A GRAMMATICAL SKETCH OF BERIK[1]

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UNCEN-SIL

1.0 INTRODUCTION

2.0 WORDS

3.0 PHRASES

4.0 CLAUSES

5.0 SENTENCES

IKTHISAR

Makalah ini adalah ringkasan tatabahasa bahasa Berik berdasarkan data yang dikumpulkan pengarang selama ia tinggal bersama masyarakat Berik, di Irian Jaya, Indonesia. Tingkat tatabahasa yang dideskripsikan adalah: kata, frasa, klausa dan kalimat. Model tagmemik digunakan sebagai model penganalisaan.

Kata, unit terbatas yang tidak dapat dibagi lebih jauh ke dalam bentuk "bebas", dibagi ke dalam kelas-kelas yang dibedakan satu sama lain menurut pola afiksasi.

Frasa terdiri dari satu tagmem inti dan satu atau lebih tagmem marginal yang kata-kata khas (khusus). Beberapa jenis frasa di bahas disini.

Klausa, unit dari predikat, pada umumnya mememuhi inti kalimat. Terjadinya jumlah dan jenis tagmem klausa inti dengan kata kerja masing-masing menjelaskan pentransitipan klausa yang padanya jenis-jenis klausa didasarkan.

Kalimat adalah unit dasar dari wacana. Kalimat-kalimat independen, dependen, sederhana dan komplex dideskripsikan.

ABSTRACT

This paper is a grammatical sketch of the Berik language based on langÀuge data gathered while living with the Berik people in Irian Jaya, Indonesia. The levels of the grammatical hierarchy described are words, phrases, clauses, and sentences. The tagmemic model has been used as the model for analysis.

Words, isolatable units which cannot be further divided into "free" forms, are divided into classes which are distinguished from one another according to principles of affixation.

Phrases consist of at least one obligatory tagmeme with one or more marginal tagmemes whose fillers are typically words. Several different phrase types are identified.

Clauses, units of predication, most commonly fill the nuclei of sentences. The occurrence of the number and kind of nuclear clause tagmemes with their respective verbs determine the transitivity of the clause upon which the clause types are based.

Sentences are basic units of discourse. Independent, dependent, simple, and complex sentences are described.

1.0. INTRODUCTION

The objective of this paper is to present a grammatical sketch of the Berik language, that is to say, to describe the different levels of the grammatical hierarchy of Berik beginning with the word level and going on to the levels of phrases, clauses, and sentences. The scope of this paper is thus limited to a description of these four levels.

Words are composed of simple and complex stems plus affixes. The complete analysis of these stems and affixes does not fall within the scope of this paper, though an initial attempt has been made in section 2 to identify some affixes. Similarly, at the other end of the grammatical hierarchy, i.e. sentences, paragraphs, and discourse, further research is needed to make this grammatical sketch more complete. In other words, a sketch like this cannot be considered to be complete at all levels of the grammatical hierarchy, but there are levels in this sketch where this incompleteness is particularly apparent, namely below the word level and above the sentence level. Grimes has stated in relating the study of discourse to sentences that "certain factors are needed for the understanding of elements in sentences that are not available within those sentences themselves, but only elsewhere in the discourse" (Grimes 1975:8). The analysis set forth here, however, of Berik words, phrases, clauses, and sentences should be helpful to others who are interested in the languages of the island of New Guinea.

1.1. The Berik language is spoken by about 1,000 people living in five villages along the banks of the Tor River in the Jayapura regemcy, in the province of Irian Jaya (Western New Guinea) in Indonesia. Berik, the largest among the Upper Tor languages, is the "lingua franca" for smaller language groups in the area. The Upper Tor languages are a smaller sub-group of languages coordinate with other smaller sub-groups including Nimboran, Sentani, Demta, and Uria (Orya) and one large sub-group, Tami, to form the North Pap — Rn language group which in turn is a member of the Central New Guinea macro-phylum (Wurm 1971c). Cowan in his **Grammar of the Sentani Language** adds that Sentani belongs to a much larger supergroup of distantly related groups of languages which he has named the "North Papuan phylum." The exact nature of the relationships involved in this phylum, and the position of each group within it are, however, still very unclear (Cowan 1965).

These languages in still a broader system of classification are identified as being Non-Austronesian languages (or Papuan) in contrast to Austronesian[3] languages which are also found on the island of New Guinea. The only classifying distinction Barr and Barr make in their Index of Irian Jaya Languages (Barr and Barr 1978) is between Austronesian and Papuan languages. Berik is one of the Papuan languages.

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3   The Austronesian languages stretch from Madagascar to Easter Island, and from Formosa, Cham and Hawaii on the north to Indonesia, New Zealand, and Polynesia on the south. (Dyen 1965).

Austronesian   Papuan (Non-Austronesian)

Central New Guinea Macro- phylum

North   Papuan   Phylum

Tami   Nimboran   Upper Tor   Sentani
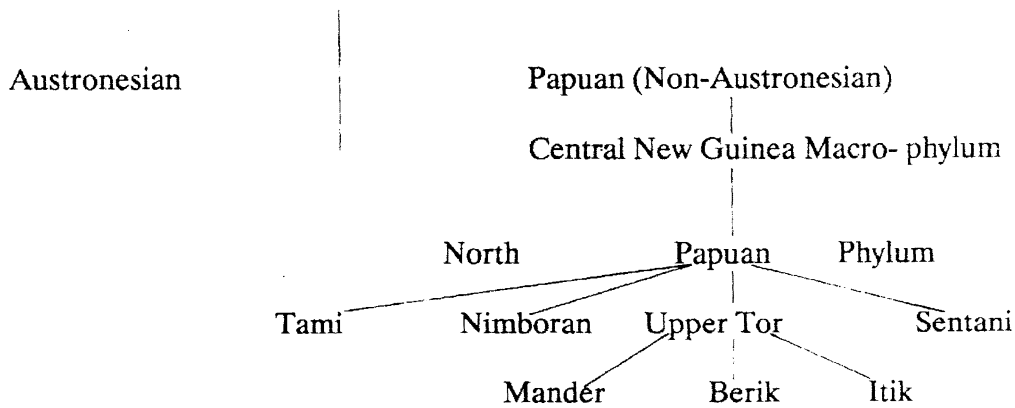
Mander   Berik   Itik

Chart 1. Language Classification

1.2. The data for this analysis of the Berik language were collected under the auspices of the Universitas Cenderawasih and the Summer Institute of Linguistics during eighteen months of residence in the villages of Tenwer and Somanente on the Tor river between 1973 and 1979. The data includes about 1,000 expressions (clauses and sentences) and 15 texts of varying lengths totaling thirty typed pages which added about 300 additional expressions for analysis.

1.3.The model used for this paper is the tagmemic model as developed by Kenneth L. Pike and others, and especially as presented most recently by Kenneth and Evelyn Pike in **Grammatical Analysis,** wherein they state that:

human nature across language barriers is in some sense uniform...and this uniformity the tagmemic theory attempts to capture. Further, the student is to see that language is not abstracted from life, but is merely one part of it, operating on principles necessary for all purposeful action. Here tagmemics differs from any theory which might prefer to treat a linguistic structure as if it were merely an abstract mathematical or logical system, rather than as a system of behavior comparable to systems of nonverbal behavior. (Pike and Pike 1977:vii,xiv).

In stating the basic notion of tagmemics, Pike says:

Central to tagmemics is the insistence on the possibility and necessity on both theoretical and practical levels, of keeping units as prime constructs in the theory and also to the internal linguistic structure of the speaker. Universal to the languages of the world, these units can be such only when high-level generalized conditions are met--a unit must have contrastive-identificational features, a range of variability, and distribution in class, sequence, and system (Brend 1974:viii).

Using the three basic terms of features, variation, and distribution, and applying them to the analysis of Berik, for example, we discover that units with the feature that they cannot be further divided into "free" forms are defined as being words. Words, however, have a range of variability in that some never take affixes, others have optional affixes, and still

others have obligatory affixes. Words are distributed in the grammatical hierarchy below the phrase level and are typical fillers of tagmemes in phrase structures.

Using the tagmemic model has allowed the organization of this field data into this grammatical sketch. The tagmemic concept of slot and class is used throughout the paper, and in some instances formulas are given to clarify the constructions. Less attention, however, has been paid to the more recent tagmemic developments of role and cohesion as outlined in chapters 3 and 4 of **Grammatical Analysis**.

1.4. The sound system of Berik has been described in "A Preliminary Berik Phonology" (Westrum and Westrum, 1975). The Berik orthography used in this thesis is based upon that description. There are 16 consonants and 6 vowels. The consonant and vowel symbols are given here along with articulatory descriptions and illustrative words.

