

THE VERBAL SYNTAX OF KUMAN

by

JULIE ANNE PIAU

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CONTENTS

ACKNOWLEDGEMENTS	v
ABBREVIATIONS	vi
INTRODUCTION	1
CHAPTER ONE: MORPHOPHONEMICS	3
1.1 Phonotactics	5
1.2 Allophonic distribution	6
1.3 Morphophonemic rules	7
1.4 Discussion	21
1.4.1 Alternations involving /gl/	21
1.4.2 Second/third person dual	22
CHAPTER TWO: THE INDEPENDENT CLAUSE	26
2. Word order	28
2.0 Nominal	30
2.1 Pronouns	30
2.1.1. Personal Pronouns	30
2.1.2 Interrogative Pronouns.	31
2.1.3 Demonstrative.	35
2.2 Nouns	36
2.2.1 Compound nouns	37
2.2.2 'Case'	37
2.2.2.1 Locative	37
2.2.2.2 Instrumental	39
2.3 Adjectives	40
2.4 The Predicate.	43
2.4.1 Order of suffixes	44
2.4.2 Verbal Semantics	45

2.5	Verb suffixes	56
2.5.1	Illocutionary force, status and modality	56
2.5.2	Illocutionary force	57
2.5.2.1	Interrogative: yes-no questions	57
2.5.2.2	Content questions	59
2.5.2.3	Imperative	60
2.5.2.4	Declarative	61
2.6	Person number	63
2.6.1	First person	64
2.6.1.1	Singular: <u>-i</u>	64
2.6.1.2	Dual: <u>-bugl</u>	64
2.6.1.3	Plural: <u>-mun</u>	65
2.6.2	Second person singular	67
2.6.3	Third person	67
2.6.3.1	Singular	67
2.6.3.2	Second/third person dual: <u>-bir</u> ~ <u>-bri</u> , <u>-ir</u>	69
2.6.3.3	Plural: <u>-im</u> , <u>-uw</u> , <u>-i</u>	70
2.7	Status	71
2.7.1	General status	71
2.7.1.1	<u>-nagl</u> 'Modal' and 'Irrealis'	72
2.7.2	Specific status	74
2.7.2.1	<u>-ka</u> 'REALLY'	75
2.7.2.2	<u>-da</u> 'MAYBE', 'PERHAPS'	76
2.7.2.3	<u>-ba</u> 'HOPEFULLY'	77
2.8	<u>-kit</u> 'NEGATIVE'	78
2.9	<u>-t</u> 'EMPHATIC'	78
2.10	<u>-edi</u> , <u>-di</u> Aspect	79

CHAPTER THREE: SERIAL VERB CONSTRUCTIONS AND DEPENDENT VERBS	81
3.0 Serial verbs versus dependent verbs	81
3.1 Serial verb constructions	84
3.2 Semantic relations of serial verb constructions	87
3.2.1 Aspect	87
3.2.2 Modality	88
3.2.2.1 Ability 'know how' and Conative modality	
'try to'	89
3.2.2.2 Desiderative modality	91
3.2.2.3 Purposive	96
3.2.3 Simultaneous action: same actor	97
3.2.4 Benefactive	99
3.2.5 Instrumental	99
3.3 Dependent verbs	10
3.3.1 Person number	10
3.3.1.1 Switch in number and person	10
3.3.1.2 Switch reference	10
3.4 Temporal relations	10
3.4.1 Sequential action	10
3.5 Status	10
 CHAPTER FOUR: NEXUS AND JUNCTURE	 110
4.0 Layers of the clause	110
4.1 Operators	111
4.1.1 Nuclear operators	112
4.1.2 Core operators	113
4.1.3 Peripheral operators	114
4.2 Juncture	114
4.2.1 Nuclear and core layer junctures	115
4.2.2 Peripheral junctures	121

4.3	Nexus types	122
4.4	Interaction of juncture and nexus	124
4.4.1	Nuclear coordinate nexus	124
4.4.2	Peripheral coordinate nexus	125
4.4.3	Peripheral subordinate nexus	128
4.4.4	Nuclear co-subordinate nexus.	133
4.4.5	Core cosubordinate nexus	134
4.4.6	Peripheral cosubordinate nexus	135
	NOTES	143
	REFERENCES	144

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ABBREVIATIONS

1	first person
2	second person
3	third person
ant	anterior
AR	allophonic rule
C	consonant
cont	continuent
cor	coronal
DA	different actor
DECL	declarative
DL	dual
EMP	emphatic
IMP	imperative
LOC	locative
NEG	negative
PERF	perfective
PL	plural
pl	plural
Q	interrogative
R	rule
SEQ	sequential
SF	surface form
SG	singular
UF	underlying form
V	vowel
?	no independent meaning
*	ungrammatical

INTRODUCTION

Kuman is a Non-Austronesian or Papuan language of the Central Family of the East New Guinea Highlands Stock (Wurm 1978). There are over 66,000 speakers of Kuman, who live mainly in the northern part of Simbu Province, Papua New Guinea. Languages which belong to this family include Mid-Wahgi, Chuave, Salt-Yui, Sinasina and Golin. Previous work on Kuman has been carried out to my knowledge by Capell (1948-1949), Bergmann (1953), Nilles (1969), Trefry (1967, 1969) Lynch (in press) and Piau (1981).

The aim of this subthesis is to describe the predicate and the constructions it enters into. In chapter one, I attempt to describe the morphophonemic processes, and formulate some general rules for the verbs. The more specific rules, that is, where only one phoneme of a particular morpheme is affected is given in the respective morpheme is discussed. The rules discussed here should not be considered as conclusive, as further research may show exceptions, or better rules may be written. The rules presented in this chapter only affect verbal morphology. In chapter two, I will describe briefly nominals and adjectives. The main focus of the chapter, however is a description of the final verb suffixes. In chapter three I will discuss the non-final or dependent verbs, which includes a discussion on serial verb constructions, the notion of controlled and uncontrolled events and the semantic relations

that are encoded in these verbs. In chapter four, I will discuss clause linkage using Olson's (1981) and Foley and Van Valins' (1984) theory of interclausal relations. This involves a discussion on how clauses can be linked at different levels, and how Kuman does this.

This discussion, of course, does not cover all the different suffixes that occur on the verb. Only the suffixes that are relevant to the subthesis are discussed here. Similarly, further research may show different methods of separating the different layers and the syntactic relationships between clauses.

CHAPTER ONE

MORPHOPHONEMICS

In this chapter, I will only discuss the morphophonemic processes affecting verbal morphology. The rules presented below should not be considered as conclusive, as further research may prove otherwise. Some of these rules may need to be restated to include possessive noun phrases. The rules that will be discussed below are those that affect more than one morpheme. Others that affect a particular morpheme are considered as specific and will be mentioned in the following chapter. Because this chapter is primarily concerned with morphophonemics, only alternations relating to verbal morphology will be discussed below. The phoneme inventory, listing both traditional and distinctive features of the phonemes is presented below in Tables 1a., 1b., 2a., and 2b.

Phonemes:

Table 1a. Vowels

	Front	Back Unrounded	Back Rounded
High	i		u
Mid	e		o
Low		a	

Table 1b. Distinctive features of vowels.

	i	e	a	o	u
High	+	-	-	-	+
Low	-	-	+	-	-
Round	-	-	-	+	+
Back	-	-	+	+	+

Table 2a. Traditional features of consonants.

	Labial	Alveolar	Palatal	Velar
Stop: voiceless	p	t		k
: voiced pre-				
nasalized	b	d		g
Fricative		s		
Nasal	m	n		
Lateral		l		gl
Semivowel			y	w

Table 2b. Distinctive features of consonants.

	p	b	m	t	d	s	n	l	y	k	g	gl	w
Vocalic	-	-	-	-	-	-	-	-	-	-	-	-	-
Consonantal	+	+	+	+	+	+	+	+	-	+	+	+	-
Continuent	-	-	-	-	-	+	-	+	+	-	-	+	+
Voice	-	+	+	-	+	-	+	+	+	-	+	+	+
Nasal	-	-	+	-	-	-	+	-	-	-	-	-	-
Lateral	-	-	-	-	-	-	-	+	-	-	-	+	-
Sonorant	-	-	+	-	-	-	+	+	+	-	-	+	+
Coronal	-	-	-	+	+	+	+	+	-	-	-	-	-
Anterior	+	+	+	+	+	+	+	+	-	-	-	-	-
High	-	-	-	-	-	-	-	-	+	+	+	+	+
Back	-	-	-	-	-	-	-	-	-	+	+	+	+
Round	-	-	-	-	-	-	-	-	-	-	-	-	+

1.1 Phonotactics

All consonants can occur in word medial position. /gl/, which is a laterally released velar, and /l/ can not occur word initially, while /s/, /y/, and /w/ can not occur word finally. /t/ normally does not occur word finally, except as a morphophonemic alternant of /gl/ when the initial consonant of the following word is /n/. For example, [nit ne] /nigl ne/ water eat 'drink'. /m/, /n/, and /gl/ are the only consonants that can close syllables. Of the possible twenty-five vowel combinations, the following clusters are not permitted: ea, eo, ae, oa, and ue. The following clusters are permitted within words, but not across morpheme boundaries: iu, oi, eu, ou, uo, ua. For examples

$$(iv) /t/ > [t] / \left\{ \begin{array}{l} \text{---n} \\ \# \text{---} \end{array} \right\}$$

[r] elsewhere

1.3 Morphophonemic rules

In this section, I will discuss the rules involved in morphophonemic processes. The features for the phonemes presented in Tables 1b. and 2b. will be used here when describing the respective phonemes.

(1) "Reduction" of two complex morphemes

$$\left\{ \begin{array}{l} v \text{ gl} \\ t \end{array} \right\} + \text{bit} > \text{iut} / \text{ where /gl/ and /t/ are the final phonemes of the verb stem followed by the second/third person dual suffix.}$$

[verb stem]

1a. UF mogl-bit-a stay-2/3DL-DECL
 R1 m iut-a
 AR(iv) m iur-a
 SF miura 'They (2) stayed'

1b. UF pit-bit-a hear-2/3DL-DECL
 R1 p iut-a
 AR(iv) piur-a
 SF piura 'They (2) heard'

Rule (1) affects only the second/third person dual and /gl/ and /t/ final verb stems. See 1.4.2 for further discussion.

(2) Consonant plus vowel metathesis

$$\begin{array}{ccccccc}
 \text{gl} + \text{i} \text{C} + & & & > & \text{i} \text{gl} + \text{C} + \\
 \text{1} & \text{2} & \text{3} & & \text{2} & \text{1} & \text{3}
 \end{array}$$

Rule (2) applies to second/third person plural suffix. The high front vowel metathesises with the preceding velar lateral.

2.	UF	te-nagl-im-a	give-IRREALIS-2/3PL-DECL
	R2	te-naigl-m-a	
	SF	tenaiglma	'Let them give it'

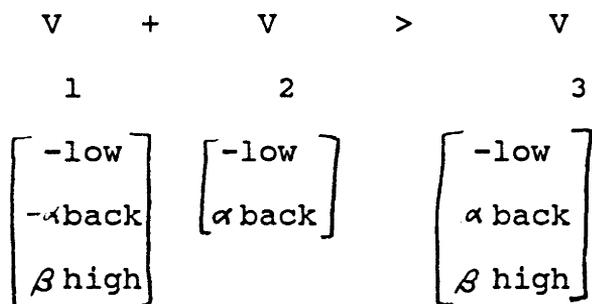
(3) Vowel to glide

$$\begin{array}{c}
 \text{V} \\
 \left[\begin{array}{l} +\text{high} \\ -\alpha\text{back} \end{array} \right]
 \end{array}
 >
 \left[\begin{array}{l} -\text{cons} \\ -\text{voc} \end{array} \right]
 / \# ___ \text{V}
 \left[\begin{array}{l} \alpha\text{back} \end{array} \right]$$

Vowels are converted to glides in word initial position, for example,

3a.	UF	i-um-a	bring-3SG-DECL	3b.	u-i-a	come-1SG-DECL
	R2	y-um-a			w-i-a	
	SF	yuma	'Let her bring it'.		wia	'I am coming'

(4) Vowel coalescence



This rule applies to vowel final verb stems in the irrealis status. The second order of suffixes after the verb stem in a positive statement is the person number suffix. The two vowels merge, which results in a third vowel, which takes its feature of height from the first vowel and the feature of rounding from the second vowel. For example,

4a. UF si-um-a hit-3SG-DECL

R4 s um-a

SF suma Let her hit it'.

4b. UF te-um-a give-3SG-DECL

R4 t om-a

SF toma 'let her give it'.

is given in 2.6.1.3.

(7) $\left. \begin{array}{c} \text{gl} \\ \text{t} \end{array} \right\} + \text{labial loss}$

The consonant clusters /gl + b/ and /gl + m/ are permitted in Kuman, for example,

(i) aglba 'edible vegetable'

(ii) gaglma 'pine tree'

In certain contexts both are lost. The voiceless labial /p/ does not occur after /gl/ or /t/. Similarly, /t + b/ and /t + m/ are also lost. In the examples above, /glb/ and /glm/ occur within a morpheme. Across morpheme boundaries, these consonant clusters are lost. That is, if /gl/ and /t/ final verb stems are followed by /b/ or /m/, the initial phonemes of the person number suffixes, both are lost. /t/ plus labial loss also affects the negative suffix, whose underlying form is -kit.

$\left. \begin{array}{c} \text{t} \\ \text{gl} \end{array} \right\} + \text{C} > \emptyset / \text{ where } / \text{gl}/ \text{ and } / \text{t}/ \text{ are the final phonemes}$

$\left[\begin{array}{c} +\text{voice} \\ -\text{cont} \\ +\text{ant} \\ -\text{cor} \end{array} \right]$	of the verb stem or where /t/ is the final
	phoneme of the negative suffix and these
	are immediately followed by a person
	number suffix whose initial phoneme is /b/

or /m/.

7a. UF pit-bugl-a hear-1DL-DECL

R5 pt-bugl-a

R7 p-ugl-a

SF pugla 'We (2) heard.'

7b. UF pit-mun-a hear-1PL-DECL

R5 pt-mun-a

R7 p-un-a

SF puna 'We heard'

7c. UF kan-kit-bugl-a see-NEG-1DL-DECL

R5 kan-kt-bugl-a

R7 kan-k-ugl-a

SF kankugla 'We (2) did not see (it).'

(8) Vowel loss

i > ∅ / v__c
[+nasal]

The high front vowel /i/ is lost before a nasal.

8a. UF ne-im-a eat-2/3PL-DECL

R8 ne-m-a

SF nema 'Let them eat'.

8b. pai-n-a lie-2SG-DECL

pa-n-a

pana 'You may lie
down'.

(9) Velar voicing

$$k > g / \left\{ \begin{array}{l} C \\ [+voice] \\ V V \end{array} \right\} + _a +$$

This rule affects the specific status suffix -ka 'REALLY'.

9a. UF ne-i-ka-a eat-1SG-REALLY-DECL

R9 ne-i-ga-a

R10 ne-i-g-a

SF neiga 'I ate'.

9b. UF ne-n-ka eat-2SG-REALLY-DECL

R9 ne-n-ga-a

R10 ne-n-g-a

SF nenga 'You ate'.

(10) Simplification of geminate clusters

$$\begin{array}{l} \text{Segment} \\ i \end{array} > \emptyset / - \begin{array}{l} \text{Segment} \\ i \end{array} \left\{ \begin{array}{l} \text{where } i \text{ is defined as} \\ i \\ \text{identical value for all} \\ \text{features.} \end{array} \right\}$$

10a. UF kan-n-a see-2SG-DECL

R10 ka-n-a

SF kana 'You saw it'

10b. si-i-a hit-1SG-DECL

s-i-a

sia 'I hit (it).'

(11) Metathesis of semivowel plus velar

w k > k w

1 2 2 1

This rule applies to an allomorphic variant of third person subject suffixes.

11a. UF pit-uw-ka-a hear-3SG-REALY-DECL
 R5 pt-uw-ka-a
 R10 pt-uw-k-a
 R11 pt-u-kw-a
 AR (iv) pr-u-kw-a
 SF prukwa 'She heard'.

11b. UF pit-iw-ka-a hear-2/3PL-REALY-DECL
 R5 pt-iw-ka-a
 R10 pt-iw-k-a
 R11 pt-i-kw-a
 AR (iv) pr-i-kw-a
 SF prikwa 'They heard'.

(12) Vowel loss: /u/

$$v \quad > \quad \emptyset \quad / \quad gl + \underline{\quad} C +$$
$$\left[\begin{array}{l} +high \\ +back \end{array} \right]$$

The high back vowel is lost after a velar lateral.

12a. UF mogl-um-a stay-3SG-DECL

R12 mogl-m-a

SF moglma 'Let her stay'

12b. UF bagl-um-a cut-3SG-DECL

R12 bagl-m-a

SF baglma 'Let her cut it'

(13) Develarization of a lateral

$$gl \quad > \quad l \quad / \quad + \quad \underline{\quad} V + V$$

This rule affects /gl/ final verb stems, where /gl/ plus a vowel cluster produces a simple lateral. This rule must precede rule (14). Examples of rule (13) are presented below with rule (14).

