

(405) Eu jo us nij-ec
that house sleep lie-NOM/ADJ
'That is a sleeping house.'

(406) Caja mel cof-ad-ec ho-na.
woman child supervise-3p-NOM/ADJ come-3s-pres.
'The child supervising woman is coming.'

1.2.5.2.2. Relative clause.

For a description of the adjective (relative) clause see 1.1.2.3.

1.2.5.2.3. Possessive adjective.

There is no possessive adjective as such. The possessive postpositional phrase performs the function of possessive adjective and precedes the possessed noun (see also 1.2.4. and 2.1.1.4.6.1.).

(407) Ija na jo. *'My house.'*
1s of house

(408) Hina na jo. *'Your house.'*
2s of house

(409) Uqa na jo. *'His/her house.'*
3s of house

(410) Ele na jo. *'Our (two) house.'*
1d of house

(411) Ale na jo. *'Your (two)/their (two) house.'*
2d of house
3d

(419) Age mel oso oso qee sul-ade-l-ein.
 3p boy indef. indef. not send-3p-neg.p-3p
'They didn't send any of the boys.'

(420) Leih og-a.
 some get-2s-imp.
'Get some.'

1.2.5.2.5. Demonstrative adjective.

The demonstrative adjectives *i* 'this', *eu* 'that' and *ou* 'that(dista)' can follow the head noun. *i*, *eu* and *ou* can function as either demonstrative adjectives or as free demonstrative pronouns. These demonstrative adjectives can combine with other pronouns and particles for anaphoric purposes (see 1.5.1.5. and 2.1.2.5.). *i* and *eu* can also function anaphorically on their own.

(421) Dana eu sab i ut-ug-a.
 man that food this 3s-2s-imp.
'Give this food to that man.'

(422) Jo ou wele qatane-i-a.
 house that already break-3s-tod.p
'That house has fallen apart.'

1.2.5.2.6. Quantifiers.

A mass noun can be modified by a general quantifier, e.g. *leih* 'some', *nag* 'little', *geh* 'much', *ihoc* 'sufficient', *cunug* 'all'. *nag* and *geh* can be modified by the emphatic word *bahic*, and *ihoc* and *cunug* can be modified by the postposition *ca* 'add' functioning as an emphatic word.

(423) Sab nag o-g-a.
 food little take-2s-imp.
'Take a little food.'

(424) Sab ihoc j-ag-a fo?
 food sufficient eat-2s-tod.p QU
'Have you had enough food?'

(425) Dana eu sab cunug ca je-i-a.
 man that food all emph. eat-3s-tod.p
'That man ate every scrap of the food.'

Count nouns can be modified by a general quantifier, e.g. *leih* 'some', *ca* 'add/both', *nag odi* 'a few', *madi* 'many', *ihoc* 'sufficient', *cunug* 'all'. *madi* can be modified by the emphatic word *bahic* and *ihoc* and *cunug* can be modified by the postposition *ca* 'add' functioning as an emphatic word.

(426) Caja mel aid ca ho-gi-na.
 woman boy female add come-3p-pres.
'Both the woman and the girls are coming.'

(427) Dana caja madi bahic jobon ono bile-gi-na.
 man woman many emph. village there be-3p-pres.

'There are very many people living in the village there.'

A count noun can also be modified by a specific number (see 2.1.6. for details of the counting system). The Amele counting system becomes impractical beyond ten and Pidgin or English terms are used for numbers above ten.

(428) Uqa ho lecis faje-i-a.
 3s pig two buy-3s-tod.p
'He bought two pigs.'

1.2.5.2.7. Adverbials.

The adverbial negative word qee 'not' can modify a noun and a noun can also be modified by emphatic words (see 1.2.5.2.8. below).

(429) Eu qa qee.
 that dog not
'That is not a dog.'

1.2.5.2.8. Emphatic words.

A noun can be modified by an emphatic word. bahic 'very', 'really' occurs as attribute to a noun, a noun phrase, adjective, quantifier or adverb. himec and dih 'only', 'just' occur as attribute to a noun, a noun phrase, a pronoun, an article, a demonstrative adjective, an adverb, a quantifier, a numeral or a verb. The reflexive/emphatic particle dodoc can also emphasize a pronoun, noun or noun phrase (see 1.6.9.1.). The comitative/circumstantial particle ca can emphasize a noun, a quantifier or a locative demonstrative.

(430) Ija iso-mi eu dain bahic.
 1s sore-1s-pos. that pain emph.
'My sore is very painful.'

(431) Mel eu eben gesis bahic.
 boy that hand bow emph.
'That boy is a real bowman.'

(432) Sab i me bahic.
 food this good emph.
'This food is very good.'

(433) Geh bahic nij-i-a.
 much emph. lie-3s-tod.p
'There is a lot of it.'

(434) Dana himec ho-gi-na.
 man only/just come-3p-pres.
'Only/just the men are coming.'

(435) Ija cabi eu dih od-ig-a.
 1s work that just do-1s-tod.p
'I have just done that work.'

- (436) Ija himec h-ug-a.
1s just come-1s-tod.p
'Just I came.'
- (437) Ija dih h-ug-a.
1s just come-1s-tod.p
'I just came.'
- (438) Oso himec ho-i-a.
indef. only come-3s-tod.p
'Only one came.'
- (439) Eu himec bil-i-a.
that only be-3s-tod.p
'Only that is here.'
- (440) Age na jo cunug eu nag himec.
3p of house all that small only
'All their houses are only small ones.'
- (441) Lecis dih bile-si-a.
two just be-3d-tod.p
'Just two are left.'
- (442) Ija dodoc nu-ig-a.
1s self go-1s-tod.p
'I myself went.'
- (443) Wele ca dana maha ene qee bile-l-ein.
before add man land here not be-neg.p-3p
'A long time ago nobody lived here.'

1.2.5.2.9. Comparative/superlative/equative structure.

There are two ways of expressing comparison. In one case the verb wol-doc 'to surpass' functions in the comparative clause. In the other case the particle ca can be postposed to the adjective to express the comparative form of the adjective (see also 1.8.).

- (444) Uqa cecela. Uqa ija wol-te-na.
3s long 3s 1s surpass-1s-3s-pres.
'He is taller than me.'
- (445) Uqa cecela qa ija wol-du-gi-na.
3s long but 1s surpass-3s-1s-pres.
'I am taller than him.'
- (446) Age jo ben ca cehe-ig-a.
3p house big add build-3p-tod.p
'They made the house bigger.'

Similarity can be expressed by the postposed particle we or the phrasal expressions ca ca and ihoc na na.

- (447) Uqa dana ben we.
3s man big like
'He is like a big man.'

(4) A noun can be premodified by a nominalizing clause.

(463) Ba1 m-ec je.
contract put-NOM/ADJ talk
'An agreement.'

(464) Camac wa cil-ec cudun.
sago water boil-NOM/ADJ place
'A place for cooking sago.'

(5) A noun can be premodified by a postpositional phrase.

(465) Ija na jo.
1s of house
'My house.'

(466) Cad q-oc nu signin.
enemy hit-NOM/ADJ for knife
'A fighting knife.'

1.2.5.3. Number of modifiers of a particular type which can cooccur.

(1) Adjectives can be duplicated to express intensity or plurality or both.

(467) Jo eu nag nag.
house that small small
'That house is very small.'

(468) Dana ono bile-in eu age ben ben.
man there be-3p-rem.p that 3p big big
'The men that lived there were giants.'

(2) An adjective can be modified by another adjective to express moderate degree.

(469) Jo nag ben.
house small big
'A house that is a little bit small.'

(470) Jo ben nag.
house big small
'A house that is a little bit big.'

(3) The article oso can be duplicated to emphasize indefiniteness.

(471) oso oso *'anyone'*
indef. indef.

(4) A noun can be duplicated to express plurality or as an adverbial phrase expressing manner (see also 1.2.3.1.).

(472) Silom cete h cete h.
thing thing
'Silom's things.'

Adjectives which describe the quality of the head noun

generally follow adjectives which describe quantity, however such combinations are quite rare in text material.

- (473) Uqa ho ben me oso faje-i-a.
 3s pig big good indef. buy-3s-tod.p
'He bought a good big pig.'

Preferable to the above is for one of the adjectives to be expressed in an end-shifted clause.

- (474) Uqa ho ben oso faje-i-a, eu me bahic.
 3s pig big indef. buy-3s-tod.p that good emph.
'He bought a big pig - a very good one.'

1.2.5.4. Combinations of modifiers in the noun phrase.

The chart below illustrates the possibilities for combining the modifiers of the NP i.e. adjective, adjective phrase, adjectivalizing clause, article, demonstrative adjective, quantifier, adverb, emphatic word, interrogative word and locative demonstrative. The letters correspond to illustrative sentences below of possible combinations. An asterisk indicates that such a combination is not possible.

	a	a	a	a	d	q	a	e	i	l
	d	d	d	r	e	u	d	m	n	o
	j	j	j	t	m	a	v	p	t	c
		P.	Cl.			n		h	e	
						t			r	
adj.	a	b	c	d	e	f	g	h	i	j
adj.P.		k	l	m	n	o	p	q	r	s
adj.Cl.			*	t	u	v	w	x	y	z
art.				aa	ab	*	ac	ad	*	ae
dem.					*	af	ag	ah	ai	aj
quant.						*	ak	al	*	am
adv.							*	an	ao	ap
emph.								aq	ar	as
inter.									*	at
loc.										*

(475)

- (a) Jo nag ben.
 house small big
'The house that is a little bit small.'
- (b) Jo nag me bahic.
 house small good emph.
'The very good small house.'
- (c) Jo us nij-ec nag.
 house sleep lie-NOM/ADJ small
'A small sleeping house.'

- (d) Jo nag oso.
house small indef.
'A small house.'
- (e) Jo nag eu.
house small that
'That small house.'
- (f) Jo nag lecis.
house small two
'Two small houses.'
- (g) Jo nag qee.
house small not
'Not a small house.'
- (h) Jo nag bahic.
house small emph.
'The very small house.'
- (i) Jo nag ganic?
house small how many
'How many small houses?'
- (j) Jobon nag ceheleg.
village small up there
'The small village up there.'
- (k) Jo nag nag me bahic.
house small small good emph.
'Very good small houses.'
- (l) Jo us nij-ec nag nag.
house sleep lie-NOM/ADJ small small
'Small sleeping houses.'
- (m) Jo nag nag oso.
house small small indef.
'A very small house.'
- (n) Jo nag nag eu.
house small small that
'That very small house./Those small houses.'
- (o) Jo nag nag lecis.
house small small two
'Two small houses.'
- (p) Jo nag nag qee.
house small small not
'Not small houses.'
- (q) Jo nag nag bahic.
house small small emph.
'Extremely small houses.'
- (r) Jo nag nag ganic?
house small small how many
'How many small houses?'

- (s) Jobon nag nag ceheleg.
village small small up there
'The small villages up there.'
- (t) Jo us nij-ec oso.
house sleep lie-NOM/ADJ indef.
'A sleeping house.'
- (u) Jo us nij-ec eu.
house sleep lie-NOM/ADJ that
'That sleeping house.'
- (v) Jo us nij-ec lecis.
house sleep lie-NOM/ADJ two
'Two sleeping houses.'
- (w) Jo us nij-ec qee.
house sleep lie-NOM/ADJ not
'Not a sleeping house.'
- (x) Jo us nij-ec himec.
house sleep lie-NOM/ADJ only
'Only a sleeping house.'
- (y) Jo us nij-ec ganic?
house sleep lie-NOM/ADJ how many
'How many sleeping houses?'
- (z) Jo us nij-ec ceheleg.
house sleep lie-NOM/ADJ up there
'The sleeping house up there.'
- (aa) Jo oso oso.
house indef. indef.
'Any house(s).'
- (ab) Jo eu oso.
house that indef.
'One of those houses.'
- (ac) Jo me qee oso.
house good not indef.
'A bad house.'
- (ad) Jo oso himec.
house indef. just
'Just a house.'
- (ae) Jobon ceheleg oso.
village up there indef.
'A village up there.'
- (af) Jo lecis eu.
house two that
'Those two houses.'
- (ag) Jo me qee eu.
house good not that
'That bad house.'

- (ah) Jo eu himec.
house that only
'Only that house.'
- (ai) Jo eu ganic?
house that how many
'How many of those houses?'
- (aj) Jobon ceheleg eu.
village up there that
'That village up there.'
- (ak) Jo me qee lecis.
house good not two
'Two bad houses.'
- (al) Jo lecis himec.
house two just
'Just two houses.'
- (am) Jobon ceheleg lecis.
village up there two
'Two villages up there.'
- (an) Jo me qee bahic.
house good not emph.
'The very bad house.'
- (ao) Jo me qee ganic?
house good not how many
'How many bad houses?'
- (ap) Jobon ben qee ceheleg.
village big not up there
'The village up there that is not big.'
- (aq) Ija himec dih h-ug-a.
is only just come-is-tod.p
'Only I just came.'
- (ar) Jo me bahic ganic?
house good emph. how many
'How many very good houses?'
- (as) Jobon ceheleg bahic.
village up there emph.
'The village up there a long way.'
- (at) Jobon ceheleg ganic?
village up there how many
'How many villages up there?'

1.2.5.5. Order of modifiers in relation to the head noun and each other.

The modifiers that can follow the nominal head in the noun phrase are adjective, adjective phrase, adjectivalizing clause, article, demonstrative adjective, quantifier, adverbial, emphatic word, interrogative word and locative

demonstrative. These modifiers occur in the following order in relation to the head noun and each other:

Head noun	adj.c.	{	adj.	}	emph.	loc.	{	art.	}	adv.
			adj.p.					dem.		
								quant.		
								inter.		

(476) Jo us nij-ec nag bahic himec ceheleg
house sleep lie-NOM/ADJ small emph. emph. up there

oso qee.

indef. not

'Not just a very small sleeping house up there.'

The modifiers that can precede the nominal head in the noun phrase are interrogative word, postpositional phrase and nominalizing clause. The interrogative word can precede either the postpositional phrase or the nominalizing clause.

(477) Cel sab man-ec nu cudun?
which food roast-inf. for place
'Which place to cook food?'

(478) Cel sab man-ec cudun?
which food roast-NOM/ADJ place
'Which food cooking place?'

1.3. Coordination.

1.3.1.1. Means for coordinating sentences.

The most common means for coordinating sentences is by coordinate medial verbs (see 1.3.1.1.4.). Other means are *ca* 'and' coordination (see 1.3.1.1.1.), *qa* 'but' coordination (see 1.3.1.1.2.) and *fo, o* 'or' coordination (see 1.3.1.1.3.).

1.3.1.1.1. 'and' coordination.

Sentences can be conjoined by the particle *ca* 'and'. This conjoining can only occur with sentences that have a nominalized or infinitive verb, however. The coordinating particle *ca* must follow each coordinated sentence. See sentence 3 in text 7 below for another example.

(479) Uqa tutuc cob-oc ca me cob-oc ca
3s straight walk-NOM/ADJ add good walk-NOM/ADJ add

dadom-it-en.

guide-1s-3s-rem.p

'He taught me how to live a straight and good life.'

1.3.1.1.2. 'but' coordination.

Sentences can be conjoined by the particle *qa* 'but'. When conjoining sentences *qa* occurs in the sentence final position similar to the subordinating conjunctions *fi* and *mi* 'if', *nu* for 'cause' and *eu* 'that'. However, *qa* has syntactic restrictions described below which characterize it as a coordinating conjunction. No more than two clauses can be conjoined by *qa*.

(i) Whereas *fi* and *nu* can follow and subordinate a nonfinite coordinate medial clause as well as a finite clause *qa* cannot coordinate a coordinate medial clause but only finite clauses. So whereas (480) and (481) below are grammatical (482) is not. To make (482) grammatical a finite verb must be used as in (483).

(480) *Ija ja hudo-co-min fi uqa sab man-igi-an.*
 1s fire open-DS-1s CD 3s food cook-3s-fut.
'If I lit the fire she will cook the food.'

(481) *Ija ja hudo-co-min nu uqa sab mane-i-a.*
 1s fire open-DS-1s cause 3s food cook-3s-tod.p
'Because I lit the fire she cooked the food.'

but not

(482) **Ija ja hudo-co-min qa uqa sab mane-i-a.*
 1s fire open-DS-1s but 3s food cook-3s-tod.p
'I lit the fire but she cooked the food.'

(483) *Ija ja hud-ig-a qa uqa sab mane-i-a.*
 1s fire open-1s-tod.p but 3s food cook-3s-tod.p
'I lit the fire but she cooked the food.'

(ii) Whereas clauses subordinated by *fi*, *mi*, *nu* and *eu* can all be end-shifted as in (484), (485) and (486) a clause conjoined by *qa* cannot be end-shifted and is ungrammatical as in (487).

(484) *Uqa sab man-igi-an ija ja hudo-co-min fi.*
 3s food cook-3s-fut. 1s fire open-DS-1s CD
'She will cook the food if I lit the fire.'

(485) *Uqa sab mano-u-b ija ja hudo-u-m mi.*
 3s food cook-contr.-3s 1s fire open-contr.-1s CR
'She would have cooked the food if I had lit the fire.'

(486) *Uqa sab mane-i-a ija ja hud-ig-a eu nu.*
 3s food cook-3s-tod.p 1s fire open-1s-tod.p that for
'She cooked the food because I lit the fire.'

but not

(487) **Uqa sab mane-i-a ija ja hud-ig-a qa.*
 3s food cook-3s-tod.p 1s fire open-1s-tod.p but
 **'But she cooked the food I lit the fire.'*

1.3.1.1.3. 'or' coordination.

The interrogative particle *fo* or the Pidgin loan word *o* can function as coordinating conjunctions expressing alternation between sentences. In each case a particle must follow each alternant sentence. *fo* also functions as a conjunction in the alternative yes-no question sentence (see 1.1.1.2.1.3.).

(488) Age cete**h** cete**h** bahu na dec ced-i-me-ig cut
3p thing thing forest at from get-pred.-SS-2p sago

get-i-me-ig fo ceed weg-i-me-ig fo
cut-pred.-SS-2p or bamboo weave-pred.-SS-2p or

fal-do-qag-an.
fence-3s-2p-fut.

[2:9]

'You can get something from the forest, cut some sago or weave some bamboo, and then fence it.'

(489) Gama q-u-me-ig o sis q-u-me-ig
lizard hit-pred.-SS-3p or grasshopper hit-pred.-SS-3p

o cete**h** cete**h** nag nag qu-qu cobo-gi-na.
or thing thing small small it.-hit walk-3p-pres.

'They go along shooting at small things like lizards or grasshoppers.'

1.3.1.1.4. Coordinate medial verbs.

The most common means of coordinating sentences or clauses is by coordinate medial verb suffixation. There are two types of coordinate medial verb: (i) sequential action medial verbs (described under 2.1.3.3.2.1.1. perfective aspect) and (ii) simultaneous action medial verbs (described under 2.1.3.3.2.1.2. imperfective aspect). Sequential action medial verbs describe a related series of consecutive events whereas simultaneous action verbs describe a temporal overlap of concurrent events. Both types of verb can be marked for the person-number of the subject of the verb and also for coreferentiality or noncoreferentiality with the subject of the following verb. See 2.1.3.6.7. for a full description of what constitutes same subject following (SS) and what constitutes different subject following (DS). Coordinate medial clauses are distinguished from subordinate medial clauses on the basis of (i) their structure within the sentence, (ii) the possibility of tense/mood desinence on the verb, (iii) the scope of negation across clauses and (iv) subject NP coreference by the switch-reference system (see 1.1.2.). Clauses with subordinate medial verbs form a structure where one clause is embedded within another, $_{s}[_{s}[]...]...$. Whereas clauses with coordinate medial verbs form a structure of concatenated clauses i.e. a clause chain, $_{s}[_{s}[] _{s}[] _{s}[]...]$. Only the final clause in the chain is marked for tense/mood and this tense/mood applies to the other verbs in the chain. With subordinate medial verbs on the other hand there is the possibility of independent tense/mood desinence from the tense/mood of the verb in the superordinate matrix clause since they

are on a different level syntactically from the matrix verb. Also, whereas in a subordinate clause the scope of a negating particle is limited to the subordinate clause in which it occurs, in a coordinate clause the scope of a negating particle applies to all the clauses in the coordinate chain following the clause in which the particle occurs (see 1.1.1.3.2. and 1.4.4-5.).

With verbs marked for SS, both sequential and simultaneous verbs, tense/mood desinence is completely dependent on the tense/mood of the final verb. With verbs marked for DS tense/mood desinence is completely dependent for the sequential verb but for the DS simultaneous verb realis and irrealis tense/mood can be distinguished by the suffixation on the simultaneous verb itself although the verb is still dependent on the final verb for specific tense/mood desinence (see also 2.1.3.3.2.1.2.). It is common for many clauses or sentences to be conjoined into one sentence. In a statistical count of six different texts (see 1.2.1.2.6.) there was an average of three clauses per sentence over the six texts and four of the texts had a maximum count of clauses per sentence of ten or more. A sample text is given below illustrating sentence coordination. In sentence 6 there are five coordinated verbs(sentences) occurring consecutively without any intervening clausal elements. In sentence 7 there are eight coordinated sentences with one subordinated sentence. In sentence 10 there are ten coordinated sentences with one embedded quote sentence. In each of these sentences all the coordinated verbs are dependent on the final verb in the sentence for tense desinence which happens to be yesterday's past tense in most cases.

Text 7 - author Gulal - date 19.12.78

1. Ija Fonde na hag sanan m-it-en.
1s Friday on sickness start become-1s-3s-rem.p
2. Dewe-ni dain te-na.
body-1s-pos. pain 1s-3s-pres.
3. Ilo-mi q-it-ec ca gogodo-mi dain t-ec
head-1s-pos. hit-1s-inf. add back-1s-pos. pain 1s-inf.

ca cat dain t-ec ca cal-i ho-n.
add hip pain 1s-inf. add arise-pred. come-3s-rem.p
4. Odo-co-b tu leis hag nije-em.
do-DS-3s night two sick lie-1s-rem.p
5. Eu nu cum ono Mrs Fensky ca
that for yesterday there with

mec-it-igi-an nu nu-ig-an.
see-1s-3s-fut. for go-3s-yest.p

6. Ija Malolo uqa na ka jic ana-g na ono
 1s 3s of car road mother-3s-pos. at there
 nu sum-ud-i bi-bil-igin ne-ce-b
 for wait-3s-pred. sim.-be-dur.-1s-DS come down-DS-3s
 tobo-co-min belo-w-an.
 climb up-DS-1s go-1d-yest.p
7. Bel-i-me-u Mrs Fensky cemenug na l-i-me-u
 go-pred.-SS-1d near at go-pred.-SS-1d
 ija hag nu sisil-te-ce-b hag nu
 1s sickness about ask-1s-DS-3s sickness about
 sil-d-i made-co-min uqa glas na ija na
 ask-3s-pred. say-DS-1s 3s glass with 1s of
 hag f-igi-an nu gia-ni na
 sickness see-3s-fut. for armpit-1s-pos. at
 m-i-me-i glas u-me-i ija na hag
 put-pred.-SS-3s glass take-SS-3s 1s of sickness
 fe-i-an.
 see-3s-yest.p
8. Od-i-me-i marasin it-i-an.
 do-pred.-SS-3s medicine 1s-3s-yest.p
9. Uqa dewe-ni melel-do-i-an eu dewe-ni
 3s body-1s-pos. examine-3s-3s-yest.p that body-1s-pos.
 dain ganac na himec, dunug ca qee.
 pain skin on only inside with not
10. Eu nu "Cois, hina gad cesel-i nu-ug-a,"
 that for OK 2s may return-pred. go-2s-imp.
 odi ma-te-ce-b cesel-i h-u Malol ca
 like say-1s-DS-3s return-pred. come-pred. with
 uqa nu ka na ah-i b-i baby clinic
 3s for car in take-pred. come up-pred.
 cudun na ono m-ite-ce-b ija Lufani ca ija na
 place at there put-1s-DS-3s 1s with 1s of
 mel aid oso Graged dana o-n uqa ca
 boy female indef. man get-3s-rem.p 3s with
 ono market cudun na t-i-me-u ono ka
 there place at go up-pred.-SS-1d there car
 oso Oireb age na ka PMU eu u-m-ig
 indef. 3p of car that take-SS-1s
 b-i Danben jic na ton-i-m-ig
 come up-pred. road at climb down-pred.-SS-1s

ene b-ig-an.
here come up-1s-yest.p

11. Od-i-m-ig ka PMV eu twenty toea na
do-pred.-SS-1s car that with

faj-ig-an.
buy-1s-yest.p

12. Odi himec.
like just

'On Friday I started to get sick. My whole body was hurting. My head hurt and my back hurt and my hip hurt. So for two nights I lay sick. Because of that yesterday I went there for Mrs. Fensky to look at me. While I waited there at the main road for Malolo's car he came down. I climbed in and off we went. We went and came to Mrs. Fensky's. She asked me about my sickness and I told her about my sickness. She put a thermometer under my arm to see my temperature then she took it out and looked at my temperature. Then she gave me some medicine. She had examined me and found that the pain was only on my skin and not inside. So then she told me, "Alright you can go home now." I came back for Malolo and he took me in the car to the baby clinic place and put me there. Then I and Lufani, a daughter of mine who married a Graged man, went up to the market place. There I got one of the Direb PMV's (Public Motor Vehicle) and came up to Danben. I climbed down at the road and came up here. I paid twenty toea for that PMV. That's it.'

Independent sentences can also be conjoined in a coordinate relationship by simple juxtaposition.

- (490) Ji-ji ni-nij-en cotu-g-ul age
sim.-eat sim.-lie-3s-DS brother-3s-p 3p

sum-ud-ein sum-ud-ein qee nu.
wait-3s-3p-rem.p wait-3s-3p-rem.p not for

[3:9]

'While he ate and ate his friends waited and waited in vain.'

- (491) Ho eu tuqe-si-n cile-si-n.
pig that butcher-3d-rem.p boil-3d-rem.p

[18:42]

'They(2) butchered that pig and cooked it.'

1.3.1.3. Means of coordinating major categories of the sentence.

Major categories of the sentence can be coordinated by either simple juxtaposition or by coordinating particles. When nominals are coordinated by juxtaposition an accompanying phonological feature of nonfinal intonation indicates that together they have a unitary function in the sentence.

(492) _____ / _____ / _____ / _____ / _____
 Mun gonub, ujam, maleb, baguc, eu cunug
 banana spec. spec. spec. spec. that all

_____ / _____
 ceh-i he-do-n.
 plant-pred. finish-3s-3s-rem.p

[5:5]

'He planted gonub, ujam, maleb and baguc species of banana.'

(493) _____ / _____
 Age na sab cil-i j-ec ceteħ ceteħ cabi teful
 3p of food boil-pred. eat-inf. thing thing work bone

_____ / _____
 age cehew-anaga eu cunug jo eundec na
 3p possession-3p-pos. that all house from of

_____ / _____
 bil-ena.
 be-3s-pres.

[30:4]

'All those things belonging to the house are there, things for cooking, work tools and personal possessions.'

A listing of coordinated noun phrases is frequently followed by a summarizing noun phrase as in the examples above. The phrase here is eu cunug 'all of them' in each case and this noun phrase is also in a coordinate relationship to the other nominals. A pronoun can also function to summarize a group of nouns with a human reference.

(494) Tupau Wawac Kuma age me bile-ig-a fo?
 3p good be-3p-tod.p QU

[23:63]

'Are Tupau Wawac and Kuma well?'

Noun phrases can be coordinated by the particle ca 'add'. The particle must follow each conjunct.

(495) Odo-co-b bibito-mige ca bicile-mige ca
 do-DS-3s buttocks-1p-pos. add tail-1p-pos. add

dewe-nige cunug dain g-en.
 body-1p-pos. all pain 1p-3s-rem.p

[27:25]

'Then our buttocks and our tail bones, our whole bodies began to hurt.'

(496) Age jo uqa na wag ca qaqac ca gilel ca
 3p house 3s of top plate add ridge pole add baton add

facoc ca eu sacia-du-me-ig jo nah
 rafter add that prepare-3s-SS-3p house post

hel-u-me-ig nah qu-do-lo-ig.
 dig-pred.-SS-3p post plant-3s-hab.p-3p

[13:5]

'They used to prepare the top plates and the ridge pole and the batons and the rafters and then they would dig the house post holes and sink the posts.'

Noun phrases can be conjoined by the interrogative particle *fo* 'or'. In this respect *fo* can express either inclusive disjunction, where the disjunction is false only if both disjuncts are false otherwise it is true, or exclusive disjunction, where the disjunction is false if both disjuncts are true or false otherwise it is true. To express inclusive disjunction the particle *fo* follows each disjunct.

- (497) Ana-g fo meme-g fo uqa bahu
 mother-3s-pos. or father-3s-pos. or 3s forest
- nu-i-me-i udud q-u hul-i
 go-pred.-SS-3s ginger hit-pred. pull-pred.
- aho-na.
 bring-3s-pres.

[28:51]

'Either his mother or his father goes to the bush and pulls up some ginger and brings it back.'

- (498) Maha aluh nenel sasac na eu na fafa gul fo
 land mountain slope smooth on that on pawpaw new or
- ahul gul fo u-me-ig oso oloc mud-en.
 coconut new or take-SS-3p indef. roll make-3s-rem.p

[16:25]

'They get an immature pawpaw or coconut and one of them rolls it down the smooth sloping side of a hill.'

To express exclusive disjunction the first disjunct is followed by *fo* and the negative particle *qee*. A second interrogative particle does not follow the second disjunct. This construction is similar to that of the alternative yes-no question sentence (see 1.1.1.2.1.3.).

- (499) Uqa jobon ceheleg fo qee cuhulug nu-igi-an.
 3s village up there or not down there go-3s-fut.
'He will either go to the village up there or the one down there.'

- (500) Uqa mala fo qee ho q-ugi-an.
 3s chicken or not pig hit-3s-fut.
'He will kill either the chicken or the pig.'

The Pidgin loan word *o* 'or' also functions as a coordinating conjunction between noun phrases.

- (501) Dodo fil fil o due dodo o ceta dodo o
 story different or dance story or yam story or
- sa-t-ag-a.
 tell-1s-2s-imp.

[21:16]

'Tell me a different story or a dance story or a yam story.'

1.3.1.4. Means for expressing coordination and accompaniment.

There is a special postpositional phrase to express accompaniment (see 1.2.4.). The postposition *ca* 'with' normally follows the element expressing the one accompanied but if either the accompanier or accompanied is omitted then the remaining element must be followed by the accompaniment postposition. Even when one element is omitted the verb must express agreement with both elements. One form of 'and' coordination uses the accompaniment particle *ca* 'add' (see 1.3.1.1.1. and 2.1.1.4.4.).

(502) Banag ca Bunag ca ale due bele-si-a.
 add add 3d dance go-3d-tod.p
 'Banag and Bunag have gone to the dance.'

(503) Banag Bunag ca ale due bele-si-a.
 with 3d dance go-3d-tod.p
 'Banag has gone to the dance with Bunag.'

(504) Hina ca due bele-w-an fo?
 2s with dance go-1d-fut. QU
 'Will you go to the dance with me?'

1.3.1.5. Degree of structural parallelism prerequisite to coordination.

1.3.1.5.1. Coordination of adjectives and participial constructions.

There is no construction equivalent to the '-ing' and '-ed/-en' participial adjective clauses of English. The nearest equivalent would be where a form of the verb functions as an adjectival modifier. This can be of two types. Either (i) a verb stem suffixed by the adjectivalizing clitic *-ec/-oc* or (ii) the remote past tense form. These forms are illustrated below:

(505) Eu jo us nij-ec.
 that house sleep lie-NOM/ADJ
 'That is a sleeping house.'

(506) Ceta tac-en.
 yam store-3s-rem.p
 'Stored yam.'

But even with these forms it is not possible for them to cooccur with another adjective in a coordinate construction as such. However an adjectivalizing clause can cooccur with an adjective as a series of postmodifying elements in the noun phrase (see also 1.2.5.4.).

(507) Jo us nij-ec nag bil-i-a.
 house sleep lie-NOM/ADJ small be-3s-tod.p
 'There is a small sleeping house.'

(508) Caja mel cof-ad-ec me ho-na.
 woman child oversee-3p-NOM/ADJ good come-3s-pres.
 'The good child supervising woman is coming.'

1.3.1.5.2. Coordination of nouns and nominalized constructions.

It is possible to coordinate a noun and a nominalized clause although speakers would prefer to express such a notion with two separate clauses. So (510) would be preferred to (509) below.

(509) Naus ca uqa na ho adi qo-i-a eu ca
 add 3s of pig how hit-3s-tod.p that add
 d-ug-a.
 know-1s-tod.p
'I know Naus and how he killed his pig.'

(510) Naus d-ug-a. Uqa na ho adi qo-i-a eu
 know-1s-tod.p 3s of pig how hit-3s-tod.p that
 ha d-ug-a.
 also know-1s-tod.p
'I know Naus and I also know how he killed his pig.'

1.3.1.5.3. Coordination of adverbials.

Adverbs can be coordinated with adverbial phrases since adverbs are also categorially adverbial phrases.

(511) Ija mahuc cebit na h-ug-a.
 1s quickly slowly come-1s-tod.p
'I came quickly and quietly.'

Adverbs can be coordinated with adverbial clauses.

(512) Uqa sab faj-igi-an nu mahuc le-i-a.
 3s food buy-3s-fut. for quickly go-3s-tod.p
'He went quickly to buy food.'

1.3.1.5.4. Coordination of active and passive verbs.

There are no passive verbs.

1.3.1.5.5. Coordination of verb categories.

Transitive, intransitive and ditransitive verbs can be coordinated.

(513) Odo-co-b sab cil-i-me-i ah-u ale-ce-b
 do-DS-3s food boil-pred.-SS-3s bring-pred. 3d-DS-3s
 ale sab eu j-i-me-si dana uqa na danah eu
 3d food that eat-pred.-SS-3s man 3s of friend that
 uqa caj-i nuo-lo-i.
 3s arise-pred. go-hab.p-3s

[13:25]

'Then she would cook some food and bring it and give it to them(2). They(2) would eat that food and then the man's friend would get up and go.'

1.3.2.1-2. Omission and nonomission of elements of the sentence under identity in coordination.

When sentences or clauses are coordinated normally a minimal reference to the subject is maintained between clauses by the subject person-number suffixation for both sequential and simultaneous coordinate medial verbs. In certain circumstances, however, all reference to the subject can be deleted with both the sequential and simultaneous verbs. This includes nominal and pronominal reference as well as verbal suffixation. With the sequential medial verbs the subject suffixation can be optionally deleted where the subjects are coreferential between clauses (see 2.1.3.5. for details of how the deletion operates). With simultaneous verbs reference to the subject by verbal suffixation can also be deleted when subjects are coreferential between clauses and the simultaneous verb is functioning with a following verb expressing durative aspect (see 2.1.3.3.2.1.11.). In this case the first clause is composed of just a reduplicated verb stem with no subject suffixation and the second (durative) verb carries the subject person-number suffixation. When a direct or indirect object is animate a minimal reference is maintained between coordinate coreferential clauses by verbal object cliticization (see 2.1.3.6.2.2-3.) Other nominal or pronominal reference to direct or indirect object can be omitted however. Adverbial elements of time, place, manner, instrument, cause and purpose are normally omitted where identical in the following coordinate clause. In the examples taken from text below the omitted elements are given in square brackets. The classification of the deleted constituent i.e. subject(S), direct object(DO), indirect object(IO) or locative(LOC) is also given.

(514) * [Mala] odo-co-b cudumac uqa da-dan-i
 chicken do-DS-3s wallaby 3s sim.-confuse-pred.

bi-bil-en macas na dec gubal h-u-me-i
 dur.-be-3s-DS sea in from turtle come-pred.-SS-3s

* [gubal] cudumac gahi-d-u * [gubal] ° [cudumac]
 turtle wallaby carry-3s-pred. turtle wallaby

ah-u * [gubal] macas la na ° [cudumac]
 take-pred. turtle sea shore on wallaby

m-ude-ce-b * [cudumac] uqa caj-i-me-i * [cudumac]
 put-3s-DS-3s wallaby 3s arise-pred.-SS-3s wallaby

n-u * [cudumac] bahu nu-en.
 go down-pred. wallaby forest go-3s-rem.p

[4:15]

'Then while the wallaby sat there confused the turtle came out of the sea. He lifted the wallaby on his shoulder and carried him and put him on the shore. Then he (wallaby) got up and went down into the bush.'

(515) * [Dana] od-i-me-ig * [dana] cis u-me-ig
 man do-pred.-SS-3p man stone get-pred.-SS-3p

*^o[dana] cis na camac cisa-gi-na. *^o[Dana]
 man stone on sago scrape-3p-pres. man

 Loc[cis na] cise-ce-bil ta masue-ce-b
 stone on scrape-DS-3p scrapings increase-DS-3s

 *^o[dana] gebel ^o[ta] taca-gi-na. *^o[Dana] gebel
 man sheath scrapings fill-3p-pres. man sheath

 na ^o[ta] tac-i-me-ig *^o[dana] ^o[gebel]
 in scrapings fill-pred.-SS-3p man sheath

 gul-di *^o[dana] ^o[gebel] eh-i nu-i *^o[dana]
 carry-3s man sheath take-pred. go-pred. man

^o[ta] wa na lan gug ca m-i-me-ig
 scrapings water in frame base have put-pred.-SS-3p

 *^o[dana] age ta eu dubin na m-i-me-ig
 man 3p scrapings that stalk in put-pred.-SS-3p

 *^o[dana] golalas q-u-me-ig *^o[dana] golalas na
 man shell hit-pred.-SS-3p man shell with

 wa wete-gi-na.
 water scoop-3p-pres.

[15:9]

'Then they get a stone and scrape the sago on the stone. They scrape the sago and the scrapings increase and they fill the sheath. They fill the sheath and carry it to the frame with a base and put it in the water. Then they put those scrapings in a stalk, get a shell scoop and scoop the water out with it.'

- (516) Eu nu *^o[Mim] uqa gaid mel sim sim eundec
 that for spirit 3s always boy child child of that

 moot m-ado-lo-i. *^o[Meme-ga-il ana-ga-il] mun
 food put-3p-hab.p-3s father-3p-p mother-3p-p banana

 cod-i-me-ig ahuc me-ce-b buic me-ce-b mel
 chop-pred.-SS-3p milk put-DS-3s ripe put-DS-3s boy

 sim meme-ga-il ana-ga-il ^o[mel sim]
 child father-3p-p mother-3p-p boy child

 cu-cul-ad-i *^o[meme-ga-il ana-ga-il] cabi
 sim.-leave-3p-pred. father-3p-p mother-3p-p garden

 na be-bele-igin *^o[Mim] uqa mel sim ced-i
 to sim.-go-3p-DS spirit 3s boy child take-pred.

 *^o[Mim] ^o[mel sim] gaban-ad-i-me-i *^o[Mim]
 spirit boy child gather-3p-pred.-SS-3s spirit

 uqa ^o[mel sim] gaid sab ade-lo-i.
 3s boy child always food 3p-hab.p-3s

[11:7-8]

'So then for that kind of little child he would always put food for them. They would chop banana and give

each one milk and ripe banana and then the children's parents would leave them and go to the garden. But while they were away he would take them and gather them together and give them food.'

1.3.3.1. Omission and nonomission of elements of the noun phrase under identity in coordination.

The nominal head(a), adjective(b), adjective phrase(c), quantifier(d), demonstrative adjective(e), interrogative adjective(f), negative particle(g), postpositional phrase(h) and adjective clause(i) can all be omitted from the noun phrase under identity in coordination.

(517)

- (a) Mel ben ca nag ca age bal udo-gi-na.
boy big add small add 3p ball play-3s-pres.
'The big and small boys are playing football.'
- (b) Mel mel aid nag cof-ad-og-a.
boy boy female small look after-2s-imp.
'Look after the small boys and girls.'
- (c) Dana caja madi bahic ho-ig-a.
man woman many emph. come-3s-tod.p
'Very many men and women came.'
- (d) Dana caja cunug ho-ig-a.
man woman all come-3p-tod.p
'All the men and women came.'
- (e) Dana caja eu age sab je-ig-a.
man woman that 3p food eat-3p-tod.p
'Those men and women ate the food.'
- (f) Ail mel mel aid ca ho-ig-a?
which boy boy female add come-3p-tod.p
'Which boys and girls came?'
- (g) Eu dana caja qee. Eu dol.
that man woman not that ghosts
'They are not men or women. They are ghosts.'
- (h) Ija na sign sapol ca aig ca qee.
1s of knife axe add edge have not
'My knife and axe are not sharp.'
- (i) Dana caja ho-ig-a eu sab cunug je-ig-a.
man woman come-3p-tod.p that food all eat-3p-tod.p
'The men and women that came ate all the food.'

1.3.3.2. Omission and nonomission of elements of an adjective phrase under identity in coordination.

An adjective phrase can cooccur with another adjective phrase or adjective within the same noun phrase but it is not possible to form a construction whereby elements of such phrases could be omitted under identity in coordination.

1.3.3.3. Omission and nonomission of elements of an adverb phrase under identity in coordination.

Two adverb phrases or adverbs or an adverb phrase and an adverb can be coordinated but it is not possible to form a construction whereby elements of such phrases could be omitted under identity.

1.4. Negation.

Sentence negation is expressed by either a preverbal negative particle qee 'not' or cain 'don't' or by negative suffixation on the verb or by both. The negative particle, qee, occurs with any past tense or the present tense or the future tense and the prohibitive particle, cain, occurs only with the negative imperative mood (negative future tense) (see 1.1.1.3.2.). When the negative particle, qee, occurs with the present tense or the habitual past tense there is no negation marking on the verb. Any other past tense is expressed by the one form which is the remote past tense form with a negative infix -l- (see 2.1.3.2.). When the negative particle qee or the prohibitive particle cain occurs with a verb in the future tense then the verb is expressed in the negative future tense form which includes a negative infix -u (see 2.1.3.2.). A verb suffixed for negative future tense can optionally occur with the certain apprehensive mood (see 2.1.3.4.17.). In this case no negative particle precedes the verb. The negative particles qee and cain are constituents of the verb phrase and can occur in any position preceding the verb. So (a), (b) and (c) below are free variants while (d) is ungrammatical.

(518)

(a) Uqa dana eu qaig qee ut-el.
3s man that money not 3s-3s-neg.p
'He did not give that man money.'

(b) Uqa dana eu qee qaig ut-el.
3s man that not money 3s-3s-neg.p
'He did not give that man money.'

(c) Uqa qee dana eu qaig ut-el.
3s not man that money 3s-3s-neg.p
'He did not give that man money.'

but not

(d) *Qee uqa dana eu qaig ut-el.
not 3s man that money 3s-3s-neg.p

In equative sentences the nonverbal predicate is negated by the postposed negative particle qee 'not'.

(519) Jobon i na dana madi bahic qee.
village this in man many emph. not
'In this village there are not many men.'

1.4.2. Constituent negation.

A constituent can be negated by postposing the negative particle qee 'not' to it.

- (520) Sab me qee je-i-a.
 food good not eat-3s-tod.p
'He ate bad food.'
- (521) Ija sign ca qee h-ug-a.
 is knife with not come-1s-tod.p
'I came without a knife.'
- (522) Uqa iwal-ad-ec qee.
 3s teach-3p-inf. not
'He is not a teacher.'
- (523) Eu ija na jo qee.
 that is of house not
'That is not my house.'
- (524) Uqa qa cinig we qee.
 3s dog seem like not
'He is not like a dog.'

1.4.3. More than one negative element in a sentence.

More than one negative element can occur in a sentence in a few special instances. In one case there is an idiomatic expression qee m-ec 'to cease to be (lit: to become not)' and this can be negated. The result is positive.

- (525) Wa qee me-i-a.
 water not become-3s-tod.p
'The water has finished.'
- (526) Wa qee qee m-el.
 water not not become-3s-neg.p
'The water has not finished.'

A second instance is in the certain apprehensive mood sentence (see 2.1.3.4.17.). In this mood the verb can optionally be marked for future negative tense and this can be negated by the negative particle qee 'not'. The negated form is then functioning like a double negative since normally no negative particle precedes the verb, however the result is negative.

- (527) Uqa ho-i-aun dain.
 3s come-3s-neg.f CAP
'Lest he come.'
- (528) Uqa qee ho-i-aun dain.
 3s not come-3s-neg.f CAP
'Lest he not come.'

Another instance of more than one negative element occurring in a sentence is where one of the negatives happens to be contained in a modifier of a noun phrase.

(529) Uqa sab me qee qee je-i-aun.
 3s food good not not eat-3s-neg.f
'He won't eat the bad food.'

1.4.4. Coordination of negative clauses or sentences.

When negative sentences are coordinated by coordinate medial verb suffixation only the final verb in the clause chain is marked for negation. The nonfinal verbs in the clause chain are dependent upon the final verb for negation desinence as well as tense/mood desinence. The scope of the negation is delimited by the position of the negative particle which occurs in the clause at the limit of the negative scope.

(530) Uqa jo l-i-me-i sign qee o-l.
 3s house go-pred.-SS-3s knife not get-3s-neg.p
'He went to the house and didn't get the knife.'

(531) Uqa jo qee l-i-me-i sign o-l.
 3s house not go-pred.-SS-3s knife get-3s-neg.p
'He didn't go to the house and get the knife.'

In a coordinate sentence structure negative scope can also be limited by a subordinating particle like *fi* 'if' or *nu* 'for/cause'. In this case the negation operates from the negative particle to the subordinating conjunction.

(532) Ege qee faj-udo-co-mun fi mel age me qee
 1p not pay-3s-DS-1p CD boy 3p good not
 calo-qag-an.
 become-3p-fut.

[20:28]

'If we do not pay him the boys will become ill.'

(533) Qee sab ija dih j-i-m-ig nu
 not food is just eat-pred.-SS-1s cause
 uma-du-h-ig-a.
 do-3s-2s-1s-tod.p

[13:20]

'It was not because it was just me eating the food that I did it to you.'

Where sentences are coordinated by the coordinating conjunction *qa* 'but' and are final dependent sentences, each sentence must be marked for negation for it to be negated. In such cases neither the negative particle nor the negative verbal suffixation is attracted to the coordinator or combined with it.

(534) Qee h-og-a qa ceb qee ih-ig-aun.
 not come-2s-imp. but betelnut not 2s-1s-neg.f
'But if you don't come I won't give you betelnut.'

1.4.5. Negation of subordinate clauses.

It is not possible for a verb in a subordinate clause to be negated by the negation of a verb in a superordinate clause or vice versa. A verb must be negated on its own grammatical level. A subordinating conjunction limits the scope of negation to the subordinated clause if the negative element qee occurs in the subordinate clause as in (536) below. Where there is a choice between negating the subordinate clause or negating the superordinate clause negation of the superordinate clause is preferred. So (535) is preferred to (536).

(535) Ija sab faj-ig-en nu qee ho-lo-m.
 1s food buy-1s-fut. for not come-neg.p-1s
'I did not come to buy food.'

(536) Ija qee sab faj-ig-aun nu h-ug-a.
 1s not food buy-1s-neg.f for come-1s-tod.p
'I came not to buy food.'

1.5. Anaphora.1.5.1.1. Anaphora by deletion.

Anaphora by deletion is common when sentences or clauses are conjoined either as coordinate medial clauses or by a coordinating conjunction (see 1.3.1.2-4.). Once a referent is introduced or reintroduced by a noun or noun phrase then subsequent references are normally by pronoun or verbal suffixation alone. See 1.3.2.1. for examples from text of omission of elements under identity in coordination.

It is possible to delete the head noun of a NP if it is the same as in a previous clause.

(537) Naus ho nag qo-i-a qa (ho) ben
 pig small hit-3s-tod.p but pig big
 busale-i-a.
 run away-3s-tod.p
'Naus killed the small pig but the big (pig) ran away.'

It is possible to delete an identical head noun in a separate sentence.

(538) Naus ho nag qo-i-a. Ben busale-i-a.
 pig small hit-3s-tod.p big run away-3s-tod.p
'Naus killed the small pig. The big (pig) got away.'

It is possible to delete both subject and object NP from the second of two coordinated clauses.

(539) Naus sign haun faje-i-a qa hib na
 knife new buy-3s-tod.p but behind at
 ite-i-a.
 1s-3s-tod.p
'Naus bought a new knife but later gave me (it).'

It is not possible, however, to delete identical subject or object NP's from the first of two coordinate clauses. Neither is it possible to have the following types of deletion where it is the verb (the bracketed item) that is deleted:

SOV+SO(V)
SO(V)+SOV
SOV+O(V)

It is possible to answer a yes-no question with just a word for 'yes' or 'no' (see 1.1.1.2.4.2.1.1.) and it is possible to answer a question-word question with just the word that corresponds to the question-word (see 1.1.1.2.4.2.2.).

It is possible to delete almost the whole of the second of two sentences where the negator qee is involved in the second sentence. This can occur with a sentence expressing contradiction as in (540) below.

(540) Duwe ma cil-i-a ija qa qee.
taro boil-3s-tod.p is but not
'Duwe boiled taro but not I.'

1.5.1.2. Deletion where element is marked on the verb.

Both subject and object can be marked on the verb (see 2.1.3.6.1.1-3.) and it is very common in text for all reference to subject and object to be deleted except for verbal suffixation. Where the subject of successive coordinate clauses is coreferential even the verbal suffixation can be deleted leaving just the verb stem (see 2.1.3.5. and 2.1.3.7.). Normally then once a subject or object is introduced by a noun or noun phrase in the first clause it is only referenced in succeeding clauses by verbal suffixation or pronominal reference (see 1.3.2.1-2.).

1.5.1.3. Personal pronoun anaphora.

Anaphora by personal pronoun is very common. In text, once a nominal reference has been made subsequent reference will be by personal pronoun or verbal suffix alone. For personal pronoun forms see 2.1.2.1.10. Pronominal reference can be interclausal and intraclausal. In the latter case a pronominal "copy" is made of the preceding nominal. The pronoun itself agrees with the verb in person and number and serves to emphasize the nominal or disambiguate it from other nominals in the sentence.

(541) Dana uqa ho-i-a.
man 3s come-3s-tod.p
'The man came.'

(542) Dana age ho-ig-a.
man 3p come-3p-tod.p
'The men came.'

(543) Dana eu mel age qo-i-a.
man that boy 3p hit-3s-tod.p
'The man hit the boys.'

1.5.1.4. Reflexive pronoun anaphora.

There is no reflexive pronoun proper; rather reflexivity is expressed by a personal pronoun followed by a reflexive postposition *dodoc*. This reflexive element follows the argument upon which the reflexive action of the verb operates (see 1.6.1.). *dodoc* can also function to emphasize the noun or pronoun it follows (see 1.6.9.1.).

(544) *Me1 uqa dodoc qo-i-a.*
 boy 3s self hit-3s-tod.p
 'The boy hit himself.'

(545) *Dana uqa dodoc nu-i-a.*
 man 3s self go-3s-tod.p
 'The man himself went.'

1.5.1.5. Special anaphoric pronouns.

There are no special anaphoric pronouns, however, the demonstrative pronouns *i* 'this' and *eu* 'that' can function anaphorically either alone or in combination with other elements. Also the adverbial particles *edi* 'like this' and *odi* 'like that' and the indefinite article *oso* can function anaphorically. *i* and *eu* can function alone or with personal pronouns, e.g. *i age* 'these', *eu age* 'those', or with the adverbials *edi* and *odi*. When functioning alone *i* has only a cataphoric use and *eu* only an anaphoric use. In combination with *odi* and a pronoun *eu* can also have a cataphoric use. In combination with a pronoun *i* can also have an anaphoric use. *edi* only has a cataphoric use and *odi* can function anaphorically and cataphorically. *oso* only has an anaphoric use.

Cataphoric use of i.

(546) *Eu nu qila i ege meen qaig eu mede*
 that for now this 1p stone shoot that nose-3p
qo-qo-na.
 hit-1p-pres. [2:22]
 'Therefore now we are doing this - we are gathering the money.'

Anaphoric use of eu.

(547) *Se gai-ni eu adi od-og-a?*
 hey friend-1s that how do-2s-tod.p [4:10]
 'Hey friend what is that you have done?'

Cataphoric use of edi.

(548) *Ege edi cilo-qo-na. ...*
 1p like this cook-1p-pres. [31:4]
 'We cook it like this. ...'
 (The rest of the text goes on to explain how to cook the sago.)

Cataphoric use of odi.

(549) Eu odi. Mel mulung bele-gi-na.
that like that boy initiation go-3p-pres.

Gug odi. ...
basis like that

[20:1-3]

'The boy's initiation ceremony is like this(that). The basis of it is like this(that). ...'

(The rest of the text goes on to relate the initiation ceremony.)

Anaphoric use of odi.

(550) Eu odi igid cad-ec eu han
that like that game fight-NOM/ADJ that war

cad-ec nu ihoc m-ec eu odi odo-gi-na.
fight-NOM/ADJ for enough put-inf. that like do-3p-pres.

[16:21]

'It is like that. That is how they played the fighting game and practised to make war.'

Cataphoric use of i/eu with pronouns.

(551) Dana i/eu age ho-ig-a.
man this/that 3p come-3p-tod.p

Naus ca Liwa ca Malol ca.
add add add

'These/those men came. Naus, Liwa and Malol.'

Anaphoric use of i/eu with pronouns.

(552) Naus ca Liwa ca Malol ca ho-ig-a.
add add add come-3p-tod.p

Dana i/eu age sab je-ig-a.
man this/that 3p food eat-3p-tod.p

'Naus, Liwa and Malol came. These/those men ate the food.'

Anaphoric use of oso.

(553) Uqa leis met-al-en. Oso caja hahun ca.
3s two carve-3d-3s-rem.p indef. woman image add

Oso dana hahun ca.
indef. man image add

[5:7]

'He carved two of them. One was the image of a woman and the other was the image of a man.'

1.5.1.6. Other means of anaphoric reference.

The switch-reference system anticipates the reference of the following subject NP and therefore has a cataphoric function (see 2.1.3.6.7.).

Another means of anaphoric reference exists involving special use of the first clause of the sentence which can be just a dummy verb or a full recapitulation clause repeating the content of the final clause of the previous sentence. It is normal in text for the subject NP of the first clause in a sentence to "pick up" its subject continuity from the final clause of the preceding sentence either by a dummy verb like *od-oc* 'to do' or by a recapitulation clause that restates the preceding final verb. So typical examples of this would be:

Same subject continuity.

.. uqa ho-i-a. Od-i-me-i ..
 3s come-3s-tod.p do-pred.-SS-3s
 '... he came. Having done that ...'

.. uqa ho-i-a. H-u-me-i ..
 3s come-3s-tod.p come-pred-SS-3s
 '... he came. Having come ...'

Different subject continuity.

.. uqa ho-i-a. Odo-co-b ..
 3s come-3s-tod.p do-DS-3s
 '... he came. Having done that ...'

.. uqa ho-i-a. Ho-co-b ..
 3s come-3s-tod.p come-DS-3s
 '... he came. Having come ...'

This construction is diagrammed in [4] below.

[4]

Same subject continuity

Clause 1-DS	Clause 2-fl.	Clause 1-SS*	Clause 2
S ₁ Subject _i	Subject _j	S ₂ Subject _j	Subject _j

Different subject continuity

Clause 1-DS	Clause 2-fl.	Clause 1-DS*	Clause 2
S ₁ Subject _i	Subject _j	S ₂ Subject _j	Subject _j

*recapitulation clause

However, a special type of 'retrospective' reference can occur involving the recapitulation clause. Retrospective reference is diagrammed in [5] below. In this construction clause 1 of S₂ is marked with SS following as it has an identical subject NP to clause 2 in S₂. However, clause 1 of S₂ is also marked for subject person-number agreement of its own subject NP and in this case the subject *i* was previously referred to in clause 1 of S₁. Clause 1 in S₂ is not therefore picking up its subject continuity reference from the immediately preceding clause i.e. the final clause, 2, of S₁ but rather is "skipping over" this clause and picking up its subject reference from a previous, more distant clause. Such retrospective reference can refer back

to very distant subject NP's, skipping over many clauses and even sentences as shown in example (557) below. In this construction, strictly speaking, the S/R markers are only coreferencing the following clause and therefore are functioning cataphorically, as normal, but they serve to highlight the fact that the subject reference does not follow on from the immediately preceding final clause and subject continuity must be related back to a more distant preceding clause.

[5]

	Clause 1-DS	Clause 2-fl.	Clause 1-SS*	Clause 2
S ₁	Subject _i	Subject _j	S ₂ Subject _j	Subject _i

*retrospective recapitulation clause

Examples from text of anaphoric reference by a retrospective recapitulation clause are given below. The retrospective clause is underlined in each example:

In (554) Odimei (3s subject) does not refer back to ceguloloig (3p subject) rather it refers back to maadeceb whose subject is dana ben 'big man'.

(554) Dana ben uqa dana caja ca ma-ade-ce-b cegul-ec
man big 3s man woman with say-3p-DS-3s meet-NOM/ADJ

cudun na cegulo-lo-ig. Od-i-me-i uqa ceb
place at meet-hab.p-3p do-pred.-SS-3s 3s betelnut

boh daul na tac-i-me-i ah-u gemo
plate long in fill-pred.-SS-3s bring-pred. middle

mo-lo-i.
put-hab.p-3s

[29:33-34]

'The big man used to tell the people to meet him at the meeting place. Then he would fill the long plate with betelnut and put it in the middle of them.'

In (555) Odimeig (3p subject) does not refer back to calen (3s subject) but rather refers back to qetecebil whose subject is the anonymous 'they'.

(555) Meen eu adi bahic qete-ce-bil jo ben oso cin
cave that how emph. cut-DS-3p house big indef. like

we cal-en? Od-i-me-ig el-du cuha
seem appear-3s-rem.p do-pred.-SS-3p clean-3s well

bahic do-in?
emph. 3s-3p-rem.p

[25:34-35]

'How did they cut that cave so that it appears like a huge house and how did they make it so smooth?'

In (556) the subject of Odimei is 'he/the man' and the subject of qahen is cenal aig oso 'a galip nut seed'. The previous reference to 'the man' is in the recapitulation clause beginning the second sentence, Us ninijen 'as he

slept'. Note also that cajimei coreferences the following nonagentive cause subject dain 'pain' as same subject when in fact this is a grammatical change of subject. For an explanation of this phenomenon see 2.1.3.6.7.

(556) Us dahi-g cele-ce-b nij-en. Us
 sleep ear-3s-pos. forget-DS-3s lie-3s-rem.p sleep
 ni-nij-en cenal aig oso cas-i l-i
 sim.-lie-3s-DS galip nut indef. come out-pred. go-pred.
 ton-i-me-i mede qah-en.
 fall-pred.-SS-3s nose-3s-pos. break-3s-rem.p
Od-i-me-i filicit-i caj-i-me-i dain
 do-pred.-SS-3s startle-pred. arise-pred.-SS-3s pain
 do-co-b mad-en ..
 3s-DS-3s say-3s-rem.p

[14:9-11]

'He went to sleep and forgot about it. As he slept a galip nut came loose, fell down and broke his nose. He jumped up startled and in great pain said ..'

In (557) Odimesi (3d subject) does not refer back to nen (3s subject) rather it refers back to Cuhuldocobil (3d subject) whose subject is 'those two'.

(557) Cuhul-do-co-bil casu ceteh-teh odi
 deceive-3s-DS-3d drum things like
 qe-qel-ad-i sih o-n. Sih ceteh-teh
 sim.-throw-3p-3s-SS cane get-3s-rem.p cane things
 eu dewe-g cunug me qee m-en.
 that body-3s-pos. all good not become-3s-rem.p
 Dewe-g gol n-en. Od-i-me-si
 body-3s-pos. red come down-3s-rem.p do-pred.-SS-3d
 eu ale ono dec ho-si-n.
 that 3d there from come-3d-rem.p

[19:13-16]

'They(2) deceived him and as he threw those things about the cane got him. Those cane things made his body no good and blood poured out. Then those two came away from there.'

1.5.2.1. Anaphora within the clause.

The person-number subject and object verbal suffixation can have an antecedent within the same clause. Anaphora can also be expressed within the clause:

(i) by personal pronoun either functioning alone or within a postpositional phrase.

(558) Dana caja age ho-gi-na.
 man woman 3p come-3p-pres.
'The men and women are coming.'

(559)Malol uqa na jo age cehe-gi-na.
 3s of house 3p build-1s-pres.
'They are building Malol's house.'

(560)Mel aid oso uqa nu h-ug-a.
 boy female indef. 3s cause come-1s-tod.p
'I came because of a girl.'

(561)Ija Lufani ca ija na mel aid oso Graged dana
 1s with 1s of boy female indef. man
 on uqa ca market cudun na t-i-me-u ...
 get-3s-rem.p 3s with place to go up-pred.-SS-1d
 [7:10]
'I and Lufani, a daughter of mine who married a Graged man, went up to the market place ...'

(562)Dana eu uqa dodoc nu-i-a.
 man that 3s self go-3s-tod.p
'That man went himself.'

(ii) by the inalienably possessed noun referring back to a previous antecedent which can be possessor or possessee (see 2.1.1.4.7.1.).

(563)Naus uqa na ho mela-h ute-i-a.
 3s of pig son-3s-pos. 3s-3s-tod.p
'Naus gave his pig to his son.'

(564)Dege Aikun ca, Naus mela-h-ul, ho-si-na.
 add son-3s-pos.-p come-3d-pres.
'Dege and Aikun, Naus's sons, are coming.'

(iii) by a demonstrative pronoun in the relative clause (see 1.1.2.3.) or with a quantifying expression.

(565)Mun gonub ujam maleb baguc eu cunug ceh-i
 banana that all plant-pred.
 he-do-n.
 finish-3s-3s-rem.p

[5:5]

'Gonub, ujam, maleb and baguc banana species, all of them he finished planting.'

(iv) by the reciprocal verb (see 2.1.3.6.9.).

1.5.2.2. Anaphora between coordinate clauses.

Any of the anaphora described in 1.5.1.1-6. can occur between coordinated clauses whether or not the element is marked on the verb. The switch-reference system operates cataphorically between coordinate clauses and the antecedent need not necessarily be in the immediately preceding clause (see 1.5.1.6. and 2.1.3.6.7.).

1.5.2.3. Anaphora between superordinate and subordinate clauses.

Any of the anaphora described in 1.5.1.1-6. can occur between superordinate and subordinate clauses. Anaphora by deletion is obligatory in the relative clause between the antecedent (head noun) and the relativized noun since the head noun is replaced by the relative clause (see 1.1.2.3.). Anaphora by deletion is optional in other cases. Anaphora by pronoun can occur across any superordinate-subordinate combination except for the purpose adverbial clause (see 1.1.2.4.2.5.) in which case the antecedent can occur in either the superordinate or subordinate clause.

(566)

(a) Naus ho q-ugi-an nu (*uqa) bahiw nu-i-a.
pig hit-3s-fut. cause 3s forest go-3s-tod.p

(b) (*Uqa) ho q-ugi-an nu Naus bahiw nu-i-a.
3s pig hit-3s-fut. cause forest go-3s-tod.p
'Naus went to the forest to kill a pig.'

(c) Naus ho q-ugi-a bil-i (*uqa) bahiw
pig hit-3s-rel.f be-pred. 3s forest

nu-i-a.
go-3s-tod.p

(d) (*Uqa) ho q-ugi-a bil-i Naus bahiw
3s pig hit-3s-rel.f be-pred. forest

nu-i-a.
go-3s-tod.p
'Naus went to the forest intending to kill a pig.'

Anaphora between superordinate-subordinate clauses by verbal suffixation can occur across any superordinate-subordinate combination except in the cases where the subordinate verb is in the infinitive form as in the adverbial clauses of purpose and apprehension (see 1.1.2.4.2.5. and 11.).

(567) Naus sab faj-ec nu ho-i-a.
food buy-inf. for come-3s-tod.p
'Naus came to buy food.'

(568) Ija Madang nu-i-m-ig wal-i f-ec dain.
1s go-pred.-SS-1s brother-1s see-inf. CAP
'If I go to Madang I might see my brother.'

Anaphora between superordinate-subordinate clauses by reflexive pronoun can only occur with the antecedent in the superordinate clause.

(569) Naus uqa uqa dodoc cus-ec nu ho-i-a.
3s 3s self wash-inf. for come-3s-tod.p
'Naus came to wash himself.'

Anaphora between superordinate-subordinate clauses by the switch-reference system only occurs with the adverbial subordinate clauses of condition and apprehension.

(570) Ija Madang nu-i-f-ig wal-i f-ig-en.
 1s go-pred.-CD/SS-1s brother-1s see-1s-fut.
'If I go to Madang I will see my brother.'

(571) Ija Madang nu-i-m-ig wal-i f-ig-en dain.
 1s go-pred.-SS-1s brother-1s see-1s-fut. CAP
'If I go to Madang I might see my brother.'

1.5.2.4. Anaphora between different subordinate clauses.

There are no additional restrictions on anaphoric relations between subordinate clauses. (572) below illustrates anaphora between the relativized noun in a relative clause and verb suffixation in a purpose clause.

(572) Dana aluh na bile-na eu uqa sab
 man mountain on be-3s-pres. that 3s food
 faj-igi-an nu ho-i-a.
 buy-3s-fut. for come-3s-tod.p
'The man that lives on the mountain came to buy food.'

1.5.2.5. Anaphora between different sentences.

All the kinds of anaphora described under 1.5.1.1-6. can operate across unconjoined sentences except anaphora by reflexive pronoun and switch-reference.

1.5.3. Anaphora and complementizers.

Subordinating conjunctions occur in the sentence final position and therefore the only element in the sentence that can occur next to the complementizer is the verb. Verbal suffixes when functioning as antecedent or anaphor can therefore occur next to the complementizer.

1.6. Reflexives.

1.6.1. Means of expressing reflexivity.

Reflexivity is expressed by postposing the reflexive postposition dodoc 'self' to the personal pronoun forms (see 2.1.2.2.). These reflexive forms function either as free forms or as attributive within the noun phrase. A reflexive action can also be expressed by a pronominal clitic attached to the verb (see 1.6.3.). Also certain verbs have inherent reflexive action where the object of the verb is identical to the subject. Reflexive forms can be used with these verbs, however.

as-ec	<i>'to wipe away excreta from anus'</i>
cus-ec	<i>'to wash'</i>
qal-ec	<i>'to turn around'</i>
sal-ec	<i>'to remove skin'</i>
taq-ec	<i>'to dress'</i>
telel-ec	<i>'to tremble'</i>

(573) Uqa uqa dodoc taqe-i-a.
 3s 3s self dress-3s-tod.p
'He dressed himself.'

1.6.2. Scope of reflexivity.

Ordinarily the scope of reflexivity does not extend beyond the clause boundary since, even if the subject is not expressed by an overt NP, subject reference is still carried by the verb suffixation within the clause. This applies for both coordinate and subordinate clause structures and for reflexivity expressed by both the reflexive pronominal form and the object pronominal clitic form.

(574) Dana h-u-me-i uqa dodoc na sign o-i-a.
 man come-pred.-SS-3s 3s self of knife get-3s-tod.p
'The man_i came and took his_i knife.'

(575) Dana h-u-fe-i uqa dodoc na sign u-gi-an.
 man come-pred.-CD-3s 3s self of knife get-3s-fut.
'If the man_i comes he_i will get his_i knife.'

(576) Ija jo na nu-i-m-ig q-it-ig-a.
 1s house at go-pred.-SS-1s hit-1s-1s-tod.p
'I went to the house and hit myself.'

(577) Ija jo na nu-i-f-ig q-it-ig-en.
 1s house at go-pred.-CD-1s hit-1s-1s-fut.
'If I go to the house I will hit myself.'

Reflexive scope can extend beyond the clause boundary, however, if the reflexive form occurs within a clause with an infinitive verb which does not carry subject person-number agreement.

(578) Uqa dodoc na sign oc nu ho-i-a.
 3s self of knife get-inf. for come-3s-tod.p
'(He_i) came to get his_i knife.'

(579) Q-it-ec nu jo na nu-ig-a.
 hit-1s-inf. for house at go-1s-tod.p
'(I) went to the house to hit myself.'

1.6.3. Intraclausal reflexivity.

Reflexivity can be expressed with a pronominal object clitic attached to the verb where the subject of the verb is coreferential with the object (see also 2.1.3.6.1.2-3).

(580) Ija q-it-ig-a.
 1s hit-1s-1s-tod.p
'I hit myself.'

1.6.3.1. Possible syntactic functions of the antecedent.

The antecedent of a reflexive action indicated by a verbal object clitic can only be subject of the verb or modifier of the subject.

(581) Ija q-it-ig-a.
 1s hit-1s-1s-tod.p
'I hit myself.'

(582) Ija mela-mi q-ite-i-a.
 1s son-1s hit-1s-3s-tod.p
 'My_i son hit me_i.'

1.6.3.2. Possible syntactic functions of the reflexive.

When reflexive action is indicated by a verbal object clitic the reflexive can function as either direct or indirect object.

(583) Ija q-it-ig-a.
 1s hit-1s-1s-tod.p
 'I hit myself.'

(584) Ija sab it-ig-a.
 1s food 1s-1s-tod.p
 'I gave myself food.'

(585) Ija mela-mi sab ite-i-a.
 1s son-1s food 1s-3s-tod.p
 'My son gave me food.'

1.6.3.3. Restrictions on intraclausal reflexive combinations.

There are no restrictions on intraclausal reflexive combinations but the object clitic cannot coreference a pronoun marked with the reflexive postposition dodoc 'self'.

(586)*Ija dodoc q-it-ig-a.
 1s self hit-1s-1s-tod.p

1.6.4. Position of the reflexive element within the clause.

The reflexive element occupies the same position in the clause as its nonreflexive counterpart.

1.6.5. Possible relations between antecedent and reflexive.

The possible relations between the antecedent and reflexive element are shown in the following chart. Other antecedent/reflexive combinations are either not possible in that there is no form in the language to express the combination (for example there is no form for subject complement so this category cannot occur as either antecedent or reflexive) or ungrammatical in that although a form may exist its use is not part of the grammar of the language (for example the indirect object cannot occur as a reflexive element because of the cooccurrence restriction described under 1.6.3.3. above (see (587) below)).

(587)*Ija dodoc sab it-ig-a.
 1s self food 1s-1s-tod.p
 'I gave myself food.'

A number on the chart refers to the subsection of 1.6.5. in which that particular combination of antecedent and reflexive functions is illustrated.

Ref1:	B	C	D	F	G	H	I	J
Ant:								
A		1	2	4	5	6	17	18
B			20	22		24	35	36
C	38			40	41	42	53	54
D	56			58				72
E	74		76				87	88
F	90		92					
G	106		108					120
H	122							
I	174							
J	194		196	198		200		

Key to chart

A: subject

B: modifier of subject

C: direct object

D: modifier of direct object

E: indirect object

F: modifier of indirect object

G: adpositional indirect object

H: modifier of adpositional indirect object

I: element in adpositional phrase

J: modifier of element in adpositional phrase

1.6.5.1. Antecedent=subject: Reflexive=direct object.

(588) Uqa uqa dodoc qo-i-a.
 3s 3s self hit-3s-tod.p
 'He hit himself.'

1.6.5.2. Antecedent=subject: Reflexive=modifier of direct object.

(589) Uqa uqa dodoc eben qo-i-a.
 3s 3s self arm hit-3s-tod.p
 'He_i hit his_i arm.'

1.6.5.4. Antecedent=subject: Reflexive=modifier of indirect object.

(590) Uqa uqa dodoc mela-h ceb uto-i-a.
 3s 3s self son-3s betelnut 3s-3s-tod.p
 'He_i gave his_i son betelnut.'

1.6.5.5. Antecedent=subject: Reflexive=indirect object marked by an adpositional phrase.

(591) Uqa uqa dodoc nu sab uto-i-a.
 3s 3s self for food 3s-3s-tod.p
 'He gave food to himself.'

1.6.5.6. Antecedent=subject: Reflexive=modifier of indirect object in adpositional phrase.

(592) Uqa uqa dodoc mela-h ate-g ca sab ale-i-a.
 3s 3s self son-3s daughter-3s with food 3d-3s-tod.p
'He_j gave his_j son and daughter food.'

1.6.5.17. Antecedent=subject: Reflexive=element in an adpositional phrase.

(593) Uqa uqa dodoc na jo mane-i-a.
 3s 3s self of house burn-3s-tod.p
'She_j burnt her_j house.'

1.6.5.18. Antecedent=subject: Reflexive=modifier of element in an adpositional phrase.

(594) Uqa uqa dodoc mela-h ca nue-si-a.
 3s 3s self son-3s with go-3d-tod.p
'He_j went with his_j son.'

1.6.5.20. Antecedent=modifier of subject: Reflexive=modifier of direct object.

(595) Ija mela-mi ija dodoc ebe-ni qo-i-a.
 1s son-1s 1s self arm-1s hit-3s-tod.p
'My_j son hit my_j arm.'

1.6.5.22. Antecedent=modifier of subject: Reflexive=modifier of indirect object.

(596) Ija mela-mi ija dodoc ate-ni sab ute-i-a.
 1s son-1s 1s self daughter food 3s-3s-tod.p
'My_j son gave my_j daughter food.'

