A SELECTIVE WORD LIST IN TEN DIFFERENT BINANDERE LANGUAGES

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0. <u>Introduction</u>

This paper is designed to be an initial step towards comparative work in the Binandere language family. For this reason the word list was chosen as much as possible to give access to very basic vocabulary, especially household, cultural and kin terms less likely to change with the passage of time. It is therefore not suitable for a mutual intelligibility study. The authors present some tentative interpretations of the data and hope to follow this study up later in more detail. Another hope of ours is to stimulate further comparative study by other scholars in this large, but neglected language family.

1. Basic Phonology

This section is not meant to be a technical description of the Binandere language family's phonemes. It is rather simply meant to provide a basic pronunciation guide. The descriptions provided should be taken only as a very rough approximation of the phonetic value. To save space the data in section #3 is in semiothographic form and this form appears first below in section #1.1 followed by the more phonetic equivalent in brackets which is in turn followed by a short technical description.

1.1		iption of Orthography used in Data
/p/	(p ^h)	Voiceless bilabial aspirated stop. Only Korafe and Notu have no $/p/$. See $/f/$ below.
/t/	$(\mathbf{t}^{\mathbf{h}})$	Voiceless alveolar aspirated stop.
/k/	$(\mathbf{k}^{\mathbf{h}})$	Voiceless velar aspirated stop.
/b/	(b)	Voiced bilabial stop.
/d/	(d)	Voiced alvoelar stop.
/g/	(ĝ)	Voiced velar stop.
/f/	(g)	Voiceless bilabial (with some interdental allophonic variations). In our data this occurs only in Korafe, Kokoda and Notu.
/s/	(s)	Voiceless alveolar fricative.
/e/	(g)	Voiced velar fricative. Only in Korafe.
/j/	(dz)	Voiced alveopalatal (in Suena and Zia this is alveolar) affricate.
/ r /	(r)	Voiced alveolar flapped vibrant (usually

fluctuating freely with a lateral allopnone).

- /w/ (b) Voiced bilabial (in some variants interdental) fricative or non-syllabic vocoid.
- /y/ (y) Voiced palatal non-syllabic vocoid. In the data used for this paper only Ambasi, Binandere, Korafe, Notu, Suena, and Zia exhibit this phoneme.
- /m/ (m) Voiced bilabial nasal.
- /n/ (n) Voiced alveolar nasal.
- /n/ (n) Voiced alveopalatal nasal. This is phonemic in Notu and found once in the data for Ambasi. See question #3 in the nasalization section (#1.4).
- /mb/ (mb) Voiced bilabial prenasalized stop. Not found in Suena and Zia.
- /nd/ (nd) Voiced alveolar prenasalized stop. There is no such phoneme in Suena and Zia and in this data no occurance in Ambasi although we suspect this last to be simply a skew in the data.
- /ng/ (^ŋg) Voiced velar prenasalized stop. There is no such phoneme in Suena or Zia. For Orokaiva this phoneme is realized as a nasal stop.
- /nj/ (ndz) Voiced alveolar prenasalized affricate. There is no such phoneme in Orokaiva, Suena or Zia and none in this data for either Ambasi or Kokoda.
- /ng/ (ng/ Voiced velar prenasalized affricate. Only in Korafe.
- /h/ (h) Voiceless glottal fricative. This apparently occurs phonemically only in Aeka, Kokoda, Orokaiva, and Paraharava. In the data #55 under Notu is probably an onomatopeotical usage since Parrington doesn't list this as having phonemic status.
- /i/ (i) High close front unrounded voiced vocoid.
- /u/ (u) High close back rounded voiced vocoid.
- /e/ (e) Mid close front unrounded voiced vocoid.
- /o/ (o) Mid close back rounded voiced vocoid.
- /a/ (a) Low open central unrounded voiced vocoid.
- /,/ (,) Symbol for phonetic nasalization. Usually with vocoids. See section #1.4.

1.2 Stress Patterns.

In general stress is not phonemic in the Binandere language family with Korafe being the only proved exception. The authors had phonemic statements to work with for Korafe, Notu, Orokaiva, Suena and Zia and we will mention these languages' stress patterns individually first and close this

section with remarks about stress patterns observed in the other five languages.