(14) Vowel loss: /i/

$$i \quad > \quad \emptyset \quad / \quad \quad \quad C \quad \quad + \quad \underline{\quad} + C$$
$$\quad \quad \quad [+lateral] \quad V$$

Rule (14) cannot be collapsed with rules (2) or (12). This rule, if collapsed with rule (2), which states that /i/ metathesises with the preceding velar lateral would result in an incorrect surface form for first person singular. Secondly, if rule (13) was collapsed with rule (12), there would not be a conditioning environment for rule (12). That is, a vowel cluster is necessary for the velar lateral to be delateralized. Note that in rule (2), where the vowel metathesises with the velar lateral, the consonant which follows belongs to the same morpheme as the vowel. This rule can not be collapsed with rule (12), although both vowels are [+high]. In rule (12), the following consonant also belongs to the same morpheme as the vowel. In both rules, (2) and (12), a morpheme boundary is not allowed between the vowel and the consonant.

13a. UF mogl-i-ka-a stay-1SG-REALLY-DECL

R10 mogl-i-k-a

R14 mogl-k-a

(?) SF moglka 'I stayed'

13b. UF mogl-i-a stay-1SG-DECL

R13 mol-i-a

R14 mol-a

SF mola 'I am staying'

(18) Vowel addition

$$\emptyset > e / c _ + \left\{ \begin{array}{l} c \\ \# \end{array} \right\}$$
$$\left[\begin{array}{l} -\text{voice} \\ -\text{son} \\ -\text{cont} \end{array} \right]$$

Although /p/ has the same features as those listed above, it does not apply to it because /p/ does not occur in this position. This rule applies to medial verbs or verbs stems which are immediately followed by another consonant.

17a. UF	pit	hear	17b. ak-n-a	hold-2SG-DECL
R5	pt		-	
R18	pte		ake-n-a	
AR (iv)	pre		-	
SF	pre	'hear'	akena	'You may hold it'.

(19) Vowel assimilation

$$e > v / c \ v \ c _ + \left\{ \begin{array}{l} c \\ \# \end{array} \right\}$$
$$\left[\begin{array}{l} \alpha \text{ high} \\ \beta \text{ back} \end{array} \right] \quad \left[\begin{array}{l} \alpha \text{ high} \\ \beta \text{ back} \\ -\text{low} \end{array} \right]$$

Rules (18) and (19) can not be easily collapsed. /e/ is the vowel that normally occurs in this environment. /e/ then changes

to having the same features as the vowel preceding it, unless this is /a/. That is, if the first vowel is /a/, /e/ remains the same. This is illustrated above in example 17b. above where rule (19) does not apply.

- 18. UF dok-n-ka-a
- R9 dok-n-ga-a
- R10 dok-n-g-a
- R18 doke-n-g-a
- R19 doko-n-g-a
- SF dokonga 'You searched for it'.

(20) Vowel loss

$$\begin{array}{ccc}
 V & > \emptyset / \text{---} & + V \\
 [+back] & & [+back]
 \end{array}$$

This applies to back vowels that are followed by another back vowel.

- 19. UF mogl-bugl-a stay-1DL-DECL
- R7 mo-ugl-a
- R20 m-ugl-a
- SF mugla 'We (2) stayed'.

1.4 Discussion

In this section, I will discuss alternations of /gl/ and the second/third dual forms.

1.4.1 Alternations involving /gl/

The distribution of /gl/ is complex because it involves /l/, [l] and /t/. Alternations involving /t/ have been explained by morphophonemic rules. Lynch (in press) counted only forty occurrences of intervocalic /l/, compared to over three hundred occurrences of /gl/. Although intervocalic /l/ is rare, it occurs commonly as a second phoneme of a consonant cluster, for example si bla 'burst', ake ple di 'help'. /l/ also occurs in free variation with [ɫ], which is an allophone of /gl/, for example, olto ~ oɫto 'long', if the following phoneme is /t/. As [ɫ] is an allophone of /gl/, there seems to be phonemic overlapping between /gl/ and /l/. In this chapter, I do not intend to discuss the possible historical origins of /l/. Lynch (in press) suggests that /l/ could be a borrowed phoneme, or the result of ongoing morphophonemic processes. Further research is required to determine the status of /l/. I have preferred to give /l/ and /gl/ phonemic status in this sub-thesis. /gl/ results in a simple lateral only before a vowel cluster, but is in free variation with [ɫ] before an alveolar. Further research into this would also involve /t/ and [r], because /gl/ results in /t/ by morphophonemic processes. Although I have preferred to give [r] allophonic status, that is [r] is an allophone of /t/,

further research is required to determine the status of /t/,
[r], /l/ and /gl/.

1.4.2 . Second/third person dual

The second/third person dual forms require some explanation as some /gl/ and /t/ final verb forms do not conform to the general rule [see rule 7]. In other languages of the Central Family there is only one form for first, second and third persons, namely /bil/. Kuman has deviated from this norm and has developed a first person dual /bugl/. The second/third person dual engage in a number of different morphophonemic rules which are dependent on the final phoneme of the verb root. The surface form of the second/third dual form is -bri, which is used in free variation with -bir although -bri is more commonly used. The underlying form is most likely -bit. In verb forms that are vowel final, or /n/ final, there are no irregular changes within the verb. For example,

20a. UF	ne-bit-a	
R5	ne-bt-a	
AR(1V)	ne-br-a	
SF	nebra	'They (2) ate.'

This would suggest that rules (5), (19), and (20) would have to be reordered to apply in order (19), (20), and (5) or else a new rule needs to be introduced. For example

20b. UF	ne-bit-ka-a	eat-2/3DL-REALLY-DECL
R10	ne-bit-k -a	
R18	ne-bite-k-a	
R19	ne-bti-k-a	
R5	ne-bti-k-a	
AR(iv)	ne-bri-k-a	
SF	nebrika	'They (2) ate.'

However, if the rules were reordered, a number of suffixes and verb forms would surface incorrectly, for example, the medial verb form pit 'hear' would surface as *pri. The underlying form of the negative suffix -kit would also surface incorrectly as -kri. Although example (19) results in the correct surface form, a number of new rules would have to be introduced to account for the surface form for verbs such as pit 'hear' and the negative suffix -kit. I would prefer to introduce a new rule, written below as rule (21), in which an epenthetic /i/ is inserted between /t/ and the following consonant.

21. $\emptyset \rightarrow i$ /t + __C

A second problem that is related to the second/third dual is the surface form of /gl/ and /t/ verb forms. These are illustrated below with both the underlying and surface forms.

21a. UF mogl-bit-a
 SF miura

21b. pit-bit-a
 piura

In the above examples, if some of the rules described were applied, we would arrive at incorrect surface forms. This is illustrated below.

22a. UF mogl-bit-a stay-2/3DL-DECL
 R4 mogl-bt-a
 R6 mo-t-a
 AR(iv) mo-r-a
 SF *mora

22b. UF pit-bit-a
 R5 pt-bt-a (2 applications)
 R7 p -t -a
 AR(iv) p-r-a
 SF *pra

There does not seem to be any plausible phonological rule which will account for miura or piura.

$$V \begin{Bmatrix} gl \\ t \end{Bmatrix} + bit \longrightarrow iut$$

[verb stem]

This rule would have to apply before rules (5) and (7). This was

written above as rule (1) so that none of the rules which followed would affect it.

CHAPTER TWO

THE INDEPENDENT CLAUSE

In this chapter, I will be discussing the parts of speech that make up an independent clause in Kuman, namely the nominals and the predicate. Discussion of the nominals will be brief, as the main focus of this chapter will be on the predicate. Bloomfield (1933:170) defined a sentence as 'an independent linguistic form not included by virtue of any grammatical construction in any larger linguistic form', although he recognized that certain structures mark sentences as having a dependent relationship within a larger unit (Bloomfield 1933). Waterhouse (1963) recognized that there are both dependent and independent sentences, and that there are grammatical constructions that distinguish dependent sentences from independent sentences, and proceeds to discuss these. She defined dependent and independent sentences as follows.

Independent sentences are defined distributionally as those which can occur as a complete utterance without ambiguity, or which can initiate discourse without necessity for some type of defining context. Dependent sentences are defined as those which cannot occur as a complete utterance or initiate discourse without some defining context and which are formally marked for discourse (Waterhouse 1963:68).

Waterhouse's (1963) discussion is suitable for discussion of Papuan languages, although analysts working on Papuan languages tend to refer to these as dependent and independent clauses, which are largely determined by the type of affixes found on the

predicates. These predicates have been referred to as medial or final because of the position they occur in, and the clauses dependent or independent respectively. In Papuan languages, clauses are dominated by the predicates, and Longacre (1972) adds that clauses that consist of one predicate must be distinguished from those that consist of a number of predicates. Longacre also adds that

there is a grand structural division between the distinctive verb of the main clause which is often called the independent or final verb, and the verbs of the other clauses which are sometimes referred to as dependent or medial verbs. (Longacre 1972:2).

To refer to these predicates simply as medial or final because of the position in which they occur is an oversimplification, because not all medial verbs are dependent. Longacre (1972) also observes that in some languages, there can also be independent 'medial' verbs. He stresses the differences between these medial and final verbs, saying that

we have a clause with a verb of distinctive structure which occurs but once in the entire sentence (usually at the end of the sentence), preceded by other clauses with verbs of other structure (Longacre 1972:2).

In most Papuan languages, the features that need to be considered in distinguishing the 'medial' from the 'final' verb are the affixes that are found on the predicates which mark the clause type. In this sub-thesis, the terms 'medial' and 'final' will not be used to describe the verbs, but the terms dependent and independent. I will now discuss the main differences

between independent and dependent verbs in Kuman.

The independent verb in Kuman is distinguished from the dependent verb by the illocutionary force suffix. In fact, Foley and Van Valin (1984:221) point out that in many Papuan languages, 'the inflection diagnostic of the final (independent) verb is suffixation for illocutionary force', because the medial (dependent) verbs are never inflected for illocutionary force. Although this statement is generally true for independent verbs in Kuman, there are certain constructions in which the independent predicate is not marked for illocutionary force (see 2.1.2 and 2.10). The independent verb lacks the switch reference morpheme, a feature that is typical of dependent verbs only. Similarly, the suffixes indicating temporal relations are only found on the dependent verbs. Although person number suffixes are found on both dependent and independent verbs, some person number suffixes are different, depending on the constructions in which they occur. In this chapter, I will only discuss the affixes of the independent verb.

2. Word order

Although word order is quite flexible in Kuman, the preferred word order is actor-undergoer-predicate (SOV). There is, however, one constraint on word order, and that is, the verb must always occur finally. In sentences where the person number of the actor is different to that of the undergoer, the actors are distinguished from the undergoer by the cross-referencing on the verb, regardless of the word order, as shown

in the examples below.

1a. tokei no kabugla
tokei no kan-bugl-a
snake 1PL see-1DL-DECL
We (2) saw the snake.

1b. no tokei kabugla
no tokei kan-bugl-a
1PL snake see-IDL-DECL
We (2) saw the snake.

Word order is important when both the actor and the undergoer have the same person number specification, for example, third person singular, as shown in the examples below.

1c. yagl ta kibir nem kanugwa.
yagl ta kibit ne -m kan-uw -ka -a
man a bow father-3POSS see-3SG-REALLY-DECL
A man saw the policeman.

1d. kibir nem yagl ta kanugawa
kibit ne -m yagl ta kan-uw- ka -a
bow father-3POSS man a see-3SG-REALLY-DECL
A policeman saw a man.

In the examples above, the sentences are identical except for word order. In 1c. yagl 'man' is the actor while kibir nem

'policeman' is the undergoer, while in example 1d., when the noun phrases are reversed, the policeman is the actor, while the man is the undergoer. In most instances, the pronoun indicating the actor of a given clause is optional, because of the cross referencing on the verb that specifies who the actor is.

2.0 Nominal

There are two types of nominals; pronouns and nouns. I will firstly discuss the pronouns and secondly the nouns. In relation to the discussion on nouns I will also discuss adjectives, a term that is used to describe certain parts of speech that seem to be adjectives when translated into English, but function as nominals except for colour and age, which must occur attributively.

2.1 Pronouns

There are three categories of pronouns; personal demonstrative and interrogative pronouns.

2.1.1. Personal Pronouns

Kuman distinguishes four personal pronouns. First person distinguishes between the singular and the non-singular, while in the non-first pronouns, number is collapsed. More distinctions are found in the verbal suffixes, which will be discussed below. Below are the independent personal pronouns.

	Singular	Plural
1	na	no
2	ene	
3	ye	

These pronouns are also the underlying suffixes of the possessive pronouns; however this has already been discussed by Lynch (in press), and will not be repeated here. In relation to the possessive pronouns however, there is no distinction for plural. The singular forms are marked by the suffixes -na '1SG POSS', -n '2SG POSS'. The underlying form for third singular is ye, but is subjected to a number of morphophonemic rules (See Lynch (in press)).

2.1.2 Interrogative Pronouns.

There are five interrogative pronouns;

auglo	'where'
awe	'where', 'which'
ira	'who'
aunake	'when'
siragl	'what'

In clauses where the interrogative pronouns occur, illocutionary force suffixes are optional. If the illocutionary force suffix is used, only the declarative suffix -e is permitted, but not

the interrogative suffix. This is because the clause is automatically an interrogative with the use of interrogative pronouns, and this is not marked twice. That is, an interrogative pronoun is not used in conjunction with the interrogative suffix.

awe 'where', 'which' may occur alone as an interrogative locative or with nominals. A clause is ungrammatical if awe co-occurs with a predicate.

2a. awe 'where?'

2b. yugun awe

yugu -n awe

house-2POSS where

'Where is your house?' 'Which is your house?'

2c. *yugun awe yom

yugu -n awe yei-um

house-2POSS where put-3SG

auglo 'where' on the other hand, can optionally occur with a predicate. If it occurs alone, it functions as an interrogative locative. If a noun phrase occurs with auglo, a predicate is optional, as the examples below show.

3a. auglo 'Where?' 'Where is it?'

3b. yugun auglo

yugu -n auglo

house-2POSS where

Where is your house?

3c. yugun auglo yom

yugu -n auglo yei-um

house 2POSS where put-3SG

Where is your house? Where do you come from?

siragl 'what' again, may optionally co-occur with a predicate, as the examples below show.

4a. siragl 'What?'

4b. siragl erum

sitagl et-um

what do-3SG

What's wrong? What is she doing?

aunake 'when' functions as an adverb of time only.

5. aunake etn

aunake et-n

when do-2SG

When did you do it?

ira 'who' can only refer to animate actors.

6a. ira um
ita u -um
who come-3SG
Who came?

6b. koboglo ira sume
koboglo ita si -um -e
stone who hit-3SG-DECL
Who threw the stone?

There is a sixth word, which functions simultaneously as a focus marker, an interrogative pronoun or as an emphatic suffix on predicates. It is not a pronoun, but the combination of the question intonation pattern and the focus accounts for the meaning 'what about me' when suffixed to a pronoun. When it occurs independently, it does not function as a focus marker.

7a. we 'yes'

7b. taragl yenga iwe inaglo
tatagl yei-n -ka -a i -we i -nagl -i -o
thing put-2SG-REALLY-DECL this-FOC take-IRREALIS-1SG-Q
Shall I take this thing you left?

7c. ye kunugl nogwawe
 ye kunugl ne -uw -ka -a -we
 3 steal eat-3SG-REALLY-DECL-FOC
 He stole.

2.1.3 Demonstrative.

In most Papuan languages, there is basically a two term demonstrative distinction (Foley; in press). Kuman, however, has only one term for the demonstrative pronoun, i 'this/that/here/there'. A brief glance at other language of the Simbu area, such a Golin, Sinasina and Middle Wahgi seems to suggest that these languages also have only one term for the demonstrative pronoun. In Salt-Yui, on the other hand, Irwin (1974:34) has analysed this language as having five demonstrative pronouns. A further and closer examination of other languages of the Central Family may show that a single demonstrative pronoun could be an areal feature of the Central Family languages.

i in Kuman can also occur with a number of other suffixes to refer to more specific locations, although these have previously been analysed as a single morpheme rather than two morphemes.

i-bo	there-up	'up there'
i-mara	this-down	'down there', 'down here'
i-re	this-?	'over there'
i-da	this-up	'over there', 'up there'

2.2 Nouns

Nouns in Kuman belong to two semantic classes, depending on the verbs they occur with which expresses their concept of existence.¹ This is a common feature amongst languages of the Central Family, and other Papuan languages. Of the two semantic classes, which are divided in classes of animate versus inanimate, a sub-class of animate nouns, such as kinship terms and body part are obligatorily marked for possession. Nouns are not marked for number; that is, they may be interpreted as either singular or plural. If the noun phrase functions as the actor, number is indicated on the verb, as the examples below show.

- 8a. ga kodwgle sika sugwa
ga kodwagle sika si -uw -ka -a
child chicken ? hit-3SG-REALLY-DECL
The child chased the chicken(s).