1.6.5.24. Antecedent=modifier of subject: Reflexive=modifier of indirect object in adpositional phrase.

(597) Ija mela-mi ija dodoc ate-ni nu sab ute-i-a.
 1s son-1s 1s self daughter about food 3s-3s-tod.p
'My_j son gave my_j daughter food.'

1.6.5.35. Antecedent=modifier of subject: Reflexive=element in an adpositional phrase.

(598) Ija mela-mi ija dodoc na qa qo-i-a.
 1s son-1s 1s self of dog hit-3s-tod.p
'My_j son hit my_j dog.'

1.6.5.36. Antecedent=modifier of subject: Reflexive=modifier of element in an adpositional phrase.

(599) Ija mela-mi ija dodoc ate-ni na qa qo-i-a.
 1s son-1s 1s self daughter of dog hit-3s-tod.p
'My_j son hit my_j daughter's dog.'

1.6.5.38. Antecedent=direct object: Reflexive=modifier of subject.

(600) Ija dodoc mela-mi ija q-it-i-a.
 1s self son-1s 1s hit-1s-3s-tod.p
'My_i own son hit me_i.'

1.6.5.40. Antecedent=direct object: Reflexive=modifier of indirect object.

(601) Ija uqa dodoc meme-g Dege ihac-du-g-a.
 1s 3s self father-3s show-3s-1s-tod.p
'I showed Dege_i to his_i father.'

1.6.5.41. Antecedent=direct object: Reflexive=indirect object marked by an adpositional phrase.

(602) Ija Naus uqa dodoc nu ma-du-g-a.
 1s 3s self about say-3s-1s-tod.p
'I told Naus_i about himself_i.'

1.6.5.42. Antecedent=direct object: Reflexive=modifier of indirect object in an adpositional phrase.

(603) Ija Naus uqa dodoc mela-h nu ma-du-g-a.
 1s 3s self son-3s about say-3s-1s-tod.p
'I told Naus_i about his_i son.'

1.6.5.53. Antecedent=direct object: Reflexive=element in an adpositional phrase.

(604) Ija Naus uqa dodoc na jo na f-ig-a.
 1s 3s self of house in see-1s-tod.p
'I saw Naus_i in his_i house.'

1.6.5.54. Antecedent=direct object: Reflexive=modifier of an element in an adpositional phrase.

(605) Ija Naus uqa dodoc mela-h na jo na f-ig-a.
 1s 3s self son-3s of house in see-1s-tod.p
'I saw Naus_i in his_i son's house.'

1.6.5.56. Antecedent=modifier of direct object: Reflexive=modifier of subject.

(606) Ija dodoc mela-mi ija ebe-ni qo-i-a.
 1s self son-1s 1s arm-1s hit-3s-tod.p
'My_i son hit my_i arm.'

1.6.5.58. Antecedent=modifier of direct object: Reflexive=modifier of indirect object.

(607) Ija uqa dodoc aide-g Naus mela-h ut-ig-a.
 1s 3s self wife-3s son-3s 3s-1s-tod.p
'I gave Naus's_i son to his_i wife.'

1.6.5.72. Antecedent=modifier of direct object: Reflexive=modifier of element in an adpositional phrase.

(608) Ija ija ate-ni ija dodoc mela-mi ca f-ig-a.
 1s 1s daughter-1s 1s self son-1s with see-1s-tod.p
'I saw my_i daughter with my_i son.'

1.6.5.74. Antecedent=indirect object: Reflexive=modifier of subject.

(609) Uqa dodoc mela-h Naus ceb uto-i-a.
 3s self son-3s betelnut 3s-3s-tod.p
'His_i own son gave Naus_i betelnut.'

1.6.5.76. Antecedent=indirect object: Reflexive=modifier of direct object.

(610) Ija Naus uqa dodoc mela-h ut-ig-a.
 1s 3s self son-3s 3s-1s-tod.p
'I gave Naus_i his_i own son.'

1.6.5.87. Antecedent=indirect object: Reflexive=element in an adpositional phrase.

(611) Ija Naus uqa dodoc na sign ut-ig-a.
 1s 3s self of knife 3s-1s-tod.p
'I gave Naus_i his_i own knife.'

1.6.5.88. Antecedent=indirect object: Reflexive=modifier of element in an adpositional phrase.

(612) Ija Naus uqa dodoc mela-h ca sab al-ig-a.
 1s 3s self son-3s with food 3d-1s-tod.p
'I gave Naus_i and his_i son food.'

1.6.5.90. Antecedent=modifier of indirect object: Reflexive=modifier of subject.

(613) Uqa dodoc mela-h Naus wali-ag sab ute-i-a.
 3s self son-3s brother-3s food 3s-3s-tod.p
'His_i own son gave Naus's_i brother food.'

1.6.5.92. Antecedent=modifier of indirect object: Reflexive=modifier of direct object.

(614) Ija Naus uqa dodoc na sab uqa na ho ut-ig-a.
 1s 3s self of food 3s of pig 3s-1s-tod.p
'I gave Naus's_i own food to his_i pig.'

1.6.5.106. Antecedent=indirect object in an adpositional phrase: Reflexive=modifier of subject.

(615) Ale dodoc cot-ola Naus Kefa ca ho ale-i-a.
 3d self brother-3d add pig 3d-3s-tod.p
'Their_i own brother gave (Naus and Kefa)_i a pig.'

1.6.5.108. Antecedent=indirect object in an adpositional phrase: Reflexive=modifier of direct object.

(616) Ija Naus Kefa ca ale dodoc na ho al-ig-a.
 1s add 3d self of pig 3d-1s-tod.p
'I gave (Naus and Kefa)_i their_i own pig.'

1.6.5.120. Antecedent=indirect object in an adpositional phrase: Reflexive=modifier of an element in an adpositional phrase.

(617) Ija Naus ca uqa dodoc mela-h ca sab al-ig-a.
 1s add 3s self son-3s add food 3d-1s-tod.p
'I gave Naus_i and his_i son food.'

1.6.5.122. Antecedent=modifier of indirect object in an adpositional phrase: Reflexive=modifier of subject.

(618) Ija dodoc mei ija mela-mi ate-ni ca ho
 1s self father 1s son-1s daughter-1s add pig
 ale-i-a.
 3d-3s-tod.p
'My_i own father gave my_i son and my_i daughter a pig.'

1.6.5.174. Antecedent=element in an adpositional phrase: Reflexive=modifier of subject.

(619) Ija dodoc mela-mi ija na qa qo-i-a.
 1s self son-1s 1s of dog hit-3s-tod.p
'My_i own son hit my_i dog.'

1.6.5.194. Antecedent=modifier of an element in an adpositional phrase: Reflexive=modifier of subject.

(620) Ija dodoc mela-mi ija ate-ni na qa qo-i-a.
 1s self son-1s 1s daughter-1s of dog hit-3s-tod.p
'My_i own son hit my_i daughter's dog.'

1.6.5.196. Antecedent=modifier of an element in an adpositional phrase: Reflexive=modifier of direct object.

(621) Ija dodoc mela-mi ija ate-ni ca f-ig-a.
 1s self son-1s 1s daughter-1s with see-1s-tod.p
'I saw my_i own son with my_i daughter.'

1.6.5.198. Antecedent=modifier of an element in an adpositional phrase: Reflexive=modifier of indirect object.

(622) Ija ija dodoc mela-mi ija ate-ni ca ho al-ig-a.
 1s 1s self son-1s 1s daughter add pig 3d-1s-tod.p
'I gave my_i own son and my_i daughter a pig.'

1.6.5.200. Antecedent=modifier of an element in an adpositional phrase: Reflexive=modifier of indirect object in an adpositional phrase.

(623) Ija uqa dodoc mela-mi ca ija ate-ni ca ho
 1s 3s self son-1s add 1s daughter add pig

al-ig-a.
 3d-1s-tod.p
 'I gave my_i own son and my_i daughter a pig.'

1.6.6. Reflexive relations within nominalized clauses.

All the possible reflexive relations described in 1.6.5. above can occur within the indirect quote which is a nominalized clause (see also 1.1.1.1.).

(624) Uqa uqa dodoc qo-i-a ec mad-en.
 3s 3s self hit-3s-tod.p NOM/ADJ say-3s-rem.p
 'He_i said that he_i hit himself_i.'

1.6.7. Reflexive relations within ordinary noun phrases.

Reflexive relations cannot exist within ordinary noun phrases.

1.6.8. Reflexive structures without an overt antecedent.

A reflexive must have an overt antecedent although it does not necessarily have to be in the same clause (see 1.6.2.). The antecedent can also be just a verbal suffix.

(625) Uqa dodoc qo-i-a.
 3s self hit-3s-tod.p
 '(He) hit himself.'

1.6.9. Other uses of reflexive forms.

1.6.9.1. As emphatic pronoun.

The particle *dodoc* often functions to add emphasis to the nominal or pronominal head of a noun phrase expressing subject, direct object, indirect object or equational predicate.

(626) Jo mel age dodoc cehe-gi-na.
 house boy 3p self build-3p-pres. [30:34]
 'They build the house themselves.'

(627) Ija Kristen me-em eu ija dodoc qee.
 1s Christian become-1s-rem.p that 1s self not [8:11]
 'When I became a Christian it was not just me.'

1.7. Reciprocals.

1.7.1. Means of expressing reciprocity.

Reciprocity is expressed by two coordinate medial verbs embedded within a matrix verb (see 2.1.3.6.9. for a full description). The two coordinate verbs must be identical with different subject (DS) marking and third person singular subject suffixation. They can be comprised of either a verb stem plus suffixation or a third person singular object marker plus suffixation.

(628)Age fe-ce-b fe-ce-b eig-a.
 3p see-DS-3s see-DS-3s 3p-tod.p
'They looked at each other.'

(629)Age asal do-co-b do-co-b eig-a.
 3p laugh 3s-DS-3s 3s-DS-3s 3p-tod.p
'They laughed at each other.'

1.7.2. Scope of reciprocity.

The scope of reciprocity is not necessarily restricted to the same clause. In most cases the antecedent and reciprocal element occur in the same clause as the antecedent is marked on the reciprocal matrix verb but in the case of the matrix verb being in the infinitive form the antecedent will not be marked on the matrix verb and may only occur in another clause.

(630)Uqa dana eu cesaw-ale-i-a. Qo-co-b
 3s man that separate-3d-3s-tod.p hit-DS-3s

 qo-co-b ec dain.
 hit-DS-3s NOM/ADJ CAP
'He separated those men in case they fought each other.'

(631)Dana age han na oso qo-co-b qo-co-b ec
 man 3p war with indef. hit-DS-3s hit-DS-3s NOM/ADJ

 nu cegule-ig-a.
 for meet-3p-tod.p
'They met to fight one another.'

1.7.3. The possible syntactic functions of the antecedent and the reciprocal verb.

1.7.3.1. The possible syntactic functions of the antecedent.

The antecedent must always be the subject of the matrix verb since the subject is always coreferenced on the embedded reciprocal verb. However other arguments, like direct object, indirect object and possessive, can be expressed in the reciprocal clause.

(632)Age qo-co-b qo-co-b eig-a.
 3p hit-DS-3s hit-DS-3s 3p-tod.p
'They_i hit each other_i.'

(633)Age meen qel-i qo-co-b qo-co-b eig-a.
 3p stone throw-pred. hit-DS-3s hit-DS-3s 3p-tod.p
'They_i threw stones at each other_i.'

(634)Age ceb ute-ce-b ute-ce-b eig-a.
 3p betelnut 3s-DS-3s 3s-DS-3s 3p-tod.p
'They_i gave betelnut to each other_i.'

(635)Age eeta eh-i le-ce-b eh-i le-ce-b
 3p yam take-pred. go-DS-3s take-pred. go-DS-3s

eig-a.

3p-tod.p

'They_i took yams to each other_i.'

- (636) Age age na sab je-ce-b je-ce-b eig-a.
 3p 3p of food eat-DS-3s eat-DS-3s 3p-tod.p
'They_i ate each other's_i food.'

- (637) Ale eben-ala heewe-ce-b heewe-ce-b esi-a.
 3d hand-3d-pos. hold-DS-3s hold-DS-3s 3d-tod.p
'They(2)_i held each other's_i hand.'

1.7.3.2. Syntactic functions of the reciprocal verb.

The embedded reciprocal verb can coreference the direct or indirect object of the matrix clause. When the direct object is coreferenced the whole verb is duplicated. When the indirect object is coreferenced only the object marker and subject suffixation is duplicated. For a description of how direct and indirect object is marked on the verb see 2.1.3.6.2.2-3.

Direct object coreference.

- (638) Age get-u-do-co-b get-u-do-co-b eig-a.
 3p cut-pred.-3s-DS-3s cut-pred.-3s-DS-3s 3p-tod.p
'They_i cut each other_i.'

- (639) Ale o-i-do-co-b o-i-do-co-b esi-a.
 3d get-pred.-3s-DS-3s get-pred.-3s-DS-3s 3d-tod.p
'They(2)_i married each other_i.'

- (640) Age wa jo-u-do-co-b jo-u-do-co-b
 3p water wash-pred.-3s-DS-3s wash-pred.-3s-DS-3s

eig-a.

3p-tod.p

'They_i baptized each other_i.'

- (641) Ale ew-u-do-co-b ew-u-do-co-b
 3d despise-pred.-3s-DS-3s despise-pred.-3s-DS-3s

esi-a.

3d-tod.p

'They(2)_i despised each other_i.'

- (642) Age od-u-do-co-b od-u-do-co-b i-me-ig
 3p do-pred.-3s-DS-3s do-pred.-3s-DS-3s pred.-SS-3p

asale-ig-a.

laugh-3p-tod.p

'They_i made each other_i laugh.'

Indirect object coreference.

- (643) Age jacas get-i do-co-b do-co-b eig-a.
 3p tobacco cut-pred. 3s-DS-3s 3s-DS-3s 3p-tod.p
'They_i cut tobacco for each other_i.'

- (644) Ale na ho u do-co-b do-co-b esi-a.
 3d of pig get-pred. 3s-DS-3s 3s-DS-3s 3d-tod.p
'They(2)_i killed each other's_j pigs.'
- (645) Age sisil do-co-b do-co-b eig-a.
 3p ask 3s-DS-3s 3s-DS-3s 3p-tod.p
'They_i questioned each other_j.'
- (646) Age dadan do-co-b do-co-b eig-a.
 3p confuse 3s-DS-3s 3s-DS-3s 3p-tod.p
'They_i confused each other_j.'
- (647) Age filicit do-co-b do-co-b eig-a.
 3p startle 3s-DS-3s 3s-DS-3s 3p-tod.p
'They_i startled each other_j.'

1.7.3.3. Restrictions on combinations of syntactic functions in the reciprocal verb.

It is not possible for the reciprocal verb to encode both direct object and indirect object coreference simultaneously, while it is possible to do this on a nonreciprocal verb (see 2.3.6.2.2-3.).

1.7.6. Reciprocal relations within nominalized clauses.

The reciprocal clause can occur within a nominalized clause (see also 1.1.2.2.).

- (648) Age qo-co-b qo-co-b egi-na nu eu me qee.
 3p hit-DS-3s hit-DS-3s 3p-pres. HB that good not
'That they_i always fight each other_j is not good.'

1.7.7. Reciprocal relations within ordinary noun phrases.

The reciprocal clause can occur within a noun phrase.

- (649) Age na do-co-b do-co-b ec nu dodo eu
 3p of 3s-DS-3s 3s-DS-3s NOM/ADJ about story that
 me qee.
 good not
'Their_i stories about each other_j are not good.'

1.7.8. Reciprocal structures without any overt antecedent.

A reciprocal clause must have an overt antecedent although this need not necessarily occur in the same clause as the reciprocal verb.

1.7.9. Other uses of reciprocal verbs.

The reciprocal verb can only be used to express reciprocal relations.

1.8. Comparison.1.8.1. Means of expressing comparison.

Comparison in general is expressed by two clauses, one expressing the standard of comparison and the other expressing the comparative element. In detail the expression of comparison can be as follows:

(i) by an equative clause expressing the standard of comparison followed by a clause expressing the comparison with the verb *woldoc* 'to surpass'. The clauses are simply juxtaposed if the subject is the same for each clause but if the second clause contains a different subject to the first clause and the second clause expresses that the subject of that clause is greater/lesser in some attribute to that of the first clause then the clauses are conjoined by the coordinating conjunction *qa* 'but'.

(650) Uqa cecela. Ija wol-te-na.
 3s tall 1s surpass-1s-3s-pres.
'He is tall. He is taller than me.'

(651) Uqa cecela ija qa wol-du-gi-na.
 3s tall 1s but surpass-3s-1s-pres.
'He is tall but I am taller than him.'

(652) Ija sab geh bahic j-ig-a.
 1s food much emph. eat-1s-tod.p
 Ija uqa wol-d-ug-a.
 1s 3s surpass-3s-1s-tod.p
'I ate a lot of food. I ate more than him.'

(653) Ija sab geh bahic j-ig-a uqa qa
 1s food much emph. eat-1s-tod.p 3s but
 wol-te-i-a.
 surpass-1s-3s-tod.p
'I ate a lot of food but he ate more than me.'

Comparison using *woldoc* can also be expressed as a nominalized clause.

(654) Uqa ija wol-t-ec.
 3s 1s surpass-1s-NOM/ADJ
'He is my superior.'

(655) Jo i nag jo eu qa wol-d-oc.
 house this small house that but surpass-3s-NOM/ADJ
'This house is small but that house is smaller.'

(656) Na eu culumen ca qa meen wol-d-oc.
 wood that heavy have but stone surpass-3s-NOM/ADJ
'Wood is heavy but stone is heavier.'

The superlative degree can also be expressed using the verb *woldoc*. Again this can be a verbal or nominal expression.

Mel madi bahic fi age jo nag ben ca ceho-qag-an.
 boy many emph. CD 3p house small big add build-3p-fut.

Mel madi ca qee fi age jo nag ihoc we
 boy many add not CD 3p house small enough like

ceho-qag-an.
 build-3p-fut.

[30:33-35]

'The boys build the house themselves. If there are a lot of boys they build a fair size house. If there are not a lot of boys they build a small house that is sufficient.'

(The fewer the boys .. the smaller the house ..)

(664) Ija kopra geh qee mudi-f-ig qaig nag u-g-en.
 is copra much not make-CD-1s money small get-1s-fut.

Ija kopra geh mudi-f-ig qaig ben u-g-en.
 is copra much make-CD-1s money big get-1s-fut.

'If I don't make a lot of copra I will only get a small amount of money. If I make a lot of copra then I will get a lot of money.'

(The more copra .. the more money ..)

1.9. Equatives.

1.9.1. Means of expressing equivalence.

There are five ways of expressing equivalence:

(i) by the postpositional phrase *ihoc na na* 'equal to each other'.

(665) Ija na qa ca hina na qa ca ale ihoc na na.
 1s of dog add 2s of dog add 3d enough
'My dog and your dog are alike.'

(ii) by the postpositional phrase *ca ca* 'alike'.

(666) Naus uqa wali-ag ca ale ca ca.
 3s brother-3s-pos. add 3d add add
'Naus and his brother are alike.'

(iii) by the postpositional phrase *cinig we* 'seem like'. This can be used to express nominal resemblance or verbal simile.

(667) Uqa meen cinig we.
 3s stone seem like
'He is like a stone.'

(668) Uqa qa cinig we.
 3s dog seem like
'He is like a dog.'

(669) Uqa na qeni cinig we tobe-na.
 3s tree lizard seem like climb up-3s-pres.
'He climbs trees like a lizard.'

(670) Uqa wa gubal cinig we cesawe-na.
 3s water turtle seem like divide-3s-pres.
'He swims like a turtle.'

(iv) by a metaphorical nominal equative clause.

(671) Uqa meen.
 3s stone
'He is a stone.'

(672) Uqa qa.
 3s dog
'He is a dog.'

(v) by the adverbial expression *odi we* 'like that'.

(673) Dana eu uqa sab je-i-a eu odi we
 man that 3s food eat-3s-tod.p that like that like

 ija ha (sab) j-ig-a.
 1s also food eat-1s-tod.p
'That man ate as much food as me.'

(674) Dana eu cecela eu odi we ija ha
 man that tall that like that like 1s also

 cecela.
 tall
'That man is as tall as me.'

1.9.2-4. Omission of elements under identity.

In the methods of expressing equivalence described under 1.9.1. the following restrictions apply:

(1) with (i), (ii), (iii) and (iv) the object of equivalence must be expressed as a separate noun phrase.
 (2) with (v) the object of equivalence and the equivalence attribute, either verbal or adjectival, must be repeated in the following equative clause. Other items stated in the first clause can be optionally omitted in the equative clause.

(675) Caja eu uqa na mel sim sab ute-i-a eu
 woman that 3s of boy child food 3s-3s-tod.p that

 odi we ija ija na (mel sim) (sab) ut-ig-a.
 like like 1s 1s of boy child food 3s-1s-tod.p
'That woman gave as much food to her child as I gave to mine.'

1.10. Possession.

The notion of possession i.e. one entity being possessed or related in a close association with another entity, is only expressed formally on the noun in the case of the inalienably possessed noun (see 2.1.1.4.7.). However, this notion can also be expressed in a number of other ways as given below.

1.10.1. Construction of sentences expressing possession.

Sentences expressing possession can be of three different types:

(1) A verbless equative sentence with a possessive nominal i.e. a pronoun followed by the postposition *na* 'of', functioning as predicate.

(676) *Qa eu ija na.*
dog that 1s of
'That dog is mine.'

(677) *Eu ija na qa.*
that 1s of dog
'That is my dog.'

(678) *Jo eu ija me-i uqa na.*
house that 1s father-1s-pos. 3s of
'That house is my father's.'

(679) *Eu ija me-i uqa na jo.*
that 1s father-1s-pos. 3s of house
'That is my father's house.'

(2) A verbless equative sentence with a circumstantial postpositional phrase (see also 2.1.1.4.5.) functioning as predicate.

(680) *Ija hag ca.*
1s sickness have
'I am sick/have sickness.'

(681) *Ija sign ca.*
1s knife have
'I have a knife.'

(682) *Ija culumen ca.*
1s problem have
'I have a problem.'

(683) *Qa eu teful ca.*
dog that bone-3s-pos. have
'That dog is bony/skinny.'

(3) A sentence with an impersonal verb functioning as predicate. This can be considered a 'looser' kind of possession than (1) and (2) above.

(684) *Ija wen te-na.*
1s hunger 1s-3s-pres.
'I am hungry.'

(685) *Ija musul te-na.*
1s sweat-3s-pos. 1s-3s-pres.
'I am sweaty/sweating.'

(686) *Qa eu teful do-na.*
dog that bone-3s-pos. 3s-3s-pres.
'That dog is bony/skinny.'

1.10.2. Alienable and inalienable possession.

Alienable and inalienable possession are distinguished. Alienable possession is expressed by a possessive noun phrase (see 1.2.5.1.) which comprises a possessed nominal preceded by a possessive postpositional phrase. The postposition is na 'of' and this can follow either a pronoun or a nominal if it is a name or kinship term.

(687) Ija na jo.
1s of house
'My house.'

(688) Naus na jo.
of house
'Naus's house.'

(689) Uqa meme-g (uqa) na jo.
3s father-3s-pos 3s of house
'His father's house.'

Alienable possession within the noun phrase can also be expressed by a preposed attributive noun phrase.

(690) Dana caub caja bil-i-a.
man white woman be-3s-tod.p
'The white man's wife is here.'

Inalienable possession is expressed by a closed class of inalienably possessed nouns which are mainly body parts and kinship terms (see 2.1.1.4.7.1. for a full listing of known forms). The inalienably possessed noun is suffixed for person and number of the possessor and, in the case of the kinship nouns, also for singular and plural number of the possessee.

(691) Ija co-ni to-du ode-i-a.
1s mouth-1s-pos. follow-3s do-3s-tod.p
'He did what I said. / He obeyed me.'

(692) Naus mela-h-ul ho-gi-na.
son-3s-pos.-p come-3p-pres.
'Naus's sons are coming.'

1.10.3. Temporary and permanent possession.

There is no difference between the expression of temporary and permanent possession.

1.10.4. Possession relative to persons, animals and things.

The only difference in possession relative to persons, animals and things is that nearly all kinship terms and body part terms are inalienably possessed and kinship terms, which relate to humans, can express singular or plural number of the possessee.

1.10.5. Present and past possession.

There is no difference between the expression of present and past possession.

1.11. Emphasis.1.11.1. Sentence emphasis.

There is no overt difference between contrastive and noncontrastive sentence emphasis.

1.11.1.1. Noncontradictory sentence emphasis.

Noncontradictory sentence emphasis can be expressed in four ways:

(i) by increased intensity and heightened pitch throughout the sentence and especially on the intonation peak (see 3.3.4.2. and 3.3.4.3.).

(ii) by the use of a particle expressing affirmation like *ao*, *cece* or *cmcm* 'yes'.

(693)

A: Qila cabi na nu-ugu-na fo?
now garden to go-2s-pres. QU
'Are you going to the garden now?'

B: Ao. Ija qila cabi na nu-igi-na.
yes 1s now garden to go-1s-pres.
'Yes. I am going to the garden now.'

(iii) by the emphatic mood particle *ijom/om* postposed to the sentence (see also 2.1.3.4.10.).

(694) Aria i qila ohis tob-ec we qee cun
alright this now above climb up-inf. able not feet

beges-ade-ce-b n-i q-it-ec dain.
slide-dist.-DS-3s come down-pred. hit-1s-inf. CAP

Ohis ou na nij-igi-na ijom.
above that at lie-1s-pres. EM

[21:59-60]

'Alright now I am not able to climb up lest my feet slide everywhere and I fall and hurt myself. So now I just sit up there!'

(iv) by use of an adverbial expression like *mele* 'truly' or *dih*, *himec* 'just/only' or *bahic* 'very'.

(695) O mele bahic! Anut cete cete me bahic
O truly very god thing thing good very

ifan-en.
create-3s-rem.p

[14:11]

'Truly God created something very good.'

(696) Od-i-me-i uqa cis-do-n, *I ale dih
do-pred.-SS-3s 3s think-3s-3s-rem.p this 3d just

t-i-me-si cuhu-te-ce-bil busal-ig-a." en.
go up-pred.-SS-3d deceive-1s-DS-3d run away-1s-tod.p

[19:24]
'Then he thought, "These two just went up and tricked me and I ran away."

(697) B-i jic ben na cal-om eu ege
come up-pred. road big at arrive-1p-rem.p that 1p

agas-om. Usino oc nu himec.
stick-1p-rem.p get-inf. for only

[27:8]
'When we came up and arrived on the big road we got stuck. We had only got to Usino!'

1.11.1.2. Contradictory sentence emphasis.

Contradictory sentence emphasis can be expressed in two ways:

(i) by increased intensity and heightened pitch throughout the sentence and especially on the intonation peak (see 3.3.4.2. and 3.3.4.3.).

(ii) by the use of a particle expressing contradiction like qee "no" or qa "but".

(698)

A: Qila cabi na nu-ugu-na fo?
now garden to go-2s-pres. QU
'Are you going to the garden now?'

B: Qee o. Ija qila cabi na qee nu-igi-na.
no 1s now garden to not go-1s-pres.
'No. I am not going to the garden now.'

(699)

A: Hina sab tin ca cain j-ag-aun.
2s food sweet have don't eat-2s-neg.f
'Don't eat the sweet food.'

B: Ija qa sab tin ca j-ec nu gale te-na.
1s but food sweet have eat-inf. for desire 1s-3s-pres.
'But I want to eat the sweet food.'

1.11.2. Constituent emphasis.

1.11.2.1.1. Emphasis by stress/accent.

A common means of emphasizing a constituent is by increased intensity and heightened pitch on the stressed syllable of the constituent. This effect is heightened in the case of contrastive constituent emphasis.

(700) 

 Hina ma-d-og-a!

 2s say-3s-2s-tod.p

 'You tell him!'

1.11.2.1.2. Emphatic words.

There are a number of emphatic words that can modify a constituent (see 1.2.5.2.8.).

1.11.2.1.3. Emphasis by movement.

A constituent can be emphasized by being moved to the preverbal object position. The most common constituent to be emphasized in this way is the subject.

(701) Jo mel age dodoc cehe-gi-na.

 house boy 3p self build-3p-pres.

 [30:34]

 'The boys build the house themselves.'

(702) Qee sab ija dih j-i-m-ig nu od-ih-ig-a.

 not food 1s just eat-pred.-SS-1s for do-2s-1s-tod.p

 [17:30]

 'I did that to you so that it would not be just me eating the food.'

A direct object can be frontshifted to the sentence initial position. This frequently occurs when the direct object is a heavy construction like a relative clause but the direct object can also be frontshifted when it is not part of a heavy structure. This appears, however, to be a topicalizing device in discourse rather than a means of emphasizing a constituent.

(703) Lo je eu ege to-du ode-q-an qa

 law talk that 1p follow-3s do-1p-fut. but

 qee to-du odo-lo-in.

 not follow-3s do-hab.p-2p

 [22:104]

 'Those commandments, we should follow them but you don't.'

(704) Ija Anut mi qa dalam eu cenal batak na

 1s God CR but gourd that galip branch on

 mo-u-m.

 put-contr.-1s

 [14:7]

 'But if I were God I would have put that gourd on the branch of the galip tree.'

1.11.2.1.8. Combination of ways of expressing constituent emphasis.

Any or all of the above means of expressing constituent emphasis can be combined.

1.11.2.2. Elements which can be emphasized.

1.11.2.2.1.1. Noun phrase.

Noun phrases can be emphasized by increased intensity and heightened pitch, emphatic words or movement to the preverbal position.

1.11.2.2.1.2. Adjective.

An attributive adjective can be emphasized by increased intensity and heightened pitch, emphatic words or movement to the preverbal position. A predicative adjective can be emphasized by increased intensity and heightened pitch or emphatic words.

1.11.2.2.1.3. Verb.

The predicate as a whole can be emphasized by increased intensity and heightened pitch and an emphatic word in the preverbal position. In the case of a paratactic sequence of serial coordinate verbs individual verbs in the series can be emphasized separately from the predicate as a whole.

(705) Lo je eu Jesus uqa cunug to-du
 law talk that 3s all follow-3s

bahic od-on.
 emph. do-3s-rem.p

[22:155]

'Jesus really obeyed the law.'

1.11.2.2.1.4. Adverbial.

Adverbials can be emphasized by increased intensity and heightened pitch, emphatic words or movement to the preverbal position.

1.11.2.2.2.1. Constituents of main clause.

Constituents of main clauses can be emphasized by increased intensity and heightened pitch, emphatic words or movement to the preverbal position.

1.11.2.2.2.2. Constituents of subordinate clauses.

Constituents of subordinate clauses can be emphasized by increased intensity and heightened pitch, emphatic words or movement to the preverbal position within the subordinate clause.

(706) Sab Adeg je-i-a eu nu ija cul-ig-a.
 food eat-3s-tod.p that for 1s leave-1s-tod.p
'I left because Adeg ate the food.'

1.11.2.2.2.3. Constituents of noun phrase.

Constituents of noun phrases can be emphasized by increased intensity and heightened pitch, emphatic words or movement to the preverbal position i.e. constituents of the NP can be moved out of the NP to the preverbal position for emphasis.

(707) Caub ___ ene madi bahic bili-gi-na.
white ___ here many emph. be-3p-pres.

[23:18]

'There are lots of white people staying here.'

1.11.2.2.2.4. Constituents of coordinate constructions.

Constituents of coordinate constructions can be emphasized by increased intensity and heightened pitch and emphatic words. A constituent in a coordinate clause can be emphasized by movement to the preverbal position within the clause.

1.11.2.2.2.5. Emphasis of more than one constituent simultaneously.

More than one constituent can be emphasized simultaneously by increased intensity and heightened pitch.

(708)

A: Malol uqa Bunag na mala qo-i-a.
3s of chicken hit-3s-tod.p
'Malol killed Bunag's chicken.'



B: Gee o. Galem uqa Banag na mala qo-i-a.
no 3s of chicken hit-3s-tod.p
'No. Galem killed Banag's chicken.'

1.11.2.2.3. Movement of constituents.

Where a constituent is emphasized by movement nothing is left behind no matter what the word class or constituent type. This applies also to the movement described under 1.11.2.2.2.3. in that it is only a complete constituent within the NP (in this case an AdjP) that can be moved. cf. (709) below with (707) above.

(709)*Caub ___ bahic ene madi biligina.

1.11.3. The focus of a yes-no question.

The focus of a yes-no question can be marked by either the expression of a pro-drop pronoun or the intonation nucleus i.e. by increased intensity and heightened pitch on the syllable of the element in focus which bears stress in the unmarked case or by both these means.

(710)
Hina jo i cehe-em fo?
2s house this build-2s-rem.p QU

'Did you build this house?'

(711) $\overbrace{\text{Jo} \quad \text{i} \quad \text{cehe-em} \quad \text{fo?}}^{\text{house this build-1s-rem.p QU}}$
'Did you build this house?'

(712) $\overbrace{\text{Jo} \quad \text{i} \quad \text{cehe-em} \quad \text{fo?}}^{\text{house this build-2s-rem.p QU}}$
'Did you build this house?'

The element in focus can also optionally be moved to the preverbal position.

(713) $\overbrace{\text{Jo} \quad \text{i} \quad \text{hina cehe-em} \quad \text{fo?}}^{\text{house this 2s build-2s-rem.p QU}}$
'Did you build this house?'

1.12. Topic.

Topic is a pragmatic notion defined as 'What the sentence is about' (Brown and Miller 1980:376) or 'a person or thing about which something is said' (Crystal 1985:311). The topic of a sentence can therefore be distinguished on the basis of question-answer pairs like:

What about X?
 X is ...

where X is the topic of the second sentence. Focus (Comment), on the other hand, is the essential new information communicated by the sentence and can be distinguished by question-answer pairs like:

What did you buy?
 I bought X.

where X is the focus of the second sentence. Focus is not dealt with here but is defined in order to give a clearer understanding of the notion topic.

1.12.1. Means of indicating the topic of a sentence.

In general the pragmatic category of topic coincides with the syntactic category of subject which can be clearly established and distinguished from other categories by word order and verb agreement both for the subject of the clause containing the marked verb and for the subject of the following verb (see 2.1.3.6.7.). Subject normally occurs in the sentence initial position i.e. the normal syntactic position for topic. There is one type of sentence structure, however, in which the categories of topic and subject do not coincide. This is the impersonal verb structure described under 2.1.3.8. In this sentence structure two arguments occur, an experiencer and a cause, and both are marked on the verb for person and number agreement. The experiencer NP is marked for object agreement and can be any person and number. The cause is

marked for subject agreement and can only be in the third person singular. However, it is the experiencer NP (object) which must occur in the sentence initial i.e. topic, position. It is ungrammatical for the cause NP (subject) to occur in this position. The impersonal verb structure is used to express psychological or physical states in respect of the experiencer. Thus in answer to a question like 'How are you?' in Amele it would be possible to have answers like 'I am hungry' or 'I am afraid' expressed by an impersonal verb.

EXP CAU OB SU
 (714) Ija wen te-i-a.
 1s hunger 1s-3s-tod.p
 'I am hungry.'

CAU EXP OB SU
 (715) *Wen ija te-i-a.
 hunger 1s 1s-3s-tod.p

EXP CAU OB SU
 (716) Ija cucui te-i-a
 1s fear 1s-3s-tod.p
 'I am afraid.'

CAU EXP OB SU
 (717) *Cucui ija te-i-a
 fear 1s 1s-3s-tod.p

It should be noted with regard to the notion of topic described here that the Amele topic does not meet the criteria laid down by Li and Thompson (1975) for distinguishing topic from subject. For example the topic in the impersonal verb construction need not be definite:

(718) Oso wen do-i-a.
 indef. hunger 3s-3s-tod.p
 'Someone is hungry.'

The topic (experiencer NP) must be expressed on the verb as a pronominal clitic. Therefore there is agreement between the topic and the verb:

(719) *Ija wen ei-a.
 1s hunger 3s-tod.p

The topic NP does not set the spatial, temporal or individual framework within which the main predicate holds. While the topic NP must precede the cause (subject) NP it does not necessarily have to occur as the first element in the sentence:

(720) Cum ija wen te-i-an.
 yesterday 1s hunger 1s-3s-yest.p
 'Yesterday I was hungry.'

It should also be noted that, while Amele is clearly a subject prominent language (in Li and Thompson's terminology), it does have characteristics of a topic prominent language, viz. (i) no passive construction,

(ii) no 'dummy' or 'empty' subjects and (iii) a double subject using the pronominal copy strategy:

(721) Dana i uqa ho-i-a.
 man this 3s come-3s-tod.p
'This man, he came.'

1.12.2-3. Elements that can be topicalized.

Within the impersonal verb construction only the experiencer NP can function as topic and must always precede the cause NP.

1.13. Heavy Shift.

1.13.1. Movement processes.

Heavy structures, most commonly relative clauses, are normally moved to the sentence initial position.

1.13.2. Structures which are subject to heavy shift.

The most common type of structure that is frontshifted is the relative clause and in fact it is preferable that such a clause occurs as the first constituent of the sentence (see 1.1.2.3.5.). Normally the subject NP is the first constituent in the sentence but clauses relativizing on the direct or indirect object can be frontshifted.

(722) Mala mel heje o-i-a eu ija f-ig-a.
 chicken boy illicit take-3s-tod.p that is see-1s-tod.p
'I saw the chicken that the boy stole.'

(723) Dana ija ija na sapol ut-ig-a eu uqa ja
 man 1s 1s of axe 3s-1s-tod.p that 3s firewood
 qatane-na.
 split-3s-pres.
'The man that I gave my axe to is splitting the firewood.'

Heavy adverbial (postpositional) phrases can be frontshifted.

(724) Cudun dan ben tawe-na eu na ija
 place fig big stand-3s-pres. that at is
 jahun-d-ug-a.
 hide-3s-1s-tod.p
'I hid it at the place where the big fig tree is.'

(725) Sab faj-ig-en nu ija mahuc h-ug-a.
 food boy-1s-fut. cause 1s quickly come-1s-tod.p
'I came quickly to buy food.'

(726) Sapol haun faj-ig-a eu na ija na
 axe new buy-1s-tod.p that with 1s tree
 qet-ig-a.
 cut-1s-tod.p
'I chopped down the tree with the new axe I bought.'

1.13.5. Heavy shift and complementizers.

The most common type of heavy shift involves subordinated clauses (see 1.13.2. above) and the subordinating conjunction, if present, is moved with the clause.

1.14. Other movement processes.

Movement of sentence constituents to the preverbal position for emphasis has been described under 1.11. and movement of heavy constituents to sentence initial position is described under 1.13. above. Movement of the relativized element in the relative clause to clause initial position is described under 1.1.2.3.5. Movement of conditional and contrafactual adverbial clauses to sentence final position is described under 1.1.2.4.2.7-8. and movement of the apprehension adverbial clause to sentence initial position is described under 1.1.2.4.2.11. Another type of movement process occurs which is not already described. This process endshifts constituents to the sentence final position. The function of this movement process is to express an afterthought or, in the case of endshifted coordinate clauses, for special stylistic effect.

(727) Age wa wet-i dubin na basec-do-gi-na
3p water scoop-pred. stalk with pour-3s-3p-pres.

camac ta na.
sago scrapings in

[15:12]

'They scoop up the water and then pour it in with the stalk - into the sago scrapings that is.'

(728) Uqa t-en ohis ono.
3s go up-3s-rem.p above there

[18:48]

'He went up - up there.'

(729) Eu uqa jeje-g ca m-en dana eu.
that 3s voice-3s have become-3s-rem.p man that

[17:35]

'Then he got his voice back - that man did.'

(730) Cuha jo eu mahuc cesul-do-co-mun
Sunday house that quickly help-3s-DS-1p

caub qee m-igi-a nu.
white not become-3p-rel.f for

[2:16]

'We must do something quickly about the church building or else the white man's work will be in vain.'

(731) Mel ben m-i-me-ig age isi han cad-ec
boy big become-pred.-SS-3p 3p soon war fight-NOM/ADJ

iwal-ade-qag-an nu.
teach-3p-3p-fut. for

[16:22]

'The boys become grown up and soon they will teach them to fight war.'

(732) "Qaga-h-ig-en," do-n "Qee j-i
kill-2s-1s-fut. 3s-3s-rem.p not eat-pred.

he-du-f-eg."
finish-3s-CD/SS-2s

[19:39]

'He said, "I will kill you if you don't eat it all."'

(733) "Tuq-i j-ag-a," do-co-b tuq-i
butcher-pred. eat-2s-imp. 3s-DS-3s butcher-pred.

ji-ji-en.
sim.-eat-3s-DS

[19:38]

'"Butcher and eat!" he told her as she butchered and ate.'

1.15. Minor sentence types.

Minor sentences can be of three types: (1) exclamations or response words (see 1.2.1.3.1.), (2) titles of address like proper names and kinship terms (see 2.1.1.4.7.1.) and (3) elliptical constructions that can occur freely in text or as answers to questions (see 1.1.1.2.4.2.).

1.16. Operational definitions for word classes.

Word classes are defined in terms of the following criteria:

- (a) morphology
- (b) distribution
- (c) syntactic function

1.16.1. Noun.

(a) Morphology.

Only the inalienably possessed nouns are distinguished by morphological inflection from other word categories. Otherwise nouns are distinguished from adjectives and other word categories on the basis of distribution. Morphologically nouns can be divided into two basic types: monomorphemic and polymorphemic. The polymorphemic nouns can be further subdivided into reduplicated, duplicated, derived and inflected nouns.

(i) Monomorphemic.

Most nouns are monomorphemic i.e. are composed of one morpheme and cannot be inflected. Most monomorphemic nouns are just one or two syllables. The maximum syllable structure for a monomorphemic noun is three syllables.

bahim	<i>'floor'</i>
caja	<i>'woman'</i>
dana	<i>'man'</i>
gadolah	<i>'edge'</i>
jo	<i>'house'</i>

malaqa	'star'
sab	'food'
wa	'water'

(ii) Polymorphemic.

Polymorphemic nouns can be:

(1) Reduplicated nouns.

A reduplicated noun reduplicates the first syllable of its stem and usually only occurs in this reduplicated form. Where the stem begins with a consonant the first CV is reduplicated. Where the stem begins with a vowel the first VC is reduplicated. Many nouns are reduplicated and the reduplication usually has a semantic basis which can be:

(A) Mass/plurality.

bo-bos	'dust'
be-beig	'root(s)'
ci-cit	'barbs'
do-do	'tail feathers'
gi-gi	'grass'
la-lac	'rain puddle'
li-lih	'broom'
mu-mudic	'light rain'
ni-nihul	'wasp species'
qa-qah	'iguana species'
su-sul	'peelings'
to-toc	'dew'
ud-ud	'ginger species'
we-wes	'ant species'

(B) Continuity/stillness.

al-alag	'stagnant water'
do-do	'story'
od-od	'garden path'
qa-qac	'ridge pole'
si-si	'agreement'
un-un	'humming'

(C) Movement.

ab-ab	'hand movement'
do-dol	'throat'
fu-fu	'wind'
fi-fiji	'hot spring'
gu-gulac	'hurricane'
lo-lo	'wind from NE'

(D) Intensity.

ga-gadic	'strength'
hi-hiban	'strength'
hi-hic	'toughness'
hu-hul	'overripeness'

(E) Emotional sensation.

al-al	'tiredness'
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be-belec	'dream'
ce-ces	'a smell'
cu-cui	'fear'
da-dan	'confusion'
de-deman	'a smell'
ul-ul	'sourness'

(F) Immaturity.

lu-lu	'preadolescent'
mo-modo	'baby'

Some inflected nouns also reduplicate the first syllable of the stem.

bi-bitomi	'my buttocks'
ge-gehi-ni	'my dirt'
go-godo-mi	'my backbone'
ha-haba-ni	'my spirit'
ja-ja-ni	'my great great grandparent'
je-je-ni	'my voice'
mo-mo-i	'my wife's mother'
ne-nege-ni	'my spleen'

(2) Duplicated nouns.

Duplicated nouns duplicate the whole stem and usually only occur in this form (see also 1.2.5.1.).

ais ais	'danger'
bamabam	'tree species'
begabeg	'beggar'
ceelaceel	'a swallow'
cinacin	'Blue collared parrot'
folo folo	'lungs'
gihigh	'heat'
hig hig	'Doria's hawk'
ug ug	'New Guinea eagle'

Duplicated nouns can be distinguished from reduplicated nouns on the basis of stress placement (see 3.3.2.1.). A reduplicated noun will carry only one primary word stress. For example:

['dɔdɔ]	'tail feathers/story'
['gɪgɪ]	'grass'
[ɔ 'dɔdɔ]	'garden path'
[u 'dud]	'ginger species'

A duplicated noun, on the other hand, carries primary stress on each element. For example:

['aɪs 'aɪs]
['fɔlo 'fɔlo]
['hɪg 'hɪg]
['ug 'ug]

Some nouns optionally duplicate to indicate plurality or similarity.

ceteh	'thing'	ceteh (ce)teh	'things'
-------	---------	---------------	----------

qala	'burial hole'	qala qala	'cemetery'
bagac	'leaf'	bagac bagac	'thin'
ho	'pig'	ho ho	'piglike'

(3) Derived nouns.

Nouns can be derived from verbs by the nominalizing clitic -ec/-oc (see 2.2.1.2.).

(4) Inflected nouns.

Inflected nouns are inalienably possessed nouns and these are described under 2.1.1.4.7.1.

(b) Distribution.

A noun can occur:

- (i) alone as head of the noun phrase
- (ii) as head of the postmodified or premodified noun phrase
- (iii) as one of the juxtaposed items in the compound or duplicated noun phrase
- (iv) as the possessor or possessee in the inalienably possessed noun phrase
- (v) as the object of the postposition in the postpositional phrase
- (vi) as the nominal predicate in the equative clause
- (vii) as the juxtaposed item in the derived adjective phrase and
- (viii) as head or as the juxtaposed item in the adverbial phrase.

A noun is distinguished from an adjective or an adverb on the basis of occurrence in the circumstantial postpositional phrase (see also 2.1.1.4.5.). Only a noun can occur as object of the postposition in the circumstantial postpositional phrase.

(734) Ija sign ca.
 1s knife have
 'I have a knife.'

(735)*Ija me ca.
 1s good have
 *'I have good.'

(736)*Ija bahic ca.
 1s very have
 *'I have very.'

Nouns can be subdivided on the basis of distribution:

Proper nouns vs. common nouns.

Proper nouns (usually names) cannot be modified by a noun, an adjective, an adjective phrase, an indefinite article, a quantifier or an emphatic word. A proper noun can also occur as the object of the postposition in the possessive postpositional phrase whereas a common noun cannot (see 1.10.2.). Common nouns can also be subdivided into alienably vs. inalienably possessed nouns, count vs. mass(noncount) nouns and animate vs. inanimate nouns.

(i) Alienably vs. inalienably possessed nouns.

Alienably possessed nouns must be preceded by a possessive postpositional phrase in the premodified possessive noun phrase whereas inalienably possessed nouns must be preceded by either a proper noun or a pronoun (see 1.2.5.1.).

(ii) Count nouns vs. mass nouns.

Count nouns can be modified by the quantifier *madi* 'many' whereas mass nouns can be modified by the quantifier *geh* 'much' and not vice versa.

(iii) Animate nouns vs. inanimate nouns.

Animate nouns can take a pronominal clitic in the verb when functioning as indirect object whereas inanimate nouns cannot.

(c) Syntactic function.

The noun can function as subject, direct object, indirect object, or as an adverbial of time, location or manner in the sentence and as nominal predicate in the equative clause.

1.16.2. Pronoun.

(a) Morphology.

Pronouns do not inflect.

(b) Distribution.

Pronouns are a closed set of items used to substitute for a noun or noun phrase. There are four basic types.

(i) Personal pronouns.

Personal pronouns can be free forms or pronominal clitics attached to the verb (see 2.1.2.1. and 2.1.3.6.1.2-3.). In each case there are distinct forms for various combinations of person and number. Free pronouns can occur wherever a noun or noun phrase can occur. A free pronoun must also occur before the reflexive postposition *dodoc* in the reflexive postpositional phrase (see 1.2.4. and 1.6.). A clitic pronoun attached to the verb must agree in person and number with the object that it refers to. Up to two clitic pronouns can occur in the verb.

(ii) Indefinite pronoun.

The indefinite pronoun (see 1.2.5.2.4.) can occur as the sole head of the noun phrase or as a postmodifier of the noun.

(iii) Deictic pronouns.

Deictic pronouns can be of two types:

(1) Demonstrative.

Demonstrative pronouns (see 1.2.5.2.5. and 2.1.2.5.2.) can occur as the sole head of the noun phrase or as a postmodifier of the noun.

(2) Locative demonstratives.

Locative demonstratives (see 2.1.2.5.2.) can occur as

the sole head of a locative noun phrase or as a postmodifier of the noun.

(iv) Interrogative pronouns.

Interrogative pronouns substitute for the questioned item (see 1.1.1.2.2. and 2.1.2.6.).

(c) Syntactic function.

The personal, indefinite, demonstrative and interrogative pronouns can have the same syntactic function as the noun or noun phrase for which they substitute. The locative demonstrative can only substitute for a locative noun phrase.

1.16.3. Verb.

(a) Morphology.

The verb (see 2.1.3.) is a word which has the potential to be inflected by a set of suffixes to indicate:

- (i) predication (see 2.1.3.6.12.1.11.)
- (ii) tense-aspect-mood and negation of the sentence (see 2.1.3.2-4. and 2.1.3.6.12.1.10.)
- (iii) person-number of the subject (see 2.1.3.6.1.1.)
- (iv) person-number of the direct or indirect object (see 2.1.3.6.1.2-3.)
- (v) subject coreferentiality or noncoreferentiality with the subject of the following verb (see 2.1.3.6.7.)

In addition the verb stem, predicate marker or object marker can be reduplicated to indicate simultaneous or iterative action (see 2.1.3.3.2.1.2 and 8.).

(b) Distribution.

The verb selects the choice of arguments in the predicate, e.g. direct or indirect object. Verbs can also be nominalized or adjectivalized by the derivational suffix *-ec/-oc* (see 1.1.2.2.).

(c) Syntactic function.

The verb predicate is the constituent of all major sentence types except the verbless equative clause and can be the minimum constituent of the sentence.

1.16.4. Adjective.

(a) Morphology.

Adjectives do not inflect and therefore cannot be distinguished on the basis of morphology from alienably possessed nouns. Adjectives, like nouns, can be monomorphemic or polymorphemic.

(i) Monomorphemic.

Adjectives can be monomorphemic i.e. are composed of one morpheme and cannot be inflected. Most monomorphemic adjectives are just one or two syllables. The maximum

syllable structure for a monomorphemic adjective is three syllables.

bagalan	'wide'
ben	'big'
caub	'white'
me	'good'
nag	'small'
udu	'black'

(ii) Polymorphemic.

Polymorphemic adjectives can be reduplicated or derived.

(1) Reduplicated adjectives.

Reduplicated adjectives reduplicate the first syllable of the stem. Where the stem begins with a consonant the first CV is reduplicated. Where the stem begins with a vowel the first VC is reduplicated.

ce-cela	'long'
du-duleh	'rough'
gi-gicit	'tight'
ha-hawan	'first'
it-itom	'righteous'
la-lan	'crumbly'
ne-nel	'sloping'
so-sog	'narrow'
tu-tuc	'straight'

(2) Derived adjectives.

Adjectives can be derived from verbs by the nominalizing or adjectivalizing clitic -ec/-oc (see 2.2.3.2.).

(b) Distribution.

The adjective is a word which has the potential to occur:

- (i) alone as the head of the noun phrase
- (ii) in an attributive position following the nominal head of the noun phrase
- (iii) as the nonverbal predicative element of the equative clause
- (iv) as head of the adjective phrase and to be postmodified by another adjective or an emphatic word in the adjective phrase
- (v) as object of the postposition in the postpositional phrase
- (vi) as head of the adverbial phrase.

An adjective can be distinguished from a noun on the following bases:

- (i) When an adjective occurs as head of the noun phrase it is not possible to further modify that adjective by another postposed adjective. Whereas this is possible if the head noun is present.

(737) Dana caub (me) ho-i-a.
 man white good come-3s-imm.p
 'The (good) white man came.'

(738)Caub (*me) ho-i-a.
white good come-3s-imm.p
'The (good) white (man) came.'

(ii) An adjective cannot occur as the preceding juxtaposed item in the compound noun phrase.

(739)Eu jo nah.
that house post
'That is a house post.'

(740)Eu nah jo.
that post house
'That is a post house (i.e. a house of/on posts).'

(741)Eu jo ben.
that house big
'That is a big house.'

(742)*Eu ben jo.
that big house

(iii) Only an adjective can occur with the postposition *ca* 'add/with' when it is used in the comparative clause (see 1.8.1.) to express comparison, although a noun can occur with *ca* if it is used in both the clause expressing the standard of comparison and the comparative clause. So (743) and (745) below are grammatical but (744) is not. Therefore *ben* 'big' is an adjective and *wa* 'water' is a noun.

(743)Jo i ben. Jo eu ben ca.
house this big house that big add
'This house is big. That house is bigger.'

(744)*Sab i wa. Sab eu wa ca.
food this water food that water add

(745)Sab i wa ca. Sab eu wa ca bahic.
food this water add food that water add emph.
'This food is wet. That food is very wet/wetter.'

(iv) A noun can occur as the object of the postposition in the circumstance postpositional phrase whereas an adjective cannot.

(747)Lotoc eu wa ca.
cloth that water have
'That cloth is wet.'

(748)*Dana eu me ca.
man that good have

(749)*Jo eu ben ca.
house that big have

(c) Syntactic function.

The adjective can function as subject, direct object, indirect object in the sentence and as adjectival predicate in the equative clause.

1.16.5. Postposition.

(a) Morphology.

All postpositions are morphologically simple except for eundec which is a complex form (see below).

(b) Distribution and syntactic function.

Postpositions are a closed set of items which follow a pronoun, noun, noun phrase, adjective, adjective phrase or adverbial clause to form a single constituent of structure i.e. a postpositional phrase (see 1.1.2.4. and 1.2.4.) The postposition occurs as head of the postpositional phrase. There are five simple and three compound postpositions and one complex postposition.

(i) Simple postpositions.

na can be preceded by a noun, pronoun, demonstrative, noun phrase, adjective(relative) clause or a nominalized clause functioning as object of the postposition. It also indicates that the semantic relationship of the object is one of time, location, instrument or alienable possession.

ca can be preceded by a noun, pronoun, adjective, demonstrative, noun phrase, postpositional phrase, adjective (relative) clause, or nominalized clause functioning as object of the postposition. It also indicates that the semantic relationship of the object is that of accompaniment, addition, comparison, time or location.

nu can be preceded by a noun, pronoun, adjective, demonstrative, negative particle, noun phrase, postpositional phrase, adjective(relative) clause, nominalized clause or sentence functioning as object of the postposition. It also indicates that the semantic relationship of the object is that of purpose or cause.

dec can be preceded by a noun, demonstrative, noun phrase or postpositional phrase functioning as object of the postposition. It also indicates that the semantic function of the object is that of origin.

dodoc can only be preceded by a pronoun and indicates that the object pronoun is reflexive.

(ii) Compound postpositions.

Compound postpositions comprise a postposition functioning as head of the postpositional phrase preceded by an obligatory or optional element that forms a compound unit with the postposition.

sec is obligatorily preceded by a demonstrative pronoun and the compound postpositional unit is preceded by a noun, locative demonstrative or a noun phrase functioning as object. The semantic function of the object is one of direction.

hen is obligatorily preceded by a demonstrative pronoun and the compound postpositional unit is preceded by a noun, locative demonstrative or a noun phrase functioning as object. The semantic function of the object is one of proximal location.

we can be optionally preceded by the word cin(ig) 'like' forming a compound postpositional unit with it. This can be preceded by a noun, noun phrase or sentence functioning as

object. The semantic function of the object is that of analogy.

(iii) Complex postposition.

The complex postposition *eundec* can occur alone as a proform or be preceded by a noun, pronoun, adjective, noun phrase or postpositional phrase functioning as object and the semantic function of the object is that of typological origin. When *eundec* occurs alone it takes the syntactic function of the constituent for which it substitutes.

1.16.6. Numeral/quantifier.

There is no formal distinction between numerals, quantifiers and nouns since any of these items can occur as the sole head of the noun phrase. A numeral can function by itself as subject or direct object or as a postmodifier in the noun phrase. It can also function as an element in the numeral phrase (see 2.1.6.1.). A numeral can be postposed by an emphatic word. Numerals also affect verb agreement.

(750) *Dana lecis ho-si-na.*
 man two come-3d-pres.
 'Two men are coming.'

1.16.7. Adverb.

Adverbs are not formally distinguished from nouns or adjectives. Items that can be determined by other means to be nouns or adjectives can have an adverbial function.
 e.g.

(751) *Uqa jai-h nu-i-a.*
 3s foot-3s go-3s-tod.p
 'He went by foot.'

(752) *Uqa me nu-i-a.*
 3s good go-3s-tod.p
 'He went well.'

(753) *Uqa mahuc nu-i-a.*
 3s quickly go-3s-tod.p
 'He went quickly.'

Conversely 'adverbs' can have a nominal or adjectival function viz. an adverb can function like a noun as the sole head of the NP or like an adjective as the object of the postposition in the comparative PP (cf. 1.2.5.1., 1.16.1. and 1.16.4.)

e.g.

(754) *Mahuc nij-i-a.*
 quick lie-3s-tod.p
 'The quick (one) is here.'

(755) *Dana i mahuc. Dana eu mahuc ca.*
 man this quick man that quick add
 'This man is quick. That man is quicker.'

The term 'adverb' is therefore maintained only for

convenience when a single item expresses an adverbial function of the verb or clause. An adverb alone can express the temporal, locative or manner function of the clause. It can occur in the adverbial phrase with other adverbs and can be followed by an emphatic word in the adverbial phrase.

Notes:

- 1• In this example there are two indirect quotes embedded within a direct quote.
- 2• This sentence would be interpreted as *'How much food did the men eat?'*.
- 3• This analysis follows that of Haiman (1980) and MacDonald (1983) in descriptions of medial verbs in Papuan languages and contrasts with the analysis of Finer (1985) for example.
- 4• See Downing (1978:398) for a description of replacive relative clause strategy.
- 5• See Keenan and Comrie (1977) and Comrie (1981).
- 6• This pattern does not occur where the subject NP's have different referents as in 'Duwe taro and her mother yam cooked' but does occur with an alternate statement involving the same subject:

Duwe ma fo qee ceta cil-i-a.
 taro or not yam boil-3s-tod.p
'Duwe cooked taro or (cooked) yam.'

2. MORPHOLOGY.

2.1. Inflection.

2.1.1. Noun inflection.

2.1.1.1. Means by which the syntactic and semantic functions of noun phrases are expressed.

2.1.1.1.1. Bound affixes.

Bound affixes mark the inalienably possessed nouns for first, second and third person and singular, dual and plural number of the possessor and, for kinship terms, also singular and plural number of the possessee. See 2.1.1.4.7. 1. for a full description.

2.1.1.1.2. Clitic particles.

The clitic particle *-ec/-oc* marks a sentence as a nominalized or adjectivalized clause (see indirect quote sentence (1.1.1.1.), noun phrase (1.2.5.2.1.), nominalized reciprocal clause (1.7.7.) and nominalized comparison clause (1.8.1.)).

2.1.1.1.4. Postpositions.

There are nine postpositions. Five are simple; *na* 'at/in/on/with/of', *ca* 'with/add/have/at/in', *nu* 'for/so/because', *dec* 'from' and *dodoc* 'self'. Three are compound, i.e. require other words or particles to precede them; *sec* 'way', *hen* 'way' and *we* 'like'. One is complex, i.e. is a combination of demonstrative + postposition + postposition; *eundec* 'origin'. *na* marks the nominal it follows as either a location in time or space, an instrument or an alienable possessor. *ca* marks the nominal it follows as either an accompanier, a coordinated nominal, a circumstance, a comparative or a location in time or space. *nu* marks the nominal it follows as purpose or cause. *dec* marks the nominal it follows as source. *dodoc* marks the preceding pronoun as reflexive. *sec* with a preceding demonstrative pronoun marks the preceding nominal as the direction towards. *hen* with a preceding demonstrative pronoun marks the preceding nominal as the direction of location. *we* with an optional preceding particle, *cin(ig)* 'seem', marks the preceding nominal as analogic or resemblance. *eundec* marks the preceding nominal as social or territorial origin (see also 1.2.4. and 1.16.5.).

2.1.1.1.5. Word order.

Word order is significant for distinguishing subject, indirect object and direct object. The basic unmarked order of constituents in the sentence is S IO DO V. In text the order of these constituents is fairly rigid (see 1.2.1.2.6.) but movement is possible. A direct object NP functioning as experiencer can occupy the sentence initial thematic(subject) position (see 1.12.) and a subject NP, which normally occupies the sentence initial position, can be moved to the object preverbal position for emphasis (see

1.11.2.1.3.). The subject, indirect object or direct object is generally expressed by a noun or pronoun but can be expressed only in the verb (see 2.1.3.6.1-3.). Since only pronouns and verbal suffixes distinguish person and number a noun functioning as subject, indirect object or direct object does not agree directly with the verb, but only by pronominal copy and since word order is somewhat flexible for these constituents it may not always be possible to determine whether a particular nominal is functioning as subject, indirect object or direct object on syntactic criteria alone. See 1.1.2.3. (adjective clause) for an example of ambiguity.

2.1.1.1.6. Derivational processes.

The postclitic *-ec/-oc* can derive nouns from verbs (2.2.1.2.) verbs from nouns (2.2.2.1.) verbs from adjectives (2.2.2.3.) and adjectives from verbs (2.2.3.2.). The posposition *ca* 'with' can derive adjectives from nouns (see 2.2.3.1.).

2.1.1.1.7. Other means by which the syntactic and semantic functions of noun phrases are expressed.

(i) Verbal object marking. The clitic object marking on the verb can distinguish direct from indirect object (see 2.1.3.6.1.2-3.) and therefore serves to indicate both the syntactic and semantic function of the nominal to which it refers. In (1) below the object marker *-ad* serves to indicate that *jo* is both direct object and plural in number. In (2) the object marker *-ad* is also plural but has indirect object coreference because of the predicate marker (see 2.1.3.6.12.1.11.). The indirect object has the semantic function of benefactive in this case.

DO

- (1) Jo *ceh-ado-qag-an.*
 house build-3p-3p-fut.
 '*They will build houses.*'

IO

- (2) Jo *ceh-i-ado-qag-an.*
 house build-pred.-3p-3p-fut.
 '*They will build a house for you/them(pl).*'

(ii) Pronominal copy. The nominal functioning as subject or object does not agree directly with the verb rather the optional following pronoun distinguishes person and number and therefore agrees with the verb. Thus person-number verb agreement is indicated by pronominal copy rather than by noun inflection.

- (3) Dana (*uqa*) *ho-i-a.*
 man 3s come-3s-tod.p
 '*A man came.*'

- (4) Dana (*ale*) *ho-si-a.*
 man 3d come-3s-tod.p
 '*Two men came.*'

- (5) Dana (age) ho-ig-a.
 man 3p come-3p-tod.p
'Men came.'

The pronominal object clitic copied onto the verb also serves to distinguish the number of the object NP as to whether it is either singular, dual or plural.

- (6) Uqa jo cehe-i-a.
 3s house build-3s-tod.p
'He built a house.'
- (7) Uqa jo ceh-ade-i-a.
 3s house build-3p-3s-tod.p
'He built houses.'

2.1.1.1.8. Combinations.

Any or all of the above means of expressing the syntactic and semantic functions of noun phrases can be combined. There is no restriction.

2.1.1.2. Means for expressing syntactic functions.

2.1.1.2.1. Subject of intransitive verbs.

The subject of an intransitive verb is obligatorily expressed by person-number marking suffixes in the verb (see 2.1.3.6.1.1.) where the verb is not an infinitive form. For the infinitive form subject person-number agreement is not expressed in the verb (see 2.1.3.5.). The subject can also be optionally expressed by an overt subject NP or coordinated NP (see 1.2.1.2.1., 1.2.5. and 1.3.1.3.). The following examples of NP's functioning as the subject of an intransitive verb illustrate the types of NP described in 1.2.5. viz. postmodified NP(a), premodified NP(b), compound NP(c) duplicated NP(d) and inalienably possessed NP(e), and (f) illustrates a coordinated NP.

- (8)
- (a) Dana ben leis ho-si-a.
 man big two come-3d-tod.p
'Two of the leaders(big men) came.'
- (b) Cad q-oc nu sign bil-i-a.
 enemy hit-inf. for knife be-3s-tod.p
'A knife for fighting enemies is here.'
- (c) Mel gah ale qaje-si-na.
 child fly 3d cry-3d-tod.p
'The twins are crying.'
- (d) Ceteh ceteh nij-eig-a.
 thing thing lie-3p-tod.p
'The things are here'
- (e) Silom uqa wali-ag ho-i-a.
 3s brother-3s come-3s-tod.p
'Silom's brother came.'

(f) Man ben ben ca man nag nag ca age cunug
bird big big add bird small small add 3p all

gaban-do-in.
gather-3s-3p-rem.p

[3:2]

'The big birds and the little birds they all gathered together.'

2.1.1.2.1.1. Agentive vs. nonagentive subjects.

There is no formal distinction between a subject that is an agent and one that is not an agent. However the switch-reference system does distinguish an agentive subject from a nonagentive subject in its coreference of the following subject NP. The transfer of reference from Subject, [+AGENT] to Subject, [-AGENT] is coreferenced as same subject(SS) i.e. no change in subject/agent but the transfer of reference from Subject, [-AGENT] to Subject, [+AGENT] is coreferenced as different subject(DS) i.e. a change in subject/agent. Thus a transfer of reference across different grammatical subjects from an agentive to a nonagentive subject is normally marked as no change in subject(agent) i.e. SS.

2.1.1.2.2. Subject of transitive verb.

The subject of a transitive verb is obligatorily expressed in the non-infinitive verb by the same set of person-number suffixes that express the subject of an intransitive verb. Nominal subjects are optional and take the same forms as subjects of intransitive verbs (see also 1.2.1.2.1., 1.2.5. and 1.3.1.3.).

2.1.1.2.3. Subject of copular construction.

A subject is obligatory in a copular construction and can be realized by a noun phrase, by a coordinated noun phrase or by the verbal suffix. In an equational sentence the subject is obligatorily expressed by a nominal since there is no verb (see 1.2.1.1. and 1.2.1.1.4.).

2.1.1.2.5. Indirect object.

The category of indirect object can be distinguished from the category of direct object by word order and by the way the pronominal object clitic attaches to the verb stem. The clitic attaches to the verb stem without an intervening predicate marker -i (see 2.1.3.6.12.1.11.) if the clitic coreferences the direct object and attaches with an intervening predicate marker if the clitic coreferences indirect object. The syntactic indirect object category can have the semantic case functions of recipient, benefactive, malefactive, allative and ablative (see 2.1.3.6.1.2-3. for a full description).

2.1.1.2.6. Object of comparison.

The object of comparison is coreferenced as direct object by the verb wol-doc 'to surpass/pass' in the comparative construction (see 1.8.1.). The standard is normally expressed first followed by the comparison.

(9) Uqa ce-celac. Uqa ija wol-t-ec.
3s long 3s 1s surpass-1s-NOM/ADJ
'He is taller than me.'

(10) Uqa ce-celac ija qa wol-d-oc.
3s long 1s but surpass-3s-NOM/ADJ
'I am taller than him.'

2.1.1.2.7. Object of equation.

The object of equation can be marked by postpositional phrases like cin(ig) we 'seems like' ihoc na na 'same/similar' or ca ca 'same' (see 1.9)

2.1.1.2.8. Other objects governed by verbs.

There are no other objects that are governed by the verb other than the direct and indirect objects. A nominal can function as an adverbial of manner but it is not governed by the verb.

(11) Ija jai-h h-ug-a.
1s leg-3s-pos. come-1s-tod.p
'I came by foot.'

2.1.1.2.9. Complement of copular construction.

The copular verbs are bil-ec 'to sit/be', nij-ec 'to lie/be', taw-ec 'to stand/be', q-oc 'to hit/have' and m-ec 'to put/become' and these can all take nominal and adjectival complements (see 1.2.1.1. and 2.1.3.6.12.1.).

2.1.1.2.9.1. Complement expressing definition.

(12) Uqa dana ben.
3s man big
'He is a leader (big man).'

2.1.1.2.9.2. Complement expressing identity.

(13) Uqa Dadog mela-h.
3s son-3s-pos.
'He is Dadog's son.'

2.1.1.2.9.3. Complement expressing role.

(14) Uqa iwal-ad-ec.
3s teach-3p-NOM/ADJ
'He is a teacher.'

2.1.1.2.10. Subject complement.

There is no syntactic means of expressing subject complement.

2.1.1.2.11. Object complement.

A postpositional phrase functioning as object complement can occur in an impersonal verb construction (see 2.1.3.8.).

- (15) Ija ceb j-ec nu gale te-na.
 1s betelnut eat-inf. for desire 1s-3s-pres.
'I like to eat betelnut.'

2.1.1.2.12. Objects governed by adjectives.

Objects are not governed directly by the adjective but rather are governed by the postposition in the adjectival construction $_{pp}[NP P] Adj.^1$

- (16) Uqa ija nu me bahic.
 3s 1s for good emph.
'He is good to me.'
- (17) Ho eu lalo ca ca-cawac.
 pig that fat with saturated
'That pig is very fat.'

2.1.1.2.13. Agent in impersonal constructions.

The NP that functions as subject in the impersonal verb construction is counted as a NULL Agent or [-AGENT] by the switch reference system (see 2.1.3.6.7.) and is coreferenced the same way as other nonanimate subject NP's. Normally the coreference from Subject, [+AGENT] to Subject, [-AGENT] is indicated as same subject(SS) i.e. no change in subject/agent. However an agentive cause can be indicated by making the marking verb different subject(DS).

- (18) Ija bi-bi-g wen te-i-a.
 1s sim.-come up-1s-SS hunger 1s-3s-tod.p
'As I came up I became hungry.'
- (19) Ija bi-bi-gin wen te-i-a.
 1s sim.-come up-1s-DS hunger 1s-3s-tod.p
'As I came up something made me hungry.'

2.1.1.2.14. Topic.

The pragmatic notion of topic is described in 1.12.

2.1.1.2.15. Emphasized element.

The marking of emphasis is described in 1.11.

2.1.1.3. Syntactic functions in relation to nonfinite verbal forms.2.1.1.3.1. Absolute construction.

An absolute construction does not occur.

2.1.1.3.2. Infinitive verb as object of the postposition.

The infinitive form of the verb can occur as object of the postpositions nu 'for' and we 'seem' (see 1.1.2.4.5. and 1.2.4.).

(20) Ija sab faj-ec nu h-ug-a.
 1s food buy-inf. for come-1s-tod.p
 'I came to buy food.'

(21) Na batac eu nag bahic nu qalac-doc we
 tree branch that small emph. so break-3s-inf. seem

me-me-n fe-n.
 sim.-become-3s-DS fe-n.

[14:6]

'He saw that the tree branch was very small and seemed like it was going to break.'

The apprehensive mood particle dain 'lest' postposed to the sentence can also occur with the infinitive form of the verb (see 1.1.2.4.2.11.).

(22) Wa na dec cal-i b-ag-a.
 water in from come out-pred. come up-2s-imp.

Waga q-ih-i j-ec dain.
 crocodile hit-2s-pred. eat-inf. CAP

'Get out of the water lest the crocodile eat you.'

2.1.1.3.3-4. Nominalized verbs.

A nominalized form derived from a verb, verb phrase or sentence by the derivational clitic -ec/-oc can function alone as subject, direct or indirect object or as the nominal predicate in the equative clause.

(23) Iwal-ad-ec ho-i-a.
 teach-3p-NOM/ADJ come-3s-tod.p
 'The teacher came.'

(24) Ija iwal-ad-ec to-d-ug-a.
 1s teach-3p-NOM/ADJ follow-3s-1s-tod.p
 'I followed the teacher.'

(25) Iwal-ad-ec sab ut-eig-a.
 teach-3p-NOM/ADJ food 3s-3p-tod.p
 'They gave food to the teacher.'

(26) Uqa iwal-ad-ec.
 3s teach-3p-NOM/ADJ
 'He is a teacher.'

2.1.1.4. Means of expressing nonlocal semantic functions.2.1.1.4.1. Benefactive.

Benefactive is expressed by the indirect object pronominal clitic attached to the verb.

Uqa jo ceh-i-h-igi-an.
3s house build-pred.-2s-3s-fut.
'He will build a house for you.'

Malefactive can also be expressed by an indirect object pronominal clitic although this is not distinguished formally from benefactive (see 2.1.3.6.1.2-3.).

2.1.1.4.2. Source.

Source can be expressed in three ways:

(i) by the postposition *dec* 'from' (see 1.2.4. and 1.16.5.).

(27) Uqa cabi dec ho-i-a.
3s garden from come-3s-tod.p
'She came from the garden.'

