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by

A. Capell

A. Healey

A. Isoroembo

M. Chittleborough

D.B. Wilson

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All correspondence concerning PACIFIC LINGUISTICS, including orders and subscriptions, should be addressed to:

*The Secretary,
"Pacific Linguistics",
Department of Linguistics,
School of Pacific Studies,
The Australian National University,
Box 4, P.O.,
Canberra, A.C.T. 2600.
Australia.*

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THE STRUCTURE OF THE BINANDERE VERB

A. CAPELL

1. SENTENCE STRUCTURE

1.01. INTRODUCTION

1.01.1. The language here called "Binandere" is that which is spoken about the Mamba River, the area in which the Reverend Copland King began work about the turn of the twentieth century, and in which all the literary work of the Anglican Mission has been carried out.

1.01.2. The phonemes of the language are treated in another part of this volume. The spelling used by the Anglican Mission has been retained here, however, for the two reasons that the examples are in large part based on printed translation - as well as on material collected by the author - and that any study of the language made from the printed materials will be in the standard orthography. This orthography is not entirely phonemic: /d/ becomes a palatal plosive before /i/, and is spelled j; /t/ becomes /s/ in the same position, and /w/ becomes bilabial v, and these three symbols are used by the Mission. The only departure made from the Mission orthography is that in the latter ng is used after a vowel to represent nasalisation, e.g. /ũ/, 'water' is written ung. The nasal marker /~/ is employed here. Otherwise ng represented /ŋg/ in this dialect - a simple /ŋ/ occurs in Notu.

1.01.3. The present essay is concerned with the analysis of the Binandere verb. However, verbal forms occur in a sentence context whose structure determines which of a number of forms must be chosen, and this structure is very different from that of English. It seems therefore advisable to prefix to the analysis of the verb a brief exposition of the sentence structure of the Binandere language. The exposition will be presented in almost tabular form, so as to permit of making the maximum space available for the discussion of the verbal system. Material not supplied from the author's field notes is drawn mainly from the Binandere translation of the *Book of Common Prayer*, the latest and best translation work

produced in the Mission, together with Bible translation and some original work available.

1.02. Utterance and Word Classes in Binandere

1.02.1. The brief outline following is couched in terms of the tagmemic system developed by Kenneth L. Pike and developed by the Summer Institute of Linguistics. This seems to allow most easily the possibility of a maximal statement in a minimal space. The following definitions are assumed:

- i. An *utterance* is a passage of speech, divisible into sentences which are utterances preceded and followed by silence.
- ii. An *uttereme* is such a period of speech preceded and followed by silence.
- iii. A *word* is a minimum utterance which can be meaningfully isolated.
- iv. A *morpheme* is the smallest meaningful unit of phonetic structure.
- v. A *phoneme* is the minimal distinctive unit of sound in a given language.

1.03. Types of Utteremes

The normal sentence composition in Binandere consist of

± actor + goal ± action.

There are five main types of uttereme to be distinguished.

Uttereme 1. Affirmation of activity: Minimum + predicate which is the exponent of a transitive verb - *sisina* 'he said'. The expanded form is:

± actor: N goal: N ± location particle + predicate: V trs

embo mi ganuma butu de gosisira
man (agent) stone ground on saw

embo mi rorae ika - aında mamaĩ tote da yai - kando esisina
man (agent) goods his - his son two of place - division did
'The man divided his goods between his two sons.'

Uttereme 2. Description of an item. Minimum:

item + description.

awa - mai nato
he - son my 'He is my son.'

amo - embo beiamana
 he - man good *'He is a good man.'*

Expansion: + (+ item + description) ± manner ± place ± time

Uttereme 3. Question.

(a) Question of identification, consisting minimally of + (item + interrogative):

amo - rori?
 this - who? *'Who is this?'*
 dawo ito - averi?
 name your - what? *'What's your name?'*

(b) Question of information consisting of Uttereme I + interrogation marker:

imo jimbo iji engo de edo era - gae - ta?
 you deeds day these in they-have-done - not know - ?
'Don't you know what they have been doing lately?'

On the morphological level there are formal changes in verb ending involved in the asking of a question, of either kind.

Uttereme 4. Answer to question. This may assume very varied forms, consisting of any of the units which may be found in responses, e.g.

ã?ã; tote; na embo gena
 yes two I man see

and many others.

Uttereme 5. Utterances in sequence. This is the section of Binandere syntax that shows most peculiarities. The basic rule is that two clauses, as understood in most European languages, do not occur as main clauses. There is a "periodic" construction, according to which a sentence contains one main clause, all others being subordinated in some way. The verbs which according to Binandere rules occur at the end of a clause, are divisible into sentence-final (SF) and sentence-medial (SM) on the morphological level. The SM forms vary also according as to whether the same actor appears in both clauses (SM₁) or whether there is a different actor in each clause (SM₂). There are also dependent forms which may appear in both SM and SF positions. For detailed explanation of SF and SM forms see 2.05.2.ff., and for dependent forms 2.05.5. and 2.12.1.ff.

1.04. Word-Classes in Binandere

On the level of morphology, the word classes, which are actually also form classes, to be distinguished in Binandere are as follows:

1. Words which can occupy (a) the actor spot or (b) the goal spot in an utterance of the types given above may be defined as nouns:

embo totorisina

man went

na totoritena

I went

embo mi ni gira

man (agent) tree saw

embo mi na gira

man (agent) me saw

Words definiable as nouns in these terms may be followed by (a) certain particle, e.g. mi marking agent or instrument; da, marking possession or location; or (b) qualifying words of quantity, quality or definiteness:

(a) embo mi na gira na kasi mi dera
man me saw me club with he-hits

embo da jisi da
man of eye in 'in the man's eye(s)'

(b) embo beiamana dakaki
man good one 'one good man'

ũ eiwa beiamana be
water this good indeed 'This water is very good.'

Some members of this group take other affixes, number markers, etc. as well.

ii. Words which occupy the action spot in any utterance may be defined as verbs; they are marked by certain suffixes which never apply to nouns. This class is studied in detail in 2.

iii. Words which occupy neither actor, goal nor action spots in an utterance, but are in a position of dependency on one of these classes may be defined as particles. Descriptive words of all types, which might seem to fall under the heading of "Particles" are best subsumed in the class of nouns, as a subclass within it.

This brief outline may now lead into a more detailed analysis of the

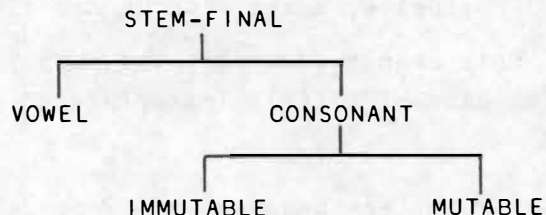
Binandere verbal system as a whole.

2. VERB STRUCTURE

2.01. Verbal Types

2.01.1. The Binandere verb has only voice - the active. It has a number of different types of verbal base, but all can be reduced to one class. The substantival form of the verb always terminates in *-ari*. This may be either an ending, as in *ategari* 'greet, thank', or a separate element as in *adu ari* 'be afraid'. It is simplest to regard all verbs as really compounds of *ari*, which by itself means 'to do', and a substantive base, *adu ari* 'to do a fearing'. In such an analysis, *ategari* becomes **ateg*' *ari* 'to do a greeting'. The advantage of this type of analysis (which need not be reflected in the orthography) is that all verbs can then be regarded as of one class, i.e. compounds of *ari*. Consonant changes within the body of the verb are frequent, but these can be treated as morphophonemic variations, not involving subdivision of the verbs into several classes or conjugations. Such subdivision becomes needful at only one point.

2.01.2. Accordingly, two subgroups of one verbal type will be recognised here. The ending *-ari* is first to be abstracted from the substantival form. Then two varieties of stem are left, (1) vowel endings and (2) consonant endings. Vowel endings are exemplified in *pi-ari* 'give', *e-ari* 'poke'. Consonant endings appear in *g-ari* 'perceive', *t-ari* 'say', *ategari* 'greet'. The group ending in consonants is further subdivisible into (i) immutable and (ii) mutable stem finals, e.g. *bur-ari* 'dig' and *kumb-ari* 'bring'. The following table shows the typing of Binandere verbs:



There are some verbs whose stems are irregular, e.g. *aimbari* 'go' > *ausisina* 'he went (long ago)', but in all cases the person endings are regular, and even the stems can largely be accounted for.

2.02. Morphophonemic Changes

2.02.1. As stated, some consonant stem finals are mutable, but all the

mutations are morphophonemic, i.e. they are due to the action of sound on sound, and can be explained on a phonemic basis, without morphological implications.

2.02.2. The principal rules which have to be observed in the conjugation of the Binandere verbs are:

i. Before the high front vowel *i*, dentals are palatalised: *d + i > ji*, and *t + i > si-*, e.g. *t-ari > sisina* 'he said'; *badari > bajido* 'having grown up'.

ii. *w* becomes *v* (bilabial) before front vowels, both *i* and *e*: *ari > awate* 'you are to do' (plur.); but *ave* (same meaning, alternative form); plural imperative *ewavi*, not *ewawi*. Before *-u-*, the *-w-* disappears: *dawari* 'go by water' > *da-utana*, Past II. In Korafe the *w - v* change takes place also before *-u-*.

iii. Changes of the homorganic nasal-plosive combinations:

(a) *mb > m*; *nd > n*. This change takes place whenever there is an *n* in the person ending which is added to the verbal stem: *gumb-ari > gumeNa* 'I come', but *gumbeta* 'you come'; *indari* 'eat' > *inaNa* 'I shall eat', but *indata* 'you will eat'.

(b) *mb > p*. This change takes place in the Past II tense, when the following vowel is *-u-*; it may be associated with reduplication of the stem also in Past IV but does not depend on it, and in the latter tense the following vowel is *-i-*. EXAMPLES: *gumb-ari* 'come' > *guputena* 'I came'; *kumb-ari* 'bring' > *kupana*, Past II; *kuputena*, Past IV. In the former example, *gupuna* is Past II, but the future is *gumana* by rule iii(a) above, because the ending has *-n-*. It may prove that the change in this second case is morphological, not just phonemic, like the others. The same change takes place in the present form of sentence-final I: *temb-ari* 'cross over' > *tepeite*, again without association with *-u-*.

(c) *nd > nj(i)*. This change occurs in the past tense forms, where it is really a special case of iii(a): *ind-ari* 'eat' > *inj-isina* 'he ate'.

iv. The suffix *-r**: the *-r-* becomes *-n-* if preceded by a nasal in the stem of the word to which it is attached.

v. Contraction and assimilation take place in verbs with homorganic nasal-plosive stem finals, in sentence medial I forms ending in *-do*: *gumba-ari* 'come' > *gundo*; *bamb-ari* 'go' > *baundo*. There are, however, some as yet unexplained exceptions to this, e.g. *katemb-ari* 'understand', *think*' > *kotembedo*.

2.03. Reduplication

2.03.1. Reduplication of the verbal stem is a regular phenomenon in the Definite Past Tense (Past III). Not all verbs appear to be subject to it, but most are. Morphophonemic rules operate in the processes of reduplication as they do elsewhere. Thus *t-ari* > *tesitena*, because **tetitena* would not be phonetically possible in this dialect.

2.03.2. Theoretically the reduplication is that of the first syllable, and this holds good in most cases, e.g.

jir-ari *jijir-isina*
wot-ari *wowos-isina*
vit-ari *vivis-isina*

There are, however, modifications of this theoretical procedure:

i. the *-mb-* pattern is simplified:

jimb-ari *jijimb-edo*

ii. stems consisting of a single consonant require a supporting vowel to be inserted:

t-ari *tes-isina*

iii. stems ending in a vowel are variously treated:

a. *pi-ari* *pipi-tena*

b. *do-ari* *dadu-rote*

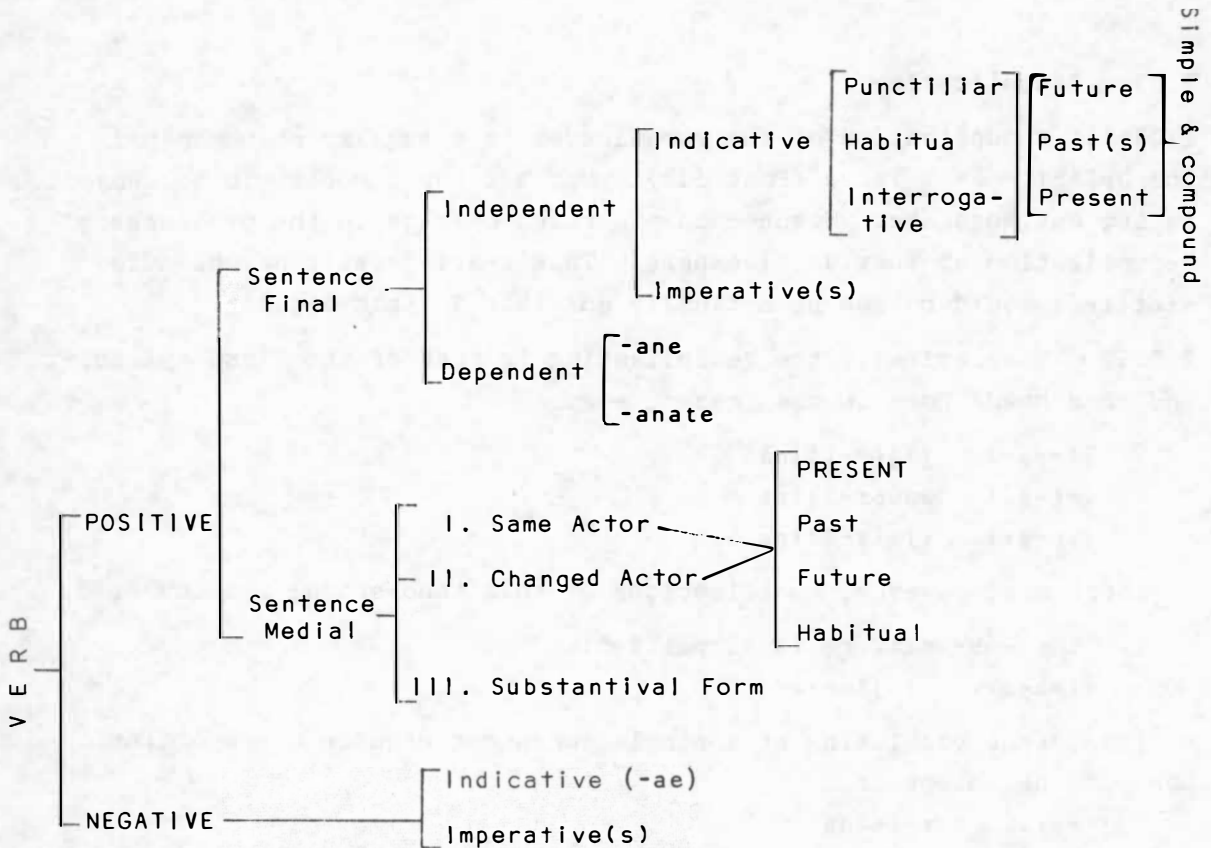
2.03.3. Some stems are irregular in that they reduplicate the later instead of the earlier part of the word, e.g.

atop-ari *ato-papo-sisina*

It is logical to suspect that these are really compounds, and would theoretically be written, e.g. **ato p-ari*, with a break between the elements.

2.04. Scheme of the Binandere Verb

2.04.1. The following table sets out the elements of the verb and the parts from which each is derived.



2.05. System of Aspects and Tenses

2.05.1. Although the Binandere verb has only one voice - Active - it is divisible into two Aspects - Positive and Negative - and a number of mood and tense forms. The moods are two: Indicative and Imperative. The scheme of tenses is somewhat complicated. The first division among them is that between sentence-final (henceforth called SF) and sentence-medial (henceforth called SM) forms. The construction of the utterance in Binandere requires explanation in order that these two major subdivisions of tense-forms may be understood.

2.05.2. English prefers an utterance arranged paratactically, with a number of full verbs connected by "and" or some other conjugation, e.g. 'the man came and I spoke to him'. In Binandere the construction is different. There must be only one main verb in a sentence; all others are subordinated in one way or another, e.g.

embo mi gundo tesiri gena
man having-come when-he spoke I-heard him

Here only the last verb is a full form: g-ena, Present or Colloquial Past of g-ari 'hear', 'perceive (by any of the senses)', 1st person singular. Moreover, this full verb is placed at the end of the utterance; therefore

it may be called sentence-final (SF). The SF forms change to express all persons, tenses and moods, as well as the two Aspects. The verb *gundo* < *gumbari* 'come' expresses nothing final; it cannot stand by itself. Its nearest English equivalent is 'having come'. But it also implies that the same actor will appear again in the next verb, and makes no statement as to who the actor is: that must be gathered from the subject, here 'embo mi' and the next verb: *gundo sisina* 'having come he spoke'; *gundo sitena* 'having come I spoke', etc. It is in these last two examples only 'sisina' and 'sitena' that make it possible to determine who came.

2.05.3. The second verb *tesiri* < *t-ari* 'speak' is also sentence-medial (SM), but it implies that a different actor is to follow: *g-ena* 'I heard'. The nearest English would be 'he-having-spoken I-heard', or 'he spoke and I heard'. Both these incomplete forms are 'sentence-medial' (SM); type I involves the same actor for both actions; type II involves a change of actor.

2.05.4. In the following sections, sentence-final forms will be treated first, sentence-medial forms later.

2.05.5. The next subdivision to be made is that of Independent and Dependent. This concerns both SM and SF forms; of course the sentence-medial are naturally dependent, though not in the same sense as that under discussion at the present moment. As the name indicates, Independent forms can stand alone, and form the main verb of the statement. Dependent forms, however, must always be coupled with another verb, though they either precede or follow that verb as the sense requires. In the sentence

*Awamane kakoa esitera piaro torari, edo ainda do da piaro
durarate (Lk.5:18)*

*They looked for (a way) to make (him) enter, and to put him to lie
down before him*

the SF verb is *kakoa esitera* 'they looked for', 'tried to find'; *piaro* is more like 'that they might put', and *torari* is the substantive form 'to enter'; both together mean 'cause him to enter', 'bring him in'; *durarate* 'that he might lie down'. Both *torari* and *durarate*, although morphologically different, are dependent on *piaro*, and that in turn on *kakoa esitera*. So the Binandere rule that an utterance can have only one sentence-final form (unless this is circumvented by a use of 'edo') is obeyed. There are many other usages in which these dependent forms occur, but the use with *piari* 'give', 'put', 'cause to' is a very common example and entirely typical.

2.05.6. Person is marked by a set of suffixes used with very little variation in all forms of the sentence-final verb (of both types), and in SM II forms with change of final vowel. As this change of final vowel is a common phenomenon in Binandere, it is convenient to use a sort of shorthand expression by which to indicate a variable vowel of this nature, and here an asterisk after the consonant is used, so that, e.g. r* will mean that 'forms -ra, -re, ri- and -ro are used'. A final -u occurs only in one instance and is not transmutable, but the other four vowels occur generally in such sequences. The person endings of the verb are therefore to be tabulated as follows:

	SINGULAR	PLURAL
1. incl.	---	-n*
1. excl.	-n*	-r*
2.	-t* ~ -si	-w* ~ -vi
3.	-r*, -n*	-r*

The third person singular is usually -r*, but becomes -n* in Dependent forms and certain of the Independent forms, e.g. Future tense.*

2.05.7. The vowels added to these personal suffixes are:

- a Statements, sentence-final Independent.
- e Statements, SF, Dependent.
- i Interrogative, all forms, and some SM.
- o Sentence final, dependent.

EXAMPLES:

- a: e-n-a 'I do'; e-site-n-a 'I did' (definite past); a-n-a 'I shall do'
- e: a-n-e 'let me do', 'I may do'; a-r-a-te 'let him do'
- i: t-ete-n-i 'did I say?'; t-e-o-si 'do you (habitually) say?'
- o: t-a-n-o gata 'when I speak you will hear'. In certain persons -i is used in these SM forms instead of -.

* The author long hesitated whether to include a Realis-Irrealis distinction in Binandere, on the ground of this particular type of variation, but decided that the distinction Independent-Dependent was more productive.

2.06. Vowels Added to Stems

2.06.1. In 2.01.2. it was shown that the stem of a Binandere verb is obtained by removing the *-ari* which marks the substantival form. This stem, however, is not yet ready for use with person endings. It needs a linking vowel of some kind to connect it with those endings. This vowel varies, as does the final vowel added after the person sign. The vowels that are used as connecting links between the stem and the person endings vary somewhat with the tenses and other forms, but the following table summarises the uses:

- i. -e- ~ -i- SF forms, non-future.
- ii. -a- Future, and certain past forms.
- iii. -a- ~ -o- Dependent forms.
- iv. -o- Habitual forms, Dependent or Independent.

EXAMPLES:

- i. -e- ~ -i-: *t-ari 'say' > t-e-na 'I say'; s-i-si-na 'I said (some time back)'. The -i- form marks certain of the past tenses.*
- ii. -a-: *t-ari 'say' > t-a-n-a 'I shall say'; kumb-ari 'bring' > kup-an-a 'brought (yesterday)'.*
- iii. -a- ~ -o-: *t-ari 'say' > t-a-n-e 'let me say'; ari 'do' > ore 'let him do'.*
- iv. -o- Usually in combination with *-e-*: *t-ari 'say' > t-e-o-n-a 'I usually say'; t-e-o-si 'do you usually say?'; it-ari 'remain' > it-o-ta 'you shall remain (always)'.*

Nothing has been said in this concerning Imperatives, which have forms peculiar to themselves. The same remark applies also to the Negative Aspect.

2.07. Verbal Compounds

2.07.1. Verbal expressions in Binandere may be either simple or compound. A simple verb consists of only one form, e.g. *gupatana 'I came (yesterday)*; compound verbs consist of two expressions or even three. Of these compound verbs there are two sorts. One is semantic in the sense that each verb carries its full force and the two may be separated, e.g. *kundo gumbari 'bring', lit. 'having-taken come'*. Each verb can be used independently of the other. In the other type of compound, each verb may indeed appear independently, but the two are used together to

express a modification of the action expressed by the first one, as regards its kind or duration. In this sense it is justifiable to speak of auxiliary verbs. The commonest of these auxiliaries is *ari* 'to do', but there are others, such as *jirari* 'continue', *itari* 'remain'. Thus:

isima ari 'dwell permanently in a place'
adu ari 'be afraid', lit. 'do a fearing'
adu ari jirari 'be in a state of fear'
anumbari 'sit down' > *anumbedo itari* 'remain seated'

It will be noticed that *ari* and *jirari* can be combined, as in the second example. Compare also: *Frank pepeta eiri jirira* 'Frank is lost (in the bush)'. At the same time these verbs here used as auxiliaries can be independent: *mũia jirira* 'how dark it is', implying that it remains so for an appreciable space of time; *iji dudumo eiri* 'what a cool day it is'.