Consonant symbol	Articulatory description	Illustrative word
b	voiced, bilabial stop	betef 'bamboo needle'
d	voiced, alveolar stop	dum 'spatula'
f	voiceless, labio-dental fricative	fas 'none'
g	voiced, velar stop	gom 'thigh'
j	voiced, alveopalatal grooved affricate	ju 'bird
k	voiceless, velar	koksa 'bud'stopk
l	voiced, alveolar lateral	tatal 'vein'
m	voiced, bilabial nasal	mase 'nose'
n	voiced, alveolar nasal	nin 'meat'
ng	voiced, velar nasal	aiyang 'chicken'
p	voiceless, bilabial, stop	pasip 'boy's name'
r	voiced alveolar flap	jirar 'come'
s	voiceless, alveolar grooved fricative	son 'ashes'
t	voiceless, alveolar stop	tokwa 'fire'
w	voiced, bilabial semi-consonant	werem 'cough'
y	voiced, palatal semi-consonant,	aiyu 'basket'

Vowel symbol	Articulatory description	Illustrative word
i	voiced, high, close, front	fina 'stand'
e	voiced, mid, open, front	seseye 'black'
aa	voiced, low, close, front	aarem 'mouth'
a	voiced, low, open, front unrouded vocoids	ababala 'delicious'
u	voiced, high, close back	ulum 'bow'
o	voiced, mid, close, back rounded vocoids	oso 'brother'

WORDS

Words are isolatable units which cannot be further divided into "free" forms. Word classes are distinguished from one another as follows: (1) those which never take affixes, (2) those which optionally occur with affixes, and (3) those which obligatorily occur with one or more affixes. Words belonging to class (1) above, those which never take affixes, constitute small closed subclasses. Words which occur with optional affixes or obligatory affixes tend to be large open subclasses. All Berik affixes occur as suffixes.

Word classes are as follows.

2.1. Closed classes which never take suffixes.

2.1.1. **Response words** are often used as a simple reply to some former utterance.

ngga, sia	'yes'
wowo	'no'
fas	'none'
bar	'finished'
bai	'don't want'

2.1.2. **Pseudo-imperatives** compose a small class of words which are used by themsel ves when giving commands to others. These words are different from the inflected true im perative forms of the verbs 'come,' etc., which can occur in the imperative construction on the sentence level. (See section 5.3.2.)

au	'come'
aiyai	'watch out'
jesbaf	'don't'

2.1.3. **Exclamatory words** usually carry strong emotional meaning.

wa	'(amazement)'
nesik	'(pity)'

2.1.4. **Interrogatives** are used in forming questions. They may occur individually or in longer utterances. (See section 5.3.1.)

basa	'what'
Ai basa?	'What is this?'
nasa	'who'
Je nasa?	'Who is that?'
bafa	'why'
Je baf nunggiri	'Why does he run?'
fomera	'how many'
Junu fomera?	'How many birds?'
fwera	'where'

Je fwera	'Where is he?'
fonggalabar	'when'
Fonggalabar je fortiant?	'When did he arrive?'

2.1.5. Numerals one to four are single words. Numbers larger than four are composed of combinations of these four numerals and other words, and form numeral phrases. (See section 3.1.)

daamfena	'one'
naura	'two'
nawerningna	'three' (two plus one)
nawernaura	'four' (two plus two)

2.1.6. Manner Adverbs occur in the modifier slot of Verb Phrases, but unlike other modifiers are never inflected. (See section 3.9.2.)

mese	'also'
gamjon	'again'
enggam	'like this'
maa	'already'
gamerje	'not yet'
galap	'later'

2.1.7. Temporals generally refer to days or parts of a day and are monomorphemic. (Visual reference is sometimes given by gesturing to the position of the sun.)

namwer	'today, now'
gwirmir	'tomorrow'
ir	'yesterday'
jem	'day before or day after'
gwerem	'noon'
dafef	'afternoon'

2.1.8. Locationals function mainly to mark position.

afunup	'middle of'
sagap	'on'
burawer	'behind'

2.1.9. Conjunctions join two or more constructions together either on the phrase or the sentence level. Phrase level conjunctions are optional joiners in Coordinate Phrase constructions.

yo	'and'	
Salmon	yo Martinus	'Salmon and Martinus'
afa 'or'		

Gwirmir   Bular afa   oso   jemna ge tifi.
tomorrow   Bular or   brother his pl go-fut
'Tomorrow either Bular or his brother will go.'

Sentence level conjunctions join clauses together either in a coordinate or a subordinate relationship to form sentences. (See sections 3.4 and 5.3)

ane 'and'

Aame is   udanaburswana   **ane** is gerna   tane gitowai.
you   you   pregnant   and you give birth child male
'You are pregnant and will give birth to a boy.'

ga   'and'

Sa   orotena   **ga**   asis   bili.
imp   boil   and   you   tell
'Boil the water and tell me.'

jeuga   'but'
Niko   kasiyan   tombana   **jeuga** Tuan ga   fos   telbili.
Niko   peanuts   eats   but   Mr.   rel   water   drinks
'Niko eats peanuts, but Mr. drinks water.'

jebas   'because'

Ai as   sina,   **jebas** asia   wisiam bitolu.
I I   cry   because I   coolness feel
'I cry because I am hungry.'

jengga   'then'

Twena   nunggirbisi   **jengga**   jensiriber.
pig   ran   then   snorted
'The pig ran then snorted.'

jamer   'until'

Ai   sofsant   **jamer** ai   fosant aure.
I   went   until   I   arrived there
'I went until I arrived there.'

2.2. Open classes of words which optionally include suffixes.

2.2.1. **Nouns** occur on the phrase level as Nuclei of Noun Phrases and Coordinate Noun Phrases, as either Item or Possessor in the Possessive Phrase, and as Axis in the Location Phrase.

2.2.1.1 The suffixes with which nouns might occur are as follows:

a. -na

Nouns occurring as the Subject of a Berik sentence are usually affixed with the -na focus suffix. However, not all nouns as Subject take this inflection.

Banggena	aiserem je		tawefa	tinibe.
squirrel-fox	this	it	climb-fut	tree-place

'The squirrel fox will climb the tree.'

b. -s

Nouns occurring as the Object of a sentence are usually affixed with the -s object marker suffix.

fo   'water'

Ai	fos	telbi.
I	water-obj	drink

'I drink water.'

c. -ap and -wer

The locational suffixes -ap and -wer occur on nouns and indicate position or location.3 If an action in a clause is towards the speaker, -ap is used. If an action is away from the speaker, -wer is used. (see section 3.8.)

+ Head	+ locational suffix
nouns	-ap (action towards) -wer (action away from)

Morphophonemic comments:

Here and elsewhere in this paper, if a noun ends in a vowel, the initial vowel of the suffix is deleted. If a noun ends in a nasal, the initial /w/ of the locational suffix is deleted.

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3   Nouns and their locational suffixes must be distinguished from relators though orthographically they appear similar. (See Section 3.8.1.)

Je   jinap   ila. '
he   house-loc   comes
'He comes to the house.'

Je   jinawer   sofwena.
he   house-loc   goes
'He goes away from the house.'

In some cases, either of the locational suffixes is used, especially when the action of the sentence is not directional.

Oso   imna   sitap   fitna.
younger sibling your   outside-loc   stands
'Your brother stands outside.'

Tuna   sitawer   fara.
stone   outside-loc   lies
'The stone lies outside (the box).'

d. -yan

The negative suffix -yan (see section 2.3.1.f.) can occur on nouns in Non-Transitive Clauses. In the following examples, it negates the whole sentence.

Ai   taneyan.
I   child-not
'I'm not a child.'

Je   namwer   bwernabaryan.
he   now   sickness-neg
'He isn't sick now.'

e. -em

The instrument suffix -em occurs on nouns as instrument.

Korano   atem   difnant.
chief   canoe-inst   came
'The chief came by canoe.'

Je   twena   ginem   tana.
he   pig   arrow-inst kill
'He killed the pig with an arrow.

f. -far

The suffix -far occurs on nouns as comitative. (An allomorph -bar occurs with pronouns. (See section 2.2.2.6.c.)

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Niko   uwafar   fonap ge   ·   tini.
Niko   father-acc   water pl   go
'Niko goes to the river with father.

Niko   jebar   ge   sofwa.
Niko   he-acc   pl   go
'Niko goes with him.'

Je   Koranofar ge   nasona.
he   chief-acc   pi   talk
'He talks with the chief.'

g. -bara

A relational suffix -bara occurs on nouns and indicates a special form of accompany-
ing relationship between a noun or pronoun and the noun to which it is attached, and car-
ries the meaning 'to have.'

Aame   ke   yafontoibara?
you   ques   daughter-have
'Do you have a daughter?'

Gworabara   fo   tartarfer   orotona.
cover-have   water quickly   boil
'The water boils quickly with a cover.'

h. -mana

The suffix -mana occurs on nouns as possessor.

Jina   Koranomana   unggwandusa.
house   chief-poss   big
'The chief's house is big.'

Tane uwamana   maa   sofwa.
child father-poss   already   go
'The father's child has already gone.'

If the noun as possessor precedes the Item it possesses, an allomorph -em occurs on
the noun as possessor. In this occurence, although possession is indicated on the possessor,
location or accompaniment is also indicated on the Item possessed. (See section 3.7.)

Koranoem jinap
chief-poss   house-in
'in the chief's house'

i. **-f**

A benefactive suffix **-f** occurs on nouns as benefactive or recipient.

Musa   fenbit   Minaf   golbitent.
Moses   bandage   Mina-ben   gave
'Moses gave the bandage to Mina.'

Ai   bangkona   Susterf   eyembili.
I   bench   Sister-ben   make
'I make a bench for Sister.'

Aame   nanf   eyembili?
You   who-ben   make
'You are making it for whom?'