Korafe (see Farr 1974) prefers two syllable words to be stressed on the first syllable and three or more syllable words to be stressed on the second syllable. Furthermore non-verbs with vowel glide syllable nuclei prefer to have the syllable with the double nucleus stressed (for discussion of double vowel syllable nuclei see Farr-1974). There is regular perturbation of stress in some verb phrases.

Notu has first syllable stress.

Orokaiva has first syllable stress.

Suena has penultimate stress on non-verbs (with more work needed on verbs and verb phrases-Wilson 1969).

Zia has predictable stress with stress generally occuring on the penultimate syllable except in special cases as outlined in Wilson, Oida, Siki and Kiawa 1976.

Aeka, Ambasi, Binandere, Kokoda and Paraharava all prefer initial stress and the data is only marked where this does not occur.

In the data section (#2) stress will only be written when exceptions to the general rules outlined above occur.

1.3 Tone

Only Suena has any conclusive evidence of tone where more than 25 minimal pairs of two and three syllable words differentiated only by tone have been discovered-Wilson 1969. Some very slight evidence for tone differentiated minimal pairs has been found in Korafe and Zia, but it is inconclusive (see Farr 1979 and Wilson, Oida, Siki and Kiawa 1976).

1.4 Nasalization

Binandere language family phonemic statements to date including the authors' own may rather have confused the issue of nasalization than shed any light on the problem. No such statement to date to our knowledge has analyzed vowel nasalization as separate vowel phonemes. All have chosen to analyse this as 'spillover' from adjacent nasals or prenasalized stops. It should born in mind that in all the Binandere languages nasalization tends to be carried over from nasals, i.e. /m,n/ to the next following syllable, nasalizing the syllable nucleus and carrying across to the following syllable onset (especially voiced stops) if possible.

That nasalization might be a fruitful place to start further work is suggested by the following questions:

- #1. Neither Suena nor Zia have prenasalized obstruents, but Zia reports a possible dual level of nasalization-Wilson, Oide, Siki, Kiawa 1976). Could this be either nasal vowels or prenasalized obstruents?
- #2. Korafe has good evidence of neutralization of voiced stops in a nasal environment following nasals, i.e. /m, n/. Also neither a pure nasal, nor a prenasalized obstruent can occur immediately following another prenasalized obstruent. Could a prenasalized obstruent really indicate the presence of a nasal vowel phoneme?
- #3. In Notu there is a voiced alveopalatal nasal. However this occurs only word finally and as such to my knowledge forms the only closed syllable in Notu. Could this really be the effect of a nasal vowel phoneme when no other following consonant is present?

2. Data

In the data section most of the entries are single words, but where more than one word or form is entered these are separated by a slash (/). Where the English gloss has been translated by more than one language word these have been connected by a dash (-), i.e. the Zia entry for #41, 'head' giti-ai. Dash (-) is also used occasionally to show that the language equivalent for the English term has not been found. In the verb section#91-103 three abbreviations have been used: inf for infinitive, imp for imperative (singular), and seq for sequential same actor medial verb.

An asterisk has been employed for those entries where there is some doubt as to the validity of the entry and/or where there has been some editorial adjustment. We especially want to mention #4, 'above' and #6, 'the inside'. Both of these words are usually in locative case and the asterisked forms reflect the editing out of the (hopefully correctly identified) locative endings from the data supplied.

Ŋ		ENGLISH	KORAFE	NOTU	BINANDERE	SUENA	ZIA	OROKAIVA	KOKODA	AEKA I	PARAHARAVA	AMBASI
	1	rain	borija	ga*	wa.	wa/ boruja	wa	ga	wa	ga	ga	wa
	2	bird	rika	ri	ni	ni	ni	di	di	di	di	ri
	3	wood	ika	ri/ ituka	ni	ni	i	i	i	ji	i	ni
	4	above	i 'ka	i*	i kane*	i *	i*	i	i'hare	i *	ihane	ikane*
	5	mercy	joka,	jo*	đo	jo	λo	jo	jo	jo	oţ	do
	6	(the) inside (of a thing)	jo†ka	jo*	do*	moka	moko	jo	jo*	jo	to*	do*
	7	meat/fish	oka	WO	wo	wo	WO	o	0	o	o	wo
	8	lime	o'ka	9	Ģ	oro	oro	9	9	9	9	9
	9	pig	fuka	fu	pu	pu	pu	ohu	fu	hų	ghu	pu
	10	boat	gaka	nga	ma	wa	wą.	nga	nga*	nga	enga	ma
	11	penis	wi'ka	wi*	wi	wi	wi	bi	Wi	bi	bi	wi
	12	talk/speech	geka.	ge	ge	ge	ge	ke	ke	k e	ke	ge
	13	broth	guka	momba/tu	tu	en	su	gu	usu	an	su	tu
	14	brother	ruka	ru	ru	nami/ numata	meta/ tato	du	ru	đu	đu	ru
	15	tree sap	mı†ka	ngamo/ rimu/	mì	mu	mų	mu	шù	mÀ	шÀ	шÀ
	16	real/true	be'ka	riwibu be	be	me	me	Ъе	be	be	ъе	ре
	17	mouth	beka.	be	Ъе	be	be	рe	pe	pe	•	Ъе
	18	excreta	fo'ka	је	đe	je	je	86	ge	88	ge ge	đe

