

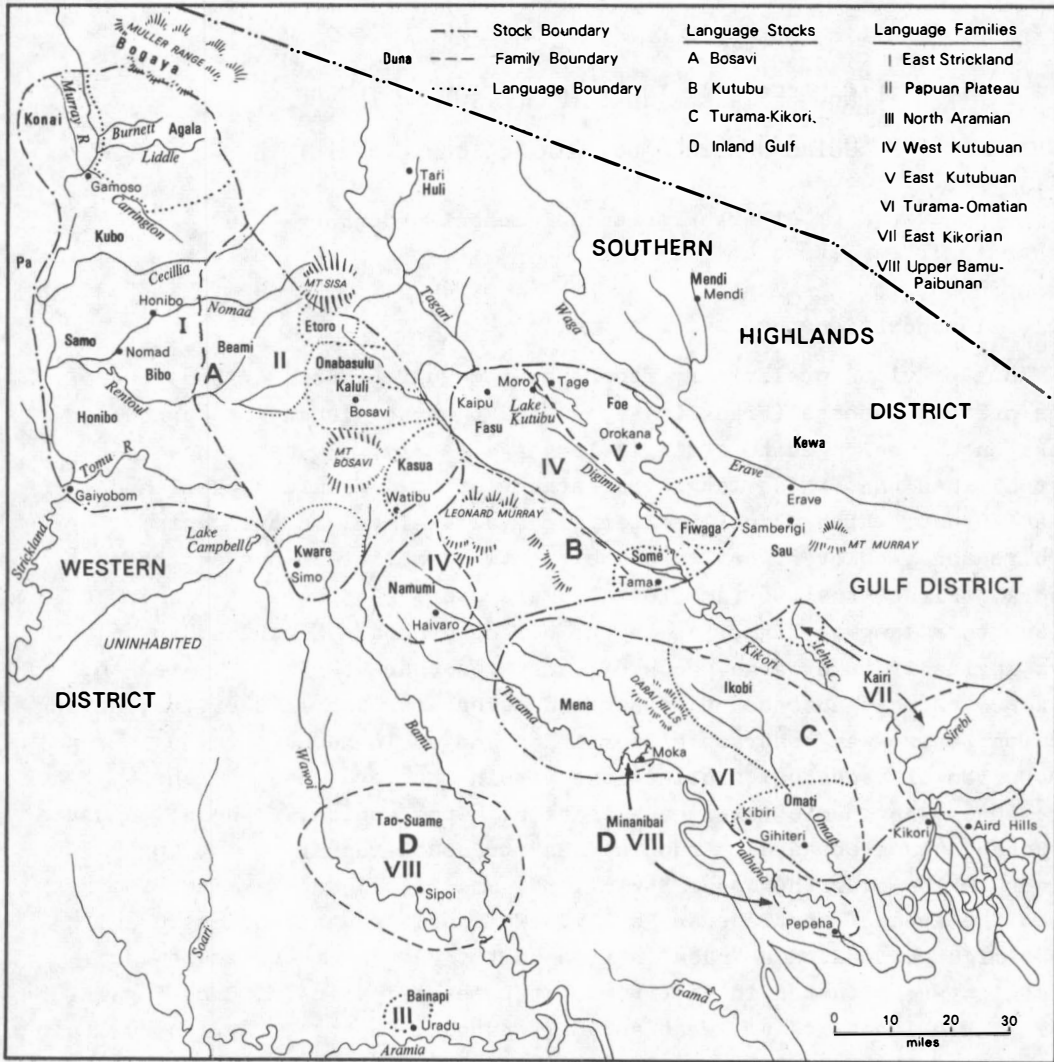
CHAPTER 4

LANGUAGES NEAR THE INTERSECTION OF THE GULF, SOUTHERN HIGHLANDS, AND WESTERN DISTRICTS

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4.1. Introduction

In a previous preliminary report on the Gulf District (1968) one of the present authors (Franklin) suggested that the languages surrounding Lake Kutubu belonged to a single language family. It has since been established that these languages rather form two families, West and East Kutubu, which mutually entertain a stock-level relationship. There are reasons, however, not to unite the two families into a separate stock. First, the two families also share stock-type relationships with other language families in the neighbourhood. Second, they belong typologically to a large group of languages characterised by (a) the absence or near-absence of person and number marking in the verb, having at most a two-way contrast either in person or in number; (b) a profusion of aspectual distinctions within the verb, and (c) the presence of phonemic vowel nasalisation. Geographically these languages stretch over a broad belt running east to south-east from the Upper Fly River region over the Upper Strickland, Mt. Bosavi and Lake Kutubu areas into the area of the Teberan Family. This belt roughly coincides with what might be called a "nasalisation belt". At least the following families are situated in it (from west to east): Awin-Pa, Duna-Pogaia, East Strickland, Bosavi, West and East Kutubu, Teberan, Pawaian, certain members of the West Central (Engan), as well as others further east. Lexicostatistical relationships between the families show the chaining effect, each family being related on the stock-level to its nearest neighbour(s). However, stock-level relationships have also been found