2.07.2. The uses of these auxiliaries varies from the viewpoint of syntax. *jirari* requires normally a SM II type verb in front of it: *adu eno jirira* 'I am in a state of fear'; *adu eto jirira* 'you are in a state of fear'; *adu eiri jirira* 'he or she is in a state of fear'. *jirira* is the 3rd person singular Present, used impersonally, 'I being fearful it remains'. Other tenses are then shown by a change of both verbs:

Past III *adu eno jijirisina*
 Future *adu eiano jinaina*
 Habitual *adu eimono jijirevira*

2.07.3. A further possible combination is with SM I Present + SM II Present + *jirira*: *bundari* 'bind' > *bundeite eno jirira* 'I am in process of binding'; or SM I Past + SM II Present + *jirira*, as *indari* 'eat' > *injido eno jirira* 'having eaten when-I-do it remains', i.e. 'I am in a state of having finished eating', 'my meal is over'. So with *anumbari* 'sit': *anumbedo eno jirira* 'I am remaining seated'; Past tense, *anumbedo iteno jijirisina*. A further example given by Copland King is: *mai eiwa bouwa abu da isiri jirira* 'this boy dwells (habitually) in the cave'. The simple present tense of *jirari*, functioning independently, is seen, e.g. in *manguro boroko jira* 'the door is now shut'.

2.07.4. Another verb used both independently and as auxiliary is *awari* 'lie down', as in *jatao awari* 'to lie asleep'. The conjugation of this verb is complicated by the number of morphophonemic modifications that enter into it.

2.08. Supplementary Notes: The Verbal Stems

2.08.1. Difficulty arises in the conjugation of the Binandere verb because more than one stem is found - different forms and tenses are derived from different stems. It is not easy to work out a consistent series of stems, but the following suggestions are made tentatively.

Type I: One stem only. This is found with verbs whose stem ends in a vowel: pi-ari 'give'.

Type II: Two stems.

(a) t-ari 'say': te- ~ si-. Here the change is purely morphophonemic, and might be classed as a sub-group of I.

(b) aw-ari 'lie down': aw ~ au. Again morphophonemically determined, but the aw- can undergo similar changes.

(c) bamb-ari 'go': bamb- ~ baunt-. The changes are in part morphological.

Type III: Three stems.

(a) gumb-ari 'come': gumb- ~ gup- ~ gun-. These are partly morphophonemic, partly morphological.

(b) g-ari 'perceive': ge- ~ gi- ~ go-.

2.08.2. The next problem that arises is that of the distribution of tenses among the various stems. It does not arise, of course, with verbs of Type I, but only with the other two types. In Type II(a), the change of stem arises only when t- is followed immediately by -i-, when it naturally becomes s-. Otherwise there is no problem.

Type II(b). In the example above stem (i) is aw-/am-/av- according to its environment, by the rules already given. Stem (ii) au- is used when a consonant immediately follows, and so is found, e.g. SM I Past, au-de; Past II, au-tana, etc. Hence under aw- stem fall: Present, Past I, Future, Past IV, Habitual, SM I Present, Prohibitive, SM II forms. The remainder under stem (ii).

Type II(c) has similarly two stems, which are in part morphophonemically governed, so that bamb- becomes bam- when a nasal is present in the suffix, as in bam-ana 'I shall go', bam-ena 'I went' (Past IV). If a consonant follows the stem immediately, baunt- is used, becoming bauns- before -i-; before the -do of SM I past the -t is eliminated, giving baun-do. Hence under stem I fall the Present, Future, Imperative, Past I(?), SM I Future, SM II(?), SM IV, and the Habitual forms.

Type III(a) involves three stems. In gumb-, the alternate gum- is used when the suffix contains a nasal; and gumb- ~ gum- in the tenses where -e- or -a- is found as a linking vowel (and of course -o- of

Habitual), i.e. Present, Past I, Future, SM I Future, SM II, Habitual; *gup-* is used where a linking vowel *-u-* is found, and so in Past II, Past III, SM I continuous (and also SM I Present, *gupeite* 'coming', as well as *gupumene*). The form *gun-* is used where there is no linking vowel at all, and so in SM I Past, *gun-do*. This form is, however, unreliable. This *bund-ari* 'bind', gives *bud-* (~ *buj-* before *-i-*), as in *bujitena*, Past III, 'I bound', but quite unexpectedly gives SM I Past *bundedo* 'having bound'. See note below on SM I Past formation.

Type III(b) has been found so far only with *g-ari* 'perceive', although one or two other verbs do show *-o-* where it is not normally found. *g-ari* gives the following arrangement:

<i>ge-/ga-</i>	<i>gi-</i>	<i>go-</i>
Present	SM I Past	SM I Present
Future	Imperative (b)	Past III
SM I Future		Habitual
Imperative (a)		Dependent
Past I		Past II
		Past IV (?)

2.09. Note on SM I (Past) Formation

2.09.1. The ending here is *-do*. A few verbs use *-ma* in place of it, but the reason for this is still unknown. The following rules relate to the vowel preceding *-do*.

i. No vowel at all, in stems whose root ends in a nasal combination or *-w*:

<i>gumbari</i>	<i>gundo</i>
<i>bambari</i>	<i>baundo</i>
<i>awari</i>	<i>audio</i>

If, however, the root contains two or more syllables, this abbreviation does not take place, and the normal vowel *-e-* is inserted:

<i>kotembari</i>	<i>kaotembedo</i>
<i>anumbari</i>	<i>anumbedo</i>

Also, *bunad-ari* > *bund-edo*, unexpectedly.

ii. The normal linking vowel is *-e-*, i.e. the form belongs to stem I in multiple stems, unless otherwise determined:

<i>ari</i>	>	<i>edo</i>	<i>ajijig ari</i>	>	<i>ajijigedo</i>
<i>tari</i>	>	<i>tedo</i>	<i>wareregari</i>	>	<i>wareregedo</i>
<i>watari</i>	>	<i>wotedo</i>	<i>bawari</i>	>	<i>bavedo</i>

iii. If the stem vowel is *-i-* or *-u-*, the same vowel is used as a

linking vowel by a rule of vowel harmony:

sir-ari > sirido

ind-ari > injido

ing-ari > ingido

dur-ari > durudo

There are a few exceptions to this rule, e.g. there is no apparent reason for g-ari > gido; and do-ari gives dodo as well as doedo.

2.10. Moods and Tenses

2.10.1. The Negative Aspect possess only Indicative and Imperative Moods. The Positive Aspect contains Indicative and Hortative Moods, and the Imperative forms are to be regarded only as a subdivision of the latter. The Past tense distinguishes various degrees of time, which will here be marked as Past I up to Past IV.

2.10.2. An important distinction was made by the Reverend Copland King in notes on which S.H. Ray based his grammar sketch in volume III of the *Reports of the Anthropological Expedition to Torres Straits*, where on page 370 he states: "There are two forms which Mr. King distinguishes as 'present state' and 'present action'. For the first -e-, and for the second -ete- is inserted before the person endings. These become -esi- in the 3rd person singular and -i- in the 3rd plural." In the later grammar (1927), Mr King gives these and similar forms for other tenses than the Present, but without mention of any distinction between them. While the matter requires further investigation, it will be here taken that the original distinction was correct, and "stative" and "active" forms will be distinguished where necessary.

2.10.3. The primary Indicative tenses in Binandere are Present, Past and Future, but the Past is subdivided as stated. The resultant forms are best referred to by number, and the scheme of tenses in the Indicative of the SF is therefore:

Present: t-e-na 'I say' (Stat.); t-ete-na (Act.)

Past I: Immediate Past, referring to action earlier in the day: t-ete-na 'I said' (as this morning). It does not seem to be possible to distinguish between this and the Present Active except by context.

Past II: A "yesterday" Past: anub-ata-na 'I sat' (Act.); is-ita-na 'I stayed'. A stative -ana form is also found.

Past III: A definite Past, of any period longer ago than yesterday: baunsisina 'I went'; siutana 'I said'.

Past IV: A far Past tense, used in historic narratives. It is remarkable in that this is the only tense in the language that does not use all the set of person endings found in other tenses; in the 1st singular and 1st plural inclusive it has -ema, and in the 1st singular variants -etema, -eima, -uma.

Future: t-ana '*I shall say*'. Confusion between this and Past II is avoided by using different stems in each, e.g. guputana '*I came*', but gumaina '*I shall come*'. In some instances also 3rd singular Past II has -utara: guptara '*he came*', gumaina '*he will come*'.

2.10.4. These are the tenses of the Indicative Mood, Independent SF. The other Moods usually carry as far as sense permits the division into Past, Present and Future, but the Past is not usually subdivided. Interrogative forms can be manufactured by the normal change of final -a to -i.

2.10.5. If the rules given in 2.05.6., 2.05.7. and 2.06. are applied, the forms of the verb *ari* '*do*' result as follows in the various Indicative tenses:

		SINGULAR	PLURAL
Present Stative:	1. incl.	--	ena
	1. excl.	ena	era
	2.	eira	era
Present Active:	1. incl.	--	etena
	1. excl.	etena	etera
	2.	eteta	etewa
	3.	esira	etera
Past I: same as Present Active.			
Past II Stative:	1. incl.	--	ana
	1. excl.	ana	ara
	2.	ata	awa
	3.	evira	ara
Past II Active:	1. incl.	--	atana
	1. excl.	atana	atara
	2.	atata	atawa
	3.	etevira	atara

		SINGULAR	PLURAL
Past III:	1. incl.	--	esitena
	1. excl.	esitena	esitera
	2.	esiteta	esitewa
	3.	esisira	esitera
Past IV:	1. incl.	--	ema
	1. excl.	ema (etema)	era
	2.	ata	awa
	3.	ena	ewa
Future:	1. incl.	--	ana
	1. excl.	ana	ara
	2.	ata	awa
	3.	aina	ara

2.10.6. There is no call for detailed examples of the uses of these tense forms. They illustrated in all the examples given throughout this grammatical sketch. Some comment is needed, however, to make clear which of different possible forms are used. In general, the stem used as a base to which these suffixes are added is determined by the morphophonemic laws already given. The Past III forms present the most variety, and reduplication is very common in these (see 2.03.1. and 2.03.2.). The forms of Past II are in general covered by 2.02.2.iii. Where there is likely to be conflict, the Future takes the simple root, the Past II the inflected root.

2.10.7. Past II Formation

Past II forms present a number of apparent irregularities in stem, and the available material does not permit them to be entirely cleared up. The suggestions that can be made at this stage are the following:

i. Simple vowel bases add the endings: pi-ari > pitena '*I gave*'. In the case of the root ari > -i-utana. With this siutana '*I said*', from t-ari, agrees, but there is also an example sitana, for which see ii.

ii. Single consonant bases add the endings, mediated by a vowel, which is determined by the position of the consonant in the mouth; a front consonant takes -i-, a back consonant -o-:

t-ari > si-tana '*I said*'

g-ari > g-o-tana '*I perceived*'

iii. Monosyllabic bases vary according as to whether their final consonant is mutable or not. A nasal combination is simplified, as in 2.02.,

and the linking vowel harmonises with that of the base as in:

kumb-ari > kup-u-tana 'I brought'
gumb-ari > gup-u-tana 'I came'

If the preceding vowel is an -a-, the consonant vanishes and a nasalised diphthong results:

bamb-ari > baũ-tana 'I went'

iv. A disyllabic base does not resolve a nasal combination, if the examples are correct: anumb-ari > anbutana 'I sat down'. A final -w in any case behaves like a final -mb, as in

daw-ari > dau-tana 'I crossed',

but without nasalisation. However, aw-ari > avetana 'I lay down' requires explanation.

2.10.8. Past III Formation

This is the tense in which reduplication occurs, as outlined in 2.03.2. It is to be noted that such reduplication seems to be limited to monosyllabic stems, whether a vowel or consonant is final. See the examples given in 2.03.2. In some cases both reduplicated and simple forms are found, e.g. pi-ari > pipitena, pitena 'I gave'. Of the non-reduplicated forms the following are to be noted:

ari > esitena 'I did'
t-ari > sitena 'I said'
g-ari > g-o-sitena 'I perceived'

These answer the pattern found in Past II. Much the same applies to other non-reduplicating verbs, generally with the stem modifications found in Past II. EXAMPLES:

aw-ari > au-tena 'I lay down'
bamb-ari > baũs-itena 'I went'

But er-ari > erori-tena 'I stood up' supplies a somewhat irregular type of reduplication.

2.10.81. The common element in all cases is the -tena suffix. Copland King gives as marks of Past III the following five endings:

-esitena -sitena -itena -jitená -tena

Some of these are obviously part of the stems of the verbs from which he has abstracted them, e.g. -jitená where -j- is the modification of -d- (in terms of 2.03.1.), as in indari > injitena 'I ate'. The data seem to point to the following tentative analysis:

i. -i- is the normal vowel unless otherwise conditioned.

ii. -e- is found where the verb is to be regarded as a compound of ari, actually or analogically, for ari > esitena. Some of the analogies may be false, but of course they are still quite real.

iii. -u- is found by vowel harmony when the vowel of the root is -u-: gupu-, kupu-, etc.

iv. -o- is found in g-ari, as usual.

v. In a nasal combination or a final -w the procedure is as in Past II, but there are some unexplained exceptions to the rule. In the case of bad-ari > baboj-itena '*I grew up*', there is irregular reduplication. In bamb-ari > baũs-itena the theoretical intermediate form is undoubtedly *baund-itnea, for the SF I form is baundo.

2.11. Interrogative Forms

2.11.1. In 2.05.7. it was shown that interrogative forms can be made by changing final -a to -i, obeying the morphophonemic rules that -ta > -si and -wa > -vi. These forms can be made to cover all the tenses of the Indicative. There are a few irregularities which are found in the Interrogative, e.g. Present Active 3rd sing., theoretically *-etiri becomes actually not only -esiri but sometimes -iri.

2.11.2. Besides indicating question, e.g. gani '*shall I see?*', the Interrogative is sometimes used also in a dubitative sense: Copland King gives as examples viteni '*I should come up*'; waoteni '*I should go down*'; gumeni '*I should come*' and pieni '*I should give*'. The suffix -ko to be dealt with in 2.11.3. seems to imply this meaning of the -i forms as its base.

2.11.3. Here again there is one exceptional form, viz., Far Past (Past IV) 3rd sing. ends in -u: enu? '*did he do?*': God ro enu? '*what did God do?*'; sakaramenta nandogo Ekalesia da Keriso mi tenu? '*how many sacraments did Christ ordain i*'.

2.11.4. The Interrogative form is used to ask questions, and may be followed by the interrogative particle ta. If there is no verb, ta is obligatory, otherwise it is optional and not widely used. EXAMPLES: God tamonde ta? '*are there three Gods?*'; God imo goteviri ta? '*can God (habitually) see you?*'; but gesi? '*do you see?*'. The Interrogative forms are used even if there is already a naturally interrogative word in the sentence: imo awa inda ango gasi? '*from where will you see him?*'.

2.11.5. Suffixing -ko to Present Interrogative

The suffix -ko can be added to the Present Interrogative. In this

case the 3rd singular -eiri becomes -ei, giving -eiko. This combined form then expresses a negative desire or order: u goroba indeiko 'he is not to drink strong drink'; ro rorae beiae na mi eriko, edo ro adu ari da tumberiko 'evil things let us not do, and into dangers let me not run'. The utterance may be strengthened by means of nongaĩ 'by no means': nongaĩ tesiko 'you must certainly not say'; nongaĩ peroveta ainda nasi da mai mi kumberiko 'a prophet in his own country people will certainly not accept'.

2.11.51. From this dehortative and denying function the -ko passes over into the meaning 'lest': Lk.5:36, no one sews new cloth on to old, teka nongaĩ matu de dada eriko, 'lest the new tear away the old', or pours new wine into old skins, waina teka ainta matu da vereugeiko, 'lest he pour out the new wine from the old skin'.

2.12. Dependent Form

2.12.1. The Dependent form substitutes -e for -a of the Independent personal endings. Like the former, it has Active and Stative forms, but makes no distinction of tense. The endings therefore are:

		I	II
Singular	1.	-ane	-anate
	2.	-ate	-atate
	3.	-are	-arate
Plural	1. incl.	-ane	-anate
	1. excl.	-ore	-orote
	2.	-ave	-awate
	3.	-ore	-orote

With the exception of the 1st plural excl., these are modifications of the Future tense endings, i.e. they represent really a Dependent Future. The second series looks like the Plain Future endings with te, the stem of t-ari 'say', i.e. 'I will do it, say', 'let me do it'. Analogous construction is to be found in other areas, including North West Australia. These forms are used only in the Positive; in the Negative a substitute construction has to be found.

2.12.2. There is also a Future Dependent formed occasionally by the addition of -r* (2.19.1.) to the Past III forms, e.g. gositenane 'let us see' (Lk.2:15), and a Habitual form in which -o- replaces -a- in the first syllable of the suffix. Two examples of this occur in the Benedictus: peroveta tedo ore 'you shall be a prophet' (full time occupation) (Lk.1:76) and in v. 77, edo ainda embo torari ewasi gore 'and men

salvation do (and) they shall see it (permanently)'.

2.12.3. The uses of the Dependent are:

(a) Hortative, expressive of a determined purpose as yet unfulfilled: amo Bada da jisi da badare '*he shall go before the face of the Lord*' (Lk.1:15), kaë bamane '*let's go*' (Lk.2:15); mande wotanate '*will you come in the canoe?*'; singa ito de te bambare, Bada '*Lord, now you may let your servant depart*' (Lk.2:39), lit. '*speak and he shall go*'; nanga aundo nenei gane '*let's go and look for more*'.

(b) Expression of consequence, as the second element of two verbs, immediately following each other, and both SF (a combination that cannot otherwise occur): tesiri gorote '*when he spoke that they might hear*'. See several examples in Lk.4:18-19, e.g. tano gorote '*that when I speak they may hear*'. The use of tari followed by some form of gari is the regular Binandere idiom for '*tell*'.

(c) Sometimes for the Imperative. Copland King's example is niao atate '*make a fire*'. This seems to be chiefly northern.

2.13. Suffixes to the Dependent

2.13.1. There are two suffixes commonly added to the Dependent form of the verb, viz., -tae and -kae. The second is the Negative of the first, the first expressing a wish or purpose, the second negating it, and providing the only available form of Negative Dependent.

i. -tae: The ending -tae is added to the Dependent form to express a wish or purpose, e.g. na bamanetae '*I wish or intend to go*'; nakare kumbo-retaе '*we are to take it*'; wasiri matawa itari kumboretae '*they will have eternal life*' (Jhn.3:16); na tanatae etena '*I intend to speak*'. This last is perhaps a little stronger than na tai etena. The use of the ending is optional, however, and it is sometimes dispersed with without any change of sense: te ni nenei kundo purare '*tell him to bring some more firewood*'. There are, however, other ways of expressing this idea of an indirect command, e.g. ko butu ami keviegate tedo '*but the world you-shall save having-said, i.e. (God) sent him to save the world*' (Jhn.3:17). The thought then passes on to the idea of a condition, '*if*': embo ge taretae... '*if a man speaks...*' (1 Pet.4:11).

ii. -kae: This is the Negative of -tae, added to a Dependent form to express an indirect order, '*is not to...*', etc.: tema, dago turari nato de tororekae '*I said they should not enter into my rest*' (Ps.95:11); tewasi tumorekae '*tell them not to run*'; pleurikaе sisina '*he said he was not to give*' (Lk.7:43). In the second example -kae is the only available means of expressing a Negative, for tewasi tumbore would be '*tell*

them to run'. Other ways of expressing the Negative Intention are available also, e.g. a Negative Imperative may be used: tewavi ruvegeove 'tell them don't forget', i.e. 'tell them not to forget'. Sometimes the -kae is omitted, with resulting ambiguity that can be solved only by a knowledge of the universe of discourse at the moment: tewavi tumbore may be 'tell them to run' or 'tell them not to run'; to be safe tumbore-kae should be used in the latter.

2.14. Habitual Forms of the Verb

2.14.1. Habit is indicated chiefly by the insertion of the vowel -o- before the personal suffix, and although there is not the elaboration of Past tenses, yet certain forms occur which look like a Past tense, not mentioned in Copland King's Grammar but documented in the translation of St. Luke. The Stative and Active forms are distinguished:

		STATIVE	ACTIVE
Singular	1.	-ona	-etona
	2.	-ota	-etota
	3.	-evira	-evetira
Plural	1. incl.	-ona	-etona
	1. excl.	-ora	-etora
	2.	-owa	-etowa
	3.	-ora	-etora

2.14.2. These endings are added to the stem of the verb as found by omitting -ari; in the case of ari itself the stem is e-. EXAMPLES: begata nato gae eora 'they do not know my ways' (Ps.95:10); imo matawa itota 'you shall live for ever' (Ps.102:26); ami mi utu da ango wowete-vira 'he (permanently) dwells in heaven' (Jhn.3:14); embomai berari mi beiae eora, awa parara dumo eora 'everyone who does evil hates the light' (Jhn.3:20); God da be da anumbedo itota 'thou remainest seated at the right hand of God'. Examples will be found in the *Catechism* and the *Preparation for Communion*. Interrogative forms can be made by the usual change of final -a to -i: teosi? 'do you (usually) say?'.

2.14.3. Although no mention of a Past tense is made in the Grammar, several examples in Lk.2 suggest such a form. These are: V.36. isinesina 'she used to live'; 37. kera enesina 'she used to serve', tumondebai enesina 'she used to worship'. These show a 3rd singular ending -nesina based on e- < ari, and in the case of it-ari, a linking vowel -i- harmonising with the root vowel, and modification of the -t- before the -i- as usually takes place. The full forms of this tense and its exact signification need to be examined.

2.15. Sentence Medial Forms

2.15.1. General notes on the uses and meanings of these forms were given in 2.05.1.-4. As the name indicates, they can never be final or complete in themselves, but always require another verb to follow and complete the sense. In English two main verbs or a subordinate clause would be required, as shown in the preliminary illustrations.