- 8b. ga kodwagle sika sigwa
ga kodwagle sika si -iw -ka -a
child chicken ? hit-3PL-REALLY-DECL
The children chased the chicken(s).

In the examples above, ga has no inflection marking number. This is indicated on the verb. In 8a. -uw marks third person

singular actor, while in 8b. -iw marks second/third person plural actor. Similarly, kodwagle 'chicken' can be either singular or plural. Quantifiers such as tau 'some', suom 'a few' or mere can also be used to indicate number.

2.2.1 Compound nouns

Kuman increases its noun inventory by compounding nouns. This consists of two nouns which are compounded together to produce a third word.

yugu togl	house fence	'home'
ka waiye	words slippery	'gossip'
gal suna	cloth center	'shirt'
ogu-na ma-m	hand-my mother-it	'my thumb'
ne-m ma-m	father-hers mother-hers	'her parents'

2.2.2 'Case'

Case is indicated by postpositions, or by a predicate. Only the locative is marked by a suffix on the noun.

2.2.2.1 Locative ²

The locative suffix occurs only on inanimate nouns, while animate nouns require a postpositional locative. Locative postpositions are used to refer to more concrete locations, some of which are listed below. Other locative postpositions have

been discussed in conjunction with the demonstrative pronouns in 2.1.3.

atne	'under'	mina	'on'
malya	'close here'	aglbe	'under (something)'
bolamugl	'on top of (something)'		

Below are some examples of the locative noun phrases, either using the locative suffix or postpositions.

9a. mokona gale grika
mokona gagl-gle git -i -ka -a
greens bag -LOC pack-1SG-REALLY-DECL
I put the greens in the bag.

9b. ye nigle moglkwa
ye nigl -gle mogl-uw -ka -a
3 water-LOC stay-3SG-REALLY-DECL
She is at the river.

9c. kagle mina yogwa
kagl-gle mina yei-uw -ka -a
foot-3POSS on put-3SG-REALLY-DECL
It is on her foot.

Examples 9a. and 9b. illustrate nouns marked by a locative suffix, while example 9c. illustrates the use of a postpositional locative. A suffix -mara is also used for the

locative; however, this can only be used with humans in a headless relative clause. Consider the examples below.

9d. na yagl ta moglmara eiga
na yagl ta mogl-mata e -i -ka -a
I man a stay-LOC go-1SG-REALLY-DECL
I am going to where a man is.

9e. na yagl ta eiga
na yagl ta e -i -ka -a
I man a go-1SG-REALLY-DECL
I am married. *I am going to the man.

2.2.2.2 Instrumental

The instrumental case can be marked using a verb, which is a serial verb construction as illustrated below in 10a. I will only discuss instrumentals that are marked by postpositions in this section.

pagl or wagle are used as instrumentals, but there is no difference in meaning as shown in the example below.

10a. koboglo ake siga
koboglo ak si -i -ka -a
stone hold hit-1SG-REALLY-DECL
I hit it with a stone.

10b. koboglo wagle/pagl siga

koboglo wagle/pagl si -i -ka -a

stone with hit-1SG-REALLY-DECL

I hit it with a stone.

2.3 Adjectives

Dixon (1982) lists seven semantic categories that cover the class of adjectives, which are colour age, dimension, value, physical property, human propensity and speed (Dixon 1982:16). Adjectives in Kuman occur in attributive function and must be accompanied with nouns, although there are some exceptions. Of the possible seven categories, Kuman has only the four following categories. Some of the adjectives are listed below in their respective categories.

Colour: kama 'black', kurwo 'white', gogl 'red' and a few others.

agl kama dog black 'black dog'

agl kurwo dog white 'white dog'

Age: kor 'new', kidagl 'old', kulu 'young'

taragl kor thing new 'new thing'

yagl kidagl man old 'old man'

abai kulu girl young 'young girl'

Dimension: pode 'big', kebra 'small'
 agl pod dog big 'big dog'
 ga kebra child small 'small child'

Value: wakai 'good', kide 'bad'
 abu wakai woman good 'good woman'
 taragl kide thing bad 'bad thing'

Categories such as physical property, human propensity and speed can occur only as part of a verb, as the examples below show.

11a. koboglo yubun erukwa
 koboglo yubun et-uw -ka -a
 stone heaviness do-3SG-REALY-DECL
 The stone is heavy.

11b. okai niga dugwa
 okai niga di -uw -ka -a
 sweet potato heat say-3SG-REALY-DECL
 The sweet potato is hot.

11c. ye tabre ogwa
 ye tabte e -uw -ka -a
 3 quickly go-3SG-REALY-DECL
 She went quickly.

11d. yagl dem kubrukwa
 yagl de -m kubt -uw -ka -a
 man bottom-3POSS twist-3SG-REALLY-DECL
 The man is angry.

Examples 11a. and 11b. illustrate physical property, while 11c. and 11d. illustrate speed and human propensity respectively. The adjectives belonging to the category of value, good and bad, are exceptions because they can occur in the category of human propensity, as the example below illustrates.

11e. abu kide erukwa
 abu kide et-uw -ka -a
 woman bad do-3SG-REALLY-DECL
 The woman is cruel.

The value adjectives function as a complement, as the example above illustrates, or may also function as a nominal, depending on the word order. Consider the examples below.

11f. na kide siga
 na kide si -i -ka -a
 I bad hit-1SG-REALLY-DECL
 I am sick.

11g. kide na sugwa

kide na si -uw -ka -a

bad 1SG hit-3SG-REALY-DECL

I am sick. (literally, bad hits me).

The description of adjectives here is brief, and further research could show that there may be other 'adjectives' that have more than one role, that is, functioning as a nominal as well as an adjective. True adjectives, however, would only perform one role, and that is, only in attributive adjectival function only.

2.4 The Predicate.

The morphology of the verb is quite complex, and the suffixes have been subjected to different morpheme breaks, see for example, Capell (1948-1949), Bergmann (1953) and Trefry (1969). The morphological rules which account for some of the complexity have been discussed in the previous chapter. Some of the rules which are specific will be given in the sections where the respective suffixes are to be discussed. In this section, I will present the order of suffixes followed by a discussion of verbal semantics, and finally, a discussion of the verb suffixes.

2.4.1 Order of suffixes

The order of suffixes is as follows.

Verb stem ± Modal ± Negative † General status +
 Person/number + Specific status † Aspect ± Emphatic +
 Illocutionary force.

Although illocutionary force is indicated above as being obligatory, there are two instances where it is optional. Firstly, when an interrogative pronoun is used (2.1.2) and secondly when the aspect suffix is used (2.10). The emphatic suffix also does not occur with the aspect suffix. The modal suffix can not occur with the irrealis general status suffix (2.7.1.1). Below are two examples illustrating this.

12a. kanakrukwa 'She doesn't want to see (it)'.
 Verb + Modal + Negative + Person/ + Specific + Illoc-

	number	status	utionary	force	
kan	-na	-kit	-uw	-ka	-a
see	want	NEG	3SG	REALLY	DECL

12b. kankratno 'Won't you see it?'

	Status	Number	Force	
kan	-kit	-nagl	-n	-o
see	NEG	IRREALIS	2SG	Q

2.4.2 Verbal Semantics

Kuman has under one hundred verb stems, of which eleven are frequently used to construct new meanings. For example, a basic verb such as break or kill in English can only be constructed using a combination of verbs, as shown in examples 13a. and 13b. respectively.

13a. ye dimaima si buku dugwa
ye dimaima si buku di -uw -ka -a
3 axe hit ? say-3SG-REALLY-DECL
He broke the axe.

13b. ye tokei si goglkwa
ye tokei si gogl-uw -ka -a
3 snake hit die -3SG-REALLY-DECL
He killed the snake.

Break is formed with the combination of the verbs si 'hit' and di 'say' as well as the adjunct buku which independently has no meaning, while kill must occur with the verbs si 'hit' and gogl 'die'. Verbs such as di 'say' and si 'hit' have been called 'auxiliary verbs' by Nilles (1969), which are then combined with adjuncts or other verbs which results in a more specific description of the event or state. These auxiliary verbs are listed below with their most basic meaning, that is, when they

occur independently.

de	'burn'
di	'say'
ere	'do', 'make'
ake	'hold'
bogl	'cut'
ne	'eat'
kan	'see'
pre	'hear'
si	'hit'
pai	'lie (down)' 'be'
te	'give'

When these verbs occur with adjuncts, which are normally nouns, the possible range of the meaning of the verb is restricted, as will be seen in the examples below. The adjuncts have a specific meaning and functions to modify the general meaning of the generic verb into a specific action or state. The adjunct carries the meaning of the compound, and the inflected verb, in many cases loses its basic meaning. In most cases, the adjunct occurs before the verb; however, there are cases where it occurs between two verbs as example 13a. si buku di 'break' illustrates. In such cases the adjunct has no meaning independently but is part of the complex verb structure which corresponds to a single verb in English. If the adjunct is deleted, the sentence will be semantically different, or may be ungrammatical. Consider the examples below.

14a. na ye ake nu siga

na ye ak nu si -i -ka -a

1SG 3 hold ? hit-1SG-REALLY-DECL

I pushed him.

14b. na ye ake siga

na ye ak si -i -ka -a

1SG 3 hold hit-1SG-REALLY-DECL

I held (him) and hit him.

14c. ye no ake ple dugwa

ye no ak ple di -uw -ka -a

3 1PL hold ? say-3SG-REALLY-DECL

She helped us.

14d. * ye no ake dugwa.

ye no ak di -uw -ka -a

3 IPL hold say-3SG-REALLY-DECL

By contrasting examples 14a. and 14b., note the semantic difference in the sentences. In example 14a., when the adjunct nu is used with the verbs, the meaning is 'push', but in example 14b., absence of nu results in a serial verb construction. In examples 14c. and 14d., the former is grammatical, while in the latter the absence of ple results in an ungrammatical sentence. The adjuncts are not restricted to one generic verb, but can occur with a number of generic verbs, each time resulting in a

new meaning. The verbs can also co-occur with each other to produce new meanings. Examples of these will be illustrated below with the verb pre 'hear'.

ne pre	eat hear	'taste'
ake pre	hold hear	'feel'
di pre	say hear	'ask'

The following examples illustrate the wide range of meanings of the generic verbs when occurring with different adjuncts.

si 'hit'

nigl kuba si	water stick hit	'swim'
nu si	mucus hit	'cough'
eur si	saliva hit	'spit'
mebigl si	vomit hit	'vomit'
de kubuno si	excreta stink hit	'fart'

ne 'eat'

usi ne	cigarette eat	'smoke'
nigl ne	water eat	'drink'
kunugl ne	theft eat	'steal', 'commit adultery'

ere 'do', 'make'

gaugl ere	laughter do	'laugh'
kai ere	tears do	'cry'
buglo ere	stick do	'poke'
aglau ere	confuse do	'confuse'
kuno ere	fit do	'fit'
arie ere	'wave' do	'tease', 'wave'

gogl 'die'

kidan gogl	hunger die	'to be hungry'
ir gogl	wind/cold die	'to be cold'
mirye gogl	pity die	'to feel sorry for someone', 'compassion'
agai gogl	space die	'to be embarrassed', ashamed
ugl gogl	sleep die	'to be sleepy'
nigl gogl	water die	'to be thirsty'

The following set of examples demonstrates the use of one adjunct with different verbs.

nigl 'water'

nigl pai	water be	'to have a shower'
nigl gogl	water die	'to be thirsty'
nigl ne	water eat	'to drink'

Loan words from Tok Pisin are also used as adjuncts to increase the range of meanings of the generic verb, for example

pasim ere	pass do	'pass (the ball)'
kas bogl	cards cut	'play cards'
bam bogl	bump cut	'bump'
raun si	wander hit	'wander'

The use of adjunct plus a generic verb is quite a common process in the Highlands languages. While Kuman employs serial verb constructions as well as adjunct plus verb to increase its verb inventory, it also has a number of specific verbs to refer to specific actions. This is illustrated below with the verb 'carry'.

au si	? hit	'carry piggy back'
togo	carry	'carry around the neck' e.g. necklace.
meke	carry	'carry on head' e.g. bilum
kake	carry	'carry'
kini	carry	'carry on shoulders'

Adjunct plus verb constructions are also used to distinguish between acts that are controlled, which will be discussed using the following examples.

15a. na bitna poglka

na bit -na pogl-i -ka -a

1SG hair -1SG POSS undo-1SG-REALY-DECL

I unplaited my hair.

15b. na bitna poglkwa

na bit -na pogl -uw -ka -a

1SG hair-1sg POSS undo -3SG-REALY-DECL

My hair came undone.

In the examples above, contrast the actor markings on the verbs. In example 15a., the verb is inflected for the first person singular while in example 15b., the actor is inflected for third person singular. In 15a., the actor na '1SG' is cross-referenced on the verb with the first singular suffix -i. bitna 'my hair' functions as a patient. In example 15b., on the other hand, the verb is inflected for third person singular by the suffix -uw, therefore na '1SG' is not the actor. The noun phrase na bitna 'my hair' now functions as the object of the verb. The morphology of the verb distinguishes between controlled and uncontrolled events in examples 15a. and 15b. illustrate. That is, an agent who has control over the event depicted by the predicate is marked for its person and number on the verb, while in events which are uncontrollable, the verb is marked by a third person singular suffix.

The most common noun phrases which function as the object of uncontrolled events are body parts. With certain body parts,

an adjunct is required to restrict the meaning of the verb.
Contrast the following examples.

15c. oguna sugwa

ogu -na si -uw -ka -a
hand-1SG POSS hit-3SG-REALLY-DECL
She hit my hand.

15d. oguna giugl sugwa

ogu-na giugl si -uw -ka -a
hand-1SG POSS pain hit-3SG-REALLY-DECL
My hand is hurting.

In example 15c., oguna 'my hand' is the experiencer of the predicate giugl sugwa 'hurt'. Note that in example 15d., the use of the adjunct giugl 'pain' restricts the meaning of the verb si 'hit'. The clause illustrates an uncontrolled state whereas in example 15c., the event is controlled.

Some highland languages, for example, Kaugel (Blowers 1970) or Enga (Lang 1973) do not make further distinctions between uncontrolled or controlled states or events. Consider the examples below from the following languages: Enga, Kaugel and Kuman. See Foley (in press) for further examples from other languages.

Enga (Lang 1973, 1975)

Namba kupa pyu-u -mu

I cold do -SENSE=PAST-3SG=AUG

I have a feeling of being cold (= I am cold)

namba paka pi-ly -a -mo

I fear do-PRES-3SG-DECL

I am afraid.

Kaugel (Blowers 1970)

Ali te ke mo

cold it is doing

I am cold.

Egele te ke mo

hunger it is doing

I am hungry.

Kuman

16a. na kidan goglka

na kidan gogl -i -ka -a

1SG hunger die -1SG-REALLY-DECL

I am hungry.

16b. na kudugl prika

na kudugl pit -i -ka -a

1SG fear hear-1SG-REALLY-DECL

I am frightened. I am afraid.

16c. na dena kubrukwa

na de -na kubt -uw -ka -a

1SG bottom-1SG POSS twist-3SG-REALLY-DECL

I am angry.

In the examples above, the predicates in Enga and Kaugel are marked for third person singular, indicating uncontrolled states. Contrast the Enga and Kaugel examples with 16a. and 16b. in Kuman. The predicates in Kuman are inflected for first person singular, unlike the Enga and Kaugel examples, although the states are uncontrollable. Kuman has two different types of uncontrolled events or states, which are distinguished semantically and morphosyntactically. Type 1 uncontrolled events or states are clauses such as examples 16a. and 16b. in which the clause structure consists of a noun phrase-adjunct-predicate. The function of the adjuncts kidan 'hunger' and 'kuduql 'fear' in examples 16a. and 16b. respectively is to modify the meaning of the verb. It is, however, not a requirement for adjuncts to occur in Type 1 uncontrolled events. This is dependent on the meaning of the verb, as example 16d. illustrates.

16d. na kiurika

na kiut -i -ka -a

1SG forget-1SG-REALLY-DECL

I forgot.

Similarly, the predicates in Type 1 uncontrolled events are marked first person singular for the actor of the verb. In Type 2 uncontrolled events, (as in 16a.) the clause structure consists of a noun phrase plus the predicate. The noun phrase in Type 2 uncontrolled events or states is normally a body part which functions as the object of the predicate as example 16c., above illustrates. Likewise, the predicate is inflected for third person singular . Adjuncts may occur in Type 2 uncontrolled events, and the function of the adjunct is to restrict the meaning of the verb, as example 15d. illustrates. The semantic roles of the noun phrases in uncontrolled events or states differ. In both types of uncontrolled states, in Type 1, the noun phrase functions as the actor, while in Type 2, the noun phrase functions as undergoer/object. This is indicated morphologically.

The phenomenon of controlled and uncontrolled states or events is a common feature of Papuan languages. In most cases, in uncontrolled events, the third singular is inflected to indicate as inanimate cause functioning as the actor, while in controlled events, the verbs are inflected for person and number of the actor. Individual languages vary in the way verbal morphology and semantic roles are used to distinguish controlled and uncontrolled events (See for example Haiman (1980), Olson (1981), Seiler (1984) and Foley (in press). In Kuman, it is the nominal arguments that determine whether the predicates are marked for controlled or uncontrolled events or states.