MAP 4: LANGUAGE GROUPS NEAR MT BOSAVI AND EAST

to exist with typologically quite distinct languages outside the group. Awin-Pa, East Strickland, and Duna show such with languages of the Ok Family; West and East Kutubu, as will be shown below, also have a stock-level relationship with Kewa of the Engan Family. How the seemingly contradictory facts of typological diversity and lexicostatistical continuity need ultimately to be interpreted is still an unsolved problem. In this chapter we will mainly confine ourselves to the relationships between the two main languages of the Kutubu area, Fasu (West Kutubu) and Foe (East Kutubu), as well as both of these with the Kewa. Lexicostatistical figures will be given as a global indication of their relationships and it will be shown that regular sound correspondences exist between the three languages. Some inferences regarding the proto sounds can then be drawn. We will then compare the pronoun sets of the languages and certain grammatical features. Finally, we will make some comments on other relationships of the area, particularly that of Fasu with the languages of the general Mt. Bosavi area (see Map 4).

4.2. The Kutubuan Language

The term Kutubuan languages will be used here to refer to the West and East Kutubu Families. Fasu, Some and Namumi comprise the West Kutubu Family, Foe and Fiwaga comprise the East Kutubu Family.

Fasu is spoken by approximately 750 people (Loeweke and May, 1966). Almost 650 of these people live in the Fasu Census Division in the villages of Ai'isu, Anuwabi, Auwabau'uni, Hebai'ui, Hedinia, Iorogabai'ui, Kaipu, Kewodigi, Manu, Sisibia, and Sonagadigi. This general area is known as either the Namo-Uri in the north or the Namo-Hou in the south. We have called the language of the southern Fasu Some. This follows the name used by the people who have migrated to the Tama village area along the Kikori River.

Namumi is spoken in the upper Turama River area near the village of Hawaro by perhaps around 100 people. As can be seen from Table 1, below, Some bears a close relationship to both Fasu and Namumi and it may be that this reflects a natural link between the two areas.

The Foe language is spoken by about 2,800 people east of Lake Kutubu, on the main island of the lake, as well as southeast toward Orokana and beyond. Legends suggest that the Foe have moved into the lake area from the southeast (Rule, 1965). Williams (1940) suggests a number of dialects for the Foe and K. Franklin's lexical materials show in

particular an aberrant area to the southeast near Beaver Falls. We have called this the *Fiwaga* language area.

4.21. Lexicostatistics

Lexicostatistical relationships between the *Fasu-Foe* areas are now given in Table 1. The column to the left is based upon the Swadesh 100 item list, the column in the centre is the percentage figure based on our full 231 item list, while the column to the right represents the full list less assumed cultural items.

Table 1

FAS												
58	54	55	NAM									
59	61	61	68	66	65	SOM						
18	18	15	16	17	14	18	15	15	FOE			
10	11	10	15	16	13	15	15	13	64	60	60	FIW

By comparing only the cultural vocabulary (twenty-four items) we arrive at the figures given in Table 2.

Table 2

FAS				
50	NAM			
60	68	SOM		
20	32	25	FOE	
15	33	33	57	FIW

It appears significant that the figures jump only between the *Fasu* and *Foe* groups on the basis of probable borrowing of cultural items and their names. That is, solely within the *Fasu* group or within the *Foe* group the figures are not significantly different from those in Table 1.

4.22. Phonemic Inventory

A comparison of the phonemic systems of the two main languages, *Fasu* and *Foe* can be seen in Table 3.

Table 3

FAS	FOE	FAS	FOE	FAS	FOE	FAS	FOE	FAS/FOE	
p	-	t	t	k	k			i	u
-	b	-	d	-	g			e	o
f	f	s	s	-	x	h	h	a	
	v								
m	m	n	n					w	y
		r	r						

Foe has a series aspirated stops /t,k/ contrasting with a series unaspirated stops /b,d,g/; this contrast is missing in Fasú. Foe /x/ is a glottal stop in some areas, a velar fricative in others. /v/ is a labiodental voiced fricative. Both Fasú and Foe have phonemic vowel nasalisation, and Fasú also has phonemic word tone (May - Loeweke 1965).

Namumi and Some appear to have phonemic systems identical with Fasú, except for additional intervocalic glottals. All show strong vowel nasalisation.

Fiwaga apparently has no /t/ or /v/ phoneme; however, it shows two series of stops, as Foe, as well as a glottal phoneme.

4.3. The Kewa Language

Kewa is spoken by about 41,000 people in the Southern Highlands and is divided into three major dialects (Franklin 1968b). The Eastern dialect is located in an area roughly between Ialibu, the Iaro River and Kagua, then east along the Kagua Valley to the Iaro River again. The Southern dialect is from the Kagua Valley south to Erave. The Western dialect crosses the Mendi-Erave River and also extends north to near the present day town of Mendi.

A grammar of Western Kewa has been published (Franklin 1971).