2.15.2. There are two main sentence medial types, to be indicated by the abbreviations SM.I and SM.II. SM.I implies that the same actor is the subject both of the medial and of the final verb: *baundo sino nato kumbate 'go and fetch my dog', lit. 'you having gone fetch my dog'*. There is no need to indicate person and number under such circumstances; the second verb will make these clear. Consequently only tense needs to be shown, and not all subdivisions are necessary here. The list as given by Kopland King needs to be supplemented by the addition of a Near Past (Past II) which is documented once in the translations. The list is:

Present	-te
Near Past	-site
General Past	-do ~ -ma
Future	-a [~]
Continuative	-mene

These forms may be derived from existing Binandere verbs, of which each is a root or stem. Thus:

-te ~ -ite	itari	'staying', 'in process'
-do	do ari	'finish', 'ceasing'
-a [~]	aimbari	'going to'
-si-te	cf. e-si-te-na	'I did'

The form *isiunte* is also found, e.g. *mai buo buro da isiunte 'the elder son being in the garden'* (Lk.15:25). Its exact force has yet to be established. The form in *-ma* can be explained through *Tsia* (Waria R.) which has a root *m-ari* 'take', but there is no literal equivalent in Binandere.

2.15.3. Examples of the Uses of the SM.I Forms

1. *Present*: *na sino goteite adu etena 'while looking at the dog I was afraid'*; *bada isite 'as the Lord liveth'*; *imo Bada da gisi da baunteite ainda begata sirige 'going before the Lord you shall prepare His ways'* (Lk.1:76). The ending is added to the same part of the verb as the *-do* ending (q.v.).

ii. *Near Past*. Only one instance occurs in the Gospel: kotembesite sitera '*understanding they said*' (Lk.1:76). This seems to imply that the understanding immediately preceded the speaking.

iii. *General Past*: na sino gotedo adu etena '*when I saw the dog I was afraid*'. If this example is compared with the first in (i) above, it will be seen that the time of the first verb is relative to that of the second. The first is not an Absolute Present nor is this an Absolute Past. The latter is expressed rather by (ii) if needed. No clarity has yet been reached concerning the -ma ending. King suggests that it is limited to certain verbs which do not have a -do ending. These have never been listed, but include pu-ma '*having come*', mambusi-ma '*having gone*', asi-ma '*having dwelt*'. The ending -do is added according to the rules given for the formation of Past II and Past III. F.R. Elder once hazarded the opinion that the form in -ma carried an idea of permanence, as, e.g. in the Lord's Prayer, isima eta '*thou art*' and mentions also nyima < yari '*go*' (a quite irregular form) and sauma < sawari '*go south*'.

iv. *Future*. The usage here is rather different. If two actions are both to happen in Future time, one being Past relatively to the other, the Past SM form is employed, viz., -do, and only the second verb is made Future, e.g. sini ito de watou jirido, jianda kumbuio '*you shall conceive and bring forth a child*'. The chief uses of the Future SM form are:

(a) to build compound tenses expressing intention of immediate action, by combining the SM form with some SF forms of ari: aĩ etena '*I am going to do*'; tumondebaĩ orote '*they are to bow their heads*'.

(b) to express purpose: wo gumaĩ petegetno guputeta '*when I had finished fishing you came*'; edo Zacharias taĩ '*intending to call him Zacharias*' (Lk.1:59), engo de embo toregaiĩ katata '*then you decided to save men*' (Te Deum); kaviegaĩ tedo '*having said he would save, i.e. intending to save*' (Is.63:2).

(c) with ae '*not*', to express a negative order: adu aĩ ae '*don't be afraid*'.

v. *Continuative*. This is the SM form answering to the SF Habitual forms, and is used when the activity concerned is either habitual or at least continues for an appreciable time: tepumene baunsisina '*he went walking*'. This also is formed from the Past stem of the verb. Another example is Lk.10:38, pepeta emene baundo '*having gone walking*'.

2.15.4. There is a tendency, more marked in Notu and Orokaiva, to avoid sentence medial forms by the use of edo < ari '*(which) having done*' > '*after*', '*then*', '*and*': benunun ito goteira, edo aro ito ito yai jianda

kumbari, edo dawore John teio *'they have heard your prayer, and your wife shall bear a child and they shall call his name John'* (Lk.1:13). It is difficult to say whether this is really a legitimate usage or not. The idea seems to be to avoid a sequence of SM forms; or two are acceptable, but more than that create difficulty in the speaker's mind in completing the statement.

2.15.5. For the vowel preceding the -do of the SM.I Past, see page 14.

2.16. The Comparative Suffix - Arago

2.16.1. This is a SM.I form, invariable for person and independent of tense. It is used whenever a comparison is stated or implied; angó 'as', or be...inge 'as' are sometimes, but not necessarily, coupled with it. EXAMPLES:

angó nakare embo nenei da buria natokare yai kotembarago dotera
lit. *'as we cease, when we have forgiven other people ill deed to us'*.

Copland King: na bero arago, ro arago, awa tedo na gari jiwae *'I am clever ('perceiving much') after (lit. this having said) work as-I-have-done, something as-I-have-done, something else as-I-have-done.*

kotembesira awaro garago esisina *'they understood that he had seen something'* (Lk.1:22); jitao audo be betarago *'having lain down he was like to die, at the point of death'*; Asisi Kotopu tano be do be gumbarami, wotarago esisina *'the Holy Spirit came down like a dove'* (Lk.3:22).

amo be embomi arago *'he is like a man who...'* (6:49); edo piarago sima borere eu *'as-having-given remaining slowly do', i.e. 'lend and be patient'*. Here piarago implies not *'giving'* but acting as though giving, i.e. lending. Similarly 4:13, satan... bambarago esisina *'did as-though-departing', i.e. 'departed for a time only'*.

2.17. Compound Tenses Formed by means of SM.I

2.17.1. The -do ending may be used followed by an auxiliary verb to form compound tenses in a variety of ways. The auxiliaries most commonly found are ari, tari, itari. EXAMPLES:

anumbedo itero *'as they were seated'* (Lk.5:17); injido orote *'that they should (habitually) eat'* (6:4); atopasido eiri *'while he was teaching'* (5:17); petedo isira *'he as standing'*; atopasido evira *'he used to teach'* (4:32); ipa berari jido esiri kaviegesitera *'when he touched them they were healed'* (4:40).

With gari 'perceive', the meaning is rather 'to find that one has such and such': injido gae 'without eating' (4:1), cf. kumbae gena 'I find I haven't got...' (5:1); embo petedo isiunte gido 'seeing the people had arisen', lit. 'having-stood being'. In the first instance the idea is rather, 'having eaten (I etc.) do not perceive'.

If the SM form ends in -ma the construction can still be used: isima ena 'I habitually stay' (1:19); isima eta 'you continually live'. There is a use of forms in -ngo which is similar: puio, edo pumango eira 'come... and he comes' (Lk.7:8), but the root meaning of this -ngo is unknown as yet.

2.18. Sentence-Medial II Forms

2.18.1. Sentence medial form II is used when there is a change of actor between the two verbs, e.g. 'when the dog saw me I was frightened'. Here the actor is 'dog' in the first phrase and 'I' in the second. In these sentences the person and number must be expressed in the first verb as well as in the second, otherwise it would not be clear who the first actor was. Consequently Type II presents person and number endings similar to those of SF forms, but ending in -o instead of -a. The following forms occur:

		PRESENT	GEN. PAST	FUTURE	HABIT
Singular	1.	-eno	-teno	-ano	-imono
	2.	-eto	-teto	-ato	-iwoto
	3.	-eiri,ero	-siri	-eirari	-euri
Plural	1. incl.	-eno	-teno	-eiano	-eimono
	1. excl.	-ero	-tero	-eiaro	-eioro
	2.	-ewo	-tewo	-eiawo	-eiowo
	3.	-ero	-tero	-eiaro	-eioro

A few samples will show the uses of these forms, which cannot usually be translated by participles in English, but require various conjugations to render them according to circumstances.

teno gotewa 'when I speak you hear'; tato gana 'speak and I shall hear'; na teteno geta 'when I spoke you heard'; na tano gido gata 'when I speak you will hear'; buro doteno gido guputeta 'when I had stopped work you came'; sina no gosiri gido adu eteno 'when the dog saw me I was afraid'; ...ae asisi bebegae esiri kaviegesitera '...he healed many of evil spirits (Lk.7:23); God dasiga esitera jiawe teuri gotora awa 'they praised God for all that he had said and they had heard' (Lk.2:20); utu jienda 3 kariga 6 euri takimbetevira 'the heavens were closed while-it-made ('during') 3 years and 6 months' (Lk.4:25); edo tepo ategeteiano

gido ewasi 'and having seen that we humbly pray, do...' (Pr.p.196); imo kotembeteiario puwasi kataĩ tedo 'we believe you will come to judge' (Te Deum 19).

2.19. The Suffix -r* ~ -n*

2.19.1. This suffix occurs in the forms -ra, -re, -ri and -ro, changing the consonant to -n- after a nasal in the verbal stem. It is essentially the mark of emphasis, but there is considerable variation in its actual uses. Form and use are best treated separately.

Form. By form the suffix becomes:

- ra with SF Independent
- re with SF Dependent
- ri with SF Interrogative
- ro with all SM forms

Tense does not enter into consideration, but if the suffix is added to a verb, it is added to the full form, in which tense, etc. already appear; if it is added to a non-verb, tense is not required to be shown. The above four forms, therefore, with the vowel endings already familiar, are all that are found.

2.19.2. Morphophonemic modification: if the -r- is preceded by a nasal in the word to which it is attached, it becomes -n-, e.g. gumenane 'I have come' (*emphatic*) for *gumena-re; dodomo naka ito jisi da piano bambarate enane 'when I sent my messenger before your face, he did it (*emphatic*)', for *ena-re; vereugainane 'it will (*certainly*) be spilled' for *vereugaina-re (Lk.5:37); ikaitomane 'it is yours' (Lk.6:21) for *ikaitoma-re; in Lk.6:45 there is a clear contrast between beimana-ne 'it is good' and beiae-re 'it is bad': the nasal in the first word causes the change of -r- to -n-.

2.19.3. Uses of the Suffix

- i. -ra frequently places the word to which it is added in the Predicate of the sentence, e.g. awa-ra 'that is it', commonly used for 'yes'; dubo bari-ra 'it is love' (Hymn 48).
- ii. -re used with Dependents is emphatic: dawore John teio 'his name you shall call John' (Lk.1:13); tena ge-re tepo teio 'but speak *JUST* the word' (Lk.7:7); ami sunagogo kaenato-re esisina 'he built a synagogue for us (*actually for us!*)' (Lk.7:5). Added to -ra, as -rare, it forms a supposition: emo peroveta rare 'if he were a prophet' (7:39); or it

makes an explanation: *amo bapataito ae rare 'in that they were not baptised'*; or a purpose: *amone iwata ominde rare 'so that it might be a sign to them'* (5:14). *wasiri de siwo embo-re jipapa ae 'it is not for the healthy that I want ointment'*, *ko kambo egeregari-re 'but it is for those that are sick'* (5:31).

- iii. -ri marks a question, 'is it?': *ave-ri 'who is it?'*; *dawo ito averi? 'who is your name?'*; *ategari itomane nongo ari-ri? 'what is your greeting about?'* (Lk.6:32); *ge ango, sabate da beimana ari-ri ta beiae ari-ri? 'is it lawful to do good or to do evil on the Sabbath?'* (6:9); *awamane be ro ingeri? 'what are they like?'* (7:31). It should be noted that the suffix is used in Binandere even if the utterance begins with a question word.
- iv. -ro used where SM forms are required: *na beiamana ra-ro eno nato du da puresi 'if I were good I should cause that you enter my house'* (Lk.7:6); *edo ro tuvedo ra-ro piaro torekare 'and when they found nothing by which to bring him in'* (Lk.5:19).

2.20. The Substantive Form

2.20.1. The Substantive form of the verb ends in -ari. It is not quite correct to call it an Infinitive; it does not perform the functions of a European Infinitive. It is far closer to the category of Substantives in European grammar. As the category of Substantives is divisible into two sections, Noun and Adjective, so are the Binandere forms in -ari. Each is illustrated below.

1. -ari form functioning as a Noun: *tamo erari 'the resurrection of the body'*; *kaviegari 'salvation'* (Lk.19:9); *matawa itari 'eternal life'* (Jhn.3:16, etc.); *sinopu da indari 'eating-place of the cattle'*.

Such an expression can be treated as a Simple Noun, and be followed by a particle (postposition): *sinopu da indari da piesira aunsisina 'she laid him in a manger'*.

This form may serve, as in the last example, as a Noun of Place; also as a Noun of Agent: *torari 'Savior'*, e.g. *torari amo Keriso Bada 'a Savior who (is) Christ the Lord'* (Lk. 2:10).

- ii. -ari form functioning as Adjective. The function exercised in this case is really that of a Past Participle Passive in

Latin terminology, 'having been...', 'that which has been ...': wo taiari 'cooked food', 'meat having been cooked', 'meat which has been cooked'. wo taiari kundo pu 'bring the cooked meat'. piari gari palawa 'shewbread', lit. 'bread given seen'; enembo...dubo dave ari 'men of good will' (Lk.2:14); moai worumi DOIARI ra tuwewo 'you shall find the child WRAPPED in cloth' (Lk.2:12).

In some instances a plural is formed by partial reduplication: bebetegari 'the dead (people)'. Sometimes there is a plural differing from the singular in form: betari 'die', 'a dead person' > bebetegari 'the dead'; bedari 'break', 'fragment' > bebedegari 'broken pieces'. Alternative forms also appear: doregari 'assemble', 'assembly', but also dorebegari as Noun.

2.21. The Imperative Mood

2.21.1. The Imperative Mood Positive is different in construction from the Negative. Copeland King gives the following list of endings for the 2nd person:

SINGULAR	PLURAL
-e	-eu
-wasi	-wavi
-ewasi	-ewavi
-eio	-ewo
-u, -uio	-uwo
-o	-owo

The basic forms involved are:

-e	-eu
-wasi	-wavi,

or rather in the first instance, simply a variable vowel (*) in the singular, and the same vowel followed by -wo in the plural:

-*	-*wo
----	------

When this vowel is -e, the morpheme alternant is -eu in the plural for -ewu < -ewo. The forms in -o- and -u- are morpheme alternants of those in -e, and are used if the stem of the verb terminates in -o or -u. Thus pu, pl. puwo 'come'.

bambu	pl. bambuwo	'go'
kumbuio	pl. kumbuwo	'take'

The form to be used for any given verb is to be found from the stem

used for the SM.I (Past) - do, e.g.

bamb-ari	>	baundo	<	*bambudo	>	bambu, bambuwo
t-ari		tedo				te, teu
g-ari		gido				gi, giu

There are, however, some alternatives which appear to be actually false analogies, e.g. giu and gaue are both used < gàri.

2.21.2. The longer forms in -wasi, -wavi are a little less abrupt: toregewasi, etc. in Lord's Prayer are cases in point. Other forms as in kotembetewo 'know' (Lk.24:6); toregewo 'beware' (12:15); tuvewo 'you shall find' (2:12) are intermediate, though some of them are almost certainly mistranslations. See Note in 2.21.3.

2.21.3. The -e, -eu form is frequently not Imperative at all, in spite of the statement in Copeland King's Grammar. It is a Determined or Certain Future, perhaps expectational or hortative: kumbuio 'you are to bear' (Lk.1:31). Others again are apparently mistakes in translation from Wedau, which does not distinguish Future and Imperative, and in the Binandere Luke they are made to serve as Present Interrogatives, e.g. Lk.24:17 ...tepeu 'you are walking', 'are you walking?' (perhaps -u for -vi, Interrogative by some morphophonemic alteration not accounted for); 9:20, na ave ge teu 'who do you say I am?'; 7:24, dumo da wotetewa ta ra geteu? 26. ango ae-ra ta ro gaĩ tedo woteteu?

2.21.4. Persons other than the second cannot be expressed directly by the Imperative Mood. A third person form may be supplied from the Immediate Past Indicative: kotopu etera 'let them make holy'; puresira 'may it come'; etera 'let them do'. First person forms are supplied sometimes by the use of the Dependent: bamane 'let us go' - with the -r* suffix for emphasis.

2.21.5. For the Negative Imperative see below, 2.22.2.

2.22. The Negative Aspect

2.22.1. The Negative in Binandere is an aspect, not a tense. It shows only one form, -ae, in the Indicative. It is really better described as a Negative Substantival form, i.e. -ae is the Negative of -ari (2.19.1.). It does not change for person, number or tense. Further delimitation of the idea must be obtained by use of ari as an auxiliary verb. Examples from Copland King need to be slightly re-spelled:

na adu ae		<i>I do not fear</i>
na indae (ind'ae)		<i>I am not eating</i>
na bundae (bund'ae)		<i>I am not binding</i>

na ambae (amb'ae) *I am not sick*

In the Future tense the SF.I Future is used before the Negative:

na aduai ae *I shall not fear*

na inaĩ ae *I shall not eat*

na bunaĩ ae *I shall not bind*

na amaĩ ae *I shall not be sick*

ADDITIONAL EXAMPLES: na beono ae '*I am not tired*'; na durae itena '*I have not dug*'; imo kotembae eteta '*you do not believe*'; ta piaĩ aeri? '*or shall he not give?*' (Lk.11:13; for -ri see 2.18.1.); edo kakoa ero gae '*and when he does not find*' (Lk.11:24).

2.22.2. The Negative Imperative has a special form, conjugable for all persons and both numbers, but used only in Present and Habitual forms. For these the endings are:

		PRESENT	HABITUAL
Singular	1.	-one	-eone
	2.	-ote	-eote
	3.	-ure	-eure
Plural	1. incl.	-one	-eone
	1. excl.	-ore	-eore
	2.	-ove	-eove
	3.	-ore	-eore

For suffixes to other parts of the verb which serve the purpose of a Negative Imperative see 2.11.5. The forms given here are used as Direct Prohibitions: adu (e)ote '*don't be afraid*'; pi eove '*don't give*'; kundo gumbote '*don't bring (it)*'; ango eote '*don't do it like that*'; imo ruvegeote no bate ni awo embo '*don't forget to bring wood for the fire*'.

2.22.3. The addition of dowasi '*leave it*', '*let it alone*' < doari '*leave*', '*stop*' is optional as a means of emphasising the order: beono eove dowasi '*do not steal - let (stealing) alone*'.

2.22.4. mana is a particle used with a Positive to express inability: na awa mana inana '*I can't eat that*'. It is thus not really an Imperative Negative but a Potential Negative. It enters into a few words as compounds, which are perhaps not really verbal at all, e.g. bei-ae '*bad*' > bei a-mana '*good*', '*unable to be bad*'.

2.23. Derived Forms of Verbs

2.23.1. Derivation in verbs is something that needs further analysis, and the existing Binandere material does not make it possible. Thus there

appears to be a form -eg- used as a transitiviser of a verb, cf.

dod-ari '*come untwisted*' > dod-eg-ari '*untwist*'.

Not all cases, however, show both forms, with and without -eg-, e.g. erigari '*break*', but er-ari is '*rise*', while the Intransitive '*become broken*' is bedari.

PRELIMINARY NOTES ON OROKAIVA GRAMMAR

ALAN HEALEY, AMBROSE ISOROEMBO, AND
MARTIN CHITTLEBOROUGH

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1. Phonology.
2. Verbs.
3. Adverbs.
4. Nouns.
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8. Nominals.
9. Clauses.
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0. INTRODUCTION

The Orokaiva language is spoken by some 25,000 people living in an area of about 250 square miles surrounding Popondetta in the Northern District of Papua. There are several dialects of Orokaiva, and the one used in this study is spoken in the village of Isivita. However, there appears to have been considerable mixing of dialects since the population movements associated with the eruption of Mount Lamington in 1951. Orokaiva is one of some twelve or more languages which belong to the Binandere Family of languages.

In June 1967 the authors spent two weeks investigating Orokaiva verbs and preparing some preliminary language lessons for use of missionaries in the Orokaiva area. They were stimulated in their task by a manuscript copy of "The Binandere Verb" kindly made available by Dr Capell. Some rough notes were prepared on the verbs and other facets of the grammar as a basis for language learning and further grammatical enquiry.

Since then a little more research has been possible and the notes have been considerably revised. However, they are still certain to contain inaccuracies, and it is with this reservation that they are made available to a wider audience.

The Orokaiva examples are provided with normal English capitalization and punctuation, since intonation has not been analyzed. Affixes are identified by the following abbreviations: **abil**(itative), **avol**(itional), **C**(ontinuative)**S**(equence), **dep**(endent), **des**(iderative), **fut**(ure), **hab**(itual), **imp**(erative), **ind**(icative), **inf**(initive), **int**(errogative), **perm**(issive), **pl**(ural), **pres**(ent), **P**(unctiliar)**S**(equence), **purp**(osive), **recip**(rocal), **S**(imultaneous)**A**(ction), **s**(in)g(ular), **subj**(ect). When the absence of a suffix is significant, the appropriate meaning is shown in parentheses in the literal translation.

1. PHONOLOGY

Orokaiva words consist of syllables of any of the following types: V, CV, VC, CVC. Many sequences of two vowels and some of three vowels have been observed in words. Syllables are closed only with nasals and the only medial consonant clusters observed are mb, nd, and ng. Word-final syllables may be closed only by n, which appears as nasalization of the vowel of the final syllable. Otherwise, all phonemes occur in all permissible positions within words.

The Orokaiva orthography consists of the following symbols: a, b, d, e, g, h, i, j, k, m, n, o, p, r, s, t, u, v, and w. These accurately represent phonemes except in two respects. The labiodental fricative v and semivowel w are allophones of a single phoneme; w precedes a and v precedes the other vowels. (In some literature w has a more limited distribution.) Similarly, r and d are allophones of a single phoneme; r occurs between vowels and d occurs in word initial position and following n. The apparent exceptions (ra indicative, re interrogative, rate 'but' and rami 'kind of') are probably enclitics and pronounced as part of the preceding word.

The first syllable of each Orokaiva word is stressed. When h occurs between unstressed vowels it is very light, and sometimes seems to be quite silent. Its phonemic status in these positions needs investigating in each main dialect. In word-initial position and medially preceded by n, g is a voiced stop; between vowels it is a voiced velar fricative. The nasal n is velar when it occurs before g. The j is a voiced alveo-palatal affricate.

2. VERBS

The morphology and usage of the verbs is by far the most difficult facet of Orokaiva grammar. Verbs consist of a stem - either simple or complex, intransitive or transitive or ditransitive - followed by up to four suffixes to indicate tense, subject person-and-number, and mood. All verb forms appear to be in the active voice.

2.1. VERB STEMS

In the far past tense a simple verb such as *poekea* 'I broke' consists of just two parts: the simple stem *poeke* 'break' and the indicative suffix *-a* (tense and person are unmarked).

On the other hand a complex verb such as *arepo ea* 'I coughed' consists of three parts: an uninflectable word or adjunct *arepo*, the stem *e*, and the suffix *-a* as above. The adjunct *arepo* has no meaning or usage apart from this combination with *e*. Also, the stem *e* has lost most of its usual meaning of 'do', 'make' (or 'say'?) and is really functioning as an auxiliary in this combination with *arepo*. In fact the combination *arepo e* may be treated as a complex verb stem which takes inflectional suffixes (on its second element) just as simple verb stems do. However *arepo* and *e* are treated as separate words rather than a compound because the particle *mine* 'each other' and the adverbs *ere* 'still' and *mane* 'not' come between them.