2.5 Verb suffixes

In this section, I will discuss the verb suffixes. Morphophonemic rules that affect the individual suffixes will be presented here when discussing the respective suffixes.

2.5.1 Illocutionary force, status and modality

According to Foley and Van Valin (1984:213), the traditional categories of mood/modality have been used 'in confusing and overlapping ways in traditional Western grammatical tradition to cover three grammatical categories'. Foley and Van Valin distinguish three different grammatical categories within the domain of mood and modality: illocutionary force, status and modality. They also recognize the existence of tense, which is yet again different. (see Foley and Van Valin 1984).

Illocutionary force has been traditionally referred to as mood, which is defined by Lyons (1977:731) as 'its status as a promise, a threat, a request, a statement etc.'. Status expresses the actuality of the event, that is, whether the action is a reality or not. Modality, on the other hand,

characterizes the speakers estimate of the relationship of the actor of the event to its accomplishment, whether he has the obligation, the intention or the ability to perform it. (Foley and Van Valin 1984:214)

The category of modality in Kuman is expressed either by a

verbal suffix or in a serial verb construction. The suffix expressing modality will be discussed here, while in the following chapter, modality will be discussed again, where serial verb constructions are used to express it.

2.5.2 Illocutionary force

Kuman distinguishes three main categories of illocutionary force: interrogative, imperative and the declarative. These suffixes are mutually exclusive, and are normally obligatory in independent verbs, except in an interrogative sentence where an interrogative pronoun is used (2.1.2) and also where the aspect suffix is used (2.10).

2.5.2.1 Interrogative: yes-no questions

The interrogative suffix is formed by the suffix -o, for yes-no questions. Alternative questions are formed by the particle -mo 'or' but this normally occurs after the interrogative suffix.

- 17a. ye nit nomo
ye nigl ne -um -o
3 water eat-3SG-Q
Did she drink water?

17b. ene bugla kano
ene bugla kan-n -o
2 pig see-2SG-Q
Have you seen the pig?

17c. ene ka pitnomo
ene ka pit -n -o-mo
2 words hear-2SG-Q-or
Have you understood the words or not?

The interrogative is also most commonly used in farewells and greetings with the verbs 'come', 'stay' and 'go'.

18a. ene ed uno
ene ed u -n -o
2 motion come-2SG-Q
Are you coming?

18b. ene ed eno
ene ed e -n -o
2 motion go-2SG-Q
Are you going?

18c. ene motno
ene mogl-n -o
2 stay-2SG-Q
Are you there?

2.5.2.2 Content questions

Interrogative pronouns are used to form content questions, but the illocutionary force suffixes are optional. If one is used, -e which otherwise marks the declarative is used, rather than the interrogative suffix -o. Clauses with both the interrogative pronoun and the interrogative suffix are ungrammatical, as examples 19c. and 19d. illustrate. Scott (1978) discusses a similar situation in Fore.

19a. siragl etn(e)
sitagl et-n (-e)
what do-2SG (-DECL)
What are you doing?

19b. ira dum(e)
ita di -um (-e)
who say-3SG (-DECL)
Who said (it)?

19c. *siragl etno
sitagl et-n -o
what do-2SG-Q

19d. *ira dumo
ita di -um -o
who say-3SG-Q

2.5.2.3 Imperative

The imperative suffix is -o. The declarative suffix -a is also used to issue commands, however, -a is a more polite form. Green (1975:117) discusses a similar notion in English in her article 'How to get people to do things with words : The Whimperative Question' where 'there are whimperatives whose 'imperative content' is expressed in a phrase that does not have the imperative form'. Her discussion of English whimperatives involves the use of tags. Kuman does not have tags and therefore the declarative suffix -a is used.

The imperative suffix -o is homophonous with the interrogative suffix, however, there are syntactic and morphological criteria which distinguishes these. Firstly, the interrogative suffix can occur with all persons and numbers, while the imperative only occurs with second person singular, dual and plural and the hortative imperative involving first person non-singular. The singular imperative is unmarked for number. There is a special set of person number allomorphs that are used for the imperative in the dual and plural. Examples of both the interrogative and the imperative clauses are presented below to illustrate the differences in person and number suffixes. Examples in the first column illustrate interrogative sentences, while the examples in the second column illustrate imperative sentences.

Interrogative

Imperative

20a. primo

pit -im -o

hear-2/3PL-Q

Did you (pl) hear?

21a. prio

pit -i -o

hear-2/3PL-IMP

You (pl) hear.

20b. pribro

pit -bit -o

hear-2/3DL-Q

Did you (2) hear?

21b. priro

pit -it -o

hear-2/3DL-IMP

You (2) hear.

20c. pitno

pit -n -o

hear-2SG-Q

Did you hear?

21c. pro

pit -o -o

hear-SG-IMP

You hear.

21d. nobuglo

ne -bugl-o

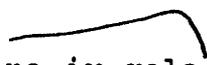
eat-1DL -DECL

Let's eat.

2.5.2.4 Declarative

There are two declarative suffixes, -e and -a. Both suffixes mark the clauses as statements, but the latter indicates a neutral statement. The former is only different in the sense that it is more subjective and indicates the speakers

involvement and interest in the speech act. This is most likely the reason why -e can occur with clauses that use interrogative pronouns, whereas -a can not occur in such clauses. The intonation patterns are also different on these two suffixes. When -a occurs, there is an abrupt drop in pitch after the sentential intonation peak, whereas with -e, the falling pitch continues, and is not as abrupt as -a. There is also a falling and rising tone immediately before the suffix -e. In the examples below, where -a is used, the actor is making a statement, whereas in 22b., when -e is used, the actor is concerned with how cold she feels. A closer translation that would differentiate 22a. from 22b. in English would be to say that 'I'm freezing', or 'Gee, I'm really cold' for sentences that are marked with -e.



 22a. na ir gola

 na it gogl-i -a

 1SG cold die -1SG-DECL

 I am cold.



 22b. na ir gole

 na it gogl-i -e

 1SG cold die -1SG-DECL

 I am cold.

2.6 Person number

Person number marking is an obligatory suffix. As I have already mentioned above, there are more distinctions with the bound suffixes than there are with the free pronouns. Kuman distinguishes seven person number suffixes: three singular, two dual and two plural suffixes. First person distinguishes singular, dual and plural. The non-singular non-first person pronouns are collapsed for dual and plural, but distinguish second and third singular. In this section, the morphophonemic rules accounting for the changes will not be repeated, except in examples where the processes are too complex. Below is a chart representing the person number suffixes.

		Number		
		singular	dual	plural
	1	-i	-bugl	-mun
Person	2	-n	-bit,	-im, iw
	3	-uw, -um, -bu		

The following verbs will be used to illustrate the different allomorphic variations the person number suffixes are subjected to:

mogl 'stay'	pre 'hear'
te 'give'	kan 'see'

2.6.1. First person

2.6.1.1 Singular: -i

First person singular has two allomorphs which are morphophonemically defined. (see rule (14)). -i disappears after /gl/, that is, \emptyset occurs after /gl/, i occurs elsewhere.

23a. na mogleka

na mogle-i -ka -a

na stay-1SG-REALLY-DECL

I stayed.

23b. na kua kankrika

na kua kan-kit-i -ka -a

1SG bird see-NEG-1SG-REALLY-DECL

I did not see the bird.

2.6.1.2 Dual: -bugl

First person dual has one underlying form -bugl, but is subjected to several morphophonemic rules with different surface realizations. This has been discussed in the previous chapter (see rule (7)), however it will be presented below for convenience.

where /t/ and /gl/ are the final phonemes of
 $\left. \begin{array}{l} t \\ gl \end{array} \right\} + b \rightarrow \emptyset$ /the verb stem, or the negative suffix, and
 /b/ the initial phoneme of the person number
 suffix -bu \underline{g} l.

Example 24a. illustrates /t+b/ loss in a negative statement,
 while example 24b. illustrates /gl+b/ loss. See also rule (20)
 for the loss of the vowel /o/.

24a. no nekuglka
 no ne -kit-bu \underline{g} l-ka -a
 1PL eat-NEG-1DL -REALLY-DECL
 We (2) did not eat (it).

24b. no muglka
 no mogl-bu \underline{g} l-ka -a
 1PL stay-1DL -REALLY-DECL
 We (2) stayed.

2.6.1.3 Plural: -mun

First person plural suffix -mun has a number of different
 surface realizations. Some of the rules which affect it are
 general, for example, the vowel assimilation rule, or the
 consonant cluster loss, and these will not be dicussed here.
 (see rules (6) and (7) for a discussion of the relevent

morphophonemic rules). The different surface realizations of -mun are: -un, -m, -mn.

-un occurs with /g/ and /t/ final verb stems in the realis status, and after the negative suffix -kit.

25a. no gaunga

no gagl-mun-ka -a
1PL burn-1PL-REALLY-DECL
We burnt (it).

25b. no moglkunga

no mogl-kit-mun-ka -a
1PL stay-NEG-1PL-REALLY-DECL
We did not stay.

-m occurs with verbs that are in the irrealis status, before -ka 'REALLY', the specific status suffix. That is, /un/ is lost between /m/ and /k/. For example,

25c. no kanamga

no kan-nagl -mun-ka -a
1PL see-IRREALIS-1PL-REALLY-DECL
We will see.

-mn occurs with verbs that are not marked with the specific status -ka 'REALLY'.

25d. no kamna
no kan -mun-a
1PL see-1PL-DECL
We see it.

2.6.2 Second person singular

The second singular suffix is -n.

26a. ene pratnga
ene pit -nagl -n -ka -a
2 hear-IRREALIS-2SG-REALY-DECL
You will hear.

26b. ene neno
ene ne -n -o
2 eat-2SG-Q
Did you eat?/Have you eaten?

2.6.3 Third person

2.6.3.1 Singular

Third person singular has three allomorphs: -uw, -bu and -um, which are morphologically conditioned. -uw is conditioned by the specific status suffix -ka 'REALLY', which is then subjected to the metathesis rule. (see rules (4) and (11)).

27a. ye kanugwa

ye kan-uw -ka -a

3 see-3SG-REALLY-DECL

She saw it.

-bu is conditioned by the irrealis status suffix -nagl. /u/ disappears if the following phoneme is a vowel, (see rule (20)) as example 27c. below illustrates.

27b. ye kanabuka

ye kan-nagl -bu -ka -a

3 see-IRREALIS-3SG-REALLY-DECL

She will see.

27c. ye kanaba

ye kan-nagl -bu -a

3 see-IRREALIS-3SG-DECL

She will see.

-um occurs elsewhere.

27d. ye kaya nomo

ye kaya ne -um -o

3 food eat-3SG-Q

Did she eat food?

27e. ye ka pruma

ye ka pit -um -a

3 words hear-3SG-DECL

She heard/She understands.

2.6.3.2 Second/third person dual: -bir ~ -bri, -ir

The suffixes -bir and -bri are used in free variation. The surface realization of this suffix with /gl/ and /t/ final verb forms has been discussed in the previous chapter. When the speaker wants to distinguish between second and third person dual, the free pronouns ene '2' and ye '3' are used. -ir is used in the imperative form only. Below are some examples illustrating this.

28a. ye nebrika

ye ne -bit -ka -a

3 eat-2/3DL-REALY-DECL

They (2) ate.

28b. ene nit nebirka

ene nigl ne -bit -ka -a

2 water eat-2/3DL-REALY-DECL

You (2) drank water.

28c. ene kaniro

ene kan-it -o

2 see-2/3DL-IMP

You (2) see.

2.6.3.3 Plural: -im, -uw, -i

The suffixes -im and -iw are morphologically conditioned. -iw occurs with the specific status suffix -ka 'REALLY', which is then subjected to the metathesis rule (11). -i occurs with the imperative, and -im occurs elsewhere.

29a. ye prikwa

ye pit -iw -ka -a

3 hear-2/3PL-REALLY-DECL

They heard.

29b. ye ka primo

ye ka pit -im -o

3 words hear-2/3PL-Q

Did they hear?

29c. ene prio

ene pit -i -o

2 hear-2/3PL-IMP

You (pl) hear.

2.7. Status

The category of status has been previously analysed as aspect by Trefry (1969) and tense by Capell (1948-1949) and Bergmann (1953). Given that status divides events into whether it has really happened, or may happen in the future, it is not surprising that status has been analysed as tense in the past. Foley and Van Valin (1984) argue for a distinction between status and tense, saying that tense is divided into events that occurred before the moment of utterance and those overlapping with it, while status refers to the actuality of the event, whether it is realized or not. Kuman, and a number of Papuan languages have no tense distinctions, but that of status. Events that are simultaneous with or before the moment of speech are real, because they have happened, while events that occur after the moment of speech are unreal events because they have not yet eventuated.

Kuman has two status distinctions: a general status distinction, that is, real and unreal events, and more specific status distinctions within the continuum of real and unreal.

2.7.1 General status

Real events are unmarked in Kuman, that is, there are no overt morphemes to mark real events. On the other hand, the morpheme -nagl is used to mark unreal events, or those that may happen after the speech moment, as the examples below illustrate.

30a. na kaniga

na kan-i -ka -a

1SG see-1SG-REALY-DECL

I saw (it).

30b. na kanaglka

na kan-nagl -i -ka -a

1SG see-IRREALIS-1SG-REALY-DECL

I will see (it).

2.7.1.1 -nagl 'Modal' and 'Irrealis'

The suffix -nagl has two functions. It indicates modality and status. In 2.4.1 I mentioned that modality normally does not occur with the irrealis status. This is because they are the same suffix. When -nagl functions as modality, it expresses a desire or intention. The different surface realizations of -nagl are due to morphophonemic processes. The phoneme /gl/ is lost before /m/ and /b/, the initial phonemes of the person number suffix. It also disappears before /k/, the initial phoneme of the negative suffix, but it remains generally elsewhere. Semantically, a wish or intention is as yet an unreal event, therefore -nagl is used to express modality. Consider the examples below.

31a. ye mige tenabuka

ye mige te -nagl -bu -ka -a

3 money give-IRREALIS-3SG-REALLY-DECL

She will give money.

31b. ye mige tekraabuka

ye mige te -kit-nagl -bu -ka -a

3 money give-NEG-IRREALIS-3SG-REALLY-DECL

She will not give money.

31c. ye mige tenakrukwa

ye mige te -nagl -kit-uw -ka -a

3 money give-IRREALIS-NEG-3SG-REALLY-DECL

She does not want to give money.

In the examples above, in 31a., -nagl expresses status. For examples 31b. and 31c., in the former, it expresses status, in the latter, it expresses modality. In these two sentences, the only difference is where -nagl occurs. In 31b., it occurs after the negative suffix, while in 31c., it occurs before the negative suffix. -nagl, when functioning as modality is more inner, that is, it occurs closer to the verb, and before the negative suffix, as example 31c. illustrates. When it occurs after the negative suffix, it functions as a status marker, as example 31b. illustrates. There is further evidence that -nagl, which generally is a status marker, may have modal overtones, is found in serial verb constructions. This will be discussed in 3.3.2.

2.7.2 Specific status

Within the continuum of realis and irrealis, further distinctions are made in relation to the actuality of the event. English splits the continuum by using modal auxiliaries, for example can, must, etc. Kuman does not have words that resemble modal auxiliaries, but employs a number of different suffixes to express these. Some of the specific status suffixes can occur as conjunction particles, however the intonation patterns are different. For example, -ba 'HOPEFULLY' can occur as a conjunction particle, which may follow -ka 'REALLY' and the illocutionary force marker. Below are some examples illustrating this.

32a.  na kanaglba
na kan-nagl -i -ba -a
1SG see-IRREALIS-1SG-HOPEFULLY-DECL
Hopefully I will see (it).

32b.  na kaniga ba di tekrika
na kan-i -ka -a ba di
1SG see-1SG-REALLY-DECL but say
te -kit-i -ka -a
give-NEG-1SG-REALLY-DECL
I saw her, but I did not tell her.

Example 32a. illustrates -ba 'HOPEFULLY' occurring as a specific status suffix, while in 32b., it functions as a conjunction particle. Note also the different intonation pattern on these examples. In 32a., -ba has only one sentential intonation pattern, the falling tone occurring on -ba. In 32b., note that there are three intonation peaks; one on the clause na kaniga 'I saw', another on ba 'but' and thirdly, one on the clause di tekrika 'I did not tell'.

2.7.2.1 -ka 'REALLY'

The suffix -ka 'REALLY' can occur with or without the general status suffixes. A verb without the suffix -ka does not necessarily mean that the action will not eventuate. The semantic difference is shown below, with the words underlined showing the difference between -ka and \emptyset . Consider the examples below.

33a. na koboglo tenaglka

na koboglo te -nagl -i -ka -a

1SG stone give-IRREALIS-1SG-REALLY-DECL

I will give money.

33b. na koboglo tenagla

na koboglo te -nagl -i -a

1SG stone give-IRREALIS-1SG-DECL

I will give money.

33c. na kabe neiga

na kabe ne -i -ka -a

1SG banana eat-1SG-REALLY-DECL

I ate the banana.