	ENGLISH	KORAFE	NOTU 1	B INANDERE	SUENA	ZIA	OROKAIVA	KOKODA	AEKA	paraharava	AMBASI
19	manta ray	seka	sofika	-	duna	duna/ bewoto	-	-	-		-
20	new	seka	seka	te k a	seka	seka	eha	eha	eha.	eha,	teka
21	betel nut	ja'ka	ja	dą.	ja	jş	នទំ	88.	są*	są.*	da
22	pepper	fi'ka	fingi	pingi	pigi	pįgi	hļngi	fi	hingi	hingi	pingi
23	back	guka	gy/gutî	gÀ	tipa/ gutipa	tipa/ bauta	ku	ku	kų	kų	gu
24	loincloth	boka	bo/ kaingo	gongo	то	mo	bo	ьо	ро	kongo	kongo
25	shame	meka	me	me	me	me,	me	me	mę	mę	m ę
26	far	soka	besau/ besauñ	betau	jora/ darako	akemo/ ake	hoi	ąh ę	utamana	mana	betay
27	hole	to'ka	to	to	toto	toto	to/ hoto	ho	to	to	to
28	female sex organ	aka	a*	a	ari	ari	a	a	a	a	a.
29	meaning	eusu	susu/ be	tutu	susu	susuwa	susu	susu	_	gugu	tutu
30	only, just	ta'ka	umosuka/ usoka/ berari	berari	daba	gege	pere	pere	pere	perarira	berarira
31	girl	gagara/ ade	gagara	gagara 1	oama-diri	baunodi/ ademai	kakara	ka kara	kakara	kakara	ga [gara
32	bowl .	tewa.	tewo	teo	tewa	tao	hewa	hewa	tewa	tewa	teo
33	: sago	ambe	ambe	ambe	аше	ame	ambe	ашре	ambe	ambe	ambe
34	spear	goroba/ gika	goroba/ gi	gi	goroba/ gi	gi- gorobo/ gi- karowa	ki	ki ·	ki	ki	gi
35	black palm	goroba	goroba	goroba	goroba	gorobo	koropa	koropa	koropa	koropa	goroba

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	ENGLISH	KORAFE	NOTU	BINANDERE	SUENA	ZIA	OROKA IVA	KOKODA	AEKA P	ARAHARAVA	AMBASI
36	dibble stick	tika	dawi	tabi	boto*	tj	9 ta	o nda	onta	tawi	tabi
37	sister-in- law (girls')	bi †ka	bi	-	bi	mi	bi	-	-		-
38	leg	ata	tei	tai	te	te	utu	heki	tei	gei	tai
39	nose	me!ndo	mendo	me'ndo	wena	weno	mende	wende	mende	bende	meno
40	hair	bio	tu	tu	giti tu	giti .	tu	hu	tu	hu	tu
41	head	gifua/ jiro	kofiri/	ko puru	giti	giti-ai	giro	siro	siro	uha	kofiri
42	face	do'mbu	фотрп	beo	benau/ mewa	benau/ megoto	tombu	tombu	tombu	tombu	dombu
43	arm	ungo	ingo	i'pa	wana.	wawo	ingeni	ingere	ingeri	ingeni	i†pa
44	animal fur	buroro	tu	du	tu	tumija	tu	hu	tu	hu	tu
45	ear	dengoro	dengoro	de†ngor¢ onde	dana dana	d a wo	tengere/ onde	tingere	ti!ngere onje	tingoro/ onje	dengoro
46	garden	wa're	ba/ buro	buro	bua	bure	pure	pure	pure	pure	buro
47	work	saramana	buro	buro	bua	buro	pure	pure	pure	pure	buro
48	nape of neck	tumo	tumo	tumo	tuma	tumo	singi	humo	tu*mo	humo	tu†mo
49	throat	dubo	dubo	dubo	duba	dubo	tunga	tunga	tunga	tunga	dubo
50	dance	yaru	уа	ya	yawa	na	ja	jawa	jawo	ja	ya
51	what	rejo	ro	ro	ne .	no	do	a' wunu	đo	do	ro
52	place	reigi/ nati	yei/ nati	nasi	nata	napo	da	da	na	nda	nasi
53	thicket	maka*	botari/ botu	bo'tu	motu	motu	ma	wasa	botu	ma.	botu