The stem of a verb may be modified to indicate a repetitive action or (if transitive) a plural object by the use of a reduplicative prefix or a suffix or both. Several different ways of marking stems for plurality have been observed, but as these are only partly predictable from the shape of the stem, the plural form of each verb needs to be listed in an Orokaiva dictionary.

- (1) Reduplication of first CV or VC of stems ending in *ke*

Singular	Plural	
<i>waeke</i>	<i>wa-waeke</i>	<i>shut</i>
<i>hirike</i>	<i>hi-hirike</i>	<i>open</i>
<i>tiuke</i>	<i>ti-tiuke</i>	<i>cut</i>
<i>uhuke</i>	<i>uh-uhuke</i>	<i>blow</i>

- (2) Suffix *-reke* on stems ending in *ge* or *ke*

<i>ege</i>	<i>ege-reke</i>	<i>wash</i>
<i>age</i>	<i>age-reke</i>	<i>cook</i>
<i>tige</i>	<i>tige-reke</i>	<i>tie</i>
<i>toge</i>	<i>toge-reke</i>	<i>wrap up</i>

Singular	Plural	
ike	ike-reke	<i>give</i>
veke	veke-reke	<i>sharpen</i>

(3) Suffix -kereke on single syllable stems

e	e-kereke	<i>do</i>
ki	ki-kereke	<i>see</i>
ve	ve-kereke	<i>fall</i>
te	te-kereke	<i>hit</i>

(4) Suffix -jeke or -pujeke on stems ending in mbu

humbu	humbu-jeke, humbu-pujeke }	<i>fetch</i>
jimbu	jimbu-jeke, jimbu-pujeke }	<i>marry</i>
kambu	kambu-jeke, kambu-pujeke }	<i>bite</i>
pambu	pambu-jeke, pambu-pujeke }	<i>go</i>

(5) Reduplication of first CV of stem ending in e, plus suffix -ke

pehe	pe-pehe-ke	<i>die</i>
vore	vo-vore-ke	<i>roast</i>
kute	ku-kute-ke	<i>paint</i>
toge	to-toge-ke	<i>wrap up</i> (see also (2))
gahe	ga-gahe-ke	<i>poke</i>
hire	hi-hire-ke	<i>sew</i>
tige	ti-tige-ke	<i>tie</i> (see also (2))
ve	ve-ve-ke	<i>fall</i> (see also (3))

(6) Unclassified

poeke	po-pojeke	<i>break</i>
jimbu	ji-jimbu-keke	<i>marry</i> (see also (4))
indi	indi-dike	<i>eat</i>
te	ta-te	<i>hit</i> (see also (3))

It is apparent that at least some verbs (e.g. *wrap up*, *tie*, *fall*, *marry*, *hit*) have two different plural stems, but it is not known whether or not these differ in meaning or usage. Complex verbs appear to pluralize in at least two different ways - by reduplication of the adjunct or by suffixation of the auxiliary - but more research is needed.

sau e	sau-siu e	snatch
ki e	ki e-kereke	make a spear

2.2. STEM CHANGES WHEN SUFFIXED

All of the stems listed above are in their basic form. The basic stem may be used as an abrupt imperative, but a more common usage of the basic stem is in the far past with indicative suffix -a. The basic stems of most regular verbs end in e. A few end in i, for instance ingi 'hear', indi 'eat', iri 'be' and jigi 'touch, seize'. A few also end in u, for instance hembu 'walk', pambu, pahu 'go', kambu 'bite', humbu 'take' and jimbu 'marry'. The stem-final vowels change in some forms of the verb and disappear in others.

The first five suffix combinations listed in Table 1 add right on to the basic stem without affecting its final vowel. With suffix combinations 6-13, stem-final e changes to i but other vowels do not change. With suffix combinations 14-16 stem-final i changes to e and e and u change to a. With suffix combinations 17-26 the stem-final vowel disappears altogether. Notice that, if one ignores the variable h, the stem variants are the sole distinguishing feature between certain forms with identical tense or aspect suffixes, e.g. 3 and 9; 8, 11, and 26; 4, 12, and 20; and 13 and 22. (See also Table 4.)

There are at least 9 irregular verbs whose stem variants only partly follow the pattern just described. Three typical regular verbs and these 9 irregular verbs are presented in Tables 2 and 3 with all 26 suffix combinations (but not the individual suffixes), so as to demonstrate their stem variants.

2.3. NON-FINITE FORMS OF THE VERB

There are three dependent forms of the verb which are not inflected for subject person-and-number. These occur in non-final clauses in a sentence. Each of these forms signifies that the subject (and usually also the tense) of its clause is the same as that of the following clause. Their suffixes (with the reference numbers of Tables 1, 2 and 3) are:

5. -to Punctiliar Sequence
6. -e Simultaneous Action
7. -ma Continuative Sequence

Punctiliar Sequence implies that one action takes place after another (X and then Y). Continuative Sequence implies that the action of the verb with this suffix is continuing or extended and that the next action either interrupts it or follows its completion (X until Y). Simultaneous

Action implies two actions going on at the same time (Xing while Ying).

Na puvu-to ba indi-so-n-a.

I come-PS taro eat-will-I-ind.

'I will come and eat the taro.'

Na puvu-to ba ind-ahe-n-a.

I come-PS taro eat-abil.-I-ind.

'I would come and eat the taro (if I could).'

Dago puvu-to iji amina ba indi-a.

we come-PS time that taro eat(you far past)-ind.

'When we came we ate the taro.'

Amo ki vekie ke e-n-a.

he spear sharpen-SA speech talk-he far past-ind.

'While he was sharpening a spear he was talking.'

Na ke iji-e ev-e-n-a.

I speech talk-SA sleep-near past-I-ind.

'I fell asleep while talking.'

Na ke iji-ma ev-e-n-a.

I speech talk-CS sleep-near past-I-ind.

'I talked till I fell asleep.'

Pahu-ma donda inde-so-n-a.

go-CS food eat-fut.-I-ind.

'I will go for a while and then eat food.'

'When I (eventually) arrive I will eat food.'

For further examples of -e see the durative phrase (section 2.6.).

There are several forms of the verb which occur in independent clauses (including sentence-final clauses) and which are not inflected for subject person-and-number but only for mood. (Some of these may later prove to be best described as dependent. The imperatives could perhaps be viewed as finite forms.)

- | | | |
|-----|-----------|-------------------------|
| 1. | no suffix | Abrupt Imperative (sg.) |
| 19. | -a | Polite Imperative (sg.) |
| 16. | -si | Desiderative |
| 25. | -ae | Negative |
| 24. | -ara | Reciprocal |
| 23. | -ari | Infinitive |

The last four deserve comment. The desiderative by itself signifies desire, intention, or preparedness, with the subject person-and-number and tense being understood from the context. To specify subject

person-and-number and tense, the desiderative may be followed by a finite form of the verb e 'do' (or e 'say'?) as described in section 2.6. A clause containing a desiderative verb in a longer sentence signifies purpose.

Puvure-si.

come-des.

'I want to come.' 'He is ready to come.' 'They intended to come.' etc.

Puvure-si ere-o-n-a.

come-des. do-pres.-I-ind.

'I am ready to come.'

Donda inde-si puvu-ho-n-a.

food eat-des. come-pres.-I-ind.

'I am coming to eat the food.'

Similarly, the negative does not signify subject person-and-number or tense; these are understood from the context. They may be specified by adding a finite form of the verb e 'do' (or e 'say'?) as described in section 2.6.

Puvur-ae.

come-not

'I won't come.' 'He didn't come.' etc.

Puvur-ae ai-so-n-a.

come-not do-fut.-I-ind.

'I won't come.'

A verb form containing the suffix -ara 'reciprocal' occurs in the reciprocal phrase described in section 2.6.

The infinitive has a wide range of usage. It can function as a citation form, as an abstract noun, as a noun of instrument, and, when followed by a postposition, as a noun of place.

peh-ari

die-inf.

'death' (the act of dying)

di kogomb-ari

head decorate-inf.

'headdress' (the thing used for decorating the head)

eg-ari ta

wash-inf. at

'at the laundry' (the place where one washes)

It can function as an adjective, and in this usage an infinitive with a plural stem (see section 2.1.) indicates either plurality of the noun or the results of a multiple action.

ki poek-ari
spear break-inf.
'the broken spear', 'the spear is broken'

ki po-pojek-ari
spear pl.-break-inf.
'the spear broken in several pieces', 'the broken spears'

Followed by a human noun it can indicate an agent.

kaj-ari embo
kill-inf. man
'murderer' (a man who kills)

It can be used in a clause which functions as the object of verbs such as 'know', 'see', 'hear'. A free pronoun indicates subject person-and-number, and, if necessary, a time word is used to indicate the tense.

amo mahu puvur-ari ke ingi-e-n-a.
he already come-inf. speech hear-near past-I-ind.
'I heard (the news) that he had (already) come.'

2.4. FINITE FORMS OF THE VERB

Most finite forms of the verb have an ending composed of three suffixes. The first suffix, together with the vowel or lack of vowel of the verb stem, indicates tense and aspect. The second suffix indicates subject person-and-number, and the third suffix indicates mood. The two exceptions to this pattern are the far past (2) which has no tense suffix and no subject person-and-number suffix for most persons, and the continuative prohibitive variant of the permissive aspect (22) which has a fourth suffix.

There are four subject person-and-number suffixes in all tenses and aspects except far past.

-n	I
-j, -i	he, she, it
-r	we, they
-w, -v	you (plural)
no suffix	you (singular)

Instead of these four, far past has only two such suffixes.

-n	he, she, it
-w, -v	you (plural)

Here, lack of a suffix signifies any of: '*I, you (singular), we, they*'.

There are three mood suffixes.

- a indicative
- e interrogative (except in 20 and 22 hortative)
- o dependent (usage and significance little understood)

Because various morphophonemic changes take place when they combine, all combinations of the final vowel of the tense suffixes, the subject person-and-number suffixes, and the mood suffixes are listed in traditional order in Table 4. This table of morphophonemic changes should be consulted constantly when examining the verb morphology of the individual examples in this paper. In the far past tense the interrogative suffix seems not to occur. The far past suffix for second person plural, -awa, replaces the final vowel of the stem.

There are five tenses in Orokaiva, and some of these may be formed in two ways. So far, only the far past and the near past have been observed in the dependent mood.

- | | | | |
|-----|-----------------|------------|--|
| 2. | no tense suffix | Far Past | - months or years ago |
| 8. | -he | Mid Past A | - days ago |
| 13. | -ha | Mid Past B | - days ago |
| 26. | -e, -ehe | Near Past | - minutes ago |
| 11. | -ehe, -he | Present A | - This form of the verb signifies a continuing process and is usually preceded by <i>ere</i> ' <i>still</i> '. |
| 12. | -o | Present B | - This form of the verb is used less often than Present A. It possibly has another usage as well as Present. |
| 14. | -so | Future | - The second persons indicative (-so-a singular, -so-w-a plural) are also used as a polite imperative. |
| 15. | -si | Potential | - The first person plural indicative (-si-r-a) is used as a hortative. |

Na ki veki-o amo ke e-n-a.

I spear sharpen-dep. he speech talk-he far past-ind.

'While I was sharpening the spear he was talking.'

Na ki veki-o iji isapa amo ke e-n-a.
I spear sharpen-dep. time small he speech talk-he far. past-ind.
'Soon after I sharpened the spear he spoke.'

Umo ere puv-e-o avoeto ungote donda inde-so-r-a.
you now come-near past-(you)-dep. so we food eat-fut.-we-ind.
'Seeing you have come we will eat the food.'

Na puvu-ho-n-a avoeto pamba-so-a.
I come-pres.-I-ind. so go-fut.-(you)-ind.
'I'm coming, so you can go.'

There appear to be two more tenses not listed above which deserve further checking. One is a past tense with endings identical to the far past (2), but these are attached to the stem variant which occurs in the mid past.

ere u-a vovu-n-a
still do-(past they)-ind. fall-past he-ind.
'They were doing it.' 'He fell.'

The other is a future tense with the tense suffix -oko and the usual person endings, and these are attached to the stem variant which occurs in the infinitive (23).

ki-oko-v-a puvur-oku-j-a
see-fut.-you pl.-ind. come-fut.-he-ind.
'You will see it.' 'He will come.'

Orokaiva has several finite forms of the verb which signify aspect rather than tense. So far only the permissive and habitual/future aspects have been observed in the dependent mood.

- | | | | | |
|-----|------|--------------------|---|--|
| 10. | -hae | Far Past Habitual | | } One or both of these has a future significance in its dependent form |
| 9. | -ro | Past Habitual | - Usage as a final verb needs checking | |
| 3. | -ro | Present Habitual A | - sometimes | |
| 17. | -ago | Present Habitual B | - sometimes | |
| 18. | -aro | Present Habitual C | - always | |
| 21. | -ae | Abilitative | - Also used in contrary-to-fact situations 'I could have... but...', 'I wanted to... but...', 'If... then I would (have)...'. | |
| 4. | -o | Avolitional | - 'lest', 'might' | |

20. -o Purposive - Only interrogative forms have been observed, but they seem to have indicative or almost imperative significance. The first person plural -o-r-e is used as a hortative.
22. -a Permissive - e.g. 'I may eat it.', '...so that I could eat it.' The first person plural interrogative -a-r-e is used as a hortative. The dependent forms seem to have a wide range of significance and the second person forms -a-o and -a-v-o are used as prohibitives.

Na ki-ae na puvu-ro-n-o te.
 I know-not I come-fut.-I-dep. or
 'I don't know whether I can come or not.'

Pambu-ro-n-o tai-su-i-a.
 go-fut.-I-dep. hit-fut.-he-ind.
 'If I go he will hit me (while I'm going).'

Pamb-a-n-o tai-su-i-a.
 go-perm.-I-dep. hit-fut.-he-ind.
 'If I go he will hit me (when I arrive).'

Pamb-a-n-o t-ahi-j-a.
 go-perm.-I-dep. hit-abil.-he-ind.
 'If I had gone he would have hit me.'

Na ba mahinge ind-aro-n-a.
 I taro always eat-pres. hab.-I-ind.
 'I always eat taro.'

Ami-na enana ke e-o-r-a haeke-n-a.
 he-subj. them speech talk-avol.-they-ind. stop-far past he-ind.
 'He stopped them talking.' (=He rebuked them lest they talk.)

Enana ta donda nei ike-vu ind-o-r-e.
 them to food some give-(imp.)-pl. eat-purp.-they-int.
 'Give them something to eat.'

2.5. IMPERATIVE AND HORTATIVE FORMS OF THE VERB

Three different types of imperative are used: the abrupt or harsh imperative (1), the polite imperative (19), and the second person

indicative forms of the future tense (14) used as a polite imperative. Furthermore, the second person dependent forms of the permissive aspect (22) are used for prohibitions without any negative suffix or adverb. Forms 1 and 19 add *-vu* for a plural imperative whereas forms 14 and 22 have the second person plural suffix *-v* or *-w* characteristic of finite verbs (section 2.4.). Forms 1 and 22 optionally add a final suffix *-jo* to indicate a continuative or extended action. All of the possible imperative and prohibitive forms of *poeke* 'break' are illustrated below.

	Singular	Plural
Abrupt Imperative (1)	<i>poeke</i>	<i>poeke-vu</i>
Continuative Abrupt Imperative	<i>poeke-jo</i>	<i>poeke-vu-jo</i>
Polite Imperative (19)	<i>poek-a</i>	<i>poek-a-vu</i>
Polite Imperative (14)	<i>poeke-so-a</i>	<i>poeke-so-w-a</i>
Prohibitive (22)	<i>poek-a-o</i>	<i>poek-a-v-o</i>
Continuative Prohibitive	<i>poek-a-o-jo</i>	<i>poek-a-v-o-jo</i>

The first person plural forms of three different aspects seem to be used as hortative, and these are illustrated below for *poeke*.

Potential Indicative (15)	<i>poeke-si-r-a</i>
Purposive Interrogative (20)	<i>poek-o-r-e</i>
Permissive Interrogative (22)	<i>poek-a-r-e</i>

Obviously, in the last two forms the suffix *-e* has lost its interrogative force.

2.6. VERB PHRASES

(a) The *Negative Phrase* consists of the non-finite negative form of the verb (25) followed by any finite form of the verb *e* 'do'.

Ing-ae u-he-n-a.

hear-not do-mid past-I-ind.

'I didn't hear it (yesterday).'

(b) The *Desiderative Phrase* consists of the non-finite desiderative form of the verb (16) followed by any finite form of the verb *e* 'do'.

Inde-si u-he-n-a.

eat-des. do-mid past-I-ind.

'I wanted to eat it (yesterday).'

(c) The *Durative Phrase* consists of a pair of nearly synonymous non-finite verbs followed by a form of *e* 'do'. The various types of pairing deserve further enquiry.

Si puri ere-u-j-a.

cry thrash around do-pres.-he-ind.

'He is keeping on wailing.'

Uri-e kovi-e ere-o-r-a.
 plant-SA dig-SA do-pres.-they-ind.
 'They are busy gardening.'

Oroho te mane puv-e-n-a avo ba ag-a jiw-a
 now or not come-mid past-I-ind. then taro cook-? wrap and cook-?
 ere-o-n-a.
 do-pres.-I-ind.

'Ever since I came I have been cooking taro.'

(d) The *Reciprocal Phrase* consists of the non-finite reciprocal form of the verb (24) preceded by mine 'each other' and followed by a finite form of the verb e 'do' with a plural subject suffix. For complex verbs, mine comes between the adjunct and the auxiliary with -ae. The reciprocal signifies an action done to each other, or to each other's things, or for each other's benefit. Note that mine also occurs in the complex verbs mine e 'pay back', mine e 'answer'.

Ungo mine ki-ara e-he-w-a.
 you pl. each other see- recip. do-near past-you pl.-ind.
 'You saw each other (just now).'

Enana jenete mine ara ai-so-r-a.
 they forget each other (forget)- recip. do-fut.-they-ind.
 'They will forget each other.'

Enana donda mine ind-ara e-he-r-a.
 they food each other eat- recip. do-near past-they-ind.
 'They ate each other's food.'

Ungae mine arumb-ara a-r-e.
 we each other sit- recip. (do)-perm.-we-int.
 'Let's exchange seats.'

Enana mine peh-ara e-a.
 they each other die- recip. do-(far past)-ind.
 'They died together (matching each other's deeds in battle).'

3. ADVERBS

Several uninflectable words and phrases immediately precede the verb in a clause and may be called adverbs.

eha	as soon as	iji nei	sometime
ere	still	iji neinei	sometimes
iji aingeko	often	iji wahai	immediately

kihi	<i>first</i>	mane	<i>not</i>
mahainge	<i>always</i>	sausau	<i>quickly</i>
mahu	<i>already</i>	seimaseima	<i>slowly</i>

With complex verbs (see section 2.1.) ere always comes between the two parts of the verb, and mane often does so. Ere is especially used to indicate continuous action. In some literature it has been written as a verb prefix.

4. NOUNS

Most nouns are uninflectable, and plurality is indicated by other words in the same phrase or clause. A few nouns pluralize by compounding two nouns which are near synonyms.

oro	bande	oro-bande
<i>single boys' house</i>	<i>married peoples' house</i>	<i>houses</i>
otau	wasai	otau-wasai
<i>friend</i>	<i>friend</i>	<i>friends</i>

A few nouns pluralize by one of various types of reduplication.

sapura	<i>sin</i>	sa-sapura	<i>sins</i>
pondo	<i>feast</i>	pondo-kondo	<i>feasts</i>

Many of the kinship terms have plural forms. Some use reduplication and some use one of several plural suffixes.

namei	<i>my brother</i>	na-namei	<i>my brothers</i>
du	<i>sister</i>	du-emone	<i>sisters</i>
aja	<i>mother</i>	aja-mane	<i>mothers</i>
mama	<i>father</i>	mama-ha	<i>fathers</i>
ai	<i>wife</i>	ai-riri	<i>wives</i>

Since noun plurals are so varied, all known plurals need to be listed in an Orokaiva dictionary. There appears to be no gender or other classification system applicable to Orokaiva nouns.

5. ADJECTIVES

Adjectives are inflected only to indicate plurality of the noun they qualify. Most adjectives reduplicate their first syllable.

embo javotoho	<i>good man</i>	embo ja-javotoho	<i>good men</i>
---------------	-----------------	------------------	-----------------

A few other adjectives show other types of reduplication for plurality.

isa-pa	isa-sa-roho	<i>small</i>	eha	eha-ha	<i>new</i>
--------	-------------	--------------	-----	--------	------------

The infinitive of a transitive verb may be used as an adjective, and in these circumstances it is marked for plurality of the noun as described in section 2.1.

hasiwo poek-ari
knife break-inf.
'broken knife'

hasiwo po-pojek-ari
knife pl.-break-inf.
'broken knives'

Adjectives may be followed by the intensives *ko* and *be*.

dombo *big*
 dombo ko *very big*
 dombo be *extremely big*

6. PRONOUNS AND DEMONSTRATIVES

If one ignores the distinctions between the demonstrative pronouns used for third person singular, there are eight combinations of person and number in Orokaiva pronouns.

I	I and my companion(s) (= we exclusive)
I and you (= we inclusive dual)	I and you and our companion(s) (= we inclusive plural)
you	you and your companion(s) (= you plural)
he/she/it	he and his companion(s) (= they)

There are at least five sets of pronouns, each with their own particular usages, as listed in Table 5. Interrogative words based on the root *amu* 'who?' are included since they seem to function in the same way as pronouns.

Actually, the forms listed as third person singular pronouns could also be regarded as demonstratives, since they contain the positional roots:

- e near the speaker
- a near the hearer
- o away from both speaker and hearer

The full range of demonstratives is listed in Table 6 with some suggestions as to their usage. Interrogative words based on the root de 'what?, where?' are included since they seem to function in the same way as demonstratives.

7. POSTPOSITIONS

Postpositions are words or pairs of words which follow a noun or noun phrase to show its function in the clause.