33d. na kabe neia

na kabe ne -i -a

1SG banana eat-1SG-DECL

I am eating the banana. I am going to eat the banana.

In the examples above where -ka occurs the event will occur, or has occurred as examples 33a. and 33c. illustrate. In example 33d., there is a modal overtone with the absence of -ka 'REALLY'; however the event has not eventuated.

-ka 'REALLY' cannot occur with the interrogative suffix -o. The interrogative has encoded in it the possibility of an event, therefore -ka 'REALLY' cannot occur with the interrogative suffix. The use of -ka is in effect more emphatic. It has been glossed as 'REALLY' because the chances of the event occurring are very high if it co-occurs with the irrealis status -nagl. When -ka is not used in conjunction with the irrealis status, the chances of the event occurring are lower.

2.7.2.2. -da 'MAYBE', 'PERHAPS'

This suffix indicates doubt or uncertainty. -da 'PERHAPS', 'MAYBE' is not mutually exclusive with -ka 'REALLY' but may

occurr following -ka 'REALLY', as example 34b. illustrates. -da, unlike -ka, can occur with an interrogative pronoun; the closest translation to English would be 'I wonder....' as example 34c., below, illustrates.

34a. na ye kanida

na ye kan-i -da -a

1SG 3 see-1SG-MAYBE-DECL

Maybe I saw it.

34b. na ye kanigada

na ye kan-i -ka -da -a

1SG 3 see-1SG-REALLY-MAYBE-DECL

Maybe I saw her.

34c. ye siraglwe dimda.

ye sitagl-we di -im -da -a

3 what -FOCUS say-2/3PL-MAYBE-DECL

I wonder what they said.

2.7.2.3. -ba 'HOPEFULLY'

The suffix -ba expresses a desire or a wish. I mentioned in 2.7.2 that -ba could also occur as a conjunction particle; however, the intonation pattern distinguished these. -ba, unlike -da cannot occur with interrogative pronouns. -ba must co-occur with the general status suffix -nagl 'IRREALIS' if -ba is to function as a status suffix. When -ba occurs with verbs in the

realis status it functions as a conjunctive particle, because the event has happened. This is illustrated in the examples below.

35a. na ye kanaglba

na ye kan-nagl -ba -a

1SG 3 see-IRREALIS-HOPEFULLY-DECL

Hopefully, I will see her.

35b. na kani ba ed ogwa

na kan-i ba ed e -uw -ka -a

1SG see-1SG but... motion go-3SG-REALLY-DECL

I saw it but it has gone.

2.8 -kit 'NEGATIVE'

The negative is marked by the suffix -kit 'not'.

35c. ye ka dikrukwa

ye ka di -kit-uw -ka -a

3 words say-NEG-3SG-REALLY-DECL

She did not say words.

2.9 -t 'EMPHATIC'

The emphatic suffix -t occurs between the illocutionary force suffix and the specific status suffix -ka 'REALLY' and -ba 'HOPEFULLY'. It can only occur with the illocutionary force

suffix marking the declarative, as the examples below illustrate.

36a. no ye di tobuglkra
no ye di te -bugl-ka -t -a
1PL 3 say give-1DL -REALLY-EMPH-DECL
We (2) told them/her.

36b. na kanaglbra
na kan-nagl -ba -t -a
1SG see-IRREALIS-HOPEFULLY-EMPH-DECL
Hopefully, I will see (it).

2.10 -edi, -di Aspect

The perfective suffix is one of the suffixes that does not require the illocutionary force suffix marking the declarative. Only the interrogative suffix can occur with the perfective suffix. There is no imperfective suffix. The imperfective is formed with the irrealis status -nagl and the perfective aspect. Examples of this are given below. The vowel /i/ becomes /u/ with third person singular and plural. This particular suffix requires further research to determine exactly what its function is; however for the present I will refer to it as aspect. Examples of this are presented below.

37a. ye kadu

ye kan-du

3 see-PERF 3SG

She saw it.

37b. ye kanabed

ye kan-nagl -bu -ed

3 see -IRREALIS-3SG-PERF

She will have seen (it).

CHAPTER THREE

SERIAL VERB CONSTRUCTIONS AND DEPENDENT VERBS

In this chapter, I will discuss dependent verbs, serial verb constructions, and the different semantic relationships that are encoded in these constructions.

3.0 Serial verbs versus dependent verbs

Serial verb constructions consist of two or more predicates strung together in a single clause. The question in relation to whether these serial verb constructions are derived from underlying multiple clauses has been discussed by Schacter (1974), Olson (1981), Foley and Olson (1985) to name only a few. I will not discuss their arguments here but will outline the main features of serial verb constructions and differentiate these from dependent verbs. Crowley (1983) mentions some of the following as features of serial verbs constructions. Firstly, all verbs in a serial verb construction refer to subparts of a single overall event. Secondly, there is no intonational or grammatical marking of clause boundaries between the verbs. Thirdly, there are tight restrictions on the nominal arguments associated with each verb, although this is language specific. Dependent verbs, on the other hand, can have their own core and peripheral arguments, with each verb belonging to a different

clause. Foley (in press) uses the following examples to illustrate the differences between serial verb constructions and dependent verbs from Yimas, another Papuan language spoken in the Sepik area.

marimp-in ama-awŋkwi -sipan -it
 river -OBL 1SG-down in water-bathe -PERF
 I bathe in the river.

marimp-in awŋkwi -mp -i anti -nan
 river -OBL down in water-SEQ-DEP ground -OBL
 yampara-mp -i ama -sipan-it
 stand -SEQ-DEP 1SGA-bathe-PERF
 I went down into the river, stood on the ground and washed.

The first example illustrates a serial verb construction in which the verbs in juxtaposition awŋkwi 'down in water' and sipan 'bathe' share the arguments ama '1SG S' and marimp-in 'in the river'. In the second example, each predicate has its own peripheral argument: marimp-in 'into the river' is associated with the predicate awŋkwi 'down in water', while anti-nan 'on the ground' is associated with the predicate yampara 'stand'. Dependent verbs in Yimas are inflected to mark dependency between the clauses; the morphemes -i 'DEP' and -mp 'SEQ' respectively. Person and number and tense inflection are taken from the following independent verb, which is ama-sipan-it 'I washed'.

In Kuman, dependent verbs may take suffixes that indicate semantic relationships such as sequential; serial verb constructions may not. Similarly, some core and peripheral arguments must be shared in a serial verb construction but not in dependent verbs. Consider the following examples in Kuman.

38a. ye edwedi ka di narukwa

ye edwedi ka di nat -uw -ka -a

3 yesterday words say give-3SG-REALY-DECL

Yesterday she told me/ Yesterday she said words to me.

38b. ye edwedi ka didre narukwa

ye edwedi ka di -dite nat -uw -ka -a

3 yesterday words say-SEQ give-3SG-REALY-DECL

Yesterday she told me and then gave me (something).

The first example illustrates a serial verb construction. The complex predicate di narukwa 'told me' has the core arguments ye '3' and ka 'words' and the peripheral argument edwedi 'yesterday'. The first verb in the series di 'say' consists only of the verb stem in juxtaposition with the following verb which carries specification for person number and illocutionary force. The second example (38b.) illustrates a dependent verb: di 'say' is marked to indicate a sequential relationship between the two predicates. Although the above example shows that specification for actor is taken from the following verb, different actors can occur with dependent verbs; that is, the actor of one predicate need not be the same as the actor of the following verb. The core argument ye '3' is shared by both predicates; however ka 'words' is a core argument of di 'say'. Contrast also the semantic difference between the two clauses. In 38a. di narukwa 'she told me' functions as a single predicate, whereas in 38b., the independent or generic meaning of the verbs are retained.

Foley and Olson (1985) in their discussion of verb serialization discuss the nature of argument sharing for these serial verb constructions, and the different 'layers' in which serialization takes place. These layers will be discussed in the following chapter. In serial verb constructions, peripheral arguments must modify the entire complex predicate, whereas in dependent verb structures, each verb may also have its own peripheral arguments, so there are certain restrictions on serial verb constructions, such as the complex predicate sharing the same core and peripheral arguments, not holding for dependent verbs, in which each verb may independently select its own core and peripheral arguments. In distinguishing between dependent verbs and serial verb constructions in Kuman, the latter term will be used to describe verbs that occur in a series with no suffixes, but take their specification for status, person number and illocutionary force from the following independent verb, while the former will refer to predicates that have suffixes on the verbs; for example, person number of the actor, or temporal suffixes.

3.1 Serial verb constructions

In the previous chapter, I mentioned that Kuman has under one hundred verb stems, of which eleven are generic verbs which can occur with other verbs or adjuncts to increase the verb inventory. In this section, I will discuss this aspect of verb serialization, and secondly, other semantic relations that are encoded in serial verb constructions.

One of the distinguishing features of serial verb constructions is its tendency to create new meanings from a combination of verbs in juxtaposition. Some of these may be predictable from the combination of verbs, while in others, it is semantically unpredictable. Some examples are listed below.

di te	'say give'	= 'tell'
di pre	'say perceive'	= 'ask'
ne pre	'eat perceive'	= 'taste'
ake pre	'hold perceive'	= 'feel'
di pogl	'say undo'	= 'explain'
si bogl	'hit cut'	= 'sew'
si dage	'hit glue'	= 'glue', 'stick together'
si gogl	'hit die'	= 'kill'
doko kan	'search see'	= 'find'
ere kan	'do see'	= 'try'
pre pol si	'perceive undo hit'	= 'understand'

The examples given above consist of two or more predicates in juxtaposition with no intervening words. In some serial constructions, the predicates may be separated by nominal adjuncts, often with no independent meaning, which modify the semantics of the verbs, but do not introduce new arguments into the complex predicate structure. Examples of these constructions are shown below.

ake gi di	'hold ? say'	'tighten', 'hold tightly'
ake ple di	'hold ? say'	'help'
si kor ere	'hit new do'	'heal'
si biglki di	'hit ? say'	'break'
ake nu si	'hold ? hit'	'push'
si dat di	'hit ? say'	'squash'

The verbs in nuclear serial verb constructions must share all core and peripheral arguments, which implies that the verbs belong to a single clause rather than number of different clauses. The combination of these verbs also produce lexically unpredictable meanings, and therefore must be treated as a single complex predicate. Below are some examples illustrating this.

39a. ye ka pre pol sugwa

ye ka pit pogl si -uw -ka -a

3 words hear undo hit-3SG-REALLY-DECL

She understood.

39b. ye edwedi no ake ple dugwa

ye edwedi no ak ple di -uw -ka -a

3 yesterday 1PL hold ? say-3SG-REALLY-DECL

She helped us yesterday.

39c. ye edwedi gagl yugugl si boglkwa

ye edwedi gagl yugu -gle si bogl-uw -ka -a

3 yesterday 'cloth' house-LOC hit cut -3SG-REALLY-DECL

She sewed clothes in the house yesterday.

In the examples above, the non-final serialized verbs do not carry any inflections. Specification for illocutionary force and person number are carried on the last verb in the series. In example 39a., the core arguments ye '3' and ka 'words' are associated with the single complex predicate pre pol sugwa 'she understood'. Similarly, in example 39b., ye '3' and no '1PL' are core arguments of the complex predicate, ake ple dugwa 'she helped'. The peripheral nominal argument edwedi 'yesterday' modifies the whole clause. In example 39c., there are two peripheral arguments, edwedi 'yesterday' and yuguql 'in the house' which modify the whole clause. Clauses such as 39a., 39b., and 39c., will be discussed in more detail in the following chapter. In serial verb constructions, there is only one sentential intonation pattern.

3.2 Semantic relations of serial verb constructions

The different semantic relations encoded in serial verb constructions that will be discussed are aspect, modality, benefactive and the temporal relation marking simultaneous action.

3.2.1 Aspect

In 2.10, I discussed the perfective aspect suffix. Kuman uses the verbs mogl 'stay' to indicate progressive aspect and kod 'throw away', 'lose', 'finish' to indicate perfective

aspect, as shown in the examples below.

40a. ye gagl si bogl kodugwa

ye gagl si bogl kod -uw -ka -a

3 'cloth' hit cut finish-3SG-REALLY-DECL

She finished sewing the clothes.

40b. ye no ake ple di munga

ye no ak ple di mogl-mun-ka -a

3 1PL hold ? say stay-1PL-REALLY-DECL

We are helping them.

The aspect marking verbs mogl 'stay' and kod 'finish' must occur finally in the serial verb construction and carry the obligatory suffixes of person number and illocutionary force. These verbs modify the whole predicate. Again, there is only one sentential intonation pattern.

3.2.2 Modality

In the previous chapter, I discussed briefly the notion of modality, which covers the categories of obligation, intention and ability. English uses a number of verbs or modal auxiliaries to express modality, for example

can, may, shall, will
could, might, should, would
must, ought to, used to, need
dare (Quirk and Greenbaum 1976:26).

Lyons (1978) discusses two basic types of modality: epistemic and deontic modality. According to Foley and Van Valin (1984), epistemic modality expresses status, while deontic modality expresses what they term modality. Foley and Van Valin (1984) in their discussion are only using different terms (status and modality) for what Lyons (1978) call epistemic and deontic modality respectively, but these terms refer to the same semantic distinction.

Most Papuan languages do not have a set of modal auxiliaries to indicate modality. Haiman (1980) in his discussion of Hua, another Papuan language points out that

Hua lacks all modal words: there is no lexemic equivalent for can, should, necessary, possible or want...all ideas of modality are related to the mental states of uncertainty and desire, and these are in turn related to each other: what is desired is not actual (Haiman 1980:441).

In Haiman's (1980) discussion of modality, he includes status. Kuman uses both serial verb constructions and dependent verbs to express modality.

3.2.2.1 Ability 'know how' and Conative modality 'try to'

In Kuman, both conative modality and ability are expressed by the same verb, kan 'see'. Consider the examples below.

41a. Mebe kwin bogl kanugwa

Mebe kwin bogl kan-uw -ka -a

Mebe gin rummy cut see-3SG-REALLY-DECL

Mebe knows how to play gin rummy.

41b. Mebe kwin bogl kanaba

Mebe kwin bogl kan-nagl -bu -a

Mebe gin rummy cut see-IRREALIS-3SG-DECL

Mebe will try to play gin rummy.

Examples 41a. and 41b. illustrate ability and conative modality respectively. Ability can only occur with verbs marked in the realis status, while irrealis status can occur with clauses expressing conative modality. Because ability is considered as being real, kan 'see' may never be inflected for irrealis status when used in this sense. The perfective suffix -edi can also be marked on sentences that express ability and conative modality. The perfective suffix must also occur in conjunction with the irrealis status suffix to express conative modality. This is illustrated in the examples below.

41c. ye kwin bogl kadu

ye kwin bogl kan-du

3 gin rummy cut see-PERF 3SG

She knew how to play gin rummy.

41d. ye kwin bogl kanabed

ye kwin bogl kan-nagl -bu -ed

3 gin rummy cut see-IRREALIS-3SG-PERF

She will have tried to play gin rummy.

3.2.2.2 Desiderative modality

Desiderative constructions vary from language to language. In Imonda, (Seiler 1984) another Papuan language, desiderative constructions are formed with an immediate future suffix that varies according to person, but has a modal overtone. Yimas (Foley in press) has two different constructions which are dependent on whether the wisher and the actor of the desired action are the same or different. If the wisher and the actor are different, the verb 'say' is used, but if they are the same, this verb is not required.

Kuman has a number of constructions that are dependent on whether the statement is positive or negative, and if the actor is the same as or different from the speaker. In all types of desiderative constructions, the desiderative is marked by -nagl. This was discussed in 2.7.1.1. If the statement is positive, and the speaker is the same as the actor, the verb pit 'hear' is used. Consider the examples below.

42a. na suna wana prika

na suna wan -nagl pit -i -ka -a

1SG centre wander-IRREALIS hear-1SG-REALLY-DECL

I want to go to town.

42b. ye suna wanagledi prukwa

ye suna wan -nagl -edi pit -uw -ka -a

3 centre wander-IRREALIS-PERF hear-3SG-REALY-DECL

She wants to go to town.

In the examples above, when -nagl is used, the perfective aspect is not used (42a.), but in 42b., -nagl must occur with the perfective aspect -edi. Because the wisher and the actor are the same, the verb pit 'hear' is used. Negative statements are an exception to this; that is, the verb pit 'hear' is not required; the predicate is negated directly. If pit 'hear' is used, there is a semantic difference. Contrast example 42b. above and 42c. below.

42c. ye suna wanagledi prekrukwa

ye suna wan -nagl -edi

3 centre wander-IRREALIS-PERF

pit -kit-uw -ka -a

hear-NEG-3SG-REALY-DECL

She did not think of going to town.

42d. ye suna wanakrukwa

ye suna wan -nagl -kit-uw -ka -a

3 centre wander-IRREALIS-NEG-3SG-REALY-DECL

She does not want to wander about in town.

42e. ye suna wankrabuka

ye suna wan -kit-nagl -bu -ka -a

3 centre wander-NEG-IRREALIS-3SG-REALLY-DECL

She will not wander about in town.