2.2.2. **Pronouns** occur as the nucleus of the Pronoun Phrase, and in the Possessor slot in the Possessive Phrase. The basic form of Berik pronouns is indicated in the box below.

person	singular	plural
1	a(i)	ne
2	i	i + verb plural marking
3	je	je + verb plural marking

2.2.2.1. Subject pronouns

There are two sets of subject pronouns which differ in form according to the positions in which they occur. Either pronoun may be used singly or together, or with nouns or names. In the negative construction co-occurrence of pronoun-1 and pronoun-2 does not occur. A further description of these pronouns is given in the description of Phrase structure in section 3.6.

Subject pronoun-1 is identical to basic form of Berik pronouns with the exception of second person singular which has the form **aame** 'you' and not 'I'. The second vowel of the first person singular pronoun is deleted when a suffix is added.

Subject pronoun-2 is the basic pronoun form plus the suffix **-jam** except for the third person singular which does not posit the basic form. Its form is merely **jam** 'he.'

Subject pronoun-1	Subject pronoun-2	
ai	ajam	'I'
aame	ijam	'you'
je	jam	'he/she/it'
ne	ne jam	'we'

Ai	tonora.
I-1	plant
'I plant.'	

Ajam	tonola.
I-2	plant
'I plant.'	

Ai ajam	tonolyan.
I-1 I-2	plant
'I do not plant.'	

When used with nouns or names, the pronoun follows the noun or name, and either one or both pronouns may occur.

Petrus **je** **jam**	onap	sofwa.
Peter he-1 he-2	jungle-to	go
'Peter goes to the jungle.'		

Petrus **je**	onap	sofwa.
Peter he-1	jungle-to	go
'Peter goes to the jungle.'		

Petrus **jam**	onap	sofwa.
Peter he-2	jungle-to	go
'Peter goes to the jungle.		

2.2.2.2. **Other suffixes** with which pronouns occur are as follows:

a. **-s ~ -m**

Pronouns occurring as the Object of a sentence are affixed with the -s ~ -m object marked suffix, seemingly in free alternation. Perhaps one set of object pronouns is used with one class of verbs and the other set with other classes of verbs. More research is needed to clarify this point.

Gwirmir	wini **as**	damtafa.
tomorrow	woman me	see-fut
'Tomorrow the woman will see me.		

Niko	**am**	saftena
Niko	me	hit
'Niko hit me.'		

b. -p

The suffix -p occurs on pronouns in the Adjunct4 slot of Bitransitive clauses as benefac-
tive.

Fi	ap	golbili.
salt	me	give

'Give the salt to me.'

c. -mena and -rem

There are two sets of possessive pronouns. They occur in the possessive slot in the Pos-
sessive Phrase. (See section 3.7.) Possessive pronoun-1, which takes the -mena suffix, fol-
lows the possessed noun.

Jina	mena	aure.
house	my	there

'My house is over there.'

Possessive pronoun-2, which takes the -rem suffix, precedes the possessed noun.

Ajam	sofwa	alem	jinap.
I-2	go	my	house

'I go to my house.'

d. -nan

The suffix -nan occurs on pronouns in the Object slot of the Transitive clause as
reflexive.

Ai	anan	safsafulu.
I-1	myself	hit

'I hit myself.'

e. -bar

The suffix -bar occurs on pronouns as comitative.

Bular jebar	fonap	tini.
Bular he-acc	river-to	go

'Bular goes to the river with him.'

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4   Adjunct here is used to include not only the traditional notion of Indirect Object, but also in a
     wider sense is used to include Instrument which occupies the same position in the clause. (See
     Section 4.0.)

f. -yan

The negative suffix -yan when occuring with pronouns indicates negation. It usually occurs in short response statements.

Aiyan
I-1-neg
'Not I.'

g. -serem

The suffix -serem is often added to demonstratives (see below) to indicate "particular referent."

Jina	aiserem	Gijonmana.
house	this	Gideon's

'This particular house is Gideon's.'

h. demonstratives

The first person singular pronoun ai 'I' without any suffix is identical to the demonstrative pronoun ai 'this,' and the third person singular pronoun je 'he' is identical to the demonstrative pronoun je 'that.'

2.2.3. Modifiers

Modifiers occur in one of several modifier slots in the Noun Phrase and the Verb Phrase. Modifiers are subclassified semantically into the following categories: color, shape, sensual perception, spatials, quantifiers, and a miscellaneous category.

2.2.3.1. Color

This list of six colors is exhaustive with all colors portraying syllable reduplication and vowel harmony.

sinsini	'white'
seseye	'black'
berbere	'red'
ikikini	'green'
bwelkat-bwelkata	'yellow'
ibam-ibama	'blue'

The following lists are not exhaustive. Representative examples have been chosen.

2.2.3.2. Shape

unggwandusa	'large'
bastantoiya	'small'
bukona	'round'

ferfera	'flat'
bubwalna	'long'
tofora	'short'

2.2.3.3. Sensual Perception

kakala	'hot'
wisimi	'cold'
kekelna	'hard'
nonona	'soft'
titini	'wet'
setera	'dry'

2.2.3.4. Spatials

giri	'deep, tall'
gwetmana	'near'
bijua	'far'
teten	'empty'
enbisini	'full'

2.2.3.5. Quantifiers

Berik numbers do not belong to this class since they are basically non-inflectable, though they are sometimes used as modifiers. Things numbering more than three are usually referred to as 'many'.

ane	'many'
seyafter	'all'
fas	'none'

2.2.3.6. Other Attributes

waakena	'good'
sasara	'happy'
baabeta	'strong'
bunar	'true'
samem	'slow'
taban	'finished'

The demonstrative and possessive pronouns are also modifiers and are discussed in Section 2.2.2.4. and 2.2.2.6.

2.2.3.7. Modifier Suffixes

The suffixes which might occur on modifiers are as follows:

a) -sus

An intensifier suffix -sus is added to most modifiers and carries the meaning of 'very.'

berberesus red-very	'very red'
bukonasus round-very	'very round'
kekelnasus hard-very	'very hard'
bijuasus far-very	'very far'
anesus many-very	'very many'
baabetasus strong-very	'very strong'

The modifier may be reduplicated in order to indicate even greater intensity.

waaken-waakena good good	'very good'
waaken-waakensus good good	'very, very good'

b. **-fer/-ber**

The suffix **-fer ⁓ -ber** added to modifiers indicates verbal modification.

waaken**fer** 'well, carefully, etc.'

Susi lampunu	waaken**fer**	gworansona.
Susie lamp	carefully	place
'Susie places the lamp carefully.'		

bastantoi**fer** 'a little'

Je	bastantoifer	**sarbana.**
he	a little	hears
'He understands a little.		

bijua**ber**	far	
he far	go	'He goes far.'

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c. -yan

The negative suffix **-yan** occurs on modifiers and negates the description.

> unggwandusa**yan**   'not large'
> large-not

> samem**yan**   'not slow'
> slow-neg

2.3. Open classes of words which obligatorily occur with one or more suffixes.

2.3.1. Verbs

Verbs are the most complex morphological component of the Berik language. Verbs occur as the nucleus of all Verb Phrases which in turn are the nucleus of the predicate slot in Transitive and Intransitive clauses. Morphemes occurring on the verb root as suffixes may mark number of subjects or objects, gender of objects, size of objects, distance of the speaker from the place of action, height of objects, the general time of day, tense and negation. To illustrate this complexity, the different forms of the Berik verb 'to give' are given in the following matrix. The first set of entries are Berik verb forms used to mean giving one or two or three large items to a male using the tenses of present, past, and future, and further specifying whether the item or items were given in sunlight or in darkness. The second set of entries show the same information with the only exception that the large item or items were given to a female, not a male.

Entries for the Berik verb 'to give' (to a male)

		Present	Past	Future
1 lg.	sunlight	gulbana	gulbanant	gulbafa
	darkness	gulbasa	gulbafant	gubafa
2 lg.	sunlight	terbene	terbenent	terbefe
	darkness	terbese	terbefent	terbefe
3 lg.	sunlight	kitobana	kitulbanant	kitobafo
	darkness	kitobasa	kitulbafant	kitobafo

Entries for the Berik verb 'to give' (to a female)

		Present	Past	Future
1 lg.	sunlight	gobili	golbilint	golbifi
	darkness	gobisi	golbifint	golbifi
2 lg.	sunlight	terbili	terbilint	terbifi
	darkness	terbese	terbefint	terbifi
3 lg.	sunlight	kitobili	kitulbilint	kitulbifi
	darkness	kitobisi	kitulbifint	kitulbifi

Still other matrices would be needed to illustrate all the above information for the verb 'to give' with the only change that a small item is given, not a large one. Other matrices would be needed to display all the above information and adding the variable that the giving was done at some distant place.

The Berik verb 'to tie' with many of its inflections is given below. The entries are glossed for tying one, two or three large items, close to the speech act location, using all three tenses, and also specifying whether the item or items were tied in sunlight or in darkness.

Entries for the Berik verb 'to tie'			
	Present	Past	Future
1 lg. sunlight	fwirena	fwirenant	fwirena
darkness	fwiresa	fwirenant	fwiresa
2 lg. sunlight	faarena	faarefant	faarefa
darkness	faaresa	faarenant	faaresa
3 lg. sunlight	taferebili	taferebilint	taferebifi
darkness	taferebisi	taferebifint	taferebisi

Another matrix would be needed to illustrate all the above information for the verb 'to tie' with the only change that the tying is done at some distant place.