(a)	embo	}	<i>for, to</i>	Indirect Object
	avo embo			
	te	}	<i>and</i> <i>at</i>	Coordination
				Time
	ga		<i>with</i>	Accompaniment
	na	}	<i>with, by</i> <i>- -</i>	Instrument
				Emphatic Subject
	ta	}	<i>of</i> <i>to</i> <i>at, on</i> <i>to, from</i>	Possessive
				Destination
				Location
				Indirect Object
(b)	ta degi	}	<i>to, from</i>	Indirect Object (The ta is optional when preceded by an indirect object pronoun already ending in -ta - see fourth column of pronouns in Table 5.)
	ta dei			
	ta eto		<i>from</i>	Source
(c)	engihi ta		<i>near, beside</i>	Location
	pe ta		<i>in front of</i>	Location
	ku ta		<i>behind</i>	Location
	jo ta		<i>inside, in</i>	Location
	araha ta		<i>outside</i>	Location
	hamo ta		<i>on, on top of</i>	Location
	i ta		<i>above, up</i>	Location
	hu ta		<i>down</i>	Location
	suvu ta		<i>under</i>	Location

In groups (b) and (c) ta could well be treated as the postposition and the other words as belonging to two separate word classes.

Avo ovu ku ta ra.
it pot behind ind.
 'It is behind the cooking pot.'

8. NOMINALS

A nominal is a word or phrase which may have a function within a clause such as subject, object, comment, indirect object, instrument or location.

(a) A noun, adjective, pronoun or demonstrative alone constitutes a nominal. (In the illustrations below, words which are not part of the nominal are in square brackets.)

Hasiwo [ike].
knife give-(imp.)
 '[Give me] a knife.'

Peni [ike].
big give-(imp.)
 '[Give me] the big one.'

Amo [ike].
that give-(imp.)
 '[Give me] that one.'

(b) A noun may be followed by an adjective, numeral, demonstrative, or any combination of these (in the order named) to constitute a nominal.

Hasiwo eha erevi [kei-so-a].
knife new this see-fut.-(you)-ind.
 '[Look at] this new knife.'

Hasiwo heriso [kei-so-a].
knife two see-fut.-(you)-ind.
 '[Look at] the two knives.'

Hasiwo pe-peni heriso orovi [kei-so-a].
knife pl.-big two that see-fut.-(you)-ind.
 '[Look at] those two big knives.'

(c) A possessor may either precede or follow a possessed noun (perhaps with some difference in semantic emphasis) to constitute a nominal. The possessor may be a possessive pronoun (see Table 5), a noun followed by the possessive postposition *ta*, or an embedded nominal followed by *ta*.

[Amo] nau du [ra]. OR [Amo] du nau [ra].
she my sister ind.
 '[She is] my sister.'

[Avo] pamone ta eti.
that woman of bag
 '[That is] a woman's bag.'

[Amo] nau du ta bande [ra].
that my sister of house ind.
 '[That is] my sister's house.'

[Amo] embo okose ta ohu.
that man old of pig
 '[That is] an old man's pig.'

(d) The noun in a nominal of type (b) may be replaced by an embedded nominal of type (c).

No eti pe-peni mahu heriso aravo [ike-so-a].
your bag pl.-big old two that give-fut.-(you)-ind.
 '[Give me] those two big old bags of yours.'

(e) Except when a nominal is functioning as subject, object, or comment, it is followed by one of the postpositions listed in section 7 to indicate its function in the sentence. (If the last word of the nominal is a demonstrative the postposition combines with it as indicated in Table 6.)

Nau bande ta eto [puv-e-n-a].
my house from come-near past-I-ind.
 '[I have just come] from my house.'

[Na] hasiwo peni ami-na [tiuke-a].
I knife big that-with cut-(far past I)-ind.
 '[I cut it] with that big knife.'

If a nominal is functioning as a location expression within the clause, then the obligatory postposition may be followed or preceded by one of the location demonstratives *ei* 'here', *ai* 'there' or *oi* 'there'.

Gaga suvu ta ei [mih-e-r-a].
platform under here be-pres.-they-ind.
 OR Gaga suvu ei ta [mih-e-r-a].
 '[They are] here under the platform.'

(f) Several nouns or nominals may be coordinated either by postposing *te* to each or by inserting *eto* between the last two, or by both methods together.

[Dago] ba te pina te u te [ind-aro-r-a].
we taro and tapioca and coconut and eat-pres. hab.-we-ind.
 '[We eat] taro, tapioca and coconut.'

Ba piye eto ena [ovu jo ta ra].
taro bananas and greens pot in ind.

OR Ba te piye te eto ena te [ovu jo ta ra].
 'Taro, bananas and greens [are in the pot].'

Nominals followed by a postposition do not seem to be coordinated as described above. The second of two such nominals may either follow the whole clause (rather like an afterthought) or may be incorporated into a second clause.

Mama nau ta ike eto no imboro ta.
father ny to give-(imp.) and your uncle to
 'Give it to my father and your uncle.'

Embo ta dei iki-ti-e ami-ta meni ta ike.
man to give-?-SA him-of son to give-(imp.)
 'Give it to the man and his son.'

9. CLAUSES

At least five basic types of clause may be distinguished on the basis of their internal structure. All of them may have an optional free subject, and each has one or more other parts which are characteristic of that particular clause type. The subject consists of a nominal optionally followed by the emphatic postposition *na*.

(a) The *Equational Clause* has one characteristic part following the subject - an obligatory comment. The comment consists of a nominal (other than pronoun or demonstrative) with or without a postposition such as *embo* 'for' or *ta* 'of'.

Ovu orovi eha ra.
cooking pot that new ind.
 'That cooking pot (over there) is new.'

Aravo on.
that lime pot
 'That is a lime pot.'

Ovu erevi umo avo embo.
cooking pot this you for
 'This cooking pot is for you.'

Ambe amo nau meni ta ra.
sago that my son of ind.
'That sago is my son's.'

(b) The *Locational Clause* has two characteristic parts following the subject - an obligatory location expression consisting of a nominal (other than pronoun or adjective) with a locational postposition and this may be optionally followed by a form of the verb mihi 'be', 'stay'.
 Dagota o ovu jo ta ra.
our meat cooking pot in ind.
'Our meat is in the cooking pot.'

Ungota hasiwo ovu pe ta mih-e-r-a.
your pl. knife pot in front be-pres.-they-ind.
'Your knives are in front of the cooking pot.'

(c) The *Intransitive Clause* has one characteristic part following the subject - an obligatory intransitive verb or verb phrase.
 Evohu okose avo pehih-i-j-a.
woman old that die-mid past-she-ind.
'That old woman died.'

(d) The *Transitive Clause* has two characteristic parts following the subject - an optional object, and following this, an obligatory transitive verb or verb phrase. Here and in (e), the object consists of a nominal. When a reflexive verb phrase occurs, the object consists of oenga 'self' or a nominal including this word.
 Dago u indi-e-r-a.
we coconut eat-mid past-we-ind.
'We ate the coconut.'

Amo oenga te-n-a.
he self hit-he far past-ind.
'He hit himself.'

(e) The *Ditransitive Clause* has three characteristic parts following the subject - an optional object, followed by an optional indirect object consisting of a nominal with an indirect object postposition, in turn followed by an obligatory ditransitive verb or verb phrase (e.g. 'give to', 'show to', 'tell to', 'take from').

Na nau eti nau iae embo iki-he-n-a.
I my bag my daughter to give-near past-I-ind.
'I gave my bag to my daughter.'

Avo hasiwo meni ta degi totohumbu-n-a.
she knife baby from take away-she far past-ind.
'She took the knife from the baby.'

(f) *Quotative Clauses* have not been investigated.

Any of the clause types except (a) may also contain a time expression preceding the subject, and any except (a) and (b) may also contain a location expression, an instrument expression, an accompaniment expression, or presumably any combination of these, preceding or following the verb. The rigidity or otherwise of the order of the various parts of a clause needs further investigation.

Iji amina dago amo kog-a-r-a.
time that we him see-mid past-we-ind.
'We saw him at that time.'

Amo pambu-n-a gan na.
he go-he far past-ind. canoe with
'He went by (means of) canoe.'

Na pamb-e-n-a embere ta.
I go-near past-I-ind. road on
'I went by road.', 'I went along the road.'

The basic clause types may be varied in several ways.

(1) If a reciprocal verb phrase (see section 2.6.(d)) occurs in a clause of type (c), (d) or (e), the subject of the clause is plural.

(2) When the negative adverb *mane* occurs it is the last item of an Equational Clause and precedes the verb in all other types of clause. It may precede either the first or second word of a complex verb.

Emo pina mane ra.
this tapioca not ind.
'This is not tapioca.'

Na puvu-he ke mane ai-so-n-a.
I come-SA speech not talk-fut.-I-ind.
'While I am coming I will not talk.'

Amo mane si e-agu-j-a. OR Amo si mane e-agu-j-a.
she not cry cry-pres.hab.-she-ind.
'She does not cry.'

In negative clauses there is a tendency to use *mane* with the future, imperative, permissive and present habitual forms of the verb and to use a negative verb ending in *-ae* or a negative phrase for the various past tenses and some present tenses. The usages and meanings of the two types of negative deserve further investigation. In the future at least there seems to be a slight difference of meaning.

Puvur-ae ai-so-n-a.

come-not do-fut.-I-ind.

'I may not come.'

Mane puvure-so-n-a.

not come-fut.-I-ind.

'I will not come.'

(3) All five basic types of clause may be varied for indicative, yes-no interrogative and information interrogative as discussed in section 10.

10. SENTENCES

An exclamation such as M-m. 'Yes.' or An-an. 'No.' may be regarded as a sentence in itself. Exclamations aside, a sentence normally consists of one or more clauses, optionally linked by conjunctions, and terminated by a final finite verb with its mood suffix or by a mood particle (enclitic?) following a final non-finite verb or other part of speech. Some conjunctions are:

rate	<i>but</i>
eto	<i>and, and then</i>
kito	<i>then, therefore</i>
avoeto	<i>so, therefore</i>
avoembo	<i>therefore, so then</i>
amo	<i>when, that</i>
avo	<i>then</i>

Some of these conjunctions are clearly the same shape as certain demonstratives, and they may really be functioning here as relatives marking the preceding clause as an included clause.

Na ambe ind-e-n-a eto ind-ae to-hae-n-a kito
I sago eat-near past-I-ind. and eat-not leave-abil.-I-ind. then
 pe-hae-n-a.
 die-abil.-I-ind.

'I ate sago so I wouldn't die.' (I ate the sago, since if I hadn't eaten it I would have died.)

Dago k-e-r-a amo Toste pamba-so-r-a.
we know-near past-we-ind. that Thursday go-fut.-we-ind.
'We know that we are going on Thursday.'

Na k-e-n-a avo ki na kaj-ari.
I see-near past-I-ind. that spear me wound-inf.
'I saw that the spear had wounded me.'

Amo mahu puvur-ari ke ingi-e-n-a.
he already come-inf. speech hear-near past-I-ind.
'I heard (the news) that he had (already) come.'

The sentence-final mood markers are:

M o o d	Mood suffixes on finite verbs	Mood particles follow- ing non-finite verbs and other parts of speech
Indicative	-a	ra (optional)
Yes-No Questions	-e, -e te	rete
Information Questions	-e	re
Alternative Questions		

In information questions, one of the clauses contains one of the question words listed in Tables 5 and 6 or *doinge* 'how many', *deite* 'when?', *do eto* 'why?', *dainge eto*, *deingeto* 'how?', or *do e* 'do what?', in addition to the mood marker at the end of the sentence. (The basic stem *do e* 'do what?' does not occur as an abrupt imperative, but it may be readily seen in the far past *Avo do e-a*. 'What did he do?'.) The Yes-No Question markers *-e te* and *rete* are also used with the meaning 'or' following the first half of alternative questions.

Yes-No Questions:

Ungo on ere o-v-e?
you pl. lime pot still (make)-pres.-you pl.-int.
'Are you making a lime pot?'

Umo ba ere agi-e te?
you taro still cook-pres. (you) int. int.
'Are you cooking taro?'

Amo keroja rete?
that sweet potato int.
'Is that sweet potato?'

Information Questions:

Umo do ere o-e?
you what still (do)-pres. (you)-int.
'What are you doing?'

Dainge ere pah-o-e?
where still go-pres.-(you)-int.
'Where are you going?'

Nau hasiwo deita re?
my knife where int.
 'Where is my knife?'

Ka amo amunu re?
girl that who int.
 'Who is that girl?'

Do indi-to ambure e-to peh-ehe-i?
what eat-PS sick sick-PS die-mid past-he int.
 'What did he eat that he got sick and died?'

Alternative Questions:

Avo keroja rete kae?
that sweet potato or yam
 'Was it sweet potato or yam?'

Amo enda no rete amita re?
that land your or his int.
 'Is that your land or his?'

Dago ki-ae amo puv-e-i te puvur-ae re?
we know-not he come-near past-he or or come-not int.
 'We don't know whether he came or not.'

Usually the final clause in each sentence is marked as either indicative or interrogative. However, sentences sometimes end with a dependent verb, perhaps implying another subsequent or consequent action. Sentences with final dependent verbs may be regarded as indicative, and such sentences, especially those with verbs in the permissive aspect (22), may be made interrogative by intonation or *te*.

Umo amo siosao ai-si puvu-to?
you it destroy destroy-des. come-PS
 'Have you come to destroy it?'

Do uje ere-o-e degi no ta a-n-o?
what want want-pres.-(you)-int. for you for (do)-perm.-I-dep.
 'What do you want me to do for you?'

Verbs in non-final clauses may be either dependent or independent. For those tenses which have both dependent and independent forms further research is required to establish how their usage in non-final clauses is conditioned and the exact nature of the meaning differences involved (simultaneous actions versus sequence of actions is one possibility).

Pambu-ro-n-o tai-su-i-a.
 go-fut.-I-dep. hit-fut.-he-ind.
 'If I go he will hit me (while I am going).'

Pamba-so-n-a tai-su-i-a.
 go-fut.-I-ind. hit-fut.-he-ind.
 'If I go he will hit me (after I arrive).'

Causation seems to be conveyed by a separate clause containing a dependent form of the verb ike 'put, give' or e 'do' (or 'say'?).

Enana na meni ik-a-r-o pambu-n-a.
 they subj. child put-perm.-they-dep. go-far past he-ind.
 'They sent the child away.' OR 'They let the child go.'

Embo na ami-ta meni e-n-u ji neinei humbu-to
 man subj. him-of son do-far past he-dep. wood some take-PS
 puvu-n-a.
 come-far past he-ind.

'The man made his son fetch some firewood.'

Table 1

STEM VARIANTS AND SUFFIX COMBINATIONS

Stem Variant	Ref. No.	Tense or Aspect	Finite or Non-Finite	Suffix Combinations mostly for first person singular	
				Indicative	Dependent
Basic Stem with characteristic final vowel	1	Abrupt Imperative (sg.)	NF	-	
	2	Far Past	F	-a	-o
	3	Present Habitual A Ind. Future Dependent	F	-ro-n-a	-ro-n-o
	4	Avolitional	F	-o-n-a	
	5	Punctiliar Sequence	NF		-to
Stem-Final e > i	6	Simultaneous Action	NF		-e
	7	Continuative Sequence	NF		-ma
	8	Mid Past A	F	-he-n-a	
	9	Past Habitual Indicative Future Dependent	F	-ro-n-a	-ro-n-o
	10	Far Past Habitual	F	-hae-n-a	
	11	Present A	F	-ehe-n-a -he-n-a	
	12	Present B	F	-o-n-a	
	13	Mid Past B	F	-ha-n-a	
Stem-Final e > a u > a i > e	14	Future	F	-so-n-a	
	15	Potential	F	-si-n-a	
	16	Desiderative	NF	-si	
Stem with final vowel dropped	17	Present Habitual B	F	-ago-n-a	
	18	Present Habitual C	F	-aro-n-a	
	19	Polite Imperative (sg.)	NF	-a	
	20	Purposive	F	-o-n-e	
	21	Abilitative	F	-ahae-n-a -ae-n-a	
	22	Permissive	F	-a-n-a	-a-n-o
	23	Infinitive	NF	-ari	
	24	Reciprocal	NF	-ara	
	25	Negative	NF	-ae	
	26	Near Past	F	-e-n-a -ehe-n-a	-e-n-o -ehe-n-o

Table 2
REGULAR VERB PARADIGMS

Ref. No.	Tense/Aspect/Mood	'break'	'walk'	'hear'
1.	Abrupt Imperative (sg.)	poeke	hembu	ingi
2.	Far Past	poeke-a	hembu-a	ingi-a
3.	Present Habitual A Ind.	poeke-rona	hembu-rona	ingi-rona
	Future Dependent	poeke-rono	hembu-rono	ingi-rono
4.	Avolitional	poeke-ona	hembu-ona	ingi-ona
5.	Punctiliar Sequence	poeke-to	hembu-to	ingi-to
6.	Simultaneous Action	poeki-e	hembu-e	ingi-e
7.	Continuative Sequence	poeki-ma	hembu-ma	ingi-ma
8.	Mid Past A	poeki-hena	hembu-hena	ingi-hena
9.	Past Habitual Indicative	poeki-rona	hembu-rona	ingi-rona
	Future Dependent	poeki-rono	hembu-rono	ingi-rono
10.	Far Past Habitual	poeki-haena	hembu-haena	ingi-haena
11.	Present A	poeki-(e)hena	hembu-(e)hena	ingi-(e)hena
12.	Present B	poeki-ona	hembu-ona	ingi-ona
13.	Mid Past B	poeki-hana	hembu-hana	ingi-hana
14.	Future	poeka-sona	hemba-sona	inge-sona
15.	Potential	poeka-sina	hemba-sina	inge-sina
16.	Desiderative	poeka-si	hemba-si	inge-si
17.	Present Habitual B	poek-agona	hemb-agona	ing-agona
18.	Present Habitual C	poek-arona	hemb-arona	ing-arona
19.	Polite Imperative (sg.)	poek-a	hemb-a	ing-a
20.	Purposive	poek-one	hemb-one	ing-one
21.	Abilitative	poek-(ah)aena	hemb-(ah)aena	ing-(ah)aena
22.	Permissive Indicative	poek-ana	hemb-ana	ing-ana
	Permissive Dependent	poek-ano	hemb-ano	ing-ano
23.	Infinitive	poek-ari	hemb-ari	ing-ari
24.	Reciprocal	poek-ara	hemb-ara	ing-ara
25.	Negative	poek-ae	hemb-ae	ing-ae
26.	Near Past Indicative	poek-(eh)ena	hemb-ena	ing-ena
	Near Past Dependent	poek-(eh)eno	hemb-eno	ing-eno

Table 3

IRREGULAR VERB PARADIGMS

Ref. No.	Tense/Aspect/Mood	'fall'	'leave'	'hit'	'see', 'know'
1.	Abrupt Imperative (sg.)	ve	to	te	ki
2.	Far Past	ve-a	to-a	te-a	ki-a
3.	Present Habitual A Ind.	ve-rona	to-rona	te-rona	ki-rona
	Future Dependent	ve-rono	to-rono	te-rono	ki-rono
4.	Avolitional	ve-ona	to-hona	te-ona	ki-ona
5.	Punctiliar Sequence	ve-ro	to-to	te-to	ki-to
6.	Simultaneous Action	vovu-e	toru-e	tohu-e	kogu-e
7.	Continuative Sequence	vovu-ma	toru-ma	toru-ma	kogu-ma
8.	Mid Past A	vovu-hena	toru-hena	toru-hena	kogu-hena
9.	Past Habitual Indicative	vovu-rona	toru-rona	to-rona	kogu-rona
	Future Dependent	vovu-rono	loru-rono	to-rono	kogu-rono
10.	Far Past Habitual	vovu-haena	toru-haena	toru-haena	kogu-haena
11.	Present A	vovu-ehena	toru-ehena	toru-ehena	kogu-ehena
12.	Present B	vov-ona	toru-ona	tor-ona	kog-ona
13.	Mid Past B	vov-ana	toru-hana	tor-ana	kog-ana
14.	Future	vea-sona	toa-sona	tai-sona	kei-sona
15.	Potential	vea-sina	toa-sina	tai-sina	kei-sina
16.	Desiderative	vea-si	toa-si	tai-si	kei-si
17.	Present Habitual B	ve-agona	to-agona	te-agona	ki-agona
18.	Present Habitual C	ve-arona	to-arona	te-arona	ki-arona
19.	Polite Imperative (sg.)	-	-	-	-
20.	Purposive	ve-one	-	-	ki-one
21.	Abilitative	ve-haena	to-haena	t-ahena	ki-haena
22.	Permissive Indicative	ve-ana	te-ana	t-ana	ki-ana
	Permissive Dependent	ve-ano	to-ano	t-ano	ki-ano
23.	Infinitive	ve-ari	to-ari	t-ari	ki-ari
24.	Reciprocal	ve-ara	to-ara	t-ara	ki-ara
25.	Negative	ve-ae	to-ae	t-ae	ki-ae
26.	Near Past Indicative	v(eh)-ena	to-ena	t(eh)-ena	k(eh)-ena
	Near Past Dependent	v(eh)-eno	to-eno	t(eh)-eno	k(eh)-eno

Comment: Notice that the verbs to 'leave' and te 'hit' are homophonous in forms 7, 8, 10, and 11.

Continued on page 61.

Table 3 (continued)

IRREGULAR VERB PARADIGMS

Ref. No.	'come'	'come'	'be', 'stay'	'do', 'make'	'say'
1.	puve	ha-e	mihi	e	e
	puve-ve (pl.)	ha-ve (pl.)	-	-	-
2.	puvu-a	-	mihi-a	e-a	e-a
3.	puvu-rona	-	mihi-rona	e-rona	e-rona
	puvu-rono	-	mihi-rono	e-rono	e-rono
4.	puvu-ona	hu-rona	mihi-ona	e-ona	e-ona
5.	puvu-to	hu-to	mihi-to	e-to	e-to
6.	puvu-e	hu-e	mih-e	u-e	iji-e
7.	puvu-ma	hu-ma	mihi-ma	u-ma	iji-ma
8.	puvu-hena	-	-	u-hena	iji-ena
9.	puvu-rona	-	mihi-rona	uru-rona	iji-rona
	puvu-rono	-	mihi-rono	uru-rono	iji-rono
10.	puvu-haena	-	mi-haena	u-haena	iji-haena
11.	puvu-ehena	-	mi-hena	er-ena	er-ena
12.	puvu-ona	hu-hona	mi-hona	ere-ona	ere-ona
13.	puvu-hana	-	mi-hana	u-hana	iji-hana
14.	puvure-sona	hure-sona	mihere-sona	ai-sona	ai-sona
15.	puvure-sina	hure-sina	-	ai-sina	ai-sina
16.	puvure-si	hure-si	-	ai-si	ai-si
17.	puv-agona	hur-agona	mih-agona	e-agona	e-agona
18.	puvur-arona	hur-arona	mih-arona	e-arona	e-arona
19.	puvur-a	hur-a	mih-a	-	-
20.	puvur-one	hur-one	mih-one	one	one
21.	puvur-aena	hur-aena	mih-aena	ahena	ahena
22.	puvur-ana	-	-	ana	ana
	puvur-ano	-	-	ano	ano
23.	puvur-ari	hur-ari	-	ari	ari
24.	puvur-ara	hur-ara	-	ara	ara
25.	puvur-ae	hur-ae	mih-ae	ae	ae
26.	puv-ena	-	mih(eh)-ena	(eh)ena	(eh)ena
	puv-eno	-	mih(eh)-eno	(eh)eno	(eh)eno

Comments: Notice that the verb e 'say' is homophonous with e 'do' except in forms 6-10 and 13. Forms 11 and 12 obligatorily contain ere 'still' and seem to have no overt stem (neither do forms 20-26).