Kewa is a member of the West Central Family, a group which also comprises Enga, Huli, Ipili, Mendi, Sau, and possibly Wiru. Members of this Family on the whole (except for Wiru) show a lexicostatistical percentage relationship of well over 40%. On the other hand, its relationship with other Highland Families, such as the Western Family, which it borders, is less than that displayed between Kewa and, for example, Fasú.

4.31. Lexicostatistics

In Appendix A to this chapter are listed all the cognate sets between Fasu, Foe and Kewa which have to date been noted. Counting only the items belonging to Swadesh's 200 item list, we arrive at the following figures: Fasu - Foe 42 cognates or 20%, Fasu - Kewa and Foe - Kewa both 28 cognates or 14%. We see that these figures fall within the range of stock-level relationships, but that Fasu and Foe definitely form a distinct group.

4.32. Kewa Phonemes

For comparative purposes the phonemes of Kewa are:

p	t	t̪	k	i	u
mb	nd		ŋg (most often g)	e	ə
	s				a
m	n	ñ			
	r				
	l				
w		y			

Both /r/ and /l/ are flapped; there are two central vowels which are generally written as a and aa in Kewa materials. The east dialect and some parts of the south have a series of two alveopalatal sounds: /t̪/ and /ñ/.

Neither Fasu or Foe have prenasalised stops, an alveopalatal nasal, a lateral flap, or a sixth vowel. On the other hand Kewa has no /h/, glottal stop, or labiodental sounds. Only the southern area of Kewa has vowel nasalisation. This most often apparently reflects the loss of a petrified suffix (see also note 1 of Appendix A).

4.4. Sound Correspondences

The 136 sets of probable cognates listed in Appendix A show a general pattern of regular sound correspondences between Fasu, Foe and Kewa. There is also a fringe of seemingly irregular sound correspondences. This may be due to on the one hand our lack of knowledge of the conditions governing the sound changes, on the other hand to errors in the identification of cognates. We will list these correspondences below and see if any inferences regarding proto sounds can be drawn from them.

Since Fasu and Foe appear to be the most closely related of the three

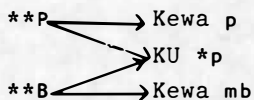
languages, we will first examine their correspondences and, where possible, reconstruct the proto-phonemes of proto-Kutubuan (to be abbreviated: KU). We then will examine the correspondences of the KU phonemes with Kewa to see if they allow reconstruction of any of the proto-phonemes of the still earlier common stage of KU and Kewa. KU protophonemes will be marked by an asterisk; protophonemes of the earlier stage will be marked by two asterisks. We will restrict ourselves to the correspondences between the consonant phonemes.

Each set of correspondences is followed by the list number(s) of the cognate set(s) showing the correspondence. The correspondences are given in the order Fasu - Foe - Kewa. Dashes indicate initial, medial, or final position (e.g. p-, -p-, -p). No dash indicates that the correspondence is found in all positions (i.e. for consonants: initially and medially). Three dots indicate absence of a cognate showing the correspondence.

p	:	o	:	p	5,59,60,63,71,84,123,140,201,222,274
-p-	:	-b-	:	...	14,61,62,106,128
p	:	...	:	p	20,21,83,132,202,207,277,285,286
-p-	:	-b-	:	-mb-	278
...	:	-b-	:	-mb-	29
-p-	:	v-	:	p-	283
...	:	v-	:	p-	289

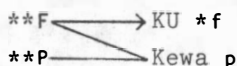
Fasu p : Foe b in the majority of cases and allows to set up KU *p. The relationship of Foe v to Fasu p and f (see below) is not clear. In fact, v does not fit well in the phonemic system of Foe and might perhaps be a phoneme borrowed from some other language. Cognate set 283 shows a number of unusual sound-correspondences: p-v-p; r-r-t; and t-d-k (see below). This may be due to the symbolic nature of the words, which express in their form and meaning the idea of a swift turning or spinning round.

KU *p corresponds in two cases with Kewa mb, in all other cases with Kewa p, suggesting a double origin of:



f	:	f	:	p	3,11,16,27,73,89,103,121,131,135
f-	:	v-	:	...	10

The regular correspondence of Fasu *f* with Foe *f* allows to set up KU **f*. For *f*:*v*, see above. The correspondence KU **f* : Kewa *p* shows that Kewa *p* also has a double origin:



m	:	m	:	m	18,19,26,51,52,56,63,77,108,124,129,133,
					205,221,223,225,229,231,237,281,282,
-m-	:	...	:	-n-	22
-m-	:	-n-	:	...	226

This quite regular set of correspondences allows to set up KU **m* as well as ***M*. Fasu *m* : Kewa *n*: probable cognates in Huli, Duna-Pogaia, and in the East Strickland and Mt. Bosavi families all show a voiced alveodental consonant: wano, pyero, weni, wodo-, walo. The Fasu form therefore could have resulted from regressive assimilation: *wano > wamo. It is not possible to account for Fasu *m* : Foe *n* in 226.