(28) Ija je eu Bunag na dec dah m-ig-a.
1s talk that of from eat put-1s-tod.p
'I heard that talk from Bunag.'

(29) Dodo i age do na dec.
feather this 3p bird of paradise of from
'These feathers are from a bird of paradise.'

(ii) by the postposition *eundec* 'from/belonging' which expresses social or territorial origin (see 1.2.4. and 1.16.5.).

(30) Dana eundec age eeta odoqagan?
man belonging 3p what do-3p-fut.

[24:32]

'What would men like that do?'

(31) Na bodo-ec eundec f-i-me-ig age
tree soft-NOM/ADJ belonging see-pred.-SS-3p 3p

sum na q-u qatan-ado-lo-ig.
sharp tree hit-pred. split-3p-hab.p-3p

[16:31]

'They used to look for a soft kind of tree and then they would split it to make sharp sticks.'

(iii) by an indirect object pronominal clitic expressing the ablative case (see 2.1.3.6.1.2-3.).

(32) Uqa mala eu heje u-te-i-a.
3s chicken that illicit get-pred.-1s-3s-tod.p
'He stole that chicken from me.'

2.1.1.4.3. Instrumental.

Instrumental is expressed by the postposition na 'with/by' (see 1.1.2.4.2.3., 1.2.4. and 1.16.5.).

- (33) Ija man sonon-ec signin na q-ug-a.
 1s creature glide-NOM/ADJ knife with hit-1s-tod.p
'I killed the snake with a knife.'

2.1.1.4.3a. Negative instrumental.

Negative instrumental is expressed by the negative particle qee 'not' following the circumstantial postpositional phrase (see 1.2.4., 1.16.5 and 2.1.1.5.).

- (34) Ija man sonon-ec signin ca qee
 1s creature glide-NOM/ADJ knife with not

 qaga-d-ug-a
 kill-3s-1s-tod.p
'I killed the snake without a knife.'

2.1.1.4.4. Comitative.

Comitative is expressed by the postposition ca 'with' (see 1.2.4. and 1.16.5.). Subject agreement is taken from the contents of the subject NP and the comitative NP as a whole. Person agreement is taken from the highest NP on the hierarchy, 1st > 2nd > 3rd, whether it is the subject NP or the comitative NP. So the following agreement combinations apply:

Subject NP	Comitative NP	Verbal agreement
1st	$\left\{ \begin{array}{l} 1st \\ 2nd \\ 3rd \end{array} \right\}$	1st
$\left\{ \begin{array}{l} 1st \\ 2nd \\ 3rd \end{array} \right\}$	1st	1st
2nd	$\left\{ \begin{array}{l} 2nd \\ 3rd \end{array} \right\}$	2nd
$\left\{ \begin{array}{l} 2nd \\ 3rd \end{array} \right\}$	2nd	2nd
3rd	3rd	3rd

Ija Lufani ca bel-ow-a.
 1s with go-1d-tod.p
 'I went with Lufani. / I and Lufani went.'

Lufani ija ca bel-ow-a.
 1s with go-1d-tod.p
 'Lufani went with me. / Lufani and I went.'

2.1.1.4.4a. Negative comitative.

Negative comitative cannot be expressed directly. A negation of the positive form (2.1.1.4.4. above) is expressed followed by a positive proposition. The person hierarchy for subject agreement also applies to the negated form (see 2.1.1.4.4.).

(35) Ija Lufani ca qee ho-1-oh.
 1s with not come-neg.p-1d
 'I and Lufani did not come.'

Ija himec h-ug-a.
 1s only come-1s-tod.p
 'Only I came.'

2.1.1.5. Circumstance.

Circumstance is expressed in two ways:

(i) by the postposition ca 'have' (see 1.2.4., 1.10. and 1.16.5.).

(36) Uqa eben gegehin ca.
 3s hand-3s-pos. dirt-3s-pos. have
 'He has dirty hands.'

(37) Lotoc eu wa ca.
 cloth that water have
 'That cloth is wet.'

(ii) by the adjectivalizing postclitic -ec/-oc.

(38) Dana wau-g cad-ec ho-na.
 man stomach-3s-pos. fight-ADJ come-3s-pres.
 'The fighting man is coming.'

(39) Ija man fulul-ec f-ig-a.
 1s creature flap-ADJ see-1s-tod.p
 'I see a bird.'

2.1.1.4.5a. Negative circumstance.

Negative circumstance is expressed by the negative particle qee 'not' following the circumstantial postpositional phrase.

(40) Uqa eben gegehin ca qee.
 3s hand-3s-pos. dirt-3s-pos. have not
 'He doesn't have dirty hands.'

- (41) Lotoc eu wa ca qee.
cloth that water have not
'That cloth is not wet.'
- (42) Ija sign ca qee h-ug-a.
is knife have not come-1s-tod.p
'I came without a knife.'

2.1.1.4.6. Possessive.

Possession can be alienable or inalienable (see also 1.10).

2.1.1.4.6.1a. Alienable possession.

Alienable possession can be expressed by:

(i) the postposition na 'of' (see also 1.2.5.1. and 2.1.2.4.7.).

(43) Ija na jo mane-i-a.
is of house burn-3s-tod.p
'My house burned down.'

(44) Banag na jo mane-i-a.
of house burn-3s-tod.p
'Banag's house burned down.'

(ii) a preposed attributive noun phrase.

(45) Dana caub caja ho-na.
man white woman come-3s-pres.
'The white man's wife is coming.'

(46) Eu ceta bahim.
that yam platform
'That is store of yams/yam store.'

2.1.1.4.6.1b. Inalienable possession.

There is no special marking on the possessor noun but see 2.1.1.4.7. for inalienably possessed nouns.

2.1.1.4.6.2-3. Temporary-permanent and present-past possession.

There is no morphological distinction made on the basis of temporary-permanent or present-past possession.

2.1.1.4.7. Possessed.

2.1.1.4.7.1. Alienable and inalienable possessedness.

Alienably possessed nouns have no special morphological marking however inalienably possessed nouns, mainly kinship and body part terms, are suffixed for person and number of the possessor and, in the case of the kinship nouns, also for singular or plural number of the possessee. Illustrative paradigms are given below for dewe-g 'his body'

and cot-ig 'his brother'. Epenthetic harmonic vowels are underlined.

	1st person	2nd person	3rd person
Sing.	dewe-ni	dewe-n	dewe-g
Dual	dewe-ni-le	dewe-n <u>e</u> -la	dewe-n <u>e</u> -la
Plur.	dewe-ni-ge	dewe-n <u>e</u> -ga	dewe-n <u>e</u> -ga
	1st person	2nd person	3rd person
Sing.	cot-i	cot-in	cot-ig
Pl. psee.	cot-i-el	cot-in-el	cot-ug-ul
Dual	cot-i-le	cot- <u>o</u> -la	cot- <u>o</u> -la
Pl. psee.	cot-i-le-il	cot- <u>o</u> -la-il	cot- <u>o</u> -la-il
Plur.	cot-i-ge	cot- <u>o</u> -ga	cot- <u>o</u> -ga
Pl. psee.	cot-i-ge-il	cot- <u>o</u> -ga-il	cot- <u>o</u> -ga-il

Some 109 inalienably possessed noun forms have been identified by the author and these are listed below in their grammatical classes. The nouns are classified according to their different first, second and third person singular forms. Alternative forms are given in brackets. Morphologically the first, second and third person suffixes can be as follows:

First person.

-ni, -mi, -ini, -ani, -eni, -li, -i

Second person.

-n, -m, -nin, -in, -ein, -im, -inin, -ain, -en

Third person.

-g, -ug, -nag, -nug, -ig, -iag, -ag, -eg, -n, -c, -ic, -h,
 Ø

There is a possibility that some of the variation in the morphology is due to phonological conditioning (see 3.4.1. 1-2. for a discussion of the rules involved). The probable underlying forms for first, second and third person are:

First person -ni, -i
 Second person -n
 Third person -g, Ø

All nonmarriage nuclear family terms are marked with -i underlyingly for first person singular (see 5.1.1.). However there does not appear to be any semantic basis for the third person distinction between -g and Ø. Since some of the phonological rules cannot be maintained due to the opacity constraint all the possessed noun forms are listed in their surface (morphological) form.

	1st person	2nd person	3rd person	Gloss
C1	<u>-ni</u> aide-ni amuli-ni ate-ni bami-ni bi-ni anag coli-ni dahi-ni dewe-ni gee-ni gemu-ni hie-ni jeje-ni mage-ni taba-ni	<u>-n</u> aide-n amuli-n ate-n bami-n bi-n anag coli-n dahi-n dewe-n gee-n gemu-n hie-n jeje-n mage-n taba-n	<u>-g</u> aide-g amuli-g ate-g bami-g bi-g anag coli-g dahi-g dewe-g gee-g gemu-g hie-g jeje-g mage-g taba-g	'wife' 'tears' 'daughter' 'scrotum' 'intestines' 'maturity' 'ear' 'body' 'penis' 'husband' 'friend' 'voice' 'brother's wife' 'body(including head)'
C2	<u>-ni</u> hohu-ni nalu-ni sili-ni tehu-ni	<u>-nin</u> hohu-nin nalu-nin sili-nin tehu-nin	<u>-g</u> hohu-g nalu-g sili-g tehu-g	'tail' 'whole being' 'navel' 'girth'
C3	<u>-ni</u> dolo-ni gema-ni gia-ni maja-ni sibe-ni	<u>-in</u> dolo-in gema-in gia-in maja-in sibe-in	<u>-g</u> dolo-g gema-g gia-g maja-g sibe-g	'ghost after death' 'liver' 'armpit' 'shame' 'chin'
C4	<u>-ni</u> cula-ni	<u>-n</u> cula-n	<u>-ug</u> cula-ug	'pride'
C5	<u>-eni</u> ewel-eni	<u>-ein</u> ewel-ein	<u>-ug</u> ewel-ug	'humility'
C6	<u>-ni</u> gai-ni	<u>-n</u> gai-n	<u>-nag</u> gai-nag	'cousin'
C7	<u>-ni</u> ceme-ni	<u>-in</u> ceme-in	<u>-nug</u> ceme-nug	'presence'
C8	<u>-mi</u> ai-mi (mai-mi) cebina-mi	<u>-m</u> ai-m (mai-m) cebina-m	<u>-g</u> ai-g (mai-g) cebina-g	'tooth' 'man's sister'
C9	<u>-ni</u> cuhu-ni gegehi-ni gelehi-ni hahu-ni	<u>-nin</u> cuhu-nin gegehi-nin gelehi-nin hahu-nin	<u>-n</u> cuhu-n gegehi-n gelehi-n hahu-n	'flesh' 'dirt' 'bravery' 'reflection/shadow'
C10	<u>-ni</u> bina-ni cehewa-ni duma-ni	<u>-in</u> bina-in cehewa-in duma-in	<u>-n</u> bina-n cehewa-n duma-n	'fame' 'wealth' 'character'

	ebe-ni (eba-ni)	ebe-in (eba-in)	ebe-n (eba-n)	'hand/forearm'
	hahaba-ni	hahaba-in	hahaba-n	'spirit which leaves a person when startled'
	hilia-ni	hilia-in	hilia-n	'wealth'
	hilima-ni	hilima-in	hilima-n	'vein/tendon'
	hojo-ni	hojo-in	hojo-n	'wing'
	hulufa-ni	hulufa-in	hulufa-n	'scar'
	huta-ni	huta-in	huta-n	'sound of a person walking'
	ija-ni	ija-in	ija-n	'name'
	ilo co-ni	ilo co-in	ilo co-n	'knowledge'
	oloho-ni	oloho-in	oloho-n	'bad temper'
	uwe-ni	uwe-in	uwe-n	'upper arm'
	wica-ni	wica-in	wica-n	'image'
C11	<u>-ni</u> amese-ni gosi-ni qafi-ni	<u>-n</u> amese-n gosi-n qafi-n	<u>-c</u> amese-c gosi-c qafi-c	'eye socket' 'hair' 'crown of head'
C12	<u>-ni</u> bagi-ni ilo hu-ni	<u>-nin</u> bagi-nin ilo hu-nin	<u>-c</u> bagi-c ilo hu-c	'feathers/hair' 'brain'
C13	<u>-ni</u> gola-ni malasa-ni nenege-ni	<u>-in</u> gola-in malasa-in nenege-in	<u>-c</u> gola-c malasa-c nenege-c	'blood' 'pancreas' 'spleen'
C14	<u>-ni</u> gada-ni (cata-ni)	<u>-in</u> gada-in (cata-in)	<u>-ic</u> gada-ic (cata-ic)	'hip(s)'
C15	<u>-mi</u> cigu-mi	<u>-m</u> cigu-m	<u>-c</u> cigu-c	'snivel'
C16	<u>-mi</u> gabala-mi sahala-mi	<u>-im</u> gabala-im sahala-im	<u>-c</u> gabala-c sahali-c	'shoulder blade' 'saliva'
C17	<u>-mi</u> bibito-mi gailo-mi gogodo-mi iso-mi jai-mi mela-mi mugu-mi oso-mi qehe-mi	<u>-m</u> bibito-m gailo-m gogodo-m iso-m jai-m mele-m mugu-m oso-m qehe-m	<u>-h</u> bibito-h gailo-h gogodo-h iso-h jai-h mela-h mugu-h oso-h qei-h (qehi-h)	'buttocks' 'grain' 'backbone' 'sore/wound' 'foot/lower leg' 'son' 'breastbone' 'brother-in-law' 'side'
	tucu-mi wailo-mi	tucu-m wailo-m	tucu-h wailo-h	'thigh' 'waist/loins'
C18	<u>-mi</u> beila-mi bia-mi	<u>-im</u> beila-im (beile-m) bia-im	<u>-h</u> beila-h bia-h	'tongue' 'mouth'

C19	<u>-ni</u> be-ni co-ni du-ni su-ni	<u>-n</u> be-n co-n du-n su-n	<u>∅</u> be co du su	'neck(front)' 'lips' 'neck(back)' 'breast(woman's)'
C20	<u>-ni</u> ola-ni	<u>-in</u> ola-in	<u>∅</u> ola	'face'
C21	<u>-ini</u> ceh-ini cul-ini musul-ini teful-ini	<u>-in</u> ceh-in cul-in musul-in teful-in	<u>∅</u> ceh cul musul teful	'magic/poison' 'heart' 'sweat' 'bone'
C22	<u>-ini</u> ganac-ini	<u>-inin</u> ganac-inin	<u>∅</u> ganac	'skin'
C23	<u>-ani</u> gob-ani	<u>-ain</u> gob-ain	<u>∅</u> gob	'knee'
C24	<u>-mi</u> biso-mi faco-mi hibo-mi (hibile-mi) ilo-mi mede-mi qato-mi siho-mi	<u>-m</u> biso-m faco-m hibo-m ilo-m mede-m qato-m siho-m	<u>∅</u> biso faco hibo ilo mede qato siho	'back of head' 'collar-bone' 'space behind a person' 'head' 'nose' 'shoulder' 'side of head'
C25	<u>-ni</u> jaja-ni	<u>-in</u> jaja-in	<u>-iq</u> jaja-ig	'great great grand- parent/child'
C26	<u>-li</u> tana-li	<u>-in</u> tana-in	<u>-iq</u> tana-ig	'wife's father'
C27	<u>-i</u> cot-i dod-i huh-i jamul-i men-i momo-i waw-i	<u>-in</u> cot-in dod-in huh-in jamul-in men-in momo-in waw-in	<u>-iq</u> cot-ig dod-ig huh-ig jamul-ig men-ig momo-ig waw-g (waw-ig)	'brother' 'great grand- parent/child' 'husband's parent' 'mother's brother's wife' 'brother's wife/ husband's sister' 'wife's mother' 'stomach'
C28	<u>-i</u> bin-i	<u>-im</u> bin-im	<u>-iq</u> bin-ig	'father's sister'
C29	<u>-i</u> caja h-i wal-i	<u>-in</u> caja h-in wal-in	<u>-iag</u> caja h-iag wal-iag	'woman's sister' 'brother'

C30	<u>-i</u> au (an-i) as-i aw-i min-i	<u>-in</u> an-in as-in aw-in min-in	<u>-ag</u> an-ag as-ag aw-ag min-ag	'mother' 'grandparent/child' 'nephew/neice' 'vagina'
C31	<u>-i</u> am-i me-i (mem-i)	<u>-en</u> am-en mem-en	<u>-eg</u> am-eg meme-eg	'eye' 'father'

2.1.1.4.8. Quality.

Quality can be expressed in the NP by a postpositional phrase, a derived adjective, a nominalized or adjectivalized clause or a nominal predicate.

- (47) Uqa dana cula-ug ca.
3s man pride-3s add
'He is a man with pride.'
- (48) Man sonon-ec age witic na calo-qag-an.
creature glide-NOM/ADJ 3p night at come out-3p-fut.
'The snakes (lit: gliding creatures) will come out at night.'
- (49) Uqa heje oc dana.
3s illicitly take-NOM/ADJ man
'He is a thief.'
- (50) Eu jo us nij-ec.
that house sleep lie-NOM/ADJ
'That is a sleeping house.'
- (51) Uqa qa bahic.
3s dog emph.
'He is a real dog.'

2.1.1.4.8a. Negative quality.

Negative quality can be expressed by negating the constituent expressing the positive quality.

- (52) Uqa dana me qee.
3s man good not.
'He is not a good man.'
- (53) Uqa heje oc dana qee.
3s illicitly take-NOM/ADJ man not
'He is not a thief.'

2.1.1.4.8b. Reference quality.

Many abstract qualities are expressed by inalienably possessed nouns although an equivalent to 'honour' does not exist.

binan	'his fame'
cemenug	'his presence'

culaug	'his pride'
duman	'his character'
ewelug	'his humility'
gelehin	'his bravery'
ijan	'his name'
ilo con	'his knowledge'
majag	'his shame'
olohon	'his temper'

Reference quality can also be expressed using the postposition *ca* 'with'.

- (54) Dana gelehin ca.
 man bravery with
 'The man with bravery.'

Other concrete body part terms can be used idiomatically to express abstract qualities.

- (55) Uqa gema-g be-i-a.
 3s liver-3s-pos. come up-3s-tod.p
 'He became angry (lit: his liver came up).'
- (56) Hina waw-in hune-i-a.
 2s stomach-2s-pos. dig-3s-tod.p
 'She charmed you (lit: she dug your stomach).'
- (57) Uqa am-ige heewe-i-a.
 3s eye-1p-pos. hold-3s-tod.p
 'He held our attention (lit: he held our eye).'

2.1.1.4.9. Quantity.

In the past standards of measurement were based on body parts, e.g. a hand, a forearm, an armspan etc., but nowadays imperial or, more recently, metric measurement is used. A mass noun can be modified by a general quantifier and a count noun can be modified by a general quantifier or a numeral (see also 1.2.5.2.6. and 2.1.6.).

- (58) Ija sab geh bahic ceh-ig-a.
 1s food much emph. plant-1s-tod.p
 'I planted a lot of food.'
- (59) Rais ten kilo faj-ag-a.
 rice buy-2s-imp.
 'Buy ten kilos of rice.'
- (60) Age mala leis qo-ig-a.
 3p chicken two hit-3p-tod.p
 'They killed two chickens.'

2.1.1.4.10. Material.

Material is expressed by a compound NP (see 1.2.5.1.) consisting of a nominal expressing the material followed by a nominal expressing the product.

- (61) Eu nah jo.
 that post house.

'That is a house on posts.'

- (62) Eu meb nah jo.
that hardwood spec. post house
'That is a house of hardwood posts.'

Compound NP's can also describe types without reference to material composition.

- (63) Ceta bahim.
yam platform
'Yam store / store of yam.'

- (64) Dama bolob.
possum trap
'Possum trap / trap for possum.'

- (65) Man fulul-ec taic
creature flap-ADJ nest
'Bird's nest / nest of bird.'

2.1.1.4.10a. Negative material.

It is not possible to express negative material directly.

2.1.1.4.11. Manner.

Manner is expressed by an adverb, an adverbial phrase, a noun or noun phrase functioning as an adverbial, a numeral or quantifier functioning as an adverbial, (see 1.2.1.3.) or by a verb functioning in a paratactic verb sequence (see 2.1.3.7.). See also 1.1.2.4.2.2.

- (66) Uqa mahuc ho-i-a.
3s quickly come-3s-tod.p
'He came quickly.'
- (67) Ma susul ihul ahal nije-i-a.
taro scraping disorder lie-3s-tod.p
'The taro scrapings lay all about.'
- (68) Uqa jic ho-i-a.
3s road come-3s-tod.p
'He came by road.'
- (69) Mel sim ho ho cobo-gi-na.
child small pig pig walk-3p-pres.
'Small children crawl (lit: walk like pigs).'
- (70) Osahic osahic bele-ig-a.
one one go-3p-imp.
'Go one at a time.'
- (71) Uqa cucui-i busale-i-a.
3s fear-pred. run away-3s-tod.p
'He ran away afraid.'

2.1.1.4.11a. Negative manner.

Negative manner is expressed by the negative equivalents of the forms described for manner above.

- (72) Uqa qee mahuc ho-1.
3s not quickly come-neg.p-3s
'He did not come quickly.'
- (73) Ma susul qee ihul ahal nije-1.
taro scrapings not disorder lie-neg.p-3s
'The taro scrapings were not lying all about.'
- (74) Uqa qee jic ho-1.
3s not road come-neg.p-3s
'He did not come by road.'
- (75) Dana age qee ho ho cobo-gi-na.
man 3p not pig pig walk-3p-pres.
'Men do not crawl.'
- (76) Cain osahic osahic belo-wain.
don't one one go-neg.f-3p
'Don't go one at a time.'
- (77) Uqa qee cucui-i busale-1.
3s not fear-pres. run away-neg.p-3s
'He did not run away afraid.'

2.1.1.4.12-13. Cause and Purpose.

Cause and purpose are both expressed within the NP in the same way by the postposition nu 'cause/for' (cf. also 1.1.2.4.2.5-6.).

- (78) Ija uqa nu h-ug-a.
1s 3s cause come-1s-tod.p
'I came because of him.'
- (79) Ija sab nu h-ug-a.
1s food for come-1s-tod.p
'I came for food.'

2.1.1.4.14. Function.

Function can be expressed by an analogic postpositional phrase (see 1.2.4.).

- (80) Ija dana eu seibul odi we na nan na
1s man that club like like of stick with
q-ug-a.
hit-1s-tod.p
'I used my digging stick as a club to hit that man.'

2.1.1.4.15. Reference.

Reference is expressed by the postposition nu 'about'.

- (81) Ija ho nu ma-d-ug-a.
 1s pig about say-3s-1s-tod.p
'I told him about the pig.'
- (82) Ija age qo-co-b qo-co-b eig-a nu
 1s 3p hit-DS-3s hit-DS-3s 3p-tod.p about
 ma-d-ug-a.
 say-3s-1s-tod.p
'I told him about them fighting each other.'

2.1.1.4.16. Essive.

Essive can be expressed by a separate clause or sentence.

- (83) Ija Gedimas uqa mel sim na eu ija do-om.
 1s 3s child small at that 1s know-1s-rem.p
'I knew Gedimas as a child.'

2.1.1.4.17. Translative.

Translative can be expressed by an analogic postpositional phrase (see 1.2.4.).

- (84) Age Naus pastor cin we m-ud-ein.
 3p seem like make-3s-3p-rem.p
'They made Naus pastor.'

2.1.1.4.18. Part-whole.

Part-whole relations are expressed by compound noun phrases.

- (85) Jo qei-h.
 house side-3s-pos.
'Side of the house.'
- (86) Wa ilo.
 water head
'Source of the river.'
- (87) Tu gemo.
 night middle
'Middle of the night.'

Generic-specific relations can also be expressed by a compound noun phrase.

- (88) Mun gonub.
 banana species
'Type of banana.'
- (89) Na ahul.
 tree coconut
'Coconut tree.'

- (90) Man wag.
bird canoe
'Aeroplane'

2.1.1.4.19. Partitive.

2.1.1.4.19.1. Partitive numeral.

A partitive numeral can be expressed by:

(i) two appositional NP's, one of which specifies a set, and the other a number of members of that set specified numerically.

- (91) Ija mela-mi-el leis ale Madang cabi odo-si-na.
1s son-1s-pos.-p two 3d work do-3d-pres.
'Two of my sons work in Madang.'

(ii) a relative clause, of which the restricting sentence specifies the set, and the antecedent NP specifies a number of members of that set.

- (92) Ija mela-mi-el Tusbab skul nu-ein eu
1s son-1s-pos.-p school go-3p-rem.p that

leis ale Madang cabi odo-si-na.
two 3d work do-3d-pres.
'Two of my sons that went to Tusbab high-school work in Madang.'

2.1.1.4.19.2. Nonpartitive numeral.

Numerals follow the noun in the noun phrase to specify the number (see 1.2.5.2.6. and 1.16.6.).

- (93) Uqa mala leis a-q-ale-i-a.
3s chicken two hit-3d-3s-tod.p
'He killed two chickens.'

Inalienably possessed kinship nouns are specially marked for plurality of the possessee (see 2.1.1.4.7.1.).

- | | |
|--------------------|----------------------|
| (94) Uqa wali-ag. | Uqa wali-ag-ul. |
| 3s brother-3s-pos. | 3s brother-3s-pos.-p |
| 'His brother.' | 'His brothers.' |

- | | |
|------------------|-------------------|
| (95) Uqa aide-g. | Uqa aide-g-ul. |
| 3s wife-3s-pos. | 3s wife-3s-pos.-p |
| 'His wife.' | 'His wives.' |

2.1.1.4.19.3. Partitive quantifier.

A partitive quantifier is expressed by a relative clause of which the restricting sentence specifies the set, and the antecedent nominal a nonspecific quantity from that set.

- (96) Mel age wa na n-oin eu leih age
boy 3p water in go down-3p-rem.p that some 3p

waga nu cucui-ein.
 crocodile cause fear-3p-rem.p
'Some of the boys that went down into the river were afraid of the crocodiles.'

- (97) Mel age wa na n-oin eu leih age
 boy 3p water in go down-3p-rem.p that some 3p

waga nu qee cucui-el-ein.
 crocodile cause not fear-neg.p-3p
'Some of the boys that went down into the river were not afraid of the crocodiles.'

2.1.1.4.19.4. Nonpartitive quantifier.

A nonpartitive quantifier is expressed by a nominal followed by a quantifier (see also 2.1.6.6.).

- (98) Dana caja leih age nu-ein.
 man woman some 3p go-3p-rem.p
'Some people went.'

- (99) Uqa sab leih je-i-a.
 3s food some eat-3s-tod.p
'He ate some food.'

2.1.1.4.19.5. Partitive negative quantifier.

A partitive negative quantifier is expressed by a relative clause, of which the restricting sentence specifies the set, and the antecedent states an unspecified member of that set.

- (100) Mel age wa na n-oin eu mel oso
 boy 3p water in go down-3p-rem.p that boy indef.

waga nu qee cucui-el.
 crocodile cause not fear-neg.p-3s
'None of the boys that went down into the river were afraid of the crocodiles.'

2.1.1.4.19.6. Nonpartitive negative quantifier.

A nonpartitive negative quantifier is expressed by a negative proposition in which the subject nominal is modified by the quantifier *cunug* 'all'. The meaning of (101) is unambiguous and cannot mean some people went and some did not as in the English equivalent 'All the people did not go'.

- (101) Dana caja cunug age qee nue-l-ein.
 man woman all 3p not go-neg.p-3p
'None of the people went.'

2.1.1.4.20-21. Price and value.

Prices and values are expressed in the national currency of Papua New Guinea. There is no traditional currency.

(102) Cabi eu nu ten kina na faj-udo-go-na.
work that for with buy-3s-1p-pres.

[20:25]

'We pay him K10(ten Kina) for that work.'

(103) Ija ka PMV eu twenti toea na faj-ig-a.
is car that with buy-1s-tod.p

[7:10]

'I paid 20t(twenty toea) for the PMV.'

(104)

A: Ho eu qaig ganic?
pig that shoot how much
'How much is that pig?'

B: Ho eu na qaig wan handet.
pig that of shoot
'It is K100(one hundred Kina) for that pig.'

A: Cois ija qaig wan handet na faj-ig-en.
OK is with buy-1s-fut.
'OK I will buy it for K100.'

2.1.1.4.22. Distance.

Although measurements of distance, e.g. kilometres, are available through Pidgin or English native speakers usually measure distance in terms of travelling time involved and/or in terms of geographical locations encountered on the journey mutually known to both speaker and hearer.

(105) Eu 7 o'clock odi Erima jobon cul-om.
that like village leave-1p-rem.p

B-i jic ben na cal-om eu ege
come up-pred. road big at arrive-1p-rem.p that 1p

agas-om. Usino oc nu himec. Usino jic
stick-1p-rem.p get-inf. for only road

eu me dih nu jic na culumen oso qee
that good just for road at problem indef. not

guluc-do-l-om. Hour leis qee oc ni-nij-en
meet-3s-neg.p-1p two not get-inf. sim.-lie-3s-DS

eu odi ege Usino jic batac na cal-om.
that like 1p road branch at arrive-1p-rem.p

Ono dec ta-taw-oqon asane-ce-b haun
there from sim.-stand-1p-DS immediate-DS-3s again

agas-om. N-eb Waliom cu-cul-d-eb
stick-1p-rem.p go down-1p sim.-leave-3s-1p-DS

Urigina cu-cul-d-eb agas-om.
sim.-leave-3s-1p-ds stick-1p-rem.p

[27:7-16]

'We left Erima village at about 7 o'clock. We came up and as we arrived at the main road we got stuck just

getting to Usino. The Usino road itself was good and we did not meet any problem there. After two hours we came to the fork in the road to Usino but as soon as we left there we got stuck again. We went down and as we left Waliom and Urigina we got stuck.'

(106) Ege ho cus bahu ben na jaqo-co-mun
1p pig wild forest big in chase-DS-1p

jic ono ca nu-i-a.

road there with go-3s-tod.p

'We chased the pig and it went a long way through the forest.'

2.1.1.4.23. Extent.

Units of measurement are available through Pidgin or English, e.g. feet and inches or more recently the metric scale. Previously different body parts were used as a means of measure i.e. *eben hand + forearm* or *mamog thumb* but these are rarely used today.

(107) Ija na jo maha na dec 7 feet ohis odi
1s of house ground at from above like

cehe-em.

build-1s-rem.p

'I built my house 7 feet off the ground.'

More common in indicating extent is the use of a suitable quantifier.

(108) Sildom uqa na jo eu cecela bahic.
3s of house that long emph.

'Sildom's house is very long.'

2.1.1.4.24. Concessive.

Concessive cannot be expressed simply within the NP but can be expressed by two clauses linked by the adversative conjunction *qa* 'but' (see 1.1.2.4.2.9).

2.1.1.4.25-26. Inclusion and exclusion.

If an individual person or group is to be specifically included in or excluded from a statement made about the other members of the class this must be stated in a separate clause.

(109) Mel cunug age bal ud-eig-a.
boy all 3p ball play-3p-tod.p

Mel nag ha ud-eig-a.

boy small also play-3p-tod.p

'All the boys played football including the small boys.'

(110) Mel cunug age bal ud-eig-a qa mel nag
boy all 3p ball play-3p-tod.p but boy small

qee ude-1-ein.

not play-neg.p-3p

'All the boys played football except the small boys.'

Exclusion can also be indicated by a special exclusive marker on the verb (see 2.1.3.6.12.1.13.).

2.1.1.4.27. Addition.

Addition is expressed by the adjective *gami* 'together' postposed to the noun phrase indicating the person or item to be added to.

(111) Dana ijed age Imalal gami cois ho-qag-an.

man three 3p together OK come-3p-fut.

'Three other men should come together with Imalal.'

Addition can also be expressed by the postposition *ca* 'add' (see 1.2.4.).

(112) Malol ca Silom ca Cam ca ho-ig-a.

add add add come-3p-tod.p

'Malol and Silom and Cam came.'

2.1.1.4.28. Vocative.

A person's attention can be called by the use of a proper name, kinship term, title or greeting followed by the vocative particles *o* or *e* expressing calling or exclamation (see 2.1.3.4.23.). Also the vocative particles *Se* 'Hey' or *O* can be used initially in the address. The vocative particles *o* and *e* are used most frequently in Amele songs at the end of a line or verse.

(113) Sewa o.

Au e.

'O Sewa.'

'O mother.'

(114) Se gai-ni

eu adi od-og-a?

Hey friend-1s-pos. that how do-2s-imp.

[4:10]

'Hey my friend what on earth have you done?'

(115) O caja ana nu-ugu-na?

O woman where go-2s-pres.

'O woman where are you going?'

2.1.1.4.29. Citation form.

The citation form is termed in the language *je ilo* 'head word' or *je gug* 'basic word' and applies principally to verbs and inalienably possessed nouns. The citation form of the verb is the infinitive form.

e.g. f-ec 'to see' cesul-doc 'to help'
q-oc 'to hit' soi-doc 'to clean'

The citation form of the inalienably possessed noun is the third person singular form.

e.g. ana-g 'mother' wau-g 'stomach'

meme-g 'father' ame-g 'eye'

The 3s citation form is an option in certain nominal expressions where agreement with the possessor is possible.

(116) Ija jai-mi/jai-h h-ug-a.
1s leg-1s/leg-3s come-1s-tod.p
'I came by foot.'

(117) Ija dodol gee-ni/gee-g dain te-na.
1s throat penis-1s/penis-3s pain 1s-3s-pres.
'My larynx is sore.'

2.1.14.30. Label form.

There are no special label forms.

2.1.1.5. Local semantic functions.

Location in space can be indicated in several different ways:

(i) by a place or village name e.g. Gum community school, Danben (village).

(ii) by a geographical, habitation or vegetation feature e.g. aluh 'mountain' aluh igoc 'mountain peak', aluh gogodoh 'mountain backbone(ridge)', bahu 'forest that has regrown after clearing', coluc, wadau 'uninhabited/unclaimed forest', qau sasac 'dense forest', caibol 'cool place', salu 'shaded place', wa 'water/river', cue/sil 'flood', tut 'spring', fifiji 'hot spring', alalag 'stagnant water', macas 'sea', lan 'coast/shore', nui 'island', maha/hatu 'land', hih 'mound', hatin 'cave', taic 'nest/den', sau 'sky'.

(iii) by the wind direction e.g. babon 'wind from mountains(E)', calag 'wind from sea(W)', jawalti 'wind from north coast(NW)', jawan 'wind from S.' and lolo 'wind from NE.'.

(iv) by a nominal expression involving a body part noun e.g. wa ilo 'river head', cabi ilo 'garden head', wa co/biah 'river mouth', wa ameg 'river eye (deep water)', cabi jaih 'garden foot', jo ameg 'house eye (opening at end of house)', jo qeih 'house side'.

(v) a locative word or expression e.g. cudun 'place', cemenug 'near', hibo 'behind', dunuh 'inside', ohis 'above', bisalu 'below/underneath', gemo launo 'middle', maha gemo 'middle ground (outside)', salac 'meeting place', cudug 'sleeping place'.

(vi) by a postposition or postpositional phrase (see also 1.2.4.) e.g. na 'to/at', dec 'from', i/eu sec 'this/that way' i/eu hen 'over here/there', ono ca 'over there (a long way)'.

(vii) by a locative demonstrative e.g. ene/ono 'here/there', ceheleg/cuhulug 'up/down there'.

(viii) by a directional motion verb or a paratactic verb sequence expressing direction (see 2.1.3.6.10.).

(ix) by special deictic use of the switch-reference system (see 2.1.3.6.7.).

2.1.1.5.1. General location.

General location is expressed by a place name, locative demonstrative word or a locative postpositional phrase with a stative or motion verb.

(118) Uqa Danben bil-i-a.
3s be-3s-tod.p
'He is in/at Danben.'

(119) Uqa ene bil-i-a.
3s here be-3s-tod.p
'He is here.'

(120) Uqa jo na bil-i-a.
3s house in be-3s-tod.p
'He is in the house.'

(121) Uqa Madang nu-i-a.
3s go-3s-tod.p
'He went to Madang.'

(122) Uqa jic ana-g na nu-i-a.
3s road mother-3s-pos. to go-3s-tod.p
'He went to the main road.'

(123) Uqa Jelso jobon ono nu-i-a.
3s village there go-3s-tod.p
'He went over to Jelso village.'

(124) Uqa Madang dec ho-i-a.
3s from come-3s-tod.p
'He came from Madang.'

(125) Uqa ono dec ho-i-a.
3s there from come-3s-tod.p
'He came from there.'

General motion past a location is expressed by the verb wol-doc *'to surpass/pass'* in a paratactic verb sequence with a motion verb.

(126) Uqa jo wol-du nu-i-a.
3s house pass-3s-pred. go-3s-tod.p
'He went past the house.'

(127) Uqa jobon wol-du ho-i-a.
3s village past-3s-pred. come-3s-tod.p
'He came past the village.'

2.1.1.5.2. Proximate.

Proximate location can be expressed by a suitable locative word like *cemenug* or *duducul* 'near'. Also the verb *l-ec* 'to go' indicates motion that is only of a proximate nature.

- (128) Uqa jo cemenug/duducul tawe-i-a.
 3s house near stand-3s-tod.p
'He stood near the house.'
- (129) Uqa jo cemenug/duducul na i sec le-i-a.
 3s house near at this way go-3s-tod.p
'He went near the house.'
- (130) Uqa jo cemenug/duducul na dec ho-i-a.
 3s house near at from come-3s-tod.p
'He came from near the house.'

2.1.1.5.3. Interior location.

Interior location can be expressed by a suitable locative word like *dunuh* 'inside', *hamol* 'room' or *gemo* 'middle', or a verb that expresses motion from inside to outside or vice versa.

- (131) Uqa jo dunuh/hamol (na) bil-i-a.
 3s house inside/room at be-3s-tod.p
'He is inside the house.'
- (132) Uqa jo dunuh na te-i-a.
 3s house inside at go up-3s-tod.p
'He went up into the house.'
- (133) Meen hatin na dec cale-i-a.
 stone cave in from come out-3s-tod.p
'He came out of the cave.'
- (134) Uqa jo gemo gemo cobo-i-a.
 3s house middle middle walk-3s-tod.p
'He walked down the middle of the house.'

2.1.1.5.4. Exterior location.

Exterior location is expressed by a locative word *gemo* 'middle/outside' or *gesac* 'side/edge'.

- (135) Uqa maha gemo tawe-i-a.
 3s ground middle stand-3s-tod.p
'He stood outside.'
- (136) Uqa jobon gemo sum-ii bil-i-a.
 3s village outside wait-it. be-3s-tod.p
'He waited outside the village.'
- (137) Uqa jo na dec maha gemo le-i-a.
 3s house at from ground middle go-3s-tod.p
'He went outside from the house.'

(138) Uqa jobon gemo na dec ho-i-a.
 3s village outside at from come-3s-tod.p
'He came from outside the village.'

(139) Uqa jo gesac co-cob-i nu-i-a.
 3s house edge it.-walk-3s-SS go-3s-tod.p
'He walked past outside the house.'

2.1.1.5.5. Anterior location.

Anterior location can be expressed by the verb *aqun-ec* 'to precede' and this can also have a nominalized form *aqun-ec* 'front'. Otherwise there is no overt locative word to express anterior location.

(140) Dana oso aqun-i ho-i-a.
 man indef. preced-pred. come-3s-tod.p
'One man came ahead.'

(141) Car uqa na jai-h oso anse i sec
 3s of leg-3s-pos. indef. left this way

tawe-na aqun-ec na dec gis cal-i
 stand-3s-pres. front-NOM/ADJ at from air come out-pred.

h-u folo-en.
 come-pred. flatten-3s-rem.p

[27:18]

'Air came out of the front left-hand tyre and it went down.'

2.1.1.5.6. Posterior location.

Posterior location is expressed by the noun *hibo/hibileh* 'space behind/behind'.

(142) Uqa jo hibo/hibileh tawe-i-a.
 3s house behind stand-3s-tod.p
'He stood behind the house.'

(143) Ho eu na ben hibo/hibileh na i sec nu-i-a.
 pig that tree big behind at this way go-3s-rem.p
'That pig ran behind the big tree.'

(144) Ho na ben hibo/hibileh na dec ho-i-a.
 pig tree big behind at from come-3s-tod.p
'The pig ran from behind the big tree.'

(145) Ho na ben hibo na i sec wol-du
 pig tree big behind at this way pass-3s-pred.

nu-i-a.
 go-3s-tod.p
'The pig ran past behind the big tree.'

(146) Ija hina hibo-m/hibile-m to-h-ig-en.
 1s 2s behind-2s-pos. follow-2s-1s-fut.
'I will follow behind you.'

2.1.1.5.7. Superior location.

Superior location is expressed by locative words like *ohis* 'above' or *igoc* 'peak/summit'.

- (147) *Mala jo igoc na bil-i-a.*
 chicken house peak on sit-3s-tod.p
'The chicken sat on top of the house.'
- (148) *Mel na ohis na tobe-i-a.*
 boy tree above to climb up-3s-tod.p
'The boy climbed up to the top of the tree.'
- (149) *Mel na ohis na dec tone-i-a.*
 boy tree above of from fall-3s-tod.p
'The boy fell from the top of the tree.'
- (150) *Meeleh ohis fulul-egi-na.*
 flying fox above flap-3p-pres.
'The flying foxes are flying overhead.'

2.1.1.5.8. Superior-contact location.

Superior-contact location is expressed by locative words like *tatac* 'top' or *lalan* 'surface' or a locative postpositional phrase.

- (151) *Ceta jool ca cabal tatac na bil-i-a.*
 yam bag with table top on sit-3s-tod.p
'The bag of yams is on top of the table.'
- (152) *Ceta jool ca cabal na m-ag-a.*
 yam bag with table on put-2s-imp.
'Put the bag of yams on the table.'
- (153) *Ceta jool ca cabal na dec og-a.*
 yam bag with table on from take-2s-imp.
'Take the bag of yams off the table.'
- (154) *Goci cabal lalan gudu gudu ei-a.*
 rat table surface run run 3s-tod.p
'The rat ran across the table top.'

2.1.1.5.8a. Surface-contact location.

Surface-contact location can be expressed by locative words like *basai* or *lal* 'surface'.

- (155) *Wag wa basai/lal nij-i-a.*
 canoe water surface lie-3s-tod.p
'The canoe is on the surface of the water.'
- (156) *Wag wa basai/lal na sun-do-ig-a.*
 canoe water surface on push-3s-2p-imp.
'Push the canoe onto the water.'
- (157) *Wag wa basai/lal na dec di-do-ig-a.*
 canoe water surface on from pull-3s-2p-imp.
'Pull the canoe off the water.'

- (158) Wa bidad wa basai/lal fulul-i nu-i-a.
 water dragonfly water surface flap-pred. go-3s-tod.p
'The dragonfly flew across the surface of the water.'

2.1.1.5.9. Inferior location.

Inferior location can be expressed by locative words like *isu/iso bisalu* 'under'.

- (159) Ahul meeg jo bisalu nij-i-a.
 coconut dry house under lie-3s-tod.p
'The dry coconuts are under the house.'
- (160) Ceta jool ca cabal iso m-ag-a.
 yam bag with bed under put-2s-imp.
'Put the bag of yams under the bed.'
- (161) Ceta jool ca cabal iso na dec o-g-a.
 yam bag with bed under at from take-2s-imp.
'Take the bag of yams from under the bed.'
- (162) Ho jo bisalu gudu gudu ei-a.
 pig house under run run 3s-tod.p
'The pig ran under the house.'

2.1.1.5.10. Inferior-contact.

Inferior-contact location is expressed in the same way as inferior location.

- (163) Qeen meen bisalu nij-i-a.
 centipede stone under lie-3s-tod.p
'There is a centipede under the stone.'
- (164) Qeen meen bisalu na nu-i-a.
 centipede stone under at go-3s-tod.p
'The centipede went under the stone.'
- (165) Qeen meen bisalu na dec cale-i-a.
 centipede stone under at from come out-3s-tod.p
'The centipede came out from under the stone.'
- (166) Qeen meen bisalu na i sec nu-i-a.
 centipede stone under at this way go-3s-tod.p
'The centipede went past under the stone.'

2.1.1.5.11. Lateral location.

Lateral location can be expressed by locative words like *cemenug* 'near', *gesac*, *gadoloh* 'edge', *qeih* 'side' or *sucun* 'corner'.

- (167) Dana jo cemenug tawe-i-a.
 man house near stand-3s-tod.p
'The man stood beside the house.'
- (168) Wa col gesac nu-i-a.
 water bank edge go-3s-tod.p
'He went to the edge of the river bank.'

(169) Wa col gesac na dec tone-i-a.
 water bank edge at from fall-3s-tod.p
'He fell in from the edge of the river bank.'

(170) Dana uqa jo qeih wol-du le-i-a.
 man 3s house side pass-3s-pred. go-3s-tod.p
'The man went past the side of the house.'

2.1.1.5.12. Lateral-contact location.

Lateral-contact location can be expressed by locative words like cemenug 'near', gesac, gadoloh 'edge', qeih 'side' or sucun 'corner' within a postpositional phrase containing na 'at/on'.

(171) Qeni na qeih na nij-i-a.
 lizard tree side at lie-3s-tod.p
'The lizard is on the side of the tree.'

(172) Meen jo qeih na hele-i-a.
 stone house side at throw-3s-tod.p
'He threw the stone at the side of the house.'

(173) Hal jo qeih na dec cede-i-a.
 pot house side at from take-3s-tod.p
'She took her pots from off the side of the house.'

(174) Qeni na qeih na i sec tobe-na.
 lizard tree side at this way climb-3s-pres.
'The lizard is climbing up the side of the tree.'

2.1.1.5.13. Citerior location.

Citerior location is expressed by the directional postpositional phrase containing i/eu sec (see also 1.2.4.).

(175) Uqa jo jic ene i sec fo ono i sec fo
 3s house road here this way QU there this way QU
 tawe-i-a?
 stand-3s-tod.p
'Did he stand on this side of the house or on that side of the house?'

(176) Jic ene i sec h-og-a.
 road here this way come-2s-imp.
'Come to this side of the road.'

(177) Jic ene i sec na dec l-ag-a.
 road here this way at from go-2s-imp.
'Go from this side of the road.'

(178) Jic ene i sec cob-oc nu.
 road here this way walk-inf. HO
'Let us walk down this side of the road.'

2.1.1.5.14. Citerior-contact location.

Citerior-contact location is expressed in the same way as citerior location above.

(179) Gah uqa glas hagen ene/dunuh i sec fo qee
fly 3s glass side here/inside this way QU not

naha/maha gemo i sec bil-i-a fo?
half/outside this way be-3s-tod.p QU

'Is the fly on this side/the inside of the glass or on the other side/outside?'

2.1.1.5.15. Ulterior location.

Ulterior location is expressed by the phrases *ono i sec 'over in that direction',* or *naha i sec 'over that way'.*

(180) Uqa aluh ono/naha i sec bil-i-a.
3s mountain there/half this way be-3s-tod.p
'He lives beyond the mountain.'

(181) Uqa aluh ono/naha i sec nu-i-a.
3s mountain there/half this way go-3s-tod.p
'He went beyond the mountain.'

(182) Uqa aluh ono/naha i sec na dec ho-i-a.
3s mountain there/half this way at from come-3s-tod.p
'He came from beyond the mountain.'

(183) Man wag aluh ono/naha i sec futu-i-a.
bird canoe mountain there/half this way fly-3s-tod.p
'The aeroplane flew beyond the mountain.'

The notion of location beyond can also be expressed by the phrase *ono ca 'over there (lit: there add)'*.

(184) Jobon eu ono ca.
village that there add
'That village is over there.'

2.1.1.5.16. Ulterior-contact location.

Ulterior-contact location is expressed in the same way as ulterior location above.

(185) Wag wa ono/naha i sec nij-i-a.
canoe water there/half this way lie-3s-tod.p
'The canoe is on the other side of the river.'

(186) Wag wa ono/naha i sec ton-i
canoe water there/half this way go down-pred.

nu-i-a.
go-3s-tod.p
'The canoe went down the other side of the river.'

2.1.1.5.17-18. Medial location.

Medial location meaning 'between two things' and 'among' is expressed by the locative word *gemo* 'middle'.

(187) Amele dana caja age Gum Gogol ca gemo bile-gi-na.
 man woman 3p with middle be-3p-pres.
'The Amele people live between the Gum and Gogol rivers.'

(188) Ananas faifa leis gemo na ceh-ag-a.
 pineapple pawpaw two middle at plant-2s-imp.
'Plant the pineapples in between the two pawpaw trees.'

(189) Ananas faifa leis gemo na dec ced-ag-a.
 pineapple pawpaw two middle at from take-2s-imp.
'Take the pineapples from between the two pawpaw trees.'

(190) Age jobon gemo gemo cobo-ig-a.
 3p village middle middle walk-3p-tod.p
'They walked through the middle of the village.'

(191) Ija Naus ca dana caja ca gemo gemo
 1s with man woman with middle middle
 co-cob-i bel-ow-a.
 sim.-walk-1d-SS go-1d-tod.p
'Naus and I walked among/through the crowd of people.'

2.1.1.5.19. Circumferential location.

There are various words that might express circumferential location: verbs like *is-doc*, *tali-doc* 'go around', adjectives like *dala-doc*, *falan-doc*, *gol-doc* 'round' and nouns like *hac*, *dac* 'boundary'.

(192) Dana age ja tal-du bil-ein.
 man 3p fire round-3s-pred. sit-3p-rem.p
'The men sat around the fire.'

(193) Dana age du-du-i bil-eig
 man 3p sim.-dance-pred. be-dur.-3p-SS
 tal tal egi-na.
 round round 3p-pres.
'The men danced around and around.'

(194) Uqa dac cabi tal-du me-i-a.
 3s boundary garden round-3s-pred. put-3s-tod.p
'He put a boundary around the garden.'

2.1.1.5.20. Citerior-anterior location.

Citerior-anterior location is expressed the same way as ulterior location is expressed (see 2.1.1.5.15.).

2.1.1.5.21-26. Motion past a long object in the direction of its length.

Motion past a long object in the direction of its length is expressed in the same way as interior, exterior, superior, superior-contact, surface, inferior and inferior-contact motion past is expressed.

2.1.1.5.21. Interior motion past a long object.

(195) Age meen hatin gemo gemo cobo-ig-a.
3p stone cave middle middle walk-3p-tod.p
'They walked through the cave/tunnel.'

2.1.1.5.22. Exterior motion past a long object.

(196) Uqa wa col co-cob-i nu-i-a.
3s water bank it.-walk-3s-SS go-3s-tod.p
'He walked along the river bank.'

2.1.1.5.23. Superior motion past a long object.

(197) Man wag asou futu-i no-i-a.
bird canoe valley fly-pred. go down-3s-tod.p
'The aeroplane flew down the valley.'

2.1.1.5.24. Superior-contact motion past a long object.

(198) Na ton-en eu mel tatac cobo-i-a.
tree fall-3s-rem.p that boy top walk-3s-tod.p
'The boy walked along the top of the fallen tree.'

2.1.1.5.25. Inferior motion past a long object.

(199) Ho jo bisalu h-u-me-i ameg eu sec na
pig house under come-pred.-SS-3s eye that way at

dec ameg i sec na gudu gudu ei-a.
from eye this way at run run 3s-tod.p
'The pig came under the house and ran from that end to this end.'

2.1.1.5.26. Inferior motion past a long object.

(200) Gumama facoc bisalu co-cob-i ija
millipede rafter under sim.-walk-3s-SS is

ilo-mi ohis nu-i-a.
head-1s-pos. above go-3s-tod.p
'The millipede walked along the underside of the rafter and went over my head.'

2.1.1.5.27-29a. Motion at right angles past a long object.

Motion at right angles past a long object is expressed by a verb like let-ec 'to cross over', cagoc or get-ec 'to cut across'.

(201) Uqa wa let-i-me-i col tobe-i-a.
3s water cross-pred.-SS-3s bank climb-3s-tod.p

'He crossed the river and climbed up the bank.'

(202) Uqa na qete-ce-b tone-i-a.
3s tree cut-DS-3s fall down-3s-tod.p
'He cut the tree down.'

2.1.1.6. Location in time.

Location in time can be expressed by various nominal, verbal and postpositional phrasal expressions. Also the switch-reference system has a special deictic function for indicating location in time (see 2.1.3.6.7.). Pidgin loan words are used normally to describe days of the week and months of the year although there are some Amele words for days of the week (see 2.1.1.6.1.3.). Location in time can also be indicated by tenses on the verb (see 2.1.3.2.) i.e. present, today's past, yesterday's past, remote past and future time references.

2.1.1.6.1. General time expressions.

Temporal expressions include:

Nominals

sain	<i>'time'</i>
tun	<i>'time'</i>
qila	<i>'now/today'</i>
isi	<i>'soon'</i>
wele	<i>'before'</i>
waig	<i>'long time'</i>
gaid	<i>'always'</i>
casac	<i>'first'</i>
hahawan	<i>'first'</i>
deel	<i>'day'</i>
cam ameg	<i>'time of day'</i>
cahineg	<i>'daylight'</i>
wesu	<i>'afternoon'</i>
witic	<i>'night'</i>
tu	<i>'night'</i>
cum	<i>'yesterday'</i>
eelen	<i>'two days ago'</i>
uqadec	<i>'tomorrow'</i>
eledec	<i>'two days hence'</i>
hibodec	<i>'three days hence'</i>
tefil	<i>'four days hence'</i>
hinub	<i>'five days hence'</i>
tu gemo	<i>'midnight'</i>
jagel	<i>'month'</i>
cabi gel	<i>'year'</i>
cuha	<i>'Sunday'</i>
cuha nag	<i>'Saturday (lit: little Sunday)'</i>
cel sain	<i>'what time'</i>
cahel sain	<i>'famine'</i>
lu sain	<i>'time of much food'</i>
daec sain	<i>'time of cold'</i>
wa sain	<i>'wet season'</i>
cam sain	<i>'dry (lit: sun) season'</i>

Verbal expressions.

walag dan-ec	'dawning'
cocojag-ec	'dawning'
cam gemo taw-ec	'midday'
cam toton-ec	'sunset'
wesu itah faga ca	'dusk'

Postpositional phrases.

hib na	'later'
wele ca	'a long time ago'

2.1.1.6.1.1. Time of day.

The Amele people are familiar with modern time devices like clocks and watches and radio time signals so it is quite likely that a person would specify a particular time of day according to the standard time measure.

- (203) Qasil na 7 o klok odi h-og-a.
 morning in 7 o'clock about come-2s-imp.
 'Come at about 7 o'clock in the morning.'

There are also descriptive expressions to specify particular times of the day. Since the hours of light and darkness stay more or less the same all year round i.e. 12 hours of each, the reference to events like sunrise and sunset can be taken to mean the same time on whatever day they are made.

- (204) Walag da-dan-en mala qo-gi-na sain na.
 sim.-dawn-3s-DS chicken hit-3p-pres. time at
 'Early morning when the cocks are crowing.' (4.00-5.00)

- (205) walag da-dan-en.
 sim.-dawn-3s-DS
 'first light' (5.30-6.00)

- (206) co-cojag-en.
 sim.-dawn-3s-DS
 'first light' (5.30-6.00)

- (207) walag dan-i he-do-i-a sain na.
 dawn-pred. finish-3s-3s-tod.p time at
 'when the dawn has broken' (6.30-7.00)

- (208) cam gemo tawe-na sain na.
 sun middle stand-3s-pres. time at
 'midday' (11.00-13.00)

- (209) cam to-ton-on.
 sun sim.-go down-3s-DS
 'sunset' (18.00-18.30)

- (210) cam ton-i he-do-i-a sain na.
 sun go down-pred. finish-3s-3s-tod.p time at
 'after sunset' (18.30-19.30)

- (211) wesu itah f-ag-a ca
 afternoon see-2s-imp. with
 'dusk (when it is hard to see)' (18.00-19.00)

(212)tu gemo
 night middle
 'midnight' (22.00-03.00)

2.1.1.6.1.2. Period of the day.

There are terms for general periods of the day:

(213)Qasil
 morning (06.00-12.00)

(214)Belo (Pidgin loan)
 midday (12.00-14.00)

(215)Cam gemo tawe-na sain.
 sum middle stand-3s-pres. time
 'midday' (11.00-13.00)

(216)Wesu
 afternoon (12.00-18.00)

(217)Cahineg
 hours of daylight (06.00-18.00)

(218)Witic
 hours of darkness (18.00-06.00)

(219)Tu
 night/darkness (18.00-05.00)

2.1.1.6.1.3. Days of the week.

In general Pidgin terms are used for specific days of the week although there are Amele terms for Sunday and Saturday. There are also Amele terms for specific days in the past and specific days in the future.

qila	'now/today'
deel	'day'
cum	'yesterday'
eelen	'two days ago'
uqadec	'tomorrow'
eledec	'two days hence'
hibodec	'three days hence'
tefil	'four days hence'
hinub	'five days hence'
cuha	'Sunday'
cuha nag	'Saturday (lit: little Sunday)'

Pidgin loan words:

Sande	'Sunday'
Mande	'Monday'
Tunde	'Tuesday'
Trinde	'Wednesday'
Fonde	'Thursday'
Fraide	'Friday'
Sarere	'Saturday'

2.1.1.6.1.4. Months of the year.

The Amele are familiar with modern calenders and the Lutheran Church calender is now an integral part of their culture with many important events governed by the calender itself. Therefore they use Pidgin terms for months of the year.

Janueri	Julai
Februeri	Ogas
Mas	Septemba
Epril	Oktoba
Me	Novemba
Jun	Desemba

(220) Ceta eu jagel Jun na o Julai o le-ce-b Ogas
yam that month June in or July or go-DS-3s August

gadac age ceta huno-lo-ig.
mark 3p yam pull up-hab.p-3p

[12:18]

'They used to pull up those yams either in June or in July or even as late as August.'

Particular months can also be designated numerically.

(221) Ija jagel leis na cesel-i h-ug-en.
1s month two at return-pred. come-1s-fut.
'I will come back in two months time.'

2.1.1.6.1.5. Year.

The Amele are familiar with the modern numbering system for years and the New Year is celebrated on 1st January each year. Before the arrival of European missionaries at the beginning of the 20th century the yearly cycle was related to the alternation of dry and wet seasons and the planting of new gardens through the wet season. This is reflected in that the Amele term for year is cabi gel *'garden fence'*.

(222) Naintin sikstin na misjoneri age Amele hatu na
nineteen sixteen in missionary 3p land to

hahawan ho-in.
first come-3p-rem.p
'In 1916 the missionaries first came to Amele land.'

2.1.1.6.1.6. Festivals.

None of the former traditional pre-Christian ceremonies are practised any more except occasionally an initiation ceremony for young men. At this ceremony the young men are circumcised during a special time of isolation and fasting. Strangely though the Amele term for this ceremony is a loan word from the neighbouring Gedaged (Austronesian) language. The term is mulung galab. Most people now only celebrate the Christian festivals of Christmas, Easter etc.

2.1.1.6.1.7. Seasons.

Being situated only 5° south of the equator on the northern coast of Papua New Guinea the area inhabited by the Amele is subject to the tropical monsoon weather pattern. Thus when the monsoon winds are blowing in a southerly direction during the months of January to June it is the wet season and when the monsoon winds are blowing in a northerly direction from July to December it is the dry season. The Amele have terms for these seasons, cam sain 'sun time' and wa sain 'wet time'. Gardens are usually planted at the beginning of the wet season i.e. in January. Other seasonal terms are cahel sain 'famine time', lu sain 'food time' and da-ec sain 'cold time'.

2.1.1.6.2. Frequentative.

Frequentative expressions are made with the temporal postpositional phrase (see 1.1.2.4.2.1. and 1.2.4.) or the habitual mood (see 2.1.3.4.18.).

(223) Dana caja age Mande na jobon na (gaid) cabi
man woman 3p Monday on village in (always) work

odo-gi-na.

do-3p-pres.

'On Mondays the people work in the village.'

(224) Dana caja age Mande na jobon na cabi odo-gi-na nu.
man woman 3p Monday on village in work do-3p-pres HB

'On Mondays the people work in the village.'

2.1.1.6.3. Punctual-future.

(225) Ija deel ijed he-do-co-b cesel-i
1s day three finish-3s-DS-3s return-pred.

h-ug-en.

come-1s-fut.

'I will return in three days.'

2.1.1.6.4. Punctual-past.

(226) Galem Jelso nue-ce-b deel ijed he-do-i-a.
go-DS-3s day three finish-3s-3s-tod.p

'Galem went to Yelso three days ago.'

2.1.1.6.5. Duration.

(227) Ija cabi gel leis odi ene bil-ig-a.
1s garden fence two like here be-1s-tod.p

'I have lived here for two years.'

2.1.1.6.6. Anterior-duration-past.

(228) Deel ijed he-do-co-b Galem qee cesel-i
day three finish-3s-DS-3s not return-pred.

ho-1.

Od-en

qa

Galem cesel-i

come-neg.p-3s do-3s-rem.p but

return-pred.

ho-i-a.
 come-3s-tod.p
'For three days Galem did not return and then he came back.'

2.1.1.6.7. Anterior-duration-future.

(229) Ceta eu jagel Jun na o Julai o le-ce-b Ogas
 yam that month June in or July or go-DS-3s August
 gadac age ceta hune-q-an.
 mark 3p yam dig up-1p-fut.
'Those yams go until June or July or even August and then we harvest them.'

2.1.1.6.8. Posterior-duration-past.

(230) Ija Danben 1978 na bi-bil-ig ho-om.
 1s in sim.-be-1s-SS come-1s-rem.p
'I have lived in Danben since 1978.'

2.1.1.6.9. Posterior-duration-future.

(231) Mande oso he-do-co-b Danben ono
 Monday indef. finish-3s-DS-3s there
 bi-bil-ig bil-ig-en.
 sim.-be-1s-SS be-1s-fut.
'When Monday has finished I will be living in Danben.'

2.1.1.6.10. Anterior-general.

(232) Ogas qee he-doc na ija Danben bile-em.
 August not finish-inf. in 1s be-1s-rem.p
'I was in Danben before August.'

2.1.1.6.11. Posterior-general.

(233) Ogas hib na ija Danben bil-ig-en.
 August later 1s be-1s-fut.
'I will be in Danben after August.'

2.1.1.6.12. Point in period-past.

(234) Cuha cul-do-q-an eu na ija Galem
 week leave-3s-1p-yest.p that in 1s
 f-i ijed do-om.
 see-pred. three 3s-1s-rem.p
'Last week I saw Galem three times.'

2.1.1.6.13. Point in period-future.

(235) Deel ijed qee he-do-co-b ija cesel-i
 day three not finish-3s-DS-3s 1s return-pred.
 h-ug-en.
 come-1s-fut.
'Before three days have finished I will return.'

2.1.1.7. Double case marking.

There is no case marking on the noun.

2.1.1.8. Number marking.2.1.1.8.1. System of marking number in nouns.

The only nouns that are marked for person-number are the inalienably possessed nouns (see 2.1.1.4.7.1.) and these can be marked for first, second and third person and singular, dual and plural number of the possessor and also, for the kinship nouns only, singular and plural number of the possessee. Otherwise number marking is achieved by either (i) pronominal copy (see 2.1.1.1.7, 2.1.2.1.1.1. and 2.1.2.1.18.) or (ii) by verb suffixation for subject or object (see 2.1.3.6.1.1-3.) or (iii) by both. In these cases singular, dual and plural number is distinguished. Number can also be distinguished when the nominal is a direct object with the verb meaning 'to get/take' which has different forms depending upon whether the object is singular or plural. The forms are oc (singular object) and ced-ec (plural object). Also the verb meaning 'to go(*distal*)' has an optional plural form bel-ec when the subject is nonsingular. The number of the nominal can also be indicated by a qualifying numeral.

Pronominal copy.

(236) Dana eu uqa ben
man that 3s big
'That man is big'

(237) Dana eu ale ben.
man that 3d big
'Those two men are big.'

(238) Dana eu age ben.
man that 3p big
'Those men are big.'

Verb suffixation and singular/plural verbs.

(239) Dana nu-i-a.
man go-3s-tod.p
'The man went.'

(240) Dana bele-si-a.
man go-3d-tod.p
'The two men went.'

(241) Dana bele-ig-a.
man go-3p-tod.p
'The men went.'

(242) Dana mel uqa o-i-a.
man boy 3s get-3s-tod.p
'The man got the boy.'

(243) Dana mel ale ced-ale-i-a.
 man boy 3d get-3d-3s-tod.p
 'The man got the two boys.'

(244) Dana mel age ced-ade-i-a.
 man boy 3p get-3p-3s-tod.p
 'The man got the boys.'

2.1.1.8.2. System of marking number = obligatory or optional.

In the case of the inalienably possessed nouns the marking of number is obligatory both for possessor and possessee. For the number marking described in 2.1.1.8.1. above the verb suffixation marking person-number of the subject is obligatory for the noninfinitive verb. The process of pronominal copy both for the free pronouns and the clitics on the verbs is optional.

2.1.1.8.3. General quantifiers.

General quantifiers are described under 1.2.5.2.6.

2.1.1.8.4. Collective and distributive nouns.

(a) Collective.

Several kinship terms (which can optionally be inalienably possessed terms) require obligatory plural subject suffixation on the verb. These are tal 'nuclear family' and sihul 'clan'.

(245) Ija na tal/sihul ene bile-ig-a.
 1s of family/clan here be-3p-tod.p
 'My nuclear family/clan are here.'

Other terms that require a plural verbal agreement are am 'group/heap' and plural nouns describing people, insect or animal groups - see below. Nouns describing insect or animal groups are usually reduplicated to indicate plurality (see 1.16.1.).

(246) Age mel cesaw-i-me-ig am fil
 3p boy divide-pred.-SS-3p group different
 tawe-gi-na leih am fil tawe-gi-na.
 stand-3p-pres. some group different stand-3p-pres.
 'They divided the boys, some into one group and some into another group.'

(247) Mel am bal udo-gi-na.
 boy group ball play-3p-pres.
 'The group of boys played football.'

cf.

(248) *Mel am bal ude-na.
 boy group ball play-3s-pres.

Note that the plural noun am can be treated as a singular

noun when it functions with the circumstantial postposition *ca* as below:

(249) Ma am ced-i-me-g ono i sec
 taro heap get(pl)-pred.-SS-2s there this way
 m-ag-a.
 put-2s-imp.
 'Take the heap of taros and put them over there.'

(250) Ma am ca u-me-g ono i sec
 taro heap with get(sg)-pred.-SS-2s there this way
 m-ag-a.
 put-2s-imp.
 'Take the taro heap and put it over there.'

(251) Danben ene bile-ig-a fo?
 here be-3p-tod.p QU
 'Is Danben (i.e. people of Danben village) here?'

(252) Ni-nihul ene bile-ig-a.
 wasp spec. here be-3p-tod.p
 'There are wasps here.'

(253) We-wes ene bile-ig-a.
 ant spec. here be-3p-tod.p
 'There are ants here.'

(254) Ba-bagum ene bile-ig-a.
 gecko here be-3p-tod.p
 'There are geckos here.'

(255) Qa-qah ene bile-ig-a.
 iguana here be-3p-tod.p
 'There are iguanas here.'

(b) Distributive.

There is a special marker on the verb that can indicate a distributive action (see 2.1.3.6.12.1.12.).

2.1.1.9. Noun classes and genders.

Nouns in general are not formally divided into classes and genders. The inalienably possessed nouns (see 2.1.1.4.7.1.) are divided into some 31 grammatical classes on the basis of their first, second and third person singular suffixation. Also kinship terms form a distinct class within the inalienably possessed class of nouns as they can be suffixed for plurality of the possessee. The only distinction that can be attributed to gender is the distinction between the third person singular pronominal clitic for direct vs. indirect object (see 2.1.3.6.1.2-3.) which is *-ud* for direct object and *-ut* for indirect object. The distinction can mark the fact that an indirect object is invariably human but there is not conclusive evidence for this. The reduplicated nouns also form a distinct grammatical class from those nouns that cannot reduplicate (see 1.16.1.).

2.1.1.10. Marking of definiteness in the noun phrase.

The unmarked NP has a definite referent:

- (256) Dana (uqa) ho-i-a.
 man (3s) come-3s-tod.p
'The man came.'

The referent can be further specified by a demonstrative pronoun in which case the referent is necessarily definite (see also 1.5.).

- (257) Dana eu ho-i-a.
 man that come-3s-tod.p
'That man came.'

- (258) Dana i nu-igi-an.
 man this go-3s-fut.
'This man will go.'

It is also possible to refer to an indefinite part of a definite referent by use of the indefinite quantifiers leih 'some' and oso 'one(indef.)'

- (259) Dana eu age leih sab je-ig-a.
 man that 3p some food eat-3p-tod.p
'Some of those men ate the food.'

- (260) Dana eu age oso uqa sab je-i-a.
 man that 3p indef. 3s food eat-3s-tod.p
'One of those men ate the food.'

- (261) Dana sab eu leih je-i-a.
 man food that some eat-3s-tod.p
'The man ate some of that food.'

2.1.1.11. Marking of indefiniteness in the noun phrase.

A noun phrase which has an indefinite referent is obligatorily marked by either the indefinite article oso 'indefinite' or the general quantifier leih 'some'. oso is only used with count nouns and leih can be used with either count nouns or mass nouns. As well as referring to an indefinite referent oso and leih can also refer to an indefinite part of a definite referent (see 2.1.1.10 above). oso and leih can function alone as subject, direct or indirect object or as an attributive element within the NP (see 1.2.5.2.4 and 6.).

- (262) Dana oso ho-na.
 man indef. come-3s-pres.
'A man is coming.'

- (263) Oso ho-na.
 indef. come-3s-tod.p
'Someone is coming.'

- (264) Leih ho-ig-a.
 some come-3p-tod.p
'Some came.'

(265)Wa leih j-ec nu it-ag-a.
 water some eat-inf. for 1s-2s-imp.
'Give me some water to drink.'

2.1.1.12-14. Marking of referentiality, genericness and importance of actors.

The marking of referential vs. nonreferential indefiniteness does not occur. Neither is genericness marked in the NP. Noun actors that are more important than other noun actors can be distinguished by special use of the switch-reference system (see 2.1.3.6.7.). In effect the S/R system can distinguish a subject NP that is [+AGENT] from one that is [-AGENT].

2.1.2. Pronouns.

2.1.2.1. Personal pronouns.

2.1.2.1.1. Free personal pronouns.

All pronominal forms can function alone as subject, direct object or indirect object or as an attributive element within a noun phrase. The forms are described in 2.1.2.1.10.

2.1.2.1.1.1. Obligatoriness of free pronouns.

Amele is a pro-drop language and it is not obligatory to express free pronouns for the subject, direct object or indirect object functions. Each of these functions can be expressed on the verb alone.

(266)(uqa) Ho-i-a.
 3s come-3s-tod.p
'He came.'

(267)Ceh-adi-h-ig-en.
 build-3p-2s-1s-fut.
'I will build them for you.'

A common function of the free pronoun is to express a pronominal copy of the subject, direct or indirect object nominal.

(268)Naus mela-h hina h-og-a.
 son-3s-pos. 2s come-2s-imp.
'Naus' son, you come here.'

(269)Qa mel uqa q-u je-i-a.
 dog boy 3s hit-pred. eat-3s-tod.p
'The dog bit him, the boy.'

(270)Dana caja Jelso dec age sab ad-ig-a.
 man woman from 3p food 3p-1s-tod.p
'I gave food to them, the people from Yelso.'

2.1.2.1.1.2. Optionality of free pronouns.

Free pronouns are optional in all circumstances whether the referent is first, second or third person.

2.1.2.1.1.3.1-4. Free pronouns and emphasis.

Free pronouns occur in noncontrastive nonemphatic contexts in general. Emphatic words like *dih* 'just' or *himec* 'only' can be postposed to a free pronoun for emphasis (see 2.1.3.1.15.). Also the free pronoun can function with the reflexive particle *dodoc* 'self' for emphasis (see 1.6.9.1.).

2.1.2.1.1.3.5. Answers.

In answer to questions of the type 'Who is that?' the free personal pronoun is obligatory.

(271)

A: Eu in?
that who
'Who is that?'

B: Ija.
Is
'(It is) I.'

2.1.2.1.1.3.6. Cleft or pseudocleft constructions.

Cleft or pseudocleft constructions do not occur.

2.1.2.1.1.4. Free pronouns in contrastive emphatic contexts.

It is usual for an emphasized constituent to be marked by increased intensity and heightened pitch (see also 1.11.2.1.1.).

(272)

↙↘ .
Hina ma-d-og-a.
2s say-3s-2s-imp.
'You tell him!'

2.1.2.1.1.5. Reduced pronouns.

There are no reduced pronouns.

2.1.2.1.2. Person distinctions in pronouns.

There is a basic three way distinction between first person (speaker or speaker's group), second person (addressee or addressee's group) and third person (nonparticipants in the speech act). However only in the singular number is this three-way distinction exhibited formally where there are three different forms for first, second and third person. In the dual and plural number first person is distinct but second and third person are represented by the same forms (see 2.1.2.1.10.).

2.1.2.1.3. Inclusive and exclusive distinction.

There is no inclusive/exclusive distinction in the free pronoun system however there is a special marker on the verb that has an exclusive function (see 2.1.3.6.12.1.13.).