Table 4

Finite Endings Composed of Tense Vowel, Subject Person-and-Number
Suffix, and Mood Suffix

		<i>Subject</i>	<i>Indic.</i>	<i>Inter- rog.</i>	<i>Depen- dent</i>
		I	ana	ane	ano
Tense Suffixes ending in a:		you sg.	a	ae	ao
		he, she, it	aja, aia	ai	au
-ha	Mid Past B (13)	we	ara	are	aro
-a	Permissive (22)	you pl.	awa	ave	avo
		they	ara	are	aro
<hr/>					
Tense Suffixes ending in e:					
-he	Mid Past A (8)	I	ena	ene	eno
-hae	Far Past Habitual (10)	you sg.	ea	e	eo
-he } -ehe }	Present A (11)	he, she, it	ija	ei	ei
		we	era	ere	ero
-ahae } -ae }	Abilitative (21)	you pl.	ewa	eve	evo
		they	era	ere	ero
-e } -ehe }	Near Past (26)				
<hr/>					
Tense Suffixes ending in o:					
-ro	Present Habitual A (3)	I	ona	one	ono
-o	Avolitional (4)	you sg.	oa	oe	o, oho
-ro	Past Habitual (9)	he, she, it	uja, uia,	oi	ou
-o	Present B (12)		ua		
-o	Purposive (20)	we	ora	ore	oro
-so	Future (14)	you pl.	owa	ove	ovo
-ago	Present Habitual B (17)	they	ora	ore	oro
-aro	Present Habitual C (18)				
<hr/>					
No Tense Suffix:					
		I	a	a	o
		you sg.	a	i	o
		he, she, it	na	nu	nu
		we	a	a	o
Far Past (2)		you pl.	awa, a	o	avo, o
		they	a	o	o

Continued on page 63.

Table 4 (continued)

	Subject	Indic.	Inter-rog.	Depen- dent
-si Potential (15)	I	ina		
	we	ira		
	(other endings need checking)			

Table 5

P R O N O U N S

Usage: Person-and- Number	Unemphatic Subject; Object	Emphatic Subject	Indirect Object 'for'	Possessive; Indirect Object 'to'	Coordina- tion 'and'
I	na	nanena	na embo	nau	namote
you (singular)	umo	inena	umo embo	no	umote
he/she/it	{ emo, amo,avo omo	emina	emo embo	emita	emite
		amina	amo embo	amita	amite
		omina	omo embo	omita	omite
we (exclusive)	dago	dagona	dago embo	dagota	dagote
we (incl.dual)	ungae	ungaena	ungaena embo	ungaenau	ungaenamote
we (incl.pl.)	ungote	ungotena	ungotena embo	ungotenau	ungotenamote
you (plural)	ungo	ungona	ungo embo	ungota	ungote
they	enana	enanana	enana embo	enanata	enanate
who?	-	amunu	amunu embo	amuta	amute

Table 6

DEMONSTRATIVES

Usage:	<i>this, these, here (near me)</i>	<i>this, these, here (near me pointing)</i>	<i>that, those, there (near you)</i>	<i>that, those, there (near you pointing)</i>	<i>that, those, there (yonder)</i>	<i>that, those, there (yonder pointing)</i>	<i>what? where?</i>	<i>what? where? (pointing?)</i>
Subject, Object	emo	eremo erevi	amo avo (unseen)	aramo aravo	omo	oromo orovi	do	dairamo dairami
Emphatic Subject; Instrumental 'with'	emina	eremina	amina	aramina	omina	oromina	deina	dairamina
Coordination 'and'; Time 'at'	emite	eremite	amite	aramite	omite	oromite	deite	dairamite
Accompaniment 'with'	emiga	eremiga	amiga	aramiga	omiga	oromiga	deiga	dairamiga
Possessive; Indirect Object 'to'; Location	emita	eremita	amita	aramita	omita	oromita	deita	dairamita
Location	ei	erei	ai	arai	oi	oroi		
Destination 'to'; 'like'	einge		ainge	arainge	oinge	oroinge	dainge	

Healey, A., Horombo, A. and Chittiborough, M. "Preliminary Notes on Orokaiva Grammar". In Capell, A., Healey, A. and Wilson, D. editors, *Papers in New Guinea Linguistics* No. 9. A-18:33-64. Pacific Linguistics, The Australian National University, 1969. DOI:10.15144/PLA18.23
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THE BINANDERE LANGUAGE FAMILY

DARRYL WILSON

0. Introduction.
1. Member Languages.
2. Village Lists.
3. Phonology and Grammar.
4. Previous Linguistic Work.
5. Publications in Binandere Languages.
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7. Migrations.
8. Bibliography.
9. Language Map.

0. INTRODUCTION

The Binandere language family is a non-Austronesian language group extending along the East coast of the island of New Guinea from the Maiama river in the Morobe District to the vicinity of Tufi in the Northern District. The exact number of member languages is not yet known, as there are numerous dialects, especially in the larger languages. I have found very little in print about the languages or histories of these coastal people, though they have had contact with Europeans for many years. There are at present two missions working in the area: the Lutheran Mission in the Territory of New Guinea, and the Anglican Mission in Papua. Capell (1962a:148) said that the Binandere family is comparable to the Romance language family of Europe in the relationship between member languages. A sample cognate count shows that some neighbouring languages are from 52 to 86 per cent cognate with one another.

That such a state-of-knowledge paper as this is necessary is indicated

by the fact that no one has ever listed the Suena and Yekora languages as members of the Binandere family, whereas Mawai, a dialect of Zia, has been treated for years as a separate language.

This paper summarizes what is already known about the Binandere languages in order to facilitate further linguistic and anthropological studies among these languages by others. Readers' comments and corrections are most welcome.

1. MEMBER LANGUAGES

As no one has made a comprehensive study of the Binandere family, it is impossible to say just how many languages are involved. The following listing, which includes both dialects and languages, will serve as a state-of-knowledge listing and should help to clarify the discrepancies found in the older literature in regard to names. The author has not personally investigated all languages here listed, but has compiled this list from a variety of sources both published and unpublished, as indicated below.

The languages are listed in a North to South order, together with the approximate number of speakers, where known. Older names are included in brackets.

Suena (Yema)	1,400	} (Wilson, "Field Notes")
Yekora	300	
Zia (Tsia)	2,800	
Mawai	500	
Binandere of Ioma	3,000	
Ambasi (Tain-daware)	--	
Aeka (Aiga)	--	
Orokaiva (many dialects)	25,000	(Rimoldi, 1966:3)
Hunjara (Koko)	--	
Notu (Ewage)	10,000	(Dance, 1963)
Yega of Gona	900	(Dakeyne, 1966:29)
Bareji	--	
Gaina	--	
Baruga	--	
Yega (Okeina)	--	
Korape (Koraf1, Kwarafe, Okeina)	--	

Overlooking minor variations in spellings, language names still differ considerably, especially in the older *Annual Reports*, where the names given seem to be as much village or clan names as actual tribal names.

An extreme case is that of the Orokaiva of the Mt Lamington area. The term "mountain Orokaiva" has been used recently by Rimoldi (1966:4, 104-106), who lists the following names for that group: Wasida or Waseta or Waseda (a village name), Jegasi Sarahu (two clans), Periho or Berepo ("bush people", a term by which they are known to the coastal peoples), and Kombu Sangara ("mountain Sangara", the name which the people use in referring to themselves). The term "Orokaiva" itself was introduced by the Europeans (Rimoldi 1966:3).

The term "Yega" seems to be applied to two geographically separate groups. One group just inland from Gona is growing cocoa in a project referred to as the "Yega Scheme" (Dakeyne 1966:29). Another group, near Cape Nelson, also refer to themselves as "Yega". Perhaps "Yega" is a former clan. Suena has a similarly named clan, known as "Yewa".

In the older lists a "Yema" tribe is referred to which is the present Suena tribe. Although the migration story of the Yema given by Chinnery and Beaver is in conflict with the Suenas' own migration story, the Suenas' story may be a compressed version of several older migration stories and thus still allow for the Chinnery-Beaver version. In any case the Yema-Yarawe word list given by Chinnery and Beaver is certainly Suena.

The term "Ewage", which literally means "salt water talk", is the term applied to the Notu living on the coast. The Notu living inland reject this term for themselves, and Richter of Gospel Recordings has related in conversation how heated arguments have broken out in his presence when the term "Ewage" has been used. It therefore seems best to use the term "Notu" for this language area.

In speaking of these languages, Voegelin (1965:4) has stated a policy which might well serve as a basis for further work regarding the names for these languages:

"We do not attempt to include all of the names listed in the older literature on New Guinea languages; we have omitted those found in earlier sources, as Ray, and those found in Wurm's earlier work, which are not identifiable in terms of more recent, more comprehensive surveys of the same areas."

Other language names used in the area include: Paiawa - a Guhu Samane village on the coast, Tahari - Guhu Samane of the mid-Waria, Muri - Mawai term for Guhu Samane, Bia - Suena term for Guhu Samane.

2. VILLAGE LISTS

Names given in brackets for Suena, Yekora, and Zia are spellings used by the people. All other names are Government spellings.

- Suena: Eware, Mo (Mou), Bospaira (Bosadi), Gori, Amoa (Amua),
Maiama (Mayama).
- Yekora: Sapa, Ana, Posei (Pose).
- Zia: Pema, Popoi, Siu, Zare, Putaira (Potara), Okaire, Ainse,
Saigra (Saigara), Dona, Kobo, Bau, Auno, Sowara, Eia
(Eya).
- Mawai: Yema, Gobe, Agotame, Pepeware.
- Binandere: Kurereda, Datama, Iaudare, Barara, Wai'e, Sia, Taututu,
Deboin, Mambatutu, Manau, Kotaure, Jingada, Tubi, Tabara,
Taire, Ainsi, Wade, Osako, Borogasusu, Nindewari, Wagadare,
Ewore, Bovera, Mataire, Tave, Boke, Dabari.
- Ambasi
- Aeka
- Orokaiva
- Hunjara
- Notu: Buna, Gona, etc.
- Yega of Gona: Surilai, Kanaunje, Basabugo, Banumo, Gombe, Beporo,
Gona, Konje, Otobejare, Mumburada, Ononda, Binjapada,
Jamberoda, etc.
- Bareji: Nembari, etc.
- Gaina: Iwuji, etc.
- Baruga: Embesa, etc.
- Yega of Cape Nelson: Angorogo, etc.
- Korape: Orotoaba, Katokato, etc.

3. PHONOLOGY AND GRAMMAR

The following observations are based mainly on the six northern members of the family.

3.1. PHONOLOGY

In general, the phonemics are quite simple. Syllable patterns are usually V and CV, with VV and VVV not uncommon. No consonant clusters CC or closed syllables VC or CVC occur except those involving nasals and pre-nasalized stops. The five vowels, a, e, i, o, u are common to all members, as are the stops, nasals, s, w, and r. But the phones l, h, dz, y, and ɣ vary from language to language. The phone (l) may be

a variant of /r/ and not another phoneme. Suena and Yekora prefer final /a/. Other languages prefer final /o/. There are few morphophonemic changes: in Zia and Binandere /r/ becomes /n/ after nasals; Binandere prenasalized stops become simple nasals in certain environments; verb stem consonant /m/ becomes /p/ in certain tenses. Although separate phonemes, /u/ and /w/ may be morphophonemic alternates in certain verbs. Suena awinoya 'he is resting', and au 'rest'. Tone is separate from stress and may well be phonemic. The phoneme /w/ usually has two allophones, [w] and [b]. The phones [t] and [s] may be allophones; also [dz] or [j] and [d], and [d] and [r]. In Suena, Zia, Mawai, and Yekora the phone [dz] is symbolized as z. In Binandere, Notu, and Orokaiva [dz] is symbolized as j, and [b] is symbolized as v. The velar nasal [ŋ] and the prenasalized stops [mb], [nd], and [ŋg] occur mostly in the southern half of the family.

Despite the presence of phonemic tone there seem to be many homophones. Suena /ni/ has eight distinct meanings.

Chart of Phones

All nine languages for which word lists were available have the following phones:

p, t, k	voiceless bilabial, interdental, and velar aspirated stops
b, d, g	voiced bilabial, alveolar, and velar stops
m, n	voiced bilabial and alveolar nasals
s	voiceless alveolar grooved fricative
r	voiced alveolar flap
a, e, i, o, u	voiced oral vocoids.

In addition to the 15 phones listed above, all nine languages charted have additional phones as charted overleaf:

Description	Phone	S u e n a	Z i a	Y e k o r a	M a w a i	B i n	O r o	A e k a	N o t u	K o r a p e
velar nasal	ŋ						ŋ	ŋ	ŋ	
vd. alveolar affricate	dz	dz	dz	dz	dz	dz	dz		dz	dz
vd. bilab. fricative	ɸ	ɸ	ɸ	ɸ	ɸ	ɸ	ɸ	ɸ	ɸ	ɸ
vd. bilab. semi-vowel	w	w	w	w	w	w	w	w	w	
vl. velar semi-vowel	h				h		h	h		
vd. alv.-pal. semi-vowel	y	y	y		y	y				
vd. alveolar lateral	l				l	l		l		l
prenasalized stops	mb			mb		mb	mb	mb	mb	mb
	nd		nd	nd		nd	nd	nd	nd	nd
	ŋg			ŋg	ŋg	ŋg	ŋg	ŋg	ŋg	ŋg
vd. velar fricative	ɣ						ɣ		ɣ	
glottal stop	ʔ					ʔ	ʔ	ʔ		
vl. bilab. fricative	ɸ						ɸ		ɸ	
nasalized vocoids	ĩ								ĩ	ĩ
	ẽ		ẽ	ẽ						
	ã		ã	ã	ã					
	õ		õ	õ	õ	õ	õ	õ	õ	õ
	ũ		ũ	ũ	ũ	ũ	ũ	ũ		ũ

Those who are not native speakers have trouble hearing the /ae/ /ai/ distinction, and this has led to various spellings. Another difficult phone is the double /u/ of the abrupt imperative. Suenam *'come'* (sing.), muu *'come'* (plural). Also, /o/ and /a/ have sometimes been written as /ɔ/, but it is doubtful if there is a three-way contrast.

3.2. VERBS

The verbs are highly developed, especially medial verbs, to show aspect. Verbs change root to indicate tense. Suenam *'he goes'*,

bamia 'he went'. There are both simple and compound (complex) verbs, but they function alike. Compound verbs consist of a free form plus an auxiliary verb. Verbs are pluralized by reduplication of initial syllable, though more so in Orokaiva than in Suena. Verbs (and adjectives) are intensified by a poetic shift of vowel. Suena weso wai 'to persist', weso waso wai 'to really persist'. All verbs are Active only and are marked for Mood by the final vowel. Typical vowels are: -a Indicative, -e Hortative, -o Dependent, -i Interrogative. Though Orokaiva verbs are not always marked for person, Suena verbs are, except for the negative. There are three classes of stems, ending in either -e, -i, or -u. These are found by examining either the abrupt imperative or the Far Past (Remote) tense.

Dependent (Medial) verbs of the same subject as the following verb are more developed in Suena and Binandere than in Orokaiva. Imperatives in most cases are limited in tense and person. In Suena there are five types of command: Abrupt Imperative, Polite Imperative, Future, Hortative, and Quotative. They are limited to Present and Future tense, but the Future, Hortative, and Quotative include all eleven persons, not just the normal second person. Negatives show no person or tense, and the actual constructions vary greatly from language to language. The infinitive has a wide range of usages: noun, adjective, verb. It is characterized by the suffix -ai or -ari. In some languages it is morphologically similar to the auxiliary verb 'to do', but in Suena the two are clearly separate: /-ai/ infinitive, /wai/ 'to do'.

Verb morphology is not easily analyzed: (a) because the root/stem changes for tense; (b) because not all suffixes are obligatory, and rarely do all occur together. To devise rules for root changes is difficult, and I have found it easier to memorize the roots than the rules. Generally speaking, there are three or four suffixes, indicating Tense, Person, Mood, and Number in that order. Suena verbs sometimes have six suffixes beyond the stem. The Far Past (Remote) tense has fewer person endings than other tenses.

3.3. NOUNS

There is no gender or inflection of nouns. The plurals are formed in any one of several ways: reduplication, parataxis of synonyms, affixation. Plurals of kinship terms are usually affixed, but the resultant form may not be predictable.

3.4. ADJECTIVES

Like nouns, adjectives reduplicate for plural but the resultant form is not usually predictable. Suena kiaka 'little' (sing.), kikinaka

'little' (pl.). Like verbs, they have a vowel shift for intensification. Suena zewai 'strong', zewai zawai 'very strong'.

3.5. RELATORS

Postposition words are a vital part of the syntax of most member languages, and in form may resemble Demonstratives or Conjunctions. These relator-axis phrases indicate Subject, Object, Indirect Object, Instrument, Time, etc., and function on both the clause and sentence levels.

3.6. CLAUSES

The medial verb form for punctiliar sequence action (Suena -ro, Binandere -do, Orokaiva -to) may function as a compound verb, but is best treated as two separate clauses, since each may take separate modifiers.

Suena anumuro itera 'they are seated'
Binandere anumbedo itero 'they are seated'

Both of these are literally: 'having sat down they are remaining'.

This medial form (-ro, -do, -to) may also function as an adverb in these languages which have few free form adverbs.

Suena puro mai 'bring'
Binandere kundo gumbari 'bring'

Both of these are literally: 'take (it) and come'. Here the action is no longer sequence but a manner in which the person is to come.

3.7. CONTRACTIONS

In rapid speech the final vowel is often dropped in favour of the first vowel of the following word.

Suena na bua-re are... 'I have work to do so...'
I work-with so

becomes: na buarare

3.8. WORD ORDER

Word order of possessive phrase differs from North to South.

Suena be nuso
mouth his

Notu uso be
his mouth

Korape nunda beuka
his mouth

4. PREVIOUS LINGUISTIC WORK

4.1. A. CAPELL

Dr A. Capell of Sydney University has done considerable work in the Binandere language family but his work is as yet unpublished.

4.2. SUMMER INSTITUTE OF LINGUISTICS

Darryl and Lael Wilson began work in Suena on September 1, 1964, and have at present a phoneme statement, a tentative grammar, extensive texts, a dictionary of about 3500 entries, and a concordance of 18,000 words made on the IBM 1410 computer at the University of Oklahoma by the Linguistics Information Retrieval Project and sponsored by Grant GS-270 of the National Science Foundation. They have surveyed the Mawai, Zia, Yekora, and Suena languages and have taken lengthy word lists in each.

4.3. LUTHERAN MISSION

The Lutheran Mission established a station at Zaka (Saga) near the mouth of the Waria river about 1910 and began work in the Zia language. They produced a manuscript grammar and published a book of Bible stories before giving up the vernacular for the use of Kâte. Kâte has since been replaced by English. The following is an evaluation of the Zia grammar, entitled *Grammatik der Zia Sprache*. The manuscript, now in Lae, was written in German about 1928. The material was gathered by the resident missionary, K. Mailänder, but the grammar was organized and written by Pilhofer. It is 84 pages in length including a 6-page inter-linear text. The manuscript is typed with hand written corrections. It contains copious examples, but its usefulness is limited because: (a) it is in German; (b) there is only one copy in existence; and (c) there is no tone analysis and only a note on stress.

4.4. ANGLICAN MISSION

To the author's knowledge the Anglican Mission have done linguistic work in only three of the Binandere languages. One of these, Rev. Henry Holland's grammar and dictionary of Orokaiva, was destroyed in the War. I find no record of the linguistic work which presumably preceded the translation into Notu. The other work is the *Grammar and Dictionary of Binandere, Mamba river*, by Copland King, co-founder of the Anglican

Mission in New Guinea. He worked for nineteen years in the area, from 1900 to 1918, but he left only a manuscript which he felt was not "sufficiently advanced to have the book printed". S.H. Ray suggested some rearrangements and wrote a foreword, but the actual writing was done by King's nephew, Mr Elder, who had learned another dialect. King had studied the dialect at Ave and Ambasi. The work was printed in 1927 in Sydney and consisted of 76 pages: pages 6-28 grammar, 29-53 Binandere to English dictionary, and 54-76 English to Binandere dictionary. In his preface Bishop Henry of New Guinea wrote: "There is much work still to be done on the Binandere language, but it is hoped that this grammar and dictionary will be a good starting point for future work". It should be noted that:

a. the work is not phonemic. A quick glance through the dictionary reveals the following allophones:

[j] and [d]	[j] before [i] [d] before [a], [e], [o], [u]
[w] and [v]	[w] before [a] and [o] [v] before [e], [i], and [u]
[t] and [s]	[s] before [i] [t] before [a], [e], [o], [u]

King mentioned in his introduction that after many years he could still not get the people to distinguish between [t] and [s].

b. There is no tone or stress analysis. In the dictionary /ewa/ is listed as meaning both 'ocean' and 'mango', whereas these are two separate words, a minimal pair of stress/tone.

4.5. S.H. RAY

Ray (1907) included a brief (nine pages plus text) note on the Binandere language grammar in his report on the Cambridge Expedition to Torres Straits. He has followed a Latin format. His note was superceded by King's *Grammar and Dictionary*.

4.6. ANNUAL REPORTS

In the *Annual Report* for 1910-11 Dr Strong has given word lists for Waria (Zia and Suena), Mambara, Waseda, Koko, Dobadura, Okeina, Baruga, and Korapi. In the *Annual Report* for 1914-15 E.W.P. Chinnery and W.N. Beaver wrote an article entitled, "The Movements of the Tribes of the Mambare, Division of Northern Papua". It includes maps of dialect areas and movements and a comparative vocabulary of about 200 words for English, Binandere, Yema-Yarawe, Mawai, Tahari, Aiga. Subsequent pages include

lists for Yega, Tain-Daware, Jegasa Sarau, Jauwa-Dobodura, and Hunjara. Anyone wishing to refer to this article should be aware that the report contains several typographical errors, notably in the spelling of language names.