ENGLISH KORAFE	NOTU	BINANDERE SUENA	ZIA
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	ENGLISH	KORAFE	NOTU	B INANDERE	SUENA	ZIA	OROKA IVA	KOKODA	A EKA	PARAHARAVA	AMBASI
54	yes	ai	eĦ/ę	ę	iyo	yore	ę	Ģ	е	ę	ę
5 5	pant	-	þ	kę	yaka	yaka	hę	hę	hę	hę	kę
56	cry	sorara/ koko	ji	ji	đi	ji	gi	si	si	gi	ji
57	cracking sound		to	ро	ро	рυ	pou	pou	pou	pou	erege
58	limestick	daka	da/da/ dan		sabi	sabi	tawi	-	onta.	tawi	tabi
59	seed	weka	₩e	we	mė	me	be	we	Ъe	-	-
60	old	manai	matu	matu	matu	matu	matu	maha	-	· -	-
61	bad	e k o	biae	beae	waya	meko	samuna/ sisae/ samuna	sa'muna	samuna	sapura/ sisae	beae
62	good	ew ew 9.	ewamei/ dawe	dawe	ewanana/ neine/ kokopai	wosewa/ jwai	jawotoho∕ jai	akari	jai be	jawotoho	dawe
63	red	koko i	kokoi	kokoi	ijai	yuyao	ohonde	onje	kokoi	ohoma	kokoi
64,	black	'ingago	umenga	i†ngotu	inagayai	simiyau	mume	mume	mume	mume	mu'mene
65	dog	sino	sino	sino	suna	sino	ino	ino	ino	ino	sino
66	drum	sino	sino	ta' taun/ sino	gogoi/ boi	gogoi	ino	ino	ino/eu	ino	sino/eupu
67	string bag	ati	eti	asi	ati	ati	eti	ehi	eti	ehi	asi
68	name	jawo	jawo	đao	jajo	yajo	jawo	jawo	jawo	jawo/ kori	dao
69	house	nati/ kambo	mando/ oro	ma†ndo	so/ibu/ mara	garo	bande	wande	mande	mando	mano
70	sun	iji	iji/ igoi/ waiko	iji	Waiko	wari	iji	iji	iji	iji	iji