w-	:	...	:	w-	22
w-	:	w-	:	...	228
-w-	:	-w-	:	-p-	7
-w-	:	-b-	:	-w-	53

To cognate set 22 a number of probable cognates in other languages can be added (see above, the discussion of Fasu *m* : Foe *n*). The majority of these show initial *w-*, a few show initial *p-*, possibly from an earlier **p*w-. It seems possible at least for KU to postulate **w-*.

t-	:	t-	:	r-	73
-t-	:	-r-	:	-t-	102
-t-	:	-r-	:	-r-	103
t-	:	t-	:	∅-	102
t	:	...	:	t	134,284
-t-	:	-r-	:	...	10
-t-	:	...	:	-r-	23,54,81,109,135
-t-	:	...	:	-s-	19
-t-	:	...	:	-l-	207
-t-	:	-r-	:	-nd-	3
-t-	:	∅	:	-nd-	221
-t-	:	...	:	-nd-	82
...	:	-r-	:	-nd-	288
-t-	:	-n-	:	...	77
-t-	:	-d-	:	-k-	283

Fasu t corresponds with Foe t and r. The two instances of t : t occur initially; all the t : r correspondences occur medially, suggesting

KU *t → Fasu t
 → Foe t-
 -r-

Fasu t : Foe n: Possibly Foe r > n because of the following m. Only one instance was noted and more evidence is needed.

Fasu t : Foe ø - It is not clear if this is a case of loss of a phoneme, or a morpheme. Fasu t : Foe d: see the comments on the p-v-p correspondence.

KU *t corresponds with Kewa t (3x), r (6x), nd (3-4x), s, and k. In this case it will be necessary first to reconstruct the proto-phonemes of Kewa (by comparing the Kewa dialects), or even of the Engan Family, before any conclusions can be drawn. At this stage we can only note that none of the above correspondences are unusual between Kewa dialects.

r : r : r	279,280
-r- : -r- : -t-	283
-r- : -r- : ø	102
-r- : -r- : ...	13,17,18,89,127
r : ... : r	80,83,285
-r- : ... : ø	21,27,286
... : -r- : -r-	137
... : -r- : -l-	29
r- : d- : l-	278
r- : d- : ...	89
... : d- : l-	290
r- : h- : t-	275
r- : s- : ...	76

Fasu -r- corresponds regularly with Foe -r-. Fasu r- corresponds with Foe d-, s-, and h-. The best established correspondence is r- : d-; there is some doubt about the validity of the cognate sets showing the other two correspondences. Tentatively then we can set up

KU *r → Fasu r (note the parallel with KU *t).
 → Foe d-, -r-

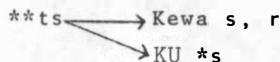
KU *r would then correspond with Kewa r, l, t and ø. As in the previous case no conclusions can be drawn until the protophonemes of Kewa have been reconstructed.

s : s : s	60,81,132,223,276
s : s : r	6,107,124,222,287
s : s : ...	14,72,104,105,204

In all instances, *Fasu* s : *Foe* s, allowing to set up *KU* *s. *KU* *s has two seemingly well attested correspondences in *Kewa*: s and r. Of the five instances of *s : s, however, three carry no weight, being connected with the trading of cultural objects. These are 223 *journey*, 132 *sweet potato*, and 81 *pearl shell*. Pearl shells and the recently introduced sweet potato (see Chapter 10 by Dutton) reached the area via trading routes carrying their names with them. This leaves us with the following sets:

pase - pase	siklɪni - rikini
ase - asa	yasi - yari or yaari
	musu - miru
	sisipu - riripu
	hisa - kira

They could form an indication that an earlier **s or **ts became *Kewa* r when next to a high front vowel, and s in other environments:



n : n : n	6,12,73,84,85,101,139,231,272
-n- : -r- : ...	106,227
-n- : ø : ...	15,30
n : ... : n	206,209
-n- : -n- : -ñ-	58

Fasu n : *Foe* n is well attested and allows to set up *KU* *n. The n - r and n - ø correspondences can at present not be accounted for. *KU* *n regularly corresponds with *Kewa* n, allowing to set up **n. The one instance of *Ku* *n : *Kewa* ñ does not allow to set up a proto phoneme **ñ. In the dialects of *Kewa* where ñ occurs it is clearly associated with high front vowels, as see (often) other palatal or alveo-palatal sounds.

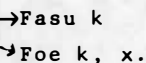
y : y : y	20,57,66,83,107,111,130,227
y- : d- : ...	106

The regular correspondence of y in the three languages allows to set up *KU* *y as well as **y. The y - d correspondence should perhaps rather be y - ø, reflecting a protoform *dyapani. Probable cognates are found

over a wide territory, being most prominent in the Finisterre Ranges and the Huon Peninsula (McElhanon and Voorhoeve 1970). Together with the *n : ñ correspondence it could be an indication that the KU-Kewa proto language had a palatal series of consonants.