2.1.2.1.4. Number marking in free pronouns.

There is a basic three-way distinction in number: singular(one person), dual(two persons) and plural(more than two persons) (see 2.1.2.1.10. for forms).

2.1.2.1.5. Status marking in pronouns.

Status is not marked by the pronominal system neither is there a fourth person obviative form of pronoun.

2.1.2.1.6. Proximity marking in pronouns.

Different degrees of proximity to the participants in the speech act are not marked in the pronouns.

2.1.2.1.7. Anaphoric pronouns.

There are no special anaphoric pronouns but anaphoric use of personal pronouns is described in 1.5.1.3.

2.1.2.1.8. Gender and class distinctions in pronouns.

There are no gender or class distinctions in the pronouns.

2.1.2.1.9. Special pronominal forms indicating tribal, sectional or family relationships.

There are no special pronominal forms indicating tribal, sectional or family relationships. Family relationships are normally indicated by an inalienably possessed noun form (see 2.1.1.4.7.1.).

2.1.2.1.10. Pronoun forms.

The following personal pronoun forms can function as either subject, direct object or indirect object, or the object of the postposition in the accompanier, alienably possessed, reflexive, purpose or cause postpositional phrases, or as a modifier of a nominal functioning as S, DO, IO, complement or equational predicate (see also 1.2.4. and 2.1.2.1.18.). The forms distinguish first, second and third person and singular, dual and plural number.

	Singular	Dual	Plural
1st person	ija	ele	ege
2nd person	hina	ale	age
3rd person	uqa	ale	age

2.1.2.1.11. Tense marking in pronouns.

Tense is not marked in the pronouns.

2.1.2.1.12. Social status distinctions marked in pronouns.

Social status such as familiar or honorific is not marked in the pronouns.

2.1.2.1.12.1. Use of titles.

The appropriate kinship term must be used by a speaker addressing or referring to certain affines or when referring to certain affines of the addressee. For a complete listing of kinship terms see 5.1.1. Mature persons if not related are normally addressed as mei 'father' or au 'mother' or, if he/she is an older person, asi 'grandparent'. A general form of greeting to someone, not necessarily related, would be wali, coti 'brother/friend'. In general kinship terms or proper names are used as titles of address. Other titles that can be used are pidgin terms like Kaunsol (councillor), Komiti (committee member), Pasta (pastor), Tisa (teacher), Masta (to a European man) or Misis (to a European woman).

2.1.2.1.13.1-2. Nonspecific indefinite pronouns.

There are no special nonspecific indefinite pronouns but this category can be expressed by use of the third person plural pronominal and verbal forms or by use of the indefinite article oso in conjunction with the interrogative pronoun in 'who'.

(273) Aluh gemo na b-i-me-b cudun oso
 mountain middle at come up-pred.-SS-3s place indef.

age jain mud-i-me-ig meci-egi-na eu na
 3p rest make-pred.-SS-3p see-3p-pres. that at

ono ege na sab j-om.
 there 1p of food eat-1p-rem.p

[27:30]

'We came up to the middle of the mountain and at the place where they stop to rest and take in the view we ate our food.'

(274) In oso uqa na sab qee j-igi-a qa qee ben
 who indef. 3s of food not eat-3s-rel.f but not big

m-i-me-i gagadic od-oc o-i-aun.
 become-pred.-SS-3s strong do-inf. get-3s-neg.f

'Whoever does not eat his food will not grow up big and strong.'

2.1.2.1.14. Specific indefinite pronouns.

There are no specific indefinite pronouns. This category is expressed by an indefinite noun phrase like dana oso 'a man', oso 'someone' or ceteħ oso 'a thing/something' (see also 1.2.5.2.4.)

2.1.2.1.15. Emphatic pronouns.

There are no special emphatic pronouns. Emphasis can be given to a pronoun by postposing an emphatic word like himec 'only', dih 'just' or bahic 'very/really' (see also 1.11.2.1.2.).

(275) Ija himec cabi od-ig-a.
1s only work do-1s-tod.p
'Only I did the work.'

(276) Ija dih cabi od-ig-a.
1s just work do-1s-tod.p
'I just did the work.'

(277) Ija bahic cabi od-ig-a.
1s emph. work do-1s-tod.p
'I really did the work.'

2.1.2.1.16. Complex pronouns.

The only complex pronoun that occurs is eundec 'belonging to' which appears to be a combination of the demonstrative pronoun eu 'that' and the postpositions na 'at/of' and dec 'from'. This construction is in fact analyzed as a complex postposition (see 1.2.4. and 1.16.5.).

2.1.2.1.17. Pronoun-noun constructions.

Pronoun-noun constructions are most common within the inalienably possessed noun phrase (see 1.2.5. and 2.1.1.4.7.). A free pronoun can optionally precede the possessed noun, agreeing with the noun as to person and number of the possessor.

(278) Ija ilo-mi dain te-na.
1s head-1s-pos. pain 1s-3s-pres.
'I have a headache.'

(279) Hina mele-m-el ho-gi-na.
2s son-1s-pos.-pl come-3p-pres.
'Your sons are coming.'

It is also possible to have a pronoun-noun construction where a nominal follows a pronoun giving clarification as to the identity of the pronominal referent. In such a construction the nominal or NP is in apposition to the pronoun and is separated from the pronoun by a slight pause and has its own intonation peak. The appositive nominal can itself have a further pronoun following. Any of the free pronouns can function as the preceding pronoun.

(280) 
Age, dana (age), na qete-ig-a.
3p man (3p) tree cut-3p-tod.p
'They, the men, chopped down the tree.'

2.1.2.1.18. Noun-pronoun constructions.

It is very common for a nominal element or coordinated nominals to be followed by the corresponding pronoun. This is commonly known as 'pronominal copy'. The purpose of this pronominal copy is (i) to give focus to the nominal referred to by the pronoun, (ii) to clarify the person and number of the referents where this is not clear from the nominal itself or (iii) to provide verbal agreement for the nominal. Any of the free pronouns can occur as the copying pronoun.

(281) Bunag uqa ho-i-a.

3s come-3s-tod.p

'Bunag came.'

(282) Dana ben eu age ho-ig-a.

man big that 3p come-3p-tod.p

'Those leaders (big men) came.'

(283) Ija Bunag ca ele ho-w-a.

1s with 1d come-1d-tod.p

'I came with Bunag.'

2.1.2.1.18.1. Pronoun groupings.

It is possible for two or more pronouns to occur in a coordinated structure with this also being optionally copied by a following pronoun. Any combination of pronoun can occur in the coordinated structure. The hierarchy for choice is 1st > 2nd > 3rd (cf. also 2.1.1.4.4.). The choice of the following copying pronoun is dependant upon whether there is a first, second or third person pronoun in the coordinate structure. If there is a first person pronoun in the coordinate structure then the copying pronoun will be first person also. If there is a second person pronoun in the coordinate structure and no first person pronoun then the copying pronoun will be second person also. Otherwise the copying pronoun is third person. This is illustrated below.

Pronoun group.

Pronoun copy.

{ 1+2+3
1+2
1+3 }

1st

2+3

2nd

3+3

3rd

(284) Ija hina ca (ele) bel-ow-a.

1s 2s with 1d go-1s-tod.p

'I and you, (we) went.'

(285) Ija uqa ca (ele) bel-ow-a.

1s 3s with 1d go-1d-tod.p

'I and he, (we) went.'

- (286) Ija ca hina ca uqa ca (ege) bel-oq-a.
 1s add 2s add 3s add 1p go-1p-tod.p
'I, you and he, (we) went.'
- (287) Hina uqa ca (ale) bele-si-a.
 2s 3s with 2d go-2d-tod.p
'You and he, (you) went.'
- (288) Uqa age ca (age) bele-ig-a.
 3s 3p with 3p go-3p-tod.p
'He and they, (they) went.'

2.1.2.1.19. Secondary pronoun system.

There is no secondary pronoun system. Specification in greater detail of the precise combination of various nonsingular combinations of persons can be achieved by the free personal pronoun system in a similar manner to the process described in 2.1.2.1.17. only in this case both appositional NP's would be pronominal. The same hierarchical restrictions on combinations of coordinated NP + pronominal copy described in 2.1.2.1.18.1. also applies to the combinations of appositional NP's.

- (289) Ele / ija hina ca / bele-w-an.
 1d 1s 2s with go-1d-fut.
'We, you and I, will go.'
- (290) Ale / hina uqa ca / bele-was-an.
 2d 2s 3s with go-2d-fut.
'You(d), you and he, will go.'
- (291) Ege / ija ca hina ca uqa ca / bele-q-an.
 1p 1s add 2s add 3s add go-1p-fut.
'We, I, you, and he, will go.'

2.1.2.1.20. Pronoun case system.

There is no case system in the free pronouns. The same forms function as subject, direct object, indirect object or accompanier. A distinction can be made between direct and indirect object by how the object pronominal clitic is suffixed to the verb (see 2.1.3.6.2.2-3.).

2.1.2.2. Reflexive pronouns.

2.1.2.2.1. Special reflexive pronouns.

There are no special reflexive pronouns but reflexivity is achieved by postposing the particle dodoc 'self' to the referent pronoun (see 1.6. and 2.1.2.2.3.).

2.1.2.2.2. Subcategories distinguished by reflexive pronouns.

Reflexive pronominal forms distinguish person, number and emphasis. They do not distinguish inclusion, obviation, proximity, anaphoricity, gender/class, kinship/tribal affiliation or status.

2.1.2.2.3. Reflexive pronoun forms.

Reflexive pronouns are formed by postposing the particle dodoc 'self' to the free pronoun forms (see 2.1.2.1.10.). The resulting forms function as modifier of subject, direct object, modifier of direct object, modifier of indirect object, adpositional indirect object, modifier of adpositional indirect object, element in adpositional phrase and modifier of element in adpositional phrase (see also 1.6.).

(292) Uqa uqa dodoc na jo mane-i-a.
 3s 3s self of house burn-3s-tod.p
 'He_j burnt his_j house.'

2.1.2.2.4. Reflexive pronouns marked for case.

There is no case marking on the noun phrase.

2.1.2.2.7. Other uses of reflexive pronouns.

The particle dodoc is also used to emphasize a pronoun to which it is postposed (see 1.6.9.1.).

(293) Ija dodoc nu-ig-a.
 1s emph. go-1s-tod.p
 'I myself went.'

2.1.2.3. Reciprocal pronouns.

There are no special reciprocal pronouns. See 1.7. and 2.1.3.6.9. for the means of expressing reciprocity.

2.1.2.4. Possessive pronouns.2.1.2.4.1. Special possessive pronouns.

There are no special possessive pronouns (see 2.1.2.4.3.).

2.1.2.4.2. Distinction between different types of possession.

A distinction is made on the basis of alienable vs. inalienable possession. Alienable possession is indicated by a free pronoun or noun followed by the postposition na 'of'. Inalienable possession is indicated by a closed set of inalienably possessed nouns (see 1.10.2.4. and 2.1.1.4.7.1.). An alienably possessed noun is preceded by the possessive postpositional phrase as part of the possessed noun phrase (see 1.2.5.) and is not itself marked for possession. An inalienably possessed noun is preceded by a noun or free pronoun and is marked itself for possessedness. No other types of possession are distinguished.

(294) Hina na mel sim qaje-na.
 2s of child young cry-3s-pres.
 'Your baby is crying.'

(295) Hina mele-m-el age ho-gi-na.
 2s son-2s-pos.-p 3p come-3p-pres.
 'Your sons are coming.'

2.1.2.4.3. Possessive pronominal forms.

The alienable possessive pronominal comprises a free pronoun followed by the postposition na 'of' and distinguishes first, second and third person and singular, dual and plural number of the possessor. The inalienable possessive pronominal comprises simply a free pronoun and distinguishes first, second and third person and singular, dual and plural number of the possessor.

2.1.2.4.4. Possessive pronoun case marking.

There is no case marking on the noun phrase.

2.1.2.4.5-6. Alternative ways of expressing possession with pronouns.

There is no alternative way of expressing possession with pronouns other than the means described above.

2.1.2.4.7. Reflexive possessive pronouns.

There are no special reflexive possessive pronouns but the free pronoun can be followed by both the reflexive particle dodoc and the possessive particle na.

(296) Uqa uqa dodoc na qa qo-i-a.
 3s 3s self of dog hit-3s-tod.p
 'He_i hit his_i own dog.'

2.1.2.4.8-10. Reciprocal and emphatic possessive pronouns.

There are no special reciprocal or emphatic possessive pronouns neither are there any other types of possessive pronouns other than those already described above.

2.1.2.4.11. Adjectival use of possessive pronouns.

All possessive pronominal forms can function either as free forms or as possessive adjectives.

(297) Jo eu ija na.
 house that is of
 'That house is mine.'

(298) Eu ija na jo.
 that is of house.
 'That is my house.'

2.1.2.5. Demonstrative pronouns.2.1.2.5.1. Parameters involved in demonstrative pronouns.

The demonstrative pronouns have a deictic, locative and generic function. The parameters involved are:

- (i) distance from speaker (i, eu, ou).
- (ii) distance from hearer (i, eu, ou).
- (iii) distance from both speaker and hearer (i, eu, ou).
- (iv) vertical orientation with respect to speaker i.e. a lower or higher level (ceheleg, kuhulug).
- (v) visible/invisible to the speaker (ai).
- (vi) visible/invisible to the hearer (ai).
- (vii) visible/invisible to the speaker/hearer (ai).
- (viii) referred to in previous discourse (i, eu).

2.1.2.5.2. Demonstrative pronoun forms.

The demonstrative pronoun forms are listed below with their comparable interrogative forms (see also 2.1.2.6):

Deictic.

i	'this'	(near speaker - 1st person)
eu	'that'	(near hearer - 2nd person)
ou	'that'	(near neither speaker nor hearer - 3rd person)

cf.

ai	'where'	(proximal location)
----	---------	---------------------

(i) edi/edec	'like this'
(eu) odi/odec	'like that'

cf.

adi/adec	'how/what kind'
----------	-----------------

i ale	'these two'
3d	
eu ale	'those two'
3d	

i age	'these'
3p	
eu age	'those'
3p	

Locative.

ene	'here'
ono	'there'

cf.

ana	'where'
-----	---------

ceheleg	'up there'
kuhulug	'down there'

i sec	'this way'
eu sec	'that way'
ou sec	'that way'

cf.

ai sec	'which way'
--------	-------------

ene i sec	<i>'over here this way'</i>
ono i sec	<i>'over there this/that way'</i>
i hen/hec	<i>'this here (proximal near speaker)'</i>
eu hen/hec	<i>'that there (proximal near hearer)'</i>
ou hen/hec	<i>'that there (proximal near neither speaker nor hearer)'</i>
i na dec	<i>'from out of this'</i>
eu na dec	<i>'from out of that'</i>
ou na dec	<i>'from out of that'</i>

Generic.

eundec *'of that type'*

- (299) Age maha i o-in.
3p land this take-3p-rem.p
'They took this land.'
- (300) Jo eu ben.
house that big
'That house is big.'
- (301) Jo ou wa ne-na.
house that water come down-3s-pres.
'That house (yonder) the rain comes in.'
- (302) Ceta eu ene ceh-ade-q-an.
yam that here plant-3p-1p-fut.
'We will plant those yams here.'
- (303) Jobon eu ono ca bahic.
village that there with emph.
'That village is a long way away.'
- (304) Age ono i sec due bele-in.
3p there this way dance go-3p-rem.p
'They went that way to the dance.'
- (305) Age ene i sec ho-in.
3p here this way come-3p-rem.p
'They came this way.'
- (306) Uqa ceheleg bil-i-a.
3s up there be-3s-tod.p
'He lives up there (up the valley).'
- (307) Uqa kuhulug bil-i-a.
3s down there be-3s-tod.p
'He lives down there (down the valley).'
- (308) Hina na sigin i hen bil-i-a.
2s of knife this here be-3s-tod.p
'Your knife is here (near me).'
- (309) Hina na sigin eu hen bil-i-a.
2s of knife that here be-3s-tod.p
'Your knife is there (near you).'

(310) Maha i na dec mim od-ige-ce-b ege jo
 land this of from earthquake do-1p-DS-3s 1p house
 haun ceh-om.
 again build-1p-rem.p
*'An earthquake from out of this land destroyed us so we
 built our houses again.'*

(311) Dana eundec me qee.
 man that type good not
'That kind of man is no good.'

For deictic usage of demonstrative pronouns see 1.5.1.5. and for relative clause usage of the demonstrative eu 'that' see 1.1.2.3.

2.1.2.5.4. Demonstrative pronouns marked for number.

Demonstrative pronouns are not marked for number directly but the demonstrative pronouns i 'this' and eu 'that' can combine with the third person dual and plural personal pronouns to form deictic dual and plural pronominal forms.

i ale	'these two'
eu ale	'those two'
i age	'these'
eu age	'those'

2.1.2.5.5. Demonstrative pronouns marked for class/gender.

There is no way of expressing class/gender in the demonstrative pronouns.

2.1.2.5.6. Demonstrative pronouns marked for case.

There is no case marking on the noun phrase.

2.1.2.5.7. Other grammatical categories marked in the demonstrative pronouns.

No other grammatical categories are marked in the demonstrative pronouns other than those described above.

2.1.2.5.8. Demonstrative pronouns used adjectivally.

The following demonstrative pronouns can function either as attributive adjectives or as free forms. There are no special adjectival forms. i 'this', eu 'that', ou 'that', i ale/age 'these two/these', eu ale/age 'those two/those', ene 'here', ono 'there', ceheleg 'up there', kuhulug 'down there', i/eu/ou sec 'this/that/that way' and eundec 'that type'. The demonstrative forms i/eu/ou hen 'over here/there/there', (i) edi 'like this', (eu) odi 'like that' can only occur as free forms.

(312) Jo i/eu/ou mel age na jo.
 house this/that/that boy 3p of house
'This/that/yonder house is the boys' house.'

- (313) Dana i/eu age age Hilu dec.
man this/that 3p 3p from
'These/those men are from Hilu.'
- (314) Maha ene/ono sab ceh-ec nu me bahic.
land here/there food plant-inf. for good emph.
'The land here/there is very good to plant food.'
- (315) Jobon ceheleg/cuhulug dana caja madi bile-gi-na.
village up/down there man woman many be-3p-pres.
'There are many people in the up/down valley village.'
- (316) Jo i/eu sec ceta nije-ig-a.
house this/that way yam lie-3p-tod.p
'The house over here/there has the yams.'
- (317) Dana eundec gaid dalul qo-na.
man that type always drunk hit-3s-pres.
'That kind of man is always drunk.'

2.1.2.6. Interrogative pronouns and other question words.

Interrogative pronouns and question words are described under 1.1.1.2.2. and 1.1.1.2.4.2.2.

2.1.2.6.1.4. Number marking in interrogative pronouns.

The interrogative pronouns for 'which' and 'who' have singular and plural forms (see 1.1.1.2.2.).

2.1.2.6.1.5. Gender/class marking in interrogative pronouns.

Gender/class is not marked in the interrogative pronouns.

2.1.2.6.1.6. Case marking in interrogative pronouns.

There is no case marking in the noun phrase.

2.1.2.6.1.7. Other grammatical categories in the interrogative pronouns.

The interrogative pronoun questioning manner has a finite and nonfinite form which would indicate that its true nature is verbal.

- (318) Mel eu adi ode-i-a?
boy that how do-3s-tod.p
'How did that boy do it?'

- (319) Dana eu ad-ec?
man that how-inf.
'What is that man like? / How is that man?'

2.1.2.6.1.8. Interrogative pronouns used adjectivally.

The interrogative pronouns cel/ail 'which' and ganic 'how much/many' can function without restriction as interrogative adjectives in the noun phrase.

(320) Ail dana ho-ig-a?
 which(p) man come-3p-tod.p
'Which men came?'

(321) Mala ganic faj-ag-a?
 chicken how many buy-2s-tod.p
'How many chickens did you buy?'

The interrogative pronoun in *'who'* can function as an interrogative adjective only in the expression in oso *'whoever'*. All interrogative pronouns including those described above can function alone as free forms.

2.1.2.6.2. Question words and their meanings.

Question words are described under 1.1.1.2.2. There is no difference in question word forms between their function in direct or indirect speech.

2.1.2.7. Relative pronouns and other relative words.

2.1.2.7.1. Special relative pronouns.

There are no special relative pronouns. Normally the demonstrative pronoun eu *'that'* functions as an optional relative pronoun following the relative clause (see 1.1.2.3.3-4 and 1.1.2.3.7.), however, some informants, influenced no doubt by English, suggest that the interrogative pronoun in *'who'* can be used in Amele in a similar way to the relative pronoun *'who'* in English. So some English educated Amele speakers would say that (322) and (323) for example are grammatical sentences in Amele.

(322) Mel in melaid qo-i-a (eu) ho-na.
 boy who girl hit-3s-tod.p (that) come-3s-pres.
'The boy who hit the girl is coming.'

(323) Mel in mala heje o-i-a (eu)
 boy who chicken illicit take-3s-tod.p (that)

 ija f-ig-a.
 is see-1s-tod.p
'I saw the boy who stole the chicken.'

With this data, however, one is forced to question the linguistic competence of these informants. Older nonEnglish educated Amele speakers have difficulty in processing sentences like (322) and (323) and to make any sense of them modify them to give the indefinite reading.

(324) In (oso) melaid qo-i-a (eu) ho-na.
 whoever girl hit-3s-tod.p (that) come-3s-tod.p
'Whoever hit the girl is coming.'

(325) In (oso) mala heje o-i-a (eu)
 whoever chicken illicit take-3s-tod.p (that)

 ija f-ig-a.
 is see-1s-tod.p
'I saw whoever stole the chicken.'

Also there is no instance of the pronoun in occurring as a relative pronoun in any of the text material recorded by the author. This text material comprises some 32 different texts totalling 15,500 words and was given by a wide range of informants both different ages and sex. On the basis of this evidence then the conclusion is drawn that in does not function naturally in Amele as a relative pronoun but could be being introduced by some bilingual Amele-English speakers.

2.1.2.7.1.1-5. Marking of relative pronouns.

The relative pronoun eu 'that' can occur as the object of the postposition na 'at/with' in the temporal, locative and instrumental adverbial (relative) clauses (see 1.1.2.4.2.1-3.).

2.1.2.7.1.6. Relative pronouns used adjectivally.

The pronoun eu 'that' functioning as the relative pronoun in the relative clause is always attributive to the relativized element.

2.1.2.7.3. Relative pronouns corresponding to 'where' and 'when'.

Locative and temporal functions can be relativized (see 1.1.2.3.7.).

2.1.3. Verb Morphology.

2.1.3.1. Voice.

2.1.3.1.1. Passive.

There is no passive voice but a pseudo-passive i.e. a means of suppressing the subject, can occur by simply omitting the subject (see 2.1.3.1.2). Another means of suppressing the subject is with the impersonal verb construction (see 2.1.3.8.).

2.1.3.1.2. Means of decreasing the valency of a verb.

The omission of the agent/subject NP from a clause with an agentive verb results in a pseudo-passive. The subject is suppressed and the object is promoted to Topic i.e. occurs in sentence initial position. So a transitive verb becomes an apparent intransitive verb.

(326) Ija na qet-ig-a.
1s tree cut-1s-tod.p
'I have cut down the tree.'

(327) Na qete-i-a.
tree cut-3s-tod.p
'The tree has been chopped down.'
'Someone has chopped down the tree.'

(328) Hina ija na sign heje o-g-a.
2s 1s of knife illicit take-2s-tod.p

'You stole my knife.'

- (329) Ija na sign heje o-i-a.
 1s of knife illicit take-3s-tod.p
'My knife has been stolen.'
Someone has stolen my knife.'

This process of valency reduction is not a true passive transformation, however, but merely a suppression of subject. In equivalent sentences with a plural object or a verb that requires a plural object the verb does not take plural subject marking when the subject is suppressed and in fact the plural object marking is maintained either through object cliticization or through the plurality of the verb.

- (330) Ija na get-ad-ig-a.
 1s tree cut-3p-1s-tod.p
'I cut down the trees.'

- (331) Na get-ade-i-a.
 tree cut-3p-3s-tod.p
'The trees have been cut down.'
Someone has cut down the trees.'

- (332) Hina ija na sign heje ced-ag-a.
 2s 1s of knife illicit take(pl)-2s-tod.p
'You stole my knives.'

- (333) Ija na sign heje cede-i-a.
 1s of knife illicit take(pl)-3s-tod.p
'My knives have been stolen.'
Someone has stolen my knives.'

A verb which normally functions as a transitive verb can function as an intransitive verb if no object is specified.

- (334) Uqa (sab) je-na.
 3s (food) eat-3s-pres.
'He is eating (food).'

- (335) Uqa (jo) cehe-na.
 3s (house) build-3s-pres.
'He is building (a house).'

For reciprocal intransitive verbs see 2.1.3.6.9.

2.1.3.1.3. Means of increasing the valency of the verb.

The valency of an intransitive verb can be increased by the following means:

(i) by a paratactic series of verbs (see 2.1.3.7.) where the first verb in the series happens to be intransitive and the second verb is transitive the whole verb sequence becomes transitive.

- (336) Sab h-u j-ag-a.
 food come-pred. eat-2s-imp.
'Come and eat food.'

(337)Ma 1-i cede-i-a.
 taro go-pred. get-3s-tod.p
'He went and got taro.'

(ii) by the affixation of an indirect object pronominal clitic to the verb with the semantic function of allative(goal):

(338)H-u-t-ag-a.
 come-pred.-1s-2s-imp.
'Come to me.'

(339)Hina 1-i-he-i-a.
 2s go-pred.-2s-3s-tod.p
'She went to you.'

The valency of a transitive verb can be increased by the following means:

(i) by the affixation of an indirect object pronominal clitic to the verb with the semantic function of benefactive:

(340)Jo ceh-ad-ih-en.
 house build-3p-2s-3s-rem.p
'He built houses for you.'

(341)Age sab siw-i-ad-ih-ig-en.
 3p food distribute-pred.-3p-2s-1s-fut.
'I will distribute the food to them for you.'

(ii) by the affixation of an indirect object pronominal clitic to the verb with the semantic function of malefactive:

(342)Uqa ija na ho q-u-te-i-a.
 3s 1s of pig hit-pred.-1s-3s-tod.p
'He killed my pig on me.' (coll. English)

(343)Age ija na mala j-i-te-ig-a.
 3p 1s of chicken eat-pred.-1s-3p-tod.p
'They ate my chicken on me.' (coll. English)

(iii) by the affixation of an indirect object pronominal clitic to the verb with the semantic function of ablative(source):

(344)Ho u-te-i-a.
 pig take-1s-3s-tod.p
'He took the pig from/off me.'

(345)Sigin ebe-ni na dec hu-i-te-i-a.
 knife hand-1s of from grab-pred.-1s-3s-tod.p
'He grabbed the knife off me out of my hand.'

2.1.3.1.3.1. Causative verbs.

There is no formal distinction between causative and noncausative verbs but a causative notion can be expressed by a series of sequential verbs where the first verb in the sequence expresses the causal action. Usually the verb *od-oc* 'to do' is the first verb in the sequence although other verbs can have this function. The same causative construction applies to intransitive, transitive and ditransitive verbs.

(346) Uqa od-ite-ce-b nu-ig-a.
3s do-1s-DS-3s go-1s-tod.p
'He made me go.'

(347) Ija od-it-i-m-ig j-ig-a.
1s do-1s-pred.-SS-1s eat-1s-tod.p
'I made myself eat.'

(348) Ija ma-do-co-min nu-i-a.
1s say-3s-DS-1s go-3s-tod.p
'I told him to go.'

(349) Ija od-ude-ce-min na qete-i-a.
1s do-3s-DS-1s tree cut-3s-tod.p
'I made him cut down the tree.'

(350) Uqa ma-he-ce-b sab man-ag-a.
3s say-2s-DS-3s food roast-2s-tod.p
'She told you to cook the food.'

(351) Hina od-ite-ce-m qa sab ut-ig-a.
2s do-1s-DS-2s dog food 3s-1s-tod.p
'You made me give food to the dog.'

(352) Ija cesus-du-co-min sign ite-i-a.
1s persuade-3s-DS-1s knife 1s-3s-tod.p
'I persuaded him to give me the knife.'

2.1.3.1.3.2. Agentivity of the causee.

There is no formal difference depending on the agentivity of the causee. However in the impersonal verb construction where the subject NP expressing cause is coreferenced by the switch-reference system it indicates that this particular type of cause is nonagentive (see 2.1.3.6.7.).

2.1.3.1.4. Special reflexive and reciprocal verb forms.

There are no special reflexive verb forms. There are special reciprocal verb forms (see 2.1.3.6.9. for a full description).

2.1.3.2. Tense.

Tense is described in terms of Comrie's definition (Comrie 1985:130):

1d	fo-w-a	ho-w-a
2/3d	fe-si-a	ho-si-a
1p	fo-q-a	ho-q-a
2/3p	fe-ig-a	ho-ig-a

Yesterday's past tense.

Yesterday's past tense, E before S (previous day), is marked by the verb final morpheme -an and takes class 1 subject person-number agreement markers.

1s	fi-g-an	hu-g-an
2s	fa-g-an	ho-g-an
3s	fe-i-an	ho-i-an
1d	fo-w-an	ho-w-an
2/3d	fe-si-an	ho-si-an
1p	fo-q-an	ho-q-an
2/3p	fe-ig-an	ho-ig-an

Remote past tense.

Remote past tense, E before S (before previous day) is marked by portmanteau tense and class 6 subject person-number agreement markers.

1s	fe-em [fɛ:m]	ho-om [hɔ:m]
2s	fe-em [fɛ:m]	ho-om [hɔ:m]
3s	fe-n	ho-n
1d	fo-h	ho-h
2/3d	fe-sin	ho-sin
1p	fo-m	ho-m
2/3p	fe-in	ho-in

Habitual past tense.

Habitual past tense, E before S, is marked by the class 1 subject person-number agreement markers occurring verb finally. The verb must also be marked by the habitual aspect affix -lo preceding the subject agreement markers.

1s	fo-l-ig	ho-l-ig
2s	fo-lo-g	ho-lo-g
3s	fo-lo-i	ho-lo-i
1d	fo-lo-u	ho-lo-u
2/3d	fo-lo-si	ho-lo-si
1p	fo-lo-b	ho-lo-b
2/3p	fo-lo-ig	ho-lo-ig

Negative past tense.

Negative past tense, not(E before S), is marked by the verb medial affix -l and the class 7 subject person-number agreement markers which mark third person singular with a

zero morpheme. The negative past tense also requires the negative particle qee 'not' preceding the verb in the VP. Epenthetic vowels are underlined.

1s	fe-l-em	ho-l-om
2s	fe-l-em	ho-l-om
3s	fe-l	ho-l
1d	fo-l <u>o</u> -h	ho-l <u>o</u> -h
2/3d	fe-l <u>e</u> -sin	ho-l <u>o</u> -sin
1p	fo-l <u>o</u> -m	ho-l <u>o</u> -m
2/3p	fe-l-ein	ho-l-oin

Future tense.

The marking of future tense, E after S, is more complex than the marking for the other tenses and while some processes can be postulated for deriving surface forms from underlying forms it is probably best to treat the whole future tense and subject person-number agreement marking as a composite portmanteau morpheme. What can be observed from the surface forms would suggest that the underlying morpheme for future tense is -an. This is the surface form in all the conjugations except the first person singular where it is -en. This anomaly can be explained by the fact that the stem final vowel, [ɛ], in the first person dual and plural forms for verbs like f-ec does not undergo rounding before the labio-velar phonemes /w/ and /gb/ as in the other tenses where this sequence occurs. Thus in the first person dual and plural forms there is a rule in the morphology that blocks assimilation of [ɛ] to [o] across a morpheme boundary preceding labio-velars. The quality of this vowel is in fact a word final phonetic quality of [e]. It would therefore be reasonable to assume that the appearance of [ɛ] in the first person singular future form is related to the rule in the dual and plural derivations, however, how this relates exactly is difficult to explain. The future tense is also marked by a particular class of subject person-number agreement markers, class 3. It can be seen that the third person singular form -igi is a combination of the class 1 first person singular form -ig and third person singular form -i. Also the dual and plural second/third person forms -was and -qag appear to be combinations of the class 1 dual and plural first person and second/third person forms -w + -si and -q + -gi respectively but again clear derivations are not analyzable so the future forms are treated as a separate class of subject person-number agreement markers, class 3. (see also 3.4. (morphophonology)).

1s	fi-g-en	hu-g-en
2s	fe-g-an	ho-g-an
3s	fi-gi-an	hu-gi-an
1d	fe-w-an	ho-w-an
2/3d	fo-was-an	ho-was-an
1p	fe-q-an	ho-q-an
2/3p	fo-qag-an	ho-qag-an

Relative future tense.

The relative future tense, E after R, expresses the notion of an action about to take place i.e. an intention or a purpose (see also 1.1.2.4.2.5.) and is marked similarly to the future tense except that there is no final -n on the verb.

1s	fi-g-e	hu-g-e
2s	fe-g-a	ho-g-a
3s	fi-gi-a	hu-gi-a
1d	fe-w-a	ho-w-a
2/3d	fo-was-a	ho-was-a
1p	fe-q-a	ho-q-a
2/3p	fo-qag-a	ho-qag-a

Negative future tense.

Negative future tense, not(E after S), is marked in a similar way to the future tense with the following differences: (i) a negative marker -u occurs as an infix within the future morpheme -an in the singular forms and the first person dual and plural forms, (ii) the rule of [ε] assimilation to [o] before a labio-velar across a morpheme boundary is not blocked in the first person dual and plural forms neither does [ε] occur in the first person singular form of the future tense marker, and (iii) the second/third person dual and plural forms are idiosyncratic to the negative future tense. A verb marked with the negative future tense can be preceded by either the negative particle qee 'not' or the prohibitive particle cain 'don't'.

1s	fi-g-a-u-n	hu-g-a-u-n
2s	fa-g-a-u-n	ho-g-a-u-n
3s	fe-i-a-u-n	ho-i-a-u-n
1d	fo-w-a-u-n	ho-w-a-u-n
2/3d	fo-was-in	ho-was-in
1p	fo-q-a-u-n	ho-q-a-u-n
2/3p	fo-wain	ho-wain

2.1.3.2.1. Tenses which are formally distinguished.2.1.3.2.1.1. Universal tense.

There is no formal way of expressing universal tense but universal ideas can be expressed.

(353) Dama eu sab me bahic.
possum that food good very
'Possum is good to eat.'

(354) Meeleh fulule-gi-na.
flying fox flap-3p-pres.
'Flying foxes fly.'

2.1.3.2.1.2. Present tense.

The present tense forms indicate that a situation is taking place at the time of speaking or will take place immediately:

(355) Uqa jo cehe-na.
3s house build-3s-pres.
'He is building a house.'

(356) Ija cabi na nu-igi-na.
1s garden to go-1s-pres.
'I am going(immediately) to the garden.'

The present tense form is often used in narrative text to relate events in past time and in this way the focus is on the progressive aspect of the present tense (see 2.1.3.3.2.1.5.).

2.1.3.2.1.3. Past tense.2.1.3.2.1.3.1. Degrees of remoteness of past tense.

There are four sets of forms which indicate that a situation relates to past time:

(i) The today's past tense describes an event that has occurred on the same day of the utterance. The perfect aspect is inherent to the today's past tense (see 2.1.3.3.1.), i.e. it indicates the continuing present relevance of a past situation (Comrie 1976:52). The tense is marked on the verb by the morpheme -a. The today's past tense form is also used to indicate the imperative mood (see 1.1.1.3.).

(357) Ija hu-g-a.
1s come-1s-tod.p
'I came(today)/ I have come.'

(358) Ija dana eu fi-g-a.
1s man that see-1s-tod.p
'I saw that man(today)/ I have seen that man.'

(ii) The yesterday's past tense describes an event that has occurred on the day previous to the day of the utterance and is marked on the verb by the suffix -an.

(359) Ija hu-g-an.
1s come-1s-yest.p
'I came (yesterday).'

(360) Ija dana eu fi-g-an.
1s man that see-1s-yest.p
'I saw that man (yesterday).'

(iii) The remote past tense describes an event that has occurred at least two days previous to the day of the utterance. It is marked on the verb by the class 6 tense and subject person-number portmanteau morphemes. The remote past tense is one of the main tense forms used for relating

events that have occurred in past time. The others are the past habitual tense and the present (progressive) tense.

(361) Ija ho-om.
1s come-1s-rem.p
'I came.'

(362) Ija dana eu fe-em.
1s man that see-1s-rem.p
'I saw that man.'

(iv) The habitual past tense describes an event that has occurred continuously in past time some time previous to the time of the utterance. It is marked on the verb by the class 1 subject person-number markers occurring verb finally. A past habitual verb is also marked by the past habitual aspect marker -lo. The past habitual is one of the main tenses used to describe events in the past. The others are the remote past and the present (progressive) tense.

(363) Ija ho-l-ig
1s come-hab.p-1s
'I used to come.'

(364) Ija dana eu fo-l-ig.
1s man that see-hab.p-1s
'I used to see that man.'

With the today, yesterday and remote past tenses there are cooccurrence restrictions with temporal expressions. So an expression for 'today' can only cooccur with the today's past tense, an expression for 'yesterday' can only cooccur with the yesterday's past tense and neither of these expressions can cooccur with the remote past tense. Although the today's past tense has this lexical cooccurrence restriction it can be used to describe an event that covers a period of time from the distant past up to the present moment. In this way it manifests the notion of perfect aspect (see 2.1.3.3.1.).

With regard to the differing degrees of remoteness in the past tenses between today's past, yesterday's past and the remote past tense it is interesting to note that the changeover from one past tense to another is not rigid. A change from the yesterday's past tense to the today's past tense does not occur on the stroke of midnight for example. Generally any event that occurred in the hours of darkness the previous night can be referred back to either in the yesterday's past tense or in the today's past tense depending on whether the speaker feels the event relates to other events that occurred on the previous day or to events that have occurred on the same day as the utterance subsequent to the event in question. The same principles apply to the changeover from the remote past tense to the yesterday's past tense.

2.1.3.2.1.3.2. Relative tenses in the past.

All past tenses are absolute i.e. relative only to the time of the utterance, but notions like past-in-the-past or future-in-the-past can be realized with quotes, either direct or indirect:

(365) Uqa mad-en, "Ija cabi dec hu-g-a," en.
3s say-3s-rem.p 1s garden from come-1s-tod.p 3s-rem.p
'He said, "I have come from the garden."

(366) Uqa cabi dec ho-i-a ec mad-en.
3s garden from come-3s-tod.p NOM/ADJ say-3s-rem.p
'He said he had come from the garden.'

(367) Uqa mad-en, "Ija cabi na nu-ig-en," en.
3s say-3s-rem.p 1s garden to go-1s-fut.
'He said, "I will go to the garden."

(368) Uqa cabi na nu-igi-an ec mad-en.
3s garden to go-3s-fut. NOM/ADJ say-3s-rem.p
'He said he would go to the garden.'

2.1.3.2.1.4. Future tense.

Future tense can be absolute (future tense proper) or relative (relative future tense).

Future tense describes an event that will take place in future time and is marked on the verb by the verb final suffix -an/-en.

(369) Uqa sab man-igi-an.
3s food roast-3s-fut.
'She will cook the food.'

Relative future tense describes an event that is about to take place in the near future and is marked on the verb by the verb final suffix -a/-e. It is usually used in relation to a verb expressing another action although it can occur on its own.

(370) Uqa lotoc oso faj-igi-a bil-i wau-g
3s cloth indef. buy-3s-rel.f be-pred. stomach-3s
ben taw-en.
big stand-3s-rem.p

[32:5]

'He stood proudly about to buy a garment.'

(371) Ija wa na dec cal-i b-ig-e
1s water at from come out-pred. come up-1s-rel.f
waga q-it-i j-ec dain.
crocodile hit-1s-pred. eat-inf. CAP
'I had better get out of the water or else the crocodile might eat me.'

(372) Aria n-u ma-do-n,
alright go down-pred. say-3s-rem.p

"I na buj-ig-e fo?" do-n.
 this at defecate-1s-rel.f QU 3s-3s-rem.p

[18:12]

'Alright she went down and said to her, "Should I defecate here?"'

2.1.3.2.1.4.1. Modal and aspectual values of the future forms.

The modal value of the absolute future tense is indicative and the inherent aspectual value is perfective, i.e. the situation is viewed in its entirety as a complete whole (Comrie 1976:18). The modal value of the relative future tense is conditional and the inherent aspectual value is imperfective as its normal use is to express a notion of purpose or intention in relation to another action (see 1.1.2.4.2.5.). A relative future action is therefore usually incomplete on its own (Crystal 1985:153). The imperative, supplicative, intentional, permissive, hortatory, monitory, apprehensive (certain and probable) and prescriptive moods all relate to future time (see 2.1.3.4.). The negative future form is used to express the negative imperative (prohibitive) mood and can be used to express the certain apprehensive mood without the mood particle *dain* 'lest' (see also 1.1.1.3.2. and 2.1.3.4.17.).

(373) Na cain tob-og-a-u-n.
 tree don't climb up-2s-neg.f

Ton-i q-ih-i-a-u-n (dain).
 fall down-pred. hit-2s-3s-neg.f CAP

'Don't climb up the tree lest you fall and hurt yourself.'

2.1.3.2.1.4.2. Degrees of remoteness in the future tense.

The absolute future tense is not subdivided according to remoteness of future events. The relative future tense is used to describe an event that is about to happen in the near future but it does not correlate with temporal expressions as the past tenses do (cf. 2.1.3.2.1.3.1.).

2.1.3.2.1.4.3. Relative tenses in the future.

The relative future tense is described under 2.1.3.2. and 2.1.3.2.1.4. The notion of future-in-the-future can be expressed by combining the relative future tense with the absolute future tense.

(374) Uqadec uqa lotoc haun faj-igi-a bil-i
 tomorrow 3s cloth new buy-3s-rel.f be-pred.

Madang nu-igi-an.
 go-3s-fut.

'Tomorrow he will go to Madang to buy a new garment.'

The notion of past-in-the-future can be expressed lexically.

(375) Eledec ija wele nu-ig-en.
 two days hence is already go-1s-fut.

'In two days time I will have already gone.'

2.1.3.2.2. Tense-aspect distinctions in the moods and non-finite forms.

The full range of tense forms can apply to any mood with the following restrictions:

(i) The potential-physical ability, hortatory and apparent moods require the infinitive form of the verb and are not marked for tense.

(ii) The imperative and permissive moods require the today's past tense marked on the verb.

(iii) The certain apprehensive mood requires the verb to be marked either for the infinitive form or for a future tense form.

(iv) The habitual mood requires the verb to be marked for present tense.

(v) Verbs marked for contrafactual mood cannot be marked for tense also and are therefore considered nonfinite forms.

Infinitive forms are not marked for tense/aspect/mood. The nonfinite medial verbs are not marked for tense and are dependent on the final finite verb in the sentence for tense desinence. However they can be marked for perfective, imperfective or iterative aspect and the perfective aspect SS verb can also be marked for conditional mood.

Certain aspectual values are inherent to certain tense forms: Progressive aspect is inherent to the present tense. Perfect aspect is inherent to the today's past tense. A verb marked for habitual past tense is also marked for habitual aspect.

2.1.3.2.3. Absolute and relative tenses.

The only combination of absolute-relative tense that can occur is the combination of future and relative future tense to express the notion of future-in-the-future (see 2.1.3.2.1.4.3.). The nonfinite medial verbs in a coordinate serial clause chain are dependent on the final finite verb in the chain for tense desinence (see 1.3.1.1.4., 2.1.3.3.2.1.1-2. and 2.1.3.7.). Also the medial verbs expressing simultaneous action with different subject marking have different forms for nonfuture(realis) vs. future(irrealis) tense (see 2.1.3.3.2.1.2.).

2.1.3.3. Aspect.

Aspect is a category marked on the verb and is defined as different ways of viewing the internal temporal constituency of a situation (Comrie 1976:3). Aspect is marked formally on the verb only in the following cases:

- (i) perfective aspect (sequential action),
- (ii) imperfective aspect (simultaneous action),
- (iii) habitual aspect (past habitual action) and
- (iv) iterative aspect (repetitive action).

Apart from this different kinds of aspectual meaning can be expressed lexically by the use of:

- (i) auxiliary verbs like bil-ec 'to sit/be', nij-ec 'to lie/be', he-doc 'to finish', cit qoc 'to terminate', cul-ec 'to leave', cuha-doc 'to excel' functioning in a paratactic sequence with a preceding verb which they modify (see also 2.1.3.7.), or as an independent verb,
 (ii) adverbials like wele 'already', gaid 'always'.

Aspect can be marked on the verb by either (i) an aspectual marker (ii) reduplication or repetition of the verb stem or (iii) aspect can be integral to the particular tense e.g. perfect aspect is integral to the today's past tense and progressive aspect is integral to the present tense.

2.1.3.3.1. Perfect aspect.

The perfect forms have both aspectual (present result of past event) and temporal (today's past) semantic values. The perfect aspect expresses the continuing relevance of a previous situation (Comrie 1976:56).

2.1.3.3.1.1. Perfect aspect forms.

The notion of perfect aspect can be expressed by either an adverb, wele 'already' preceding the verb or by the existential verbs bil-ec 'to sit/be' or nij-ec 'to lie/be' which have a perfect aspectual function when conjugated in the today's past tense.

- (376) Uqa wele nu-i-a.
 3s already go-3s-tod.p
 'He has already gone.'

When enquiring after a person's presence the today's past tense is used.

- (377)
 A: Silom bil-i-a fo?
 be-3s-tod.p QU
 'Is Silom here?'

- B: (Uqa) bil-i-a.
 (3s) be-3s-tod.p
 '(He) is here.'

or

- C: Ija bil-ig-a.
 1s be-1s-tod.p
 'I am here.'

In this context the today's past tense indicates a past state that has present relevance and it would be unacceptable to use the present (progressive) tense. What such a sentence would be construed to mean is 'Is Silom (continuously) sitting?'.

- (378)?Silom bili-na fo?
 be-3s-tod.p QU

The today's past tense functioning with a perfect aspect meaning can describe a situation that has existed for some time in the past.

- (379) Ija cabi gel leis odi Danben bil-ig-a.
 1s garden fence two about be-1s-tod.p
'I have been in Danben for about two years.'

2.1.3.3.1.2. Tenses in which perfect aspect form exists.

The notion of perfect aspect is only integral to the today's past tense. Perfect past can be expressed with the remote past tense in a suitable context.

- (380) Uqa wele nu-en qa cesel-i
 3s already go-3s-rem.p but return-pred.
 h-on.
 come-3s-rem.p
'He had gone but he came back.'

Future perfect can be expressed lexically with the future tense.

- (381) Uqadec ija wele nu-ig-en.
 tomorrow 1s already go-1s-fut.
'Tomorrow I will have gone.'

Past-perfect in the future is not possible.

- (382)*Uqadec ija wele nu-ig-a.
 tomorrow 1s already go-1s-tod.p

2.1.3.3.1.3. Uses of the perfect forms.

2.1.3.3.1.3.1. Present result of a past situation.

The today's past tense is often used to express the present result of a past situation. The past situation may not necessarily be a recent event. It can also be either a punctual event or a durative event that continues to the present time.

- (383) Dana nu ma-h-ig-a ho-na.
 man about say-2s-1s-tod.p come-3s-pres.
'The man I told you about is coming.'

- (384) Odo-co-b age jobon na tal dana caja fil fil age
 do-DS-3s 3p village in family man woman different 3p

pasol eu na eu meen qaig tac-i-me-ig
 gift that of that stone shoot fill-pred.-SS-3p

komiti eben-aga na me-ce-bil age cuha deel
 committee hand-3p-pos. in put-DS-3p 3p Sunday

oso cegul-ec na ced-eig-a.
 indef. meet-NOM/ADJ on take-3p-tod.p

[2:19]

'Then the different families in the villages made a

contribution to give to the committee and they took it on one Sunday.'

(385) Ija cabi gel leis odi Danben bil-ig-a.
1s garden fence two about be-1s-tod.p
'I have been in Danben for about two years.'

2.1.3.3.1.3.2. A situation that has held at least once in the period leading up to the present.

A situation that has held at least once in the period leading up to the present can be expressed lexically by use of the adverb wele 'already'.

(386)
A: Hina dana caub age na sab wele j-ag-a fo?
2s man white 3p of food already eat-2s-tod.p QU
'Have you ever eaten white man's food?'

B: Ao, dana caub age na sab wele j-ig-a.
yes man white 3p of food already eat-1s-tod.p
'Yes, I have eaten white man's food.'

2.1.3.3.1.3.3. A situation that began in the past and is still continuing.

For a situation that began in the past and is still continuing the today's past tense can be used (see also 2.1.3.3.1.3.1.).

(387) Ija sain cecela ca sum-ih-ig-a.
1s time long with wait-2s-1s-tod.p
'I have waited for you for a long time.'

The notion of durative aspect can also be included in this context by the addition of the verb bil-ec 'to sit/be' functioning as an auxiliary modifying verb in a paratactic verb sequence. The durative verb follows the verb it modifies (see also 2.1.3.3.2.1.11.).

(388) Ija sain cecela ca sum-ih-i bil-ig-a.
1s time long with wait-2s-pred. be-1s-tod.p
'I have been waiting for you for a long time.'

2.1.3.3.1.3.4. Other uses of the perfect forms.

(i) The most common use of the today's past tense, which has an integral perfect aspect, is to describe an event that has occurred on the same day of the utterance.

(389) Uqa qila ho-i-a.
3s today come-3s-tod.p
'He came today.'

(ii) The adverb wele 'already' can also function to emphasize the action of the verb.

(390) Uqa wele od-i-na.
3s already do-3s-pres.
'He is doing it.'

(391) Uqa wele od-igi-an.
 3s already do-3s-fut.
'He will do it.'

2.1.3.3.1.4. Perfect aspect and recent past tense.

The notion of perfect aspect is expressed by the today's past tense form.

2.1.3.3.2. Aspect as different ways of viewing the duration of a situation.

Aspect relating to the duration of a situation can be expressed:

(1) Morphologically by (i) a verbal suffix in the perfective and habitual aspect and (ii) repetition of part of the verb in the imperfective and iterative aspect.

(2) Lexically by (i) a verb or verb phrase functioning as the final verbal element in a paratactic series of verbs (see 2.1.3.7) in the durative, completive and resultative aspect, (ii) an appropriate descriptive verb phrase or compound verb phrase in the ingressive, terminative, conclusive and discontinuative aspect and (iii) use of adverbs like haun *'again'* and geh *'much'* or numerical values like lecis/leis *'twice'*, ijed *'thrice'* or wal oso *'four times'*.

The progressive aspect is integral to the present (progressive) tense.

2.1.3.3.2.1.1. Perfective aspect.

Perfective (aorist) aspect i.e. a situation that is a single punctual event viewed in its totality, without distinguishing beginning, middle and end, is expressed by the sequential action medial verb. The sequential action verb indicates a temporal succession of consecutive events. It cannot be used to describe events that are not in linear sequence. So (392) below is ungrammatical. Finite verbs must be used to describe these events as in (393).

(392) *Ija alal te-ce-b wa gab te-ce-b
 1s tiredness 1s-DS-3s water cup 1s-DS-3s

wen te-na.
 hunger 1s-3s-pres.
'I am tired, thirsty and hungry.'

(393) Ija alal te-na, wa gab te-na,
 1s tiredness 1s-3s-pres. water cup 1s-3s-pres.

wen te-na.
 hunger 1s-3s-pres.
'I am tired, thirsty and hungry.'

Sequential action (perfective aspect) is not marked overtly on the verb as with simultaneous action (imperfective aspect) but rather there are overt markers to

indicate that the subject of the following verb is 'same' or 'different' subject to the subject of the marked verb (see 2.1.3.6.7.). The markers are -me for SS following and -cV for DS following where V stands for a harmonic vowel in the DS marker. In addition sequential verbs marked for SS or DS following each have distinct sets of subject person/number agreement markers and these correspond with the SS and DS sets employed by the simultaneous verbs. Specifically sequential SS markers correspond with simultaneous SS markers, and sequential DS markers correspond with irrealis simultaneous DS markers. The SS marker on the sequential verb can be deleted in context producing a so-called 'stripped down' verb (see 2.1.3.5.). Such a verb comprises a verb stem followed optionally by a direct object marker followed by the predicate marker -i. The stripped down SS verb most often occurs in a paratactic construction preceding another verb (see 2.1.3.7.) and the SS deletion is obligatory in these forms but the deletion can also occur on a single verb in the clause when such a clause is part of a clause chain. It would appear that this SS marking deletion is a kind of contraction similar to that which occurs in English in verb phrases like 'don't' or 'won't'.

Verbs marked for sequential action therefore contrast with simultaneous verbs in that where simultaneous verbs are marked overtly for simultaneous action by reduplication, sequential verbs are marked covertly for sequential action by the fact that they are not marked by reduplication for simultaneous action, and correspondingly, where sequential verbs carry overt SS and DS markers, same subject and different subject following is marked covertly on the simultaneous verbs by the set of subject person/number agreement markers employed. An alternative analysis would be to say that SS or DS is marked covertly in both sequential and simultaneous verbs by the sets of subject person/number agreement markers employed in each case and that the so-called SS and DS markers on the sequential verbs in fact mark sequential action. However this analysis has nothing to commend it apart from the prospect of giving to both simultaneous and sequential verbs the possibility of overt aspectual marking. Also if such an analysis were correct it would be expected that the marker on the sequential verb would be the same for both SS and DS (which it is not) and that SS and DS coreference would be maintained entirely by the set of subject person/number agreement markers. This is not the case.

As with the simultaneous verbs sequential verbs are dependent on the final verb in the sentence for tense/mood desinence. For the sequential verbs this is a total dependence. The tense/mood designated on the final verb thus applies to the whole coordinate medial verb chain in the sentence (see also 1.3.1.1.4.).

The sequential verb can also be marked for other types of aspectual category either functioning itself as the final verb in a paratactic series and expressing the categories of completive, resultative and durative aspect, or it can carry inherent aspectual meaning expressing ingressive, conclusive or discontinuative aspect, or it can be marked by some form

of reduplication indicating iterative aspect. Other notions of perfectivity can be expressed by the iterative aspect.

Exemplary paradigms for sequential SS and DS are given below for the verbs f-ec 'to see' and h-oc 'to come'. The stripped down SS forms for these verbs would be f-i and h-u in each case. (see 3.4. Morphophonology for further explanation on the derivation of these forms.)

Sequential SS following.

1s	f-i-m-ig	h-u-m-ig
2s	f-i-me-g	h-u-me-g
3s	f-i-me-i	h-u-me-i
1d	f-i-me-u	h-u-me-u
2/3d	f-i-me-si	h-u-me-si
1p	f-i-me-b	h-u-me-b
2/3p	f-i-me-ig	h-u-me-ig

Sequential DS following.

1s	fe-ce-min	ho-co-min
2s	fe-ce-m	ho-co-m
3s	fe-ce-b	ho-co-b
1d	fe-co-hul	ho-co-hul
2/3d	fe-ce-bil	ho-co-bil
1p	fe-co-mun	ho-co-mun
2,3d	fe-ce-bil	ho-co-bil

Examples are given below of sequential action verbs from text material.

(394) Ija Malolo uqa na ka jic ana-g ono nu
1s 3s of car road mother-3s-pos. there for

sum-ud-i bi-bil-igin ne-ce-b
wait-3s-pred. sim.-be-dur.-1s-DS come down-DS-3s

tobo-co-min bel-ow-an.
climb up-DS-1s go-1d-yest.p

[7:5]

'As I waited there on the main road for Malolo's car he came down. I climbed in and off we went.'

(395) Ma qa cehe-ce-bil ma ben m-i-me-i
taro but plant-DS-3p taro big become-pred.-SS-3s

gulom ibul-do-co-b wal m-i-me-i
taro spec. change-3s-DS-3s ripe become-pred.-SS-3s

bagac qahe-ce-b ma eu jagel Me na age ma
leaf sprout-DS-3s taro that month May in 3p taro

huno-lo-ig.
pull up-hab.p-3p

[12:17]

'But for taro they used to plant it and then it grows big and becomes a fully grown corm. When the taro has ripened it sprouts leaves and they used to harvest it in May.'

(396)Wij caja wanam caja gale caja
widow woman strong woman desirable woman

susum caja tau taula caja mede q-u
breastfeeding woman married woman nose hit-pred.

gaban-ad-i mede-mega osol m-i signin
gather-3p-pred. nose-3p-pos. one put-pred. knife

eben-ega na m-igi-na.
hand-3p-pos. in put-3p-3s-pres.

[6:7]

'He gathers the women together, the widows, the strong ones, the pretty ones, the married ones and the ones with babies, he is gathering them together as one, and is putting their knives in their hands.'

2.1.3.3.2.1.2. Imperfective aspect.

Imperfective aspect i.e. explicit reference to the internal temporal structure of a situation, viewing a situation from within (Comrie 1976:24), is expressed by the simultaneous action medial verb. Simultaneous action indicates a temporal overlap of concurrent events and normally a simultaneous verb is followed by a nonsimultaneous verb although occasionally in text two simultaneous verbs can occur in linear sequence (see (408) below). The occurrence of a simultaneous verb indicates a temporal overlap of events with the event described by the following verb except, of course, where the following verb is in a paratactic construction with the simultaneous verb and carries itself some aspectual value such as completive, resultative or durative aspect. In such cases the simultaneity carries forward to the verb following the paratactic construction (see example (405) below).

Simultaneous action is marked on the verb by (i) some form of reduplication of the verb (see below for the various verb classes described according to the type of reduplication employed) and also (ii) particular forms of subject person/number agreement markers which, as well as marking simultaneity, also mark anticipatory coreference with the subject of the following verb in the serial clause chain (see 2.1.3.6.7.).

The simultaneous verb can also be marked lexically for other categories of aspectual value like ingressive, completive, conclusive, discontinuative and resultative aspect; however, like the sequential action verb, the simultaneous verb is dependent on the final verb in the clause chain (i.e. the final verb in the sentence) for tense/mood desinence. With the sequential action verb this dependence is total but with the simultaneous action verb the dependence is only partial. As mentioned previously the simultaneous action verb also coreferences the subject of

the following verb as 'same' or 'different' as part of the switch-reference system (see 2.1.3.6.7.). With the verbs marked for same subject following the dependence on the sentence final verb for tense/mood desinence is total but with the verbs marked for different subject following there are two sets of subject agreement markers. One set occurs when the tense/mood of the final verb refers to a real situation (realis) and the other set occurs when the tense/mood of the final verb refers to an unreal situation (irrealis). The realis set occurs when the final verb is in any past tense or the present tense and the irrealis set occurs when the final verb is in the future tense or imperative or contrafactual mood. So the following sentences apply.

- (397)Ho bu-busal-en qo-in.
pig sim.-run away-3s-DS hit-3p-rem.p
'They killed the pig as it ran away.'
- (398)Ho bu-busal-en qo-lo-ig.
pig sim.-run away-3s-DS hit-hab.p-3p
'They used to kill the pig as it ran away.'
- (399)Ho bu-busal-en qo-gi-na.
pig sim.-run away-3s-DS hit-3p-pres.
'They are killing the pig as it runs away.'
- (400)Ho bu-busal-eb qo-qag-an.
pig sim.-run away-3s-DS hit-3p-fut.
'They will kill the pig as it runs away.'
- (401)Ho bu-busal-eb qo-ig-a.
pig sim.-run away-3s-DS hit-3p-imp.
'Kill the pig as it runs away.'
- (402)Ho bu-busal-eb qo-u-b.
pig sim.-run away-3s-DS hit-contr.-3p
'They would have killed the pig as it ran away.'

Thus with simultaneous verbs anticipatory subject coreference is not marked overtly as with the sequential action verbs but rather same or different subject following is determined by the class of subject person/number markers used. The class of subject person/number agreement markers indicating SS following for the simultaneous verb corresponds with the same class of markers used for indicating SS following in the sequential action verb. The class of subject person/number agreement markers indicating DS following in the irrealis simultaneous action verb corresponds with the class of markers indicating DS following in the sequential action verb. Exemplary paradigms are given below for the verbs f-ec 'to see' and h-oc 'to come'.

The class of simultaneous SS markers do not distinguish tense/mood and the verb is totally dependent on the sentence final verb for tense/mood desinence.

Simultaneous SS markers.

1s	fi-fi-g	hu-hu-g
2s	fe-fe-g	ho-ho-g
3s	fe-fe-i	ho-ho-i
1d	fi-fi	hu-hu
2/3d	fe-fe-si	ho-ho-si
1p	fe-fe-b	ho-ho-b
2/3p	fe-fe-ig	ho-ho-ig

The classes of simultaneous DS markers are divided into realis and irrealis tense/mood designates and agree with the final verb of the sentence with regard to these tense/mood designations.

Simultaneous DS realis markers.

1s	fi-fi-gin	hu-hu-gin
2s	fe-fe-gan	ho-ho-gan
3s	fe-fe-n	ho-ho-n
1d	fo-fo-won	ho-ho-won
2/3d	fe-fe-sin	ho-ho-sin
1p	fo-fo-qon	ho-ho-qon
2/3d	fe-fe-igin	ho-ho-igin

Simultaneous DS irrealis markers.

1s	fe-fe-min	ho-ho-min
2s	fe-fe-m	ho-ho-m
3s	fe-fe-b	ho-ho-b
1d	fo-fo-hul	ho-ho-hul
2/3d	fe-fe-bil	ho-ho-bil
1p	fo-fo-mun	ho-ho-mun
2/3p	fe-fe-bil	ho-ho-bil

Examples are given below of simultaneous action verbs from text material.

(403) Ija ta-taw-ig na met-i-m-ig
1s sim.-stand-1s-SS wood split-pred.-SS-1s

am-i wal-do-n.
eye-1s-pos. spin-3s-3s-rem.p

[21:71]

'As I stood there splitting wood I became dizzy.'

(404) Cabi dana ca pastor ca iwal-ad-ec eu cunug
work man with with teach-3p-NOM/ADJ that all

adi faj-ade-na eu cunug ihac-te-te-ig
how pay-3p-pres. that all show-sim.-1s-3p-SS

sa-at-ein.
tell-1s-3p-rem.p

[9:66]

'As they showed me all about how they paid their employees, pastors and teachers they explained it to me.'

(405) Me qee felacu-cud-i bil-ei
good not let go-3s-sim.-pred. be-sim.-3s-SS

nesil-i-me-i me eundec dih heew-igi-an.
choose-pred.-SS-3s good source only hold-3s-fut.

[9:40]

'While he will let go of what is bad he will choose what is good and hold on to just that.'

(406) Dana lo ho-co-bil uqa taig du-i-me-i
man visitor come-DS-3p 3s mat roll out-pred.-SS-3s

dana eh-ud-i-me-i taig na m-ude-ce-b
man take-3s-pred.-SS-3s mat on put-3s-DS-3s

bi-bil-en ceb ca jacas ca ceteh-teh
sim.-sit-3s-DS betelnut with tobacco with things

lo uto-lo-i.
hospitality 3s-hab.p-3s

[13:23]

'When a visitor came they used to roll out a mat and place him on it and then while he sat there the host would show him hospitality by giving him things like betelnut and tobacco.'

(407) Ho bu-busal-eb qo-qag-an nu
pig sim.-run away-3s-DS hit-3p-fut. for

eu ha ihoc mo-lo-ig.
that also enough put-hab.p-3p

[16:24]

'They also used to practise to be able to shoot a pig on the run.'

(408) Nah qet-i-me-ig gul-d-i a-h-u
post cut-pred.-SS-3p carry-3s-pred. get come-pred.

jobon me-me-igin ta-taw-en ceteh eu
village sim.-put-3p-DS sim.-stand-3s-DS thing that

sacia-du-me-ig jo nah hel-u-me-ig nah
prepare-3s-SS-3p house post dig-pred.-SS-3p post

qu-do-lo-ig.
sink-3s-hab.p-3p

[13:5]

'They used to cut the posts and then carry them on their shoulders to the village. While the posts were standing there they used to get those things ready, dig the post hole and then sink the posts.'

Verbs can be classified according to how they reduplicate to express simultaneous action. There are five different ways for the verb to reduplicate and only one strategy is

normally employed by any particular verb although some verbs can employ strategy (3), object reduplication, as well as one of the other strategies:

- (1) by reduplication of the first syllable i.e. (C)V of the verb stem.
- (2) by reduplication i.e. lengthening, of the first vowel of the subject person/number agreement marker.
- (3) by reduplication of the object marker in the verb.
- (4) by repetition of the whole verb stem.
- (5) by reduplication of some internal part of the verb stem.

In the following lists of verbs classified according to reduplication strategies all the verbs are conjugated in the realis simultaneous action with third person singular subject agreement.

(1) Verbs that reduplicate the first syllable.

ba-bacis-en	'as he came out'
ba-bagaw-en	'as he pierced'
ba-bas-en	'as she gave birth'
be-be-n	'as he came up'
be-bel-eigin ³	'as they went'
be-bes-en	'as he removed'
bi-bil-en	'as he sat'
bu-busal-en	'as he ran away'
bu-buj-en	'as he defecated'
ca-cabal-en	'as he broke (it)'
ca-cabat-en	'as he fell'
ca-cabus-en	'as he snuffed light'
ca-cad-en	'as he fought'
ca-cafal-en	'as he untied'
ca-cafan-en	'as he made a hole'
ca-cagah-en	'as he peeled'
ca-cagas-en	'as he forgave'
ca-cagat-en	'as he came out'
ca-cag-on	'as he cut'
ca-cah-on	'as he removed rubbish'
ca-cal-en	'as he appeared'
ca-camal-en	'as he looked'
ca-catan-en	'as he purified'
ca-cati-en	'as he cleaned'
ca-catu-en	'as he opened'
ca-cajag-en	'as he filled'
ce-ced-en	'as he took'
ce-cegul-en	'as he met'
ce-cel-en	'as he forgot'
ce-ceh-en	'as he planted'
ce-cesaw-en	'as he divided'
ce-cesel-en	'as he returned'
ce-ces-en	'as he scooped'
ce-cew-en	'as he despised'
ci-cil-en	'as she boiled (it)'
ci-cis-en	'as he hollowed out'
co-cod-on	'as he beat'
cu-cud-en	'as he put on fire'
cu-cufal-en	'as he unfastened'
cu-cul-en	'as he left'

fa-faj-en	'as he bought'
fe-fen	'as he saw'
fo-foj-on	'as he vomited'
ga-gaw-en	'as he desired'
ge-gel-en	'as he scraped'
gi-gis-en	'as she sewed'
go-gow-en	'as he lit'
ha-hagal-en	'as he tangled'
he-heew-en	'as he held'
ho-hon	'as he came'
hu-hulu-en	'as it rotted'
ja-jab-en	'as he chased'
ja-jahin-en	'as he hated'
ja-jaq-en	'as he wrote'
je-jen	'as he ate'
je-jel-en	'as he wrapped'
le-len	'as he went'
le-let-en	'as he crossed over'
li-lib-en	'as he tied'
ma-masu-en	'as it proliferated'
me-men	'as he put'
me-men-en	'as he closed'
me-met-en	'as he sharpened'
mu-mud-en	'as he made'
ne-nen	'as he came down'
ne-nesel-en	'as he chose'
ni-nij-en	'as he lay'
no-non	'as he went down'
nu-nu-en	'as he went'
o-on	'as he got'
o-od-on	'as he did'
qa-qag-en	'as he tied'
qa-qah-en	'as he broke'
qa-qal-en	'as he turned around'
qa-qasal-en	'as he confessed'
qa-qasaw-en	'as he opened'
qa-qatan-en	'as he broke'
qa-qaj-en	'as he cried'
qe-qel-en	'as he threw'
qe-qet-en	'as he cut'
qo-qon	'as he hit'
sa-sabi-en	'as it increased'
sa-sal-en	'as he removed skin'
sa-sanij-en	'as he read'
se-sel-en	'as he hollowed out'
si-sil-en	'as he tracked'
si-siw-en	'as he distributed'
ta-tac-en	'as he filled'
ta-tanaw-en	'as he made peace'
ta-taq-en	'as he dressed'

ta-taw-en	'as he stood'
te-ten	'as he went up'
to-tol-en	'as he cut'
to-tob-en	'as he climbed up'
to-ton-en	'as he fell down'
wa-wac-en	'as he peeled'
wa-wagal-en	'as he demolished'
wa-wal-en	'as he searched'
wa-walu-en	'as it swelled'
wa-was-en	'as he grew'
we-weg-en	'as he weaved'
we-wet-en	'as he scooped'

(2) Verbs that reduplicate the first vowel of the subject marker.

a- <u>ee</u> n	'as he opened his mouth'
ab <u>a</u> - <u>ee</u> n	'as he searched with his hand'
al <u>a</u> - <u>ee</u> n	'as he repeated something'
al- <u>ee</u> n	'as he rubbed off dirt'
al <u>e</u> - <u>ee</u> n	'as he was greedy'
a <u>q</u> - <u>ee</u> n	'as he went ahead'
a <u>q</u> - <u>ee</u> n	'as he hung something'
as <u>a</u> - <u>ee</u> n	'as he laughed'
as- <u>ee</u> n	'as he wiped away excreta'
bab <u>a</u> - <u>ee</u> n	'as he crossed something'
bas- <u>ee</u> n	'as he poured'
beb <u>e</u> - <u>ee</u> n	'as he dreamed'
bit <u>a</u> - <u>ee</u> n	'as he jumped over.'
bod <u>o</u> - <u>ee</u> n	'as he softened'
bu- <u>ee</u> n	'as it buzzed'
bud <u>u</u> - <u>ee</u> n	'as it thudded.'
buh <u>u</u> - <u>ee</u> n	'as it splashed'
bus <u>u</u> - <u>ee</u> n	'as he passed wind'
cacag <u>a</u> - <u>ee</u> n	'as he talked in sleep'
cac <u>a</u> - <u>ee</u> n	'as he pulled out'
cacaw- <u>ee</u> n	'as he saturated'
cac <u>u</u> - <u>ee</u> n	'as he hung by hands'
cec <u>e</u> - <u>ee</u> n	'as he dragged'
celob <u>o</u> - <u>ee</u> n	'as he was proud'
ci <u>h</u> - <u>ee</u> n	'as he poked'
ci <u>n</u> - <u>ee</u> n	'as he spat'
ci <u>n</u> - <u>ee</u> n	'as he followed'
ci <u>t</u> - <u>ee</u> n	'as he leapt over'
cool- <u>ee</u> n	'as he matured'
cogog- <u>ee</u> n	'as he twisted'
cosol- <u>ee</u> n	'as he lay down'
cot- <u>ee</u> n	'as he kissed'
coto- <u>ee</u> n	'as he coughed'
cucui- <u>ee</u> n	'as he feared'
cuh <u>u</u> - <u>ee</u> n	'as he deceived'
cula- <u>ee</u> n	'as he was proud of'
cutu- <u>ee</u> n	'as he whimpered'
dadan- <u>ee</u> n	'as he was confused'
debo- <u>ee</u> n	'as he showed off'
dec- <u>ee</u> n	'as he stared'

do- <u>een</u>	<i>'as he erected'</i>
d- <u>oon</u>	<i>'as he understood'</i>
eu- <u>een</u>	<i>'as he shouted'</i>
falel- <u>een</u>	<i>'as he flashed'</i>
fanin- <u>een</u>	<i>'as he flattered'</i>
fufu- <u>een</u>	<i>'as he blew'</i>
gagal- <u>een</u>	<i>'as he shouted'</i>
gasu- <u>een</u>	<i>'as he searched'</i>
he- <u>een</u>	<i>'as he thanked'</i>
hol- <u>een</u>	<i>'as he longed for'</i>
idad- <u>een</u>	<i>'as he sold'</i>
ifan- <u>een</u>	<i>'as he created'</i>
ihon- <u>een</u>	<i>'as he imitated'</i>
ilal- <u>een</u>	<i>'as he dodged'</i>
jah- <u>een</u>	<i>'as he whispered'</i>
jajan- <u>een</u>	<i>'as he made disappear'</i>
meci- <u>een</u>	<i>'as he watched'</i>
mele- <u>een</u>	<i>'as he believed'</i>
muhu- <u>een</u>	<i>'as he worked hard'</i>
od- <u>oon</u>	<i>'as he did'</i>
qag- <u>oon</u>	<i>'as he set apart'</i>
qan- <u>een</u>	<i>'as he groaned'</i>
qe ^{le} l- <u>een</u>	<i>'as he trembled'</i>
seel- <u>een</u>	<i>'as he awoke'</i>
silol- <u>een</u>	<i>'as it seeped out'</i>
tal- <u>een</u>	<i>'as he tore'</i>
tefac- <u>een</u>	<i>'as he jumped over'</i>
te ^{le} l- <u>een</u>	<i>'as he trembled'</i>
til- <u>een</u>	<i>'as he was still'</i>
toco- <u>een</u>	<i>'as it(fluid) dropped'</i>
unan- <u>een</u>	<i>'as he sharpened'</i>
uta- <u>een</u>	<i>'as he called'</i>

(3) Verbs that reduplicate the object marker.