A further set of examples illustrates the dramatic changes that take place in many Berik verb roots by looking at some forms of the Berik verb 'to place.' The entries are those used to describe specifically placing one, two or three large items either in a low or in a high place and either close to or distant from the person as he relates the action.

Entries for the Berik verb 'to place'		
	Close	Distant
1 lg. low	gwerantena	gwerantetfa
high	gweransona	gweranswetna
2 lg. low	tosontona	tosontetfa
high	tosonsona	tosonswetna
3 lg. low	bununtona	bununtetfa
high	bununsona	bununswetna

Changes in the verb root, the addition of several suffixes, and the fusion of these morpheme markers all combine to make the problem of analysis complex. More research on verb morphology needs to be completed. Study thus far, however, shows that the following items are marked on Berik verbs, mainly as suffixes. Entries have been chosen to demonstrate some degree of regularity.

2.3.1.1. Verbal suffixes

a. Number

The number of the subject or object in a sentence is usually marked in the verb by changes in suffixes or by the addition of a pluralizer: in transitive clauses, the number of the object is usually marked; in intransitive clauses, the number of the subject is marked.

Transitive verbs marked for number of the object include:

Subject	Object	Verb sg	Verb dual	Verb plural	
		damtana	domsona	damtabili	'see'
		saftana	sofsona	saftabana	'hit'
		nasbana	nasona	nasbabili	'tell'
		telbese	telmisi	telbebesi	'drink'
		wirusu	wirsosa	wirtababisi	'wash'

Intransitive verbs marked for number of the subject:

Subject	Verb sg	Verb dual	Verb plural	
j	ila	ge jila	ge jalbili	'come'
	sofwa	ge sofwa	ge sofwabili	'go'
	nasona	ge nasona ge	nasbawena	'speak'
	fina	ge fina	ge fibili	'stand'

The pluralizer **ge** has not been written as a verb prefix because question words can occur between the word and the verb, and because there are no other prefixes in Berik. (See also section 3.9.)

Je ge	baf	jila? 'Why did they come?'
3rd pl	why	come
Je ge	bas	jila? 'What did they come for?'
3rd pl	what	come

b. Gender

The gender of the object of a sentence is marked on many verbs by changes in either the verb root or the suffix. Many Berik nouns have gender although it is overtly marked only in the verb. Things that fly are generally feminine, and things that crawl are masculine. An inanimate object such as a rock can take either marking.

Transitive verbs marked for gender of object by changes in the root:

Subject Object	Verb masculine	Verb feminine
	damtana	domola 'see'
	saftana	sofola 'hit'
	gerbana	golbili 'give'

Changes in the verb suffix:

	sarbana	sarbili	'hear'
	eyebana	eyebili	'make'
	gwebana	gwebili	'do'

c. Distance

The suffix -**tet** is used with some verbs to indicate that the predication is some distance from the speech act location.

Subject Object	Verb near	Verb far	
	disultena	disultetna	'fetch'
	gwerana	gwerantetna	'place'

Ai	fos	disultena.	'I fetch water.'
I	water	fetch	

Je	fos	disultetna aure.	'He fetches water there.'
he	water	fetch-far there	

d. Height

Relative height of an object in a clause in relation to the speaker's height is marked in some verbs

Subject	Object	Verb low	Verb high	
		gerantona	geransona	'to place'
		tosontona	tosansona	'to place'

e. Tense

The tense of an event is marked by the verb final suffix. The suffix **-nt** indicates past tense, and the suffix **-f** indicates future.

Subject	Verb present	Verb past	Verb future	
	tini	tinint	tifi	'go'
	jila	jilant	jifer	'come'
	tumili	tumilint	tumilfi	'eat'

In addition to tense, the general time of day is indicated on the present tense verb to distinguish early morning from noon and from evening.

Subject	Verb morning	Verb noon	Verb evening	
	telbeser	telbefer	telbener	'drink'

f. Desire and Negation

Desire and Negation are also verb final suffixes. When the desire or negation suffix occurs, tense is not indicated.

Subject	.Verb present	future	desire	negation	
	tini	tifi	tif	tiyen	'go'
	tumili	tumilfi	tumif	tumilyen	'eat'
	nwini	nwinfi	nwinf	nwinyen	'sit'

g. Continuous Action

The continuous acton suffix **-yafefa** is added to a verb to denote action that is ongoing. Only one example of this has been inventoried in our research thus far.

eyebabiyafefa.   'cook continuously' (from dawn to dusk)

Aame	tumilgal	eyebabiyafefa.	'You cook the food continously.'
you	food	cook-cont.	

h. Verbalizer -tena

All of the above are inflectional affixes on Berik verbs. The following is a derivational suffix **-tena** which can be added to a modifier to form a verb.

waakena	'good'
waakentena.	'make good'

Je angtane	waakentena. 'He healed the person.'
he person	good-make

3.0. PHRASES

3.0. Phrase structures consist of at least one obligatory tagmeme with one or more marginal tagmemes whose fillers are typically words. Berik phrases are usually short. The Numeral Phrase and Temporal Phrase are phrase level tagmemes, that is phrase structures which constitute parts of other phrase structures. All other phrases manifest clause level tagmemes.

3.1. Numeral Phrase

The numerals one to four are simple words and have been described above.(See Section 2.1.5.) The numeral five in Berik is **tafna guri**, a two-word phrase meaning 'hand whole.' Numerals five and larger than five form Numeral Phrases consisting of some reference to one or more hands of a person or one or more feet plus any numeral one to four. The numeral six, therefore, is **tafna aafwer daamfena**, meaning 'hand other one.' Any reference to another hand or another foot implies the obligatory inclusion of the first hand or first foot. Berik numbers from five to twenty are as follows:

5 =	tafna guri	'hand whole'
6 =	tafna aafwer daamfena	'hand other one'
7 =	tafna aafwer naura	'hand other two'
8 =	tafna aafwer naweringna	'hand other three'
9 =	tafna aafwer nawernaura	'hand other four'
10 =	tafna nau sama guri	'hand two both whole'
11 =	tafna nau sama guri tufa daamfena	'hand two both whole foot one'
12 =	tafna nau sama guri tufa naura	'hand two both whole foot two'
13 =	tafna nau sama guri tufa nawerninga	'hand two both whole foot three'
14 =	tafna nau sama guri tufa nawernaora	'hand two both whole foot four'
15 =	tufa guri	'foot whole'
16 =	tafna nau sama guri tufa aafwer daamfena	'hand two both whole foot other one'
17 =	tafna nau sama guri tufa aafwer naura	'hand two both whole foot other two
18 =	tafna nau sama guri tufa aafwer nawerningna	'hand two both whole foot other three
19 =	tafna nau sama guri tufa aafwer mawermaira	'hand two both whole foot other four'
20 =	tufa nau sama guri	'foot two both whole'

Perhaps because singular, dual, and plural are marked on Berik verbs, numerals are seldom used explicitly in stretches of speech. There is also non-uniformity among Beriks when eliciting numerals over ten. With the introduction of monetary units, uses of the calendar, and measurements in carpentry, Indonesian numbers are increasingly being used.

3.2 Temporal Phrase

The Temporal Phrase is used commonly to refer to some portion of the time of day. It consists of an obligatory nucleus filled by some reference to light or darkness and an obligatory margin filled by a reference to the intensity of sunlight.

---

temporal TP =	+ Nuc:	light or dark	Mar:	intensity of sunlight
	Nuc:	darkness	Mar:	intensity
		gwini		bener 'early morning'
		dark		fading
	Nuc:	light	Mar:	intensity
		gwere		bolap 'high noon'
		sun		zenith

3.3. Noun Phrase

The Noun Phrase in Berik can be represented by the formula: noun phrase NP = + Nuc: noun + (Mar: modifier) $\pm$ Mar 2

The chart below summarizes the occurrences of modifiers and other words and phrases of modification in the Noun Phrase. The Noun Phrase can fill the clause level slots of Subject, Object, Adjunct, Topic, and Comment. The Nucleus, filled by a noun can be modified by one or two modifiers.   Mar 1 is most commonly filled by a modifier. If there is a Mar 2 it is usually a quantifier (as modifier, see section 2.2.3.5.) or numeral.

+ Nuc:	+ Mar :	$\pm$ Mar:
noun	modifier	modifier
Co-ord Noun Phrase	Temporal Phrase	numeral
noun	Numeral Phrase	
	Dependent Clause	

---

6   The Pronoun Phrase has not been included in the description of the Noun Phrase. In Berik sentences, one or two pronouns following a noun phrase can also stand in an appositive (appositional) relationship to it. Further research is necessary to clarify this relationship.

Nuc: noun	twen pig	Mar: modifier		unggwandusa large 'large pig'
Nuc: noun	ir yesterday	Mar: Temporal Phrase		gwini bener darkness fading	'yesterday morning'
Nuc: noun	twen pig	Mar: noun	tane child		'baby pig'
Nuc: noun	ton stone	Mar: mod	bukona round	
		Mar: quantifier	ane many		'many round stones'

There has been no further attempt beyond what has been stated above to order the modifiers because they most often occur singly. If two or more words of modification are desired, usually two or more sentences are used.

Ai twena	ane	damtabilint.		Twena	jeserem	je	unggwandusa.
I pig	many	saw-pl-past		pig	those	they	large

'I saw many pigs. Those pigs were large.'