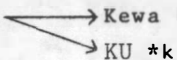
k- : k- : k-	29,65,72,84,85,86,101,137,223,271
k- : k- : -g-	4
k- : k- : ...	8,13,77,78,79,128,229
-k- : -k- : ...	126
k : g : g	2,28,57,71,85,138,273
k : g : k	3,6,88,103,122,136,281
k : g : ...	8,12,13,15,104,105
k : ... : k	25,80,81,82,108,109,129,134
-k- : -x- : ...	9,12,16,76
-k- : -x- : k-	101
-k- : -g- : -t-	123
k- : t- : k-	55
k : h : k	280,287
∅ : ... : k-	110
... : -x- : -k-	86
... : -x- : ∅	84
... : k : ∅	86

The best attested correspondences are Fasu k : Foe k, g, or x. Foe k and x, when corresponding with Fasu k, seem to be in complementary distribution: Fasu k- : Foe k-; Fasu -k- : Foe -x- between central and back vowels; Fasu -k- : Foe -k- in other environments. Thus we tentatively set up: KU *k



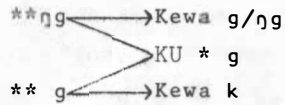
On the basis of the well attested k : g we can set up KU *g. The k - t and k - h correspondences cannot be accounted for.

KU *k corresponds with Kewa k, g, and ∅. In the case of *k : g it is suspected that the original initial k became medial through compounding of *ka(ne) with *dyo-, (see the note to item 4, Appendix A), and then became *voiced/prenasalised*. As regards KU *k : Kewa k, ∅, we hypothesize that **k



Foe k- : Kewa ∅ is left unaccounted for.

To KU *g correspond Kewa g and k. There seem to be no distributional factors involved, therefore two protophonemes are set up:



h- : h- : \emptyset	104,122,125
h- : \emptyset : \emptyset	1,9,281
h- : w- : \emptyset	51
h- : ... : \emptyset	24

It is not clear in Foe what caused the retaining of h- in some, and the loss of h- in other cases. h- : w- in set 51 is only one possibility, the other being h- : \emptyset . We will tentatively set up KU *h-.

The KU consonant phonemes set up thus far are:

p	t	k	
-	-	g	
f	s		(h)
m	n		
	r		
w	y		

No evidence of a proto-phoneme *b was found. As for *d, it is possible that the correspondence Fasu r- Foe d- has to be reinterpreted as reflecting *d-, the complementary distribution with -r- : -r- being an accidental feature of the data in hand.

Ten two-starred proto-phonemes have been set up: p,k,b,g,f,s,ηg,m,n,y; this result is only tentative and partial. Not before the proto-phonemes of the Engan Family have been reconstructed can comparison with the Kutubuan languages be expected to give reliable results.

4.5. Grammatical Features

One basis for comparison between Fasu, Foe and Kewa is the free pronominal forms which occur in cross-reference with suffixes marking person-number, as well as tense. The forms which are given in the following table are from Loeweke and May (1966), Rule (1965), and Franklin (1971). Blocks within the chart highlight the presence of identical forms.

FASU				FOE		KEWA		
	Erg	Nom	Ref	N-Foc	Foc	Intr	Tr	
sg	1.	ano	nomo	ni	na	nomo	ni	neme
	2	ne	nomo	ni	naxa	nomaxamo	ne	neme
	3	e	epo	ipi	yo	yo	nipu	nipumi
dl	1	eto	etapo	iti	yaxa, yage	+ + -mo	saa	saame
	2	teto	tetapo	titi	hagaxa	hage-maxamo	nipi	nipimi
	3	teta	tetapo	tati	hagaxa	hageramo	nipu	nipumi
pl	1	isu	isiapo	isina	yiya, yia	+ + -mo	niaa	niaame
	2	re	repo	namina	haxa	hemaxamo	nimi	nimimi
	3	i	ipu	namina	yaxa	yaxa	nimu	nimumi

The discrepancy in the labels given at the head of the columns may reflect the bias of the analyst, rather than the function of the pronominal sets. In Loeweke and May's description of Fasu (1966:26) one set fills the Subject slot of intransitive independent and dependent clauses as well as the Object slot of the transitive independent and dependent clauses. These are called Ergative in the chart above. This set of pronouns also fills the Classifier slot of general noun phrases. A second set (called the Nominative, above) fills the Subject slot of transitive independent and dependent clauses and the Possessor slot in a general noun phrase. Set three (called the Reflexive, above) fills the Referent slot of independent, dependent, and stative clauses. In the actual pronoun sets tone often disambiguates apparent homophonous forms.

According to more extensive materials (available to Voorhoeve) these pronominal sets parallel others, the remnants of which are found widely in Papuan languages. The Ok languages (Healey 1964) in particular compare well, e.g. Kati has lsg. ne, 2sg. tep, 3sg. ye; lpl. nup, 2pl. tip and 3pl. yi. Tifal shows lsg. na, 2sg. kab, 3sg. a; lpl. nu, 2pl. ib and 3pl. i. The proto-set may therefore be:

	Sg.	Pl.
1	nV(p)	ni(p)
2	$\frac{t}{k}V(p)$	$\frac{t}{k}i(p)$
3	yV(?) where V \neq i	yi(p?)