Any verb that contains an object marker will reduplicate the object marker so no special listing has been made of this type of verb. However reduplication of the object marker is slightly different, mainly in the second/third person dual and plural forms, according to whether the object coreferenced is direct or indirect, as the following paradigms illustrate. *sab* means 'food', *man-ec* means 'to cook', *cam* means 'sun' and *oc* means 'to get'. The reduplication is underlined:

Direct object coreference.

cam o-iteten *'as the sun gets me'*

cam o- <u>ihehen</u>	'as the sun gets you'
cam o- <u>idodon</u>	'as the sun gets him'
cam o- <u>ilelen</u>	'as the sun gets us(2)'
cam o- <u>alelen</u>	'as the sun gets you/them(2)'
cam o- <u>igegen</u>	'as the sun gets us'
cam o- <u>adeden</u>	'as the sun gets you/them'

Indirect object coreference.

sab mani- <u>teten</u>	'as she cooked food for me'
sab mani- <u>hehen</u>	'as she cooked food for you'
sab mani- <u>toton</u>	'as she cooked food for him'
sab mani- <u>lelen</u>	'as she cooked food for us(2)'
sab mani- <u>aalen</u>	'as she cooked food for you/them(2)'
sab mani- <u>gegen</u>	'as she cooked food for us'
sab mani- <u>aaden</u>	'as she cooked food for you/them'

(4) Verbs that reduplicate the whole verb stem.

ceel-ceel-en	'as he rejoiced'
cua-cua-do-do-n	'as he waved a branch to light it'
gobil-gobil-do-do-n	'as he stirred it'
godu-godu-do-do-n	'as he beat it'

(5) Verbs that reduplicate stem internally.

Some of these verbs (set (a)) are known to have composite verb stems. For example ahoc is a combination of oc 'get' and hoc 'come'. The verbs beginning with ehi- are a composite of 'get', 'come' and then a direction verb, lec 'go', tec 'go up', bec 'come up', noc 'go down', nec 'come down'. With these verbs reduplication occurs on the final verb stem in the composite verb. With the verbs in set (b) it is not clear as to whether they have composite verb stems or not to account for the stem internal reduplication.

Set (a).

aho-ho-n	'as he brought'
ehi-be-be-n	'as he took up'
ehi-le-le-n	'as he took along'
ehi-ne-ne-n	'as he took down'
ehi-no-no-n	'as he took down'
ehi-te-te-n	'as he took up'

Set (b).

aqate-te-n	'as he took a short cut'
cacito-to-n	'as he spat out food'
caco-co-n	'as he wiped'
cacute-te-n	'as he unhung something'

As mentioned previously the simultaneous verb can combine with other verbs in a paratactic serial verb construction which expresses other categories of aspectual value

viz. completive, resultative and durative aspect. In these cases the final verb in the paratactic sequence carries the simultaneous suffixation. Examples of such combinations are given below.

Simultaneous + completive aspect.

(409) Uqa sab ji-ji he-do-do-i ...
 3s food sim.-eat finish-com.-sim.-3s-SS
 'As he finished eating the food ...'

Simultaneous + resultative aspect.

(410) Uqa sab man-i cuha-do-do-i ...
 3s food roast-pred. excel-res.-sim.-3s-SS
 'As she cooked the food well ...'

Simultaneous + durative aspect.

(411) Uqa sab ji-ji ni-nij-e-i ...
 3s food sim.-eat sim.-be-dur.-3s-SS
 'As he stayed eating the food ...'

Other notions of imperfectivity can be expressed by the categories of aspect described below i.e. habitual, progressive, terminative, completive, conclusive, discontinuative, resultative and durative aspect (see 2.1.3.3.2.1.3-11.).

2.1.3.3.2.1.3. Habitual aspect.

The habitual aspect, which describes a situation that is characteristic of an extended period of time (Comrie 1976:27), can be marked in two ways:

(1) Morphologically by the past habitual verb suffix -lo 'habitual' which follows the verb stem and precedes the subject person/number suffix. See the illustrative paradigm of the verb nu-ec 'to go' below. The past habitual aspect is most commonly used in historical narrative text of a procedural nature and quite often all the final verbs in such texts will carry past habitual aspect. Alternatively the present (progressive) tense can be used to relate durative events that occurred in past time (see 2.1.3.3.2.1.5.).

1s	nu-ol-ig	'I used to go.'
2s	nuo-lo-g	'You used to go.'
3s	nuo-lo-i	'He used to go.'
1d	nuo-lo-u	'We(2) used to go.'
2/3d	nuo-lo-si	'You/they(2) used to go.'
1p	nuo-lo-b	'We used to go.'
2/3p	nuo-lo-ig	'You/they used to go.'

(412) Wele ca ege Hilu bilo-lo-b.
 Before add 1p be-hab.p-1p
 'Before we used to live in Hilu.'

(2) Lexically by the adverb *gaid* 'always'. This can occur with the present or future tenses or with the habitual past tense itself.

(413) Uqa gaid nu-i-na.
3s always go-3s-pres.
'He always goes.'

(414) Uqa gaid nu-igi-an.
3s always go-3s-fut.
'He will always go.'

(415) Uqa gaid nuo-lo-i.
3s always go-hab.p-3s
'He always used to go.'

Note also that a present habitual action can be expressed by the mood particle *nu* (see 2.1.3.4.18.).

2.1.3.3.2.1.5. Progressive aspect.

There is no formal way of marking progressive aspect on the verb but such aspectual meaning is inherent in the present (progressive) tense. The progressive aspect is defined in terms of a combination of progressive(continuous) meaning and nonstative meaning (Comrie 1976:35). Consequently when the verb *bil-ec* 'to be/sit' is used as a stative verb it is unacceptable for it to be in the present tense (cf. 2.1.3.3.1.1. - perfect aspect.).

(416)?Naus bil-i-na fo?
be-3s-pres. QU
(With the intended meaning of 'Is Naus here?')

What this sentence actually means is something like 'Is Naus continuously present?' or 'Is Naus continuously sitting?' The present (progressive) tense is used to relate events that have occurred in past time in texts of a historical or procedural nature. Several texts (15 and 16) are related almost entirely in the present tense even though the speaker is describing events that occurred many years ago in his youth.

2.1.3.3.2.1.6. Ingressive aspect.

There is no formal means of expressing the beginning of a situation but this meaning can be achieved by use of the compound verb phrase *sanan m-ec* 'to begin' or the verb *m-ec* 'to put/become'.

(417) Sain ege aluh tatac b-om eu
time 1p mountain top come up-1p-rem.p that

ege duan-ige sanan m-en.
1p cold-1p-pos. begin-1p-rem.p

[27:37]

'When we came to the top of the mountain we began to feel cold.'

(418) Ija mei Ud uqa kristen m-en sain
 1s father-1s 3s Christian become-3s-rem.p time
 eu na ija ha kristen m-eem.
 that at 1s also Christian become-1s-rem.p

[8:3]

'When my father, Ud, became a Christian I also became a Christian.'

2.1.3.3.2.1.7. Terminative aspect.

There is no formal means of expressing the end of a situation but this can be achieved lexically either by the use of various paratactic serial verbs (see 2.1.3.7.) like he-doc 'to finish' and cuha-doc 'to excel' or various verbal expressions like cit q-oc 'to conclude' (lit: 'to sharpen to a point') and cul-ec 'to leave'.

(1) Completive aspect. The completive aspect has the notion that a situation is finished or completed and is expressed by the verb he-doc 'to finish/complete' which can function either on its own or as the second verbal element in a paratactic series of serial verbs. In this second construction the verb he-doc gives a completive meaning to the situation expressed by the first verb and also carries any subject agreement and tense/aspect/mood verbal suffixes. The first verb is only marked by the predicate marker.

(419) Deel ijed he-do-co-b uqa cesel-i
 day three finish-3s-DS-3s 3s return-pred.
 h-on.
 come-3s-rem.p
'After three days he came back.'

(420) Jo cunug ceh-i he-do-in.
 house all build-pred. finish-3s-3p-rem.p
'They finished building all the houses.'

(421) Sab qee j-i he-do-co-m fi
 food not eat-pred. finish-3s-DS-2s if
 qee haun ih-ig-aun.
 not more 2s-1s-neg.f
'If you don't finish eating your food I won't give you any more.'

(2) Conclusive aspect. The conclusive aspect has the notion that a situation has been brought to a conclusion and is expressed by the verbal expression cit q-oc 'to bring to a conclusion/point'.

(422) Deel eu na ege cegul-ec eu cit q-om.
 day that on 1p meet-NOM/ADJ that conclude-1p-rem.p
 [9:22]
'On that day we brought our meeting to a conclusion.'

(423) Odo-co-b uqa mede-h cit q-u big
 do-DS-3s 3s nose-3s-pos. close-pred. anus

cit q-u e-ce-b ho cal m-en.
close-pred. DS-3s pig die-3s-rem.p

[18:21]

'He closed off the pig's nose and anus and then it died'

(3) Discontinuative aspect. The discontinuative aspect has the notion that a situation has been discontinued or abandoned and is expressed by the verb *cul-ec* 'to leave'.

(424)

A: Hina sab haun je-g-an fo?
2s food more eat-2s-fut. QU
'Will you have more food?'

B: Ija cul-ig-a.
1s leave-1s-tod.p
'I have had enough.'

(425) Od-i-me-u je eu culo-co-hul
do-pred.-SS-1d talk that leave-DS-1d

ni-nij-en oso na let-i lo-wo-na.
sim.-lie-3s-DS indef. at cross-pred. go-1d-pres.

[23:40]

'Then we stopped talking about that and went on to something else.'

(4) Resultative aspect. The resultative aspect has the notion of a successful completion of a situation (Comrie 1976:20) and is expressed by the verb *cuha-doc* 'to excel' functioning as the second verbal element in a paratactic series of serial verbs. The verb *cuha-doc* adds the aspectual meaning to the situation expressed by the first verb and also carries any subject agreement, tense/aspect/mood verbal suffixes. The first verb is only marked by the predicate marker.

(426) Age me je dah m-ec nu age dah-inige
3p good talk ear put-inf. for 3p ear-3p-pos.

ceh-i cuha-do-gi-na.
plant-pred. excel-3s-3p-pres.

[9:72]

'They are listening to the gospel well.'

(427) Ma hol-en fal-i cuha-du-me-g
taro pound-3s-rem.p mash-pred. excel-3s-SS-2s

mel sim ut-ag-a.
boy child 3s-2s-imp.

'Mash up the pounded taro well and give it to the child.'

2.1.3.3.2.1.7.1. Special forms indicating the completion of another situation prior to the situation being described.

There are no special forms to indicate the completion of another situation prior to the situation being described but it is very common in extended discourse to make use of

the switch-reference system (see 2.1.3.6.7.) to indicate that a particular series of related events are completed and that something new is to be introduced into the narrative. In narrative a recapitulation clause often begins a sentence and basically expresses again the content of the final clause of the previous sentence. The recapitulation clause can be an exact repeat of the lexical items used in the previous final clause or, more commonly, a dummy verb like *od-oc* 'to do' or *he-doc* 'to finish' are employed. Such a dummy verb can occur in a stereotype form *odo-co-b* 'he did it -DS' or *he-do-co-b* 'he finished it -DS' and in this way has the special function to indicate an episodic completion of events or that something new is to be introduced. When functioning this way the dummy verb always occurs with third person singular subject agreement regardless of the subject agreement of the verb in the final clause of the preceding sentence. Where a recapitulation clause is not indicating the completion of an episode it will "pick up" the same subject agreement of the final verb in the preceding sentence. This is illustrated in (428) and (429) below. The underlined items constitute the recapitulation clause in each case. Examples of episodic completion are given in (430), (431) and (432). The underlined items indicate episodic completion in each case.

(428) *Odo-co-bil mala uqa jobon t-en.*

do-DS-3p chicken 3s village go up-3s-rem.p

Jobon na t-i-me-i ahul susul ca
village to go up-pred.-SS-3s coconut scrapings with

ma susul ca ilal q-oc
taro scrapings with disorder hit-NOM/ADJ

ta-taw-en f-i-me-i eu
sim.-stand-3s-DS see-pred.-SS.-3s that

ji-ji nij-en. Ji-ji ni-nij-en
it.-eat lie-3s-rem.p sim.-eat sim.-lie-3s-DS

cotu-g-ul age sum-ud-ein sum-du-ein.
brother-3s-pos.-p 3p wait-3s-3p-rem.p wait-3s-3p-rem.p
[3:7-9]

'Then the chicken went up to the village. He went up to the village and stayed to eat the coconut and taro scrapings he saw lying there. While he stayed eating his friends waited and waited for him.'

(429) *Casac camac oso aig q-oc f-i-me-ig*
first sago indef. seed hit-NOM/ADJ see-pred.-SS-3p

age camac lan cehe-gi-na.
3p sago frame build-3p-pres.

Camac lan ceh-i he-du-me-ig age dubin
sago frame build-pred. finish-3s-SS-3p 3p stalk

get-i-me-ig ahul qilul u-me-ig ehi-nu-i
cut-pred.-SS-3p coconut cloth get-SS-3p take-go-pred.

dubin qo-gi-na. Dubin qu he-du-me-ig lan
stalk hit-3p-pres. stalk hit finish-3s-SS-3p frame

tatacan me-gi-na. Lan tatacan m-i-me-ig
top put-3p-pres. frame top put-pred.-SS-3p

na oso qudu-me-ig gocin na na halu jele-gi-na.
tree indef. hit-SS-3p head tree of vine bind-3p-pres.
[15:2-5]

'First they look for a ripe sago plant and then they build a frame for the sago. After they have finished building the sago frame they cut the stalk and then they get a coconut cloth and then they take it and beat the stalk on it. When they have finished beating the stalk they put it on top of the frame. After they have put it on top of the frame they hit a stick into the ground and bind a vine around the top of it.'

(430) Man age man cunug age cul-i
bird 3p bird all 3p leave-pred.

he-do-in. Odo-co-b mala sul-do-in.
finish-3s-3p-rem.p do-DS-3s chicken send-3s-3p-rem.p

[3:5-6]

'All the birds were completely exhausted so then they sent the chicken.'

(431) Aria casac ege l-i office na ono
Alright first 1p go-pred. in there

taw-om. Odo-co-b caub oso ege gami
stand-1p-rem.p do-DS-3s white indef. 1p with

bel-om eu uqa l-i ono made-ce-b
go-1p-rem.p that 3s go-pred. there say-DS-3s

ege haun bus na power cudun na n-om.
1p again in place to go down-1p-rem.p

[25:5-6]

'Alright first we went and stood in the office. Then a white man who had come with us told us to go down to the power place in the bus.'

(432) Eu nu qila i ege meen qaig eu mede
that for now this 1p stone shoot that nose-3s-pos.

go-go-na. He-do-co-b eu fal-doc
hit-1p-pres. finish-3s-DS-3s that enclose-NOM/ADJ

nu cabi sanan me-q-an.
for work start put-1p-fut.

[2:22-23]

'Now we are collecting the money. When we have finished that we will put up the walls.'

2.1.3.3.2.1.8. Iterative aspect.

Iterative aspect describes the successive occurrence of several instances of the same situation and is to be distinguished from habitual aspect which describes a situation that is characteristic of an extended period of time (Comrie 1976:27). In Amele iterative aspect can be marked on the verb as a distinct category separate from both habitual and imperfective (simultaneous action) aspect. Iterative aspect can be marked on the verb by reduplication of some part of the verb, i.e. the verb stem itself or the object marker, if present, or the predicate marker. The reduplication differs from the reduplication involved in the simultaneous action verb in two ways:

- (i) the verb stem can be reduplicated more than once. In one instance in text a verb stem is reduplicated three times and theoretically reduplication can be continued indefinitely to describe an iterative action.
- (ii) the subject agreement suffixes are not those for the simultaneous action verb, rather any other subject agreement suffixes and tense/aspect/mood markers can be affixed to the verb.

In fact it is possible to combine iterative aspect with other aspects, tenses and moods as illustrated below:

- (433) Age qa qu-qu ein.
3p dog it.-hit 3p-rem.p
'They hit the dog many times.'
- (434) Age qa qu-qu egi-na.
3p dog it.-hit 3p-pres.
'They are hitting the dog many times.'
- (435) Age qa qu-qu ol-oig.
3p dog it.-hit hab.p-3p
'They used to hit the dog many times.'
- (436) Age qa qu-qu ece-bil cal me-i-a.
3p dog it.-hit DS-3p dead become-3s-tod.p
'They hit the dog many times and it died.'
- (437) Age qa qu-qu i-f-eig cal m-igi-an.
3p dog it.-hit pred.-SS/CD-3p dead become-3s-fut.
'If they hit the dog many times it will die.'
- (438) Age qa qu-qu o-u-b mi cal mo-u-b.
3p dog it.-hit contr.-3p CR dead become-contr.-3s
'If they had hit the dog many times it would have died.'

Iterative aspect can be marked as shown above where there is one reduplicated verb followed by verbal suffixation or the iterative verb can be the first verb in a paratactic series of verbs in which a following verb may also express an aspectual value (see also 2.1.3.7.).

- (439) Age qa qu-qu bilo-lo-ig.
3p dog it.-hit be-dur.-hab.p-3p

'They used to hit the dog many times.'

Examples are given below taken from text material.

(1) The repetition one or more times of the verb stem.

(440) Jobon na t-i-me-i ahul susul ca
village to go up-pred.-SS-3s coconut scrapings with

ma susul ca ilal q-oc
taro scrapings with disorder hit-NOM/ADJ

ta-taw-en f-i-me-i eu
sim.-stand-3s-DS see-pred.-SS-3s that

ji-ji nij-en.
it.-eat lie-dur.-3s-rem.p

[3:8]

'Then he went up to the village and stayed and ate the taro and coconut scrapings he saw lying about.'

(441) Manila ono dec witic haun 10 pm man wag
there from night again bird canoe

u-m-ig ono dec nu nu nu nu-i Germany
get-pred.-SS-1s there from it.-it.-it.-go-pred.

wesu ono cal-eem.
afternoon there arrive-1s-rem.p

[9:5]

'From Manila I took a plane at 10 pm and from there went and went and went and arrived there in Germany in the afternoon.'

(442) *Ono bel-i-me-ig ono due du-du ece-bil
there go-pred.-SS-3p there dance it.-dance DS-3p

walag da-dan-eb f-i-me-si ale casac mahuc
dawn sim.-break-3s-DS see-pred.-SS-2d 2d first quick

caj-i-me-si aqun-i ho-si-a,* odi
get up-pred.-SS-2d ahead-pred. come-2d-imp. like

ma-al-en.
say-2d-3s-rem.p

[10:19]

'"They have gone there to dance and dance but when you(2) see the dawn breaking you(2) must leave and come quickly ahead of them," she told them(2).'

(2) The repetition of the object marker suffixed to the verb stem.

(443) Hawa-du-du bel-ein.
ignore-3s-it. go-3p-rem.p

[10:15]

'They went by ignoring her.'

(444) Uqa ma-g-en, *Cois age cetehteh eu
3s say-1p-3s-rem.p OK 2p things that

sacia-do-co-bil ija ija na skul mel teknikal
prepare-3s-DS-2p 1s 1s of school boy technical

na dec sain oso h-u-me-b ege age na
of from time indef. come-pred.-SS-1p 1p 2p of

cuha jo uqa na nah qud-u-me-b kapa
Sunday house 3s of post hit-pred.-SS-1p iron

m-i-me-b cul-i-ado-co-mun age dodoc cabi
put-pred.-SS-1p leave-pred.-2p-DS-1p 2p self work

nag nag meen qaig guduc-du-du age
small small stone shoot run-3s-it. 2p

fal-do-qag-an."
fence-3s-2p-fut.

[2:8]

'He told us, "OK you get things ready and later I and my students from the technical college will come and we will sink the posts and put the iron roof on your church building. Then we will leave it for you. You yourselves can work a little at a time as the money goes to finish the walls."

(445) Dana leis ca fi oso uqa culum na camac eu
man two with if indef. 3s sago stick sago that

gobil-doc u-gi-an. Uqa odi gobil-du-du
stir-3s-NOM/ADJ get-3s-fut. 3s like stir-3s-it.

nij-igi-an.
lie-3s-fut.

[31:8]

'If there are two men one will stir the sago with the sago stick and he will continue to stir and stir it like that.'

(3) The repetition of the predicate marker -i suffixed to the verb stem.

(446) Ono dec cebit cebit n-om. N-u
there from slow slow go down-1p-rem.p go down-pred.

n-u aria cuamu eu n-u
go down-pred. alright room that go down-pred.

til-ii tawe-ce-b ege jic cebec
still-pred.-it. stand-DS-3s 1p road door

hud-i-me-b cal-i h-om.
open-pred.-SS-1p come out-pred. come-1p-rem.p

[25:29]

'From there we came down very slowly. We came down and the lift slowed to a stop. The door opened and we got out.'

(447) Od-on qa Mike uqa Sioba Nam ca ale na lotoc
do-3s-rem.p but 3s with 3d of clothes

duan sain na tacow-as-an nu faj-igi-a made-ce-b
cold time at wear-3d-fut. for buy-3s-rel.f say-DS-3s

nu store na mec-ii cob-om.
for in look-pred.-it. walk-1p-rem.p

[27:42]

'But then Mike said he was going to buy clothes for Sioba and Nam for them to wear while it was cold so we walked around the store looking and looking.'

The notion of iterative aspect can also be indicated lexically in two ways:

(i) The use of adverbs like haun 'again/more' and geh 'much' or a numerical value like lecis/leis 'two times', ijed 'three times' and wal oso 'four times'.

(448) Cah-do-co-bil nue-ce-b haun cah-do-gi-na.
squeeze-3s-DS-3p go-DS-3s again squeeze-3s-3p-pres.

Cah-du ijed du-me-ig wal oso d-oc na
squeeze-3s three pred.-SS-3p four pred.-inf. at

age camac ta eu hele-gi-na.
3p sago scrapings that throw-3p-pres.

[15:15-16]

'They squeeze it and it goes and then they squeeze again. Three times they squeeze it and then on the fourth time they throw those sago scrapings away.'

(449) Age qa geh geh qu-qu ein qa qee cal
3p dog much much it.-hit 3p-rem.p dog not dead

m-el.
become-3s-neg.p

'They hit the dog many times but it did not die.'

(ii) The repeated full clausal description of the situation.

(450) Haun busu-en, dah m-en, haun
again pass wind-3s-rem.p ear put-3s-rem.p again

busu-en.
pass wind-3s-rem.p

[19:52]

'He heard someone passing wind and then again he heard someone passing wind.'

(451) Ode-ce-b foj-en. Rum oso eu foj-en.
do-DS-3s vomit-3s-rem.p room indef. that vomit-3s-rem.p

Ihoc le-ce-b haun rum oso na l-i
enough go-DS-3s again room indef. in go-pred.

foj-en. Ihoc le-ce-b oso na ha l-i
vomit-3s-rem.p enough go-DS-3s indef. in too go-pred.

ihoc le-ce-b haun jo oso na ton-i
enough go-DS-3s again house indef. to go down-pred.

n-u le-na. Foj-en. Ihoc
go down-pred. go-3s-pres. vomit-3s-rem.p enough

le-ce-b jo oso na ton-i n-u
go-DS-3s house indef. in go down-pred. go down-pred.

le-n eu na foj-en ihoc l-en.
go-3s-rem.p that in vomit-3s-rem.p enough go-3s-rem.p

Rum cunug ca foj-i he-do-n.
room all with vomit-pred. finish-3s-3s-rem.p

Od-i-me-i ma-do-n, "Qila qa ihoc,"
do-pred.-SS-3s say-3s-3s-rem.p now but enough

do-n.
3s-3s-rem.p

[19:60-67]

'Then she vomited. She vomited in that room. Then after she had filled that room with vomit she went to another room and filled that with vomit and then filled another room with vomit. Then she went down and went to another house. She vomited there. She filled all those rooms with vomit. Then she finished vomiting and said to him, "Now that is enough."

2.1.3.3.2.1.9-10. Semelfactive and Punctual aspect.

There is no special way of expressing the notions of semelfactive or punctual aspect in the language.

2.1.3.3.2.1.11. Durative aspect.

The durative aspect is realized lexically by use of one of the stative verbs bil-ec 'to sit/be' or nij-ec 'to lie/be' functioning as the final verb in a paratactic series of serial verbs. In such a construction the preceding verb is marked only by the predicate marker, -i, (see 2.1.3.6.12.1.11.) and expresses the situation while the final stative verb carries the verbal suffixation for tense/aspect/mood etc. The preceding non-stative verb can also be reduplicated in some way to express iterative action (see 2.1.3.3.2.1.8.) or simultaneous action (see 2.1.3.3.2.1.2.). In either case it can be some part of the verb stem that is reduplicated or the object marker. For simultaneous action the stative verb can also be optionally reduplicated as well as the verb expressing the situation. A stative verb expressing durative aspect most commonly functions with a simultaneous action verb but can also function with a nonsimultaneous action verb. The paradigms below illustrate the possible combinations for the verb nu-ec 'to go' expressing both simultaneous action and durative aspect.

Simultaneous SS and durative aspect.

1s	nu-nu-i (bi-)bil-ig	'As I continue to go ..'
2s	nu-nu-i (bi-)bil-eg	'As you ..'
3s	nu-nu-i (bi-)bil-ei	'As he continues to go ..'

1d	nu-nu-i	(bi-)bil-i	'As we(2) continue to go ..'
2/3d	nu-nu-i	(bi-)bil-esi	'As you/they(2) " ..'
1p	nu-nu-i	(bi-)bil-eb	'As we " ..'
2/3p	nu-nu-i	(bi-)bil-eig	'As they " ..'

Simultaneous DS realis and durative aspect.

1s	nu-nu-i	(bi-)bil-igin	'As I continued to go ..'
2s	nu-nu-i	(bi-)bil-egan	'As you " ..'
3s	nu-nu-i	(bi-)bil-en	'As he " ..'
1d	nu-nu-i	(bi-)bil-owon	'As we(2) " ..'
2/3d	nu-nu-i	(bi-)bil-esin	'As you/they(2) " ..'
1p	nu-nu-i	(bi-)bil-oqon	'As we " ..'
2/3p	nu-nu-i	(bi-)bil-eigin	'As you/they " ..'

Simultaneous DS irrealis and durative aspect.

1s	nu-nu-i	(bi-)bil-emin	'As I will continue to go ..'
2s	nu-nu-i	(bi-)bil-em	'As you " ..'
3s	nu-nu-i	(bi-)bil-eb	'As he " ..'
1d	nu-nu-i	(bi-)bil-ohul	'As we(2) " ..'
2/3d	nu-nu-i	(bi-)bil-ebil	'As you/they(2) " ..'
1p	nu-nu-i	(bi-)bil-omun	'As we " ..'
2/3p	nu-nu-i	(bi-)bil-ebil	'As you/they " ..'

Examples of the durative aspect with nonsimultaneous verbs are given below. The relevant verb sequence is underlined in each case.

(452)	Sis	q-u	he-d-u-me-ig	
	grasshopper	hit-pred.	finish-3s-pred.-SS-3p	
	h-u-me-ig	cudun na	oso	na <u>gaban-du</u>
	come-pred.-SS-3p	place	tree indef.	at gather-3s-pred.
	<u>bil-i-me-ig</u>	age	togo-du-du	mad-ein,
	be-dur.-pred.-SS-3p	3p	discuss-3s-3s-it.	say-3p-rem.p
	"In	jobon	t-i-me-i	ja
	who	village	go up-pred.-SS-3s	firewood
	eh-i-ne-ce-b		sis	
	take-pred.-come	down-DS-3s	grasshopper	
	man-i	je-q-an?"		
	roast-pred.	eat-1p-fut.		

[3:3]

'They finished killing the grasshoppers and came to a tree-place and as they gathered together they discussed and said, "Who will go up to the village to bring down some firewood so that we can cook and eat the grasshoppers?"'

(453)	Ege na	kobol	me	bahic	oso	eu	i	edi.
	1p	of	custom	good	very	indef.	that	this like

Sain dana oso cal me-ce-b ege bel-i-mo-b
 time man indef. dead become-DS-3s 1p go-pred.-SS-1p

qa-qaj-i bil-eb due
 sim.-cry-pred. be-dur.-sim.-1p-SS dance

sil-i-me-b dana dewe-g heew-i
 sing-pred.-SS-1p man body-3s-pos. hold-pred.

bil-oqo-na.
 be-dur.-1p-pres.

[9:33]

'One of our best customs is like this. When a man dies we wail and dance as we touch his body.'

(454) Maha eu u-me-ig ono gaid-ein. Sihul
 land that get-pred.-SS-3p there always-3p-rem.p clan

ono fulus-du-du nij-i-a.
 there increase-3s-it. be-dur.-3s-tod.p

[10:32]

'They took that land and remained there. The clan continued to increase there.' (With the implication that they completely filled the land.)

(455) "Age nij-eig-a. Mala te-i-a. Ono sab
 2p lie-2p-tod.p chicken go up-3s-tod.p there food

madi bahic fe-i-a nu ji-ji nij-i-a.
 much very see-3s-tod.p for it.-eat be-dur.-3s-tod.p

Ja qee eh-i n-i-ade-i-aun,"
 firewood not take-pred. come down-pred.-2p-3s-neg.f

odi ma-ad-en.
 like say-3p-3s-rem.p

[3:11]

'"You stayed. The chicken went up. He is staying there to eat the good food he saw. He will not be bringing the firewood down to you," he told them.'

A fixed form of the stative verb bil-ec 'to be', bili, can follow a verb in the relative future tense (see 2.1.3.2.) to add a durative aspect to the meaning. The form bili remains the same regardless of the person and number of the subject of the relative future verb as illustrated by (454-460).

(456) Ija ho q-ug-e bili bahiw nu-ig-a.
 1s pig hit-1s-rel.f be-dur. forest go-1s-tod.p
'I went to the forest to kill a pig.'

(457) Hina ho q-og-a bili bahiw nu-ug-a.
 2s pig hit-2s-rel.f be-dur. forest go-2s-tod.p
'You went to the forest to kill a pig.'

(458) Uqa ho q-ugi-a bili bahiw nu-i-a.
 3s pig hit-3s-rel.f be-dur. forest go-3s-tod.p
'He went to the forest to kill a pig.'

- (459) Ele ho qo-w-a bili bahiw belo-w-a.
 1d pig hit-1d-rel.f be-dur. forest go-3d-tod.p
'We(2) went to the forest to kill a pig.'
- (460) Ale ho qo-was-a bili bahiw belo-was-a.
 2d pig hit-2d-rel.f be-dur. forest go-2d-tod.p
 3d 3d 3d
'You/they(2) went to the forest to kill a pig.'
- (461) Ege ho qo-q-a bili bahiw belo-q-a.
 1p pig hit-1p-rel.f be-dur. forest go-1p-tod.p
'We went to the forest to kill a pig.'
- (462) Age ho qo-qag-a bili bahiw bele-ig-a.
 2p pig hit-2p-rel.f be-dur. forest go-2p-tod.p
 3p 3p 3p
'You/they went to the forest to kill a pig.'
- (463) Od-en ono dec caja hia-g bem
 do-3s-rem.p there from woman friend-3s-pos. tree spec.
 me qee cus-ec eu eh-u-d-i
 good not rub-NOM/ADJ that take-pred.-3s-pred.
 eh-i n-en, qaga-du-gi-a bili.
 take-pred. come down-3s-rem.p hit-3s-3s-rel.f be-dur.
 [19:25]
*'Then he took the woman's friend who was painted with
 the evil red paint of the bem tree from there and
 brought her down intending to kill her.'*
- (464) Uqa lotoc oso faj-igi-a bili wau-g
 3s cloth indef. buy-3s-rel.f be-dur. stomach-3s-pos.
 ben tau-en.
 big stand-3s-rem.p
 [32:5]
'He stood there proudly intending to buy a garment.'

2.1.3.3.2.1.12. Simultaneous aspect.

Simultaneous action verbs are described under imperfective aspect (see 2.1.3.2.1.2.).

2.1.3.3.2.1.14. Telic situation.

There is no special way of distinguishing a telic situation from an atelic situation nor is there a contrast between telic and atelic verbs.

2.1.3.3.2.2.1. Combinations of aspectual values.

Only the grammatical categories of aspect i.e. those categories that are marked morphologically on the verb, are considered here under combinations of aspectual values. These are perfective, imperfective, habitual and iterative aspect. Other categories of aspect are all expressed lexically. Only iterative aspect can combine with the other grammatical categories of aspect and only then with the categories of perfective and habitual aspect.

Iterative + perfective aspect.

- (465)Age qa qu-qu ece-bil cal me-i-a.
 3p dog it.-hit DS-3p dead become-3s-tod.p
'They hit the dog many times and it died.'

Iterative + habitual aspect.

- (466)Age qa qu-qu olo-ig.
 3p dog it.-hit hab.p-3p
'They used to hit the dog many times.'

2.1.3.3.2.2.2. Combinations of aspectual values with the various voices, tenses, moods and finite and nonfinite forms.

2.1.3.3.2.2.2.1. Voice.

All categories of aspect are expressed in the active voice. There is no passive voice.

2.1.3.3.2.2.2.2. Tense.

The grammatical categories of perfective and imperfective aspect can only occur with nonfinite verbs (see 2.1.3.5.). However, these verbs are dependent on a final (finite) verb for tense desinence so indirectly a verb marked for perfective or imperfective aspect can occur with any tense (see 2.1.3.3.2.1.1-2.). The grammatical category of habitual aspect can only occur with the habitual past tense (see 2.1.3.3.2.1.3.). The grammatical category of iterative aspect can occur with any tense (see below and 2.1.3.3.2.1.8.). The present tense has inherent progressive aspect (see 2.1.3.2.1.2. and 2.1.3.3.2.1.5.) and the today's past tense has inherent perfect aspect (see 2.1.3.3.1.).

- (467)Age qa qu-qu ein.
 dog it.-hit 3p-rem.p
'They hit the dog many times.'
- (468)Age qa qu-qu eig-an.
 dog it.-hit 3p-yest.p
'They hit the dog many times.'
- (469)Age qa qu-qu eig-a.
 dog it.-hit 3p-tod.p
'They hit the dog many times.'
- (470)Age qa qu-qu ol-oig.
 dog it.-hit hab.p-3p
'They used to hit the dog many times.'
- (471)Age qa qee qu-qu el-ein.
 dog not it.-hit neg.p-3p
'They did not hit the dog many times.'
- (472)Age qa qu-qu egi-na.
 dog it.-hit 3p-pres.
'They are hitting the dog many times.'

(473)Age qa qu-qu oqag-an.
 dog it.-hit 3p-fut.
'They will hit the dog many times.'

(474)Age qa qee qu-qu owa-i-n.
 dog not it.-hit 3p-neg.f
'They will not hit the dog many times.'

2.1.3.3.2.2.3. Moods.

The only categories of mood that can be marked on the verb are imperative mood (see 1.1.1.3.), conditional mood (see 2.1.3.4.4.), prescriptive mood (see 2.1.3.4.19.) and contrafactual mood (see 2.1.3.4.20.) and in this respect the only combinations of aspect and mood permitted are as follows:

Perfective aspect + conditional mood.

(475)Age qa q-u-fe-ig cal m-igi-an.
 3p dog hit-pred.-CD/SS-3p dead become-3s-fut.
'If they hit the dog it will die.'

Iterative aspect + imperative mood.

(476)Qa qu-qu eig-a.
 dog it.-hit 3p-imp.
'Hit the dog many times.'

Iterative aspect + conditional mood.

(477)Age qa qu-qu i-fe-ig cal m-igi-an.
 3p dog it.-hit pred.-CD/SS-3p dead become-3s-fut.
'If they hit the dog many times it will die.'

Iterative aspect + prescriptive mood.

(478)Age qa qu-qu o-u-b.
 3p dog it.-hit contr.-3p
'They should have hit the dog many times.'

Iterative aspect + contrafactual mood.

(479)Age qa qu-qu o-u-b mi cal mo-u-b.
 3p dog it.-hit contr.-3p CR dead become-contr.-3p
'If they had hit the dog many times it would have died.'

2.1.3.3.2.2.4. Finite and nonfinite forms.

The aspectual categories of perfective and imperfective can only occur on a nonfinite verb form (see 2.1.3.3.2.1.1-2. and 2.1.3.5.). The aspectual category of habitual can only occur on a finite verb marked for habitual past tense (see 2.1.3.2. and 2.1.3.3.2.1.3.). The aspectual category of iterative can occur with any finite verb form (see 2.1.3.

3.2.2.2.2.) and any nonfinite verb form excluding imperfective aspect (see 2.1.3.2.2.1. and 2.1.3.3.2.2.2.3.) but including the infinitive form of the verb (see below).

(480) Age qa qu-qu ec nu ho-ig-a.
 3p dog it.-hit inf. for come-3p-tod.p
 'They came to hit the dog many times.'

2.1.3.4. Mood.

Mood is a category marked on the verb and is defined by Crystal (1985:198) as a set of syntactic/semantic contrasts signalled by alternative paradigms of the verb. These semantic contrasts can have a wide range including uncertainty, definiteness, vagueness, possibility, etc. Rescher (1968) defines the following eight types as conceptual domains of modality:

- (1) Alethic modalities, relating to the notion of truth itself.
- (2) Epistemic modalities, relating to knowledge and belief.
- (3) Temporal modalities, relating to time.
- (4) Boulomaic modalities, relating to desire.
- (5) Deontic modalities, relating to duties.
- (6) Evaluative modalities.
- (7) Causal modalities.
- (8) Likelihood modalities.

In Amele mood is a syntactic and semantic category expressing a wide range of meaning on the part of the speaker such as supplication, conditionality, permission, emphasis, desire, doubt, apprehension, contrafactuality and regret. Only three of these moods; imperative, conditional and contrafactual can be marked morphologically on the verb. Most categories of mood are realized by a particular mood particle postposed to the sentence. The interrogative mood can be expressed either by a postposed particle for yes-no questions or by a question word. There are seventeen categories of mood. Of these thirteen are expressed morphologically by a mood particle postposed to the sentence. These are:

<u>Mood.</u>	<u>Particle.</u>
Certain apprehensive	dain
Conditional	fi
Contrafactual	mi
Dubitive	fa
Emphatic	om/ijom
Habitual	nu
Hortatory	nu
Interrogative	fo
Permissive	le
Probable apprehensive	do
Regretful	da
Supplicative	mo
Vocative	o or e

2.1.3.4.1. Indicative mood.

A verb in the indicative mood makes a statement and is the unmarked mood. There are nine tense paradigms in the indicative mood: present, today's past, yesterday's past, remote past, habitual past, negative past, future, relative future and negative future (see 2.1.3.2.).

2.1.3.4.2. Interrogative mood.

The interrogative mood expressing a yes-no question is realized by the interrogative mood particle *fo* postposed to the sentence. The interrogative mood can also be realized by a question-word (see also 1.1.1.2.1-2.).

(481) *Hina cabi na nuegan fo?*
 2s garden to go-2s-fut. QU
 'Will you go to the garden?'

2.1.3.4.3. Supplicative mood.

The supplicative mood expresses a request with overtones of pleading or supplication and is realized by the supplicative mood particle *mo* postposed to the sentence. The pitch of the voice is generally raised over the whole sentence.

(482) *Odo-co-bil, "Aa ite-si-a mo," al-en.*
 do-DS-3d 1s-2d-imp. SU 3d-3s-rem.p [18:31]
 'They did that and then he said to them, "Please give it to me."'

2.1.3.4.4. Conditional mood.

The conditional mood expresses a hypothetical situation in present or future time and is realized by the conditional mood particle *fi* 'if' occurring clause finally. Where the conditional mood occurs on a nonfinal clause it is required that the clause final verb be marked for perfective aspect (sequential action). Imperfective aspect (simultaneous action) marked on the verb is ungrammatical as in (486) for example. Where the sequential action is different subject following, the conditional mood particle occurs externally postposed to the clause. Where the sequential action is same subject following, the conditional mood particle is incorporated in the verb and replaces the SS marker *-me*. In this way conditional mood can be marked morphologically on the verb. In the unmarked order the conditional clause precedes, and is subordinated to, the superordinate clause but the order can be reversed for pragmatic or stylistic effect (see also 1.1.2.4.2.5.).

(483) *Ege camac cagin jo-qo-na fi ege ahul wa*
 1p sago sticky eat-1p-pres. CD 1p coconut water
 geh qee qelo-qo-na. Ege camac wa wa
 much not throw-1p-pres. 1p sago water water

jo-qo-na fi ege ahul wa geh ca
eat-1p-pres. CD 1p coconut water much with

qelo-qo-na.
throw-1p-pres.

[31:12-13]

'If we are eating sticky sago we don't throw in lots of coconut juice but if we are eating watery sago we throw in lots of coconut juice.'

(484) Hina sab qee o-co-m fi ija man-ec nu ihoc qee.
2s food not get-DS-2s CD 1s roast-inf. for able not
'If you don't get the food I won't be able to cook it.'

(485) "Qaga-h-ig-en," do-n, "Qee j-i
kill-2s-1s-fut. 3s-3s-rem.p not eat-pred.

he-du-f-eg."
finish-3s-SS/CD-2s

[19:39]

'I will kill you if you don't eat her all up.'

(486) *Hina co-cob-og fi ho cus f-i-me-g
2s sim.-walk-2s-SS CD pig wild see-pred.-SS-2s

qo-g-a.
hit-2s-imp.

'If as you are walking you see a wild pig shoot it.'

2.1.3.4.5. Imperative mood.

The imperative mood, both positive and negative (prohibitive mood), is one of three categories of mood that can be marked morphologically on the verb and is described under 1.1.1.3.

2.1.3.4.6. Optative mood.

The optative or desiderative mood has three expressions; impulsive, habitual and contrafactual, and all three are realized by the impersonal verb construction (see also 2.1.3.8.).

(i) The optative-impulsive mood expresses an immediate desire or wish to do something and is realized by an impersonal construction with an imperative VP functioning as object complement, expressing the impulse, followed by impersonal verb suffixation (see 2.1.3.8.).

(487) Ija nu-ug-a te-na.
1s go-2s-imp. 1s-3s-pres.
'I want to go'

(488) Age ceta ceh-ag-a ade-na.
3p yam plant-2s-imp. 3p-3s-pres.
'They want to plant yams.'

(ii) The optative-habitual mood expresses a continuing desire to do something and is realized by an impersonal verbal construction with the noun gale "desire" functioning

as the subject NP followed by impersonal verbal suffixation (see 2.1.3.8.). The habitual desire is expressed by a postpositional phrase functioning as object complement. The verb within the PP must be in the infinitive form.

(489) Ija ceb j-ec nu gale te-na.
1s betelnut eat-inf. for desire 1s-3s-pres.
'I like to eat betelnut.'

(iii) The optative-contrafactual mood expresses an unfulfilled desire and is realized by an impersonal construction with the matrix impersonal verb marked for contrafactual mood. The object complement is realized by a finite VP (see 2.1.3.8.).

(490) Ija nue-em to-u-b.
1s go-1s-rem.p 1s-contr.-3s
'I would like to have gone.'

2.1.3.4.7. Intentional mood.

There is not a category of intentional mood as such but purpose or intention can be expressed by an adverbial clause of purpose (see 1.1.2.4.2.5.).

2.1.3.4.8. Debitive mood.

The debitive mood expresses necessary obligation and is realized by an adverbial phrase containing an infinitive verb expressing the obligation followed by the emphatic word *bahic* 'must' (see also 1.1.2.4.2.13.).

(491) Hina uqa na mana cesel-i ut-ec bahic ut-eg-an.
2s 3s of axe return-pred. 3s-inf. emph. 3s-2s-fut.
'You must give him back his axe.'

The unmarked position for the debitive AdvP is immediately preceding the verb but it can be front-shifted or end-shifted for purposes of topicality.

(492) Ija nu-ec bahic nu-ig-en.
1s go-inf. emph. go-1s-fut.

(493) Nu-ec bahic ija nu-ig-en.
go-inf. emph. 1s go-1s-fut.

(494) Ija nu-ig-en nu-ec bahic.
1s go-1s-fut. go-inf. emph.

'I must go.'

There is no distinction between moral and physical obligation nor between different degrees of obligation.

2.1.3.4.9. Potential mood.2.1.3.4.9.1. Physical ability and permissive mood.

Physical ability is realized by an equative clause construction and the permissive mood is realized by a mood particle.

(i) Physical ability is realized by an equative clause with the adjective *ihoc* 'able' functioning as the predicative element. This can be modified by the negative particle *qee* 'not'. The predicative complement is realized by a postpositional phrase which expresses the physical ability itself.

(495) *Ija nu-ec nu ihoc.*
1s go-inf. for able
'I am able to go.'

(496) *Uqa hu-gi-an nu ihoc qee.*
3s come-3s-fut. for able not
'He will not be able to come.'

(ii) The permissive mood expresses the speakers permission for the hearer to proceed with his/her course of action and is realized by the permissive mood particle *le* postposed to the sentence. The verb must also be marked for imperative mood.

(497) *Caja eu ma-al-en, "Cois to-ad-i*
woman that say-3d-3s-rem.p OK follow-3p-pred.

bele-si-a le," al-en.
go-2d-imp. PM 3d-3s-rem.p
[10:18]
'That woman told them, "OK you can go and follow them."

2.1.3.4.9.2. Learned ability.

There is no formal way of expressing learned ability but this notion can be expressed by the compound VP *ihoc m-ec* 'to become able'.

(498) *Aria ho bu-busal-eb qo-qag-an nu*
alright pig sim.-run away-3s-DS hit-3p-fut. for

eu ha ihoc mo-lo-ig.
that too able become-hab.p-3p
[16:24]
'Alright they also used to practise to be able to kill a pig on the run.'

2.1.3.4.10. Degrees of certainty.

Besides making an assertion in the unmarked indicative mood (see 2.1.3.4.1.) a speaker can make an emphatic assertion or a doubtful assertion both of which are marked by mood particles postposed to the sentence.

(i) Emphatic assertion expresses the belief that the speaker

is completely sure of the truth of his statement and is realized by the emphatic mood particle *om/ijom* postposed to the sentence. Emphatic stress can also be placed on the mood particle itself.

(499) *O*his ou na nij-igi-na om.
above that at lie-1s-pres. EM

[21:60]

'I really sleep up there!'

(500) *U*qa ma-do-n, "Hina gaim heew-ig-a eu
3s say-3s-3s-rem.p 2s crab hold-1s-tod.p that

man-i-te-te-m ija sab met-ig-en,"
roast-pred.-sim.-1s-2s-DS 1s food peel-1s-fut.

do-n. Odo-co-b sab met-en ijom.
3s-3s-rem.p do-DS-3s food peel-3s-rem.p EM

[17:25-26]

'She told him, "You cook the crab I caught for me while I peel the food." Then she really peeled the food.'

(ii) Doubtful assertion / dubitive mood expresses the notion that the speaker is uncertain as to the truth of his statement and is realized by the dubitive mood particle *fa* postposed to the sentence or clause.

(501) *I*ja uqa nu-i-a fa i-m-ig qee ho-l-om.
1s 3s go-3s-tod.p DB pred.-SS-1s not come-neg.p-3s
'I thought that maybe he had gone so I didn't come.'

(502) *O*do-co-b ma-do-n, "Cois nu-i buj-ug-a,"
do-DS-3s say-3s-3s-rem.p OK go-pred. defecate-2s-imp.

do-n. N-u ma-do-n, "I na
3s-3s-rem.p go down-pred. say-3s-3s-rem.p this at

buj-ig-e fo?" do-n. "Eu
defecate-1s-rel.f QU 3s-3s-rem.p that

as-in celum u je-na na,"
grandp.-2s-pos. leaves get-pred. eat-3s-pres. at

do-n. Haun n-u "I na fa?,"
3s-3s-rem.p again go down-pred. this at DB

do-n. "Qee eu dod-in cufel
3s-3s-rem.p no that grt.grandp.-2s-pos. leaves

u je-na na," do-n. N-u
get-pred. eat-3s-pres. at 3s-3s-rem.p go down-pred.

"I na fa?" do-n. "Cois o ono o," do-n.
this at DB 3s-3s-rem.p OK there 3s-3s-rem.p

[18:11-17]

'Then she told her, "OK go and defecate." So she went down and said to her, "Shall I defecate here?" "That is where your grandparent gets his edible leaves," she told her. Again she went down and said to her, "Maybe here?" "No!" she said, "That is where your great

grandparent gets his edible leaves." Again she went down and said to her, "Maybe here?" "OK there," she told her."

2.1.3.4.11. Authority for assertion.

There is no distinct morphological category with which a speaker can indicate his authority for making an assertion.

2.1.3.4.12. Hortatory mood.

The hortatory mood expresses an exhortation to do something and is realized by the hortatory mood particle *nu* postposed to the sentence. The final verb in the sentence must be in the infinitive form.

(503) *Cois bel-ec nu.*
 OK go(pl)-inf. HO
 'OK let us go.'

(504) *Sab j-ec nu.*
 food eat-inf. HO
 'Let's eat!'

2.1.3.4.13. Monitory mood.

There is no category of monitory mood as such but warning or prohibition can be expressed as follows:

(i) Warning is expressed by the imperative mood (see 1.1.1.3.).

(505) *Batut f-ag-a!*
 danger see-2s-imp.
 'Look out!'

(506) *Cisa qo-g-a!*
 clear hit-2s-imp.
 'Get out the way!'

(ii) The prohibitive mood warns a person not to take a certain course of action and is realized by the negative future tense marked on the verb and the prohibitive particle *cain* 'don't' preposed to the verb (see 1.1.1.3.).

(507) *Wa na cain n-ag-a-u-n!*
 water in don't go down-2s-neg.f
 'Don't go down into the river!'

2.1.3.4.14. Narrative mood.

There is no distinct category of narrative mood but the habitual past tense or present (progressive) tense is often used to express a narrative mood in legends or procedural texts rather than the remote past tense.

2.1.3.4.15. Consecutive mood.

There is no distinct morphological category expressing consecutive mood but notions of consecutiveness and concurrency are expressed by the medial verb marked for perfective and imperfective aspect respectively (see 2.1.3.3.2.1.1-2.).

2.1.3.4.16. Contingent mood.

There is no distinct morphological category expressing contingent mood but a change from real world to contingent (possible) world and vice versa can be indicated by the switch-reference morphology (see 2.1.3.6.7.).

2.1.3.4.17. Apprehensive mood.

Apprehensive mood can be expressed either as certain apprehension or probable apprehension and each is realized by different morphological and syntactic means.

(i) The certain apprehensive mood expresses the notion that a certain course of action will result in certain consequences which may be good or bad and is realized by the apprehensive mood particle *dain* postposed to the sentence. The final verb in the sentence must be conjugated in either the infinitive form or the future or negative future tense. When the negative future tense is used the mood particle *dain* can be optionally deleted.

(508) *Batut f-ag-a. Caileg get-ih-ec /*
see-2s-imp. bamboo cut-2s-inf.

get-ih-i-aun (dain).
cut-2s-3s-neg.f CAP
'Watch out lest the bamboo cut you.'

(509) *Ohis tob-ec we qee. Cun beges-ade-ce-b*
above climb-inf. able not foot slide-dist.-DS-3s

n-i q-it-ec dain.
go down-pred. hit-1s-inf. CAP

[21:59]

'I am unable to climb up above lest my feet slide everywhere and I fall and get hurt.'

It is interesting to note that in this type of modality it is not possible to bring about the possible consequences of one's action upon oneself. So in (510) below a different subject marker must be used indicating that the subject of the first verb is different from the subject of the following paratactic verb sequence. If a same subject marking is used then this is ungrammatical as in (511).

(510) *Na tobo-co-min ton-i q-it-ec dain.*
tree climb-DS-1s fall-pred. hit-1s-inf. CAP
'If I climb the tree I might fall and get hurt.'

(511) **Na tob-i-m-ig ton-i q-it-ec dain.*
tree climb-pred.-SS-1s fall-pred. hit-1s-inf. CAP

The certain apprehensive sentence can also function as a subordinated clause and in this case the particle *dain* functions as a subordinating conjunction. Unlike other subordinate clauses (see 1.1.2.) the apprehensive subordinate clause occurs sentence finally instead of initially. The subordinated clause is set off in square brackets in (512) below.

- (512) Wa na no-co-min [waga q-it-i
 water in go down-DS-1s crocodile hit-is-pred.
 j-ec dain.]
 eat-inf. CAP
'If I go down into the river the crocodile will eat me.'

With other subordinated clauses the scope of the subordination is determined by the placement of the subordinator but with the subordinated apprehensive clause the subordinator occurs sentence finally and therefore the scope of the subordinated 'lest' clause is determined by intonation - a slight pause occurring at the beginning of the subordinated clause.

- (513) Ija Madang nu-i-m-ig wal-i fe-ce-min /
 1s go-pred.-SS-1s brother-1s see-DS-1s
 ija qaig nu sisil-t-ec dain.
 1s money for ask-1s-inf. CAP
'If I go to Madang and see my brother he might ask me for money.'

- (514) Ija Madang nu-i-m-ig / wal-i fe-ce-min
 1s go-pred.-SS-1s brother-1s see-DS-1s
 ija qaig nu sisil-t-ec dain.
 1s money for ask-1s-inf. CAP
'If I go to Madang I might see my brother and he will ask me for money.'

(ii) The probable apprehensive mood expresses the notion that a particular consequence will most likely occur if the appropriate action is not taken to avoid such a consequence and is realized by the apprehensive mood particle *do* postposed to the sentence.

- (515) Baum o hina mahuc h-og-a e.
 2s quickly come-2s-imp.
 PMU wele nu-igi-an do.
 already go-3s-fut. PAP
'O Baum come quickly or else the PMU⁴ will go.'

2.1.3.4.18. Habitual mood.

The habitual mood expresses the notion of a situation that extends over a period of time in the present and is realized by the habitual mood particle *nu* postposed to the sentence. The verb in the sentence must be conjugated in the present tense (cf. the habitual past tense/aspect 2.1.3.

2.1.3.1. and 2.1.3.3.2.1.3.).

- (516) Uqa nui-na nu.
 3s go-3s-pres. HB
'He always goes. / He is always going.'

2.1.3.4.19. Prescriptive mood.

The prescriptive mood suggests a course of action that should be followed and is realized by the contrafactual mood marked on the verb but without the contrafactual mood particle *mi* postposed to the sentence (see 2.1.3.4.20. for full paradigms).

- (517) Hina uqa na mana cesel-i ut-ou-m.
 2s 3s of axe return-pred. 3s-contr.-2s
'You should give him back his axe.'
- (518) Ija sab mano-u-m qa qee mane-l-om.
 1s food roast-contr.-1s but not roast-neg.p-1s
'I should have cooked the food but I did not.'
- (519) Ija sab mano-u-m qa qee man-ig-aun.
 1s food roast-contr.-1s but not roast-1s-neg.f
'I should cook the food but I will not.'

2.1.3.4.20. Contrafactual mood.

The contrafactual mood is marked both on the verb and by a sentence postposed mood particle *mi* 'if'. The marking on the verb is as follows:

- (i) The negative future marker *-u* is infixed to the verb following the verb stem and preceding the subject person/number agreement marker.
- (ii) A particular set of subject person/number markers are unique to the contrafactual mood although they bear some resemblance to the sequential and simultaneous irrealis DS markers and could be reduced forms of these markers.

Exemplary paradigms are given below for the verbs *f-ec* 'to see' and *h-oc* 'to come'.

1s	fo-u-m	<i>'I would have seen.'</i>
2s	fo-u-m	<i>'You would have seen.'</i>
3s	fo-u-b	<i>'He/she would have seen.'</i>
1d	fo-u-h	<i>'We(2) would have seen.'</i>
2/3d	fo-u-b	<i>'You/they(2) would have seen.'</i>
1p	fo-u-m	<i>'We would have seen.'</i>
2/3d	fo-u-b	<i>'You/they would have seen.'</i>
1s	ho-u-m	<i>'I would have come.'</i>
2s	ho-u-m	<i>'You would have come.'</i>
3s	ho-u-b	<i>'He/she would have come.'</i>
1d	ho-u-h	<i>'We(2) would have come.'</i>
2/3d	ho-u-b	<i>'You/they(2) would have come.'</i>

1p ho-u-m 'We would have come.'
 2/3p ho-u-b 'You/they would have come.'

The subordinate sentence with the contrafactual mood particle following must always have the contrafactual mood marked on the final verb of the sentence. In such a construction the verb of the matrix sentence can have any tense/aspect/mood marking including contrafactual mood.

(520) Dalum aig eu cenal batac na
 gourd seed that Tahitian chestnut branch on
 two-u-b mi ija n-i mede-mi
 stand-contr.-3s CR 1s come down-pred. nose-1s-pos.
 geh bahic ce-b cal mo-u-m.
 much very DS-3s dead become-contr.-1s

[14:11]

'If that gourd seed had been on the Tahitian chestnut branch it would have come down and really hit my nose and I would have died.'

(521) Hina qasil b-i mec-i-to-u-m mi
 2s morning come up-pred. look-pred.-1s-contr.-2s CR

ija ene nij-ig-a.
 1s here be-1s-tod.p

[21:91]

'If you had come up this morning to look for me I was here.'

(522) Ija Anut mi qa dalam eu cenal batac na
 1s God CR but gourd that galip branch on

mo-u-m.
 put-contr.-1s

[14:7]

'But if I were God I would have put that gourd on the galip tree.'

2.1.3.4.21. Regretful mood.

The regretful mood expresses the speaker's regret for what he is saying and is realized by the regretful mood particle *da* postposed to the sentence.

(523) Ija sain cecela sum-ih-ig-a qee nu ija
 1s time long wait-2s-1s-tod.p not for 1s

cu-cul-h-i l-i-m-ig
 it.-leave-2s-pred. go-pred.-SS-1s

nu-ad-ig-a da.
 go-dist.-1s-tod.p RG

'I waited for you for a long time but in vain. So I left and went without you.'

2.1.3.4.22. Vocative mood.

The vocative mood expresses the notion of friendly calling or hailing and is realized by either of the vocative mood particles *o* or *e* postposed to the sentence.

(524) Cois o.
OK VO
'That's OK.'

(525) H-og-a e.
come-2s-imp. VO
'Come.'

2.1.3.5. Finite and nonfinite forms.

A finite verb is marked for tense desinence and a nonfinite verb is not marked for tense desinence. There are four basic types of nonfinite verb: infinitive, which is not marked for tense/aspect/mood, sequential medial verb, which is marked for perfective aspect, simultaneous medial verb, which is marked for imperfective aspect and the verb marked for contrafactual mood. A fifth type of nonfinite verb occurs where a verb or clause is nominalized or adjectivalized (see (v) below).

(i) The infinitive form is the citation form of the verb and also occurs in sentences expressing the moods: optative-habitual, debitive, physical ability, hortatory, certain apprehension, and apparent mood. It can also occur in a subordinated clause expressing purpose (see 1.1.2.4.2.4.). The infinitive form is comprised of the verb stem, which can include object markers, followed by the infinitive suffix, either *-ec* or *-oc*, depending upon the class of the verb. While most verbs take the suffix *-ec* a few verbs take *-oc* in their infinitive form. No phonological or morphological motivation is apparent for this small grammatical class of verbs which includes:

cac-oc	'to wipe away'
cacit-oc	'to spit out'
cag-oc	'to cut across'
cih-oc	'to poke'
cod-oc	'to beat'
dad-oc	'to heal'
d-oc	'to know/understand'
foj-oc	'to vomit'
h-oc	'to come'
n-oc	'to go down'
oc	'to get(sg)'
od-oc	'to do'
q-oc	'to hit'

Where the verb stem includes object markers the infinitive marker can be *-ec* or *-oc* depending on the object marker preceding.

iwal-t-ec	'to teach me'
iwal-h-ec	'to teach you'
iwal-d-oc	'to teach him/her'

iwal-1-ec 'to teach us(2)'
 iwal-a1-ec 'to teach you/them(2)'

 iwal-g-ec 'to teach us'
 iwal-ad-ec 'to teach you/them'

The verb *iwaldoc* belongs to a class of verbs that must include an object marker in the infinitive form (see 2.1.3.6.2.2-3. for further details).

(ii) The sequential medial verb has two forms; one expressing same subject following and one expressing different subject following (see also 2.1.3.3.2.1.1. and 2.1.3.6.7.):

(a) The sequential same subject verb occurs in a coordinate verb chain (see 1.3.1.1.4. and 2.1.3.3.2.1.13.) and is structured as follows:

[2]

Verb stem + $\left[\begin{array}{c} \text{Object} \\ \text{marker} \end{array} \right]$ + $\left[\begin{array}{c} \text{Object} \\ \text{marker} \end{array} \right]$ + Pred. marker + $\left\{ \begin{array}{c} \text{SS} \\ \text{CD} \end{array} \right\}$ + Subject agr.

There is a verb stem, which can include optional or obligatory object markers depending on the class of the verb, followed by the predicate marker, -i, followed by the same subject (SS) marker, -me, or, if the verb is in the conditional mood, the conditional mood marker, -fi (see 2.3.1.4.4.), followed by the subject person-number agreement marker (class 1). This nonfinite medial verb is dependent on the final finite verb in the sentence for tense desinence (see 2.1.3.3.2.1.1. for full paradigms). The sequential medial SS verb can also occur in various reduced forms the purpose of which appears to be partly to facilitate ease of speech production. A sequential SS verb must occur as a reduced form of type (1) when it occurs as the nonfinal verb in a paratactic verb series (see 2.1.3.7.).

The alternatives are given below for the verbs *f-ec* 'to see' and *h-oc* 'to come':

(1) deletion of SS marker + subject agr.

1s	f-i-m-ig	->	fi	h-u-m-ig	->	hu
2s	f-i-me-g	->	fi	h-u-me-g	->	hu
3s	f-i-me-i	->	fi	h-u-me-i	->	hu
1d	f-i-me-u	->	fi	h-u-me-u	->	hu
2/3d	f-i-me-si	->	fi	h-u-me-si	->	hu
1p	f-i-me-b	->	fi	h-u-me-b	->	hu
2/3p	f-i-me-ig	->	fi	h-u-me-ig	->	hu

(2) deletion of predicate and SS marker

1s	f-i-m-ig	->	f-ig	h-u-m-ig	->	h-ug
2s	f-i-me-g	->	fe-g	h-u-me-g	->	ho-g
3s	f-i-me-i	->	fe-i	h-u-me-i	->	ho-i
1d	f-i-me-u	->	fe-u	h-u-me-u	->	ho-u
2/3d	f-i-me-si	->	fe-si	h-u-me-si	->	ho-si
1p	f-i-me-b	->	fe-b	h-u-me-b	->	ho-b
2/3p	f-i-me-ig	->	fe-ig	h-u-me-ig	->	ho-ig

(526) Gis cal-i hu-hu bil-i
air come out-pred. it.-come be-dur.-pred.

folo-en.
flatten-3s-rem.p

[27:18]

'The air came out and the tyre went down.'

(527) N-eb Waliom cu-cul-eb agas-om.
go down-1p sim.-leave-1p-SS stick-1p-rem.p

[27:16]

'We went on down and as we left Waliom we got stuck.'

(b) The sequential different subject verb occurs in a coordinate verb chain and is structured as follows:

[3]

Verb + $\left[\begin{array}{c} \text{Object} \\ \text{marker} \end{array} \right]$ + $\left[\begin{array}{c} \text{Object} \\ \text{marker} \end{array} \right]$ + Pred. + DS + Subject
stem + marker + marker + marker + agr.

There is a verb stem, which can include optional or obligatory object markers depending on the class of the verb, followed by the different subject (DS) marker, -cV, where V is a harmonic epenthetic vowel, followed by the subject person-number agreement marker (class 6). This nonfinite medial verb is dependent on the final finite verb in the sentence for tense desinence (see 2.1.3.3.2.1.1. for full paradigms).

(iii) The simultaneous medial verb has three forms:

(a) The simultaneous same subject verb occurs in a coordinate verb chain (see 1.3.1.1.4.) and has one of the structures shown below depending upon the verb class to which it belongs (see 2.1.3.3.2.1.2. for lists of verb classes and full paradigms). This nonfinite medial verb is dependent on the sentence final finite verb for tense desinence.

The structure of the verb is either

[4]

redup. Verb stem + Subject agr.
marker(class 1)

or

[5]

Verb stem + redup. Subject agr.
marker(class 1)

or

[6]

Verb stem + redup. Object + Subject agr.
marker marker(class 1)

(b) The realis simultaneous different subject verb occurs in a coordinate verb chain (see 1.3.1.1.4.) and has one of the structures shown below depending upon the verb class to which it belongs (see 2.1.3.3.2.1.2. for lists of verb classes and full paradigms). This nonfinite medial verb is dependent on the sentence final finite verb for tense desinence and the tense of the final verb must be nonfuture.

The structure of the verb is either

[7]

redup. Verb stem + Subject agr.
marker(class 2)

or

[8]

Verb stem + redup. Subject agr.
marker(class 2)

or

[9]

Verb stem + redup. Object + Subject agr.
marker marker(class 2)

(c) The irrealis simultaneous different subject verb occurs in a coordinate verb chain (see 1.3.1.1.4.) and has one of the structures shown below depending upon the verb class to which it belongs (see 2.1.3.3.2.1.12. for lists of verb classes and full paradigms). This nonfinite medial verb is dependent on the sentence final finite verb for tense desinence and the tense of the final verb must be future.

The structure of the verb is either

[10]

redup. Verb stem + Subject agr.
marker(class 6)

or

[11]

Verb stem + redup. Subject agr.
marker(class 6)

or

[12]

Verb stem + redup. Object + Subject agr.
 marker marker(class 6)

(iv) The contrafactual verb is marked for contrafactual mood only and is not marked for tense (see 2.1.3.3.2.1.20. for full paradigms). It occurs in the optative-contrafactual mood (2.1.3.4.6.), the prescriptive mood (2.1.3.4.19.) and the contrafactual mood (2.1.3.4.20.).

(v) A verb, verb phrase, clause or sentence is nominalized or adjectivalized by the replacement of the subject person-number and tense inflection on the verb by the derivational suffix *-ec* (see 1.1.1.1., 1.1.2.2., 1.2.5.2.1., 2.2.1.2. and 2.2.3.2.).

2.1.3.5.1. Nonfinite verbal forms and voice.

All nonfinite verbal forms occur in the active voice. There is no passive voice.

2.1.3.5.2. Nonfinite verbal forms and tense.

Nonfinite verbal forms cannot be specified for tense desinence by definition.

2.1.3.5.3. Nonfinite verbal forms and aspect.

The aspectual categories of perfective and imperfective can only occur on nonfinite verbs (see 2.1.3.3.2.1.1-2.). The aspectual category of iterative can occur on nonfinite or finite verb forms (see 2.1.3.3.2.1.8.). The aspectual category of habitual can only occur on finite verb forms (see 2.1.3.3.2.1.3.).

2.1.3.5.4. Nonfinite verbal forms and mood.

The modal categories of prescription and contrafactuality can only occur on nonfinite verbs (see 2.1.3.4.20.). When conditionality is marked on the verb the verb must be nonfinite (see 2.1.3.4.4.). The indicative mood can occur with all nonfinite and finite verb forms. No other category of mood is marked on the nonfinite verb but some categories of mood require the verb to be in an infinitive form viz. optative-habitual, debitive and hortatory. The verb can optionally be infinitive for the certain apprehensive mood. The remaining moods require the verb to be finite.

2.1.3.6. Person and number.

The verbal agreement categories of first, second and third person, and singular, dual and plural number are marked on the verb for the three syntactic categories of subject, direct object and indirect object.

2.1.3.6.1. Components coded in the verb.

The subject is the only category that is obligatorily coded in all finite verbs. The subject is normally encoded in all nonfinite medial verbs but can be omitted in the sequential SS verb (see 2.1.3.5.). Also the subject must be encoded in the nonfinite verb marked for contrafactual mood. For details of direct object and indirect object coding see 2.1.3.6.2.2-3. below.

2.1.3.6.2. Marking of agreement.

Subject agreement is indicated by a suffix on the verb and there are eight classes of subject agreement suffix. Object (direct and indirect) agreement is indicated by a pronominal clitic attached to the stem of the verb.

2.1.3.6.2.1. Subject agreement marking.

All finite verbs must take subject person-number agreement suffixation. Only the infinitive form of the verb does not take subject person-number agreement suffixation (see 2.1.3.5.). The nonfinite medial verbs all take subject person-number agreement suffixation in underlying form but the sequential SS medial verb can omit the subject agreement as an option (see 2.1.3.5.).

There are eight classes of subject person-number suffixes and these are shown in the chart below. The chart also shows the tenses/aspects/moods that the suffixes relate to. These eight classes can be divided into two main related groupings as shown on the chart. Set 1, classes 1-4, obviously derive from the same source. The only difference between class 1 and class 2 is that in class 2 third person singular is {Ø} marked whereas in class 1 the morpheme is {-i}. In class 3, the markers for the nonnegative future tenses, the singular forms are the same as for the singular forms in classes 1 and 2. The third person singular {-igi} form appears to be a combination of the class 1 first and third person singular forms {-ig} and {-i}. The second/third person dual and plural forms {-was} and {-qag} appear to be some kind of combination of the class 1 dual and plural first person and second/third person forms {-w} + {-si} and {-q} + {-eig} respectively. The forms of class 4 for the negative future tense are also obviously related. In set 2 the basic form for the set is exemplified by class 5 with class 6 being an abbreviated version. Classes 7 and 8, however, include aspects of set 1, specifically in the dual and plural second/third person forms.

Subject person-number agreement suffixes.

Set 1.

	Class 1.	Class 2.	Class 3.	Class 4.
1s	-ig	-ig	-ig	-ig
2s	-g	-g	-g	-g
3s	-i	∅	-igi	-i
1d	-w	-w	-w	-w
2/3d	-si	-si	-was	-was
1p	-q	-q	-q	-q
2/3p	-eig	-eig	-qag	-w(ain) ⁵
	tod.p	pres.	fut.	neg.f
	yest.p	sim.DS	rel.f	
	hab.p	-realis		
	seq.SS			
	sim.SS			

Set 2.

	Class 5.	Class 6.	Class 7. ⁶	Class 8. ⁶
1s	-min	-m	-em	-em
2s	-m	-m	-em	-em
3s	-b	-b	-n	∅
1d	-hul	-h	-h	-h
2/3d	-bil	-b	-sin	-sin
1p	-mun	-m	-m	-m
2/3p	-bil	-b	-ein	-ein
	seq.DS	contr.	rem.p	neg.p
	sim.DS			
	-irrealis			

The subject agreement markers can be suffixed to the verb in different orderings as shown below:

Order 1.

Verb stem + Subject agreement + Tense

In order 1 the subject agreement suffixation precedes the tense marking and applies to the present, today's past, yesterday's past, future, relative future and negative future tenses.

Order 2.

Verb stem + Tense/aspect/mood + Subject agreement

In order 2 the subject agreement suffixation follows the tense/aspect/mood marking and applies to the habitual past tense/aspect, the perfective (sequential SS) and

imperfective (simultaneous DS) aspect and the contrafactual mood.

Order 3.

Verb stem + Subject agreement
(Tense/aspect)

In order 3 the subject agreement suffixation immediately follows the verb stem either as a portmanteau morpheme combining subject marking and tense/aspect, i.e. for the remote past and negative past tenses, or simply as a subject marking with tense/aspect marked elsewhere, i.e. for the imperfective (simultaneous) aspect verbs.

2.1.3.6.2.2-3. Direct and indirect object agreement marking.

Both direct object(DO) and indirect object(IO) are marked on the verb by pronominal clitics which are basically the same for each category. The only difference being in the third person singular forms. The forms are charted below along with the free pronouns to which they bear some resemblance.

Object verbal agreement.

	Pronominal object clitics.		Free pronouns.
	Direct.	Indirect.	
1s	-it	-it	ija
2s	-ih	-ih	hina
3s	-ud	-ut	uqa
1d	-il	-il	ele
2/3d	-al	-al	ale
1p	-ig	-ig	ege
2/3p	-ad	-ad	age

The difference between DO and IO marking is not in the clitics themselves, except in the third person singular case, but rather in the way the clitics attach to the verb. The DO clitic attaches directly to the verb stem with no intervening predicate particle, -i (see 2.1.3.6.12.1.11.). The predicate particle either follows the DO clitic or deletes altogether. The IO clitic on the other hand attaches to the verb stem or verb stem + DO clitic with the predicate particle intervening. An exemplary paradigm is given below for the verb *qet-ec* 'to cut' to illustrate the difference between DO and IO marking. Subject marking is 3s in each case which is \emptyset marked in the present tense. In the DO marking the predicate marker follows the DO clitic in the singular and first person dual and plural forms and deletes in the second/third person dual and plural forms. In the IO marking the predicate marker precedes the IO clitic in each case.

Direct object marking.

Ija	qet-it-i-na.	'He is cutting <u>me</u> .'
1s	cut-1s-pred.-3s-pres.	
Hina	qet-ih-i-na.	'He is cutting <u>you</u> .'
2s	cut-2s-pred.-3s-pres.	
Uqa	qet-ud-i-na.	'He is cutting <u>him</u> .'
3s	cut-3s-pred.-3s-pres.	
Ele	qet-il-i-na.	'He is cutting <u>us(2)</u> .'
1d	cut-1d-pred.-3s-pres.	
Ale	qet-ale-na.	'He is cutting <u>you/</u>
2d	cut-2d-3s-pres.	<u>them(2)</u>
3d	3d	
Ege	qet-ig-i-na.	'He is cutting <u>us</u> .'
1p	cut-1p-pred.-3s-pres.	
Age	qet-ade-na.	'He is cutting <u>you</u>
2p	cut-2p-3s-pres.	<u>them</u>
3p	3p	

Indirect object marking.