If two or more modifiers occur, the stream of modifiers may be broken by the occurrence of the verb and/or a repetiton of the Subject of the clause.

Ai	tane	bastantantena gam	sarbabili	Tenwermana.
I	child	small-many rel	hear	Tenwer-poss

'I hear the small Tenwer children.'

Ai	twena	anesus	ai	damtabili	unggunfena	setetina
I	pigs	many	I	see	large	black

'I see many large black pigs.'

In the final example above, the language assistant was strongly encouraged to give a simple sentence with more than two modifiers. The modifiers, however, were permuted from the noun phrase to follow the verb and in that position acquired verbal suffixes. The strain of producing such a construction confirmed the fact that it was quite unnatural.

3.4. Co-ordinate Noun Phrase

The Co-ordinate Noun Phrase consists of two or more obligatory nuclei filled by Noun Phrases joined together by an optional conjunction. If the conjunction is omitted, the meaning is 'and.' The conjuctions **ane** 'and' and **o** 'and' are used to combine Noun Phrases whereas the conjunction **afa** 'or' is used to present alternatives.

co-ord NP = + Nuc: NP   + (+ conj: ane   + Nuc: NP)n
                                          o
                                          afa

Nuc:	Jon	Nuc:	Sarles	conj:	ane	Nuc:	Martinus
	John		Sarles		and		Martin

'John, Sarles, and Martin'

Nuc:	Daud			conj:	o	Nuc:	Sekati
	David				and		Scotty

'David and Scotty'

Nuc:	Musa					Nuc:	Niko
	Musa						Niko

'Musa and Niko'

Comments: The conjunction **o** 'and' is used infrequently, but when it does occur it is usually with only two nouns.

3.5. Accompaniment Phrase

The Accompaniment Phrase consists of one or more animate nouns plus an obligatory accompanier suffixed with the **-far** suffix. (See Section 2.2.1.1.f.) This phrase occurs in the clause level tagmemes of Subject and Topic.

Ai,	Daud,	Sekati,	**Piterfar**	twensar.
I	David	Scotty	Peter-acc	eat

'David, Scotty, Peter and I eat together.'

Musa	gwola**far**	onap	sofwa.
Musa	dog-acc	jungle-to	go

'Musa goes with his dog to the jungle.'

Korano	gwola**far**	aare.
chief	dog-acc	here

'The chief with his dog is here.'

3.6. Pronoun Phrase

As stated in the section on words, there are two sets of subject pronouns which may occur singly or together. (See Section 2.2.2.1.) When used together, they form a Pronoun Phrase.The Pronoun Phrase, therefore, consists of two nuclei, one which is filled by a pronoun from subject pronoun set 1 and the other filled by a pronoun from subject pronoun set 2. The Pronoun Phrase can occur in all clause types. Below is given an expansion and abbreviation of a common sentence in order to show the occurrence and position of pronoun-1 and pronoun-2.

Single subject pronoun-1:

Ai	mirunus	tonola.	'I plant corn.'
I-1	corn	plant	

Single subject pronoun-2:

Ajam	mirunus	tonola.	'I plant corn.'
I-2	corn	plant	

Pronoun-1 and pronoun-2:

Ai	ajam	mirunu	tonola.	'I plant corn.'
I-1	I-2	corn	plant	

Permutation of pronoun-2:

Ai	mirunu	ajam	tonola.	'I plant the corn.'
I-1	corn	I-2	plant	

The Object may be omitted:

Ai	ajam	tonola.	'I plant.'
I-1	I-2	plant	

Co-occurence of pronoun-1 and pronoun-2 is obligatory in a negative sentence.

Ai	mirunu	ajam	tonolyan. 'I don't plant corn.'
I - I	corn	I-2	plant-neg

Co-occurrence is forbidden with some predicates as in the following example. Only pronoun-1 occurs with these predicates.

Ai	simaltwola.	'I sing.'
I-1	sing	

The data can be summarized in the chart below.

	Ai I-1	ajam I-2	mirunu corn	tonola. plant
Pronoun-1 occurrence	x		x	x
Pronoun-2 occurrence		x	x	x
Pronoun co-occurrence	x	x	x	x
Object omitted	x	x		x
Pronoun co-occurrence obligatory	x	x	x	x -yan 'not'
Pronoun co-occurrence forbidden	x			'sing' class of verbs

Chart 2. Pronoun-1 Pronoun-2 occurrence

Both pronouns occur obligatorily when the clause in which they occur is negated. In Intransitive, Bi-Intransitive, and Non-Transitive clause types, the two pronouns always occur contiguously.

Je	jam	aulyan	Somanentewer. 'He doesn't go to
he-1	he-2	go-not	Somanente-to Somanente.'

In Transitive and Bitransitive clauses, however, the Object and Adjunct may occur between the two pronouns.

Je	tafna	jam	wirsoyan. 'He doesn't wash his hands.'
he-1	hands	he-2	wash-no

Ai	bangkona	Susterf	ajam	eyebili
I-1	bench	sister-for	I-2	make

'I make a bench for sister.'

In some cases, either pronoun-1 or pronoun-2 can occur following a noun to which it refers. When a noun occurs with a pronoun-1, the noun is always animate. When a noun occurs with a pronoun-2, the noun may be animate or inanimate. Co-occurrence of noun, pronoun-1, and pronoun-2 is possible, but rare.

Korano je	onap	sofwa. 'The Chief goes to the jungle.'
Chief he-1	jungle-to	goes

Gwili	jam	bosoka. 'The banana is unripe.'
banana	it-2	unripe

Matius je	jam	tainena. 'Matthew, he crawls.'
Matthew he-1	he-2	crawls

3.7. Possessive Phrase

The Possessive Phrase can fill the clause level slots of Subject, Object, Adjunct, Topic, and Comment. It can take either of the following forms: a margin filled by an optional Item and a nucleus filled by an obligatory Possessor, or less frequently an obligatory Possessor followed by an obligatory Item.

In the Item plus Possessor form, the obligatory Possessor is either a possessive pronoun-1 or a noun plus a possessive suffix. In this form, the Item is never suffixed.

+ Item	+ Possessor
Noun	possessive pronoun-1
	noun + possessive suffix, -mana

Item:	noun	tane	Possessor:	possessive pro-1	imna
	child	your			
'your child'					

Item:	noun	celana	Possessor:	noun + poss	Daudmana
		pants			David's
'David's pants'					

The Item tagmeme is optional in context as in:

Je	ke	gwola	imna? 'Is he your dog?'
he	question	dog	your

Je		ke	imna? 'Is he yours?'
he		question	your

In the second form, which is used to indicate location or accompaniment the obligatory Possessor is either a possessive pronoun-2 or a noun plus a possessive suffix. The noun as nucleus of a Noun Phase, occurring as an obligatory Item in the Possessive Phrase, always bears locational or accompaniment suffixes.

+ Possessor	+ Item
possessive pronoun-2	noun + loc/acc suffix
noun + possessive suffix, -em	

Possessor:	poss pro-2	alem	Item:	noun +	loc	jinap
		my				house-in
in my house'						

Possessor: poss pro-2 jelem
                           his
'with his father

Item: noun + acc uwafar
                            father-with

Possessor: noun + poss Daudem
                              David's
'in David's house'

Item: noun + loc jinap
                          house-in

3.8. Location Phrase

Location in Berik can be expressed in two contrasting ways. As was discussed in the word section (2.2.1.c.), the locational suffixes -ap and -wer occur on nouns and indicate position or location as in:

Tuna	kartonap	fariton.	'The stone lays in the box.'
stone	box-in	lays	

The Location Phrase may also be composed of: (1) an obligatory axis which is related to the phrase in which it occurs by an obligatory postposition relator, or (2) a location word preceded by one or more modifiers.

3.8.1. Axis + Relator

The usual locational suffixes -ap and -wer always occur on the relator.The Location Phrase can fill the clause level slots of Location in the Bitransitive, Transitive, and Non-Transitive clauses and the Adjunct as scope in the Bi-Intransitive clause. A limited number of relators found to date are listed below.

+ Axis	+ Relator	
noun	aarmap	'into'
	afunup	'middle of'
	gwetmanap	'by'
	gwonap	'under'
	sagap	'on'
	ternap	'near'
	binisamer	'edge of'
	burawer	'behind'
	masnawer	'in front of'
	tamer	'over'

Tuna	karton	gwonap	fariton.	'The stone lays under the box.'
stone	box	under	lays	
Tuna	karton	burawer	fara.	'The stone lays behind the box.'
stone	box	behind	lays	

In one instance, the Location Phrase with Axis and Relator alternated with the noun and its locational suffix.

| Je | titik | sagap | nwini. 'He sits on the floor |
| he | floor | on | sits |

| Je | titikap | jam | taifayan. | 'He isn't lying on the floor |
| he | floor-on | he | lies-not |

3.8.2. Modifiers + location word

The location word carries the usual locational suffixes -ap and -wer, and is preceded by one or more modifiers.

| tantantane | jam | orgul | tamanap |
| children | their | play | place |
| 'the children's play area' |

3.9. Verb Phrases

All Verb Phrases fill the Predicate tagmeme of clauses.