Examples 42d. and 42e. illustrate sentences that indicate modality and status respectively. In 42d. the suffix -nagl occurs immediately after the verb stem and before the negative suffix, while in 42e., the irrealis status suffix occurs after the negative suffix. This is because modality is more inner, and occurs closer to the verb stem. It is impossible in Kuman to construct desiderative sentences where the wisher and the actor are different except in the interrogative. That is, it is impossible to say 'I want you to...'. Consider the examples below.

43a. ene mebigl sinagledi pitno

ene mebigl si -nagl -edi pit -n -o

2 vomit hit-IRREALIS-PERF hear-2SG-Q

Do you want to vomit?

43b. ye mebigl sinabedi pitno

ye mebigl si -nagl -bu -edi pit -n -o

3 vomit hit-IRREALIS-3SG-PERF hear-2SG-Q

Do you think that she wants to vomit?

Consider the actor marking on the verbs si 'hit' and pit 'hear' in the above examples. In 43a., because the actor of both

predicates are the same, si has no actor marking. This is taken from the following predicate pit. In 43b., the actor of si is not the same as that of pit. Note that in this example, the predicate si is independently specified for actor by the suffix -bu '3SG', while pit 'hear' is marked for second singular. Interrogatives are only possible because it is not the speakers' wishes but the actors' wishes or intentions that are being questioned.

The quotative form using the verb di 'say' is possible if the speaker and the actor are the same or different. Consider the following examples.

44a. na ena diga

na e -nagl di -i -ka -a

1SG go-IRREALIS say-1SG-REALLY-DECL

I said I want to go.

44b. ye kopi mogo uruna dugwa

ye kopi mogo ut -nagl di -uw -ka -a

3 coffee beans pick-IRREALIS say-3SG-REALLY-DECL

She said she wants to pick coffee.

44c. ye kadamon uruna dumo

ye kadamon ut -nagl di -um -o

3 cardamom pick-IRREALIS say-3SG-Q

Did she say she wants to pick cardamom?

If the speaker and the actor are the same, the verbs di 'say' is

used mainly for emphasis, as example 44a. illustrates. The interrogative can be used in clauses where the speaker of the utterance and the actor are different, unlike the clauses where the verb pit 'hear' is used.

A third type of modal construction employs the predicate et 'do', 'make' which is used for actions that are going to be carried out in the immediate future. Consider the example below.

45. ye ena erukwa

ye e -nagl et-uw -ka -a

3 go-IRREALIS do-3SG-REALY-DECL

She is just about to go.

In the above example, the modal suffix -nagl occurs after the verb e 'go'. When et 'do', 'make' is used, the actor and the speaker need not be the same.

The fourth type of modal construction involves the use of the verb dagl 'call'. Unlike the previous examples, where there was only one sentential intonation pattern, when dagl is used, there is a pause between dagl and the following predicates. The verbs are also independently specified for actor. This is illustrated in the example below. In this construction, if the actor and wisher are different, the final verb is marked for the imperative illocutionary force, whereas if the wisher and the actor are the same, the declarative is used.

46a. ene pi³ kanaigl dagl pi kanio
 ene e kan-nagl -im dagl e kan-i -o
 2 go see-IRREALIS-2/3PL 'call' go see-2/3PL-IMP
 If you (pl) want to see (it), go and see (it).

46b. na pi kanagl dagl pi kanagla
 na e kan-nagl -i dagl e
 1SG go see-IRREALIS-1SG 'call' go
 kan-nagl -i -a
 see-IRREALIS-1SG-DECL
 If I want to see (it), I will go and see (it).

This is the only modal construction in which the irrealis status is expressed twice in the sentence. This construction is not a serial verb construction but involves dependent verbs because of the different specifications of actor and illocutionary force.

3.2.2.3 Purposive

The purposive construction also uses -nagl. Unlike modality, where only certain verbs can be used, purposive constructions can use a larger number of verbs for the purposive. The core argument functions as a complement. This is illustrated in the examples below.

47a. ye bugla kana ed ogwa

ye bugla kan-nagl ed e-uw -ka -a

3 pig see-IRREALIS motion go-3SG-REALLY-DECL

She went to see the pig.

47b. Kunma ka di tena moglkwa

Kunma ka di te -nagl mogl-uw -ka -a

Kunma words say give-IRREALIS stay-3SG-REALLY-DECL

She is staying to tell Kunma.

Purposive constructions are a type of modality because they indicate the speaker's or the actor's intentions.

3.2.3 Simultaneous action: same actor

In simultaneous action, there is either a partial or complete overlap in the time of the actions. In simultaneous action, the actors may be the same or different; however, clauses with different actors are discussed in 3.3.1.2. Simultaneous action with the same actor must, of course, share the same actor and peripheral nominal arguments; however, it is not a requirement for all verbs to share the same undergoer. Consider the following examples.

48a. ye mokona si gat nogwa

ye mokona si gagl ne -uw -ka -a

3 greens hit cook eat-3SG-REALLY-DECL

She picked, cooked and ate the greens.

48b. ye bugla pi kan mokona sugwa
 ye bugla e kan mokona si yu -uw -ka -a
 3 pig go see greens hit come-3SG-REALLY-DECL
 She saw the pig and brought (some) greens.

48c. ye edwedi bo bat nogwa
 ye edwedi bo bagl ne -uw -ka -a
 3 yesterday sugarcane cut eat-3SG-REALLY-DECL
 Yesterday, she cut and ate the sugarcane.

In examples 48a. and 48c., all the core arguments are shared equally by the predicates. In 48a., the core arguments ye '3' and mokona 'greens are equally shared by the predicates si, gat, ne 'pick, cook, and eat'. In 48c., the core arguments ye '3' and bo 'sugarcane' are shared equally by the predicates bat ne 'cut and eat'. The peripheral nominal argument, edwedi 'yesterday' modifies the whole clause. In example 48b., on the other hand, the core argument ye '3' is shared by all the verbs e kan 'go see' and si yu 'hit bring', but bugla 'pig' is only a core undergoer argument of the verbs pi kan 'go see', while mokona is the only undergoer argument of si yu 'bring'.

In these serial verb constructions, the intonation is dependent on the level in which serialization takes place [see 4.2]. The only restriction of course, is that the actor must be shared by all verbs in the construction, and that the peripheral nominal arguments must be associated with the whole clause.

3.2.4 Benefactive

The benefactive is also a serial verb construction which must occur in conjunction with the verbs te 'give' and nat 'give'. The latter term is used by non-first person actors whose beneficiary must be first person. Below are some examples illustrating this.

49a. ye bo bat narukwa

ye bo bagl nat -uw -ka -a

3 sugarcane cut give-3SG-REALLY-DECL

He cut sugarcane for me.

49b. ye bo bagl togwa

ye bo bagl te -uw -ka -a

3 sugarcane cut give-3SG-REALLY-DECL

He cut sugarcane for her.

3.2.5 Instrumental

The instrumental can occur with the verbs ak 'hold' and i 'take' as the examples below illustrate.

50a. ye koboglo ake sugwa

ye koboglo ak si -uw -ka -a

3 stone hold hit-3SG-REALLY-DECL

He hit it with a stone.

50b. ene dimaima i edi suko
ene dimaima i edi suk -o
2 axe take tree chop-IMP
Chop the tree with the axe.

3.3 Dependent verbs

In this section, I will discuss the different suffixes that occur on the dependent verbs. This includes the person number suffixes and the temporal suffixes.

3.3.1 Person number

For most person number combinations, the suffixes that occur on the dependent verbs are the same as those that occur with independent verbs, except for first person singular, third person singular and plural. All person number suffixes for both dependent and independent verbs are illustrated below.

	Dependent verbs	Independent verbs
Person number		
1SG	-ibo	-i
2SG	-n	-n
3SG	-n	-uw, -bu, -um
1DL	-bugl	-bugl
2/3DL	-bit	-bit
1PL	-mun	-mun
2/3PL	-ibi	-iw, -im

The person number suffixes express notions such as conditional (if), or 'when'. They also encode a dependency relationship between the clauses and irrealis status. These will be discussed below.

3.3.1.1 Switch in number and person

The phenomenon of switch in person and number categories has been discussed by Reesink (1983). He notes that languages vary in the assigning of switch reference morphemes, where a change from singular to plural is marked with same or different actor morphemes. The person number suffixes listed above which occur with dependent verbs are used to indicate a switch in number, but they also function to indicate the type of relationship between clauses, that is, one of dependency and semantic relations such as if and when. Consider the examples below.

51a. ene un akie enabugla

ene u -n akie e -nagl -bugl-a

2 come-2SG together go-IRREALIS-1DL -DECL

When you come, we (2) will go together.

51b. no mokona sumun taginma yu tenagla

no mokona si -mun taginma yu

1PL greens hit-1PL tomorrow bring

te -nagl -i -a

give-IRREALIS-1SG-DECL

If we pick greens, I will bring you some tomorrow.

51c. ye makai sibi agle di naro

ye makai si -ibi agle di nat -o

3 gather hit-2/3PL shout say give-IMP

If they have gathered, call me.

In the examples above, 51a. illustrates a switch in number and person. The verb u 'come' is marked for second person singular -n, while the following verb e 'go' is marked for dual by the suffix -bugl. In this example, the actor of the dependent verb is included as the actor of the independent verb. Example 51b. illustrates a switch from plural to singular, but the person category remains the same, unlike the previous example in which there was a switch in both person and number. In example 51c., the person category remains the same, but there is a switch in number. Unlike the previous two examples, the actor of the dependent verbs is not included as actor of the independent

verb. Each verb in these examples is independently specified for its core arguments. The actor(s) of the dependent verb may be included or excluded from the actor of the following independent verb, as examples 51a. and 51b. illustrate respectively.

Similarly, the actors of the verbs may be completely different, as example 51c. illustrates. That is, the actor of di naro 'tell me' is not included in makai sibi 'they gather'. There is also a significant pause between the clauses. The verbs in the first clause are in a dependency relation with the verbs of the following clause. The dependency relationship is firstly encoded in the person number suffixes. Secondly, the dependent verbs are dependent on the following independent verb for specification for illocutionary force. Example 51b. also illustrates an important difference between serial verb constructions and dependent verbs. I mentioned in 3.0. that dependent verbs may have independent core arguments. This is also true of peripheral nominal arguments. In example 51b., the temporal nominal argument taginma 'tomorrow' is only associated with the clause it precedes, and not the one it follows.

3.3.1.2 Switch reference

A switch in the person number of the actor may also be indicated by the suffix -o. Consider the examples below.

52a. ene engo ye u plau dugwa

ene e -n -ka -o ye u plau di -uw -ka -a

2 go-2SG-REALLY-DA 3 come ? say-3SG-REALLY-DECL

After you went, she arrived.

52b. ye na kankrikwo teke wiga

ye na kan-kit-iw -ka -o teke

3 1SG see-NEG-2/3PL-REALLY-DA ?

u -i -ka -a

come-1SG-REALLY-DECL

I ran away while they were not looking.

This structure of dependent verbs with different actor is similar to that of independent verbs, except for the suffix -o, which marks a switch of actors. This suffix simultaneously functions as a switch reference morpheme and a 'link' between the two clauses, and indicates a dependency relation between the clauses. That is, the dependent verb is dependent on the following independent verb for specification of status and illocutionary force. This construction may only be used in the realis status. The irrealis status suffix -nagl can not occur in either the dependent or independent verb, as this would result in an ungrammatical sentence. Contrast example 52a. with 52c. below.

52c. ene enga ye u plau dugwa

ene e -n -ka -a ye u plau

2 go-2SG-REALLY-DECL 3 come ?

di -uw -ka -a

say-3SG-REALLY-DECL

You went. She arrived.

In 52c., the verbs e 'go' and u plau di 'arrive' are both independently marked for illocutionary force. The clauses are now independently specified for illocutionary force. The clauses are now independent, with no 'link' between the two clauses. Each clause can also be independently specified for status. The suffix -o, then, encodes a switch reference relationship between clauses that have different actors, and a dependent relationship between the clauses.

3.4 Temporal relations

Temporal relations such as simultaneous action involving same or different actors have been discussed in 3.2.3 and 3.3.1.2 respectively. Verbs that occur in same actor simultaneous action clauses have been analysed as serial verb constructions because of the lack of suffixation on the non-final verbs, which contrasts with sequential action.

Same actor simultaneous actions must occur within the same time frame, which may partially overlap. This also includes the spatial setting. Different actor simultaneous action was discussed above. Kuman also possesses a marked sequential relation in dependent verbs.

3.4.1 Sequential action

Sequential action is marked by the suffix -dite. The actors of the clause, however, must be the same. Consider the examples below.

53a. ye akete pidre ikine ugwa

ye akete e-dite ikine u -uw -ka -a

3 other side go-SEQ half come-3SG-REALLY-DECL

She went to the other side and then returned.

53b. na kadre oku unaglka

na kan-dite oku u -nagl -i -ka -a

1SG see-SEQ later come-IRREALIS-1SG-REALLY-DECL

I will see (it) and then come later.

In the examples above, specification for actor, status and illocutionary force are taken from the following independent verb. If the actors are different, the structure used is that described in 3.3.1.2.

3.5 Status

In the previous chapter, I discussed the status suffixes on independent verbs. Further distinctions are also possible within the status continuum. Consider the following examples below.

54a. kam sinabuka pai dugwa

kam si -nagl -bu -ka -a pai
rain hit-IRREALIS-3SG-REALLY-DECL lie
di -uw -ka -a
say-3SG-REALLY-DECL

It is possible that it will rain.

54b. ka digwa panabo

ka di-iw-ka-a pai-nagl-bu-o
words say-3SG-2/3PL REALLY DECL lie-IRREALIS-3SG-?
Is it possible that what they said will come true?

In the above examples, the sentences indicate 'possibility'. In both sentences, a fully independent verb with its core argument is embedded as an argument of the following independent verb. That is, kam sinabuka 'it will rain' and ka digwa 'they said words' is embedded in pai dugwa 'it seems' and panabo 'will it lie' respectively. The specification for illocutionary force occurs on the superordinate clause is that of the utterance as a whole.

A second method of constructing sentences that express events that could possibly happen occurs when dependent verbs in the irrealis status are marked with the perfective aspect suffix. Consider the examples below.

55a. kam sinabedi ikine wiga

kam si -nagl -bu -edi ikine u -i -ka -a
rain hit-IRREALIS-3SG-PERF half come-1SG-REALLY-DECL
There was a possibility that it might rain, so I
returned.

55b. ye na kanaiglmedi teke paiga

ye na kan-nagl -im -edi teke
3 1SG see-IRREALIS-2/3PL-PERF ?
pai-i -ka -a
lie-1SG-REALLY-DECL
There was a possibility that they might see me, so I
hid.

The above examples are different to examples 54a. and 54b. In 54a. and 54b., the subordinate junct was embedded in the superordinate junct. In 55a. and 55b., there is no embedding involved. The two clauses are conjoined. In all four sentences, modality is expressed. There is, however, a further semantic difference with examples 55a. and 55b. In these sentences, the actor of the second clause does not want the event specified in the first clause to become reality. That is, in example 55a., the actor of the second clause -i '1SG' hurries home to avoid getting wet. Similarly, in 55b., the actor of the second clause -i '1SG' hides to avoid being seen.

The third method of expressing status occurs with the dubitative suffix -da discussed in 2.7.2.2. Unlike the previous two methods, the actor must be the same for both verbs. A

further restriction is that the verbs must be the same and can only occur with the declarative illocutionary force or the perfective suffix. This is illustrated in examples 56a. and 56b. respectively.

56a. ye koboglo galta gaiglkwa
ye koboglo gagl-da gagl-iw -ka -a
3 stone burn-MAYBE burn-2/3PL-REALY-DECL
Maybe they burnt stones.

56b. ye bugla kada kadu
ye bugla kan-da kan-du
3 pig see-MAYBE see-PERF 3SG
Maybe she saw the pig.

The first verb in the series is, of course, a dependent verb because the specification for actor, status and illocutionary force is taken from the following verb.

CHAPTER 4

NEXUS AND JUNCTURE

In this chapter, I will discuss the interaction between nexus and juncture, and outline the different possible nexus juncture combinations in Kuman. The theory of interclausal relations was originally proposed by Olson (1981) in his discussion of Barai, a Papuan language. Foley and Van Valin (1984) in their book develop this theory, giving it a universal basis.

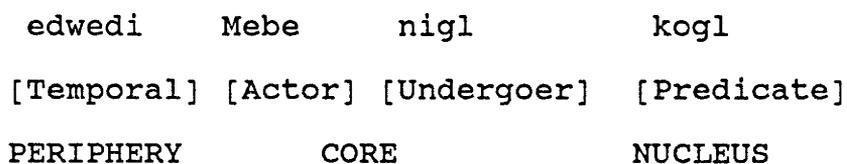
4.0 Layers of the clause

Clauses are organized into three different layers: nuclear, core and periphery. These layers are illustrated below with the following example from Kuman.

57. edwedi Mebe nigl koglkwa
edwedi Mebe nigl kogl -uw -ka -a
yesterday Mebe water fetch-3SG-REALY-DECL
Yesterday Mebe fetched water.