Jacas	qet-ite-na.	'.. <u>for me</u> .'
tobacco	cut-(pred.)-1s-3s-pres.	
Jacas	qet-ihe-na.	'.. <u>for you</u> .'
tobacco	cut-(pred.)-2s-3s-pres.	
Jacas	qet-ito-na.	'.. <u>for him</u> .'
tobacco	cut-(pred.)-3s-3s-pres.	
Jacas	qet-ile-na.	'.. <u>for us(2)</u> .'
tobacco	cut-(pred.)-1d-3s-pres.	
Jacas	qet-i-ale-na.	'.. <u>for you/them(2)</u> .'
tobacco	cut-pred.-2d-3s-pres.	
	3d	
Jacas	qet-ige-na.	'.. <u>for us</u> .'
tobacco	cut-(pred.)-1p-3s-pres.	
Jacas	qet-i-ade-na.	'.. <u>for you/them</u> .'
tobacco	cut-pred.-2p-3s-pres.	
	3p	

Up to two object clitics can be suffixed to the verb and this can be in either of the combinations DO + IO or IO + IO.

		DO IO
(528)	Uqa jo	ceh-ad-ut-en.
	3s	house build-3p-3s-3s-rem.p
		'He built houses for her.'

DO IO

- (529) Ija sign eu unan-ad-ih-ig-en.
 1s knife that sharpen-3p-2s-1s-fut.
'I will sharpen those knives for you.'

IO IO

- (530) Ija sab siw-i-ad-ih-ig-en.
 1s food distribute-pred.-3p-2s-1s-fut.
'I will distribute the food to them for you.'

IO IO

- (531) Ija od-i-tu-he-ce-min cucui igi-an.
 1s do-pred.-3s-2s-DS-1s fear 3s-fut.
'I will make him afraid of you.'

The DO and IO clitics have certain semantic (case) functions and in this respect are similar to many Australian aboriginal languages (cf. Blake 1977). The semantic cases that are expressed by the object clitics are as follows:

(i) For syntactic direct object:

The direct object clitic can have the semantic function of accusative or experiencer.

- (532) Uqa jo ceh-ad-en. (accusative)
 3s house build-3p-3s-rem.p
'He built houses.'

- (533) Uqa mala jab-ade-i-a. (accusative)
 3s chicken chase-3p-3s-tod.p
'He chased the chickens.'

- (534) Cam o-it-i-na. (experiencer)
 sun get-1s-pred.-3s-pres.
'The sun is beating down on me.'

- (535) Ija wen te-i-a. (experiencer)
 1s hunger 1s-3s-tod.p
'I was hungry.'

- (536) Age dadan ade-i-a. (experiencer)
 3p confusion 3p-3s-tod.p
'They were confused.'

(ii) For syntactic indirect object:

The indirect object can express semantic (case) functions of recipient, benefactive, malefactive, allative(goal) and ablative(source).

- (537) Uqa sab i-te-i-a. (recipient)
 3s food pred.-1s-3s-tod.p
'He gave the food to me.'

- (538) Ija cabi ihac-i-h-ig-en. (recipient)
 1s work show-pred.-2s-1s-fut.
'I will show the work to you.'

- (539) Ija ho faj-i-h-ig-en. (benefactive)
 1s pig buy-pred.-2s-1s-fut.
'I will buy the pig for you.'
- (540) Uqa ahul gel-i-te-i-a. (benefactive)
 3s coconut scrape-pred.-1s-3s-tod.p
'She scraped the coconut for me.'
- (541) Uqa ija na ho q-u-te-i-a. (malefactive)
 3s 1s of pig hit-pred.-1s-3s-tod.p
'He killed my pig on me.' (coll. English)
- (542) Age ege na mala j-i-g-eig-a. (malefactive)
 3p 1s of chicken eat-pred.-1s-3p-tod.p
'They ate our chicken on us.' (coll. English)
- (543) H-u-t-ag-a. (allative)
 come-pred.-1s-2s-imp.
'Come to me'
- (544) Ho hel-i-to-ig-a. (allative)
 pig throw-pred.-3s-3p-tod.p
'They threw (spears) at the pig.'
- (545) Uqa sign ebe-ni na dec hu-i-te-i-a. (ablative)
 3s knife hand-1s-pos. of from grab-pred.-1s-3s-tod.p
'He grabbed the knife off me out of my hand.'
- (546) Uqa ho u-te-i-a. (ablative)
 3s pig get-pred.-1s-3s-tod.p
'He took the pig off me.'

Relative to object marking there is a fundamental distinction in Amele between verbs which must carry an obligatory object clitic whether there is an overt object NP or not in the clause, even in the infinitive form, and verbs where object cliticization is not obligatory. The verbs without obligatory object cliticization can be further subdivided into those verbs that can take an optional direct object clitic and those verbs that cannot take an optional direct object clitic. Each class of verbs is listed below for exemplification.

Class 1.

Verbs that must contain an obligatory direct object clitic:

abul-doc	<i>'to struggle'</i>
acil-doc	<i>'to make a noise'</i>
af-doc	<i>'to squeeze'</i>
afaf-doc	<i>'to swarm around'</i>
ahuwa-doc	<i>'to leave alone'</i>
alil-doc	<i>'to surround'</i>
aman-doc	<i>'to aim'</i>
aqsil-doc	<i>'to shoot at a bird'</i>
bala-doc	<i>'to tear'</i>
bal-doc	<i>'to chant'</i>
basec-doc	<i>'to give birth'</i>
bele-doc	<i>'to scrape'</i>

beluc-doc	'to swallow'
bilac-doc	'to skin'
bilisa-doc	'to disperse'
bogo-doc	'to cut grass'
bilian-doc	'to clean house'
bulam-doc	'to tease'
cahac-doc	'to fence in'
cahaha-doc	'to save'
cahul-doc	'to deceive'
calan-doc	'to grab'
catac-doc	'to take hand of bananas'
cesan-doc	'to pass on sickness'
cesul-doc	'to help'
cesus-doc	'to persuade'
cifilic-doc	'to open out'
cihoc-doc	'to point/poke'
cileh-doc	'to lie upon'
cilis-doc	'to comb hair'
cis-doc	'to think'
ciji-doc	'to burn'
co-doc	'to beat'
cof-doc	'to look after'
coga-doc	'to embrace'
colum-doc	'to make a hill'
cuac-doc	'to wave a branch to light it'
cuha-doc	'to excel'
da-doc	'to heal'
dah-doc	'to whisper'
di-doc	'to pull/drag'
dodo-doc	'to approach'
ebesal-doc	'to miss'
eel-doc	'to bless'
elelan-doc	'to provoke'
fag-doc	'to attach'
fai-doc	'to break/splinter'
fal-doc	'to enclose'
falic-doc	'to turn around'
felac-doc	'to release'
filigan-doc	'to separate'
foi-doc	'to beat'
fu-doc	'to blow'
fulac-doc	'to light'
fulu-doc	'to flap'
fulus-doc	'to multiply'
gaban-doc	'to gather/become one'
gahi-doc	'to carry on shoulder'
gal-doc	'to bite off'
gan-doc	'to shed skin'
gegec-doc	'to bind tightly'
gelul-doc	'to curse'
gema-doc	'to hug'
gil-doc	'to push'
gobil-doc	'to stir'
guluc-doc	'to meet/ambush'

hawa-doc	'to leave'
he-doc	'to finish'
heh-doc	'to support from below'
hibem-doc	'to turn one's back'
hi-doc	'to dry up'
higal-doc	'to clear ground'
hili-doc	'to ripple water'
hoo-doc	'to warm'
hu-doc	'to open'
ibul-doc	'to change'
icum-doc	'to drain water out'
igo-doc	'to tease'
ihac-doc	'to show'
ihul-doc	'to mix'
inon-doc	'to pray/request'
is-doc	'to avoid'
isicol-doc	'to surprise someone'
ititac-doc	'to send away'
iwal-doc	'to teach'
iwes-doc	'to sweep'
iwigel-doc	'to wake someone up'
jab-doc	'to chase/quarrel'
jahul-doc	'to cover/hide'
laha-doc	'to stamp'
lico-doc	'to struggle'
lol-doc	'to wander'
los-doc	'to stroke'
meci-doc	'to watch'
nic-doc	'to persuade'
nu-doc	'to crush between hands'
qaga-doc	'to hit and kill'
qagal-doc	'to cook sticky rice'
qagasa-doc	'to walk slowly'
qalac-doc	'to break at base'
qida-doc	'to whip'
qisiloc-doc	'to dodge'
qoi-doc	'to brush off'
qolo-doc	'to miss'
qosoc-doc	'to look inside'
qu-doc	'to pierce ground'
qutuc-doc	'to spit'
sacia-doc	'to prepare'
soa-doc	'to look after'
soi-doc	'to clean'
sugu-doc	'to suck milk'
sul-doc	'to send'
taic-doc	'to chew'
teban-doc	'to touch'
tem-doc	'to try'
to-doc	'to follow'
togo-doc	'to discuss/reconcile'
tub-doc	'to join'

tuq-doc	<i>'to butcher'</i>
u-doc	<i>'to play'</i>
wahohog-doc	<i>'to console'</i>
wal-doc	<i>'to turn over/around'</i>
wol-doc	<i>'to pass/surpass'</i>

Note that many of these verbs must take an object clitic even if their function is intransitive and there is no overt object NP

age abul- <u>do</u> -iga	<i>'they struggled'</i>
age bal- <u>do</u> -iga	<i>'they chanted'</i>
age cuha- <u>do</u> -iga	<i>'they excelled'</i>
age dah- <u>do</u> -iga	<i>'they whispered'</i>
age fulus- <u>do</u> -iga	<i>'they multiplied'</i>
age gaban- <u>do</u> -iga	<i>'they gathered'</i>
age ibul- <u>do</u> -iga	<i>'they changed'</i>
age laha- <u>do</u> -iga	<i>'they stamped'</i>
age qutuc- <u>do</u> -iga	<i>'they spat'</i>
age tem- <u>do</u> -iga	<i>'they tried'</i>

Class 2.

Verbs that can take an optional direct object clitic when the object is human/animate. Some forms are slightly irregular and are marked with +:

aqus-ec	aqus-ud-ina	<i>'he hangs him'</i>
babal-ec	babaul-d-ina	<i>'he blocks(crosses) him'</i>
bagaw-ec	bagaw-ud-ina	<i>'he pierces him'</i>
bebes-ec	bebes-ud-ina	<i>'it scratches him'</i>
bes-ec	bes-ud-ina	<i>'he removes him'</i>
cabus-ec	cabus-d-ina	<i>'he snuffs him out'</i>
cacal-ec	cacaul-d-ina	<i>'he pulls him out'</i>
cacaw-ec	cacaw-ud-ina	<i>'it spits him out'</i>
cacut-ec	cacut-ud-ina	<i>'he unhangs him'</i>
cafal-ec	cafal-ud-ina	<i>'he unties him'</i>
cagah-ec	cagah-ud-ina	<i>'he peels him'</i>
cagas-ec	cagas-ud-ina	<i>'he forgives him'</i>
cag-oc	cag-ud-ina	<i>'he blocks(cuts across) him'</i>
c-ec	+cen-do-na	<i>'he has sex with her'</i>
cecel-ec	ceceul-d-ina	<i>'he drags him'</i>
cih-oc	+cihoc-do-na	<i>'he pokes him'</i>
cin-ec	+cinec-do-na	<i>'he follows him'</i>
cul-ec	cul-d-ina	<i>'he leaves him'</i>
cus-ec	cus-id-ina	<i>'he washes him'</i>
em-ec	em-ud-ina	<i>'he aims at him'</i>
eh-ec	eh-ud-ina	<i>'he takes him'</i>
ew-ec	ew-ud-ina	<i>'he despises him'</i>
faj-ec	fa-ud-ina	<i>'he buys/pays him'</i>
f-ec	+feci-do-na	<i>'he sees him'</i>
gaw-ec	gaw-ud-ina	<i>'he desires her'</i>
gel-ec	gel-ud-ina	<i>'he scrapes him'</i>

gis-ec	gis-ud-ina	'he sews him'
goli-ec	goul-d-ina	'he teases him'
hagal-ec	hagaul-d-ina	'he entangles him'
heew-ec	heew-ud-ina	'he holds him'
ifan-ec	ifan-ud-ina	'he creates him'
ilal-ec	ilalui-d-ina	'he dodges him'
jab-ec	jab-ud-ina	'he chases him'
jahun-ec	jahun-d-ina	'he hates him'
jajan-oc	jajaun-d-ina	'he makes him vanish'
j-ec	je-ud-ina	'it eats him'
jel-ec	jel-du-na	'he wraps him'
jo-ec	jo-ud-ina	'he baptizes him'
lib-ec	libi-du-ina	'he ties him'
m-ec	m-ud-ina	'he puts him'
men-ec	men-ud-ina	'he closes door on him'
met-ec	met-ud-ina	'he is getting thin'
nesel-ec	nesul-d-ina	'he chooses him'
od-oc	od-ud-ina	'he does to him'
oc	o-id-ina	'he gets him'
qag-ec	qag-ud-ina	'he ties him'
qag-oc	qag-ud-ina	'he sets him apart'
qal-ec	qal-ud-ina	'he turns him'
qasal-ec	qasal-ud-ina	'he confesses to him'
qatan-ec	qataun-d-ina	'he breaks him'
qaj-ec	qaj-ud-ina	'he cries to him'
qel-ec	qeul-d-ina	'he throws him'
q-oc	q-it-ina ⁶	'he hits me'
sel-ec	seul-d-ina	'she charms him'
sil-ec	siul-d-ina	'he tracks him'
sul-ec	sul-d-ina	'he lifts him up'
tac-ec	tac-ud-ina	'he fills him'
tanaw-ec	tanaw-ud-ina	'he makes peace with him'
taq-ec	taq-ud-ina	'he dresses him'
tol-ec	tol-ud-ina	'he cuts him'
uta-ec	uta-ud-ina	'he calls him'
wagal-ec	wagaul-d-ina	'he demolishes him'
wal-ec	waul-d-ina	'he searches for him'
wet-ec	wet-ud-ina	'he scoops him'

Class 3.

All other verbs cannot take a direct object clitic even if they happen to be functioning as a transitive verb.
e.g.

wa abalena	'he searches the water'
age aqunena	'he goes ahead of them'
ceb begesena	'he takes the betelnut'

ma bодоena	'she softens the taro'
sab cilena	'she boils the food'
gilem codona	'he beats the slit gong'
dod falelena	'he flashes a mirror'
wa letena	'he crosses the river'
buk saniena	'he reads the book'
lotoc talena	'he tears the cloth'
caileg wegena	'he weaves bamboo'
a-ec	'to open mouth'
abal-ec	'to search with hand'
ahawa-ec	'to whisper'
ah-oc	'to bring'
alaf-ec	'to repeat'
al-ec	'to rub off dirt'
alege-ec	'to be greedy'
aqat-ec	'to ambush'
aqun-ec	'to precede'
asal-ec	'to laugh'
as-ec	'to wipe away excreta'
bacis-ec	'to come out'
bebel-ec	'to dream'
b-ec	'to come up'
beges-ec	'to take'
bel-ec	'to go'
bil-ec	'to sit/be'
bisoc-ec	'to fear'
bitac-ec	'to jump'
bodo-ec	'to soften'
bu-ec	'to buzz'
budu-ec	'to thud/splash'
busal-ec	'to run away'
busu-ec	'to pass wind'
buj-ec	'to defecate'
cabal-ec	'to break'
cabat-ec	'to fall'
cacagan-ec	'to talk in sleep'
cacit-oc	'to spit out'
cad-ec	'to fight'
cah-oc	'to remove rubbish'
cal-ec	'to appear'
catan-ec	'to be pure'
catu-ec	'to clean'
cajag-ec	'to fill'
ceel-ec	'to rejoice'
cegul-ec	'to meet'
cel-ec	'to forget'
celobo-ec	'to be proud'
cesel-ec	'to return'
cih-oc	'to prick/poke'
cil-ec	'to boil'
cin-ec	'to spit'
cin-ec	'to follow'
cis-ec	'to scratch/hollow out'
citol-ec	'to leap'
cod-oc	'to beat rhythmically'
coel-ec	'to mature'
cogog-ec	'to bend/curve'

cosol-ec	'to lie down'
cot-ec	'to kiss'
cucui-ec	'to fear'
cud-ec	'to put on fire'
cuhul-ec	'to deceive'
cula-ec	'to be proud of'
cutu-ec	'to whimper'
dadán-ec	'to be confused'
dad-oc	'to be healed'
debo-ec	'to disobey'
dee-ec	'to stare'
do-ec	'to become erect'
d-oc	'to understand'
du-ec	'to roll out'
eu-ec	'to shout'
falel-ec	'to flash'
fanin-ec	'to flatter'
foj-oc	'to vomit'
fufu-ec	'to blow'
filicit-ec	'to be surprised'
gaca-ec	'to retch'
gagala-ec	'to shout'
gasu-ec	'to search'
gol-ec	'to redden'
gow-ec	'to light'
hol-ec	'to yearn'
h-oc	'to come'
hulu-ec	'to rot'
idad-ec	'to trade'
jah-ec	'to whisper'
jaq-ec	'to write'
l-ec	'to go'
let-ec	'to cross over'
masu-ec	'to proliferate'
meci-ec	'to awake'
mele-ec	'to believe'
muhu-ec	'to work hard'
n-ec	'to come down'
nij-ec	'to lie'
n-oc	'to go down'
nol-ec	'to flow'
nud-oc	'to rub'
nu-ec	'to go'
qah-ec	'to break'
qan-ec	'to groan'
qasaw-ec	'to open'
qelet-ec	'to tremble'
sabi-ec	'to populate'

sal-ec 'to remove skin'
 sani-ec 'to read'
 seel-ec 'to awake'
 seg-ec 'to sweep'
 silol-ec 'to seep'
 siw-ec 'to distribute'
 siw-ec 'to breathe'

tal-ec 'to tear'
 taw-ec 'to stand'
 t-ec 'to go up'
 telel-ec 'to tremble'
 til-ec 'to be still'
 tob-ec 'to climb up'
 toco-ec 'to drip'
 ton-ec 'to climb down'

wac-ec 'to peel'
 walu-ec 'to swell'
 weg-ec 'to weave'

In order to take an object marker these verbs would have to function with another verb in a paratactic series (see 2.1.3.7.):

ah-u eh-ih-ig-en 'I will take you'
 bring take-2s-1s-fut.

buj-i q-ite-i-a 'he shit on me'
 defecate hit-1s-3s-tod.p

cad-i q-ite-i-a 'he fought me'
 fight hit-1s-3s-tod.p

cesel-i h-u m-ite-i-a 'he returned me'
 return come put-1s-3s-tod.p

sah-u q-ite-i-a 'he pissed on me'
 urinate hit-1s-3s-tod.p

While it is not completely clear exactly why Amele marks some verbs with obligatory object clitics and others not there seems to be an underlying notion of goal-oriented verbs vs. agent-oriented verbs. So the verbs marked with an obligatory object clitic are the goal-oriented verbs and the focus of the verb is on the goal towards which the action of the verb is directed. This comes out more clearly with the meaning of some verbs rather than others. The following 'object' verbs appear to be obviously goal-oriented:

abul-doc 'to struggle (with someone)'
 aman-doc 'to aim (at something)'
 bulam-doc 'to tease (someone)'
 cahul-doc 'to deceive (someone)'
 cesan-doc 'to infect (someone)'
 cesul-doc 'to help (someone)'
 cesus-doc 'to persuade (someone)'
 elelan-doc 'to antagonise (someone)'
 fal-doc 'to fence in (something)'

guluc-doc	'to meet (someone)'
he-doc	'to finish (something)'
ibul-doc	'to change (something)'
isicol-doc	'to surprise (someone)'
jahul-doc	'to hide (something)'
lahi-doc	'to shake (something)'
los-doc	'to stroke (something)'
qaga-doc	'to kill (something)'
qolo-doc	'to miss (something)'
sacia-doc	'to prepare (something)'
soi-doc	'to clean (something)'
tub-doc	'to join together (something)'
tuq-doc	'to butcher (something)'
tuli-doc	'to wake up (someone)'
wahohog-doc	'to console (someone)'
wol-doc	'to surpass (someone)'

Compare the verbs above with the following verbs that cannot take a direct object clitic. The focus of the action of the verb is on the agent performing the action as there is no goal to the action:

a-ec	'to open mouth'
asal-ec	'to laugh'
bebel-ec	'to dream'
bil-ec	'to sit'
busal-ec	'to run away'
ceel-ec	'to rejoice'
cula-ec	'to be proud'
filicit-ec	'to be startled'
gol-ec	'to blush'
hulu-ec	'to rot'
masu-ec	'to proliferate'
nij-ec	'to lie'
nol-ec	'to flow'
qan-ec	'to groan'
qeel-ec	'to tremble'
seel-ec	'to awake'
taw-ec	'to stand'
was-ec	'to grow'

and the motion verbs

b-ec	'to come up'
bel-ec	'to go'
h-oc	'to come'
l-ec	'to go'
n-ec	'to come down'
n-oc	'to go down'
nu-ec	'to go'
t-ec	'to go up'
tob-ec	'to climb up'
ton-ec	'to climb/fall down'

The distinction between goal-oriented verbs and agent-oriented verbs can be drawn out further by:

(i) comparing verbs with similar meanings but different orientation:

e.g.

isicol-doc vs. filicit-ec
 'to surprise(someone)' 'to be surprised'

lahi-doc vs. qelex-ec
 'to shake(something)' 'to tremble'

tuli-doc vs. seel-ec
 'to wake up(someone)' 'to awake'

(ii) comparing a few verbs that have the same stem but with different orientation and slightly different meanings as a result:

e.g.

basec-doc vs. bas-ec
 'to give birth' 'to pour out'

Uqa mel basec-do-i-a. 'She bore a son.'
 3s boy bear-3s-3s-tod.p

Uqa wa base-i-a. 'She poured out the water.'
 3s water pour-3s-tod.p

fulul-doc vs. fulul-ec
 'to flap(wings)' 'to fly'

Man fulul-do-i-a. 'The bird flapped its wings.'
 bird flap-3s-3s-tod.p

Man fulule-i-a. 'The bird flew.'
 bird fly-3s-tod.p

wilic-doc vs. wilic-ec
 'to stir(something)' 'to wag'

Dana camac wilic-do-i-a. 'The man stirred the sago.'
 man sago stir-3s-3s-tod.p

Qa wilice-i-a. 'The dog wagged (its tail).'
 dog wag-3s-tod.p

It should be noted that the notion of agent-orientation vs. goal-orientation is independent of the syntactic notion of intransitive vs. transitive since certain verbs must obligatorily have an object clitic whether there is an overt direct object NP or not and vice versa there are certain verbs that cannot have an object clitic even if there is an overt direct object NP as an argument of the verb.

2.1.3.6.3. Conditioning factors on use of verbal object markers.

The pronominal object clitics occur under the following conditions:

(i) where it is a class of verb that has an obligatory object clitic (see 2.1.3.6.2.2-3.).

(ii) where the object is human/animate a semantic (case) function can be indicated for experiencer, recipient,

benefactive, malefactive, allative or ablative by the object clitic (see 2.1.3.6.2.2-3.).

(iii) where the overt object is a free pronoun the verbal pronominal clitic can function in its stead or complementary to it.

(547) Ija (hina) cesul-h-ig-en.
1s 2s help-2s-1s-fut.
'I will help you.'

(548) Uqa (age) iwal-ad-igi-an.
3s 3p teach-3p-3s-fut.
'He will teach them.'

(iv) where the object is animate or inanimate and dual/plural number an object clitic can optionally be used to indicate the number.

(549) Caja eu fanin-ad-en.
woman that flatter-3p-3s-rem.p
'He flattered those women.'

(550) Uqa na mel cof-al-ein.
3s of child look after-3d-3p-rem.p
'They looked after her two children.'

(551) Dana eu jo ceh-ad-i-al-igi-an.
man that house build-3p-pred.-3d-3s-fut.
'He will build houses for those two men.'

2.1.3.6.4. Features of the noun phrase which are coded in the verb.

A noninfinitive verb is obligatorily coded for subject person-number agreement. An infinitive verb is not coded for subject person-number agreement (see 2.1.3.5.). A finite or nonfinite verb can be obligatorily or optionally coded for direct or indirect object person-number agreement depending on the class of the verb (see 2.1.3.6.2.2-3.). The person can be either first person (speaker), second person (addressee) or third person (other). The number can be either singular (one person), dual (two persons) or plural (more than two persons). The medial nonfinite sequential or simultaneous verb also encodes subject coreferentiality or noncoreferentiality with the following verb (see 2.1.3.6.7.).

2.1.3.6.5. Discrepancy between coding of syntactic and semantic features in the verb.

There is a discrepancy between the way syntactic and semantic features are coded in the verb in the following areas:

(i) The switch-reference (S/R) system primarily codes identity or nonidentity of subject NP's across clauses. However, as is described under 2.1.3.6.7., the interpretation of what constitutes 'same' or 'different' subject is open to both semantic and pragmatic conditions. The S/R system can monitor a change of syntactic

subject as no-change i.e. SS if there is also a change from [+AGENT] to [-AGENT]. It is open to interpretation then if the S/R system is a syntactic system influenced by semantic factors or if the S/R system is in fact tracking the semantic category of Agent rather than the syntactic category of Subject. The S/R system has also taken on a pragmatic deictic role and can indicate changes of time, place and world.

(ii) The way objects (direct or indirect) are marked on the verb reveals a discrepancy between the syntactic notion of intransitive vs. transitive verbs and the semantic notion of agent-oriented vs. goal-oriented verbs (see 2.1.3.6.2.2-3.).

2.1.3.6.6. Noun phrase agreement across all voices, tenses, aspects, moods and finite and nonfinite forms.

The features of NP person-number agreement and the direct and indirect object semantic features described in 2.1.3.6.2.2-3. apply to all tenses, aspects, moods and noninfinitive forms. (There is only one category of voice - active.) The infinitive form is not marked for subject person-number agreement but can be marked for object person-number agreement. The features of subject NP coreference described in 2.1.3.6.4. and 2.1.3.6.7. only apply to the sequential and simultaneous action verbs.

2.1.3.6.7. Marking of identity or nonidentity between the subject of a verb and the subject of the following verb.

In Amele the linguistic phenomenon of clause chaining occurs whereby many clauses can be conjoined in a coordinated series forming a single sentence. See 1.1.2.1. (Subordination) and 1.3.1.1.4. (Coordination) for the criteria for distinguishing coordinate clauses from subordinate clauses. It is not uncommon in certain kinds of narrative for fifteen to twenty verbs to be conjoined in a single sentence. In such concatenated clause chains the final verb in the sentence carries the tense and mood desinence. The structure of this type of sentence is:

[12]
 S -> *(S) S $\begin{bmatrix} +TENSE \\ +MOOD \end{bmatrix}$

*iterative

The final finite verb is therefore termed the 'final' verb although in reality due to factors like subordination and front and end shifting a final verb may not always be the final verb of a given sentence. The other verbs in the clause chain are not marked for tense or mood but are dependent on the final verb for tense/mood desinence and are therefore termed 'dependent' or 'medial' verbs. The medial verb is not marked for tense or mood but instead is marked for some aspectual category. This can be either perfective, imperfective or iterative aspect (see 2.1.3.3.2.1.1-2 and

'You came and he ate the food.'

- (558) Uqa ho-co-b sab j-ig-a.
 3s come-DS-3s food eat-1s-tod.p
 (c) (a)
'He came and I ate the food.'

- (559) Ija bi-bil-igin sab ja-g-a.
 1s sim.-sit-1s-DS food eat-2s-tod.p
 (a) (b)
'As I sat you ate the food.'

- (560) Hina bi-bil-egan sab je-i-a.
 2s sim.-sit-2s-DS food eat-3s-tod.p
 (b) (c)
'As you sat he ate the food.'

- (561) Uqa bi-bil-en sab j-ig-a.
 3s sim.-sit-3s-DS food eat-1s-tod.p
 (c) (a)
'As he sat I ate the food.'

Subject set of the controlling clause properly included in the subject set of the marked clause:

- (562) Ege h-u-me-b sab j-ig-a.
 1p come-pred.-SS-1p food eat-1s-tod.p
 (a,b,c) (a)
'We came and I ate the food.'

- (563) Ege h-u-me-b sab ja-g-a.
 1p come-pred.-SS-1p food eat-2s-tod.p
 (a,b,c) (b)
'We came and you ate the food.'

- (564) Ege h-u-me-b sab je-i-a.
 1p come-pred.-SS-1p food eat-3s-tod.p
 (a,b,c) (c)
'We came and he ate the food.'

- (565) Ege bi-bil-eb sab j-ig-a.
 1p sim.-sit-1p-SS food eat-1s-tod.p
 (a,b,c) (a)
'As we sat I ate the food.'

- (566) Ege bi-bil-eb sab ja-g-a.
 1p sim.-sit-1p-SS food eat-2s-tod.p
 (a,b,c) (b)
'As we sat you ate the food.'

- (567) Ege bi-bil-eb sab je-i-a.
 1p sim.-sit-1p-SS food eat-3s-tod.p
 (a,b,c) (c)
'As we sat he ate the food.'

Subject set of the marked clause properly included in the subject set of the controlling clause:

- (568) Ija ho-co-min sab jo-q-a.
 1s come-DS-1s food eat-1p-tod.p
 (a) (a,b,c)
 'I came and we ate the food.'
- (569) Hina ho-co-m sab jo-q-a.
 2s come-DS-2s food eat-1p-tod.p
 (b) (a,b,c)
 'You came and we ate the food.'
- (570) Uqa ho-co-b sab jo-q-a.
 3s come-DS-3s food eat-1p-tod.p
 (c) (a,b,c)
 'He came and we ate the food.'
- (571) Ija bi-bil-igin sab jo-q-a.
 1s sim.-sit-1s-DS food eat-1p-tod.p
 (a) (a,b,c)
 'As I sat we ate the food.'
- (572) Hina bi-bil-egan sab jo-q-a.
 2s sim.-sit-2s-DS food eat-1p-tod.p
 (b) (a,b,c)
 'As you sat we ate the food.'
- (573) Uqa bi-bil-en sab jo-q-a.
 3s sim.-sit-3s-DS food eat-1p-tod.p
 (c) (a,b,c)
 'As he sat we ate the food.'

It should be noted that in Amele where the subject of the controlling clause is properly included in the subject of the marked clause the speaker has no choice but to select SS marking. In a number of PNG languages speakers can apparently choose SS or DS marking in these circumstances according to factors dependent upon a person hierarchy of 1st > 2nd > 3rd (Reesink 1983). In Amele, however, such a choice of SS or DS marking only applies where there is an overlap of subject sets across clauses i.e. where the subject set of the controlling clause is only partially included in the subject set of the marked clause. In which case the speaker can select either SS or DS marking when the overlap does not involve the first person. So either (574) or (575) below would be grammatical. If first person is involved in the subject set overlap however, then SS must be marked as in (576) below.

- (574) Ege h-u-me-b sab je-si-a.
 1p come-pred.-SS-1p food eat-3d-tod.p
 (a,b,c) (c,d)
 'We came-SS and they(2) ate.'
- (575) Ege ho-co-mun sab je-si-a.
 1p come-DS-1p food eat-3d-tod.p
 (a,b,c) (c,d)
 'We came-DS and they(2) ate.'

(576) Ege h-u-me-b sab jo-w-a.
 1p come-pred.-SS-1p food eat-1d-tod.p
 (a,b,c) (a,d)
 1 1
 'We came-SS and we(2) ate.'

(577)*Ege ho-co-mun sab jo-w-a.
 1p come-pred.-DS-1p food eat-1d-tod.p
 (a,b,c) (a,d)
 1 1
 'We came-DS and we(2) ate.'

The only other instance where the speaker has a choice of SS or DS marking when the subject of the controlling clause is included in the subject of the marking clause is when the marking clause has a reciprocal simultaneous verb (see 2.1.3.6.9.). In this case the speaker can choose SS or DS marking when the controlling clause is not first person.

(578) Mel age qo-co-b qo-co-b $\left\{ \begin{array}{l} \text{eig} \\ \text{3p-SS} \\ \text{eigin} \\ \text{3p-DS} \end{array} \right\}$ oso tone-i-a.
 boy 3p hit-DS-3s hit-DS-3s one fall-3s-tod.p
 'As the boys fought each other one fell down.'

(579) Ege qo-co-b qo-co-b eb ija ton-ig-a.
 1p hit-DS-3s hit-DS-3s 1p-SS 1s fall-1s-tod.p
 'As we fought-SS each other I fell down.'

(580)*Ege qo-co-b qo-co-b oqon ija ton-ig-a.
 1p hit-DS-3s hit-DS-3s 1p-DS 1s fall-1s-tod.p
 'As we fought-DS each other I fell down.'

The Amele S/R system is an anticipatory subject coreferencing system and not a retrospective coreferencing system although retrospective reference to subjects of previously mentioned clauses can be made by a special anaphoric device involving the recapitulation clause (see 1.5.1.6.). In text then the S/R system coreferences the merging of sets of participants (i.e. subject sets) as DS as the following examples illustrate:

(581) Ija Malolo uqa na car jic anag na ono nu
 1s 3s of road mother at there for

sum-ud-i bi-bil-igin ne-ce-b
 wait-3s-pred. sim.-be-dur.-1s-DS come down-DS-3s

tobo-co-min belo-w-an.
 climb up-DS-1s go-1d-yest.p

[7:5]

'While I waited on the main road for Malolo's car he came down. I climbed in and off we went.'

(582) Aria am oso eu su-sum-ado-qon ho-co-bil
 alright group one that sim.-wait-3p-1p-DS come-DS-3p

ege haun bus tob-i-me-b Ukarumpa
 1p again go up-pred.-SS-1p

cesel-om.
 return-1p-rem.p

[25:39]

'While we waited in one group they came and we got back into the bus again. Then we returned to Ukarumpa.'

(583) Ni-nije-min ho-co-bil b-i bele-q-an.
 sim.-lie-1s-DS come-DS-2p come up-pred. go-1p-fut.

[21:99]

'I will stay and when you come we will come up.'

Splitting of participant groups (i.e. subject sets) in text is coreferenced as SS:

(584) Ija Lufani ca market cudun na t-i-me-u
 1s with place at go up-pred.-SS-1d

ono car oso u-m-ig b-i Danben jic
 there indef. get-SS-1s come up-pred. road

na ton-i-m-ig ene b-ig-an.
 at climb down-pred.-SS-1s here come up-1s-yest.p

[7:9]

'I and Lufani went up to the market place and there I got a car. I came up to Danben, got down at the road and then came up here.'

(585) Co-cob-i bile-si caja eu uqa dih
 sim.-walk-pred. be-dur.-3d-SS woman that 3s only

sab cil-i jo-lo-i.
 food boil-pred. eat-hab.p-3s

[17:19]

'As those two went along it was only that woman who used to cook and eat the food.'

(586) Ale sab eu j-i-me-si dana uqa na danah eu
 3d food that eat-pred.-SS-3d man 3s of friend that

uqa caj-i nuo-lo-i.
 3s arise-pred. go-hab.p-3s

[13:25]

'They(2) would eat that food and then that friend of the man used to get up and go.'

The S/R system is essentially a syntactic referential system coreferencing the grammatical subject NP across clauses. It is not influenced, for example, by a change in the semantic role across clauses of one of the participants in the subject set of the marking clause. The following examples show a change of semantic role across clauses of one of the subject set participants in the marking clause from agent to recipient in one case and from agent to experiencer in another case. Also a change across object NP's from experiencer to recipient is given but in all instances of change of semantic role it is the syntactic contents of the subject NP that is tracked and marked for SS since the

ah-u jo nag oso m-ig-en.
take-pred. house small indef. put-1p-3s

[27:45]

'We saw that house then he turned (the car) and he took us from there and put us in a small house.'

(595) Fe-fe-si duc eu ut-on.
sim.-see-3d-SS fruit that 3s-3s-rem.p

[18:2]

'As they(2) saw (it) she gave her that fruit.'

So far it has been demonstrated that the the primary function of the S/R system is to anticipate the contents of the subject NP of the following clause as to whether it is same or different to the contents of the subject NP of the anticipatory clause. An essentially syntactic function. It has also been demonstrated how this function is not affected by semantic role changes of subject set participants across clauses. However it will now be shown how the S/R system is affected by both semantic and pragmatic (deictic) factors. First we will examine the semantic factors.

A common phenomenon that exists in PNG languages with S/R systems is that it is possible to make an apparently anomalous reference to a following clause as same subject when in fact it is grammatically a different subject. This phenomenon was first described in Longacre (1972:7-16) and later in other works; Litteral (1972), West (1973), Thurman (1975), Davies (1981) and most extensively in Foster (1981). The phenomenon has come to be known as "clause skipping" since the referential(marked) clause will apparently skip over the immediately following clause and coreference a clause further down the clause chain as same subject. This normally occurs when the skipped over subject is either inanimate or belongs to a grammatically subordinated clause. The phenomenon of clause skipping is diagrammed below [13]. In this construction clause 1 has a SS marking that does not refer to the immediately following clause, clause 2, but to a more distant clause in the clause chain, clause 3, in this case. The subject coreferencing is therefore "anomalous" as it stands since the subject NP, j , of clause 2 is not identical to nor a subset of the subject NP, i , of clause 1. If the coreferencing was in strictly linear concatenation (i.e. local) then clause 1 should be marked DS to be grammatical. The identical subject NP is in fact in clause 3. The fact that the subject NP's of clause 2 and clause 3 are not identical is indicated by the DS marker on clause 2.

[13]

Clause 1-SS*	Clause 2-DS	Clause 3
Subject i	Subject j	Subject j

*SS refers to clause 3

This kind of "clause skipping" also occurs in Amele where the subject of the following clause is a nonagentive subject. However it will be argued here that this is in fact not a case of clause skipping and it will be shown that the S/R system does not skip over the nonagentive subject but reads it as just that, a subject specified [-AGENT].

Genuine clause skipping does occur, however, where the immediately following clause belongs itself to a subordinated sentence and this is described and illustrated under 1.1.2. (Subordination).

Cases of anomalous SS reference do occur in the language involving nonagentive subjects. These can be (i) the subject of an impersonal verb (see also 2.1.3.8.), (ii) a body part or (iii) some other inanimate subject. It should be noted that the phenomenon outlined here is clearest with nonagentive subjects (i) and (ii). With (iii) there is always the possibility that agentivity can be assigned to the subject even though it is inanimate. This depends on a speaker's world view or the particular situation he wishes to describe. Examples of this type of reference to a nonagentive subject are given below.

(596) Ija b-i-m-ig wen te-i-a.
1s come up-1s-SS hunger 1s-3s-tod.p
'I came up and I became hungry.'

(597) Ija ta-taw-ig ija am-i wal-do-i-a.
1s sim.-stand-1s-SS 1s eye-1s spin-3s-3s-tod.p
'As I stood my eye(s) spun (I became dizzy).'

(598) Ija co-cob-ig wa he-do-i-a.
1s sim.-walk-1s-SS water finish-3s-tod.p
'As I walked along the rain stopped.'

It is argued in this thesis, however, that these are not incidents of clause skipping as diagrammed above; rather the marking clause coreferences the immediately following clause as SS when syntactically it is a change of subject. Firstly, while it is most common in text to find these incidents of anomalous SS marking in a clause chain where there is a third clause for the reference of the first clause to skip down to, occasionally instances occur where there is no third clause, as in the examples given. The second clause occurs as the final clause of the sentence. Therefore the first clause must be coreferencing the second clause directly as SS. Secondly if the S/R marking is "corrected" on the first clause and it is made DS then this produces a different meaning as given below.

(599) Ija be-ce-min wen te-i-a.
1s come up-1s-DS hunger 1s-3s-tod.p
'I came up and something caused me to be hungry.'

(600) Ija ta-taw-igin ija am-i wal-do-i-a.
1s sim.-stand-1s-DS 1s eye-1s spin-3s-3s-tod.p
'As I stood something caused my eye(s) to spin.'

(601)? Ija co-cob-igin wa he-do-i-a.
1s sim.-walk-1s-DS water finish-3s-tod.p
?'As I walked along something made the rain stop.'

A DS marking produces the meaning that some other causal agent is involved which is not the subject of the following clause. What seems to be happening then is that it is possible to have two different kinds of subject NP in Amele.

One is marked [+AGENT] and one is marked [-AGENT] or null-AGENT. The S/R system marks a change from Subject, [+AGENT] to Subject, [-AGENT] as SS i.e. no change in Subject, or rather no change in Agent. Most of the time a Subject is [+AGENT] and therefore a change of Subject is also a change of Agent but when a Subject is [-AGENT] the S/R system reveals that it is the Agent that is being tracked across clauses and not the Subject. Another way of looking at it would be to say that in this case the change of Subject is ignored because it does not also involve a change of Agent.

Examples are given below from text of SS marking involving the different kinds of [-AGENT] subjects described. Examples where a DS marking occurs are also given. The relevant verb is underlined in each case.

(i) Subjects of impersonal verbs.

In (602) the [-AGENT] subject of the impersonal verb is *wen* 'hunger' and the reference from the verb *Titi bilesi* is SS.

(602) Ti-ti bile-si mel aid cajahia-g eu wen
sim.-go up be-3d-SS boy female friend-3s that hunger

do-co-b qaje-ce-b te-si-n.
3s-DS-3s cry out-DS-3s go up-3d-rem.p

[17:3]

'As they(2) went up that girl's friend became hungry and she cried out and they(2) went up'

In (603) the [-AGENT] subject of the impersonal verb is *dain* 'pain' and the reference from the verb *cajime-i* is SS.

(603) Filicit-i caj-i-me-i dain do-co-b
startle-pred. arise-pred.-SS-3s pain 3s-DS-3s

mad-en..
say-3s-rem.p

[14:11]

'Startled and in great pain he got up and said..'

In (604) the [-AGENT] subject of the impersonal verb is *gale* 'desire' but in this case the meaning indicates that some other causal agent is involved.

(604) Cudumac uqa fe-ce-b gale d-on.
wallaby 3s see-DS-3s desire 3s-3s-rem.p

[4:5]

'The wallaby looked and it made him envious.'

(ii) Body part subjects.

(605) Cal-i h-u-me-b ege co-nige
come out come-pred.-SS-1p 1p mouth-1p-pos.

cule-ce-b taw-om.
leave-DS-3s stand-1p-rem.p

[25:30]

'We came out and then stood with our mouths open.'

- (606) Ija ta-taw-ig na met-i-m-ig
 1s sim.-stand-1s-SS wood split-pred.-SS-1s
 am-i wal-do-n.
 eye-1s-pos. spin-3s-3s-rem.p
 [21:71]
'As I stood there splitting wood I became dizzy.'
- (607) Odi mad-i-me-i us dahi-g cele-ce-b
 like say-pred.-SS-3s sleep ear-3s-pos. forget-DS-3s
 nij-en.
 lie-3s-rem.p
 [14:9]
'He said that and then he went to sleep and forgot about it.'
- (608) Mel sab eu je-ce-bil bi-niga iqe-ce-b
 child food that eat-DS-3p stomach-3p-pos. stretch-DS-3s
 bi-bile-igin meme-ga-il ana-ga-il cabi na dec
 sim.-sit-3p-DS father-3p-p mother-3p-p garden at from
 h-u-me-ig..
 come-pred.-SS-3p
 [11:10]
'The children ate that food causing their stomachs to stretch and as they sat their fathers and mothers came from the garden ..'
- (609) Ewe-ce-b co ta-tal-en.
 shout-DS-3s mouth-3s-pos. sim.-rip-3s-DS
 [17:29]
'He shouted out as it made his mouth rip.'
- (iii) Inanimate subjects.
- (610) M-i he-du-me-i ceta wal me-ce-b
 put-pred. finish-3s-SS-3s yam ripe become-DS-3s
 ceta eu hun-i-me-i..
 yam that dig up-pred.-SS-3s
 [5:10]
'He finished doing that and then since those yams were ripe he dug them up..'
- (611) Uqa caj-i-me-i sain eu he-do-co-b
 3s arise-pred.-SS-3s time that finish-3s-DS-3s
 d-u-me-i..
 know-pred.-SS-3s
 [14:12]
'He got up knowing that that time had finished..'
- (612) T-i-me-i susul ilal q-oc
 go up-SS-3s scraps disorder hit-NOM/ADJ
 ta-taw-en f-i-me-i..
 sim.-stand-3s-DS see-pred.-SS-3s
 [3:8]

'He went up and saw the scraps lying about..'

In the following examples involving inanimate subjects where the coreference is DS it is sometimes not clear whether the DS is indicating that another causal agent is involved as in (613) or that the inanimate subject itself is being assigned agentivity in this instance as in (614) or whether pragmatic (deictic) factors of the kind described below are playing a part as in (615) and (616).

(613) Uqa na wa ca gaban-du camac na basec-do-co-mun
3s of water with gather-3s sago in pour-3s-DS-1p

no-no-n haun gobil-do-go-na.
sim.-go down-3s-DS again stir-3s-1p-pres.

[31:11]

'We mix the water with the sago and pour it out causing it to go down as we stir it again.'

(614) Uqa cabi na co-cob-on cam gagadic me-ce-b
3s garden to sim.-walk-3s-DS sun strong become-DS-3s

uqa l-i-me-i cenal salu na us nij-en.
3s go-pred.-SS-3s galip shade in sleep lie-3s-rem.p

[14:3]

'As he walked to the garden the sun became strong so he went and lay down in the shade of a galip tree and went to sleep.'

In (615) and (616) the underlined DS verb is probably indicating a change in place or time setting (see below) rather than a change in Agent(Subject).

(615) Je eu culo-co-hul ni-nij-en oso na
talk that leave-DS-1d sim.-lie-3s-DS indef. to

let-i lo-wo-na.
cross over-pred. go-1d-pres.

[23:45]

'We(2) left that text lying there and moved on to another one.'

(616) Ono bi-bil-iqin cuha ijed eu o-co-b ija
there sim.-sit-1s-DS Sunday three that get-DS-3s 1s

ija na jic sacia-du-m-ig man wag u-m-ig
1p of road prepare-3s-SS-1s bird canoe get-SS-1s

Ethiopia ono l-i ton-oom.
there go-pred. descend-1s-rem.p

'I stayed there for three weeks and then I prepared my journey, took a plane and landed at Ethiopia.'

The S/R system also has a pragmatic or deictic function in that it can indicate a change in time, place or world setting. A change of time, place or world setting is indicated by the structure, [14], diagrammed below. Basically there are occasionally "anomalous" DS markings on verbs across clauses that have the same subject NP. The explanation given by native speakers as to the reason for

such instances is that "something has changed" or this is "a new situation" and often it is obvious that the change being indicated is deictic rather than syntactic and that these deictic changes are in the area of time, place or world reference points. For example a change of time marked by the S/R system is often backed up by a temporal expression; a change of place marked by the S/R system occurs most frequently with verbs of motion and a change of location can also be indicated by a locative expression; a change of world marked by the S/R system is normally a switch from an intended or proposed action to the real action itself or vice versa, i.e. a switch from real action to intended action.

[14]

Clause 1-DS* Clause 2
Subject, Subject,

*Indicates a semantic change of time, place or world

Illustrative examples from text are given below and the clause indicating the semantic change is underlined. In each case there is no change in grammatical subject between the underlined verb and the following controlling verb.

(i) Change of time setting.

(617) Od-i-me-ig eu na cuha fe-ce-bil hib na age
do-pred.-SS-2p that of Sunday see-DS-2p later 2p

meen qaig gaban-du-me-ig ihoc f-i-me-ig ..
stone shoot gather-3s-SS-2p enough see-pred.-SS-2p

[2:10]

'Do that and then later take a look and you will see that the money you have collected will be enough ..'

(618) Eu 1977 jagel November na odo-co-b cul-ig-en.
that month in do-DS-3s leave-1p-3s-rem.p

[2:14]

'That was in November 1977 that he did that and then he left it for us.'

(619) Wele ene sain me je hahawan ho-co-b
before here time good talk first come-DS-3s

nij-en.
lie-3s-rem.p

[9:65]

'Before when the gospel first came it stayed.'

(620) Ma ben m-i-me-i gulom ibul-do-co-b
taro big become-pred.-SS-3s species change-3s-DS-3s

wal m-i-me-i ..
ripe become-pred.-SS-3s

[12:17]

'The taro grows big and then when it changes into a gulom type it is ripe..'

(ii) Change of place setting.

(621) Mike uqa car tuli-do-co-b jic to-d-u
 3s start-3s-DS-3s road follow-3s-pred.

b-i Sioba na jo cemenug ono uqa car
 come up-pred. of house near there 3s

heewe-ce-b taw-en.
 hold-DS-3s stand-3s-rem.p

[27:4]

'Mike started the car and then followed the road up to Sioba's house and held the car there near the house.'

(622) Age ceta gul-do-co-bil l-i bahim na tac-ein.
 3p yam carry-3s-DS-3p go-pred. floor on fill-3p-rem.p
 [5:14]

'They carried the yams on their shoulders and went and filled up the yam store.'

(623) Uqa mun cod-on ma hun-en ceta tac-en
 3s banana chop-ADJ taro dig-ADJ yam store-ADJ

ne-ce-b m-i-al-en.
 go down-DS-3s put-pred.-3d-3s-rem.p

[17:19]

'He went down with the chopped banana, the dug-up taro and the stored yam and put it for them(2).'

(624) Uqa cegul-t-en. Odo-co-b uqa eh-ite-ce-b uqa
 3s meet-1s-3s-rem.p do-DS-3s 3s take-1s-DS-3s 3s

ana-g meme-g ca ale na jo na
 mother-3s-pos. father-3s-pos. add 3p of house to

bel-om.
 go-1p-rem.p

[9:6-7]

'He met me. Then he took me to his mother and father's house.'

(iii) Change of world setting.

(625) Aria meme-g eu ma-do-n, "Cois eu
 alright father-3s-pos. that say-3s-3s-rem.p OK that

real -> intent.

ma-do-co-min l-ig eh-i l-i m-ih-ig-en,
 say-3s-DS-1s go-1s take-pred. go-pred. put-2s-1s-fut.

intent. -> real
 do-n. Odo-co-b l-i-me-i dana
 say-3s-3s-rem.p do-DS-3s go-pred.-SS-3s man

co cafa q-oc eu ma-do-n,
 mouth-3s-pos. close hit-NOM/ADJ that say-3s-3s-rem.p

"Cois caja eh-i l-i m-ud-ih-ig-en,"
 OK woman take-pred. go-pred. put-3s-2s-1s-fut.

do-n.
say-3s-3s-rem.p

[17:13-14]

'Alright the father told her, "OK I say I will take you and give you to him." Then he went to the man with the closed mouth and told him, "OK I will bring the woman and give her to you."'

intent. -> real

(626) Uqa ege odi made-ge-ce-b uqa uqa na mel
3s 1p like say-1p-DS-3s 3s 3s of boy

cede-ce-b h-u-me-ig ..
get(pl)-DS-3s come-pred.-SS-3p

[2:11]

'He told us that and then he got his boys and they came..'

(627) Eu nu qila i ege meen qaig eu mede
that for now this 1p stone shoot that nose-3s-pos.

real -> intent.

qo-qo-na. He-do-co-b eu fal-doc nu cabi
hit-1p-pres. finish-3s-DS-3s that fence-inf. for work

sanan me-q-an.
start put-1p-fut.

[2:22-23]

'So now we are gathering that money. When we have finished we will start to do the fencing work.'

(628) Hina gaim heew-ig-a eu mani-te-te-m ija
2s crab hold-1s-tod.p that roast-sim.-1s-2s-DS 1s

intent. -> real

sab met-ig-en," do-n. Odo-co-b sab
food peel-1s-fut. 3s-3s-rem.p do-DS-3s food

met-en ijom.
peel-3s-rem.p EM

[17:25-26]

'"You roast the crab that I caught for me while I peel the food," she told him. Then, alright, she really peeled the food.'

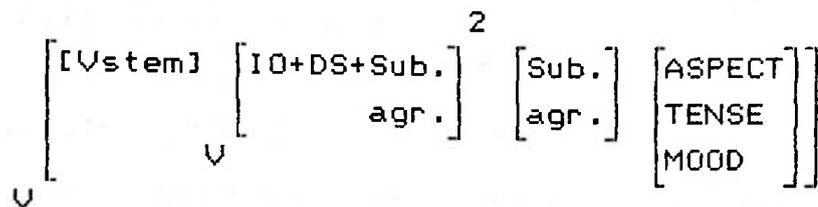
2.1.3.6.8. Reflexive verbs.

There are no special reflexive verbs. Reflexivity is indicated by a reflexive pronoun construction (see 1.6.). A reflexive action can also be indicated by the verb however. This is by means of an object clitic where subject and object reference happen to be to the same entity.

(629) Ija q-it-ig-a.
1s hit-1s-1s-tod.p
'I hit myself.'

Some verbs have an inherent reflexive action where the object of the verb is the same as the subject but reflexive pronoun forms can be used with these verbs.

[16]



- (631) Dana ale qo-co-b qo-co-b esi-a.
 man 3d hit-DS-3s hit-DS-3s 3d-tod.p
'The two men hit each other.'
- (632) Dana caja age fe-ce-b fe-ce-b eig-a.
 man woman 3p see-DS-3s see-DS-3s 3p-tod.p
'The people looked at each other.'
- (633) Age eeta eh-i le-ce-b eh-i le-ce-b
 3p yam take-pred. go-DS-3s take-pred. go-DS-3s
 eig-a.
 3p-tod.p
'They took yams to each other.'
- (634) Ele ew-udo-co-b ew-udo-co-b ow-a.
 1d despise-3s-DS-3s despise-3s-DS-3s 1d-tod.p
'We(2) despise each other.'
- (635) Ege tanaw-udo-co-b tanaw-udo-co-b oq-a.
 1p pacify-3s-DS-3s pacify-3s-DS-3s 1p-tod.p
'We made peace with each other.'
- (636) Mel ale talil do-co-b do-co-b esi-a.
 boy 3d circle 3s-DS-3s 3s-DS-3s 3d-tod.p
'The two boys circled each other.'
- (637) Ege asal do-co-b do-co-b oq-a.
 1p laugh 3s-DS-3s 3s-DS-3s 1p-tod.p
'We laughed at each other.'
- In nonfinite constructions the coordinate verbs are followed by the appropriate nonfinite suffixation.
- (638) Age fe-ce-b fe-ce-b ec nu ho-ig-a.
 3p see-DS-3s see-DS-3s inf. for come-3p-tod.p
'They came to see each other.'
- (639) Mel age qo-co-b qo-co-b i-me-ig
 boy 3p hit-DS-3s hit-DS-3s pred.-SS-3p run
 busal-eig-a.
 away-3p-rem.p
'The boys hit each other and then ran away.'
- (640) Mel ale qo-co-b qo-co-b esin oso
 boy 3d hit-DS-3s hit-DS-3s sim.-3d-DS indef.

ton-en.

fall down-3s-rem.p

'As the two boys hit each other one of them fell down.'

2.1.3.6.10. Directional verbs.

There are no specific verbs indicating motion towards or away from the speaker/hearer but motions in different directions: to and from a point, up at an inclination, down at an inclination, up vertically, down vertically etc. can be indicated by a paratactic series of verbs where the final verbal element is realized by a motion verb. The motion verb adds the directional meaning to the situation expressed by the first verb and carries the verbal suffixation. The first verb is marked only by the predicate marker -i. The motion verbs that function in this way are:

Horizontal orientation.

nu-ec	<i>'to go (sg)'</i>
bel-ec	<i>'to go (pl)'</i>
l-ec	<i>'to go (proximal)'</i>
h-oc	<i>'to come'</i>

Vertical orientation.

t-ec	<i>'to go up'</i>
n-oc	<i>'to go down'</i>
b-ec	<i>'to come up'</i>
n-ec	<i>'to come down'</i>
tob-ec	<i>'to ascend vertically'</i>
ton-ec	<i>'to descend vertically'</i>

Examples of usage:

(641)Uqa caji nuia.	<i>'He arose and went.'</i>
(642)Uqa caji hoia.	<i>'He arose and came.'</i>
(643)Uqa caji teia.	<i>'He arose and went up.'</i>
(644)Uqa caji neia.	<i>'He arose and came down.'</i>

(645)Uqa ceseli nuia.	<i>'He returned and went.'</i>
(646)Uqa ceseli hoia.	<i>'He returned and came.'</i>

(647)Eh-ih-i	be-i-a.
take-2s-pred.	come up-3s-tod.p
<i>'He brought you up.'</i>	

(648)Eh-du-i	n-u-ge-ga-n	fo?
take-3s-pred.	go down-pred.-1p-2s-fut.	QU
<i>'Will you take him down for us?'</i>		

2.1.3.6.11. Body orientation.

Different kinds of body orientation can be indicated by various compound verb forms or adverbial expressions.

(649)Uqa us	nij-ina.
3s	sleep lie-3s-pres.
<i>'He is sleeping (lit: sleep lying).'</i>	

- (650) Uqa uqoc uqoc nij-ina.
 3s lie-3s-pres.
'He is lying on his front/stomach.'
- (651) Uqa tag tag nij-ina.
 3s lie-3s-pres.
'He is lying on his back.'
- (652) Mel uqa ho ho cob-ona.
 child 3s pig pig walk-3s-pres.
'The child is crawling (lit: walking like a pig).'

2.1.3.6.12.1. Incorporation.

There are many verb phrases which consist of a verb and an adjunctive element which can be a noun, noun phrase, verb, adjective, adjective phrase, adverb or postpositional phrase. These are analyzed as compound VP's i.e. adjunct + verb. Such compounding occurs most frequently with the verbs q-oc 'to hit' and m-ec 'to put' although it can occur with other verbs. In such a compound VP the verb functions as a copular verb and the meaning is carried by the adjunctive element. Often the meaning is idiomatic and cannot be determined from the individual elements of the compound VP however. Most of the adjunctive elements that have been observed to date in compound VP's also have an independent existence elsewhere in the language and it would seem that compounding with m-ec and especially q-oc is fully productive in that they can combine with almost any nominal or adjectival element to produce a compound VP and often an idiomatic expression. This supports the analysis that in this capacity q-oc and m-ec are functioning as copular verbs. The compound VP's sanan m-ec 'to start' and cit q-oc 'to bring to a conclusion' also have aspectual values (see 2.1.3.3.2.1.6-7.). A few adjunctive elements only occur in a compound VP and do not have an independent existence.

2.1.3.6.12.1.1. Incorporation of nouns and noun phrases.

Sample examples are only given for nominal compounding with q-oc and m-ec since this process is open-ended for these verbs.

aig q-oc	seed hit	'to bear fruit'
ame-g q-oc	eye hit	'to be dazzled'
amese-c q-oc	eyelid hit	'to wink'
bail q-oc	yellow hit	'to paint yellow'
cahug q-oc	smell hit	'to be smelly'
calih q-oc	weed hit	'to weed'
ceb q-oc	betelnut hit	'to take all the betelnuts off the tree'
cesil q-oc	cassowary hit	'to sneeze'
cit q-oc	point hit	'to sharpen to a point'
cog q-oc	frog hit	'to be got at by the frogs'
cololo q-oc	bamboo hit	'to play bamboo flute'
dalul q-oc	drunk hit	'to be drunk'
hag q-oc	sickness hit	'to be sick'
hime q-oc	knot hit	'to be knotted'
ilal q-oc	disorder hit	'to be in disorder'
ilo q-oc	head hit	'to have a headache'

ijan q-oc	name hit	'to name'
ja q-oc	fire hit	'to make a big feast'
jain q-oc	rest hit	'to worry'
jagel q-oc	moon hit	'to have one's monthly period'
lal q-oc	surface hit	'to float'
mala q-oc	chicken hit	'to crow'
malasa-c q-oc	pancreas hit	'to have goosepimples'
man q-oc	bird hit	'to be got at by the birds'
mede q-oc	nose hit	'to gather together'
qab q-oc	ridgepole hit	'to cover ridgepole'
qato q-oc	shoulder hit	'to shrug'
sab q-oc	food hit	'to serve food'
salu q-oc	shade hit	'to be shaded'
sib q-oc	chin hit	'to yawn'
siw q-oc	breath hit	'to yawn'
sucun q-oc	corner hit	'to be like a corner'
ud q-oc	load hit	'to load up'
wa q-oc	water hit	'to be wet'
wau-g q-oc	stomach hit	'to be repentant'
ame-g m-ec	eye put	'to keep a look out'
bal m-ec	magic put	'to do garden growing magic'
ban m-ec	dwarf put	'to become a dwarf'
caf m-ec	invalid put	'to become an invalid'
cahug m-ec	smell put	'to smell'
cal m-ec	stale put	'to die'
cih m-ec	fun put	'to make fun'
dah m-ec	ear put	'to listen'
dewe-g m-ec	body put	'to hang around'
galab m-ec	decoration put	'to decorate'
gatic m-ec	galip put	'to shell a galip nut'
gi m-ec	grass put	'to become overgrown with grass'
haul m-ec	lizard put	'to become like a lizard'
hel m-ec	hole put	'to become jealous'
sanan m-ec	start put	'to start'
sim m-ec	child put	'to be like a child'
unun m-ec	hum put	'to hum'
wal m-ec	rainbow put	'to become ripe'
jain mud-ec	rest make	'to rest'
dado mud-ec	guide make	'to guide'
mede qah-ec	nose break	'to work hard'
us nij-ec	sleep lie	'to sleep'

2.1.3.6.12.1.6. Incorporation of adjectives and adjective phrases.

cisan q-oc	burnt hit	'to be burnt'
cogain q-oc	immature hit	'to be immature'
gad q-oc	stupid hit	'to be stupid'
gaga q-oc	coloured hit	'to be coloured'
gagadic q-oc	strong hit	'to be strong'
gal q-oc	curled hit	'to be curled'
gonin q-oc	coiled hit	'to be coiled'
manin q-oc	calm hit	'to be calm'

me q-oc	good hit	'to bear fruit'
mugulih q-oc	bitter hit	'to be bitter'
qen q-oc	invisible hit	'to be invisible'
ben m-ec	big put	'to become big'
camasac m-ec	clear put	'to become clear'
cebac m-ec	alive put	'to become alive'
cecela m-ec	long put	'to become long'
cus m-ec	wild put	'to become wild'
gaga m-ec	colour put	'to become coloured'
gogolos m-ec	loose put	'to become loose'
gotol m-ec	bad put	'to become bad'
gudoc m-ec	deep put	'to be deep'
ihoc m-ec	enough put	'to practise'
me qee m-ec	good not put	'to become no good'
meeg m-ec	dry put	'to become dry'
mulec m-ec	empty put	'to become empty'
toia m-ec	old put	'to become old'

2.1.3.6.12.1.7. Incorporation of adverbs.

geh q-oc	much hit	'to be hurt badly'
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2.1.3.6.12.1.8. Incorporation of postpositions.

ca ca m-ec	add add put	'to become the same'
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2.1.3.6.12.1.9. Incorporation of verbs.

Verb incorporation would be more accurately described as a complex VP structure of verb + auxiliary where the verb q-oc 'to hit' functions as an auxiliary verb. This structure is described here under incorporation since most of these forms have an idiomatic meaning similar to the forms incorporating nominal and adjectival elements but in actuality this is a type of serial verb construction (see 2.1.3.7.).

beges-i q-oc	take hit	'to oversleep'
emud-i q-oc	ambush hit	'to ambush'
man-i q-oc	roast hit	'to do magic'
qatan-i q-oc	split hit	'to tear'
qel-i q-oc	throw hit	'to thunder'
qet-i q-oc	cut across hit	'to trip and fall'
qul-u q-oc	spit hit	'to rinse mouth out'
sehel-i q-oc	slip hit	'to slip and fall'
sel-i q-oc	hollow hit	'to make a resonant noise'
sul-i q-oc	lift hit	'to lift up'

Another type of verb incorporation also occurs in relation to Pidgin verbs and this is fully productive. A verbal suffix d-oc 'object marker' is attached to a Pidgin verb to 'Ameleze' it. This occurs where an Amele term does not exist or it is more convenient to use a Pidgin term - for example:

(653)Wa pumpim do-g-a.
 water 3s-2s-imp.
 'Pump the water.'

(654) Uqa na je skruim d-ug-en.
 3s of talk 3s-1s-fut.
 'I will add to his talk.'

(655) Paitim d-og-a.
 3s-2s-imp.
 'Hit him!'

2.1.3.6.12.1.10. Incorporation of negative elements.

The negative morphemes -l 'negative past' and -u 'negative future' are included in the verb where there is a negative particle qee 'not' or cain 'don't' preceding the verb or in the apprehensive mood (see 2.1.3.3.2.1.17.).

2.1.3.6.12.1.11. Incorporation of predicate marker.

A predicate marker -i occurs with some verbal constructions. It occurs in the sequential action same subject verbs following the verb stem and preceding the same subject marker (see 2.1.3.3.2.1.1.). The subject marker and SS marker can be omitted when the verb occurs as part of a serial verb construction leaving just the verb stem and the predicate marker (see 2.1.3.5 and 7.).

(656) bil-i-me-i 'he sat and..'
 sit-pred.-SS-3s

(657) nu-i-me-i 'he went and..'
 go-pred.-SS-3s

(658) nu-i fe-i-a 'he went and saw'
 go-pred. see-3s-tod.p

The main function of the predicate marker is to distinguish direct object clitics from indirect object clitics (see 2.1.3.6.2.2-3.). The direct object clitic attaches directly to the verb stem and the predicate marker either follows the direct object clitic or deletes altogether whereas the predicate marker must occur between the indirect object clitic and the verb stem in which case it often coalesces with the final vowel (either -e or -o) of the verb.

(659) je-ad-ig-en 'I will eat them.'
 eat-3p-1s-fut.

(660) j-i-ad-ig-en 'I will eat (it) for them.'
 eat-pred.-3p-1s-fut.

(661) o-ad-ig-en 'I will get them.'
 get-3p-1s-fut.

(662) u-ad-ig-en 'I will get (it) for them.'
 get-pred.-3p-1s-fut.

The predicate marker can also occur as an independent element with certain adverbials.

(663) qee i el 'it is not'
 not pred. 3s-neg.p

(664) tuma tuma i mad-en 'he spoke in awe'
 pred. say-3s-rem.p

It can also be argued that the predicate marker is the only realization of the verb 'to give' which comprises just verb suffixation and has no overt verb stem. However comparing (665) (an instance of 'give' with indirect object suffixation) with (666) (an instance of an impersonal verb with direct object suffixation) it can be seen that the predicate marker does occur in the case of the verb 'to give'.

(665) Uqa sab i-te-i-a.
 3s food pred.-1s-3s-tod.p
 'He gave me food.'

(666) Ija wen te-i-a.
 1s hunger 1s-3s-tod.p
 'I was hungry.'

2.1.3.6.12.1.12. Incorporation of distributive marker.

There is a special marker on the verb -ad that can indicate a distributive action.

(667) Dana age bud-u bel-ad-eig-a.
 man 3p disperse-pred. go-dist.-3p-tod.p
 'The men went off in all directions.'

(668) Uqa maha cunug wal-ade-i-a.
 3s land all search-dist.-3s-tod.p
 'He searched the whole land.'

(669) Uqa sab eu cawal-ade-i-a.
 3s food that grab-dist.-3s-tod.p
 'He grabbed all of that food.'

2.1.3.6.12.1.13. Incorporation of exclusive marker.

There is a special marker on the verb -ad that can indicate an exclusive action.

(670) Ija qa jobon l-i-m-ig nij-ad-ig-en.
 1s but village go-pred.-SS-1s lie-excl.-1s-fut. [21:98]
 'But I will go to the village without you.'

(671) Ija sum-i-h-ig-a qee nu ija ma
 1s wait-pred.-2s-1s-tod.p not for 1s taro
 je-ad-ig-a.
 eat-excl.-1s-tod.p
 'I waited for you to no avail so I ate the taro without you.'

2.1.3.7. Strings of verbs.

Clause chaining is a common occurrence in the language and the reader is referred to section 2.1.3.6.7. for a description of the switch-reference system that is integral to the clause chaining phenomenon. As well as clauses occurring in a coordinated sequence verbs alone can also be strung together in paratactic serial verb constructions.⁹ In such constructions only the final verb in the series will carry the verb morphology, either verb medial suffixation or verb final suffixation, and the other verb(s) will be a reduced form of the verb i.e. either verb stem(object clitic) + predicate marker or verb stem(object marker) + subject agreement marker. In other words either the same subject (SS) marker and the subject agreement marker is deleted or the predicate marker and the SS marker is deleted. These verbs are also known as 'stripped down' verbs. See section 2.1.3.5. (Nonfinite forms) for the morphological form of these reduced verbs. Such verb series only occur where the subject NP is the same for all the verbs in the series. As well as stringing together a series of verbs that describe a close knit and related sequence of actions the serial verb construction has some specialized functions:

- (i) the final verb in the series can add an aspectual meaning to the preceding verb(s) (see 2.1.3.3.).
- (ii) the final verb in the series can function as a copular verb to either produce a compound meaning with the preceding verb(s) in the series or add no extra meaning at all (see 1.2.1.1. and 2.1.3.6.12.1.9.).
- (iii) the final verb in the series can function to carry object markers where the preceding verb(s) in the series cannot carry object markers (see 2.1.3.6.2.2-3.).
- (iv) the final verb in the series can be a directional verb and add directional meaning to the verb series (see 2.1.3.6.10.).

Examples are given below of paratactic verb series taken from text material. Most of these paratactic series comprise just two verbs but up to five have been recorded in text. Where the series does not have one of the specialized functions mentioned above there is no restriction on clausal elements that can occur between the paratactic verbs.

(672) *Aqun-ec na dec eu gis cal-i*
 front-NOM/ADJ at from that air come out-pred.

hu-hu bil-i folo-en.
 it.-come be-dur.-pred. flatten-3s-rem.p

[27:18]

'From the front air came out as the tyre went down.'

(673) *N-i-me-si aluh ben wol-du-du*
 come down-pred.-SS-3d mountain big pass-3s-it.

h-u wa let-i h-u
 come-pred. water cross over-pred. come-pred.

ene i sec ho-si-n.
 here this way come-3d-rem.p

[10:23]

'They came down, passed the big mountain, came to the river and crossed over it and then came this way to here.'

(674) In dec oso cal me-ce-b age l-i
 who from indef. dead become-DS-3s 3p go-pred.

heew-i bi-bil-i qaj-i-me-ig..
 hold-pred. sim.-be-dur.-pred. cry-pred.-SS-3p

[9:36]

'When someone dies they sit and touch the body as they wail..'

(675) Caf-do-do-gin camac ta eu qee
 squeeze-sim.-3s-3p sago scrapings that not

me-ce-b age casac wa heew-i fe-gi-na.
 become-DS-3s 3p first water hold-pred. see-3p-pres.

[15:18]

'As they keep squeezing the taro scrapings come to an end and then they test the water.'

(676) J-i f-ag-a.
 eat-pred. see-2s-imp.
'Taste it!'

2.1.3.8. Impersonal verbs.

The impersonal verb construction can be comprised of either (i) an experiencer NP and a cause NP followed by a verbal ending or (ii) an experiencer NP and a verbal complement element followed by a verbal ending. With type (i) the experiencer NP is coreferenced by the verbal ending as syntactic object. Subject agreement on the verbal ending is always third person singular and this would indicate that the cause NP functions as subject. However it is ungrammatical for the experiencer and cause NP's to occur in the unmarked order of SOV. The experiencer NP (O) must always precede the cause NP (S) with an order of OSV. So, while (677) below is grammatical (678) is not.

O S V
 (677) Ija wen te-na.
 1s hunger 1s-3s-pres.
'I am hungry.'

S O V
 (678) *Wen ija te-na.
 hunger 1s 1s-3s-pres.

This can be explained by the pragmatic notion of topic (see also 1.12.) whereby the experiencer NP being [+HUMAN] and higher on the animacy hierarchy than the cause NP, [-HUMAN], takes the topic position normally occupied by the syntactic subject i.e. preceding syntactic object and normally sentence initial. The nominal elements expressing cause are realized by a closed class of nominals some of which only

occur in the impersonal verb construction. These are marked by + below. The other nominals can occur elsewhere as free forms. All the forms below are listed in the present tense which is zero marked for third person singular subject.

+alal te-na	'I am tired.'
aileleh te-na	'I taste something bitter.'
caub te-na	'I am becoming white.'
ciciten te-na	'I am prickled'
cucui te-na	'I am afraid.'
dadán te-na	'I am confused.'
dain te-na	'I feel pain.'
duan te-na	'I feel cold.'
+fia fia te-na	'I have a slight pain.'
+fogo te-na	'I understand.'
gale te-na	'I have desire.'
gigitic te-na	'I have something tight on.'
gihigih te-na	'I feel hot.'
gol te-na	'I am red.'
gulihin/gulin te-na	'I taste something bitter.'
musul te-na	'I am sweating.'
+nahin te-na	'I am itchy.'
siw te-na	'I am breathless.'
ulaul/ulul te-na	'I taste something sour.'
us te-na	'I am sleepy.'
wa gab te-na	'I am thirsty.'
(ja) walac te-na	'I feel warm.'
+walol te-na	'I am sorry/ I grieve.'
+wen te-na	'I am hungry.'