3.9.1. Basic Verb Phrase

The Basic Verb Phrase can be represented by the formula:

$$VP = \pm \text{ modifier} + (\pm \text{ pluralizer} + \text{verb})$$

In other words, the Basic Verb Phrase consists of an optional margin filled by a modifier and an obligatory nucleus filled by an option Pluralizer and an obligatory verb, always in that order. Modifiers occur with verbs in all clause types.

| Margin: | mod | gamjon | Nucleus: | verb | jifa |
| | | again | | | come |
| 'come again' |

| Margin: | mod | samem | Nucleus: pluralizer ge +: verb | nasona |
| | | slow | pl | speak |
| 'speak slowly' |

In rare cases, a locational may occur between the modifier and the verb. When it occurs there, it is not considered to be part of the verb phrase.

| Kristin | bunarsus | tesap | teafna |
| Christine | true-very | sago area | go |
| 'Christine truly went to the sago area.' |

3.9.2. Imperative Verb Phrase

The Imperative Verb Phrase consists of an obligatory imperative marker **das ~ jas** (or their abbreviated forms, **sa or s'**) and an uninflected form of a transitive or intransitive verb. These true imperatives, though uninflected, contrast with the pseudo-imperatives in that the true imperatives are part of the inflectional system whereas the pseudo-imperatives are not. (See section 2.1.2.).

| Das | armanul! | 'Buy!' |
| imp | buy | |

| Sa | armanul! | 'Buy!' |
| imp | buy | |

| S'armanul! | 'Buy!' |
| imp-buy | |

3.9.3. Cessative Aspectual Verb Phrase

The Cessative Aspectual Verb Phrase consists of a nucleus filled by any verb plus a margin filled by the cessative word, **atikwona** 'stop.' The suffix **-ram** occurs on both the verb and the cessative word and indicates that the clause in which it occurs is subordinate to the following clause in the sentence. (See Section 5.4.2.2.).

| Korano | aajes | nasonaram | atikwonaram, |
| Chief | he | speak | stop |
'When the chief stopped speaking, . . .'

3.9.4. Incessative Action Verb Phrase

The Incessative Action Verb Phrase consists of a noun from a small class of nouns and an incessative action verb, **gwebali**. The incessative action verb can be inflected for all tenses.

Je werem gwebili. 'He coughs and coughs.'
he cough does continuously

| Ai | naaremem | gwebili. | 'I paddle and paddle.' |
| I | paddle-with | do continuously | |

3.9.5. Hortative Action Verb Phrase

The Hortative Action Verb Phrase consists of the hortative marker **gan** and any verb. The verb may be marked for either future or present tense.

| Gan | gastafe! | 'Let's cut.' |
| hort | cut-future | |

Gan	toteni!	'Let's go out.'
hort	go out	

4.0. CLAUSES

Clauses are units of pedication. Berik clauses normally contain one predicate, except for cases in which one clause is embedded within another. Clauses most commonly fill the nuclei of sentences, but they can also occur as clause level constructions embedded within another clause. A clause consists of optional tagmemes of Time, Subject, Object, Adjunct, and Location and an obligatory Predicate. Although the Subject is regarded as being an optional nuclear tagmeme, this means that it is not necessarily an overt Noun Phrase as Subject, but, in fact, is one that is understood. In a multi-clause sentence, for example, the Subject may be omitted, especially if it has been introduced in a previous clause. The occurrence of the Object and/or Adjunct with their respective verbs determines the transitivity of the clause as in other languages. In other words, within the clause, there is an important interrelationship between the Predicate and the other nuclear tagmemes. The tagmemes of Time and Location are marginal tagmemes since they are not directly related to the predicate, but are more commonly Setting.

Each clause type then correlates the set of verbs which may occur within the Predicate with the number and kind of roles of its other nuclear tagmemes (Pike and Pike 1977). The roles are: actor, undergoer, and scope; the slots are subject, direct object, and adjunct. The central meaning of the roles are: the actor is that which does the action of the verb; the undergoer is the item on which the actor acts; and the scope is the direction or goal toward or away from which the action is directed or an instrument used in performing the action.

If a clause has no actor, transitivity is irrelevant and the clause is referred to as Non-Transitive. It could also be referred to as **Equative**:

Gwili	je	bosoka.
banana	3rd	unripe

The banana is not ripe.

If a clause has an actor, it is defined to be one of a set for which transitivity is relevant For this set, then, the choice is between an undergoer and no undergoer. Those which have no undergoer are **Intransitive**:

Minyak	mes	oroto. 'The oil already boils.'
oil	already	boils

Those which have an optional undergoer are **Transitive**:

Mina	tumilgal	eyebili. 'Mina cooks food.
'Mina	food	cooks

The final distinction is based upon those having a scope:

Bitransitive:

Ai	buku	jep	gubanant. 'I gave him a book.'
I	book	3rd-to	give-past

Bi-Intransitive (or Semi-transitive):

Maria		tesap	sofsant.	'Maria went to the sag
Maria		sago place	go-past	

In many cases, location or destinations would fall into the nuclear Adjunct slot of the clause as scope, especially when the location is in some way essential to the meaning of the Predicate. In these cases, the location is often directional.

Niko		onap	sofsant.	'Niko went to the jungl
Niko		jungle-to	go-past	

In other cases, locations or positions are marginal tagmemes of Location, especially when they are not essential and only weakly related at the most of the Predicate, and when they are not directional, but purely setting.

Niko	twena	tana	onap.	'Niko killed the pig in the j
Niko	pig	killed	jungle.'	

4.1. Clause Types

There are five clause types in Berik: Bitransitive, Transitive, Bi-Intransitive, Intransitive, and Non-Transitive (Equative). The chart below displays the tagmemes associated with the various clause types[7]. The Temporal and Locational tagmemes are marginal; the other tagmemes are nuclear. Temporals, though most often occurring as the first tagmeme of a clause, especially to indicate a new paragraph, may permute to other positions in the clause except following the Predicate. Locationals may precede or follow the Predicate.

	Temp	Subj	Obj	Adjunct	Loc	Pred
Bitransitive	±	±	±	±	±	+
Transitive	±	±	±	−	±	+
Bi-Intransitive	+	+	−	±	+	+
Intransitive	±	±	−	−	±	+
Non-Transitive (Equative)	±	Topic			Comment	

Chart 3. Clause types with associated tagmemes.

4.1.1. Bitransitive Clause

The Subject, Object, Adjunct, and Predicate tagmemes are nuclear in the Bitransitive Clause and normally occur in that order. The Subject, Object, or Adjunct might not actually appear in the surface structure of the clause, but they would be understood in context.

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7   The traditional slot terms of Subject, Object, etc. have been used in the above Chart rather than the role terms of Actor, Undergoer, and Scope.o

The Object tagmemes are cross referenced in the Predicate as suffixes on the verb. Clarifying the explanation of Objects and Adjuncts in the introductory paragraph, the Adjunct as scope may be a recipient or donator of a thing or action, a locational, or an instrument used in performing the action.

Temporal and Locational tagmemes are marginal in all clause types.

Mar: Temp Nuc: Subj   Object Adjunct Predicate   Mar: Loc

Ir	ai	buku	jep	gubanant	jinap
yesterday	I	book	him-to	gave	house-in

'Yesterday I gave the book to him in the house.'

	Joel	mirunu	Tuanf	iribeyele.
	Joel	corn	Mr.-for	plants

'Joel plants corn for Mr.

	Je	faawena	jinap	gelna.
	he	spear	house-in	places

'He places the spear in the house.

Gamer	je	tini	tobalsiusint	twen	sagabe
then	he	stick	threw	pig	back-on

'Then he threw the stick onto the pig's back.

	Ai	tesala	betefem	tebili
	I	leaves	needle-with	sew

'I sew leaves with the needle.

Comments: The Adjunct may permute to follow the Predicate.

4.1.2. Transitive Clause

The optional Subject, Object, and obligatory Predicate tagmemes are nuclear in the Transitive clause. The Subject is omitted in an imperative.

Several features of the Object are marked in the Predicate. (See section 2.3.1.). The Object may permute to precede the Subject or in some rare instances to follow the Predicate.

Temporal and Locational tagmemes are marginal.

Mar: Temp	Nuc: (Obj)	Subject	Object	Predicate	Mar: Loc
Namwer		Mina	tumilgal	eyebili	dapurwer
now		Mina	food	cooks	kitchen-in

'Now Mina cooks in the kitchen.'

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Fos	disultena	
water-you-2	get 'Get water!'	

Tane	je	ginas	eyebana	
child	he	arrow	makes	'The child makes an arrow.'

Tini	ai	goltesant.	
stick	I	picked-up	'I picked up the stick.'

4.1.3. Bi-Intransitive Clause

The optional Subject and Adjunct as scope and the obligatory Predicate tagmemes are nuclear in the Bi-Intransitive clause. Temporals and Locationals are marginal. As with the Bitransitive clause, the Adjunct may be a locational essential to the Predicate, or an instrument used in performing the action. The Adjunct always carries the locational or the instrumental suffix.

Mar: Temp Nuc:	Subj Adjunct	Pred	Mar: Loc
Ir	Maria je tesap	sofsant.	
yesterday	Maria sago place-to	went 'Yesterday Maria went to the sago place.'	
	Amnip	jila!	
	me-to	come 'Come to me!'	
Tuna	karton mifip	falnutena.	
stone	carton lip-at	lays	
'The stone lies at the lip of the carton.'			
Aamke	atem	difna?	
you-ques	canoe-by	come 'Did you come by canoe?'	
Je	jam	nwini kursinip.	
she-1	she-2	sits chair-on 'She is sitting on the chair.'	
Tane	jitamwer	naodna	
child	outside	plays 'The child plays outside.'	
Banggena	taosent	tinibe	
	squirrel	climbed tree-on 'The squirrel climbed the tree.'	