5. PUBLICATIONS IN BINANDERE LANGUAGES

Zia materials by Lutheran Mission:

Biblische Geschichte: Anutura Ungweng tang, Rev. Mailänder, 1917, Saga, 119pp. [Bible stories]

Binandere materials by Anglican Mission:

Prayers, Psalms, Hymns, Catechism in the language of Binandere, River Mamba, Papua. Sydney, 1912.

Atutumbari Embomai Da Book, a Manual of Devotion for Communicants.

Genese by Copland King, 1903, Mission Press, Bartle Bay, 16pp. [a few chapters of Genesis]

Prayer Book with Scripture Readings, 1907.

Book of Common Prayer, 1912.

Luke Kotopu, Sydney, 1912, BFBS 1949. [Gospel of St Luke]

School Readers.

Notu materials by Anglican Mission:

Prayer Book in Ewa Ge.

Mark and John Kotopu, the Gospels in Ewa Ge, BFBS, 1952.

Orokaiva materials by Anglican Mission:

Haveni. [Hymns in the Orokaiva language]

Mark Otohu Ta Evanelia, BFBS, 1956. [Gospel of Mark]

Collects, Epistles, and Gospels.

Service Book. [various services]

Suena materials by Summer Institute of Linguistics:

Suena Yere. [50 hymns]

Azimai 1-5. [Series of 5 primers for literacy]

Soweni Iwo Nasokai. [Hygiene booklet]

Yuda Ema Noisowa. [Bible background booklet]

Zenesis. [Abridgement of Genesis]

Gospel of Mark. [currently being prepared]

6. COMPARATIVE STUDIES

6.1. THE BINANDERE PHYLUM

Voegelin (1965:6) has spoken of the Binandere Phylum as consisting of "one family plus languages of uncertain degree of relationship". Dr Strong, in 1910, had established the Binandere family together with several others in the area, and had suggested that the Upper Musa Group might be distantly related. This still seems quite possible, as a comparison of the Yareba language of the Musa river (Dr Strong's "Bori" is a Yareba clan name) with the Binandere family shows some cognates (22 per cent with Gaina). What this means, then is that the northern and western boundaries of the Binandere family are quite clear, but that at the southern end in the vicinity of Tufi and the Musa river, the boundary of the family is not yet established. The western boundary has been further established by Dutton (1967) in his work on the Koiliarian family.

6.2. RELATION OF LANGUAGES

The following percentages of cognates are based on a comparison of 100 words, 57 of which were from the Swadesh list. All 100 were on the standard S.I.L. Survey list. It is felt that these figures, if taken as an indication of mutual intelligibility, would be low because of the "multiple cognate" phenomenon described by Wurm and Laycock (1961:134).

According to the native people, one of the five languages, Yekora, is much more difficult than the others, though it shows a high percentage of cognates. The Yekoras have been subjugated by the Zias and Suenas for many years, and may have borrowed greatly. Suena, Zia, Mawai, and Binandere are to some extent mutually intelligible, but none of the four can understand Yekora. This mutual intelligibility may be what Wurm and Laycock have called "passive bilingualism" (1961:136).

This cognate count is given for only the five languages in which the author has personally taken extensive word lists.

	Suena	Zia	Mawai	Yekora	Binandere
Suena	--				
Zia	67	--			
Mawai	59	86	--		
Yekora	61	68	64	--	
Binandere	59	56	56	52	--

6.3. COMPARATIVE WORD LISTS

SUBJECT PRONOUNS

		Suena	Zia	Mawai	Yekora
Singular	1	na	na	na	na
	2	ni	ni	ni	ni
	3	nu	nu	nu	nu
Dual	1	nato	nato	nato	naete
	2	nito	nito	nito	--
	3	nuto	aŋwoto	agoto	nuete
Plural	1	nakare	nae	nage	nati
	2	nikare	nie	nige	niti
	3	nukare	aŋwo	ago	aŋgara

		Binandere	Notu	Aeke	Orokaiva	Korape
Singular	1	na	na	na	na	na
	2	imo	imo	mo	umo/imo/mo	nĩ
	3	awa/owa	umo	umo	amo/umo	nu
Dual	1	nadade	--	--	--	nangae
	2	imotote	--	--	--	nengae
	3	ima adade	--	--	--	nengae
Plural	1	kaenato	ungona	nako	nango/dago	namane
	2	imomane	ingo	ingo	ingo/ungo	ne
	3	awamane	ungo	ungo	ungo/enana	ne (digari)

Notes: 1. King lists many alternate forms of pronouns for Binandere, perhaps because his study covered several dialects.

2. Orokaiva pronouns apparently differ greatly from dialect to dialect.

3. Suena shows 11 persons in pronouns including dual inclusive nage and plural inclusive nakai not shown above. Orokaiva also has the inclusive dual ungae and inclusive plural unгоре.

4. In Suena (and Zia?) there are four degrees of emphasis in pronouns: na 'I', nama 'I' (respectfully), nane 'I' (emphatic), and naka nane 'I' (hyperemphatic).

5. Suena has four grammatical categories of pronouns: Subject/Object, Indirect Object, Possessive, and Reflexive.

ENGLISH	SUENA	ZIA	MAWAI	YEKORA	BINANDERE
hair	giti tu	giti ai	zio ai	gibazauru	kopuru tu
head	giti	gitau	zio	gibaza	koporu
mouth	be	be	be	be	be
nose	ɓena	ɓeno	heno	mena	mendo
eye	giti moka	diti	diti	diti	gisi moka
neck	duba/tuma	tumo	tumo	tuma	tumo
belly	oti/tini	oti	oti	ura	osi
skin	tama/aiso	tãu	ainso	arai	tamo/ainto
knee	bawa	boma	boma	bagazi	banggo
man	ema	emo	emo	emba	embo
woman	bama	bamuno	bamuno	bana	eutu
bird	ni	ndi	ni	ndi	ni
dog	sunu	sino	sino	ina	sino
road	ebata	nagibo	nai	nai	begata
stone	omata/doba	daba	daba	gomba	bangga
big	bamu	baina	baina	zaidimba	bazina
small	kiaka	kaka	kaka	ka	siaka
fire	niao	iao	yao	iãwa	niao
smoke	ibosi	boisa	boisa	imboi	imbosi
ashes	abetu	abetu	abetu	airi	abetu
ear	dana	dãwo	dago	dongara	dengoro
tongue	iwawa	ewawa	ewawa	ibibi	iwawa
tooth	di	di	di	di	di
breast	ami	ami	ami	ami	ami
hand	wana	wãwo	nago	uma	ipa
foot	te	te	te	ɓe	tai
sun	waiko	wari	wari	i	izi
moon	inua	ino	ino	ina	kariga
star	kuna	arasa	arasa	gobu	dabori
cloud	bereze/utu	uditi	bereze	unditi	utu
rain	wa	wa	wa	wa	wa
water	ou	ou	ou	ou	ou/ũ /
tree	ni	i	i	ĩ	ni
root	tatabi	itai	itai	ĩtai	nitai
leaf	ni gi	i gi	gi	ingi	ningi

Notes: 1. The five word lists given here are from the author's own survey notes.

2. Yekora 'dog' and 'moon', ina, ina, are different in tone.

3. Suena oti is *external belly*. tini is *internal organs*.

4. Suena duba is 'throat', tuma is 'nape of neck'.
5. The symbol [z] represents the affricate [dz] throughout these lists.
6. The generic 'cloud' is bereze. uđiti and utu are 'sky'.
7. Wurm and Laycock's theory of multiple cognates is borne out by the Suena terms for 'skin' and 'star'. Suena tama and aiso both mean 'skin', though tama is much more frequent. Suena kuna is 'star', but there are four other terms which show cognate relationships with other languages: dabori 'large star or planet', gobu 'star', yara 'The Pleiades', moroa 'morning star'.

ENGLISH	SAIROPE	DOBODURU	KENDATA	JEGARATA- KAKENDETTA	GAINA
hair	hu	hu	tu	hu	bio
head	ura	poɸoru	hohoru	uha	koɸiri
mouth	pe	pe	pe	pe	beka
nose	ɸende	mbende	mende	bende	mendo
eye	hiri	tihi	titi	tihi	diti
neck	humo	tupo	tunga	tunga	koma
belly	ori	hini	ure	hini	
skin	ando	ando	hamo	hamo/ndo	
knee	kowa	paunge	paunge	paunge	
man	embo	embo	embo	embo	mandi
woman	pamone	eɸuhu	pamone	eɸohu	eɸetu
bird	ndi	ndi	di	di	
dog	ino	inũ	inõ	inõ	
road	degi	embere	degi	embere	
stone	koro	kaluma	karu/koro	kalu/koro	
big	peni	dombo	peninombo	peni/ndombo	
small	isoko	isapa	isapa	isapa	
fire	i	yia	i	zi	
smoke	ipoi	iposi	iposi	iposi	
ashes	aɸisa	amiga	amisa	amiga	
ear	tengere	onze	onde	oze	deɸoro
tongue	iɸiɸi	iɸiɸi	iɸiɸi	iɸiɸi	aɸeɸa
tooth	ti	ti	ti	ti	
breast	emi	emi	emi	emi	
hand	ingere	ingere	igeni	ingeni	
foot	utu	itu	utu	utu	
sun	izi	iyi	izi	izi	
moon	indua	hariga	hariga	hariga	

ENGLISH	SAIROPE	DOBODURU	KENDATA	JEGARATA- KAKENDETTA	GAINA
<i>star</i>	hunzara	tamana	tarama	huzara	
<i>cloud</i>	zohi	pondizo	zohi	zohi	
<i>rain</i>	wa	ga	ga	ga/ga	
<i>water</i>	umo	umo	umō	umō	
<i>tree</i>	i	zi	i	zi	
<i>root</i>	era	zikebi	i susu	zi susu	
<i>leaf</i>	gigi	zi iki	i gigi	gigi	

Notes: 1. Sairope, Doboduru, Kendata, and Jegarata-Kakendetta are all known as Orokaiva. The lists were taken by an S.I.L. survey team. The Gaina list comes from Weimer.

2. Sairope (Hunjara?) shows interesting relations with Suena on such words as *hair, belly, knee, moon* and *rain*.

3. Some words are open to question. *i susu* probably means '*tree stump*', not '*tree root*'.

4. Sairope is in the Managalasi area; Doboduru is in the Buna census division, as is Kendata; and Jegarata is in the Popondetta census division.

5. Gaina *mandi 'man'* is cognate with Zia *mani 'male child'*.

ENGLISH	NOTU	KORAPE	AEKA	BAREJI	BARUGA
<i>hair</i>	giti	bio	choru		ɸoma
<i>head</i>	kopiri	zirc	kiti tu		agu
<i>mouth</i>	be	beka	pe		b'e
<i>nose</i>	mendo	mendo	mende		mendo
<i>eye</i>	diti	diti	kiti		diti
<i>neck</i>	dubo	dubo	tumo	tumo	tumo/manze
<i>belly</i>	tini	tini	oti	tini	desini
<i>skin</i>	tamo	tamō	tamo	tamo	tamo/andoro
<i>knee</i>	baingo	kaubo	pange	kaubo	kwogo
<i>man</i>	embo	genembo	embo		mendi
<i>woman</i>	eβetu	eβetu	pamine		eβetu
<i>bird</i>	dī	lioka	di	lika	ndi
<i>dog</i>	sino	sino	ino	sino	nino
<i>road</i>	emboro	emboro	deitamo	emboro	darei
<i>stone</i>	ganuma	gamana	atara	siŋoi	sigoi/gembiro
<i>big</i>	nembo	mindapō	ponoro	nembodaba	zozoberi
<i>small</i>	kiambo	koitako	isapa	izoko	mindikoko

ENGLISH	NOTU	KORAPE	AEKA	BAREJI	BARUGA
<i>fire</i>	yiabo	abaraka	zi	ika	ika ibari
<i>smoke</i>	mbosi	imbosi	ipoi	imbosi	gimbori
<i>ashes</i>	abiga	abega	abiga	uotu	ika
<i>ear</i>	dengoro	dengoro	tangere		denoro
<i>tongue</i>	abeba	abiba	ibibi		abibi
<i>tooth</i>	di	diaka	ti	dika	di
<i>breast</i>	emi	ami	emi	ami	
<i>hand</i>	ingo	ungo		ino	ino
<i>foot</i>	te	ata	tei/utu	ata	eka
<i>sun</i>	izi	izi	izi	izi	iri/rako
<i>moon</i>	kariga	inua	hariga	kariga	sekara
<i>star</i>	damana	damana	tapori	damona	damota
<i>cloud</i>	poroga	poroga	poraga	goso	goso/boruma
<i>rain</i>	ga	burizi	ga	boruze	axagorobi/ lasisi
<i>water</i>	umo	ubu	umo	uwu/karaze	ubu/dabara
<i>tree</i>	yi/ri	iaka	ziuhu	ika	sisira
<i>root</i>	yieamei	be sisi	zi susu	durira	riribu/rabisi
<i>leaf</i>	yi igi	ia gi	zi iki	i gi	besumbu

Notes: 1. The Notu and Korape lists were taken by an S.I.L. survey team. The Aeka list was furnished by Capell. The Bareji and Baruga lists are from Weimer.

2. Korape adds a final -ka to *mouth, bird, fire, tooth, and tree*.

3. Notu, Korape, and Aeka '*cloud*' may be a specific type: cf. Suena poroga '*thunderhead*'. Likewise for Korape '*rain*': cf. Suena boruza '*heavy rain*'.

7. MIGRATIONS

SUENA. The Suenas have a tradition that their ancestors came from the Opi and Kumusi river area of the Northern District, about 30 miles NW of Popondetta. They left that area because the Binandere, with whom they were living, were cannibalizing the Suena children. Coming north to Morobe (Sinugu), they fought with the Guhu-Samane people and drove these up into the mountains near Garaina. There are still three villages of Guhu-Samane left on the coast, two on the Maiama river and one at Paiawa. There is every reason to accept this tradition as true, and I would date their departure from Papua about 1800. Chinnery and Beaver make allusion to the Iawamuie tribe on the lower Kumusi. This corresponds

to the two major Suena clans, Yewa-Muye. However, Chinnery and Beaver show the Suenas (Yema-Yarawe) as migrating to Morobe from further north than the Suenas' tradition.

NOTU. Apparently two ancestors came to the present Notu area: one from Korape (Tufi) going to Gona area, and one from the Bariji river going first to Dombada village south of Gona and then on to the Aivi Creek area north of Gona.

BINANDERE, ZIA, MAWAI. For a detailed account of the movements of these tribes, see Chinnery and Beaver, 1914-15.

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DEPARTMENT OF HUMAN GEOGRAPHY, A.N.U.

9. LANGUAGE MAP

SUENA PHONOLOGY

DARRYL WILSON

1. Phonemes.
2. Syllables.
3. Stress-Tone Patterns.
4. Intonational Patterns.

1. PHONEMES

1.1. OUTLINE OF SUENA¹ PHONEMES

CONSONANTS

	Labial	Dental & Alveolar	Alveo-Palatal	Velar
Obstruents				
vl.	p	t	s	k
vd.	b	d	dz	g
flapped		r		
Resonants	w		y	
Nasals	m	n		

VOWELS

	Front	Central	Back
High	i		u
Low	e	a	o

1.2. DESCRIPTION OF CONTRASTIVE FEATURES

There is contrast in manner of articulation between voiced, voiceless, and flapped obstruents, resonants, and nasals. Obstruents contrast as to

labial, dental and alveolar, alveo-palatal, and velar points of articulation. Resonants contrast as to labial and alveo-palatal. Nasals contrast as to bilabial and alveolar points of articulation. Vowels contrast as to front, central and back as well as high and low tongue positions.

1.3. DESCRIPTION OF PHONEMES

1.3.1. Consonants

- /p/ [p^h] voiceless bilabial aspirated stop.
 /t/ [t^h] voiceless interdental aspirated stop.
 /s/ [s] voiceless alveolar fricative.
 /k/ [k^h] voiceless velar aspirated stop.
 /b/ [b] voiced bilabial stop.
 /d/ [d] voiced alveolar stop.
 /dz/ [dz] voiced alveolar affricate.
 /g/ [g] voiced velar stop.
 /m/ [m] voiced bilabial nasal.
 /n/ [n] voiced alveolar nasal.
 /w/ [w] voiced high close back non-syllabic vocoid, occurs before
 u, o, a.
 [ɸ] voiced high close front flat fricative, occurs before i, e.
 /y/ [y] voiced alveo-palatal non-syllabic vocoid.
 /r/ [ɾ] voiced alveolar flapped vibrant, occurs word medial only.²

/pama/	[pama]	<i>hill</i>	/wara/	[wara]	<i>jungle</i>
/bama/	[bama]	<i>woman</i>	/yara/	[yara]	<i>Pleiades</i>
/tama/	[tama]	<i>skin</i>	/ititi/	[ititi]	<i>shadow</i>
/dama/	[dama]	<i>dew</i>	/itiri/	[itiri]	<i>startled</i>
/sara/	[sara]	<i>bamboo</i>	/kaya/	[kaya]	<i>small knife</i>
/dzama/	[dzama]	<i>sweet odour</i>	/gaya/	[gaya]	<i>frog</i>
/mama/	[mama]	<i>father</i>	/didikai/	[didikai]	<i>families</i>
/nama/	[nama]	<i>I</i>	/dirina/	[dirina]	<i>thorn</i>

1.3.2. Vowels

- /i/ [i] high close front unrounded voiced vocoid.
 /e/ [e] mid close front unrounded voiced vocoid.
 /a/ [a] low open central unrounded voiced vocoid.

/o/ [o] mid close back rounded voiced vocoid.
 /u/ [u] high close back rounded voiced vocoid.
 /ewa/ [ewa] *here*
 /awa/ [awa] *there (close)*
 /owa/ [owa] *there (distant)*
 /iwo/ [iwo] *turtle*
 /uwi/ [ubi] *firefly*

Free fluctuation of full phonemes occurs in the following words:

/s/ ~ /dz/	/susawia/	<i>he is going</i>
	/sudzawia/	<i>he is going</i>
/m/ ~ /p/	/potitinoya/	<i>he is putting</i>
	/motitinoya/	<i>he is putting</i>

2. SYLLABLES

A Suena syllable is composed of one vowel with optional consonant onset. There are two syllable patterns, V and CV.³

/demira/	<i>mosquito</i>
/uso/	<i>coconut</i>
/kiaka/	<i>small</i>
/bua/	<i>garden</i>

All possible combinations of consonants and vowels within the syllable have been noted except /yi/.

Every syllable is approximately the same length, except for intonational lengthenings for special effects.

3. STRESS-TONE PATTERNS

The materials presented in this section and in section 4 need considerably more work, but are presented here for the benefit of those interested.

3.1. STRESS

Stress occurs on the penult of poly-syllabic noun stems. Stress on verbs and affixed nouns has yet to be studied.

3.2. TONE

Pitch on words of more than three syllables has yet to be examined, but in a corpus of over 3000 words only the following contrastive

word-tone patterns have been noted for words of up to three syllables:

One syllable. High tone contrasts with low tone.

/dzá/ [dzá] *Areca nut*

/dza/ [dzà] *mushroom*

Two syllables. High tone on the first syllable, low tone on the second contrasts with mid tone on the first syllable and low tone on the second.

/káyo/ [káyò] *death sorcery*

/kayo/ [kāyò] *flying squirrel*

Three syllables. High tone on second syllable contrasts with high tone on the first syllable. These two patterns are equally frequent in occurrence.

/gamía/ [gāmíà] *he bit*

/gámia/ [gámīà] *he pulled up*

To date, 26 pairs of words identical except for tone have been discovered.

3.3. DISTRIBUTION

3.3.1. Distribution of Phonemes in Word

CONSONANTS: any consonant may occur in an initial, medial, or final syllable, except that /r/ never occurs initially.

VOWELS: any vowel may occur word initial, medial or final. In charting VC sequences across syllable boundaries, all possible forms were found except -iy-. In charting VV sequences all possible forms were found except ee and oo. The following VVV sequences were found:

iao /niao/ *fire*

uai /nuai/ *life*

eai /keai/ *to tear*

oia /poia/ *bandana*

eia /keiawai/ *to come up*

aia /saia/ *it is cooked*


3.3.2. Distribution of Syllables in Word

Both V and CV syllables may occur word initial, word medial, or word final.


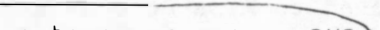
4. INTONATIONAL PATTERNS

There are four types of intonation:



1. Falling intonation throughout a pause group signals finality.


 ni bayamuno-s- a awa ⁴ 'you will go'
 you will go-you-ind. s.m.

2. Level intonation signals non-finality or incompleteness, and is followed by a slight final drop in pitch.


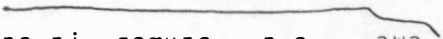

 ni baya- s- a
 you will go-you-ind. 'when you go then'

 na bayamuno-n-a awa 'I will go'
 I will go- I-ind. s.m.

3. Final rise and fall intonation signals that a Yes-No response is anticipated.


 bayamuno-s-ita 'will you go?'
 will go-you-Q

 bayamuno-s- a 'will you go?'
 will go-you-ind.

Note that in the first example there is a morphemic signal as well as an intonation, whereas in the second example, the anticipated response is indicated only by intonation.

4. A mid rise and final fall signals conditional.


 ni bayamuno-s- a awa,
 you will go-you-ind. s.m. 'if you go, I will

 na ni gamuno- n-a awa see you'
 I you will see-I-ind. s.m.

N O T E S

1. The Suena language is spoken by approximately 1400 people living along the coast near the Morobe Patrol Post in the Morobe District of New Guinea. Data for this paper was compiled over a three year period while the author was living in the village of Bosadi. Many informants were used in collecting the data. I am indebted to Miss Dorothy James, S.I.L., for invaluable assistance in writing this paper.

2. A small minority of speakers have a flapped lateral [ɻ] instead of the flapped vibrant [ʀ].

It might be possible to postulate [ʀ] as a submember of /d/ phoneme, since although there are several occurrences of medial [d], nearly every occurrence is subject to question whether or not it is one word or a close-knit phrase.

One word:

/bosadi/ [bosadi] The name of a village; a compound made from Bosa-paira and Digutu, two villages which merged under Local Government Council.

/binandere/ [binandere] The name of the related language group from which the Suenas originally migrated. This language has prenasalized stops.

/didikai/ [didikai] 'families', a reduplication of dikai 'relative'.

/didinoya/ 'he ties up' There seems to be no explanation for this medial [d].

Close-knit phrases:

/da da/	[dada]	<i>one by one</i>
/bama diri/	[bamadiri]	<i>young girl</i>
/wana da/	[wanada]	<i>five (lit. 'one hand')</i>
/dao dao wai/	[daodaowai]	<i>soft</i>
/dau dau wai/	[daudauwai]	<i>senile</i>

We have analyzed [r] and [d] as separate phonemes on the basis of:

1. the occurrence of medial [d] in *didinoya* 'he ties up' and its related conjugation, which is a frequent vocabulary item.