It should be noted that in Amele the verb 'to give' does not have a verb stem and is realized by verbal suffixation alone similar to the impersonal verb. With the verb 'to give', however, other inflections of subject person-number than 3s can be realized and also the normal order of SOV occurs.

S	IO	DO	V
(679) Ija	dana	leis	sab al-ig-a.
1s	man	two	food 3d-1s-tod.p
			'I gave the two men food.'

In the negative form of the type (i) impersonal verb construction the negative particle qee 'not' can precede either the verbal suffix or the cause NP but it is ungrammatical for qee to precede the experiencer NP. This would give further evidence that the experiencer NP is functioning like a subject NP (i.e. as topic) since the negator qee can only occur as a constituent of the VP (see 1.4.).

(680) Ija	wen	qee	te-l.
1s	hunger	not	1s-3s-neg.p
			'I am not hungry.'

(681) Ija	qee	wen	te-l.
1s	not	hunger	1s-3s-neg.p
			'I am not hungry.'

(682)*Qee ija wen te-1.
not 1s hunger 1s-3s-neg.p

The impersonal verb construction, type (ii), with the verbal element functioning as verbal complement is fully productive and expresses the optative mood (see 2.1.3.4.6.). The verbal complement element can be realized by either a VP in the imperative mood or a VP in the remote past tense. The former expresses a present or future desire while the latter expresses a contrafactual desire. As with the type (i) impersonal verb the object pronominal clitic in the verbal suffix agrees in person and number with the experiencer NP and the verb is always realized with 3s subject. Exemplary paradigms are given below for an intransitive verb nu-ec 'to go' and a transitive verb j-ec 'to eat'.

Ija nu-ug-a te-na. 'I want to go.'
Hina nu-ug-a he-na. 'You want to go.'
Uqa nu-ug-a do-na. 'He wants to go.'

Ele nu-ug-a ile-na. 'We(2) want to go.'
Ale nu-ug-a ale-na. 'You/they(2) want to go.'

Ege nu-ug-a ige-na. 'We want to go.'
Age nu-ug-a ade-na. 'You/they want to go.'

Ija sab j-ag-a te-na. 'I want to eat food.'
Hina sab j-ag-a he-na. 'You want to eat food.'
Uqa sab j-ag-a do-na. 'He wants to eat food.'

Ele sab j-ag-a ile-na. 'We(2) want to eat food.'
Ale sab j-ag-a ale-na. 'You/they(2) want to eat food.'

Ege sab j-ag-a ige-na. 'We want to eat food.'
Age sab j-ag-a ade-na. 'You/they want to eat food.'

As with the type (i) impersonal verb the negative particle, qee 'not', can precede either the verb or the verbal complement element but not the experiencer NP.

(683)Ija nu-ug-a qee te-na.
1s go-2s-imp. not 1s-3s-pres.
'I don't want to go.'

(684)Ija qee nu-ug-a te-na.
1s not go-2s-imp. 1s-3s-pres.
'I don't want to go.'

(685)*Qee ija nu-ug-a te-na.
not 1s go-2s-imp. 1s-3s-pres.

(686)Ija sab j-ag-a qee te-na.
1s food eat-2s-imp. not 1s-pres.
'I don't want to eat food.'

(687)Ija qee sab j-ag-a te-na.
1s not food eat-2s-imp. 1s-3s-pres.
'I don't want to eat food.'

(688)*Qee ija sab j-ag-a te-na.
not 1s food eat-2s-imp. 1s-3s-pres.

Where the impersonal verb expresses desire regarding another party the forms are:

Ija Naus nu-ug-a te-na.
'I want Naus to go.'
Hina Naus nu-ug-a he-na.
'You want Naus to go.'
Uqa Naus nu-ug-a do-na.
'He wants Naus to go.'
Ele Naus nu-ug-a ile-na.
'We(2) want Naus to go.'
Ale Naus nu-ug-a ale-na.
'You/they(2) want Naus to go.'
Ege Naus nu-ug-a ige-na.
'We want Naus to go.'
Age Naus nu-ug-a ade-na.
'You/they want Naus to go.'

Ija Naus sab j-ag-a te-na.
'I want Naus to eat food.'
Hina Naus sab j-ag-a he-na.
'You Naus want to eat food.'
Uqa Naus sab j-ag-a do-na.
'He wants Naus to eat food.'
Ele Naus sab j-ag-a ile-na.
'We(2) want Naus to eat food.'
Ale Naus sab j-ag-a ale-na.
'You/they(2) want Naus to eat food.'
Ege Naus sab j-ag-a ige-na.
'We want Naus to eat food.'
Age Naus sab j-ag-a ade-na.
'You/they want Naus to eat food.'

The optative-contrafactual mood (see 2.1.3.4.6.) is also expressed with an impersonal verb. In this case the verbal ending is marked for contrafactual mood as well as third person singular subject agreement.

Ija nu-eem t-ou-b *'I would like to have gone.'*
Hina nu-eem h-ou-b *'You would like to have gone.'*
Uqa nu-en d-ou-b *'He would like to have gone.'*
Ele nu-oh il-ou-b *'We(2) would like to have gone.'*
Ale nu-esin al-ou-b *'You/they(2) would like to have gone.'*
Ege nu-om ig-ou-b *'We would like to have gone.'*
Age nu-ein ad-ou-b *'You/they would like to have gone.'*

The negative form is:

- Ija qee nu-el-em t-ou-b
'I would like to have not gone.'
 Hina qee nu-el-em h-ou-b
'You would like to have not gone.'
 Uqa qee nu-el d-ou-b
'He would like to have not gone.'
 Ele qee nu-ol-oh il-ou-b
'We(2) would like to have not gone.'
 Ale qee nu-ele-sin al-ou-b
'You/they(2) would like to have not gone.'
 Ege qee nu-ol-om ig-ou-b
'We would like to have not gone.'
 Age qee nu-el-ein ad-ou-b
'You/they would like to have not gone.'

Where the optative-contrafactual mood is expressed concerning someone else then the verbal element is in the remote past tense and agrees with the other party NP.

- Ija Naus nu-en t-ou-b
'I would like Naus to have gone.'
 Hina Naus nu-en h-ou-b
'You would like Naus to have gone.'
 Uqa Naus nu-en d-ou-b
'He would like Naus to have gone.'
 Ele Naus nu-en il-ou-b
'We(2) would like Naus to have gone.'
 Ale Naus nu-en al-ou-b
'You/they(2) would like Naus to have gone.'
 Ege Naus nu-en ig-ou-b
'We would like Naus to have gone.'
 Age Naus nu-en ad-ou-b
'You/they would like Naus to have gone.'

2.1.4. Adjectives.

2.1.4.1. Distinctions between predicate and attributive forms of adjectives.

There is no difference in the form of adjectives whether they are used predicatively or attributively. The adjective normally functions as an attributive element in the noun phrase and as such can be the only manifestation of the noun phrase (see 1.2.5.2.1.). The adjective can also function as the predicative element of the verbless equative clause (see 1.2.1.1.4.).

- (689) Dana sab me je-i-a.
 man food good eat-3s-tod.p
'The man ate good food.'

- (690) Sab eu me.
 food that good
'That food is good.'

2.1.4.2. Distinction between absolute and contingent state of adjectives.

The adjective can function in an absolute (normal) state as described in 2.1.4.1. or in a contingent (abnormal) state when it functions either as an adverbial element in the clause modifying the verb (see 1.2.1.3.) or as the complement in the compound verb phrase (see 2.1.3.6.12.1.6.) complementing copular verbs like q-oc 'to hit/have' or m-ec 'to put/become'. There is no difference in the form of adjectives whether they function in an absolute or contingent state.

(691) Uqa dana tutuc.
3s man straight
'He is an honest man.'

(692) Uqa tutuc cobo-na.
3s straight walk-3s-tod.p
'He lives righteously.'

(693) Na eu me qo-i-a.
tree that good hit-3s-rem.p
'That tree has fruited.'

(694) Mel eu me me-i-a.
boy that good put-3s-tod.p
'That boy has become good.'

2.1.4.3. Adjective agreement.

Adjectives do not agree with nouns.

2.1.4.4. Comparison.

Comparison is described under 1.8.

2.1.4.5. Degrees of quality.

2.1.4.5.1. In large measure.

Large measure is expressed by an intensifier word like bahic 'very' occurring after the adjective/adverb.

(695) Jo eu ben bahic.
house that big very
'That house is very big.'

2.1.4.5.2. In superabundance.

There is no way of distinguishing superabundance from large measure.

2.1.4.5.3. In small measure.

Small measure is expressed by one adjective modifying another.

(696) Jo eu ben nag.
house that big small

'That house is a little bit big.'

2.1.4.6. Verbal categories with predicative adjectives.

Adjectives that function as the predicate element in the verbless equative clause are not marked with verb morphology (see 1.2.1.1.4.). When an adjective functions as the complement of a copular verb the verb carries the appropriate morphology and the adjective is not marked (see 1.2.1.1.2.).

2.1.5. Postpositions.

2.1.5.1. Usage of postpositions.

The usage of postpositions is described fully under 1.2.4., 1.16.5. and 2.1.1.1.4.

2.1.5.2-4. Nominal agreement and government.

Postpositions do not agree with the nouns they govern neither do they combine with the personal pronouns or the indefinite article that they govern.

2.1.6. Numerals/quantifiers.

2.1.6.1. Numerals used in counting.

The Amele have an indigenous base 5 counting system based on the five fingers of the hand. So the count is 1, 2, 3, 4, 10 since the five fingers of one hand is the base. The system is still used although it is only really workable up to decimal 10. Beyond decimal 10 the Amele system becomes very cumbersome so Pidgin or English numbers are used for 10 and above. *wal oso* is literally *'one rainbow'*; *eben* is *'hand'* and *gic* is *'finger'*. So *eben gic osahic* is *'one hand and one finger'* etc. *eben naha naha* is *'two hands (lit: hand half half)'*.

	<u>Pental</u>	<u>Decimal</u>
osahic/osaic/osol	1	1
lecis/leis	2	2
ijed	3	3
wal oso	4	4
eben/ebum oso	10	5
eben gic osahic	11	6
eben gic lecis	12	7
eben gic ijed	13	8
eben gic wal oso	14	9
eben naha naha	20	10

2.1.6.4. Ordinal numbers.

Ordinal numbers can be formed by suffixing a nominalizing or adjectivalizing ending *doc* to a numeral. There are also some relationship terms that can function as ordinal numbers.

osahic doc *'first'*

leciš doc	'second'
ijed doc	'third'
wal oso doc	'fourth'
eben oso doc	'fifth'
matu	'firstborn/first'
milum	'secondborn/second'
subig	'lastborn/last'

(697) Cah-du ijed du-me-ig wal oso d-oc na
squeeze-3s three 3s-SS-3p rainbow one NOM/ADJ at

age camac ta eu hele-gi-na.
3p sago scraps that throw out-3p-pres.

[15:16]

'They squeeze it three times and then on the fourth time they throw those sago scraps out.'

2.1.6.6. Quantifiers.

Quantifiers are described under 1.2.5.2.6., 1.16.6. and 2.1.1.10.

2.1.6.6.1. Quantifier compounds.

There are no quantifier compounds.

2.1.6.6.2. Other means of expressing quantification.

Numerals can be duplicated to express manner.

osahic osahic	'one at a time'
leciš leciš	'two at a time'
naha naha	'both sides (lit: half and half)'

Quantifiers can be emphasized by a postposed particle ca
'with'.

cunug ca 'everything (lit: with all)'

2.1.7. Adverbs.

2.1.7.1. Comparison.

Comparison is described under 1.8.

2.1.7.2. Quality.

Quality is described under 2.1.4.5.

2.1.8. Clitics.

2.1.8.1-2. Kinds of and placement of clitics.

2.1.8.1.1-4. Personal, possessive, reflexive and reciprocal pronouns.

The particle na postposed to a personal pronoun serves to form a possessive pronominal. The particle dodoc postposed to a personal pronoun serves to form a reflexive

pronominal. *dodoc* can also emphasize the pronoun to which it is postposed. There are no reciprocal pronominal forms.

2.1.8.1.5. Auxiliary verbs.

Auxiliary verbs can occur as part of a string of paratactic verbs (see 2.1.3.7.). One of their functions is to express different types of aspectual meaning (see 2.1.3.3.).

2.1.8.1.6. Sentence particles.

Sentence particles include the mood particles *fo*, *mo*, *le*, *om/ijom*, *fa*, *nu*, *dain*, *do*, *da*, and *o/e* postposed to the sentence (see 2.1.3.4.), the sentential clitic *qa* 'but' (see below) and the independent adverbial response particles *ao/cece/cese* 'yes', *qee* 'no', *cois* 'OK' and *mele* 'truly' (see also 1.1.1.2.4.2. and 1.2.1.3.1.1.). The mood particles *fo* and *dain* can also function as subordinating conjunctions and *qa* and *fo* can also function as coordinating conjunctions (see 1.3.1.1.2-3.). The negative particle *qee* 'not' and the prohibitive particle *cain* 'don't' can also be preposed to the verb in the verb phrase to negate the proposition.

The sentential clitic *qa* 'but' occurs following the first phrasal element in the sentence.

(698) *Ija qa cucul-hi nu-gi-en.*
 1s but leave-2s go-1s-fut. [4:11]
'But I will leave you and go.'

(699) *Ho eu qa dana eu uqa na.*
 pig that but man that 3s of [18:24]
'But that pig belongs to that man.'

(700) *Hib na qa eh-i b-i ene*
 behind at but take-pred. come up-pred. here
ceh-om.
 build-1p-rem.p [21:43]
'But later we brought (it) up here and built.'

2.1.8.1.7. Sentence connectives.

The sentence connectives are:

(i) Coordinating conjunctions. (see also 1.3.)

<i>ca</i>	'add'
<i>qa</i>	'but'
<i>fo</i>	'or'
<i>o</i>	'or'

(ii) Subordinating conjunctions. (see also 1.1.2.)

<i>eu</i>	'that' (relative pronoun)
<i>fi</i>	'if' (conditional mood)

i	'this'
mi	'if'(contrafactual mood)
nu	'purpose/cause'
eu nu	'therefore'
i nu	'because of this'
(eu) odi	'like that'

2.1.8.1.8. Anaphoric particles.

There are no special anaphoric particles but see 1.5.1.5. for a description of particles that have an anaphoric function.

2.1.8.1.9. Other particles.

The only other particles not already mentioned are the nominalizing and adjectivalizing clitics -ec/-oc/-doc which can function to nominalize or adjectivalize a clause or sentence (see 1.1.2.2. and 1.2.5.). The postposition ca 'add' can have a special emphasizing function with some elements.

cunug ca 'absolutely everything'
all add

ono ca 'a long way off'
there add

wele ca 'a long time ago'
before add

2.2. Derivational morphology.

None of the derivational processes are iterative. They all are fully productive unless otherwise specified.

2.2.1.1. Nouns from nouns.

Nouns can be derived from nouns by noun compounding (see 1.2.5. and 2.2.6.3.1.).

2.2.1.2. Nouns from verbs.

Many verbs can function as nouns in their nominalized form. A nominalized verb is formed by the suffixation of the nominalizing/adjectivalizing clitic -ec/-oc/-doc to the verb stem. In this respect the nominalized form of the verb is identical to the infinitive form.

abul-doc 'to struggle/a struggle'
ahawa-ec 'to talk secretly/secret talk'
aqun-ec 'to precede/front'

babal-ec 'to cross/a cross'
bebel-ec 'to dream/a dream'
bul-oc 'to hollow/a hollow'

cad-ec 'to fight/a fight'
cagas-ec 'to forgive/forgiveness'

cag-oc	'to cut across/an interruption'
cal-ec	'to appear/appearance'
ceel-ec	'to rejoice/joy'
cegul-ec	'to meet/a meeting'
cof-doc	'to supervise/a supervisor'
dale-ec	'to delay/a delay'
du-ec	'to dance/a dance'
eded-ec	'to glow/a glow'
fal-ec	'to flash/a flash'
gaban-doc	'to gather/a gathering'
gesil-ec	'to examine/an examination'
gow-oc	'to light/a light'
hagal-ec	'to tangle/a tangle'
hol-ec	'to yearn/yearning'
hu-doc	'to open/an opening'
idad-ec	'to trade/a trade/trading place'
ihan-ec	'to sacrifice/a sacrifice'
ihon-ec	'to imitate/an imitation/imitator'
iwal-adec	'to teach/a teacher'
jab-doc	'to pursue/a pursuit'
jahu -doc	'to cover/a covering'
jab-ec	'to write/writing'
jajan-oc	'to disappear/disappearance'
jel-ec	'to wrap/a wrapping'
j-oc	'to baptize/baptism'
meg-ec	'to search/a search'
mel-ec	'to believe/belief'
men-ec	'to close/a closing'
nesel-ec	'to choose/a choice'
noi-ec	'to flow/a flow'
od-oc	'to do/doing'
qag-oc	'to set apart/a separation'
qasal-ec	'to confess/a confession'
qatan-ec	'to split/a split'
qet-ec	'to cut/a cut'
qida-doc	'to whip/a whip/a whipping'
sacia-doc	'to prepare/preparation'
taman-ec	'to gather/a gathering'
tanaw-ec	'to make peace/a peace'
tem-doc	'to try/a try/a trial'
togo-doc	'to discuss/a discussion'
u-doc	'to play/a game'
uta-ec	'to call/a call'
wagal-ec	'to destroy/destruction'
wal-oc	'to express sorrow/sorrow'

weg-ec	'to weave/weaving'
wet-ec	'to scoop/a scoop'

2.2.1.3-5. Nouns derived from other categories.

Nouns are not derived from other categories.

2.2.2.1. Verbs from nouns.

A number of verbs are derived directly from nouns. The noun functions as the stem of the derived verb. This process is not fully productive since only a limited number of verbs are derived in this way.

cad	'enemy'	cad-ec	'to fight'
cis	'mosquito'	cis-ec	'to itch'
cucui	'fear'	cucui-ec	'to fear'
cula-ug	'his pride'	cula-ec	'to be proud'
dadán	'confusion'	dadán-ec	'to be confused'
fufu	'wind'	fufu-ec	'to blow'
siw	'breath'	siw-ec	'to breathe'

Many verbs are also derived from nouns by compounding with the copular verbs q-oc 'to hit/have' and m-ec 'to put/become' (see 2.1.3.6.12.1.5.).

2.2.2.2. Verbs from verbs.

A verb is derived from a verb whenever it is reduplicated to indicate imperfective or iterative aspect (see 2.1.3.3.2.1.2 and 8. for the various types of reduplicated verb that can occur). Verbs can also be derived from verbs by compounding with other verbs in a paratactic series (see 2.1.3.7.).

2.2.2.3. Verbs from adjectives.

A few verbs are derived directly from adjectives. The adjective functions as the stem of the derived verb. This process is not fully productive.

mele	'true'	mele-ec	'to believe'
gol	'red'	gol-ec	'to redden/blush'

Verbs can also be derived from adjectives by compounding with the copular verbs q-oc 'to hit/have' and m-ec 'to put/become' (see 2.1.3.6.12.6.).

2.2.2.4. Verbs from adverbs.

There is only one example of a verb derived from an adverb. The adverb functions as the stem of the verb. This process is not productive.

gaid	'always'	gaid-ec	'to always be'
------	----------	---------	----------------

2.2.2.5. Verbs from other categories.

A compound verb can be formed from a postpositional phrase and a verb (see 2.2.6.3.).

2.2.3.1. Adjectives from nouns.

Adjectives can be derived from nominals by postposing the particles *ca* 'with' and *we* 'like' to the nominal to form a derived adjective phrase (see 1.2.2.).

gegehin ca	dirt with	'dirty'
ja ca	fire with	'beautiful'
teful ca	bone with	'boney'
wa ca	water with	'wet'
meen we	stone like	'stone-like'
qa we	dog like	'dog-like'
geni we	lizard like	'lizard-like'

2.2.3.2. Adjectives from verbs.

Many verbs can function as adjectives in their adjectivalized form. The adjectivalized verb is formed by suffixing the nominalizing/adjectivalizing clitic *-ec/-oc/-doc* to the verb stem. In this respect the adjectivalized form of the verb is identical to the infinitive form.

ab-ec	'to separate/separate'
afan-ec	'to turn over/turned over'
alil-doc	'to surround/surrounded'
babal-ec	'to cross/crossed'
bebes-ec	'to terrify/terrifying'
bil-ec	'to be/alive'
bodo-ec	'to soften/soft'
bul-oc	'to hollow/hollow'
cacaw-ec	'to saturate/saturated'
cagas-ec	'to forgive/forgiven'
cag-oc	'to cut across/blocked'
catan-ec	'to be pure/pure'
cesaw-ec	'to divide/divided'
cil-ec	'to bail/boiled'
debo-ec	'to disobey/disobedient'
fal-doc	'to enclose/enclosed'
filicit-ec	'to be surprised/surprising'
fulul-ec	'to fly(flap)/flying'
gaban-doc	'to gather/gathered'
gati-doc	'to stop/stopped'
gol-doc	'to stir/round'
hagal-ec	'to tangle/tangled'
he-doc	'to finish/finished'
heew-ec	'to hold/held'
hel-ec	'to throw/thrown'

hud-ec	'to open/opened'
ibul-doc	'to change/changed'
ifan-ec	'to create/created'
jahul-doc	'to hide/hidden'
jel-ec	'to wrap/wrapped'
lib-ec	'to bind/bound'
men-ec	'to close/closed'
nesel-ec	'to choose/chosen'
nu-doc	'to rub/rubbed'
oc	'to take/married(taken)'
qag-oc	'to set apart/set apart'
qah-ec	'to fold/folded'
qatan-ec	'to split/split'
qet-ec	'to cut/cut'
sabi-ec	'to populate/populated'
senen-ec	'to whiten/white'
sonon-ec	'to glide/gliding'
tac-ec	'to fill/filled'
tal-ec	'to tear/torn'
taq-ec	'to dress/dressed'
til-ec	'to be still/still'
tub-doc	'to join/joined'
unan-oc	'to sharpen/sharpened'
wac-ec	'to peel/peeled'
wal-doc	'to turn/turned'
weg-ec	'to weave/woven'
wol-doc	'to surpass/superior'

Verbs can also function as adjectives in their remote past tense form.

mun cod-on	banana	chopped	'chopped banana'
ma hun-en	taro	dug up	'dug up taro'
ceta tac-en	yam	stored	'stored yam'

2.2.3.3. Adjectives from adjectives.

Compounded adjectives can form a derived adjective phrase (see 1.2.2. and 2.2.6.3.). Adjectives can also be derived from adjectives by postposing the particle *we* 'seem' to an adjective to form a derived adjective phrase (see 1.2.2.).

ben we	'seemingly big'
gagadic we	'seemingly strong'
ihoc we	'seemingly sufficient'
nag we	'seemingly small'

2.2.3.4. Adjectives from adverbs.

Some adverbs can also function as adjectives without any formal derivational process.

(701)Eu gauc nij-i-a.
that useless lie-3s-rem.p
'That is useless (lit: lies uselessly).'

(702)Uqa dana gauc.
3s man useless
'He is a useless man.'

(703)Mel dana lecis gemo tawe-i-a.
boy man two middle stand-3s-tod.p
'The boy stood between the two men.'

(704)Maha gemo l-ag-a.
ground middle go-2s-imp.
'Go outside (lit: middle ground).'

2.2.4.1. Adverbs from nouns.

Some nouns can function as adverbs of manner with no formal derivational process.

us niji-na sleep lying 'He is sleeping.'
jaih ho-i-a leg came 'He came by foot.'

2.2.4.2. Adverbs from verbs.

Adverbs cannot be derived from verbs.

2.2.4.3. Adverbs from adjectives.

Some adjectives can function as adverbs without any formal derivational process.

(705)Uqa dana me.
3s man good
'He is a good man.'

(706)Me bil-ag-a fo?
good be-2s-tod.p QU
'Are you well?'

2.2.6.1. Compound and complex postpositions.

Compound and complex postpositions are described under 1.2.4., 1.16.5. and 2.1.1.1.4.

2.2.6.3. Compound morphology.

The following types of compound structures can occur:

(i) Nominal + nominal.

N + N

cabi gel garden fence 'year'

ceb boh	betelnut plate	'betelnut plate'
dana caja	man woman	'people'
je halu	talk rope	'radio antenna'
jo nah	house post	'house post'
gis gun	steam forbidden	'Holy Spirit'
man je	bird talk	'Tok Pisin'
man wag	bird canoe	'aeroplane'
mel gah	boy fly	'twins'
wa gab	water cup	'thirst'

ceteh ceteh	thing thing	'things'
ho ho	pig pig	'piglike'(AdvP)
bic bic	tail tail	'tailwards'(AdvP)

N + N (inalienably possessed)

dodol gee-g	'larynx'
throat penis	

jic ana-g	'main road'
road mother	

N + [N + N]

meb [jo nah]	'kwila house post'
kwila house post	

mel [anag memeg]	'boy's mother and father'
boy mother father	

[N + N] + N

[wa ilo] salac	'river head meeting place'
river head meeting place	

[sab ceh-ec] cudun	'food planting place'
food to plant place	

(ii) Nouns and verbs.

Nouns can be incorporated with verbs to form a compound verb phrase (see 2.1.3.6.12.1.11.).

(iii) Verbs and verbs.

Verbs can function with other verbs in a paratactic series to (i) express aspectual meaning, (ii) function as a copular verb, (iii) carry verbal object markers and (iv) give directional meaning (see 2.1.3.7.).

(iv) Postposition and verb.

ca ca m-ec	with with put	'to make the same'
------------	---------------	--------------------

(v) Adjective and adjective.

The construction adjective + adjective is analyzed as a derived AdjP (see 1.2.2.).

nag nag	small small	'very small'
---------	-------------	--------------

ben ben	big big	'very big'
ben nag	big small	'a little bit big'

(vi) Adverb and adverb

The construction adverb + adverb is analyzed as a derived AdvP (see 1.2.3.).

gaid gaid	always always	'continuously'
cebit cebit	slow slow	'very slowly'
nag odi	small like	'nearly'

Notes:

- 1• By analogy with English where prepositions rather than the adjective govern the object:
proud of him
good to me
- 2• Public Motor Vehicle.
- 3• Plural verb.
- 4• Public Motor Vehicle.
- 5• The full negative future form is included here as it forms a portmanteau morpheme with the subject marking.
- 6• These are portmanteau forms of tense+subject person-number.
- 7• qoc is irregular. 3s object is Ø marked e.g. qona 'he hits him', but other person-number combinations are marked hence 1s is illustrated.
- 8• This term was first coined by Jacobsen (1967).
- 9• Serial verb constructions are a common feature of PNG languages - see also Davies (1981) and James (1983).

3. PHONOLOGY.

The following special symbols are used in this section:

- ' syllable stress
- phrase stress
- ✓ sentence stress/intonation peak
- ↘ intonation contour
- . syllable boundary
- \$ syllable
- + morpheme boundary
- # word boundary
- [] phonetic/surface form
- / / phonemic/underlying form

3.1. Phonological units (segmental).

3.1.1. Distinctive segments.

a, b, c, d, e, f, g, h, i, j, k, l, m, n, o, q, s, t, u, w.

3.1.2. The segments.

3.1.2.1. Nonsyllabics.

Distinctive feature matrix for nonsyllabics:

	b	m	f	t	d	s	n	l	g	k	gb	ʔ	h	j	w
cons	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-
syll	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
son	-	+	-	-	-	-	+	+	-	-	-	-	+	+	+
round	+	+	+	-	-	-	-	-	-	-	+	-	-	-	+
high	-	-	-	-	-	-	-	-	+	+	+	-	-	+	+
low	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-
back	-	-	-	-	-	-	-	-	+	+	+	+	+	-	-
voice	+	+	-	-	+	-	+	+	+	-	+	-	-	+	+
cont	-	+	+	-	-	+	+	+	-	-	-	-	+	+	+
lateral								+							

Notes to chart:

(i) The features used in the chart are basically those proposed in 'The Sound Pattern of English' (Chomsky and Halle 1968). However since Amele does not distinguish lip-rounded from nonlip-rounded consonants and as there is a close phonological correlation between labial consonants and rounded vowels (see 3.4.1.1.) the cover feature [ROUND] is used to describe both labial consonants and rounded vowels.

(ii) In Amele the nasals /m/ and /n/ pattern with the other continuants /f,h,l,s/ in vowel insertion rules (see below) and are therefore specified as [+cont]. /m/ and /n/ also pattern with /l/ in

deletion rules (see 3.4.4.1.), /m/ patterns with /h/ in rounding rules (see 3.4.1.1.).

e.g.

UR	SR	
/gbaf + g/	-> [gbəfik]	'his bald head'
/dah + g/	-> [dəhik]	'his ear'
/ʔol + g/	-> [ʔɔlik]	'his maturity'
/gos + g/	-> [gɔsik]	'his hair'
/bam + g/	-> [bəmik]	'his scrotum'
/bin + g/	-> [bɪnik]	'his father's sister'

the insertion rule is:

Ø	->	i /	C	_____	g
			[+cont]		[possessed noun 3s]

3.1.2.1.1. Plosives.

(1) b

[b] voiced labio-labial plosive occurs word initially, intervocalically and word finally where the word is monosyllabic.

[bæ]	'today'	[ʔəbə]	'brother'
[be]	'his neck'	[ɛ'bən]	'his hand/forearm'
[biʔ]	'tail'	[du'bɪn]	'stalk'
[bɔh]	'plate'	[ʔɔ'bɔʔ]	'to walk'
[bu'ɛʔ]	'to buzz'	[nɪ'buʔ]	'cell of citrus'
[næ:b]	'termite'	[gɔb]	'knee'
[ʔɛb]	'betelnut'	[tub]	'comb'
[sɪb]	'rubbish'		

[p] voiceless labio-labial plosive occurs word finally where the word is polysyllabic.

[gə'læp]	'body ornament'	[bɔ'lɔp]	'trap'
[u'wɛp]	'eagle'	[hɪ'nup]	'5 days hence'
[æ'dɪp]	'black dye'		

[b] and [p] are analyzed as phonetic representations of the phoneme /b/. A limited amount of fluctuation occurs between [p] and the fricative [f] so for some lexical items [p] fluctuates with [f] word initially and intervocalically.

[gə'pæt] ~ [gə'fæt]	'canoe'
[sə'pɔl] ~ [sə'fɔl]	'axe' (Russian loan word)
[tɛ'pu] ~ [tɛ'fu]	'his bone'
['pupu] ~ ['fufu]	'wind'

(2) c

[ʔ] glottal stop occurs word initially, finally and intervocalically. The phone [ʔ] contrasts with the phones [t], [d] and [g] as well as contrasting with its absence and is therefore analyzed as a full phoneme /ʔ/.

/ʔ/	/t/	/d/	/g/
[ʔæ] 'with'	[tæ] 'sago scraps'	[dæ] 'apprehension'	[gæ] 'shellfish'
[ʔɛʔ] 'sex'	[tɛʔ] 'go up'	[dɛʔ] 'from'	[gɛʔ] 'interj.'
[ʔih] 'fun'		[dih] 'just'	[gih] 'forked'
[ʔɔl] 'bow-string'	[tɔl] 'tree centre'	[dɔl] 'ghost'	[gɔl] 'red'
[ʔul] 'heart'	[tul] 'smell'	[dul] 'handle'	[gul] 'unripe'
[dɔ 'ʔɔʔ] 'dress up'		[dɔ 'dɔʔ] 'self'	
[gæʔ] 'iguana'		[gæ:d] 'crazy'	[gæ:g] 'boiling'
[hæʔ] 'boundary'	[hæt] 'sugarcane'		[hæ:g] 'sickness'
[tɛʔ] 'go up'	[tɛt] 'pillow'		
[dɔʔ] 'understand'		[dɔd] 'mirror'	
[gɔʔ] 'grass species'	[gɔt] 'banana species'		[gɔg] 'sweet potato'
[duʔ] 'Malay apple'	[dut] 'thorn'		
[ʔəm] 'sun'		[əm] 'heap/group'	
[ʔav] 'flying spirit'		[av] 'my mother'	
[ʔæ 'vi] 'dog's teeth'		[æ 'vi] 'my nephew/niece'	
[ʔɛ 'sɛʔ] 'to scoop'		[ɛ 'sɛʔ] 'to carry on head'	
[ʔɛv] 'fermented root drink'		[ɛv] 'that'	
[ʔɪ 'hɔʔ] 'to prick/poke'		[i 'hɔʔ] 'enough'	
[ʔɔn] 'your lips'		[ɔn] 'he got(rem.p)'	
[ʔɔ 'dɔʔ] 'to beat/chop'		[ɔ 'dɔʔ] 'to do'	
[ʔul] 'his heart'		[ul] 'axe handle'	
[ʔus] 'wild'		[us] 'sleep'	
[dæʔ] 'garden boundary'		[dæ] 'apprehension'	
[wæʔ] 'sago'		[wæ] 'water'	
[bɛʔ] 'to come up'		[be] 'his neck'	
[mɛʔ] 'to put/become'		[me] 'good'	
[jiʔ] 'road'		[ji] 'eat and...'	
[dɔʔ] 'to understand'		[dɔ] 'bird of Paradise'	
[hɔʔ] 'to come'		[hɔ] 'pig'	
[luʔ] 'bark rope'		[lu] 'time of food'	
[suʔ] 'wet'		[su] 'her breast'	

(3) d

[d] voiced apico-alveolar plosive occurs word initially, finally and intervocalically. The phones [d] and [t] (see (6) below) occur in phonemically contrasting environments in all word positions and are therefore analyzed as separate phonemes /d/ and /t/.

[dæ]	'apprehension'	[tæ]	'sago scraps'
[dɔɪn]	'pain'	[tɔɪn]	'cloud'
[dɛʔ]	'from'	[tɛʔ]	'to go up'
[dɔl]	'ghost'	[tɔl]	'centre of Kwila tree'
[dul]	'handle'	[tul]	'a bad smell'
[gbæ:d]	'cheek'	[gbæt]	'fruit species'

[ud]	'belongings'	[ʔut]	'spine of sago leaf'
[dv 'dun]	'thorn'	[tv 'tun]	'sugar cane species'
['mædu]	'eel species'	['mætu]	'firstborn'
[tɔ 'dɔʔ]	'to follow'	[tɔ 'tɔʔ]	'dew'

(4) g

[g] voiced dorso-velar plosive occurs word initially, intervocalically and word finally where the word is monosyllabic.

[gæ:d]	'crazy'	[bæ 'gæʔ]	'leaf'
[gəh]	'much'	[mɛ 'gɛʔ]	'to search'
[giʔ]	'finger/toe'	[sɪ 'gin]	'knife'
[gɔ]	'red'	[ɔ 'gɔ]	'tree species'
[gum]	'gourd'	[mv 'guh]	'his breastbone'
[hæ:g]	'sickness'	[ʔɔg]	'frog'
[mæɛg]	'dry'	[gug]	'basis'
[lig]	'shrub species'		

[k] voiceless dorso-velar plosive occurs word finally where the word is polysyllabic.

[æ 'nɔk]	'his mother'	[æ 'lɔk]	'raven'
[dɛ 'rɔk]	'his body'	[ʔæ 'huk]	'a smell'
[dæ 'hik]	'his ear'		

There are, however, a limited number of words in the language that have word initial [k] and a sample of these is given below.

['kənə]	'Chinese little tern'
[kɛ]	'coconut scraper'
[kis]	'steam'
[kɔ 'bɔ]	'custom'

This actually produces a phonemic contrast in one instance:

[gɛ]	/gɛ/	'fence'
[kɛ]	/kɛ/	'coconut scraper'

Word initial [k] is therefore analyzed as the independent phoneme /k/ otherwise [g] and [k] are analyzed as phonetic representations of the phoneme /g/.

(5) q

[gb] voiced dorso-labiovelar occurs word initially and intervocalically and contrasts phonemically with the phonemes /b/ and /g/ in these positions.

/gb/	/b/	/g/
[gbæ]	[bæ]	[gæ]
'dog'	'today'	'shellfish'
[gbəh]	[bəh]	[gəh]
'fungi species'	'yam species'	'a fly'
[gbɛ]	[bɛ]	[gɛ]
'bamboo spear'	'crab'	'fence'
[gbis]	[bis]	
'plant species'	'a dress'	

[g̃bɔh] 'we(2) hit'	[bɔh] 'plate'	[gɔh] 'snoring'
['g̃budɔʔ] 'hit into ground'	['budɔʔ] 'scatter'	['gudɔʔ] 'run'
['wæg̃bɛ] 'hen's egg'	['ɛbɛ] 'sibling'	['wæg̃ɛ] 'crocodile'
['dog̃bɛ] 'we understand'	['dɔbɛ] 'tree species'	['dɔg̃ɛ] 'you understand'
[ɔ 'g̃bɔnɛ] 'we are getting'	[ʔɔ 'bɔnɛ] 'he is walking'	[ɔ 'gɔnɛ] 'you are getting'

As [g̃b] contrasts with both /b/ and /g/ in many identical environments it is analyzed as the independent phoneme /g̃b/. There is evidence, however, from the verb morphology that /g̃b/ and /b/ are neutralized in word final position and are both realized by the phone [p] in this position. There are two orderings of subject person-number and tense/aspect morphemes in the verb (see also 2.1.3.6.2.1.). In one order the subject person-number morpheme precedes the tense/aspect morpheme and in the other order the tense/aspect morpheme precedes the subject person-number morpheme. When the subject person-number morpheme precedes the tense/aspect morpheme first person plural is realized by the allomorph {g̃b} but when this verb category follows the tense/aspect morpheme it is realized by the allomorph {p}. This is illustrated by the data below.

Person-number + tense/aspect.

[ho 'g̃bɔnɛ]	/ho+g̃bɔ+na/	'we are coming'
['hog̃bɛ]	/ho+g̃b+a/	'we came (today)'
[ho 'g̃bɛn]	/ho+g̃b+an/	'we came (yesterday)'

Tense/aspect + person-number.

[hɔ 'lɔp]	/ho+lɔ+b/	'we used to come'
['humɛp]	/hu+me+b/	'we came and ...'

(6) t

[t] voiceless apico-alveolar plosive occurs word initially, finally and intervocalically. [t] contrasts phonemically with /d/ (see (3) above) in all word positions and is therefore analyzed as the independent phoneme /t/.

[tɛ] 'sago scrapings'	[tɛ 'tɛʔ] 'surface'	[hɛt] 'sugar cane species'
[tɛʔ] 'to go up'	[ʔɛ 'tɛh] 'thing'	[wet] 'leaf that stings'
[tɪn] 'sweet'	[ʊɪ 'tiʔ] 'night'	[ʔit] 'cover'
[tɔb] 'body dirt'	[lɔ 'tɔʔ] 'clothing'	[gɔt] 'banana species'
[tu] 'bad smell'	[tu 'tuʔ] 'straight'	[tut] 'spring'

3.1.2.1.3. Fricatives.

(1) f

[f] voiceless labio-dental fricative occurs word initially, finally and intervocalically.

[fæ] 'doubt'	[æfæ 'nɛʔ] 'turn over'	[ʔæf] 'invalid'
[fɛʔ] 'see'	[ɛ 'fɛn] 'neck pouch'	[gæ 'lɛf] 'lizard species'
[fi] 'if'	[fɪ 'fiʔi] 'hot spring'	[if] 'string'
[fo] 'inter.'	[gɔ 'fiʔ] 'spoon'	[ɔf] 'river bank'
[fun] 'perfume'	[cufu 'nɛʔ] 'female'	[v 'muf] 'taro species'

[f] contrasts phonemically with [b], [h] and [w] and is analyzed as the independent phoneme /f/.

/f/	/b/	/h/	/w/
[fæ] 'doubt'	[bæ] 'today'	[hæ] 'sugar cane'	[wæ] 'water'
[fɛʔ] 'see'	[bɛʔ] 'come up'		[wɛʔ] 'soup'
[fi] 'see and..'	[bi] 'come up and..'	[hi] 'fill and..'	
[fo] 'inter.'		[ho] 'pig'	

[f] can also fluctuate with [p] (see (1) in 3.1.2.1.1.).

(2) h

[h] voiceless glottal fricative occurs word initially, finally and intervocalically.

[hæ] 'sugar cane'	['mæhə] 'ground'	[dæh] 'ear'
[hɛ] 'hole'	[gɛ 'hɛ] 'funeral'	[geh] 'much'
[hih] 'mound'	[sɪ 'hi] 'banana species'	[nih] 'hook'
[ho] 'pig'	[gɔhɔ 'hɛʔ] 'pour'	[boh] 'plate'
[hut] 'mist'	[mv 'huʔ] 'juice'	[dv 'nuh] 'inside'

[h] contrasts phonemically with [f] (see (1) above), the semi-consonants [w] and [j] and the off-glides [v] and [i] and therefore is analyzed as the independent phoneme /h/.

/h/	/w/	/j/
[hæ] 'sugar cane'	[wæ] 'water'	[jæ] 'fire'
[he] 'coconut mat'	[we] 'like'	[je] 'talk'
[hi] 'tree species'	[wi] 'yam species'	
[ho] 'pig'		[jo] 'house'
[ʔæ 'hɛ] 'famine'	[ʔæ 'wi] 'fish hook'	[ʔæ 'jɛʔ] 'get up'
[sih] 'cane'	[siw] 'breath'	[vij] 'widow'

/h/	/u/	/i/
[g̃bəh] 'fungus species'	[g̃bəv] 'road that is overgrown'	[g̃baɪ] 'reprimand'
[həh] 'support'		[heɪ] 'tree species'
[ʔəh] 'magic'	[ʔəv] 'root drink'	
[bɔh] 'plate'	[bov] 'tree species'	
[ʔɔh] 'tree species'		[ʔɔɪ] 'dew'

There is also fluctuation between [h] and the alveolar grooved fricative [s] (see (4) below) contiguous to high vowels with some lexical items.

[g̃bənɪ 'hu]	~	[g̃bənɪ 'su]	'small millipede'
[ʔɪ 'lihɔʔ]	~	[ʔɪ 'lisɔʔ]	'to comb hair'
[fv 'luhɔʔ]	~	[fv 'lusɔʔ]	'to multiply'

(3) j

/j/ has a fricative allophone (see 3.1.2.1.4.).

(4) s

[s] voiceless apico-alveolar grooved fricative occurs word initially, finally and intervocalically and is analyzed as the independent phoneme /s/.

[sə:b] 'food'	[bə 'saɪ] 'surface'	[wəs] 'edible plant'
[səh] 'vine species'	[ʔɛ 'sɛʔ] 'scoop'	[ə 'bɛs] 'other'
[sɪl] 'lightning'	['isi] 'soon'	[ʔɔ 'mis] 'ash'
[sɔ] 'stick'	['ɔso] 'indef.'	[ʔɔs] 'unmarried'
[su] 'breast'	[mv 'su] 'sweat'	[us] 'sleep'

[s] also fluctuates with [h] (see (2) above).

3.1.2.1.4. Liquids and approximants.

(1) l

[l] voiced apico-alveolar lateral occurs word initially, finally and intervocalically and is analyzed as the independent phoneme /l/.

[læn] 'coast'	[mæ 'læk] 'yam'	[bəl] 'chant'
[lɛʔ] 'to go'	['mele] 'true'	[mɛl] 'child'
[lig] 'croton bush'	[lɪ 'lih] 'broom'	[fɪl] 'different'
[lɔ 'bin] 'gum'	['lɔlo] 'wind from NE'	[dɔl] 'ghost'
[luʔ] 'bark rope'	[lv 'lug] 'piece'	[gul] 'unripe'

(2) j

[j] voiced close front dorso-palatal semi-consonant occurs intervocalically in syllable initial position preceding the vowels [æ], [ɛ] and [ɔ].

[ʔɛ 'jæ]	'torch'
[i 'jæn]	'his name'
[u 'jæm]	'banana species'
[i 'jɛd]	'three'

[ɪ 'jɔm] 'emphatic'
[hɔ 'jɔn] 'wing'

The sequence [ju] does not occur word medially. In intervocalic position between the vowel [æ] the semi-consonant [j] fluctuates with the palatal fricative [j̥].

[mæ 'jæk] ~ [mæ 'jæk] /majag/ 'shame'
['ʔæjəl] ~ ['ʔæjəl] /caja/ 'woman'

[j̥] voiced dorso-palatal fricative occurs word initially preceding any vowel, word finally following the high front vowel [i] and intervocalically preceding the high front vowel [i].

[j̥æ:g] 'foreign' [fr 'fi:ji] 'hot spring' [li:j] 'yellow-backed lory'
[jarh] 'his leg' [vi:j] 'widow'
[j̥æ] 'water'
[j̥ɔv] 'dance'
[j̥ɛʔ] 'to eat'
[j̥e] 'talk'
[j̥iʔ] 'road'
[j̥ɔ:l] 'bag'
[j̥o] 'house'
[j̥ul] 'upside down'

The above distribution of [j̥] applies principally to monomorphemic words. For polymorphemic words the distribution is more general. Where reduplication occurs [j̥] can occur word medially preceding other vowels than [i].

[j̥æ 'jark] /ja+jai+g/ 'his great great grandparent'
[j̥ɛ 'jek] /je+je+g/ 'his voice'
['j̥ɔjɔn] /jo+joten/ 'as he moved'

Also with certain verbs the verb stem arbitrarily has a final [j̥] which means phonologically a word medial [j̥] can occur before any vowel in certain inflections of the verb.

[fæjɛʔ] /faj+ten/ 'to buy/pay'
[ni:jɛʔ] /nij+eʔ/ 'to lie'
[fɔjɔʔ] /foj+oʔ/ 'to vomit'
[bu:jɛʔ] /buj+eʔ/ 'to defecate'

[fæjæden] /faj+ad+ten/ 'he bought them'
[fæjɛn] /faj+en/ 'he paid'
[fæjigen] /faj+ig+ten/ 'I will pay'
[fæjogbæn] /faj+ogb+an/ 'we paid (yest.)'
[fæjudɔn] /faj+ud+on/ 'he paid him'

However, since no instance of phonemic contrast occurs between [j̥] and [j] and in fact when [j̥] and [j] do occur as alternants in the same environment, as in /majag/ and /caja/ above, this is not a contrast but a fluctuation of phones, [j̥] and [j] are analyzed as phonetic representations of the phoneme /j/.

(3) w

[w] voiced close back labio-labial semi-consonant occurs word initially and intervocalically preceding all vowels excluding [ɛ], [i] and [ɪ].

[wæ] 'water'	[ʔehɛ 'wæn] 'riches'
[waɪt] 'prayer ritual'	
[wɔɪk] 'his stomach'	
[we] 'like'	
['wɔɪdɔʔ] 'to surpass'	[li 'wɔk] 'bean species'
	[ʔɛwu 'tɛʔ] 'to despise'

[ʋ] voiced labio-dental approximant occurs word initially preceding the vowels [i], [ɪ] and [ɛ], word finally following the vowels [i] and [ɪ] and intervocalically preceding the vowels [i], [ɪ] and [ɛ].

[ʋɛn] 'hunger'	[dɛ 'ʋɛk] 'his body'	[hæ 'liʋ] 'orange stripes'
[ʋiʋ] 'snake species'	['ævi] 'my nephew/niece'	[waɪʋ] 'pandanus species'
[ʋɪ 'tiʔ] 'night'	[ʔæ 'ʋɪ] 'fish hook'	[ɔiʋ] 'possum species'

[w] and [ʋ] are analyzed as phonetic representations of the phoneme /w/.

3.1.2.1.8. Nasals.

(1) m

[m] voiced labio-labial nasal occurs word initially, finally and intervocalically and is analyzed as the independent phoneme /m/.

[mæ] 'taro'	['dɛmɛ] 'possum'	[ʔəm] 'sun'
[mɛʔ] 'to put'	[æ 'mek] 'eye'	[bɛm] 'tree species'
[mi] 'louse'	[mɪ 'mi] 'insect species'	[sim] 'young'
[mɔɪ] 'sago thatch'	[dɔ 'mɔn] 'necklace'	[kɔm] 'stilts'
[mun] 'banana'	[v 'muf] 'taro species'	[sum] 'spear'

(2) n

[n] voiced apico-alveolar nasal occurs word initially, finally and intervocalically and is analyzed as the independent phoneme /n/.

[næ] 'tree'	['ænɛ] 'where'	[bæn] 'dwarf'
[nɛʔ] 'come down'	['ɛne] 'here'	[bɛn] 'big'
[nih] 'hook'	[ʔɪ 'ni] 'kunai grass'	[tin] 'sweet'
[noh] 'tap-root'	['ɔno] 'there'	[ʔɔn] 'your mouth'
['nui] 'island'	[dv 'nuh] 'inside'	[fun] 'perfume'

3.1.2.2. Syllabics.3.1.2.2.1. Vowels.

Distinctive feature matrix for syllabics:

	i	e	ə	o	u
round	-	-	-	+	+
high	+	-	-	-	+
back	-	-	-	+	+
low	-	-	+	-	-

Each vowel has tense and lax alternants and the feature +/-tense distinguishes centralized from noncentralized vowels.² This is illustrated by the chart below.

Tense and lax vowel alternant chart.

	[-Back]		[+Back]		
[+High]	i	ɪ	ʊ	u	
[-High]	e	ɛ	ɔ	o	[-Low]
	æ	ə			[+Low]
	[+Tense]	[-Tense]			[+Tense]

The vowels can be contrasted phonemically by the following lexical sets:

[sæ]	'blossom'	[hæ]	'sugar cane'
[sɛ]	'tenth portion'	[he]	'mat of coconut leaves'
[sɪ]	'lightning'	[hi]	'full'
[sɔ]	'carrying stick'	[ho]	'pig'
[su]	'fungi species'	[hu]	'python species'

(1) i

[i] voiced close front unrounded tense vocoid occurs in open, stressed or unstressed syllables, word initially, medially and finally and in close syllables with final /b,c,d,f,g,h,j,s,t,w/.

[i]	'this'
[mi]	'louse'

['i.si	'later'
[i. 'hɔʔ]	'enough'
['si.ə]	'species of bat'
['gɒ.ʔi.o]	'megapode'
['nu.i]	'island'
[ʔæ. 'dip]	'species of plant/blue dye'
[gɔ. 'fiʔ]	'spoon'
[gɒid]	'horsefly'
[if]	'yarn for string bags'
[br. 'bik]	'species of vine'
[dih]	'just'
[niʔ]	'pandanus tree'
[ʔɔ. 'mis]	'ashes'
[bæ.bæ. 'lit]	'butterfly'
[tæ. 'liʊ]	'species of plant'

There is one lexical exception to the above distribution and this is:

[bæ. 'him] 'platform'

[ɪ] voiced close front unrounded lax vocoid occurs in open, stressed or unstressed syllables word medially and in close syllables with final /l,m,n/.

['ni.fu.lə]	'species of beetle'
[ni.ni. 'hul]	'species of wasp'
[ɪ]	'species of yam'
[gɒ. 'sɪ]	'morning'
[ʔɪ. 'nim]	'kunai grass'
[ɪn]	'who'
[de. 'bin]	'buttress root'

The phones [i] and [ɪ] therefore only have good complementary distribution in the closed syllable and it should be possible to have a phonemic contrast in the environments given below. However, such contrasts do not occur and the phones [i] and [ɪ] are analyzed as phonetic representations of the phoneme /i/.

['Ci.CV]	[Ci. 'CVC]
['Cɪ.CV]	[Cɪ. 'CVC]

(2) e

[ɛ] voiced half-open front unrounded lax vocoid occurs in open or close, stressed or unstressed syllables and word initially or medially.

['ɛ.ne]	'here'
[ɛ. 'ben]	'his hand/forearm'
['fi.mək]	'you saw and..'

[ɛ:] voiced half-open front unrounded lax long vocoid occurs in open or close, stressed or unstressed syllables and word initially or medially. [ɛ:] is analyzed as the underlying geminate cluster /ee/ (see Vowel length 3.3.1.1.).

[mɛ:. 'ləh]	'flying fox'
[gɒɛ:n]	'centipede'
[ɛ: 'lɛn]	'day before yesterday'

[e] voiced half-open front unrounded tense vocoid occurs in open syllables, either stressed or unstressed, word finally.

['me]	'good'
['mɛ.lə]	'true'

[e] also occurs word medially in two other instances. In the first case [e] occurs preceding the vowel /i/ in the diphthong sequence [ei].

[be. 'berk]	'roots'
-------------	---------

In the second case there is grammatical conditioning in the future tenses whereby a verb stem final /e/ does not become /o/ preceding the labiovelars /w/ and /gb/ (see 3.4.1.1.). Rather the /e/ is a phonetic [e].

[fe. 'wæn]	'we(2) will see'
['fe.wə]	'we(2) are about to see'
[fe. 'gbæn]	'we will see'
['fe.gbə]	'we are about to see'

[ɛ] and [e] are analyzed as phonetic representations of the phoneme /e/.

(3) a

[æ] voiced open front unrounded tense vocoid occurs in close or open, stressed or unstressed syllables and word initially, medially, and finally only in words of one syllable.

['ʔæm]	'sun'
[fr. 'gi.æn]	'he will see'
['mæ.lə]	'chicken'
[hæ.hæ. 'wæn]	'first'
['wæ]	'water'

[æ:] voiced open front unrounded long tense vocoid occurs in close stressed syllables only in words of one syllable preceding a voiced stop (see also Vowel length 3.3.1.1.).

['sæ:b]	'food'
['ʔæ:d]	'enemy'
['næ:g]	'small'

[ɑ] voiced open retracted and raised front unrounded tense vocoid occurs in stressed or unstressed syllables preceding the vowel /i/ in the diphthong sequence [ai].

['tɑɪn]	'cloud'
[ʔɑɪ. 'lɛk]	'bamboo species'

[ɑ] voiced open back unrounded tense vocoid occurs in stressed or unstressed syllables preceding the vowel /u/ in the diphthong sequence [au].

['ʔɑʊb]	'white'
[mɑʊ. 'lɔm]	'evil spirit'

[ə] voiced half-close central unrounded lax vocoid occurs

only in open unstressed syllables, word finally in polysyllabic words.

['mælə]	/mala/	'chicken'
['fɛnə]	/fena/	'he sees'
['figə]	/figa/	'I see'
['fɔgbə]	/fɔgba/	'we see'
['hugə]	/huga/	'I come'

[æ], [æ:], [a], [ɑ] and [ə] are analyzed as phonetic representations of the phoneme /a/.

(4) o

[ɔ] voiced half-open back rounded tense vocoid occurs in close stressed or open stressed or unstressed syllables and word initially or medially.

[ɔ. 'dɔd]	'path in garden'
[fɔ. 'lɔ.si]	'they(2) used to see'

[o] voiced half-close back rounded tense vocoid occurs in open syllables, either stressed or unstressed, word finally.

['ho]	'pig'
['ɔ.no]	'there'

[o] can occur word medially in two other instances. In the first case [o] occurs preceding the vowel /u/ in the diphthong sequence [ov].

[ov]	'that'
[hovm]	'I would have come'

In the second case [o] occurs preceding the labiovelars [gb] and [w] in some inflections of the verb (see 2.1.3.2.). With one verb oc this produces a word initial [o].

[ho. 'wɔ.nə]	'we(2) are coming'
[ho. 'gbɔ.nə]	'we are seeing'
[o. 'wɔ.nə]	'we(2) are getting'
[o. 'gbɔ.nə]	'we are getting'

[ɔ] and [o] are analyzed as phonetic representations of the phoneme /o/.

(5) u

[u] voiced close back rounded tense vocoid occurs in open stressed or unstressed syllables word initially, medially and finally and in close syllables with final /b,c,d,f,g,h,l,n,s,t/.

['u.mɪk]	'I get and..'
['fu.fu]	'wind'
[ʔv. u. 'mɛn]	'heavy'
[ʔub]	'debt'
[ʔɔ. 'luʔ]	'forest'
[ʔud]	'fast'
[ʔuf]	'female animal'
[ge 'muk]	'her husband'
[dv. 'nuh]	'inside'

[seɪ. 'bu]	'wooden club/sword'
[hæ. 'hun]	'his reflection'
[ʔɛ. 'lus]	'leaf'
[hut]	'mist'

[v] voiced close back rounded lax vocoid occurs in open stressed or unstressed syllables, word initially and medially and in close syllables preceding /m/.

['v.du]	'black'
[tv. 'tuʔ]	'straight'
[sv.sv. 'mu]	'smooth'
[vm]	'thick'
[mɛ. 'dvm]	'avocado pear'

The phones [u] and [v] therefore only have good complementary distribution in the closed syllable and it should be possible to have a phonemic contrast in the environments given below. However, such contrasts do not occur and the phones [u] and [v] are analyzed as phonetic representations of the phoneme /u/.

['Cu.CV]	[Cu. 'CVC]
['Cv.CV]	[Cv. 'CVC]

3.1.2.3-4. Restrictions in occurrence of segments.

The segments described above occur in all word classes.

3.2. Phonotactics.

Word internal consonant clusters only occur with a few lexical items (see 3.2.2.1.). For these items the formula below applies where a word can be composed of from two to three syllables with any CV permutable from the formula:

(C)V(C)((C)(V)(C))((C)(V)(C))

For most lexical items including all verb and inalienably possessed noun stems, however, internal consonant clustering does not occur so the formula below is applicable where a word or verb/noun stem can be composed of from one to three syllables and have a CV combination permutable from the formula:

(C)V(C)(V(C)(V(C)))

Verb stems and noun stems can be reduplicated in which case it is normally the first (C)V that reduplicates. Also verb stems and inalienably possessed noun stems can be inflected with various suffixes. The maximum number of syllables that can be added to the verb stem in the way of subject and object agreement suffixes is four and this gives a possible syllable pattern for the fully inflected verb of:

(C)V [(C)V(C)(V(C)(V(C))) | (C)V(C)(V(C)(V(C)(V(C))))]

The inalienably possessed noun stem can take up to two syllables as possessive suffixes and this gives a possible syllable combination for the inalienably possessed noun of:

(C)V (C)V(C)(V(C)(V(C))) | V(C)((V)((C)))

Verb stems and inalienably possessed noun stems do not occur as independent phonological words but always as part of a larger phonological phrase unit.

The phonological word is a rhythm unit having one major stress placement, the physical manifestation of stress being relatively greater intensity often accompanied by relatively higher pitch. In general the boundaries of phonological and grammatical words coincide. Where a word appears to be longer than three syllables it can usually be determined by stress placement that it is in fact more than one word as a phonological word unit only takes one major stress placement. For example the following lexeme turns out to be two words.

['æ.si.u.'lik] /asi ulig/ 'fern species'

Stress placement can also differentiate duplicated nouns i.e. a noun phrase, from reduplicated nouns i.e. a phonological word (see 1.16.1.).

3.2.1.1. Word final consonants.

All consonants can occur word finally. However some can only occur as allophonic variants in word final position as indicated below.

Consonant	Word final variant
/b/	-> [p]
/gb/	-> [p]
/g/	-> [k]
/j/	-> [j]
/w/	-> [ʊ]

The occurrence of /gb/ in word final position is controversial since this can only be deduced from the verb morphology (see 3.1.2.1.1.(5)) but there is one example of [gb] occurring in a syllable final, verb stem final position in the lexical item

['tugb.dɔʔ] /tugbdoʔ/ 'to butcher'

This contrasts with

['tub.dɔʔ] /tubdoʔ/ 'to join'

These data lend support to the analysis that /gb/ occurs word finally but as the phone [p]. Nevertheless, unless it can be substantiated that a particular instance of word final [p] can be assigned to the phoneme /gb/ all instances of word final [p] are arbitrarily assigned to the phoneme /b/.

3.2.1.2. Word initial consonants.

All consonants can occur word initially. However the CV sequences /ju/ and /wu/ are very rare. Only two instances of word initial /ju/ have been recorded in some 5000 lexical items and no instance of word initial /wu/ has so far been recorded.

3.2.2.1. Word internal consonant clusters.

The language does not permit word or stem initial or final consonant clusters but consonant clustering can occur word medially with certain lexical items (often names which may be some kind of reduced or composite form) and across the morpheme boundary of verb stem and verbal suffix where object clitics are attached to the verb stem. Some lexical items with word medial consonant clusters are:

['æn.se]	'left hand'
[jæ. 'wæl.ti]	'wind from north'
['læʔ.g̃baɪ.ə]	'scorpion'
['mɪl.du]	'small spirit being with long black hair and white skin'

Some names that have word medial consonant clusters are:

Danben	a village name meaning 'the big fig tree'
Jelso	a village name derived from [jɛ.ʔɛɪ ɔ.sɔ] 'a breadfruit tree'
Misangul	a man's name

The possible object clitics that can be suffixed to the verb stem to produce a consonant cluster are (see also 2.1.3.6.1. 2-3):

[-tɛʔ]	'me'
[-hɛʔ]	'you'
[-dɔʔ]	'him'
[-lɛʔ]	'us(2)'
[-gɛʔ]	'us'

The following consonant clusters can therefore occur across the verb stem and object clitic morpheme boundary:

$$\text{any C} + \begin{Bmatrix} t \\ h \\ d \\ l \\ g \end{Bmatrix}$$

One example of this clustering would be:

[sun 'tɛn]	/sun+tɛn/	'he pushed me'
[sun 'hɛn]	/sun+hɛn/	'he pushed you'
[sun 'dɔn]	/sun+dɔn/	'he pushed him'
[sun 'lɛn]	/sun+lɛn/	'he pushed us(2)'
[sun 'gɛn]	/sun+gɛn/	'he pushed us'

Where it is the case that such consonant clustering produces a geminate cluster then the cluster is realized phonetically by one member of the cluster (see also 3.3.1.3-7.). That is

$$C_i C_i \rightarrow C_i$$

3.2.3.1-2. Word final and word initial vowels.

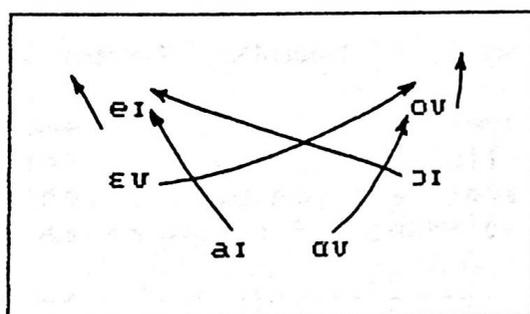
Any of the vowels /a,e,i,o,u/ can occur word finally or initially. There is no restriction.

['æ.nə]	/ana/	'where'
['ɛ.ne]	/ene/	'here'
['i.si]	/isi/	'later'
['ɔ.no]	/ono/	'there'
['v.du]	/udu/	'black'

3.2.3.3. Sequences of vowels.

The vocoid sequences [ai], [au], [ei], [ɛv], [ɔi], [ov] are interpreted as the phoneme sequences /ai/, /au/, /ei/, /eu/, /oi/, /ou/ respectively which form complex VV syllabic nuclei in either open or close syllables. These diphthongs are illustrated in the chart below. This analysis avoids the problems of either (a) interpreting the vocoid sequences as complex phonemes, which would add six additional vowel phonemes to the phoneme inventory, or (b) interpreting the vocoid sequences as a sequence of vowel plus semiconsonant and establishing the additional syllable structure patterns (C)VCC, which otherwise would not occur in the language.

Diphthong chart.



All of these diphthongs can occur word finally, initially and medially.

(1) Word final diphthongs:

['lai]	/lai/	'slave'
[bæ 'sai]	/basai/	'surface'
['ʔau]	/ʔau/	'flying spirit'
[wæ 'dau]	/wadau/	'uninhabited place'
['mei]	/mei/	'my father'
[ʔæ 'tei]	/ʔatei/	'store room'
['ʔɛv]	/ʔɛv/	'root drink'

['humev]	/humeu/	'we(2) came and..'
['ʔoi]	/ʔoi/	'dew'
[kə 'mɔi]	/momoi/	'my wife's mother'
['bov]	/bou/	'tree species'
[hə 'lou]	/holou/	'we(2) used to come'

(2) Word initial diphthongs:

['ark]	/aig/	'seed'
[ar 'lul]	/ailul/	'gravel'
['av]	/au/	'my mother'
[av 'təʔ]	/autoʔ/	'banana species'
['ei]	/ei/	'interjection'
['ein]	/ein/	'they said'
['ev]	/eu/	'that'
['evl]	/eul/	'leaf species'
['oi]	/oiw/	'possum species'
[oi 'tina]	/oitina/	'he gets me'
['ou]	/ou/	'that(distal)'
['ouv]	/ouv/	'I should have got'

(3) Word medial diphthongs:

['tain]	/tain/	'cloud'
['həv]	/haun/	'again/more'
['lei]	/leih/	'some'
['mev]	/meul/	'new garden'
['fəʔ]	/foiʔ/	'pandanus fruit'
['hov]	/houv/	'I would have come'

The vowel clustering pattern of the language also supports such an analysis in that all possible combinations of vowel clusters, including the reverse diphthongal sequences, can occur as shown in the chart below.

Chart of vowel cluster combinations.

	a	e	i	o	u
a	aa	ae	ai	ao	au
e	ea	ee	ei	eo	eu
i	ia	ie	ii	io	iu
o	oa	oe	oi	oo	ou
u	ua	ue	ui	uo	uu

The reverse sequences to the diphthong sequences occur i.e. /ia/, /ua/, /ie/, /ue/, /io/, /uo/, as well as the

sequences /ae/, /ao/, /ea/, /eo/, /iu/, /oa/, /oe/, /ui/ and the geminate clusters /aa/, /ee/, /ii/, /oo/, /uu/.

[br 'æh]	/b <u>ia</u> h/	'his mouth'
[du 'æn]	/d <u>ua</u> n/	'cold'
[bi 'ɛk]	/b <u>ie</u> g/	'vine species'
[nu 'ɛn]	/n <u>u</u> ten/	'he went'
[fi 'ɔk]	/f <u>io</u> g/	'Moluccas friar bird'
[du 'ɔʔ]	/d <u>uo</u> ʔ/	'a dance'
['dæʔ]	/d <u>ae</u> ʔ/	'cold'
['æo]	/a <u>o</u> /	'yes'
['beæ 'uɛʔ]	/be <u>tawe</u> ʔ/	'to carry around neck'
['æsiu 'lik]	/a <u>situli</u> g/	'grass species'
['sɔæ 'dɔʔ]	/sɔ <u>a</u> doʔ/	'to care for'
[bɔ 'dɔɛʔ]	/bɔ <u>do</u> teʔ/	'soft'
['nui]	/n <u>ui</u> /	'island'
[mæ 'ædæg .ə]	/m <u>a</u> tada+gə/	'say to them'
[mɛle 'ɛʔ]	/m <u>e</u> leteʔ/	'to believe'
[fɛʔi 'iten]	/fɛʔ <u>i</u> it+en/	'he watched me'
['ɔɔɔɔ]	/ɔ <u>o</u> do+on/	'as he did it..'
['nuugə]	/n <u>u</u> ug+ə/	'(you) go'

However, the occurrence of sequences of syllabic vowels word initially and finally is much rarer. The reverse diphthongal sequences /ia/, /ua/, /ie/, /ue/, /io/, /uo/ do not occur word initially rather the sequences /ja/, /wa/, /je/, /we/, /jo/, /wo/ occur. The reverse diphthongal sequences /ia/, /ua/, /ue/, /io/ do occur word finally, however. /ie/ and /uo/ do not occur word finally.

[nr . 'ji . ə]	/nij <u>i</u> a/	'he is lying'
['hu . ə]	/h <u>u</u> a/	'bull ant'
['du . e]	/d <u>u</u> e/	'song'
['ɔ . di . ɔ]	/o <u>di</u> o/	'goodbye'

The sequences /eia/ and /oia/ can occur word finally as the sequence diphthong followed by vowel.

['fɛi . ə]	/fɛ <u>i</u> a/	'he saw'
['hɔi . ə]	/hɔ <u>i</u> a/	'he came'

The sequence /ao/ can occur word initially and finally. The sequence /oa/ can occur word initially. The sequence /ui/ can occur word finally.

['æ . o]	/a <u>o</u> /	'yes'
[ɔ . æ . 'dɛ . nə]	/ɔ <u>a</u> d+enə/	'he gets them'
['nu . i]	/n <u>ui</u> /	'island'

Another support for analyzing the diphthongs as complex VV sequences is that when reduplication occurs involving a diphthong only the first vowel in the complex nucleus is reduplicated. This suggests therefore that underlyingly the diphthongs are separate vowels.

[jæjark]	/ja+jai+g/	'his great, great grandparent/child'
[bɛberk]	/be+beig/	'roots'

[mɔmɔɪk] /mo+moi+g/ 'his wife's mother'

There is also evidence from the noun morphology (see also 3.4.4.1.) that the sequences [aɪ], [eɪ], [ɔɪ] can be phonetic realizations of the underlying phoneme sequences /ai/, /ei/, /oi/ as shown by the following derivations involving sonorant deletion.

UR			SR	
/gia+ni+n/	->	giaʃin	->	[gi 'aɪn] 'your cousin'
/sibe+ni+n/	->	sibeʃin	->	[sɪ 'beɪn] 'your chin'
/oloho+ni+n/	->	olohoʃin	->	[ɔɪ 'hɔɪn] 'your bad temper'

3.2.4. Differences between structure of lexical morphemes and words.

The phonological structure of words differs from that of morphemes in two ways:

(i) Certain consonant clusters occur across morpheme boundaries within the verb which do not occur within most morphemes themselves. A few consonant clusters do occur in some lexical items within the morpheme but these items are considered as not conforming to the standard morpheme pattern of the language. This is described under 3.2.2.1.

(ii) Certain vowel sequences only occur across morpheme boundaries. These are /ue/, /ae/, /ea/, /iu/, /oe/, /aa/, /ii/, /uu/ (see 3.2.3.3. above for examples).

3.2.5.1. Assignment of medial units, clusters and sequences to syllables.

In most cases a syllable boundary is considered to coincide with a morpheme boundary but there are exceptions to this as described below where either (i) a diphthong sequence of vowel + off-glide or (ii) a geminate vowel cluster occurring as a phonetic long vowel occur across a morpheme boundary. Otherwise a syllable boundary occurs in the environment V(C)_(C)V.

(i) Off-glide sequences.

The off-glide sequences [aɪ], [aʊ], [eɪ], [ɛʊ], [ɔɪ], [oʊ] can occur as a single syllabic nucleus either within the morpheme or across a morpheme boundary.

[aɪ] /ai/

[tɑɪn]	/tɑɪn/	'cloud'
[ho. 'waɪn]	/ho+waɪ+n/	'they will not come' come-3p-neg.f
[ʔɔ. tɔ. 'gɑɪ]	/ʔoto+gɑɪ/	'their brothers' brother-3p-p

[aʊ] /au/

[hɑʊn]	/hɑʊn/	'again/more'
--------	--------	--------------

[ho. 'g̃bavn] /hotg̃ba+u+n/ 'we will not come'
come-1p-neg.f

[ei] /ei/

[leih] /leih/ 'some'

[mε. 'meik] /me+me+ig/ 'as they put'
sim.-put-3p-SS

[εv] /eu/

['mεv.lə] /meula/ 'right hand'

['hu.mεv] /hu+me+u/ 'we(2) came..'
come-SS-1d

[ɔi] /oi/

['fɔiʔ] /foiʔ/ 'pandanus fruit'

[hɔ. 'ɔi] /ho+lo+i/ 'he used to come'
come-hab.p-3s

[ov] /ou/

[ov] /ou/ 'that(distal)'

[hovm] /ho+u+m/ 'I would have come'
come-contr.-1s

(ii) Geminate vowel clusters.

The geminate vowel clusters /aa/, /ii/, /uu/ only occur as two syllabic nuclei across morpheme boundaries. The geminate clusters /ee/ and /oo/, however, can occur either as two syllabic nuclei with one vowel taking the stress peak or as phonetic long vowels [ɛ:] and [ɔ:] forming a single syllabic nucleus. In both cases the clusters /ee/ and /oo/ can occur across a morpheme boundary.

/ee/

[mε.lε. 'εʔ] /mele+eʔ/ 'to believe'
[fε:m] /fe+em/ 'I saw'

/oo/

['ɔ.ɔ.dɔn] /o+od+on/ 'as he did'
[hɔ:m] /ho+om/ 'I came'

3.2.5.2. The canonical syllable type.

The canonical syllable type is (C)V(C) where at least one consonant is present. V can occur alone, word initially, medially and finally.