The inner most layer of the clause, the nucleus, consists of the predicate or the verb stem. In the example above, kogl 'fetch' is the nucleus. The next layer of the clause is the core layer, which consists of the nuclear layer plus the core arguments of the nucleus, which is dependent on the valency of the predicate.

In the example above, the core arguments of the verb kogl 'fetch' are Mebe 'Mebe' and nigl 'water', which are actor and undergoer respectively. The peripheral layer is the outer most layer of the clause, and consists of the core and non-core arguments. The peripheral layer has no control over how many arguments a verb can take. Oblique noun phrases such as the locative and temporals are the prime candidates for the peripheral layer. The different suffixes that are marked on the verb, such as illocutionary force or status are not constituents of the respective layers, but are 'operators over the entire layer' (Foley and Van Valin 1984:208). This will be discussed in 4.1. Below is a diagram illustrating the different layers.



4.1 Operators

Each of these layers have their own operators, that is, a set of syntactic or morphological devices that are used to distinguish one layer from the other, which 'have as the domain of their scope their corresponding layer, but in the manner of operators, are not themselves constituents of that layer' (Foley and Olson 1984:22)

4.1.1 Nuclear operators

The nuclear operators are aspect and directionals, the former being more common than the latter. Aspect has scope only over the nucleus, indicating whether an action has been terminated or occurs over a period of time. In the previous chapter, I discussed the verbs mogl 'stay' and kod 'finish' that mark aspect in Kuman. In a simple clause, that is, a clause with only one predicate, the aspectual operator occurs after the verb stem that denotes the action, and carries the obligatory inflections of actor marking and illocutionary force. Consider the examples below.

58a. ye adigl moglkwa
ye adigl mogl-uw -ka -a
3 stand stay-3SG-REALLY-DECL
She is standing.

58b. ye okai ne kodugwa
ye okai ne kod -uw -ka -a
3 sweet potato eat finish-3SG-REALLY-DECL
She finished eating the sweet potato.

The only function of the aspectual verbs mogl 'stay' and kod 'finish' is to aspectually modify the verbs, but are not part of the complex nucleus. Foley and Van Valin (1984:210) note that aspect occurs close to the verb stem. Consider the following example.

58c. ye mokona gagl kodo giglag di moglkwa
ye mokona gagl kod giglag di mogl-uw -ka -a
3 greens cook finish song say stay-3SG-REALLY-DECL
She finished cooking the greens and is singing.

In example 58c., both the completive aspect and the progressive aspect occur together in the same sentence, but each one modifies a different nucleus. The completive aspect kod 'finish' modifies only the predicate it follows, which is gagl 'cook' while mogl 'stay' only has scope over the predicate di 'say'. The aspectual operators only have scope over the verb stems they occur closest to. In Kuman, aspect is the only nuclear operator that will be discussed here because Kuman does not have directional nuclear operators.

4.1.2 Core operators

Modality is an operator over the core layer, which has in its scope the nucleus plus its core arguments, because it 'expresses the relationship between the actor and his accomplishment of the action' (Foley and Van Valin 1984:215). The notion of modality was discussed in the previous chapter. Example 41a. is repeated here as 59.

59. Mebe kwin bogl kanugwa

Mebe kwin bogl kan-uw -ka -a

Mebe gin rummy cut see-3SG-REALLY-DECL

Mebe knows how to play gin rummy.

In the example above, modality is expressed by the verb kan 'see', which modifies the nucleus bogl 'cut' and its core arguments Mebe 'Mebe' and kwin 'gin rummy'.

4.1.3 Peripheral operators

Operators at the peripheral layer are status, both specific and general and illocutionary force. Of these operators, illocutionary force is the outermost operator, always occurring finally on an independent verb.

4.2 Juncture

In complex sentences, any one of these layers may be joined to another layer of the same type. Joining of the same layers, nuclear, core and periphery is referred to as a juncture. In nuclear junctures, two or more verbs are joined together into a complex nucleus that share all core and peripheral arguments. In core layer junctures, each nucleus independently selects its core arguments; however the peripheral nominal arguments are shared by both cores. In peripheral layer junctures, two clauses, each with their own independent nucleus, core and peripheral arguments are joined together.

4.2.1 Nuclear and core layer junctures

I will discuss both nuclear and core junctures here because both have a similar construction. Serial verb constructions illustrate junctures at both nuclear and core level. Consider the following examples.

60a. edwedi ye ka adigl dugwa
edwedi ye ka adigl di -uw -ka -a
yesterday 3 words stand say-3SG-REALLY-DECL
Yesterday she stood speaking.

60b. edwedi ye adigl ka dugwa
edwedi ye adigl ka di -uw -ka -a
yesterday 3 stand words say-3SG-REALLY-DECL
Yesterday she stood and spoke.

Examples 60a. and 60b. correspond to nuclear and core junctures respectively. The peripheral nominal argument edwedi 'yesterday' modifies the whole clause in both nuclear and core layer junctures. In the nuclear juncture (60a.), the core arguments are shared by the complex nucleus equally. The core layer juncture (60b.) on the other hand, consists of two nuclei, each one independently selecting its undergoer argument. The only restriction in nuclear and core layer junctures is that the

actor must be shared by all predicates.

The intonation pattern is also different with respect to nuclear and core level junctures. In nuclear level junctures there is only one sentential intonation pattern, with stress occurring penultimately. In core layer junctures, each core has its own stress. This is illustrated below in examples 61a. and 61b. respectively.

61a. ye ka adigl dugwa

ye ka adigl di -uw -ka -a

3 words stand say-3SG-REALLY-DECL

She stood speaking.

61b. ye adigl ka dugwa

ye adigl ka di -uw -ka -a

3 stand words say-3SG-REALLY-DECL

She stood and spoke.

The nuclear operator, aspect, can also be used to distinguish nuclear and core layer junctures. Contrast the following examples.

62a. ye ka adigl di moglkwa

ye ka adigl di mogl-uw -ka -a

3 words stand say stay-3SG-REALLY-DECL

She is standing up (and) speaking.

62b. ye adigl kodo ka di moglkwa

ye adigl kod ka di mogl-uw -ka -a

3 astand finish words say stay-3SG-REALY-DECL

She finished standing up and is speaking.

In nuclear level junctures, the aspect marking verb occurs finally in the sequence of verbs, modifying all predicates before it, as example 62a. illustrates. In core layer junctures, each predicate may independently select its aspect. In example 62b., the aspectual verb kod 'finish' modifies the predicate adigl 'stand' only, while mogl 'stay' modifies di 'say' only.

Certain adverbs also function in a similar manner. Consider the examples below.

63a. ye ka kanane adigl dugwa

ye ka kanane adigl di -uw -ka -a

3 words long time stand say-3SG-REALY-DECL

She stood speaking for a long time.

63b. ye kanane adigl ka dugwa

ye kanane adigl ka di -uw -ka -a

3 long time stand words say-3SG-REALY-DECL

She stood for a long time and spoke.

63c. ye adigl ka kanane dugwa
 ye adigl ka kanane di -uw -ka -a
 3 stand words long time say-3SG-REALY-DECL
 She stood and talked for a long time.

The adverb kanane 'long time' in the examples above illustrates the difference between nuclear and core level junctures. Examples 63a. 63b. and 63c. correspond to nuclear and core layer junctures respectively. In 63a., kanane 'long time' occurs before the complex nucleus, modifying the complex nucleus. In examples 63b. and 63c. on the other hand, kanane 'long time' can only modify the predicate it precedes, as is expected of core layer junctures.

Negation also operates in the same manner. Contrast the following examples.

64a. ye ka adigl dikrukwa
 ye ka adigl di -kit-uw -ka -a
 3 words stand say-NEG-3SG-REALY-DECL
 She did not stand speaking.

64b. ye adiglkre ka dugwa
 ye adigl-kit ka di -uw -ka -a
 3 stand-NEG words say-3SG-REALY-DECL
 She did not stand but spoke.

64c. ye adiglkre ka dikrukwa

ye adigl-kit ka di -kit-uw -ka -a

3 stand-NEG words say-NEG-3SG-REALLY-DECL

She did not stand (nor) speak.

The negative suffix -kit modifies the complex nucleus in 64a., while in 64b., it modifies adigl 'stand'. If both predicates are to be negated, each predicate must be independently specified for negation as example 64c. illustrates. In the above examples, 64a. illustrates a nuclear layer juncture, while both examples 64b. and 64c. are core layer junctures respectively. This indicates that the negative suffix -kit in Kuman is a core operator.

Certain semantic relationships occur at the nuclear or core layer juncture. I will limit discussion here to the benefactive construction. Consider the following examples below.

65a. Deri bo bat narukwa

Deti bo bagl nat -uw -ka -a

Deri sugarcane cut give me-3SG-REALLY-DECL

Deri cut sugarcane for me.

65b. Deri bo bagl kabe narukwa

Deti bo bagl kabe nat -uw -ka -a

Deri sugarcane cut banana give me-3SG-REALLY-DECL

Deri cut sugarcane and gave me banana.

65c. Deri bo nare kabe kua togwa
 Deti bo nat kabe kua
 Deri sugarcane give me banana bird
 te -uw -ka -a
 give-3SG-REALLY-DECL

Deri gave me sugarcane and gave the bird bananas.

The semantics of the predicate nat 'give' was discussed in 3.2.4. That is, first person recipients are encoded in the verb. In the examples above, 65a. is a nuclear level juncture, while examples 65b. and 65c. are core layer junctures. In 65a., all core arguments are shared equally by the complex predicate. Contrast this with 65b. and 65c. In 65b, the predicates bagl 'cut' and nat 'give to first person' each select their core undergoer arguments, which are bo 'sugarcane' and kabe 'banana'. In this example (65b.), kabe narukwa 'he gave me bananas' is a benefactive construction while bo bagl '(he) cut sugarcane' is not. These clauses are joined at the core level because each predicate has independently selected its core undergoer arguments but they share the same core actor argument. Note that in example 65c., the beneficiaries of the two clauses are different. The beneficiary of the first clause is first person singular, while in the second clause, it is the bird. This example is also of a core layer juncture.

In the above discussion, I have attempted to illustrate some of the differences between nuclear and core layer junctures, which are pervasive in Kuman. In nuclear layer junctures, the complex predicate equally shares both actor and

undergoer arguments, while in core layer junctures, each predicate independently selects its core undergoer argument, but the actor must be shared by all predicates. In nuclear layer junctures, all core arguments occur to the left of the predicates, while in core layer junctures, each junct has its own. Both nuclear and core junctures, however, share the same peripheral nominal arguments and peripheral operators.

4.2.2 Peripheral junctures

In peripheral layer junctures, clauses with independent nuclei, cores and peripheries are joined together. A larger number of semantic distinctions are possible at this level because none of the restrictions that occur with nuclear and core layer junctures apply. In peripheral layer junctures, each predicate may independently select its core and peripheral arguments. Consider the example below.

66. ene erme mokona sin taginma koboglo garamna
 ene etme mokona si -n taginma koboglo
 2 today greens hit-2SG tomorrow stone
 gagl-nagl -mun -a
 burn-IRREALIS-1PL -DECL
 You pick greens today and tomorrow we will burn
 stones.

In the example above, the predicate si 'hit' has the following core and peripheral arguments: ene '2SG' which is cross-

referenced on the predicate by the suffix -n '2SG', mokona 'greens' and erme 'today'. Likewise, the predicate gagl 'burn' has the following core and peripheral arguments. The core actor argument is indicated by the suffix -mun '1PL' while the core undergoer argument is koboglo 'stone'. The peripheral nominal argument taginma 'tomorrow' is associated only with the junct which includes it. In peripheral junctures, each predicate can also independently select its general status marker; however, the illocutionary force suffix which occurs on the independent verb modifies both juncts.

Peripheral junctures are richer than nuclear or core layer junctures. This is because a larger number of morphemes are suffixed to the dependent verb indicating the type of relationship between the clauses, person number of its actor, and each predicate or complex predicate may independently select its own peripheral arguments.

4.3 Nexus types

While the term juncture refers to the levels in which clauses are joined, that is nuclear with nuclear, core with core, periphery with periphery, nexus refers to 'the nature of syntactic linkage between two clauses' (Foley and Van Valin 1984:238). Traditionally, only two nexus types have been recognized: coordination and subordination. According to Olson (1981), a coordinate nexus encodes an equivalence relation between the relevant conjuncts. That is, each conjunct is linked at the same structural level with none of the conjuncts embedded

in each other. These may consist of verbs in juxtaposition, or dependent verbs with certain suffixes that signal a coordinate relationship between the two conjuncts. The type of semantic information encoded on these dependent verbs are temporal relations. In fact, Franklin (1971:103) has pointed out that

generally speaking, in New Guinea languages, such time relationships have not been described as coordinate clauses. They have, rather, been described as dependent and independent clauses within a sentence. The dependent clauses which involve time relationships are marked by 'medial' verbs...The cooccurring independent clauses on the other hand are marked by 'final' verbs.

In coordinate nexus, each conjunct may have a different illocutionary force and core argument because neither conjunct depends on the other. In subordinate nexus, one conjunct must be embedded in another conjunct or is an argument of the predicate of the superordinate conjunct. The clauses in a subordinate nexus are in a dependency relationship. Olson (1981:200) pointed out the contrast between coordinate and subordinate nexus by saying that

The result of a subordinate nexus that encodes a part-whole relation is still a single unit though internally complex, whereas the result of a coordinate nexus that encodes an equivalence relation is a sequence of such units, a sequence of wholes.

Olson (1981) follows this by a discussion illustrating the difference in coordinate and subordinate nexus from English and Barai. Similarly, Foley and Van Valin (1984) discuss the differences in these two nexus types, outlining certain tests

that can be applied to distinguish nexus types.

The notion of dependency and embedding of one clause in another is used to contrast subordinate nexus with coordinate nexus whose clauses are not dependent nor embedded in each other. A third nexus type, proposed by Olson (1981), is called the cosubordinate nexus, which refers to constructions in which one clause is not embedded in the other, yet each is dependent on the for certain features. Cosubordinate nexus, like clauses in subordinate nexus are in a dependency relation, but, like coordinate nexus, one clause is not embedded in the other.

4.4 Interaction of juncture and nexus

In 4.2, I discussed the three juncture types: nuclear, core and peripheral junctures, while in 4.3 I discussed the juncture types: coordinate, subordinate and cosubordinate. In this section, I will discuss the combination of both juncture and nexus. Because there are three different juncture and nexus types, there are theoretically nine possible juncture-nexus combinations. Individual languages differ in how many juncture-nexus combinations can occur. For all languages, however, nuclear subordinate junctures, where one nucleus is embedded in another is impossible. In this section, I will discuss the possible juncture-nexus combinations in Kuman.

4.4.1 Nuclear coordinate nexus

In nuclear coordinate constructions, each nucleus or

complex nucleus is independently specified for the nuclear layer operator aspect. Both nuclei, of course, share all core and peripheral arguments and operators. Consider the examples below.

67a. ye gaugl ere kodo pi ame dugwa
ye gaugl et kod e ame di -uw -ka -a
3 laughter do finish go 'sit' say-3SG-REALLY-DECL
She finished laughing and sat down.

67b. ye mokona gagl kodo ne moglkwa
ye mokona gagl kod ne mogl-uw -ka -a
3 greens cook finish eat stay-3SG-REALLY-DECL
She finished cooking the greens and is eating them.

In the above examples, the nuclei are independently specified for aspect. In 67a. kod 'finish' modifies only gaugl et 'laugh'. gaugl 'laughter' should not be interpreted as an argument of et 'do' because it functions as an adjunct, restricting the meaning of the generic verb et. In 67b., there are two aspectual operators kod 'finish' and mogl 'stay'. kod modifies the predicate gagl 'cook', while mogl modifies only the predicate ne 'eat'.

4.4.2 Peripheral coordinate nexus

In peripheral coordinate nexus, each nucleus has its own core and peripheral arguments and peripheral operators. Consider

the examples below.

68a. ene nigl panatnga ba nigl wakai yomo
ene nigl pai-nagl -n -ka -a ba nigl wakai
2 water lie IRREALIS-2SG-REALY-DECL but water good
ye -um -o
put-3SG-Q
You can have a wash, but is the water clean?

68b. ye mige yana udu ba no mige paikrukwa
ye mige yana u -du ba no mige
3 money 'beg' come-PERF 3SG but 1PL money
pai-kit-uw -ka -a
lie-NEG-3SG -REALLY-DECL
He came begging for money, but we have no money.

68c. ene ede sukuno mo yoko wan yugugl une
ene ede suk -n -o mo yoko wan yugu -gle
2 tree chop-2SG-Q or 'do nothing' wander house-LOC
u -n -e
come-2SG-DECL
Did you chop firewood or are you coming home from
doing nothing?