Comments: The adjunct may permute to follow the Predicate. Most Predicates in this clause are verbs of motion.

4.1.4. Intransitive Clause

The optional Subject and obligatory Predicate tagmemes are nuclear in the Intransitive clause. As in other clause types, Temporals and Locationals are marginal.

Mar: Temporal	Nuc: Subject	Predicate Mar: Locational

Namwer   wini je   irwana.
now   lady she   gets up 'Now the lady gets up.'

              Aro jem   nwintana.
              rain it   sits 'It's raining. (Rain is fälling.)'

                            Das   iruwe!
                            imp   get up 'Get up!'

Minyak   mes oroto   dapurwer
oil   already   boils   kitchen-in
'The oil is already boiling in the kitchen.'

Ai   bastantoifer sarbana.
I   little   understand
'I understand a little.'

Tantantane seyafter   jam ge   taibinene.
children   all   they pl   crawl
'All the children crawl.'

4.1.5. Non-Transitive (Equative) Clause

The obligatory Topic and obligatory Comment are nuclear tagmemes in the Non-Transitive (Equative) clause. (See comment below for exclamations.) Temporals, as in other clause types, are marginal. Unlike other clause types, Locationals may fill the nuclear Comment slot. Common fillers of the Topic and Comment slots are listed below.

± Temporals	+ Topic	+ Comment
Temporals	Noun Phrase	Modifier
Temporal Phrase	Possessive Phrase	Numerals
	Question word	Response word
		Noun Phrase
		Location Phrase
		Possessive Phrase
		Question word
		Exclamations

Comments: Temporals may also follow either the Topic or the Comment. In exclamations (which are statistically few in number), the Topic may be omitted. Typical examples of the Non-Transitive clause type follow.

Paulus   aame   mamkaya.
Paul   you   mad   'Paul, you are mad.'

Ir   fena   barbarsus.
yesterday   clothes   finished-emp
'Yesterday the clothes were completely gone (sold out).'

Ne seyafter   mafnabara.
we all   breath-have   'We all have breath.'

Je   namwer   bwernabaryan.
he   now   sickness-has-neg   'He isn't sick now.

Gwili ue   bosoka.
banana it   unripe   'The banana is unripe.'

Gwolna je   nanmena?
dog   it   whose   'Whose dog is it?'

Sandal   amna   tikar   fensawer.
sandals   my   mat   beside 'My sandals are beside the mat.'

Je   bwernabar   namwer.
he   sickness-has   now   'He is sick now.'

                Nesek!   'That's pitiful!'

5.0. SENTENCES

Sentences are basic units of discourse. Berik sentences may be broadly classified as being either Independent or Dependent. An Independent Sentence is one which includes one or more clauses, one of which is an independent clause. This independent clause is not tied by some tagmemic feature, as for example, a subordinating tagmeme, to a preceding sentence.

Ai   twena   tane tafam   tebana.
I   pig   child hands-inst   catch
'I catch the small pig with my hands.'

Dependent sentences are those involving single words, phrases, and dependent clauses and are tied by contextual information to a preceding utterance. A dependent clause in this analysis is defined as one which includes a subordinating tagmeme.

Ngga. 'Yes.'
yes

Fwera? 'Where?'
where

Jerem jinap. 'In his house.'
his   house-in

Afwer   fas.   'The others are not.'
others none

Aame	baif is	gwenaram,
. . . you	don't want	you do

'If you don't want to do it, . . .'

It should be noted that this definition of dependent clauses and sentences differs from that used by other researchers in describing other Papuan languages. The structure of Berik does not exhibit medial and final verbs as described by Murane in *Daga Grammar* and Tipton in *Nembi Discourse Structure*. Berik has a very different grammatical structure from those languages and does not make the same distinctions between independent and dependent clauses and sentences as described by those researchers.

All sentences are marked with final falling intonation with varying degrees of pause between them when grouped into larger units of discourse. The remainder of this section will concentrate on the description of Independent Sentences.

5.1. Sentence tagmemes

Sentences are composed of marginal and nuclear tagmemes. Marginal tagmemes include introductory exclamations, terms of address (including personal names and kinship terms), and Hortatory introducers.

Wa,	fona jam	orotona.
Exc	water it	boil 'Oh, the water is boiling!'

Tane amna	esorol ajur	gulbana.
child my	advice I	give 'My child, I give you advice.'

Ao,	ne	tumilgala gan	eyebabi.
Hort (come)	we	food hort.	cook 'Come, let's cook the food.'

The nucleus of an Independent Sentence may be filled by any of the five Berik clause types.

5.2. Independent Sentences

Independent Sentences may be either **Simple** or **Complex**. If a sentence contains only one independent clause, it is a Simple Sentence. Simple Sentences may contain clauses embedded within them however, as the fillers of a phrase slot.

Wini	fona	aje	gwidnirim	jega	am	damtana
lady	water	she	carry rel.	me		see

'The lady carrying water sees me.'

If a sentence contains more than one independent clause, which is in either a coordinate relationship with another independent clause or a subordinate relationship with a dependent clause, it is a Complex Sentence.

The role of any Independent Sentence nucleus may be that of an interrogative, an imperative, a hortative, or a statement. These four roles shall be discussed in relationship to the Simple Sentence, but their constructions may be used in the same manner with Complex Sentences. Complex Sentences will be discussed showing coordination, subordination, and the use of conjunctions.

5.2.1. Interrogative Sentences

Interrogative Sentences are identified by a question marker, **ke**, or an interrogative word occurring either sentence initially or following the subject. In Complex Sentences, neither the question marker nor the interrogative need be repeated in clauses following the initial clause. In rhetorical questions, the implied answer is always in the negative.

Maria	je	ke	tesap	sofsa?	
Maria	she	ques	sago-to	go	'Did Maria go to the sago place?'

Fonggalabar	ne ge	sofsa?	
when	we pl	go	'When shall we go?'

Aame	ke	twena	im	damtanant,	ga	im	nunggirin?
you	ques	pig	you	see-past	and	you	run-past

'Did you see the pig, and then run?'

Je	ke	tosa?	
3rd	ques	know	'How can she know?'

5.2.2. Imperative Sentences

Imperative Sentences are used to give commands. The imperative markers, **das**, ⁓ **jas**, **sa**, and **se** occur before any present tense transitive or intransitive imperative verb form. Other verbal suffixes. (See Section 2.3.1.) do not occur on the verb in the imperative construction.

Thimbwat,	das	nwinte!	'Thimbwat,	sit down!'
Thimbwat	imp	sit		

Titiki	aiserem	je	oltunabora. 'Se	tokso!
floor	this	it	dirty imp.	sweep

'The floor is dirty. Sweep it!'

The correctional Imperative consists of two clauses: a negative statement followed by a positive imperative.

Nwinyen;	das	tate!	
sit-not	imp	lie down	'Don't sit; lie down!'

Denggam	ti	taiyan;	nombe	s'gwidni!
axe-with	wood	cut-not	machete	use

'Don't cut the wood with an axe; use a machete!'

In a Complex Sentence the imperative marker is not repeated in clauses following the initial clause.

Ama, das	armanul	tumilgala,	ga	is	eyebabili
friend imp	buy	food	and	you	cook

'My friend, buy the food and cook it!'

The single clause negative imperative is given by a negative imperative marker, **ibsam** 'don't,' plus any transitive or intransitive verb which carries a final suffix **-ram**.

Ibsam	jilaram!	'Don't come!'
neg-imp	come	

Ibsam	gutalaram!	'Don't scratch!'
neg-imp	scratch	

5.3.3. Hortative Sentences

are those which express advice or give suggestions or exhortations. The Hortative Sentence introducer **ao** 'come' precedes any clause containing the Hortative Action Phrase. (See Section 3.9.6.) In Complex Sentences the Hortative Sentence introducer occurs sentence initially and the hortative marker **gan** occurs before each verb.

Ao,	gan	nwinte.	
Hort (come)	hort	sit	'Come, let's sit.'

Ao,	ne	tumilgala	gan	eyebabi gan	tesarabali.
Hort (come)	we	food	hort	cook hort	dance

'Come, let's cook the food and dance.'

5.2.4. Statements

Statements are all those sentences which are not of the preceding types, that is inter-rogative, imperative, or hortative. Statements are by far the most numerous type of sen-tence, and as with the other sentence types, tend to be short.

There are few conjunctions in Berik so that normally complex English sentences are written as several Simple Sentences in Berik. The Simple Sentences are chronologically related so that the action included in the first sentence would occur logically before any ac-tion in the sentences which follow. However, if a conjunction occurs or if a verbal suffix which marks the linking of clauses occurs, then the sentence is a Complex Sentence. Ex-ample of a Complex Sentence:

Je Somanente	aolna	udarna ga8	domolnutna.
he Somanente	go	plane re	see

'He goes to Somanente (in order to) see the plane.'

Example of two Simple Sentences:

Je	Somanente	jem aolyan. Je	udarna jem	domolyan.
he	Somanente	he go-neg he	plane he	see-neg

'He doesn't go to Somanente. He doesn't see the plane.'