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	ENGLISH	KORAFE	notu 1	BINANDERE	SU ENA	ZIA	OROKA IVA	KOKODA	A EKA	PARAHARAVA	AMBASI
71	time	sifo	iji	iji	waiko	iya-gao	iji	iji	iji	iji	iji
72	night	tumba	tumba	munae	mume/pi/ tumou	pi/mume	mume	mume	mume	mume	muñae
73	11ght	usasa	usasa/ parara	parara	jasimai	wa-egao	usasa	usasa	usasa	usasa	parara
74	star	damana	damana	dabori	dabori/ kuna	arasa/ gobu	hujara	hujara	mainga	hujara	damana/ dabori
75	moon	tambuma/ inua	kariga	kariga	inua	ino	hariga	hariga	hariga	hariga	kariga
76	taro	isia	waiso/ ba	ba	ma	ma.	ba.	ba.	ba	ba	ba
77	banana	bijo	bijo	bido	bija	biye	pije	pije	pije	pije	bido
78	coconut	ugu	u	mutari	ugo	u	u	u	bu	wu	mutari
79	sweet potatoe	kuta	kaema/ kuta	kaema	gero	gerosara	keroja	ange	ange	kae	kaema
80	embers of a fire	ayaraka	ri-munju ingotu	/i'ngotu	awetu	awetu	ingotu	ingose	ingotu	ingohu	o'ngotu
81	flame	bubura	a.wewa	beriberi	beriberi	beriberi	peri	peri	periper	i peri	beriberi
82	man	genembo	embo	embo	ema.	emo	embo	embo	етво	ешро	emo
83	woman	ewetu	ewetu	eutu	bama	bauno	ewohu/ pamone	pa!mone	pamone	ewehu	ewetu
84	Gona person	Gona- embo	Gona- embo	Gona- embo	Gona-ema	Gona-emo	Gona- embo	Gona- embo	Gona- embo	Gona- embo	Gona-emo
85	people	ewe tu- genembo	embomei	emboma.i	erama	emo- bauno	embomeni	embomeni	embome i	i embomeni	emomai
86	father	afa/ numamo	mama/ mamo	mamo	mama	mamaka/ mama	mamana/ mama	maha	mama	mama.	мамо
87	mother	aya	inyei/ aia/ ai	aya	mia	ayaka/ aya	ajaha/ aja	aha	aja	aja	a.i
88	boy	mandi	mei	mai	mai	mani	meni	singa/ meni	mei	meni	mai

	ENGLISH	KORAFE	NOTU	B INANDERE	SUENA	ZIA	OROKA IVA	KOKODA	AEKA F	'ARAHARAVA	AMBASI
89	tooth	dika	di	-	di	di	ti	-	-	-	<u>-</u>
90	noise	duka	jawi	-	awi	duruka	asawi				·
91	run-inf imp seq	sumbari sumbu sumbudo	sumbari sumbu sumbudo	tumbari tumbu tumbudo	sumai sumu sumuro	suno su suma o	tutuwari tutuwe tutuweto	tutuwe	konje	huhewari huhuwe huheweto	tumari tumu tumudo
92	put-inf imp seq	fitari fiti fitido	itari itl itido	piari pie pisido	potai poti potiro	pugao pugai pugairo	ikari ike iketo	hieri hia hieto	ikari ike iketo	ikari ike iketo	piari pie piedo

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indari inari indari indari. nai minae indari inderi indari 93 eat-inf mindari inda . ini inda inda inda inji ni mini imp mindi indi indito indito inido indido injido miriro indito indito niro mindido geq Kiari kiari gari gari kiari keri gai gao 94 see-inf gari gari gi ği gi ki ki ki ki gi imp gi gi kito kito gido

giro

kito

kito

tari ari ati ari ari tari sai 88.0 inf sari sari 95 <u>eay</u>, te speak-imp te se е ejo e е se se ве tedo eto eto eto eto tedo seq sedo sedo sero gero

giro

gido

gido

gido

seq

puwurari bugari bumao pururari wusureti purari come-inf furari gumbari mai 96 imp puve/ha Ъu MIG PUWU pune bugu gumbu mu fu puvuto wuwuto putu puwuto muro buro bugudo gumbudo seq

hambari pambari bamari mambari bayai babao pambari pambari go-inf mambari yari 97 hamba pambu pambu pamba. bamu mambu mambu bamu bau imp i bayno pambuto hambuto pambuto pamudu ma'mbudo bamuro/ pambuto obuduam geq baro

doari duwao toari toari toari toari doari duai cease-inf doari 98 doyari do to to to фo do to ďο ďο imp do dodo toto toto toto toto doro doro dodo dodo dodo seq .

tari dari tari tari tari hit-inf dari dari dari dai dao 99 te te de de te te de đe imp de(ge) de teto dedo teto teto teto dedo dero dero dedo dedo geq

	ENGLISH	KORAFE	NOTU	BINANDERE	SUENA	ZIA	OROKA IVA	KOKODA	AEKA]	PARAHARAVA	AMBASI
101	throw-inf imp seq	fugari fuge fugedo	figari fige figedo	augari auge augedo	apai ape apero	augao augae augaero	gosuke	kusukari kusuke kusuketo	barai-e	ihakari ihake ihaketo	augari auge augedo
102	carry-inf imp seq	fumbari fumbu fumbudo	kumbari kumbu kumbudo	kumbari kumbu kumbudo	dimai dima dimuro	dimao dių diuno	umbari umba umbuto	humbari humba humbu to	umbari umba umbuto	umbari umba umbuto	kumbari kumo kumudo
103	take-inf imp seq	bari bu budo	bari bu budo	<u>.</u> .	pumai puma pumuro/ puro	pumao pu puro	Ξ	-	-	. -	Ξ