[i] /i/ 'this'
['u.bi] /ubi/ 'eel'
[nu. 'i.ə] /nu+i+a/ 'he went'

3.2.6.1. Restrictions between word/syllable initial units or clusters and the following vowels.

Word/syllable initial consonant clusters do not occur. The consonant-vowel and consonant-diphthong sequences which occur word or syllable initially are given in the chart below. Those sequences enclosed in parentheses occur only syllable initially but not word initially. Those which are not in parentheses also occur word initially. An asterisk indicates that the sequence does not occur syllable or word initially. Orthographic symbols rather than phonemic symbols are used in this chart for convenience of presentation.

	a	e	i	o	u	ai	au	ei	eu	oi	ou
b	ba	be	bi	bo	bu	bai *		bei *		(boi)	bou
c	ca	ce	ci	co	cu	cai	cau	cei	ceu	coi	cou
d	da	de	di	do	du	dai	dau	(dei) *		(doi)	dou
f	fa	fe	fi	fo	fu	fai *		(fei)	feu	foi	fou
g	ga	ge	gi	go	gu	gai	gau	(gei)	geu	goi	(gou)
h	ha	he	hi	ho	hu	hai	hau	hei *		hoi	hou
j	ja	je	ji	jo	ju ⁴	jai	jau	(jei) *		joi	jou
k ³	ka	ke	ki	ko	*	*	*	*	*	*	*
l	la	le	li	lo	lu	lai	lau	lei *		loi	lou
m	ma	me	mi	mo	mu	mai	mau	mei	meu	moi	mou
n	na	ne	ni	no	nu	*	nau	(nei) *		noi	nou
q	qa	qe	qi	qo	qu	qai	qau	qei *		qoi	qou
s	sa	se	si	so	su	sai	sau	sei	seu	soi	sou
t	ta	te	ti	to	tu	tai	tau	(tei) *		toi	(tou)
w	wa	we	wi	wo	(wu) ⁴	wai	wau	(wei) *		*	(wou)

3.2.6.2. Restrictions between word/syllable final units and the preceding vowel.

Word/syllable final consonant clusters do not occur. The consonant-vowel and consonant-diphthong sequences which occur word or syllable finally are given in the chart below. Those sequences enclosed in parentheses occur only syllable finally but not word finally. Those which are not in parentheses also occur word finally. An asterisk indicates that the sequence does not occur syllable or word finally. Orthographic symbols rather than phonemic symbols are used in this chart for convenience of presentation.

	a	e	i	o	u	ai	au	ei	eu	oi	ou
b	ab	eb	ib	ob	ub	*	aub	*	*	*	oub
c	ac	ec	ic	oc	uc	aic	auc	(eic)	*	oic	*
d	ad	ed	id	od	ud	aid	*	*	*	*	*
f	af	ef	if	of	uf	aif	*	*	*	*	*
g	ag	eg	ig	og	ug	aig	aug	eig	*	oig	*
h	ah	eh	ih	oh	uh	aih	auh	eih	*	*	ouh
j	*	*	ij	*	*	*	*	*	*	*	*
l	al	el	il	ol	ul	ail	aül	eil	eül	oil	ouil
m	am	em	im	om	um	aim	*	*	*	oim	cum
n	an	en	in	on	un	ain	aun	ein	*	oin	*
q	*	eq ⁵	* oq ⁵	(uq)	*	*	*	*	*	*	*
s	as	es	is	os	us	ais	aus	eis	*	ois	*
t	at	et	it	ot	ut	ait	aut	*	*	*	out
w	*	*	iw	*	*	aiw	*	*	*	oiw	*

3.2.6.3. Restrictions on cooccurrence of segments.

In principle there is no restriction on cooccurrence of segments across syllable or word boundaries. It is just accidental that the only consonant clusters that do occur across syllable boundaries word internally are those listed under 3.2.2.1. Otherwise there is no restriction on cooccurrence of consonant or vowel segments across word or syllable boundaries.

3.2.6.4. Vowel harmony.

Vowel harmony occurs in certain inflections of the verb and the noun and is described under 3.4.1.1. (assimilation of vowels) and 3.4.4.2. (epenthetic harmonic vowels).

3.2.6.5. Consonant harmony.

There is no consonant harmony but in continuous speech /h/ is liable to assimilate to the following [+round] consonant.

UR

SR

/dih men/ → ['dif 'men] 'he just put'
 /dunuh beia/ → [du 'nuf 'berə] 'he came up inside'

3.2.6.6. Restrictions between adjacent or nonadjacent units or clusters.

There are no restrictions between adjacent or nonadjacent units or clusters.

3.2.6.7. Differences between the phonotactic patterns allowed with different word classes.

The only difference between the phonotactic patterns allowed with different word classes is that consonant clusters do not occur word medially in verb or possessed noun stems but can occur with some lexical items (see 3.2.).

3.3. Suprasegmentals.

3.3.1. Length.

Length is not normally contrastive but vowel lengthening does occur and in some cases this produces a contrast in meaning. This phenomenon is not analyzed as being phonologically significant and is of comparatively low incidence in the total phonological system. The explanation for vowel length appears to lie in factors related to accidental historical development rather than in the synchronic sound system.

3.3.1.1. Vowel length.

The phonetic long vowels [ɛ:] and [ɔ:] occur in words like [g̃bɛ:] 'no', [mɛ:n] 'stone', [ʔɔ:'lik] 'his white hair' and [sɔ:l] 'wallaby' and sets of contrastive pairs exist in the lexicon for the vowels [ɛ] - [ɛ:] and [ɔ] - [ɔ:] respectively. Examples are given below:

[ɛ]		[ɛ:]	
[bɛ]	'his neck'	[g̃bɛ:]	'not'
[bɛn]	'big'	[g̃bɛ:n]	'centipede'
[dɛ]	'tree'	[dɛ:l]	'day'
[mɛ]	'boy'	[mɛ:l]	'weed'
[mɛn]	'he put'	[mɛ:n]	'stone'
[ɔ]		[ɔ:]	
[ʔɔ]	'bowstring'	[ʔɔ:l]	'famine'
[dɔ]	'ghost'	[dɔ:l]	'meat'
[hɔ]	'pig'	[hɔ:l]	'hospitality'
[mɔ]	'thatch'	[mɔ:l]	'coconut cream'
[sɔ]	'stick'	[sɔ:l]	'wallaby'

However, because of factors like deficient distribution and the absence of allophonic variants for the long vowels they are analyzed as the geminate *W* clusters [ɛɛ] and [ɔɔ]. Evidence from the verb morphology and comparison with related languages supports this interpretation.

In the remote past tense the morpheme for first and second person singular can be deduced as (-em) from the direct speech forms where just the subject agreement of the verb is

copied to the postquote position (see also 1.1.1.1.). In the remote past tense form itself, however, the first and second person forms have long phonetic vowels as in the examples below:

[fɛ:m] 'I/you saw.'
[hɔ:m] 'I/you came.'

The underlying forms are therefore analyzed as having the morpheme {-em} producing long phonetic vowels in the surface forms. In the case of [hɔ:m] the [ɛ] assimilates to the preceding [ɔ] vowel in the verb stem.

UR		SR	
/fɛ+em/	->	[fɛ:m]	'I/you saw.'
/hɔ+em/	->	[hɔ:m]	'I/you came.'

Evidence that [ɛ:] and [ɔ:] are geminate vowel clusters also comes from comparing cognate forms in the languages related to Amele.⁶

	<u>Amele</u>	<u>Gumalu</u>	<u>Isebe</u>	<u>Bau</u>	<u>Panim</u>
'dry'	[mɛ:g]	[mɛʔɛk]	[mɛʔɛg]	[mɛʔɛk]	[mɛʔɛg]

	<u>Amele</u>	<u>Gumalu</u>	<u>Sihan</u>
'no'	[gɔɛ:]	[bitik]	[bɔ:ʔik]

	<u>Amele</u>	<u>Girawa</u>	<u>Wamas</u>	<u>Murupi</u>	<u>Mosimo</u>
'meat'	[dɔ:l]	[toʔon]	[dau]	[dau]	[dau]

	<u>Amele</u>	<u>Munit</u>	<u>Gumah</u>	<u>Rapting</u>	<u>Rempi</u>	<u>Baimak</u>
'wallaby'	[sɔ:l]	[sugule]	[sukuʔ]	[soɛl]	[soiʔ]	[sugur]

The vowel [æ] is also lengthened preceding voiced stops in monosyllabic words as the following pairs illustrate.

[æ]		[æ:]	
[bæm]	'loin cloth'	[næ:b]	'termite'
[ʔæf]	'invalid'	[sæ:b]	'food'
[hæt]	'sugar cane'	[gæ:d]	'crazy'
[ʔæs]	'magic'	[ʔæ:d]	'enemy'
[næh]	'house post'	[næ:g]	'small'
[dæʔ]	'boundary'	[wæ:g]	'canoe'

[æ:] is analyzed as an allophonic variant of [æ] but there is evidence from comparing cognate forms with related languages that diachronically some instances of [æ:] may also have developed from a geminate *W* cluster as the following illustrates.

	<u>Amele</u>	<u>Gumalu</u>	<u>Isebe</u>	<u>Bau</u>	<u>Panim</u>
'small'	[næ:g]	[naʔək]	[naʔəg]	[naʔək]	[naʔəg]
'loin cloth'	[bəm]	[pəm]	[bəm]	[pəm]	[bəm]

3.3.1.3-7. Length in the nonsyllabics.

Contrastive length does not occur in the nonsyllabics. In some constructions of the verb consonant clusters can occur across morpheme boundaries involving the object verbal clitics (see 2.1.3.6.1.2-3. and 3.2.2.1.). Where it is the case that such consonant clustering produces a geminate cluster then the cluster is realized phonetically by one member of the cluster. That is

$$C_i C_i \rightarrow C_i$$

UR

SR

$$/su+l+en/ \rightarrow [su'len] \text{ 'he sent us(2)'}$$

3.3.2.1. Stress.

Stress does not play a significant role in the phonology of the language except that heavy stress is associated with certain intonation patterns (see 3.3.4.1.) and is also used to emphasize sentence constituents. Stress does not distinguish lexical items from one another.

3.3.2.2. Phonetic correlates of stress.

The nucleus of a stressed syllable is pronounced with greater intensity than the nucleus of an unstressed syllable, and sometimes with higher pitch. Also the quality of the vowel, tense or lax, can indicate if the syllable is a stressed or unstressed syllable, for example [ə] only occurs word finally in unstressed syllables (see 3.1.2.2. 1.).

3.3.2.3. Distinctions between different levels of stress.

There is no distinction between different levels of stress.

3.3.2.4-5. Position of stress.

There are two patterns of stress placement depending on the morphological structure of the word. Stress placement on monomorphemic words (i.e. all words except verbs and possessed nouns) is phonologically conditioned and predictable. Stress placement on polymorphemic words (i.e. verbs and possessed nouns) is grammatically conditioned and predictable but to a lesser degree than for monomorphemic words.

For monomorphemic words stress, [+stress], falls on the first closed syllable (which is usually though not necessarily the last syllable in the word) or, if there is

no closed syllable, then on the first syllable. For the purposes of stress placement an off-glide functions as a closed syllable when it occurs in word final position. In other word positions it functions as an open syllable. Stress placement for monomorphemic words can therefore be expressed by two ordered rules, [1] and [2] below, where [2] only applies if [1] has not applied.

[1]

$$V \rightarrow [+stress] / _ \left\{ \begin{array}{l} [-syll] \# \\ C \ C \end{array} \right.$$

[2]

$$V \rightarrow [+stress] / \# (C) _$$

[du. 'æn]	/duan/	'cold'
[fæ. 'lɔl]	/falol/	'fireside'
[gæ.dɔ. 'lɔh]	/gadoloh/	'edge'
[æ. 'hul]	/ahul/	'coconut'
[ɪ.tɪ. 'tɔm]	/ititom/	'righteous'
['æn.se]	/anse/	'left hand'
[jæ. 'wæl.ti]	/jawalti/	'wind from north'
['nu.i]	/nui/	'island'
['mæ.lə]	/mala/	'chicken'
['nɪ.fu.lə]	/nifula/	'species of beetle'
['ɛ.ge]	/ege/	'we'
['v.fi.o]	/ufio/	'yam species'
['tɔɪ.ə]	/toia/	'old(person)'
['mɛv.lə]	/meula/	'right(hand)'
[baɪ. 'æ]	/baial/	'gum'
[ser. 'bʊ]	/seibul/	'war club'
[bɔ. 'eɪ]	/boei/	'morning star'
[bæ. 'saɪ]	/basai/	'surface'
[wæ. 'dɔv]	/wadau/	'uninhabited area'
[ʔɔ.ʔɔ. 'waɪ]	/ʔoʔowai/	'praying mantis'

For reduplicated nouns and adjectives the stress rules apply before the reduplication applies:

[ʔu. 'ʔu.i]	/ʔu+ʔui/	'fear'
[fɪ. 'fɪ.ji]	/fi+fiji/	'hot spring'
[mɔ. 'mɔɪ]	/mo+mo+i/	'my wife's mother'
[ʔɛ. 'ʔɛ.la]	/ʔe+ʔela/	'long/tall'

For polymorphemic words the situation with stress placement is more complex and grammatical factors play a greater role than phonological factors. Stress placement varies according to the particular conjugation of the verb or noun.

(1) Stress placement for verbs.

With the verbs stress placement is grammatically conditioned and stress can be placed on any of the following elements depending on the particular conjugation of the verb.

(i) Subject agreement suffix.

The subject agreement suffix is stressed in the present, today's past, yesterday's past, remote past, negative past and future tenses and the imperfective aspect. The subject agreement suffix is underlined.

[fɪ. 'gɪ.nə]	/fi+ <u>gɪ</u> +nə/	'I see'
['fi.gə]	/f+ <u>ɪg</u> +ə/	'I saw(tod.p)'
[fi. 'gæn]	/f+ <u>ɪg</u> +ən/	'I saw(yest.p)'
[fɛ. 'sɪn]	/fɛ+ <u>sɪ</u> +n/	'they(2) saw(rem.p)'
[fɛ. 'lɛm]	/fɛ+l+ <u>ɛm</u> /	'I did not see'
[fɪ. 'gɪ.ən]	/fi+ <u>gɪ</u> +ən/	'he will see'
[fo. 'wæ.sɪn]	/fo+w <u>æ</u> +sɪn/	'they(2) will not see'
[fɪ. 'fiɡ]	/fɪf+ <u>ɪg</u> /	'as I see(SS)'
[fɪ.fɪ. 'gɪn]	/fɪfɪ+f+ <u>ɪg</u> +n/	'as I see(DS)'
[fɛ.fɛ. 'mɪn]	/fɛfɛ+f+ <u>ɪn</u> /	'as I will see(DS)'

(ii) Aspectual/mood/negative marker.

The aspectual/mood/negative marker is stressed in the habitual aspect and the perfective aspect DS medial verb. Also in this category is included the verb expressing contrafactual mood and the negative future tense where the element expressing contrafactuality or negation is stressed in each case. The relative element is underlined in the following examples.

[fɔ. 'lɔ.sɪ]	/fo+l <u>ɔ</u> +sɪ/	'they(2) used to see'
[fɛ. 'ʔɛ.mɪn]	/fɛ+ʔ <u>ɛ</u> +mɪn/	'I saw(DS)..'
['fovm]	/fo+ <u>u</u> +m/	'I would have seen'
[fɛɪ 'ɑvn]	/fɛɪ+t+ <u>ɑ</u> +n/	'he did not see'

(iii) Verb stem.

The verb stem is stressed with the perfective SS medial verb and this is underlined in the examples given.

['fi.mɪk]	/fɪ+m+ <u>ɪg</u> /	'I see(SS)..'
['fi.mɛ.sɪ]	/fɪ+mɛ+s+ <u>ɪ</u> /	'they(2) see(SS)..'

Where there is an object pronominal clitic in the verb this normally carries the main stress regardless of which stress category the conjugation of the verb belongs.

[mæ. 'æ.di.gəl]	/mæ+ <u>ad</u> +ɪg+ə/	'I said to them(tod.p)'
[mæ. 'æ.dɔ.lɪk]	/mæ+ <u>ad</u> +ɔl+ɪg/	'I used to say to them'
[mæ. 'æ.di.mɪk]	/mæ+ <u>ad</u> +ɪm+ɪg/	'I said to them(SS)..'

(2) Stress placement for possessed nouns.

With the inalienably possessed nouns there is a general stress rule whereby main stress is placed on the final syllable of the word. This applies to all conjugations without variation excluding the first person singular forms where there is variation according to the grammatical class to which the noun belongs.⁷ Illustrative paradigms are given below for ʔɔti 'my brother' and tanali 'my wife's father' to show the exact placement of main stress.

	'brother'	'wife's brother'
1s	[ʔɔ. 'ti]	[tə.nə. 'li]

1sp ^ø	[ʔɔ.ti.'ɛl]	[tæ.næ.li.'ɛl]
2s	[ʔɔ.'tɪn]	[tæ.'nain]
2sp ^ø	[ʔɔ.ti.'nɛl]	[tæ.næ.li.'nɛl]
3s	[ʔɔ.'tik]	[tæ.'nark]
3sp ^ø	[ʔɔ.tv.'gul]	[tæ.næ.lv.'gul]
1d	[ʔɔ.ti.'le]	[tæ.næ.li.ni.'le]
1dp ^ø	[ʔɔ.ti.'leɪ]	[tæ.næ.li.ni.'leɪ]
2/3d	[ʔɔ.tɔ.'læ]	[tæ.næ.læ.næ.'læ]
2/3dp ^ø	[ʔɔ.tɔ.'laɪ]	[tæ.næ.læ.næ.'laɪ]
1p	[ʔɔ.ti.'ge]	[tæ.næ.li.ni.'ge]
1pp ^ø	[ʔɔ.ti.'geɪ]	[tæ.næ.li.ni.'geɪ]
2/3p	[ʔɔ.tɔ.'gæ]	[tæ.næ.læ.næ.'gæ]
2/3pp ^ø	[ʔɔ.tɔ.'gaɪ]	[tæ.næ.læ.næ.'gaɪ]

For the first person singular forms main stress can be placed on either the final syllable or the penultimate syllable depending on the word itself. No formal explanation has been found for this variation as it does not seem to conform to either phonological or morphological criteria, although the placement of stress is usually consistent within one grammatical class. For example all the forms in classes 26-31 which take a 1s suffix -i have final syllable stress.

C26	/tanal+i/	->	[tənə'li]	'my wife's father'
C27	/dod+i/	->	[dɔ'di]	'my great grandparent/ child'
C28	/bin+i/	->	[br'ni]	'my father's sister'
C29	/wal+i/	->	[wæ'li]	'my brother'
C30	/as+i/	->	[æ'si]	'my grandparent/child'
C31	/am+i/	->	[æ'mi]	'my eye'

All the forms that have an underlying stem final -n in classes 2,3 and 7 take syllable final stress.

C2	/silin+ni/	->	[sɪlɪ'ni]	'my navel'
C3	/geman+ni/	->	[gemə'ni]	'my liver'
C7	/ʔemen+ni/	->	[ʔemɛ'ni]	'my presence'

Yet this does not apply to other classes that can be analyzed morphologically on the same basis. For example classes 9 and 10 clearly have underlying forms with stem final -n yet some members of these classes take syllable final stress and others take penultimate syllable final stress.

C9	/ʔuhun+ni/	->	[ʔuhv'ni]	'my flesh'
	/gelehin+ni/	->	[gele'hɪni]	'my bravery'
C10	/eban+ni/	->	[ɛbæ'ni]	'my forearm/hand'
	/uwent+ni/	->	[u'uɛni]	'my upper arm'

All the forms in classes 19 and 24 with clear first person morphemes -ni and -mi respectively take final syllable stress.

C19	/be+ni/	->	[be 'ni]	'my neck'
C24	/ilo+mi/	->	[ilɔ 'mi]	'my head'

However all the forms in classes 17, 18 and 21, which are morphologically similar to classes 19 and 24 above in that they take first person suffixes -mi or -ni have penultimate stress placement.

C17	/oso+mi/	->	[ɔs 'ɔmi]	'my brother-in-law'
C18	/beila+mi/	->	[ber 'læmi]	'my tongue'
C21	/ʔul+ni/	->	[ʔu 'lɪni]	'my heart'

With other classes, for example class 1, stress assignment is quite heterogeneous.

C1	/aide+ni/	->	[aide 'ni]	'my wife'
	/dewe+ni/	->	[dɛwɛ 'ni]	'my body'
	/dahi+ni/	->	[dæ 'hɪni]	'my ear'
	/mage+ni/	->	[mæ 'geni]	'my brother's wife'

3.3.3.1. Pitch.

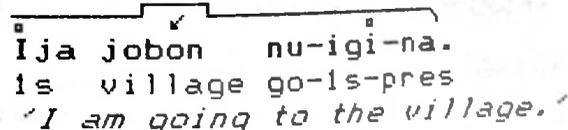
There is no lexical pitch.

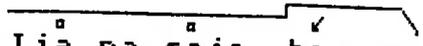
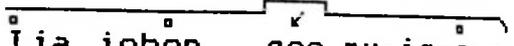
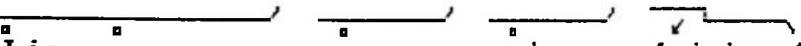
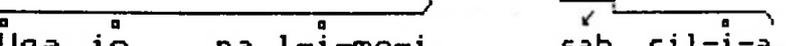
3.3.4.1. Intonation patterns.

There are two major intonation patterns for normal indicative, interrogative, imperative, supplicative, conditional, optative, debitive, permissive, emphatic, dubitative, hortatory, prohibitive, apprehensive, habitual, prescriptive, contrafactual, regretful and vocative mood sentences: final and nonfinal. The final intonation pattern is characterized by gradual falling intonation over the final element in the sentence, otherwise intonation pitch is fairly level over the whole sentence except for the intonation peak (see 3.3.4.2. below). The final intonation pattern accompanies sentence final clauses. The nonfinal intonation pattern is characterized by a rising intonation over the final element in the constituent to which the intonation pattern applies (e.g. word, phrase or sentence). The nonfinal intonation pattern is characteristic of subordinated and coordinated clauses (see 1.1.2. and 1.3.1. 1.4. respectively).

3.3.4.2. Intonation peak.

In noncontrastive, nonemphatic intonation the intonation peak falls on the stressed syllable of the element which functions as the focus of the sentence. In the following examples phrase stress is indicated by • and the intonation peak by ✓.

- (1) 
- Ija jobon nu-igi-na.
 is village go-1s-pres
 'I am going to the village.'

- (2) 
 Ijā na cāja hag ca.
 1s of woman sick have
 'My wife is sick.'
- (3) 
 Ija jobon qee nu-ig-aun.
 1s village not go-1s-neg.f
 'I will not go to the village.'
- (4) 
 Ijā na cāja hag ca qee.
 1s of woman sick have not
 'My wife is not sick.'
- (5) 
 Hina eeta faj-ag-a?
 2s what buy-2s-tod.p
 'What did you buy?'
- (6) 
 Ija mūn ca, mā ca, ceta ca faj-ig-a?
 1s banana add taro add yam add buy-1s-tod.p
 'I bought bananas, taros and yams.'
- (7) 
 Ūqa jō na l-i-me-i sab cil-i-a.
 3s house to go-pred.-SS-3s food cook-3s-tod.p
 'She went to the house and cooked the food.'

3.3.4.3. Emphatic intonation.

The degree of peremptoriness of any type of sentence (see 1.1.1.1-4. for different sentence types) is indicated by emphatic intonation whereby the intensity and the pitch is heightened throughout the utterance and particularly on the intonation peak.

- (8) 
 Hina ma-d-og-a!
 2s say-3s-2s-imp.
 'You tell him!'

3.4. Morphophonology.

In this section since all the phonological processes described occur at the phonemic level / / will represent underlying phonemic forms and [] will represent surface phonemic forms, unless specifically indicated to the contrary.

3.4.1.1. Assimilatory processes.

Assimilatory processes occur both with the vowels and the consonants.

(1) Vowels assimilating to vowels.

Assimilation to a following vowel.

(i) e → a / ___ + ga (2ps pres./tod.p/yest.p)

formally

[3]

$$\begin{array}{c} \downarrow \\ \left[\begin{array}{l} -\text{high} \\ -\text{back} \\ -\text{low} \end{array} \right] \end{array} \rightarrow [+low] / _ + [+cons] \begin{array}{c} \downarrow \\ \left[\begin{array}{l} -\text{high} \\ -\text{back} \\ +\text{low} \end{array} \right] \end{array}$$

as in the following derivations:

/fe+g+na/ → [fagana] 'you see(pres.)'
 /fe+g+a/ → [faga] 'you saw(tod.p.)'
 /fe+g+an/ → [fagan] 'you saw(yest.p.)'

Rule [3] is blocked in the future tense form
 cf.

/fe+g+an/ → [fegan] 'you will see'

(ii) e → o / ___ + lo (hab.p)

formally

[4]

$$\begin{array}{c} \downarrow \\ \left[\begin{array}{l} -\text{high} \\ -\text{round} \\ -\text{low} \end{array} \right] \end{array} \rightarrow [+round] / _ + C \begin{array}{c} \downarrow \\ \left[\begin{array}{l} -\text{high} \\ +\text{round} \end{array} \right] \end{array}$$

as in the following derivations:

/fe+lo+g/ → [folog] 'you used to see'
 /fe+lo+i/ → [foloi] 'he used to see'
 /fe+lo+u/ → [folou] 'we(2) used to see'
 /fe+lo+si/ → [folosi] 'they(2) used to see'
 /fe+lo+b/ → [flob] 'we used to see'
 /fe+lo+ig/ → [foloig] 'they used to see'

(iii) e → o / ___ + (C) u (contr./seq.-DS/sim.-DS)

formally

[5]

$$\begin{array}{c} \downarrow \\ \left[\begin{array}{l} -\text{high} \\ -\text{round} \\ -\text{low} \end{array} \right] \end{array} \rightarrow [+round] / _ + (C) \begin{array}{c} \downarrow \\ \left[\begin{array}{l} +\text{high} \\ +\text{round} \end{array} \right] \end{array}$$

in the following derivations:

/fe+u+m/	->	[f <u>o</u> um]	'I would have seen'
/fe+u+m/	->	[f <u>o</u> um]	'you would have seen'
/fe+u+b/	->	[f <u>o</u> ub]	'he would have seen'
/fe+u+h/	->	[f <u>o</u> uh]	'we(2) would have seen'
/fe+u+b/	->	[f <u>o</u> ub]	'you/they(2) would have seen'
/fe+u+m/	->	[f <u>o</u> um]	'we would have seen'
/fe+u+b/	->	[f <u>o</u> ub]	'you/they would have seen'
/fe+ʔe+hul/	->	[feʔ <u>o</u> hul]	'we(2) see(DS)..' ⁹
/fe+ʔe+mun/	->	[feʔ <u>o</u> mun]	'we see(DS)..' ⁹
/fe+fe+hul/	->	[f <u>o</u> f <u>o</u> hul]	'as we(2) see(DS)..' ¹⁰
/fe+fe+mun/	->	[f <u>o</u> f <u>o</u> mun]	'as we see(DS)..' ¹⁰

Rules [4] and [5] can therefore be combined into one rule:

[6]

$$\begin{array}{c} \vee \\ \left[\begin{array}{l} -\text{high} \\ -\text{round} \\ -\text{low} \end{array} \right] \end{array} \rightarrow \left[+\text{round} \right] / \text{ ___ } + (C) \begin{array}{c} \vee \\ \left[+\text{round} \right] \end{array}$$

Assimilation to a preceding vowel.

(iv) e -> o / o + (C) ___

formally

[7]

$$\begin{array}{c} \vee \\ \left[\begin{array}{l} -\text{high} \\ -\text{round} \\ -\text{low} \end{array} \right] \end{array} \rightarrow \left[+\text{round} \right] / \begin{array}{c} \vee \\ \left[+\text{round} \right] \end{array} + (C) \text{ ___ }$$

	UR		SR	
	/ho+ʔe+b/	->	[h <u>o</u> 'ʔ <u>o</u> p]	'he came DS..'
	/ho+ʔe+min/	->	[h <u>o</u> 'ʔ <u>o</u> min]	'I came DS..'
cf.	/fe+ʔe+b/	->	[f <u>e</u> 'ʔ <u>e</u> p]	'he saw DS..'
	/fe+ʔe+min/	->	[f <u>e</u> 'ʔ <u>e</u> min]	'I saw DS..'

Epenthetic vowels also harmonize with the preceding stem vowel in the inalienably possessed noun derivations (see 3.4.4.2.)

(2) Vowels assimilating to consonants.

(i) e -> o / ___ + $\left\{ \begin{array}{l} g^b \\ w \end{array} \right\}$

formally

[8]

$$\begin{array}{c} \downarrow \\ \left[\begin{array}{l} -\text{high} \\ -\text{round} \\ -\text{low} \end{array} \right] \rightarrow [+round] / \text{---} + \left[\begin{array}{l} -\text{syll} \\ +\text{round} \\ +\text{high} \\ +\text{back} \end{array} \right] \end{array}$$

in the following derivations:

/fe+w+a/	->	[f <u>o</u> wa]	'we(2) saw(tod.p)'
/fe+g ̄ b+a/	->	[f <u>o</u> g ̄ ba]	'we(2) saw(tod.p)'
/fe+w+a <u>n</u> /	->	[f <u>o</u> wan]	'we(2) saw(yest.p)'
/fe+g ̄ b+a <u>n</u> /	->	[f <u>o</u> g ̄ ban]	'we(2) saw(yest.p)'
/fe+w+na/	->	[f <u>o</u> wona]	'we(2) see'
/fe+g ̄ b+na/	->	[f <u>o</u> g ̄ bona]	'we(2) see'

In the last two derivations the epenthetic vowel can be analyzed as assimilating to the preceding labio-velar or the preceding [+round] vowel. The latter option would be more in line with other harmonic epenthetic vowel processes (see 3.4.4.2.). Note that this assimilation rule is blocked in the equivalent future tense derivation.

/fe+w+an/	->	[fewan]	'we(2) will see'
/fe+g ̄ b+an/	->	[feg ̄ ban]	'we(2) will see'

This assimilation also occurs in the simultaneous realis DS forms and again reduplication occurs after assimilation.

/fe+fe+won/	->	[f <u>o</u> f <u>o</u> won]	'as we(2) saw(DS)..'
/fe+fe+g ̄ bon/	->	[f <u>o</u> f <u>o</u> g ̄ bon]	'as we saw(DS)..'

This assimilation of /e/ -> /o/ only occurs with the labiovelars /w, g**̄**b/. Where the first person plural morpheme, {g**̄**b}, occurs word finally and is realized phonetically as [p] then assimilation does not occur.

[f+i+me+b]	'we see(SS)..'
[fe+fe+b]	'as we see(SS)..'

Since the vocalic labiovelar /u/ also produces the same assimilation of /e/ all the labiovelars can be grouped into one natural class meeting the criteria set by Hyman (1975).

/u/	/w/	/ɣb/	labiovelar class features
$\begin{bmatrix} -\text{cons} \\ +\text{syll} \\ +\text{round} \\ +\text{high} \\ +\text{back} \end{bmatrix}$	$\begin{bmatrix} -\text{cons} \\ -\text{syll} \\ +\text{round} \\ +\text{high} \\ +\text{back} \end{bmatrix}$	$\begin{bmatrix} +\text{cons} \\ +\text{syll} \\ +\text{round} \\ +\text{high} \\ +\text{back} \end{bmatrix}$	$\begin{bmatrix} +\text{round} \\ +\text{high} \\ +\text{back} \end{bmatrix}$

Rules [6] and [8] can be combined into one rule:

[9]

$$\begin{array}{c} \vee \\ \begin{bmatrix} -\text{high} \\ -\text{round} \\ -\text{low} \end{bmatrix} \end{array} \rightarrow \begin{bmatrix} +\text{round} \end{bmatrix} / \text{---} + (\text{C}) \begin{bmatrix} +\text{round} \\ +\text{high} \\ +\text{back} \end{bmatrix}$$

$$(ii) e \rightarrow o / \text{---} + \begin{Bmatrix} h \\ m \end{Bmatrix}$$

[10]

$$\begin{array}{c} \vee \\ \begin{bmatrix} -\text{high} \\ -\text{round} \\ -\text{low} \end{bmatrix} \end{array} \rightarrow \begin{bmatrix} +\text{round} \end{bmatrix} / \text{---} + \begin{array}{c} \text{C} \\ \left\{ \begin{array}{l} \begin{bmatrix} +\text{son} \\ +\text{round} \end{bmatrix} \\ \begin{bmatrix} +\text{son} \\ +\text{cont} \\ +\text{low} \end{bmatrix} \end{array} \right\}$$

UR

SR

$$\begin{array}{ll} /f_e+h/ & \rightarrow [f_{\underline{2}h}] \quad \text{'we(2) saw' } \\ /f_e+m/ & \rightarrow [f_{\underline{2}m}] \quad \text{'we saw' } \end{array}$$

There is no explanation apparent as to why /h/ patterns like a [+round] consonant but there is a strong /h/ <-> /f/ correspondence in the Gum language family as illustrated below¹¹ and this may indicate that some instances of /h/ in Amele are underlyingly /f/.

	<u>Amele</u>	<u>Gumalu</u>	<u>Isebe</u>	<u>Bau</u>	<u>Panim</u>
'claypot'	hal		fa:r	fal	fal
'war'	han			fan	fan
'inside'	hamol	faman	faman	faman	faman
'new'	haun		faun		faun
'hold'	hewe-	fare-	bali-	fal-	fale-
'tail'	hohug	fahuk	fohug	fohuk	fohug
'pig'	ho	fo	fo	fo	fo
'fog'	hut	fut		fu:d	fud
'male'	manahal		manafal		manafal
'plant'	?ehē-	efe-	efi-	ef-	efe-
'brain'	ilohu-		ilofu-	iloufu-	ilofu-
'meat'	?uhun	ufun	ufun	ufun	
'smell'	ahug		afug	ahuli	afug
'bat'	meleh		meref	mereh	melef

Z'graggen (1980:9) also lists the following correspondences for the 3s possessed noun suffix:

	<u>Amele</u>	<u>Isebe</u>	<u>Bau</u>	<u>Panim</u>
3s	-h	-f	-f	-f

There also appears to be a rule $g \rightarrow h$ which corresponds to the rule $n \rightarrow m$, rules [12] and [13] below, i.e. it occurs in the same environments as rules [12] and [13] as is illustrated by the following forms:

bibito-mi	bibito-m	bibito-h	'buttocks'
gailo-mi	gailo-m	gailo-h	'grain'
gogodo-mi	gogodo-m	gogodo-h	'backbone'
iso-mi	iso-m	iso-h	'sore/wound'
oso-mi	oso-m	oso-h	'brother-in-law'
wailo-mi	wailo-m	wailo-h	'waist/loins'
mugu-mi	mugu-m	mugu-h	'breastbone'
tucu-mi	tucu-m	tucu-h	'thigh'
jai-mi	jai-m	jai-h	'foot/lower leg'
mela-mi	mele-m	mela-h	'son'
qehe-mi	qehe-m	qei-h	'side'
		(qehi-h)	
beila-mi	beila-im	beila-h	'tongue'
	(beile-m)		
bia-mi	bia-im	bia-h	'mouth'

/h/ can also assimilate to /f/ in certain environments (see 3.2.6.5.).

(3) Consonants assimilating to vowels.

There is a clear phonological rule in the possessed noun morphology of /n/ \rightarrow /m/ following a [+round] vowel. Formally the rule is

[11]

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} +\text{nasal} \\ -\text{round} \end{array} \right] \end{array} \rightarrow \left[+\text{round} \right] / \$, \left[\begin{array}{c} \text{V} \\ +\text{round} \end{array} \right] + _$$

This rule applies to the first and second person forms in the noun classes 15, 17 and 24 with stem final [+round] vowels. For example the following derivations are applicable:

C15	/ʔigu+ni/	->	[ʔigumi]	'my snivel'
	/ʔigu+n/	->	[ʔigum]	'your snivel'
C17	/bibito+ni/	->	[bibitomi]	'my buttocks'
	/bibito+n/	->	[bibitom]	'your buttocks'
C24	/siho+ni/	->	[sihomi]	'my temple'
	/siho+n/	->	[sihom]	'your temple'

This rule does not apply to the forms in class 19 with stem final [+round] vowels, e.g. [ʔo+ni] 'my lips', because of the syllable restriction on the noun stem. Specifically the rule only applies to noun stems of more than one syllable. Also the rule does not apply to forms in classes 2, 3, 9, 10 and 12 where it appears the noun stem has a final [+round] vowel from the surface form but the possessive suffix is -ni. It can be shown independently that these forms in fact have a stem final n and hence are not subject to the rule. For all these forms the underlying suffixes for first and second person singular are -ni and -n respectively. In the second person forms an epenthetic vowel, -i-, is inserted between the noun stem and the suffix. This shows clearly in classes 2, 9 and 12. In classes 3 and 10 the stem final n is deleted between a [-high] and a [+high] vowel. Derivations are given below for forms from classes 2, 9 and 12 with the vowel insertion (VI) rule.

	class 2	class 9	class 12
	'girth'	'shadow'	'brain'
UR	/tehun+n/	/hahun+n/	/ilohun+n/
VI	/tehunin/	/hahunin/	/ilohunin/
SR	[tehunin]	[hahunin]	[ilohunin]

For the forms in classes 3 and 10 there is a sonorant deletion (SD) rule following the VI rule.

	class 3	class 10
	'ghost'	'bad temper'
UR	/dolon+n/	/olohon+n/
VI	/dolonin/	/olohonin/
SD	/doloin/	/olohoin/
SR	[doloin]	[olohoin]

There is one further form that provides an apparent counterexample to rule [11] and that is gemuni/gemun 'my/your husband' in class 1. However, later rules will show that there is a principle of dissimilation operating in the phonology such that a rounding rule like [11] will not operate if there is a [+round] consonant in the final syllable of the noun stem. So [11] needs modifying to [12] to account for gemuni/gemun:

[12]

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} +\text{nasal} \\ -\text{round} \end{array} \right] \end{array} \rightarrow [+round] / \text{\$}_1 \begin{array}{c} \text{C} \\ [-round] \end{array} \begin{array}{c} \text{V} \\ [+round] \end{array} + \text{---}$$

(4) Consonants assimilating to consonants.

There is another process in the inalienably possessed noun system such that /n/ → /m/ in a certain environment associated with [+round] consonants. This process can be accounted for by a rule such as [13] below:

[13]

$$\begin{array}{c} \text{C} \\ \left[\begin{array}{l} +\text{nasal} \\ -\text{round} \end{array} \right] \end{array} \rightarrow [+round] / \begin{array}{c} \text{C} \\ [+round] \end{array} \text{\$}_2 + \text{---}$$

Rule [13] accounts for the following forms:

Set (a)

C8	/ʔebina+ni/	→ [ʔebinami]	'my sister'
C16	/gabala+ni/	→ [gabalami]	'my shoulder blade'
C17	/mela+ni/	→ [melami]	'my son'
	/gbehe+ni/	→ [gbehemi]	'my side'
C18	/beila+ni/	→ [beilami]	'my tongue'
	/bia+ni/	→ [biami]	'my mouth'
C24	/mede+ni/	→ [medemi]	'my nose'

Set (b)

C1	/bami+ni/	→ [bamini]	'my scrotum'
	/dewe+ni/	→ [deweni]	'my body'
	/taba+ni/	→ [tabani]	'my body'
C3	/gema+ni/	→ [gemani]	'my liver'
	/sibe+ni/	→ [sibeni]	'my chin'
C7	/ʔeme+ni/	→ [ʔemeni]	'my presence'
C10	/ʔehewa+ni/	→ [ʔehewani]	'my wealth'
	/duma+ni/	→ [dumani]	'my character'
	/eba+ni/	→ [ebani]	'my hand/forearm'
	/hahaba+ni/	→ [hahabani]	'my spirit'
	/hilima+ni/	→ [hilimani]	'my vein/tendon'
	/hulufa+ni/	→ [hulufani]	'my scar'
	/uwe+ni/	→ [uweni]	'my upper arm'
C11	/gbafi+ni/	→ [gbafini]	'my baldness'
C19	/be+ni/	→ [beni]	'my neck'
C21	/teful+ni/	→ [tefulini]	'my bone'
C23	/goba+ni/	→ [gobani]	'my knee'

It can be seen that rule [13] accounts for a large section of the data both positively in set (a) and negatively in set (b) by the restrictive principle of dissimilation i.e. on the same basis as for rule [12], the rounding does not apply if there is a [+round] consonant in the syllable immediately preceding the place of operation. However there are some forms for which rule [13] does not account. Some forms have the correct environment as specified in the rule but do not undergo the rounding process - set (c) below. Other forms do not have the specified environment but undergo the rounding process - set (d) below.

Set (c).

C1	/amuli+ni/	-> [amulini]	'my tears'
	/mage+ni/	-> [mageni]	'my brother's wife'
C3	/maja+ni/	-> [majani]	'my shame'
C10	/bina+ni/	-> [binani]	'my fame'
	/wica+ni/	-> [wicani]	'my image'
C11	/amese+ni/	-> [ameseni]	'my eye socket'
C12	/bagi+ni/	-> [bagini]	'my feathers'
C13	/malasa+ni/	-> [malasani]	'my pancreas'
C21	/musul+ni/	-> [musulini]	'my sweat'

Set (d)

C8	/ai+ni/	-> [aimi]	'my tooth'
C16	/sahala+ni/	-> [sahalami]	'my saliva'
C17	/jai+ni/	-> [jaimi]	'my foot/lower leg'

There is comparative evidence that the forms in set (d) diachronically satisfied the environment in rule [13]. The historical reconstructions for set (d) were probably:

[maimi]
[safalami]
[faimi]

However diachronic processes do not play any part in synchronic processes as the speaker has no access to this data. Rule [13] is therefore an opaque rule¹² and should be abandoned as a productive phonological rule in the language. These forms should therefore be related by morphological relational rules in the lexicon rather than by a phonological rule.

3.4.1.2. Dissimilatory processes.

A dissimilatory process is the underlying explanation for some phonological rules (see rules [12] and [13] in 3.4.1.1.). Specifically in the following derivation the rule of $n \rightarrow m$ following a [+round] vowel does not apply because there is an immediately preceding [+round] consonant.

/gemu+ni/ -> [gemuni] 'my husband'

Compare other forms where there is no immediately preceding [+round] consonant and the rounding rule does apply:

/tuʔu+ni/ -> [tuʔumi] 'my thigh'
/ilo+ni/ -> [ilomi] 'my head'

Similarly the principle of dissimilation applies to prevent the process $n \rightarrow m$ when there is a [+round] consonant in the noun stem if that consonant is in the syllable immediately preceding the morpheme break.

/gbafi+ni/ -> [gbafini] 'my bald head'
/bami+ni/ -> [bamini] 'scrotum'

Again compare forms where the [+round] consonant is not in the immediately preceding syllable.

/gabala+ni/ -> [gabalami] 'my shoulder blade'
/beila+ni/ -> [beilami] 'my tongue'

Therefore there is a general dissimilatory principle blocking the derivation of a [+round] nasal when there is a [+round] consonant in the syllable immediately preceding the derivational site.

3.4.1.3. Other alternations between segments.

There is free fluctuation between the voiceless labio-labial plosive [p] and the voiceless labio-dental fricative /f/ in a limited number of lexical items.

[gapat]	~	[gafat]	'canoe'
[sapol]	~	[safol]	'axe' (Russian loan word)
[tepul]	~	[teful]	'his bone'
[pupu]	~	[fufu]	'wind'

There is also fluctuation between the voiceless glottal fricative /h/ and the voiceless alveolar grooved fricative /s/ contiguous to high vowels with some lexical items.

[g̃banihul]	~	[g̃banisul]	'small millipede'
[ʔilih+doʔ]	~	[ʔilis+doʔ]	'to comb hair'
[fuluh+doʔ]	~	[fulus+doʔ]	'to multiply'

3.4.2. Metathesis processes.

Metathesis processes occur in several derivations:

(i) The morpheme {-ig} represents second/third person plural in the following forms:

[fe+ig+a]	'you/they saw(tod.p)'
[fe+ig+an]	'you/they saw(yest.p)'
[fo+lo+ig]	'you/they used to see'
[f+i+me+ig]	'you/they see(SS)..'
[fe+fe+ig]	'as you/they see(SS)..'
[fe+fe+ig+in]	'as you/they see(DS)..'

In the present tense, however, the form is

[fe+gi+na]	'you/they are seeing'
------------	-----------------------

with the reverse sequence {gi} representing second/third person plural. A grammatically conditioned metathesis rule is therefore required.

[14]

ig	->	gi
		[2/3p present]

(ii) In the habitual past tense the morpheme {-lo} represents habitual aspect. The sequence {-lo} occurs in all forms except first person singular where the sequence is reversed as shown by the following paradigm:

1s	/f+ol+ig/
2s	/fo+lo+g/
3s	/fo+lo+i/
1d	/fo+lo+u/
2/3d	/fo+lotsi/

1p /fo+lo+b/
2/3p /fo+lo+ig/

A grammatically conditioned metathesis rule is therefore required.

[15]

lo -> ol
[1s hab.p]

An alternative analysis for the 1s form would be to say that the o in the suffix -lo is simply deleted after the stem final e has been changed to o, i.e.

/fe+lo+ig/ -> /fo+lo+ig/ -> [foløig]

(iii) In the sequential action verb the morpheme {-me} represents same subject following. This sequence occurs in all forms except the first person singular where the sequence is reversed and the /e/ coalesces with the predicate marker {-i}. This is illustrated by the following paradigm:

1s /f+i+m+ig/
2s /f+i+me+g/
3s /f+i+me+i/
1d /f+i+me+u/
2/3d /f+i+me+si/
1p /f+i+me+b/
2/3p /f+i+me+ig/

A grammatically conditioned metathesis rule is therefore required.

[16]

me -> em
[1s seq. SS]

3.4.3. Coalescence processes.

Two coalescence processes occur in the verb morphology; (i) e + i -> i and (ii) o + i -> u. These coalescence processes only occur across morpheme boundaries and only with derivations of the verb. The process does not occur, for example, with the possessed noun forms as illustrated below:

/cot+ile+il/ -> [cotileil] 'our(2) brothers'
/cot+tige+il/ -> [cotigeil] 'our brothers'

/dolo+in/ -> [doloin] 'your ghost'
/oloho+in/ -> [olohoin] 'your bad temper'

(i) e + i -> i

formally

[17]

V	V	V	
$\begin{bmatrix} -\text{high} \\ -\text{back} \\ -\text{low} \end{bmatrix}$	$\begin{bmatrix} +\text{high} \\ -\text{back} \end{bmatrix}$	\rightarrow	$\begin{bmatrix} +\text{high} \\ -\text{back} \end{bmatrix} \emptyset$

as shown in the following derivations:

/fe+ig+a/	→	[figa]	‘I saw(tod.p)’
/fe+ig+an/	→	[figan]	‘I saw(yest.p)’
/fe+ig+na/	→	[figina] ²	‘I see’
/fe+fe+ig/	→	[fifig]	‘as I see(SS)..’

also with all the sequential SS verb forms:

/fe+i+me+ig/	→	/fe+i+em+ig/	→	
		[fimig]		‘I see(SS)..’
/fe+i+me+g/	→	[fimeg]		‘you see(SS)..’
/fe+i+me+i/	→	[fimeil]		‘he/she sees(SS)..’
		[fimi] ³		“
/fe+i+me+u/	→	[fimeu]		‘we(2) see(SS)..’
/fe+i+me+si/	→	[fimesi]		‘you/they(2) see(SS)..’
/fe+i+me+b/	→	[fimeb]		‘we see(SS)..’
/fe+i+me+ig/	→	[fimeig] ⁴		‘you/they see(SS)..’

(ii) o + i → u

formally

[18]

V	V	V	
$\begin{bmatrix} -\text{high} \\ +\text{back} \end{bmatrix}$	$\begin{bmatrix} +\text{high} \\ -\text{back} \end{bmatrix}$	\rightarrow	$\begin{bmatrix} +\text{high} \\ +\text{back} \end{bmatrix} \emptyset$

as shown in the following paradigms:

/ho+ig+a/	→	[huga]	‘I came(tod.p)’
/ho+ig+an/	→	[hugan]	‘I came(yest.p)’
/ho+ig+na/	→	[hugina] ¹³	‘I come’
/ho+ho+ig/	→	[huhug]	‘as I come(SS)..’

also with all the sequential SS verb forms:

/ho+i+me+ig/	→	/ho+i+em+ig/	→	
		[humig]		‘I come(SS)..’
/ho+i+me+g/	→	[humeg]		‘you come(SS)..’
/ho+i+me+i/	→	[humeil]		‘he/she come(SS)..’
		[humi] ¹⁴		“
/ho+i+me+u/	→	[humeu]		‘we(2) come(SS)..’
/ho+i+me+si/	→	[humesi]		‘you/they(2) come(SS)..’
/ho+i+me+b/	→	[humb]		‘we come(SS)..’
/ho+i+me+ig/	→	[humeig] ¹⁵		‘you/they come(SS)..’

The syllable restriction on rule [20] is necessary so that it does not apply to those forms with a noun stem having a final sonorant and one syllable structure as in these forms:

[bamin]	'your scrotum'
[ʔo:lin]	'your maturity'
[ʔehin]	'your magic'
[menin]	'your brother's wife'
[walin]	'your brother'
[anin]	'your mother'

A general deletion rule is required for sequences of geminate consonants as occurs in some verb and noun derivations.

[21]

$$\begin{array}{c}
 V \quad C \quad + \quad C \quad V \Rightarrow V \quad C \quad \emptyset V \\
 [\alpha\text{FEATURE}] \quad [\alpha\text{FEATURE}] \quad \quad \quad [\alpha\text{FEATURE}]
 \end{array}$$

Rule [21] would apply to the following verbal and nominal derivations:

/qet+te+ita/	->	[qeteia]	'he crosses me/ cuts me off'
/beluh+he+ita/	->	[beluheia]	'he licked you'
/sul+le+ita/	->	[suleia]	'he sent us(2)'
/fag+ge+ita/	->	[fageia]	'it stuck to us'
/hahun+ni/	->	[hahuni]	'my shadow'
/biam+mi/	->	[biami]	'my mouth'

3.4.4.2. Insertion processes.

The following vowel insertion processes occur:

(i) Harmonic vowel insertion.

[22]

$$\emptyset \rightarrow \begin{array}{c} V \\ [\alpha\text{FEATURE}] \end{array} / \begin{array}{c} V \\ [\alpha\text{FEATURE}] \end{array} C_i \text{ --- } C_j \begin{array}{c} V \\ \end{array}$$

Rule [22] applies to all the second/third person dual and plural forms of the inalienably possessed nouns. A vowel is inserted between the dual/plural suffix and the second person suffix -n/-m attached to the end of the noun stem and this harmonizes with the final vowel in the noun stem. Compare these forms with the first person dual and plural forms. For the first person dual and plural forms the first person suffix -ni/-mi is attached to the noun stem followed by the dual and plural markers. There is no epenthetic vowel.

UR		SR	
/duma+n+la/	->	[duma <u>n</u> la]	'their(2) character'
/duma+n+ga/	->	[duma <u>n</u> ga]	'their character'
/dewe+n+la/	->	[dewe <u>n</u> la]	'their(2) body'
/dewe+n+ga/	->	[dewe <u>n</u> ga]	'their body'

/dahi+n+la/	->	[dahin <u>i</u> la]	'their(2) ear'
/dahi+n+ga/	->	[dahin <u>i</u> ga]	'their ear'
/tuʔu+m+la/	->	[tuʔum <u>u</u> la]	'their(2) thigh'
/tuʔu+m+ga/	->	[tuʔum <u>u</u> ga]	'their thigh'
/iso+m+la/	->	[isom <u>o</u> la]	'their(2) sore'
/iso+m+ga/	->	[isom <u>o</u> ga]	'their sore'

cf.

/duma+ni+le/	->	[duman <u>i</u> le]	'our(2) character'
/duma+ni+ge/	->	[duman <u>i</u> ge]	'our character'
/dewe+ni+le/	->	[dewen <u>i</u> le]	'our(2) body'
/dewe+ni+ge/	->	[dewen <u>i</u> ge]	'our body'
/dahi+ni+le/	->	[dahin <u>i</u> le]	'our(2) ear'
/dahi+ni+ge/	->	[dahin <u>i</u> ge]	'our ear'
/tuʔu+mi+le/	->	[tuʔum <u>i</u> le]	'our(2) thigh'
/tuʔu+mi+ge/	->	[tuʔum <u>i</u> ge]	'our thigh'
/iso+mi+le/	->	[isom <u>i</u> le]	'our(2) sore'
/iso+mi+ge/	->	[isom <u>i</u> ge]	'our sore'

Rule [22] also applies to the first and second person singular, and first person dual and plural forms of the verb in the present tense.

/fe+ig+na/	->	[fig <u>i</u> na]	'I see'
/ho+ig+na/	->	[hug <u>i</u> na] ¹⁶	'I come'
/fe+g+na/	->	[fag <u>a</u> na]	'you see'
/ho+g+na/	->	[hog <u>a</u> na]	'you come'
/fe+w+na/	->	[fow <u>o</u> na] ¹⁷	'we(2) see'
/ho+w+na/	->	[how <u>o</u> na]	'we(2) come'
/fe+g̃b+na/	->	[fog̃ <u>o</u> na] ¹⁷	'we see'
/ho+g̃b+na/	->	[hog̃ <u>o</u> na]	'we come'

(ii) Epenthetic /i/ vowel.

An epenthetic /i/ occurs in two environments which are captured by rule [23] below:

[23]

$$\emptyset \rightarrow \begin{matrix} \vee \\ [+high] \\ [-back] \end{matrix} / \left\{ \begin{array}{l} \begin{array}{cc} C & C \\ [\alpha\text{FEATURE}] & \text{---} & [\alpha\text{FEATURE}] \\ & + & \end{array} \# \\ \begin{array}{cc} C & C \\ \begin{bmatrix} +son \\ +cont \end{bmatrix} & \text{---} & \begin{bmatrix} +son \\ -round \\ +nasal \end{bmatrix} \\ & + & \end{array} \end{array} \right.$$

The first part of rule [23] defines all the second person forms in classes 2, 3, 9, 10, 12, 16 and 18 that have an

epenthetic vowel /i/ inserted between the suffix -n and the stem final -n.

/silin+n/	->	[silin <i>ɪ</i> n]	'your navel'	
/ʔuhun+n/	->	[ʔuhun <i>ɪ</i> n]	'your flesh'	
/ijan+n/	->	/ijan <i>ɪ</i> n/	-> [ijain]	'your name'
/siben+n/	->	/siben <i>ɪ</i> n/	-> [sibein]	'your chin'
/dolon+n/	->	/dolon <i>ɪ</i> n/	-> [doloin]	'your ghost'

The second part of rule [23] is relevant for those forms in class 21 that have a stem final /h/ or /l/ and take an epenthetic vowel between the noun stem and the first or second person suffix.

/ʔeh+ni/	->	[ʔeh <i>ɪ</i> ni]	'my magic'
/ʔeh+n/	->	[ʔeh <i>ɪ</i> n]	'your magic'
/musul+ni/	->	[musul <i>ɪ</i> ni]	'my sweat'
/musul+n/	->	[musul <i>ɪ</i> n]	'your sweat'

3.4.5. Reduplication.

Reduplication is a common way of marking various syntactic and semantic categories (see 2.1.3.3.2.1.2. (imperfective aspect), 2.1.3.3.2.1.8. (iterative aspect), 1.16.1. (nouns) and 1.16.4. (adjectives)). The first (C)V of the verb, noun or adjective stem can be reduplicated and in the case of the verbs other parts of the verb can be reduplicated like the object marker, the subject marker or the predicate marker.

Notes:

1. The sequence [wu] is extremely rare and does not occur word initially.
2. The basis for this analysis is taken from Keyser (1973) and Ladefoged (1975:245).
3. A limited number of lexical items begin with phonetic [k]. These items are analyzed as instances of the independent phoneme /k/ (see 3.1.2.1.1.).
4. The sequences /ju/ and /wu/ occur in only a few lexical items.
5. These are forms where it is known that the underlying form is /gb/. In actuality they are realized by the allophone [p].
6. The comparisons are taken from Z'graggen (1980).
7. The inalienably possessed nouns are divided into 31 classes depending on the conjugation of the 1st, 2nd and 3rd person forms (see 2.1.1.4.7.1.).
8. p = plural possessee.
9. It is not clear in this derivation why the vowel assimilation rule fails to operate on the verb stem also.
10. This derivation would indicate that reduplication operates after vowel assimilation.
11. All examples are taken from Z'graggen (1980).

12. Kiparsky's definition of opacity (Kiparsky 1971, 1973):

A process P of the form A → B / C__D is opaque to the extent that there are phonetic forms in the language having:

(i) A in environment C__D

(ii)(a) B derived by process P in an environment other than C__D

(ii)(b) B not derived by process P in the environment C__D.

13. These forms are analyzed as having an epenthetic vowel /i/ inserted between the subject agreement marker and the tense marker. Alternatively one could analyze these forms as being another example of metathesis changing the sequence /ig/ → /gi/ (see 3.4.2.) with an assimilation process for /e/ → /i/ applying before the metathesis applies.

14. This is an alternate form where the coalescence rule also applies to the third person singular morpheme {-i}.

15. Coalescence does not occur between the SS marker and the vowel in the second/third person plural suffix.

16. This form suggests that epenthesis occurs before coalescence, rules [17] and [18], otherwise the form *[huguna] 'I come' would be produced.

17. These forms could be analyzed as the epenthetic vowel harmonizing with the preceding vowel or assimilating to the preceding labio-velar (see rule [9]).

4. IDEOPHONES AND INTERJECTIONS.

4.1. Ideophones.

Ideophones occur either as a quotation form or as an onomatopoeic form (usually a bird's name).

- (1) Fufu h-u-me-i mala na dodo heewe-ce-b
wind come-pred.-SS-3s chicken of tail hold-DS-3s

"kom i kom i kom i kom i kom i kom i," en.
3s-rem.p

[4:4]

'The wind came and took hold of the chicken's tail and it went, "kom i kom i kom i kom i kom i".'

- (2) Macas lalum dunuh li li bil-i "buhu baha i" en.
sea surface inside go go be-pred. 3s-rem.p

[4:9]

'The sea came in and went "buhu baha i".'

alog	'raven'
cacol	'Myna bird'
cinacin	'Doria's hawk'
fiog'	'Moluccas friar bird'
ugug	'New Guinea eagle'

4.2. Interjections.

Interjections conform to the regular principles regarding the structure of phonological words, except for clicks, and sucking and whistling noises:

awe	expression of surprise, shock, annoyance
eii	expression of pain
se	expression used to chase dogs, reprimand children
gec	expression used to command or attract a person's attention

ingressive sucking noise with pursed lips
expression of mild surprise

apico-alveolar click
expression of disapproval

a whistling noise is often used to attract someone's attention from a distance

'ps' a noise with a voiceless labio-labial plosive followed by a voiceless apico-alveolar grooved fricative is also used to attract someone's attention

5. LEXICON.

5.1. Structured semantic fields.

5.1.1. Kinship terminology.

Most kinship terms are inalienably possessed nouns (see also 2.1.1.4.7.1.). Some terms are not, for example aba 'brother', bida 'aunt', tal 'nuclear family', si hul 'clan', jomoon 'namesake', ewel 'workman' and begabega 'orphan/slave'. Within the possessed noun system no formal (lexical) distinction is made between kinship by blood or partial blood. There is, however, a lexical distinction between some nuclear family terms (i.e. those terms that express a relationship involving marriage¹) and other kinship terms in that the marriage terms have first person singular suffix -ni/-mi and the nonmarriage terms have first person singular suffix -i but this grammatical distinction does not appear to have any social or cultural significance. The terms are listed below in first person form for male and female ego with the marriage terms listed first.

Ego

M	aide-ni	'wife'
F	gemu-ni	'husband'
M/F	mela-mi	'son'
M/F	ate-ni	'daughter'
M	cebina-mi	'sister'
M/F	oso-mi	'brother-in-law'
M/F	mage-ni	'brother's wife'
M/F	me-ni	'brother's wife / husband's sister'
M/F	cot-i	'brother' (also used as general greeting)
M/F	wal-i	'brother' (also used as general greeting)
F	cajah-i	'sister/friend'
M/F	me-i	'father'
M/F	au	'mother'
M/F	as-i	'grandparent/child'
M/F	dod-i	'great grandparent/child'
M/F	jajan-i	'great great grandparent/child'
M	tanal-i	'wife's father'
M	momo-i	'wife's mother'
F	huh-i	'husband's parent'
M/F	bin-i	'father's sister'
M/F	aw-i	'nephew/niece'
M/F	gain-i	'cousin'

5.1.1.4. Relationship by adoption.

It is quite common for children to be given to a relative to raise as their own child. There appear to be a number of reasons for this. Sometimes it is to fulfill an obligation to a close relative, say a brother, and in this case it is usually the firstborn child that is given away. In other cases it may be that the child has been born illegitimately or the parents have divorced or died or moved away to another area. The child is given to a relative who is willing to take it. The term used for such an adoptive arrangement is Uqa ma utena. 'he gives him food'. In other

words the adopting relatives take on the responsibility of raising the child and in all respects it becomes their own child. There is no special kinship terminology used for an adopted child however. Sometimes a person may be taken into a family from another language group - a different area altogether. For example many people come into the Amele area either looking for better land to work or because they are afraid of sorcery and witchcraft in their own areas. A term used for such people is bega/begabega which has the general meaning 'orphan/homeless'.

5.1.2. Colour terminology.

aimumug	'unripe(green/brown)'
bail	'yellow'
buic	'yellow/ripe'
cadib	'blue'
casucul/ cas	'black/magic/poison'
caub	'white(pig/man)'
cuduh	'dark-skinned'
gaga	'colour/decorative markings'
gihodoc	'dark/black'
gol	'red/ripe'
guac/gul	'unripe(green/brown)'
haliw	'striped (pig)'
huhul	'black/overripe'
isuac	'unripe(green/brown)'
jan	'yellow'
jedoc	'blue'
saec	'white'
senenec	'white'
tu	'darkness/night'
udu	'black(pig/man)'
wal	'rainbow'
wal mec	'become ripe/mature'

5.1.3. Body parts.

Most body part terms are inalienably possessed nouns and these are marked with +. Where alternative Amele words are separated by /, there is no difference in the meaning of the terms.

abdomen	waug+
Adam's apple (larynx)	dodol geeg+ (lit: throat penis)
ankle	jaih+ gad
anus	bic co+ bujec (lit: tail-mouth for defecating)
arm(upper)	uwen+
arm(lower)	eban+/eben+ (also 'hand')
armpit	giag+
back	gogodoh+/hoh/tag tag
backbone	gogodoh teful+
beard	co+ ho bic (lit: pig-tail mouth)
belly(abdomen)	waug+
biceps	uwen+ big
bladder	busu busu
blood	golac+

body(without head)	deweg+
body(with head)	tabag+
body and soul	nalug+
body dirt	gegehint+
brain	ilohuc+
breast(woman)	su+
breastbone	muguh+
breath	siw
buttocks	bibitoh+
calf	jaih+ big
cheek	qad
chest	muguh+
chin	sibeg+
clavicle	facot+
ear	dahig+
ear-lobe	no term
elbow	eban+ sucun
eye	ameg+
eyeball	ameg+ gug
eye brow	amesec+ ho bic
eye lash	ameg+ ho bic
eye lid	ameg ganac+
eye socket	amesec+
face	ola+
feathers	bagic+
finger	gic
finger nail	hiloc
finger tip	gic medet+ (lit: finger nose)
flesh	cuhun+
foot	jaih+
foot-sole	ceen tawec
-instep	ceen cabal
forearm-outside	eban hibot+
-inside	eban waug+
front of body	uqoc
ghost released after death	dolog+
ghost released when startled	hahaban+
groin	gailoh+
gums	maih+ lobin
guts (intestines)	big anag+/malioq
hair	gosic+
hand	eban+/ebent+ (also 'lower arm')
head	ilot+
head-back	biso+
head-side	siho+
head-top	qafic+
heart	cul+
heel	jaih+ bisoc
hips	gadaic+/cadaic+
knee	gob+
knuckle	eban+ gomasic
leg(lower)	jaih+
lips	co+
liver	gemag+
lungs	folo folo
mouth	biah+

navel	silig+
neck(front)	be+
neck(back)	du+
nose	medet+
palm of hand	eban gemag+
pancreas	malasact+
penis	geeg+
pus	gilican
ribs	qeih tefult+
saliva	sahalic+
semen	hinih
side of body	qeih+
scar	hulufant+
scrotum	bamig+
shadow/ reflection	hahun+
shin	jaih+ olag
shoulder	qato+
shoulder blade	gabalact+
skin	ganact+
snivel	ciguct+
sore/wound	isoh+
sound of a person walking	hutan+
space behind a person	hibo+
spleen	nenegect+
sweat	musul+
tail	hohug+
tears	amulig+
testicles	bamig+ musa
thigh	tucuh+
throat	dodol
thumb	mamog
toe	gic
toe-big	mamog
toenail	hiloc
tongue	beilah+
tooth/teeth	aig+/maih+
trunk of body	tehug+
umbilicus	mel silig+
vagina	mint+/minag+
vein/tendon	hilimant+
voice	jejeg+
waist	wailoh+
wing	hojon+
wrist	eban+ gad

As well as the above physical body parts there is also a set of inalienably possessed nouns that express personal qualities or characteristics.

bad temper	olohon+
bravery	gelehin+
character	duman+
fame	binant+
humility	ewelug+
image	wican+
knowledge	ilocon+
magic	ceh+

maturity	coolig+
name	ijan+
presence	cemenug+
pride	culaug+
shame	majag+
wealth/ possessions	cehewan+/hilian+

5.2. Basic vocabulary.

Where alternative Amele words are separated by /, there is no difference in the meaning of the terms. Verbs and possessed nouns are given in their citation forms, i.e. infinitive form for verbs and third person singular form for possessed nouns.

1. all	cunug
2. and	ca (see also 1.3.) (also 'with')
3. animal	dool (includes 'fish')
4. ashes	comis
5. at	na
6. back, of body directional	gogodoh hibo/hib
7. bad	me qee (lit: not good)
8. bark, of tree	na ganac (lit: tree skin)
9. because	(eu) nu
10. belly	waug
11. big	ben
12. bird	man fululec (lit: flapping creature)
13. bite, into off	qu jec galdoc
14. black	cas/udu
15. blood	golac
16. blow, to	fudoc
17. bone	teful
18. breast, woman breastbone, man	su muguh
19. breathe, to pant, to	siwec siwdoc
20. burn, to	cijec
21. child (boy) (girl) (young)	mel mel aid (lit: female boy) mel sim
22. claw	qa hiloc (dog's fingernail) man hiloc (bird's fingernail)
23. cloud	tain
24. cold	duan/duec/aibec/ducanun/quhuec
25. come, to come up, to come down, to	hoc bec nec
26. count, to	sicanec
27. cut, to	tolec/tubec (tear/slash) cagoc/qetec (cut across grain)
28. day	deel cahineg (daylight hours)
29. die, to	cal mec
30. dig, to	hunec
31. dirty	gegehin ca

32.	dog	qa
33.	drink	wa jec (lit: eat water)
34.	dry	meeg/galalec/san
35.	dull (blunt)	aig ca qee (lit: not sharp)
36.	dust	bobos
37.	ear	dahig
38.	earth	maha
39.	eat, to	jec
40.	egg	waqa/aig
41.	eye	ameg
42.	fall, to	
	(from height)	tonec
	(over)	cabatec
43.	far	ono ca
44.	fat/grease	lalo
45.	father	memeg
46.	fear, to	cucuiec
47.	feather	bagic
48.	few	madi qee (lit: not many)
49.	fight, to	cadec
	war	han
50.	fire	ja (also 'firewood')
51.	fish	dool (also 'animal')
52.	five	ebum
53.	float, to	lal qoc
54.	flow, to	nolec
55.	flower	bobog
56.	fly, to	
	(flapping wings)	fululec
	(straight wings)	futuec
57.	fog/mist	hut
58.	foot/lower leg	jaih
59.	four	wal oso (lit: a/one rainbow)
60.	freeze	no term
61.	fruit	aig (also 'seed/sharp/tooth')
62.	full	am bec/cacawec
63.	give, to ²	
	to me	itec
	to you	ihec
	to him/her	utec
	to us(2)	ilec
	to you/ they(2)	alec
	to us	igec
	to you/them	adec
64.	good	me
65.	grass	gigi
66.	green	no term
67.	guts	big anag/maliog
68.	hair	gosic
69.	hand/lower arm	eban/eben
70.	he/she/it	uqa
71.	head	ilo
72.	hear, to	dah mec
73.	heart	cul
74.	heavy	culumen ca
75.	here	ene
76.	hit, to	qoc
77.	hold	heewec
78.	horn	no term

79. how	adi
80. hunt, to	jabdoc 'to chase'
81. husband	gemug
82. I	ija
83. ice	no term
84. if	fi (conditional) mi (contrafactual)
85. in	na (also 'at/by/of/on/with')
86. kill, to	qagadoc ('hit and kill') qoc (also 'hit')
87. knee	gob
88. know, to	doc
89. lake	wa ben (lit: big water)
90. laugh, to	asalec
91. leaf	bagac
92. leftside	anse
93. leg (lower)	jaih (also 'foot')
94. lie, to, position of	nijec
95. live, to	bilec (also 'sit')
96. liver	gemag
97. long	cecela
98. louse	mi
99. man male	dana manahal
100. many	madi
101. meat/flesh	cuhun
102. moon/month	jagel
103. mother	anag
104. mountain	aluh
105. mouth	biah
106. name	ijan
107. narrow	sosog
108. near	cemenug ca
109. neck (front) (back)	be du
110. new/again/more	haun
111. night	witic/tu
112. nose	mede
113. not	qee
114. old (person) (thing)	toia hilah
115. one	oso/osol/osahic/osaic
116. other/different	fil
117. person	dana (also 'man') oso 'someone'
118. play, to	udoc/ahulec
119. pull, to	celcelec/ciluec/didoc/guldoc/ gehulec
120. push, to	sundoc
121. rain	wa (also 'water')
122. red	gol ca
123. right/correct	tutuc 'straight' ititom 'morally upright'
124. rightside	meula
125. river	wa (also 'water')
126. road	jic
127. roots	bebeig
128. rope/vine	halu
129. rotten, to be	huluec

130. round	daladoc/falandoc/goldoc
131. run, to	cusec
132. salt	macas (also 'sea')
133. sand	esic
134. say, to	madec
135. scratch, to	cisec
136. sea	macas (also 'salt')
137. see, to	fec
138. seed	aig (also 'fruit/sharp/tooth')
139. sew, to	gisec/qugi mec
140. sharp	aig ca (also 'fruit/seed/tooth')
141. short	gohic
142. sing, to	silec/duec
143. sit, to	bilec
144. skin	ganac
145. sky	sau
146. sleep, to	us nijec
147. small	nag/mamas/qain
148. smell, to	cahug qoc 'to smell something'
	cahug mec 'to become smelly'
	dedeman bec 'a smell to come up'
149. smoke	casuc
150. smooth	susumul/jocosaig/wa jodoc
151. snake	man sononec
152. snow	no term
153. some	leih
154. spit, to	cinec
155. split, to	qatanec
156. squeeze, to	cafdoc/cahdoc
157. stab/pierce, to	bagawec
158. stand, to	tawec
159. stars	malaqa
160. stick	na (also 'tree')
	caif/sol/idoc
	for carrying qag
	for extracting lime qag
	for pounding food gunum
	for beating slitgong tu
	for planting yams duli
	for hooking fruit hacit
	for axe handle tu/dul/ul
161. stone	meen
162. straight	tutuc
163. suck, to	sugudoc 'to suck milk'
164. sun	cam
165. swell, to	magaec/ibec
166. swim, to	wa cesawec (lit: to divide water)
167. tail (of dog)	hohug
	(of bird) bitic
168. that	eu
	(distal) ou
169. there	ono
170. they/you (dual)	ale
	(plural) age
171. thick	tehug ca
172. thin	bagac bagac 'leaf-like'
173. think, to	cisdoc
174. this	i
175. thou	hina (also 'ye')
176. three	ijed
177. throw, to	helec

178. tie, to	bagec/libec
179. tongue	beilah
180. tooth	aig/maih (also 'fruit/seed/sharp')
181. tree	na
182. turn, to	falidec
turn around, to	qalec/waldoc
turn over, to	cafanec/waldoc
turn back on, to	hibemdoc
183. two	lecis/leis
184. vomit, to	fojoc
185. walk, to	coboc
186. warm	walac
warm, to	hoodoc
187. wash, to	cusec 'to rub'
	joudoc 'to submerge/baptize'
188. water	wa
189. we (dual)	ele
(plural)	ege
190. wet	wa ca/wa qoc
191. what	eeta
	cel 'what/which'
192. when	cel sain (lit: what time)
193. where	ana
194. white	caub/saec/senenec
195. who (singular)	in
(plural)	an
196. wide	bagalan
197. wife	aideg
198. wind	fufu
199. wing	hojon
200. wipe, to	cacoc
201. with	ca (also 'and')
202. woman	caja
female	aid/cufunec
203. woods/forest	coluc/wadau
204. worm	mali
205. ye	hina
206. year	cabi gel (lit: garden fence)
207. yellow	bail/jan

Notes:

1. This distinction may be more apparent than real, for example mei, au, tanali, momoi, huhu would be counter examples to this hypothesis unless the distinction was only for those marriage relationships on the same generation level or later.

2. The verb 'to give' has no overt verb stem and is realized only by verb suffixation.

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