Further analysis of texts should give greater insights into this tendency toward shorter constructions. Chart 4 below summarizes the presentation of material regarding Complex Sentences in the paragraphs following it.

5.3. Complex Sentences

Complex Sentences are composed of two or more clauses of which at least one is an independent clause. These clauses are in either a coordinate relationship or a subordinate relationship in which one clause is subordinate to the other.9

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8   See Section 5.3.1. regarding this particle.

9   Both the coordinate relationship and the subordinate relationship between clauses in sentences have been grouped together under the general term complex (as contrasting with simple) senten-ces, rather than using the more usual distinction of complex verus compound.

Independent Sentences

Simple Sentences (used to illustrate roles)	Complex Sentences (used to illustrate coordination and subordination)	
	Coordinating relationship	Subordinating relationship
a) interrogative b) imperative c) hortative	a) joined by coord. conj	a) joined by subord. conj or rel particle **ga** in non-initial clause positions
d) statement	b) joined by rel particle **ga** clause initially	b) joined by a subord suffix **-ram**

Chart 5. Simple and Complex Sentences

5.3.1. Those clauses which are in a coordinate relationship are joined to one another by a coordinate conjunction, **ane** 'and,' or more commonly by a relational particle, **ga**, occurring between the clauses. This relational particle occurs frequently in discourse and needs more analysis with respect to higher grammatical levels, i.e. paragraphs and discourse. A contrastive conjunction, **jeuga** 'but,' also joins two or more clauses together in a contrasting coordinate relationship.

Aame   is   udanaburswana ane   is   gerna   tane   gitowai.
you   you   pregnant   and   you give birth   child male
'You are pregnant and you will give birth to a boy.'

Ai   jigala   gartesant ga   ai   tisin   jamer jinabo.
I   goods   got   and   I   walked   until house-at
'I got the goods and I walked (until I arrived) at the house.'

Gwidmir   Tuan   gwili   tegafar   ga   ai as   tombafa.
tomorrow Mr.   bananas   cut-fut   and   I I   eat-fut
'Tomorrow Mr. will cut the bananas and I will eat them.'

Das   orotana   ga   asi   s'bili.
imp   boil   and   me   imp-tell
'Boil (the water) and then tell me.'

Fonggalabar aame   twena   damtana   ga   im   nunggiri?
when   you   pig   see   then you run
'When you see the pig, then do you run?'

Niko   kasian   tombana, jeuga Tuan ga   fos , telbili.
Niko   peanuts   eats   but   Mr.   rel   water drinks
'Niko eats peanuts, but Mr. drinks water.'

5.3.2. Unlike the coordinate relationship in which two or more independent clauses are joined by coordinate conjunctions or the relational particle **ga**, clauses in a subordinate relationship consist of one independent clause and one or more dependent clauses.

5.3.2.1. The clauses may be joined together by subordinating conjunctions; **jengga** 'then,' **jebas** 'because' or by the relational particle **ga** which occurs in various slots in the second clause, except clause initially, but always precedes the predicate. The subject of the second clause may be omitted if it is co-referential with the subject of the initial clause.

Wa,	twena	nunggirbisi,	jengga	jensiriber.
exc	pig	runs	then	snorts

'Oh, the pig runs, then (it) snorts.'

Ai, as	sinar,	jebas	asia	wisiam	bitolu.
I I	cry	because	I	coolness	feel

'I cry because I am hungry.'

Ai	siafras	nasonar asis	ga	tawastona.
I	wrongly	speak you	rel	tell

'(When) I speak incorrectly, then you tell me.'

Je	fomfoma	artena, esala	gam	tebili.
he	how	know leaves	rel	sew

'How does he know (how) to sew leaves (for roofing)?'

Je	Somanente	aolna	udarnà	ga	domolnutna.
He	Somanente goes	plane		rel	see

'He goes to Somanenete (in order to) see the plane.'

5.3.2.2. A subordinating relationship between two clauses may also be indicated by the presence of the subordinating suffix, **-ram** on the verb of the initial clause in the Conditional and Sequential Sentences. In all the examples studied the two clauses are chronologically related with the action of the first clause occurring before the action of the second clause.

The Conditional Sentence is an example of this. The Conditional Sentence consists of two clauses; an initial dependent clause setting forth a condition, and a resultant independent clause.

Aame	baif	is	gwenaram,	ai	isas	saftana.
you	not want	you	do-subord	I	you	hit

'If you don't want to do it, I'll hit you.'

Barsa	is	taabuntnorom,	abgwona	bastoifer	is	terbana.
rice	you	get-subord	me	little	you	give

'If you get rice, give me a little.'

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Aro	jem	nwinteram,	wat	nejema	tibeyen.
rain	it	falls-subord	palm stems we		go-neg

'If it rains, we won't go for palm stems.'

Sequential Sentence examples:

Suster	forteram;	Daud	saptena.
Sister	come-subord	David	hit

'After Sister came she hit David.'

Ne	ke	nesne	nwinteneram	ke nesne	twina?
we	ques	we	sit-subord	ques we	eat

'Shall we sit and eat?'

Aame	ijes	gurulum	je	futu
you	it	plant-subord	it	died

'What you planted died.

Au,	jinas	tabanswenaram	ga	nesne	nwintena
come	house	finish-subord	then	we	sit

'Come, let's finish the house and sit.'

Namwer wini	je	irwanaram	ga	gwina
today lady	she	gets up-subord	then	goes

'Today the lady gets up and goes away.'

5.3.2.3. The Causative Sentence consists of an initial transitive clause containing a Predicate word, **taatwobana** 'to cause or to force,' and a final "effect" clause. The understood subject of the final clause is the object of the initial clause, and the Predicate of the final clause carries an **-f** final suffix on the verb.

Je	wina	gam	taatwilbini	titik	sapusof.
he	wife	rel	forced	floor	sweep

'He forced his wife to sweep the floor.'

Je	Mina	gam	taatwilbili	nanaf	sofwef.
he	Mina	rel	forced	vegetables	go

'He forced Mina to go for vegetables.'

Korano	anggwona	jes	taatwobana	tis	taarif.
chief	man	he	forced	wood	chop

'The chief forced the man to chop wood.'

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Another Causative type Sentence in which the causing action is less overt consists of an initial clause containing a noun phrase and a Predicate word, **gwebana** 'to cause thru non-overt actions' and a final "state or effect" clause including the particle **ga** 'change of state' preceding the verb.

Anas	sa	gwebana, je	bwerna	ga	folbana.
worms	cause	he	sickness	c.s.	become

'Worms cause him to become sick.'

Kwimal	le gwebana, je	bwerna	ga folbana.
jungle spirit	it caused he	sickness	c.s. became

'A jungle spirit caused him to become sick.'

Baapta Yesusmana	je gwebana,	angtane jeserem	ga waakensona.
Power Jesus-poss	it caused	person that	c.s. healed

'The power of Jesus caused that man to be healed.'

Finally:

Niko	aame	ifom	gwebana,	tane jeserem je	ga siana?
Niko,	you	you-how caused		child that he	c.s. cry

'Niko, how(or why) did you make that child to cry?'

Note also that in a question, the noun phrase and predicate word **gwebana,** can permute to follow the object.

Niko, aame	tane jeserem je ifom gwebana,	ga siana?
Niko, you	child that he you how caused	c.s. cry

'Niko, how did you make that child cry?'

5.3.2.4. Other examples of complex sentences include:

1. reason - RESULT: (because, so, therefore)

Jem	temawer	titiki je	oltunoboro, je jes toksona	titiki je.
it	because	floor it	dirty she it sweep	floor it

'Because the floor was dirty, she swept it.'

2. means - RESULT: (by, through)

Titiki eswatem	toksolaiserem,	je titiki jem	waakensona.
floor broom-with	sweeping	she floor it	cleaned

'By sweeping the floor with a broom, she got it clean.'

3. purpose - MEANS: (in order that, so that)

Je	titik	toksona jiga titiki	gam	waakenswef.
she	floor	swept so	then	is clean

'She swept the floor in order to get it clean.'

4. concession - CONTRAEXPECTATION: (although, in spite of)

Titiki	jeserem	safe	jam	toksola,
floor	that	contrary	she	swept

titiki	jeserem	jam	waakensweyan.
floor	that	it	clean-not

'Although she swept that floor, that floor isn't clean.'

5. grounds - CONCLUSION: (therefore I conclude so)

Titiki	jeserem	waakena,	je	mes	toksona.
floor	that	clean	she	already	swept

'That floor is clean, (so) she must have swept it.'

6. grounds - EXHORTATION or IMPERATIVE (see also 5.3.2.):

Titiki aiserem	je	oltunoboro,	se	tokso!
floor this	it	dirty	imp.	sweep

'The floor is dirty, so sweep it!'

7. condition - CONSEQUENCE:

Afa	titiki	je oltunoboro,	je	gam	toksona	titiki je.
if	floor	it dirty	she	then	sweep	floor it

'If the floor is dirty, she'll sweep it.'

5.4. Conclusion

This chapter on Sentences has sought to describe the distinctions between Independent and Dependent Sentences, and also Simple and Complex Sentences. Simple Sentences were used to show the different roles a sentence might play, and Complex Sentences were used to demonstrate coordination and subordination. Several examples were used in each Section to show the most common constructions. Further research needs to be done in order to make these distinctions even clearer. Especially needful is an analysis of the

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