The dual forms are often represented historically by the compounding of morphemes meaning *two* or *together with* and are more difficult to satisfactorily analyse.

There are other similarities which are apparent between the pronominal forms of the three languages, which are also common to features over a much wider area, such as an n in the 1sg. and 2sg. forms (cf. also Greenberg 1971 and Wurm, forthcoming on general pronominal features).

In an earlier study Rule compared vocabulary and grammatical features of Foe, Huli and Pole. Pole is the southernmost dialect of Kewa and is within the same language family as Huli. We may therefore accept and summarise Rule's conclusions regarding Foe and Pole (S. Kewa). Rule stated that a very low correlation of vocabulary existed between Pole and Foe (7.4%). Because of this and the diversity of their grammatical structures he doubts that Foe can "be regarded as belonging even to the broad PHYLUM of the Highlands languages."

If his thesis is accepted, the relationship of Foe to Highland languages is more distant than that of Fasu and Highland languages. This in turn may suggest that the inclusion of Foe and Fasu on more than a stock-level relationship may be tenuous. There are several grammatical features that distinguish Foe sharply from Highland languages such as Pole or Huli. These are:

- (1) formation of the negative in a verb expression;
- (2) interrogative sentence formation;
- (3) aspects are indicated on noun phrases;
- (4) a separate set of suffixes to indicate consequential mood;
- (5) a speaker-verb rather than subject-verb relationship.

Foe has two separate verbal suffixes for the negative formation of commands: -more is used for the present, -xoyoxo for the future. Fasu simply uses the negative suffix -fa. In Kewa the enclitic form na- (quite common to the Highlands) is used.

Foe has two suffixes for interrogative formation: -be is used with verbs, while -gebe is used with nouns or pronouns. Fasu adds the -ne

suffix to the verbs. In Kewa the particle *pe* or *pae* is used, generally sentence-final to mark certain interrogative structures.

All three languages have immediate and non-immediate command forms: *e ~ -ye* (immediate) vs. *-maxae* (non-immediate) in Foe; *-sie* vs. *-nie* in Fasū; *-pe* (immediate) in Kewa, and both benefactive and non-benefactive forms in the singular and non-singular (Franklin 1971:39).

There are perceptual aspects in all three languages, Foe having by far the most: factual, seen, unseen, deduced, visible evidence, and previous evidence. Kewa generally uses two: present visible evidence and deduction/inference; Fasū apparently has only the observed aspect.

What Rule calls the focussed subject is marked by *-mo* in Foe, paralleling the nominative ending in the singular number in Fasū. In Kewa the form is *-me* and again an *-mV* subject/instrument/agent marker is a very common Highlands (perhaps proto-Papuan) typological feature.

In Foe and Fasū four tenses are reported: present continuous, near past, far past and future in Foe; present, customary, neutral and future in Fasū. The choice of terms undoubtedly again reflects the linguistic bias of the investigator. In Kewa we have named the tenses present, past, narrative past, future, and perfect, each also with a parallel benefactive set (Franklin 1971:38ff).

From the foregoing one may conclude that a distant genetic relationship exists between the three languages. Although their lexicostatistical relationships all fall within the stock level, further comparative evidence points to a closer relationship between Fasū and Foe than between either of them and Kewa. This is corroborated by the typological evidence.

4.6. Relationship of Fasū to Languages to the West

We will now turn to the relationships of Fasū with the typologically similar languages to the west, viz. the languages of the Mt Bosavi region. According to the latest evidence these languages fall into three families: East Strickland, Bosavi, and North Aramian. The East Strickland and Bosavi Families have been shown to belong to the Central and South New Guinea Stock (Voorhoeve 1968), McElhanon - Voorhoeve 1970). They have been dealt with in detail by Shaw in Chapter 5. By implication the North Aramian Family, recently discovered by Karl Franklin, also belongs to the CSNG Stock. At present it includes only the Bainapi language which seems to have its closest relationships with the Kaluli language of the Bosavi Family. The two languages show at least a 16% relationship.

The languages which are geographically adjacent to **Fasu** are **Kasua** and **Kaluli**, both found on the slopes of Mt Bosavi. Their lexicon shows the influence of the considerable culture contact between the **Fasu** and Mt Bosavi areas and lexicostatistical figures based on a comparison of **Fasu** with the two languages will certainly be too high. Our main concern will therefore be with the relationships of **Fasu** and **Beami**, another member of the Bosavi Family, but situated further west on the Papuan Plateau. The **Beami** people are separated from the **Fasu** by the **Etoro**, **Kaluli**, and sundry other tribes, and they are outside the direct cultural influence of the Southern Highlands (see also Chapter 5 on the Bosavi area).

4.7. Fasu-Beami Relationship

Earlier classifications (see above), based on short and not always reliable word-lists, put the **Fasu-Beami** relationships at the lower end of the stock level range (12%). Recent assessments of the lexicostatistical relationships between **Fasu** and its western neighbours show conflicting percentages. The table below shows the percentages calculated by Shaw on the basis of less than 100 words and between brackets the percentages calculated by Franklin, using a list of 170 words.