In the examples above, the juncts are all independently marked for illocutionary force. In 68b. the verb u 'come' is marked with the perfective suffix, but, as I have mentioned previously,

illocutionary force is not marked when the perfective aspect is used. The junctcs are joined by the particles ba 'but' and mo 'or'. In 68a. the complex predicate nigl pai 'wash' is marked with the irrealis status suffix -nagl, and the declarative -a. The second junct, which is linked by ba is marked with the illocutionary force suffix -o, indicating an interrogative. The predicate is also in the realis status, which has zero (0) marking. Each predicate has independently selected its own core arguments. In 68b., the perfective aspect suffix -du has scope only over the complex predicate yana u 'come begging'. The second junct is linked by the particle ba 'but'. The predicate is marked with -a, indicating declarative force. Similarly, the negative suffix -kr, which is a core layer operator, only has scope over the second junct. In 68c., the junctcs are linked by the particle mo 'or'. The first junct ene ede sukuno 'did you chop firewood' is marked with the interrogative force -o. The second junct is marked with the declarative force -e. In this example, there is no free pronoun in the second junct; however, note that the actor -n '2SG' is indicated on both predicates. In all the examples above, each junct is independently specified for illocutionary force and status. Because of this, each junct may occur as an independent sentence, but, in this example, are joined by the particles mo 'or' or ba 'but'. If mo or ba does not occur between the junctcs, there is no longer any link between the junctcs as shown in the example below.

69. ene ede sukuno ene yoko wnw yugugl une.

ene ede suk -n -o ene yoko wan yugu-gle
2 tree chop-2SG -Q 2 do nothing wander house-LOC
u -n -e
come-2SG-DECL

Did you chop firewood? You are coming home from doing
nothing.

4.4.3 Peripheral subordinate nexus

In peripheral subordinate nexus, subordination may be indicated by the particles pre 'because' and dagl 'call'. The particle pre is homophonous with the verb pre 'hear'. pre 'because' and dagl 'call' are not specifically subordinating particles because they perform a number of different functions. Consider the examples below.

70a. ye unabuka pre sugl munga

ye u -nagl -bu -ka -a pre sugl
3 come-IRREALIS-3SG-REALLY-DECL because ?
mogl-mun-ka -a
stay-1PL-REALLY-DECL

Because she is coming, we are waiting.

In the above example, subordination is indicated by pre 'because'. In such constructions, the subordinate clause must always be marked for declarative force because the information

is presupposed. The superordinate junct, however, can be marked with either the imperative, interrogative and declarative force. The illocutionary force of the superordinate junct has scope only over the superordinate junct. Consider the following examples.

70b. ye Mosbi enabuka pre ene kai etno

ye Mosbi e -nagl -bu -ka -a pre ene

3 Moresby go-IRREALIS-3SG-REALLY-DECL because 2SG

kai et-n -o

tears do-2SG-Q

Are you crying because she is going to Port Moresby?

70c. ene kai etnga pre ye Mosbi enabo

ene kai et-n -ka -a pre ye Mosbi

3 tears do-2SG-REALLY-DECL because 3 Moresby

e -nagl -bu -o

go-IRREALIS-3SG-Q

Is she going to Port Moresby because you cried?

In example 70b., the act of crying is questioned, whereas in 70c., it is the event of going to Port Moresby that is being questioned. The subordinate junct, which is always presupposed, must always be marked with the declarative. It would be ungrammatical if the subordinate junct were marked for the interrogative. In clauses where one of the juncts is to be marked for the interrogative, this must always function as the

superordinate junct, as examples 70b. and 70c. illustrate.

The second type of subordinate construction which also involves pre 'because' is illustrated below. Consider the following examples.

71a. ye Kod enabuka pre nigl pagwa

ye Kod e -nagl -bu -ka -a pit nigl

3 Kod go-IRREALIS-3SG-REALLY-DECL because water

pai-uw -ka -a

lie-3SG-REALLY-DECL

Because she is going to Kod she is having a wash

71b. ye Kod ene pre nigl pagwa

ye Kod e -nagl pit nigl pai-uw -ka -a

3 Kod go-IRREALIS because water lie-3SG-REALLY-DECL

Because she is going to Kod, she is having a wash.

In both of the examples above, the first clause in each of the sentences is embedded in the following one. In 71a. the clause is again marked in the declarative. This is similar to example 70a. In example 71b., however, note that the subordinate junct is not marked for actor, nor is the clause marked as a declarative. Note the semantic difference between 71a. and 71b., where the latter is a modal construction. ye Kod ena 'she wants to go to Kod' is a desiderative construction which is subordinated to the following clause by pre 'because'. The actor, in this case is unmarked on the subordinate junct. As I

mentioned in the previous chapter, in most desiderative constructions the wisher and the actor must be the same.

dagl 'call' is also a modal construction which subordinates the first clause to the following clause. Consider the following examples.

72a. ene kaya ninakiutn dagl agl tenaba

ene kaya ne -nagl -kiut -n dagl agl

2 food eat-IRREALIS-not want-2SG 'call' dog

te -nagl -bu -a

give-IRREALIS-3SG-DECL

If you don't want to eat the food, she will give it to the dog.

72b. ene kaya ninakiutn agl tenaba

ene kaya ne -nagl -kiut -n agl

2 food eat-IRREALIS-not want-2SG dog

te -nagl -bu -a

give-IRREALIS-3SG-DECL

If you don't want to eat the food, she will give it to the dog.

Note that in the examples above, there is no semantic difference when dagl 'call' is used (72a.) or omitted (72b.); the first junct ene kaya ninakiutn 'if you don't want to eat' is still subordinate to agl tenaba 'she will give it to the dog'.

The above constructions are not the only possible kinds of

peripheral subordinate nexus in Kuman. Consider the following example.

73. kam sinabuka pai dume

kam si -nagl -bu -ka -a pai di -um -e

rain hit-IRREALIS-3SG-REALLY-DECL lie say-3SG-DECL

It is possible that it will rain.

It seems (looks as if) it is going to rain.

In the previous chapter, I discussed certain status constructions which which involved pai dume 'it seems', 'it is possible'. In such constructions, the junct that occurs before pai dume is subordinate to it. Again, the embedded conjunct can only be marked as a declarative. There seems to be only one possible juncture with subordinate nexus, and that is at the peripheral level. At this stage of analysis, there do not seem to be any cases of subordinate nexus at the core level, but further research may prove otherwise. There are three different types of peripheral subordinate constructions using pre 'because', daql 'call' and pai dume 'it seems'. When pre is used, the subordinate clause may be inflected for declarative illocutionary force. This is dependent on whether the subordinate clause is a modal construction, as examples 71a. and 71b. illustrate. With modal constructions, illocutionary force is not marked, but the juncts are still subordinate to the superordinate junct because of the particles pre or daql, as examples 71b. and 72a. illustrate. When modality is not expressed in the subordinate junct, the suffix for declarative

illocutionary force must always be used.

4.4.4 Nuclear co-subordinate nexus.

Although the structure of nuclear co-subordinate nexus and nuclear coordinate nexus are similar, there is an important structural difference. In nuclear coordinate nexus each nucleus may be independently specified for the nuclear operator aspect. In nuclear cosubordinate nexus, on the other hand, the aspectual operator occurs finally after the series of verbs and the nuclei are all under the scope of a single operator. Contrast example 74a. and 67b. (rewritten as example 74b.).

74a. ye mokona gat ne kodugwa

ye mokona gagl ne kod -uw -ka -a

3 greens cook eat finish-3SG-REALLY-DECL

She cooked and ate the greens

74b. ye mokona gagl kodo ne moglkwa

ye mokona gagl kod ne mogl-uw -ka -a

3 greens cook finish eat stay-3SG-REALLY-DECL

She finished cooking the greens and is eating them.

Example 74a. illustrates nuclear cosubordinate nexus, while example 74b. illustrates nuclear coordinate nexus. In the former example, the predicates gat ne 'cook and eat' are under the scope of the single aspectual operator kod 'finish'. Each nucleus in 74b., on the other hand, is independently specified

for aspect. That is, kod scope only over gagl 'cook', while mogl has scope only over ne 'eat'. In nuclear cosubordinate nexus, there is only one sentential intonation pattern, but in nuclear coordinate nexus, there is a significant pause after the aspectual operator and the following nucleus. The core actor and undergoer arguments are shared by all predicates.

4.4.5 Core cosubordinate nexus

In core cosubordinate nexus, all verbs must share a core argument, core operators and peripheral arguments and operators. Consider the examples below.

75a. ye pi abu inabuka

ye e abu i -nagl -bu -ka -a

3 go woman take-IRREALIS-3SG-REALLY-DECL

He will marry a woman.

75b. ye oglo si nigl ebrika

ye oglo si nigl e -bit -ka -a

3 jump hit water go-2/3DL-REALLY-DECL

They (2) jumped over the river.

In the examples above, all predicates share the core actor argument. The peripheral operators, status and illocutionary force are also shared by all predicates. In 75a., the irrealis status suffix -nagl modifies both verbs. In these construction, the predicates that can occur as the first verb is restricted to

motion verbs come, go, or jump.

4.4.6 Peripheral cosubordinate nexus

In peripheral cosubordinate nexus, two juncts are in a dependency relationship, but each can independently select its core arguments; however, one junct is dependent on the other for certain features. Consider the following examples.

76a. ye mokona si moglkwo na u plau diga

ye mokona si mogl-uw -ka -o na u plau

3 greens hit stay-3SG-REALLY-DA 1SG come ?

di -i -ka -a

say-1SG-REALLY-DECL.

While she was picking greens, I arrived.

76b. na kankriko ed ogwa

na kan-kit-i -ka -o ed e -uw -ka -a

1SG see-NEG-1SG-REALLY-DA motion go-3SG-REALLY-DECL

I did not see her and she went.

In the above examples, the first junct is dependent on the following junct for specification of illocutionary force. Each nucleus has independently selected its core arguments. The switch reference morpheme -o indicates that the actor of the following clause is not the same as the previous one. The aspect

marking verbs mogl 'stay' and kod 'finish' can also be used to mark the temporal relationship between clauses. Contrast 76a. with 76c. below.

76c. ye mokona si kodugwo na u plau digā

ye mokona si kod -uw -ka -o na u plau

3 greens hit finish-3SG-REALLY-DA 1SG come ?

di -i -ka -a

say-1SG-REALLY-DECL

When she finished picking the greens, I arrived.

In 76a., the events are simultaneous, while in 76c., the events are sequential. There are restrictions in these constructions when the aspect marking verbs are used to encode different temporal relations. The peripheral nominal marking the temporal must be the same for both junct. Peripheral locative arguments, however need not be the same for either junct. This is because there is some degree of overlapping between the events; therefore the temporal argument must modify both junct. Both junct must also have the same status, namely the realis status.

A similar type of restriction with status also occurs when the aspect marking verbs are not used. Consider the following examples.

77a. *na kankraglko ed ogwa

na kan-kit-nagl -i -ka -o ed
1SG see-NEG-IRREALIS-1SG-REALY-DA motion
e -uw -ka -a
go-3SG-REALY-DECL

77b. na kankriko ed enabuka

na kan-kit-i -ka -o ed
1SG see-NEG-1SG-REALY-DA motion
e -nagl -bu -ka -a
go-IRREALIS-3SG-REALY-DECL

I haven't seen her and (now) she is going.

Example 77a. is ungrammatical because the first junct is marked for irrealis status, while the second junct is in the realis status. In 77b., the sentence is grammatical because the irrealis status suffix occurs on the independent verb and modifies both verbs. This occurs when -o is used.

The person number suufixes that occur on dependent verbs are also used in cosubordinate nexus. In these clauses, the events need not be simultaneous. Likewise, the temporal and nominal arguments need not be the same. Consider the following examples.

78a. ye edile pi kokon baran no nigle pi nigl korabugla
 ye edi -gle e kokon bagl-nagl -n no nigl-gle
 3 tree-LOC go kapiak cut -IRREALIS-2SG 1PL water-LOC
 e nigl kogl -nagl -bugl-a
 go water fetch-IRREALIS-1DL -DECL
 She will go and cut kapiak in the bush and we (2)
 will go to the river and fetch water.

78b. ene taginma edi sukun pok dinan koboglo garamna
 ene taginma edi suk -n pok di -nagl -n
 2 tomorrow tree chop-2SG 'sunset' say-IRREALIS-2SG
 koboglo gagl-nagl -mun-a
 stone burn-IRREALIS-1PL-DECL
 In the morning you chop firewood, and in the
 afternoon, we will burn stones.

78c. *ye kaya kei moran no nigle obugla
 ye kaya kei mogl-nagl -n no nigl -gle
 3 food cook stay-IRREALIS-2SG 1PL water-LOC
 e -bugl-a
 go-1DL -DECL

In 78a., each junct independently selects its peripheral locative noun phrases edile 'in the bush' and nigle 'to the river'. Similarly, in 78b., each junct has its own peripheral temporal nominal taginma 'tomorrow' and pok dinan 'in the afternoon'. Each nucleus has its own core arguments; however, specification for illocutionary force is taken from the

independent verb. The person number suffixes of the dependent verb encodes a dependency relationship between the clauses. Note that the status is also the same for both verbs. If the status of the dependent verb is different to that of the independent verb, the sentence is ungrammatical, as example 78c. illustrates.

In constructions where the person number suffixes of the dependent verbs are used, the actors of the two clauses may be the same or different, as the examples above show. In these constructions, there is no obligatory switch in actor, as there is when -o is used. Consider the following examples.

79a. ene ugl pai motn kide sinatna
 ene ugl pai mogl-n kide si -nagl -n -a
 2 sleep lie stay-2SG bad hit-IRREALIS-2SG-DECL
 You keep on sleeping and you will get sick.

79b. ene kua ake motn goraba
 ene kua ak mogl-n gogl-nagl -bu -a
 2 bird hold stay-2SG die -IRREALIS-3SG-DECL
 You keep holding the bird, and it will die.

In example 79a., the actor of the first junct is coreferential with the actor of the second junct. In 79b., on the other hand, the actor of the first junct is not coreferential with the actor of the second junct. Rather, the undergoer of the first junct is the actor of the second junct. Note that there is no switch reference suffix on the dependent verb. The first junct is in a

dependency relationship to the following junct, because specification for illocutionary force is taken from the following independent verb.

Sequential action may be specifically indicated at the peripheral level in cosubordinate nexus. In this case, the actors of both juncts must be the same. This is different to example 76c. in which the aspect marking verb kod was used to indicate sequential action. This only occurs when the actor of the first clause is not the same as that of the following clause. When -dite 'SEQ' is used, specification for the actor is taken from the following independent verb. Consider the following examples.

80a. ye agigle ake nu sidre teke ogwa
ye agigl -e ak nu si -dite teke
3 brother-3POSS hold ? hit-SEQ ?
e -uw -ka -a
go-3SG-REALLY-DECL
He pushed his brother and then he ran away.

80b. ene erme pidre taginma ikine unatno
ene etme e -dite taginma ikine u -nagl -n -o
2 today go-SEQ tomorrow half come-IRREALIS-2SG-Q
Will you go today and then return tomorrow?

In the examples above, sequential action is marked by -dite. The actor is the same for both juncts, and the temporal nominal arguments for each junct can be different. In this construction,

the first junct cannot be independently specified for status as this is taken from the following independent verb.

Kuman does not have subordinate nexus at the nuclear level. In fact, Foley and Van Valin (1984) mention that no language has this nexus juncture combination because it is impossible for a nucleus to be embedded in another. Core coordinate or core subordinate nexus also do not exist in Kuman. With core subordinate nexus, there does not seem to be any clear cut cases, and further research into Kuman is required to validate this claim that the language lacks these as well. The notion of nexus and juncture is a complex issue and needs to be discussed in depth. In this thesis, I have only outlined the possible types found in Kuman.

At the nuclear level, Kuman has both coordinate and cosubordinate nexus. This was discussed in 4.4.1 and 4.4.4 respectively. In nuclear coordinate nexus, the predicates independently select their nuclear operator, aspect. In nuclear cosubordinate nexus, the aspectual operator must occur finally in the series of verbs and must modify all the predicates. They must, of course, share all core and peripheral arguments. At the core level, only cosubordinate nexus exists. This was discussed in 4.4.5. In this nexus type, the first verb in the series of verbs is restricted to motion verbs, such go, come, or jump. In this construction, a core nominal argument intervenes between the serialized predicates. The peripheral layer is the richest in Kuman, because all three nexus types occur. In coordinate nexus at the peripheral level, each junct is independently specified for status and illocutionary force. This is linked by

ba 'but' or mo 'or'. In subordinate nexus at the peripheral level, the first junct is subordinated to the following junct by pre 'because' or daql ''call''. The first junct may independently be inflected only for the declarative force because the information in the embedded clause can only be presupposed, and therefore may not be questioned. When modality is expressed, illocutionary force is not marked on the subordinate verb. In cosubordinate nexus, the switch reference morphemes can occur on the first junct. The aspect marking verbs used in conjunction with the switch reference morpheme to encode simultaneous or sequential action was also discussed. Unlike subordinate and coordinate nexus, illocutionary force does not occur on the verb of the first junct, as this is taken from the following junct. There are similar restrictions with regards to status. That is, the status of both juncts must be the same. If they are different, the sentence is ungrammatical.

NOTES

1. See Piau (1981).
2. Rules regarding the different surface derivations of the locative suffix -gle have not been discussed here because it is not relevant to the topic.
3. pi is the suppletive form of the verb e 'go'.

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