2. the reaction when we tried an orthography using [r] symbolized as d. Only confusion resulted.

3. There are no closed syllables, but in rapid speech the vowel /u/ is sometimes dropped following the consonant /m/.

/bamu/ [bam] *big*
 /bamubake/ [bambake] *very big*
 /bamubamu/ [bambam] *all things*

Except for situations such as the above, prenasalized stops are found only in borrowed or very ancient forms:

Binandere *name of a related language*
 Namandaira *name of original village c.1900*
 Mainambaira *name of a place on the beach.*

4. The abbreviations ind., s.m., and Q indicate Indicative Mood, Sentence Marking Particle, and Question morpheme respectively.

SUENA GRAMMAR HIGHLIGHTS

DARRYL WILSON

0. Introduction.
1. Pronouns and Person Endings.
2. Verbs.
3. Relators.
4. Text.
5. Appendix of Abbreviations Used.

0. INTRODUCTION

The purpose of this brief grammar highlight paper of Suena¹ is to present those aspects of Suena grammar which appear to be common to all Binandere languages. This paper, therefore, is not intended to be a complete grammar of Suena. However, a complete grammar is forthcoming.

Three things are highlighted here, **PRONOUNS** and **PERSON ENDINGS**, **VERBS**, and **RELATORS**. The Verbs in particular deserve special attention since in many utterances they are the only obligatory items. A correct understanding of the Verbs will greatly facilitate understanding of the language as a whole, for the Phrase and Clause levels are not complicated, being an extension of the information contained in the nuclear verb structure. This may be seen in the appended text. The Relator words and affixes are highlighted because of their prominent role in Suena syntax.

1. PRONOUNS AND PERSON ENDINGS

Of all the Binandere languages the author has examined, Suena seems to have the most developed and regularized pronoun system, marking a

total of eleven persons. Because they are so regular, they are included here for those persons who may wish to compare them with other languages.

Chart 1
SUBJECT/OBJECT PRONOUNS

	Singular	Dual	Plural
1st pers. incl.		nage	nakai
excl.	na	nato	nakare
2nd pers.	ni	nito	nikare
3rd pers.	nu	nuto	nukare

Chart 2
FIRST PERSON SINGULAR PRONOUNS
showing the four classes and four degrees

C L A S S E S					
Degrees		Sub./Obj.	I.O.	Possessive	Reflexive
	non-emphatic	na	namore	naso	natope
	emphatic	nane		nanaso	
	hyper-emphatic	naka nane	naka namore	naka naso	naka natope
	respectful	nama		nama	

The emphatic nane is Subject only, not Object.

Chart 3 presents the three suffixes which compose the Person Endings for verbs, together with their meanings.

Chart 3
PERSON ENDING SUFFIXES

Person	Mood	Number
first	Indicative -a	singular
second sing.	Hortative -e	dl.excl. -to
second dl. & pl. -w-	Interrogative -i...ta	dl.incl. -ge
third sing. -y-/-i/-nu	Question -i	pl.excl. -kare
third dl. & pl. -r-/-w-	Quotative -ise	pl.incl. -kai
	Dubitative -ua	

The Person Endings for verbs, composed of the three suffixes charted above are given in Chart 4. They are shown in the Indicative Mood.

Chart 4
PERSON ENDINGS FOR VERBS

	Singular	Dual	Plural
1st incl.	-	-nage	-nakai
excl.	-na	-nato	-nakare
2nd	-sa	-wato	-wa
3rd Fut. - Past	-ya/-ia	-rato	-ra
Remote	-nua	-wato	-wa

The third person suffix in Future, Present, Today, Yesterday and Past Tenses² is -y- following a vowel and -i following a consonant³. The third person has a separate set of endings for the Remote Tense, identical with the second person in dual and plural.

2. VERBS

To understand the Suena Verb is to understand the Weltanschauung of the Suenas. And reduced to its minimum it is this: every action is either punctiliar or repetitive,⁴ and is either simultaneous or in sequence with another action. There are three basic types of verbs in Suena: Independent (final), Medial (non-final), and Dependent (conditional). These are described in detail in sections 2.1., 2.2., and 2.3.

2.1. INDEPENDENT VERBS

In the Independent Verbs there are 6 moods, 2 aspects, 6 tenses, and 11 persons, making a theoretically possible total of 792 forms, though only 539 actually occur. In addition, 6 forms of the 2nd person Imperative occur, bringing the total number of Independent forms to 545. As space does not permit examination of all these forms, only one person in all six moods, both aspects and a few tenses is presented here. The regular verb *potai* 'to put' will be used in the first person singular.

	<i>Punctiliar</i>	<i>Repetitive</i>
INDICATIVE MOOD		
Future	potamunona	potitinuamunona
Present	potitinona	potitinowena
Today	potena	
Yesterday	potitana	potitinozana
Past	potisena	potitinoisena
Remote	potina	potitinoisona
HORTATIVE MOOD		
Present	potane	potitinuane
QUOTATIVE MOOD		
Present	potanise	potitinnanise
INTERROGATIVE MOOD		
Future	potamunonita	potitinuamunonita
Past	potisenita	potitinoisenita
Remote	potinita	potitinoisonita
QUESTION MOOD		
Future	potamunoni	potitinuamunoni
Past	potiseni	potitinoiseni
Remote	potini	potitinoisoni
DUBITATIVE MOOD		
Future	potamunonua	potitinuamunonua
Past	potisenua	potitinoisenua
Remote	potinua	potitinoisonua

Six forms of the 2nd person Imperative:

	SINGULAR	DUAL	PLURAL
<i>Abrupt</i>	poti	potiuto	potiu
<i>Polite</i>	potiyo	potiwoto	potiwo

2.2. MEDIAL VERBS

2.2.1. Aspect in Medial Verbs

It is with the Medial Verbs that there is the most difficulty in the early stages of analysis, because the Medial Verb appears to have the same tenses as Non-medial Verbs, but in reality the Tense morphemes of Medial Verbs are used to indicate Aspect.

na ge ses-e-n-a nu bamu-s- i- a
I talk say-T-I-ind. he went-Pt.-he-ind.
'When I spoke, he left.'

In this example the verb '*I spoke*' is simply the Today Tense Indicative Mood of the verb '*to speak*', whereas the verb '*he left*' is the Past Tense, 3 days or more ago, Indicative Mood of the verb '*to leave*'. To analyze the first verb according to its overt tense would be to read, '*I spoke today and he left three days ago*', an erroneous reading. Therefore, the Tense morpheme is no longer indicating Tense, but Aspect; in this case Punctiliar Sequence Aspect. However, Tense is involved in Medial Verbs. The Tense morphemes used to denote Aspect must agree with the Tense of the Final verb within the limits of Future, Present-Past or Remote. Present-Past here includes the Present, Today, Yesterday, and Past Tenses of the Independent Verbs. That is, a sequence action is expressed by the Today Tense morpheme of the Medial verb regardless of whether the Final verb is in the Present, Today, Yesterday, or Past Tense. The following examples are Sequence-Punctiliar actions only. For a complete list of forms see Chart 6.

na pot- e-n-a nu suzaw-i -a
I give-T-I-ind.he goes-he-ind.
'I gave it and he is going.'

na pot- e-n-a nu bam-i-a
I give-T-I-ind.he go-he-ind.
'I gave it and he went today.'

na pot- e-n-a nu bamu-ta-y-a
I give-T-I-ind.he go -Y-he-ind.
'I gave it and he went yesterday.'

na pot -e-n-a nu bamu-s- i-a
 I give-T-I-ind.he go -Pt.-he-ind.
 'I gave it and he went in the past.'

If the sequence action took place in the Remote, as indicated by the Final verb, then the Aspect-marking Tense morpheme of the Medial verb is Remote.

na pot -i- n-a nu bamu-nu-a
 I gave-Rt.-I-ind.he went-he-ind.
 'I gave it and he went a long time ago.'

Likewise the Future:

na pot -a- n-a nu bayamuno-y-a
 I give-Fut.-I-ind.he will go-he-ind.
 'When I give it he will go.'

In Medial verbs with the same subject as the following verb, the Aspect is equally important. Contrast these utterances:

vena nino- <u>ise</u>	suzaw-i-a	'he is eating as he goes'
food eats-Sim.	goes-he-ind.	
vena ni- <u>ro</u>	susaw-i-a	'he ate and is going'
food eat-Seq.P.	goes-he-ind.	
vena nino- <u>mite</u>	suzaw-i-a	'he ate at length and is going'
food eat-Seq.Rp.	goes-he-ind.	
vena nino- <u>ise</u>	bayamuno-y-a	'he will eat as he goes'
foot eat -Sim.	will go-he-ind.	
vena ni- <u>ro</u>	bayamuno-y-a	'he will eat and then go'
foot eat-Seq.P.	will go-he-ind.	
vena nino- <u>ma</u>	bayamuno-y-a	'when he has eaten at length, he will
food eat-Seq.R.	will go-he-ind.	go'

From these examples it can be seen that the Medial verb endings do not indicate Tense, but indicate Aspect in relation to the Final verb. Chart 5 shows the relationships of the various endings for Medial verbs with the same subject as the Final verb.

punctiliar suffix -ro, only with the Repetitive suffixes. The verb awai 'to rest' further divides Sequence action into Perfect and Imperfect Repetitive:

awi-no-mite eri-ta-n-a 'I was awakened before I had finished
resting-Seq.Rp. rose-Y-I-ind. sleeping.'

au-mite eri-ta-n-a 'I got my full rest and awoke.'
rest-Seq.Rp. rose-Y-I-ind.

Chart 6 shows the verb potai 'to put' in all its possible forms when used as a Medial verb with different subject from the Final verb. It is shown in the first person singular.

Chart 6
MEDIAL VERB, DIFFERENT SUBJECT

Punctiliar Aspect				Repetitive Aspect		
	Future	Pres.-Past	Remote	Future	Pres.-Past	Remote
Sim.	potitinuana	potitinona	potitinoina	potitinuana	potawena	potasana
Seq.	potana	potena	potina			

The Repetitive includes both Simultaneous and Sequence ideas.

2.2.2. Appearance and Purpose Expressed by Medial Verbs

There are two other types of Medial verb, Same Subject. One type is marked by the suffix -go and indicates appearance.

oneki gutu-ra baya-go wet-i-a 'Oneki appeared to go to the
Oneki isle-to go-appear did-he-ind. island.'

nu suna ge sa-go wet-i-a 'He appeared to bark like a dog.'
he dog talk say-like did-he-ind.

The other type consists of the future stem of the verb and indicates purpose.

na wo gayamu bamu-se- n-a 'I went to shoot fish.'
I fish to shoot went-Pt.-I-ind.

na wo gayamu wet-e-n-a 'I tried to shoot fish.'
I fish to shoot did-T-I-ind.

2.2.3. Number in Medial Verbs

Medial verbs, Same Subject, show change of number when the shift is from plural or dual to singular, but not the reverse, when the subject of the Final verb is a participant in the action of the Medial verb.

nakare suzau-mite-kare na duw-e-n-a
we go-Seq.Rp.-pl. I fall-T-I-ind.

'As we were going I fell down.'

nato gitawa ino-mite-to nu beti-s -i- a
we 2 sleep do-Seq.Rp.-2 he die-Pt.-he-ind.

'While we two were sleeping he (my companion) died.'

nato gitawa ino-nato nu beti-s-i- a
we 2 sleep do-we 2 he die-Pt.-he-ind.

'While we two were sleeping he (another person) died.'

2.2.4. Mood in Medial Verbs

The Medial verb is Mood-less, its Mood depending on the Mood of the Final verb.

nu nena ni-ro bamu-s-i-a 'He ate and went.'
he food eat-Seq.P. go-Pt.-he-ind.

nu nena ni-ro bamu-s-i-ta 'Did he eat and go?' (both actions
he food eat-Seq.P. go-Pt.-he-Interr. are in question)

With the Medial verb, Different Subject, the Mood is still marked by the Final verb, though the question may be focused on the Medial verb.

ni ne ino-s-a na bua wet-e-n-i 'What were you doing while
you what do-you-ind. I work do-T-I-Q I did the work?'

ni nago it-e-s-a na zawa gatet-e-n-i 'Where were you when I
you where be-T-you-ind. I call shout-T-I-Q called you?'

2.3. DEPENDENT (CONDITIONAL) VERBS

Dependent verbs are not concerned with simple conditions, but with conditions which are contrary to fact. They differ from all other verb types in two ways:

1. They have a different verb morphology, being composed of the future root, plus either a Today or Present ending, though it is not possible to make clear morpheme cuts, as there appear to be several portmanteau morphemes involved.

2. They have a different distribution, being found only in Contrary

to Fact sentences.

na baya-m-e-n-a na ego oko ita-m-e-n-a
I go -?-T-I-ind. I here not be- ?-T-I-ind.
'If I had gone, I would not be here.'

duwa-m-e-s-a ego mu
fall-?-T-you-ind. here come
'Lest you fall come here.'

ino-ma duwa-no-s-a
do-Fut.Rp. fall-?-you-ind.
'Keep doing that and you might fall.'

2.4. VERB CLASSES AND COMPOUND VERBS

A word needs to be said about Verb Classes. In Suená there is not sufficient evidence to warrant establishing any classes whatsoever. The Transitive/Intransitive distinction can be established only on the basis of semantics. And all verbs are Active, never Passive nor Stative, although Stative Clauses exist without verbs.

Perhaps the contribution which Suená can make to an understanding of all the Binandere languages is in the area of "Compound Verbs". In Binandere itself it would appear that all verbs are formed with the Auxiliary verb *ari* 'to do'. In Zia, Mailänder set up five classes of verbs, four of them based on the fact that they took different Auxiliary verbs. This can be done for Suená, too, though this would be establishing the classes on the basis of form rather than function. The Auxiliary verbs, with their primary meaning, are:

SUENA	ZIA	BINANDERE	OROKAIVA	ENGLISH
wai	yari	ari	e/ari	<i>to do</i>
sai	sari			<i>to say</i>
mai	mari			<i>to come</i>
gai	gari			<i>to see</i>
awai				<i>to rest</i>
nai				<i>to arrive</i>

Suená Compound verbs formed from the Auxiliary verbs listed above:

gitawa wai	<i>to sleep</i>
asio sai	<i>to sneeze</i>
sore mai	<i>to help</i>
oni awai	<i>to burp</i>
are nai	<i>to yell</i>

Another possible classification of verbs would be according to the stem vowel, in which case there would be three classes marked by -e, -u, and -i⁵, as:

se-ro	<i>say</i>	mu-ro	<i>come</i>	poti-ro	<i>put</i>
we-ro	<i>do</i>	bamu-ro	<i>go</i>	ni-ro	<i>eat</i>
de-ro	<i>hit</i>	zumu-ro	<i>pull</i>	gi-ro	<i>see</i>

Since ba-ro 'going' is a contraction of bamu-ro 'going', and pu-ro 'taking' is a contraction of pumu-ro 'taking', it can be said that the -u class only follow /m/. The majority of Suena verbs are of the -e class.

3. RELATORS

An essential part of Suena syntax are the bound and free morphemes which serve to relate one phrase or clause or sentence to another in a meaningful way. The Relators are listed here together with their meanings.

BOUND SUFFIXES:

- ra *Possession, Location, Co-ordination*
- re *Indirect Object, Time, Co-ordination*
- ya *Reason*
- e *Location*

BOUND PLUS FREE:

- re dai *Accompaniment*

FREE:

- meni *Subject/Instrument*
- nana *Location*

CONJUNCTIONS:

- are *therefore*
- ota *alright*
- ata *but; and*

DEMONSTRATIVES:

- emi, ami, omi *Subject*
- ewa, awa, owa *Object*
- ena, ana, ona *Location 'from' or 'at'*
- ego, ago, ogo *Location 'at' or 'toward'*
- ei, a, ou *this; that; 'that' being pointed out*

The first vowel of the Demonstratives indicates distance from the speaker: e- 'very near' or 'touchable', a- 'close', o- 'distant'. This

vowel system is common to Binandere and Orokaiva as well. This 3-vowel system for degree of nearness only pertains to demonstrable things, and in the realm of the strictly grammatical relationships, the middle set, namely ami, awa, ana, and ago, are used. In this usage they resemble the English relative pronouns.

ema wana toumai ami bam-i- a
man hand broken R went-he-ind.
'The man who has the broken hand went.'

The Demonstratives, emi, ami, omi, but usually just ami, functioning as Relative Pronouns, combine with the suffixes -ra and -re to show Possession, Location, Indirect Object, Time and Co-ordination. They no longer indicate Subject.

ema wana toumai ami-ra suna meni mua mai naso awa gam-i-a
man hand broken R-of dog RS eldest child my R bit-he-ind.
'The dog of the man with the broken hand bit my eldest child.'

In this example amira is a Relative Pronoun showing possession and relating the Noun Phrase *'the man with the broken hand'* to *'dog'*. The free form meni indicates that the dog is the Subject of the sentence, and the Relator awa is functioning as a Relative Pronoun showing the noun phrase *'my eldest child'* to be the Object of the verb.

The Demonstratives ana and ago occur most frequently relating two sentences by summarizing the Location or Object slots of the previous sentence in the introduction of the following sentence. Suena style demands that the succeeding sentences in a discourse begin with a Medial form of the Final verb of the preceding sentence.

ema zo meni suna naso gutu-ra ena det- i-a ago we-ro ana
man a RS dog my isle-at RL hit-he-ind. R do-Seq.P. RL
 eri-ro nat-e bam- i- a
rise-Seq.P. village-to went-he-ind.

'A man hit my dog on the island. Doing that he got up from there and went to the village.'

In this example there are six Relators: meni, though untranslatable, indicates Subject; -ra forms the locative of *'isle'*; ena further relates *'isle'* as the Location of the action; ago relates the previous action to the following sentence; ana relates the scene of the previous action to the *'rising'* of the following verb; and the vowel change (nata to nate) of *'village'* indicates the Location of the Final verb *'went'*.

The bound suffix -ya and the free conjunctions are, ota and ata relate two Final clauses.

na bayamuno-n- a-ya ni bua naso we
I will go- I-ind.-so you work my do
'I am going so you do my work.'

na bayamuno-n-a are ni bua naso we
I will go- I-ind. so you work my do
'I am going so you do my work.'

na bayamuno-n-a ata ni itamuno- s- a
I will go- I-ind. but you will stay-you-ind.
'I will go but you will stay.'

na mamuno- n-ita? ota mu
I will come-I-Interr. Alright come
'Shall I come? Alright, come.'

4. TEXT

ema eto zazo nusoto yanai yawiri ami binandere nana yawiri-ra mai
men two name their 2 Yanai Yawiri RS Binandere RL Yawiri-RP child
 pumamu susau-mite ugama ewa soe pisi- ro susau-nu gi-ro
to get go-Seq.Rp. crocodile sea mid drift-Seq.P.Ad. go-he see-Seq.P.
 ete ena dagimu-ro wena dumu meni daba pisi- ro susau-mite
land RL dive-Seq.P. nose point RI only drift-Seq.P.Ad. go-Seq.Rp.
 zorage zorage we-ro gi-ro ana me ipure dago ewa tura
close close do-Seq.P.Ad. see-Seq.P. "jackknifing" (idiom) sea under
 susau-mite iri ike ni-ro ugama zazana koakoa inoi-nu
go-Seq.Rp. glance up do-Seq.P.Ad. crocodile chest white does-it
 gi-ro witi-ro mu-ro zo giti zo ara sani-w- a- to
see-Seq.P. up-Seq.P.Ad. come-Seq.P. one head one tail held-they-ind.-dl.
 sani-ro pu- ro bamu-ro ete ena beni-ro
held-Seq.P.Ad. took-Seq.P.Ad. went-Seq.P. land RL tied-Seq.P.
 pu- ro bamu binandere nana ni- w- a- to aze- ro
took-Seq.P.Ad. went Binandere RL arrive-they-ind.dl. butcher-Seq.P.
 ni- w- a awa
ate-they-ind. s.m.

FREE TRANSLATION

Two men named Yanai and Yawiri were going to the Binandere area to get Yawiri's child when they saw a crocodile drifting in mid ocean. They dived in from the bank and drifted with only the point of their

noses sticking out. Seeing they were getting closer, they jackknifed under the water and went along. Glancing up they saw the crocodile's chest shining so they went up and one held the head and one held the tail. They held it and took it and went to shore and tied it up and took it to the Binandere area and they all butchered it and ate it.

Note that this whole text is in the Remote Tense and consists of only two sentences. Had the speaker wished, it could have easily been one sentence simply by omitting the Final verb *saniwato* of the first sentence.

5. APPENDIX OF ABBREVIATIONS USED

The following abbreviations have been used in this paper:

Ad.	Medial verb used as Adverb
dl.	Dual number
excl.	Exclusive
Fut.	Future tense
Habit.	Habitual action
incl.	Inclusive
ind.	Indicative mood
I.O.	Indirect object
Interr.	Interrogative mood
P.	Punctiliar aspect
pers.	Person
pl.	Plural number
Pt.	Past tense
Q	Question
R	Relator
RI	Relator marking Instrument
RL	Relator marking Location
RP	Relator marking Possession
Rp.	Repetitive aspect
RS	Relator marking Subject
Rt.	Remote tense

Seq.	Sequence action
Sim.	Simultaneous action
Sing.	Singular number
s.m.	Sentence marking particle
T	Today tense
Y	Yesterday tense

N O T E S

1. Suena is the northernmost member of the Binandere language family, and is spoken by about 1400 people living along the coast near the Morobe Patrol Post in the Morobe District of New Guinea. The data for this paper were gathered under the auspices of the Summer Institute of Linguistics over a period of three years in the village of Bosadi, formerly called Bospaira. The chief informants were Zaipo, Tarana, and Duri, though the material is based on a number of taped texts from various speakers.

2. The terms Present, Today, and Yesterday are distinguished as follows:

Present - an action which is currently in process.

Today - an action which happened before the present moment, but since dawn of this day.

Yesterday - an action which happened any time between dawn yesterday and dawn this morning.

3. Except in Medial verbs, where the -a of the Indicative Mood is dropped, the -y- becomes -i-.

nu bua ino-y-a
he work do-he-ind.
'He is working.'

nu bua ino-i na mu- se-n-a
he work do-he I come-Pt-I-ind.
'While he was working I came.'

4. Repetitive is a broad term including Durative and Continuous action.

5. In the form doro 'leaving', the -o may have been historically -u. The Future is duamunona 'I will leave', and the Hortative is duase 'let you leave'.