BEAMI					
(29)	41				KALULI
(11)	17	(41)	39		KASUA
(8)	11	(14)	35	(14)	32 FASU

One reason for the discrepancy can be found in the difference in size of the lists used, but certainly another reason is that the identification of cognates presents difficulties and that judgements tend to vary.

4.71. In order to arrive at a more reliable assessment of the **Fasu - Beami** relationships, a new list was made of the sets of probable cognates noted between the two languages. The list makes use of additional data in **Beami**, collected by Voorhoeve, and of the sizeable materials in **Fasu** collected by Loeweke and May. Also it takes into account comparative evidence furnished by other languages in the area when it helps to clarify the **Fasu - Beami** relationships. This list can be found in Appendix B.

Of the eighty items in the list, thirty-six belong to the Swadesh 200 item list. They are: 1,3,4,6,9,12,13,14,17,19,20,21,23,25,26,30,38,

47,48,49,50,51,55,57,58,59,60,61,62,63,65,67,70,72,73,75,77. There is a possibility that up to four items have to be dropped (19,20,55,65), as the validity of the cognate sets is doubtful. This leaves us with a cognation percentage of 15 - 18%, clearly within the stock-level range.

At present no attempt is made to systematically trace the sound correspondences; this must wait completion of the phonological analysis of Beami. The most frequent correspondences have been pointed out in Appendix B.

4.8. Summary

We have shown that Fasu has regular sound correspondences with Kewa of the Highlands, Foe near Lake Kutubu and Beami of the Bosavi Plateau. The degree of relationship is open to question, but it is doubtful if Fasu and Foe are more than separate families of the Kutubuan Stock. We have called these the West Kutubuan and East Kutubuan respectively.

Fasu also has proven links westward, with the whole Bosavian Family. Foe has cultural links eastward, particularly with the Teberan Family (see Chapter 3 for additional comments). With additional information Bainapi may also prove to be a member of the Bosavian Family. The data given points to a cognation level of about 10% for Beami - Foe and Beami - Kewa.

Clearly, the area around Lake Kutubu constitutes a vital linguistic link between the Highlands and the Lowlands, as well as with quite diverse lowland dwelling peoples.

APPENDIX A

Fasu - Foe - Kewa Cognates

In this Appendix we list cognate sets which have been noted between Fasu, Foe and Kewa. If the dialect of Kewa is not the West, it is noted as EK for the East and SK for the South (which is also called Pole). If one of the terms in a set is considered non-cognate, it is put between square brackets. If a term is missing in the data this is indicated by a dash. The sets are grouped and numbered, but the set numbers are left open so that others may be added at a later date. The groups are as follows:

1 - 50	Body Parts
51 - 70	Kinship Terms
71 - 100	Objects of Material Culture
101 - 120	Fauna
121 - 200	Other Concrete Nouns
201 - 220	Pronouns and Interrogatives
221 - 270	Abstracts
271 - 370	Events

Body Parts

	FASU	FOE	KEWA
1. <i>eye</i>	hĩ	ĩ	ini; le SK ¹
2. <i>mouth</i>	akai	agixa	agaa
3. <i>nail</i>	kitafene	girafe	kindipa
4. <i>skin</i>	kau	kaxo	yogane ²
5. <i>thigh</i>	pau	bau	palaa
6. <i>toes/fingers</i>	sikini	sigini	rikini
7. <i>wing</i>	auwa	awa	popaa
8. <i>bone</i>	kiki	kigi	[uni; kuli SK]
9. <i>breast</i>	hoko	oxo	[andu]
10. <i>chin</i>	akai fatu	agixa varu	[yaga]
11. <i>side of neck</i>	fufu	fufu	[maa]
12. <i>knee</i>	kakuna	gaxona	[rumu]
13. <i>leg</i>	korake	korage	[aa; ange SK]
14. <i>nose</i>	sape	sabe	[ini kandu]
15. <i>shoulder</i>	kinu	gĩ	[pasãã]
16. <i>stomach</i>	fako ³	faxo	[tomba]
17. <i>tongue</i>	aru	auru	[keke]
18. <i>teeth</i>	mere	mere	[imaa]
19. <i>back</i>	mati	[kixo]	masa
20. <i>blood</i>	yapi	[waria]	yaapi
21. <i>cheek</i>	pare	[agixa]	pae
22. <i>forehead</i>	wamo	[ifame]	weno; eno
23. <i>hair</i>	iti	[sãe]	iri
24. <i>heart</i>	himu	[gumũxu]	imu
25. <i>kidney</i>	kiri	-	kili EK
26. <i>neck</i>	mane, mawi	[gariko]	maa
27. <i>saliva</i>	torofae	[koseka]	tupi, supi, sope, rope
28. <i>buttocks</i>	[fimako]	genane	ge
29. <i>lips</i>	[akai kiri]	ko-baru	kambulu SK
30. <i>head</i>	uni	ũ, anuhae ⁴	kalu SK