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3. Conclusions

Two things prompted this paper. Firstly casual interaction with native speakers and linguists acquainted with other languages of the family confirmed that the family as a whole is highly cognate and we were curious to see how much so. Secondly was the fact that in all the Binandere languages verbs fall into three classes based on their stem vowels and that the stem vowels are always -e, -i, and -u (the verb 'desist, stop' # 98 on the list is the universal exception with a stem vowel of -o).

3.1 Who is Closest to Whom

We plan at a later date to take a more formal look at the data in a systematic way, but for this paper wish only to record our quick impressions. The first thing that strikes one when looking at the data is how this basic list makes the different languages look so cognate. However it should be repeated that this list was chosen to show up the affinity of the languages and would be a poor list from which to take a synchronic cognate count. The striking thing is that compared to the consonants the vowels seem to be very resistant to diachronic change (not counting nasalizationsee section #1.4). In grouping the languages Suena and Zia seem to be quite close. The coastal languages south of Suena and Zia also seem to form one natural group, i.e. Ambasi, Binandere, Korafe and Notu. The inland languages, Aeka, Kokoda, Orokaiva and Paraharava, also form a natural linguistic group. Interestingly, when looking at the data in one sense Suena and Zia seem to be the furtherest removed from the others as in #6, 8, 14, 23, 28 and 31. Often this is caused by a real difference in vocabulary as with #23 and However when the inland languages sheer off markedly from the coastal languages then Suena and Zia often stick with the other coastal languages. See #7, 9, 12, 17, 18, 20 and 21 in this regard. Very often as with #12 this is a voiced-voiceless distinction.

3.2 Verbal Stem Vowels

In the data #91-103 are verb entries. As has been noted by Farr, Larsen, Parrington and Wilson in the works already cited there are three different sets of verbs based on different stem vowels for each set. In some cases this only effects a few forms and in others quite a few of the conjugated forms are different depending on whether the verb in question is an <u>-e</u>, <u>-i</u>, or <u>-u</u> verb. These stem vowels are not found in the infinitive form, but occur in the imperative for most of the languages and in the same actor sequential medial verb forms for all the languages. To find the stem in any of the infinitive forms simply remove the

last vowel-(consonant)-vowel sequence so that the stem for 'come' in Korafe and Suena respectively would be <u>fur</u> and <u>m</u>. Before going further it should be noted that from one tense to another the form of the stem can shift (there <u>are</u> rules-see Farr 1975) so that for some of the verbs in some of the languages the imperative stem is 1½ syllables² shorter than the infinitive or sequential stems. So for Korafe the infinitive stem of #96, 'come', <u>fur</u> shortens to simple <u>f</u> in the imperative, while in Notu it is the same for both, <u>bug</u>. Kokoda, like Korafe, changes stems, in this case from <u>wuwur</u> to <u>w</u>.

The imperative is formed by taking the proper stem form and adding the stem vowel. The inland four, i.e. Aeka, Kokoda, Orokaiva and Paraharava occasionally have an <u>-a</u> here as in #93 and 102. To form the sequential same actor medial verb form the longer stem (if there are two) is taken and the stem vowel plus the medial verb ending, either <u>-do</u>, <u>-ro</u> or <u>-to</u>, depending on the language (note here the above categories seem to hold: Suena and Zia have <u>-ro</u>, the other coastal languages have <u>-do</u> and the inland languages have <u>-to</u>). In two of the entries #91 and 92 the inland languages have the stem vowels <u>-e</u> and <u>-e</u> where the coastals (including Suena and Zia) have <u>-u</u> and <u>-i</u> respectively, but in <u>all</u> the other verbs the same stem vowel is constant in all the languages.

FOOTNOTES

- 1. This paper was researched under the auspices of the Summer Institute of Linguistics. We want to thank our colleagues, Mr. Doug Parrington and Mr. Darryl Wilson, as well as Mr. Phanuel Oida and the staff and students of Martyrs' School, Popondetta for help collecting the data.
- 2. Although Binandere language family languages have almost exclusively open syllable types verb stems slways end in a consonant.

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