Kinship Terms

	FASU	FOE	KEWA
51. <i>brother</i>	hame	wame	ame ⁵
52. <i>Fa brother</i>	mae	mae	mae
53. <i>Mo brother</i>	auwa	abia	awa
54. <i>father (ref)</i>	ata	[aba]	araa
55. <i>grandfather</i>	kaua	tāūwa	kakua
56. <i>husband/in-law</i>	emia	ima	ima
57. <i>namesake</i>	yako	yago	yago
58. <i>sister (of man)</i>	ainu	ana	anya
59. <i>Mo sister, Mo co-wife</i>	papa	babo	papa ⁶
60. <i>taboo/in-law</i>	pase	pase	pase ⁷
61. <i>woman's sister</i>	apu	boba	[agi SK]
62. <i>Fa sister</i>	ape	ape	arombo
63. <i>mother</i>	ama	[hūa]	ama
64. <i>father</i>	[ata]	aba	apa
65. <i>father-in-law</i>	[emea]	kauwa	kakua
66. <i>grandmother</i>	[hakamape]	aya	aya

Objects of Material Culture

71. <i>axe</i>	kapi	gabe	gapi
72. <i>bowl</i>	kasu	kawaso	kopo
73. <i>fire tongs</i>	tafina	tafina	ripina
74. <i>garden</i>	hemo, heme e	e	e
75. <i>house</i>	ape	a	anda
76. <i>drum</i>	roko	saxo	[lai]
77. <i>fireplace</i>	katema	kanuma, kanama ⁸	[tagaa]
78. <i>netbag</i>	aku, ku	ko	[nu]
79. <i>tanket</i>	kake	kō	[aapu]
80. <i>cowrie shell</i>	rake	[bari]	rake
81. <i>pearl shell</i>	sekete	[maxame]	sekere
82. <i>pillow</i>	kata	-	kanda
83. <i>raincape</i>	yapera	[asaxabu]	yapara
84. <i>apron</i>	[fiti]	kunaxabu	konaapu
85. <i>arrow</i>	[sakare]	kenege	kenege

	FASU	FOE	KEWA
86. <i>bark belt</i>	[terakai]	kaxo	ako
87. <i>bridge</i>	[pane]	sogo	ro
88. <i>hat</i>	-	garuga	kaluaka SK
89. <i>fence</i>	ruru-	duru; mafe ⁹	pape

Fauna

101. <i>duck</i>	kokona	ya koxona	kona EK
102. <i>flea</i>	tetare	terare	ete
103. <i>rat</i>	fakita	fagira	pakira
104. <i>death adder</i>	heseke	hesege	[malu SK]
105. <i>dog</i>	kasa	gesā	[yana]
106. <i>louse</i>	yapani	dabari	[ema]
107. <i>cassowary</i>	yasi	[guru]	yati SK; yaari SK
108. <i>flying fox</i>	kaima	-	kaima
109. <i>frog</i>	kuti	[auwage]	kuri
110. <i>lizard</i>	au	[kura]	kau
111. <i>bird</i>	[mena]	ya	yaa

Other Concrete Nouns

121. <i>light</i>	fae	āfa	paa
122. <i>moon</i>	heke	hege	eke
123. <i>root</i>	pikinu	bagixo	pitya
124. <i>smoke</i>	musu	musu	miru
125. <i>egg</i>	hāī	hāē	[apaa]
126. <i>path</i>	ikia	ika	[pora]
127. <i>tree</i>	ira	ira	repena
128. <i>wind</i>	kupa	kuba	[poropu]
129. <i>pond, lake</i>	hē kumi	-	ipa kumi EK
130. <i>rain</i>	yao	[kagi]	yai
131. <i>steam</i>	fofo	-	popo
132. <i>sweet potato</i>	supuru	[agira]	saapi
133. <i>taro</i>	me, ima	[yau]	maa
134. <i>thorn</i>	keta	-	keto
135. <i>wind</i>	atifo	-	poripu
136. <i>banana</i>	[kaputa]	ga	kaai

	FASU	FOE	KEWA
137. <i>bush, leaf</i>	[ima-yao]	kara	kara EK
138. <i>pandanus</i>	[hāse, kalipi]	āge	aga
139. <i>stone</i>	[ēkē]	gāna	aana; kaana SK
140. <i>water</i>	[hē]	ibu	ipi

Pronouns, Interrogatives

201. <i>who</i>	epa	ibuge	aapi
202. 3rd p.sg.	e, epo	yo	ipu
203. <i>here</i>	o	to	go
204. <i>all</i>	su	sunage	[rayo]
205. 1st p.sg.	nomo	nomo	[nime] ¹⁰
206. 1st pl.	ni	[na]	ni
207. 1st p.du.	etapo	[yage, iya hage]	saa lāapo
208. 2nd p.sg.	ne	naxa	ne
209. <i>this</i>	one	[to]	one

Abstracts

221. <i>another</i>	meta	me	meda
222. <i>hot</i>	sisipu	sisibu	riripu EK, SK
223. <i>journey</i>	kimisi	kimi	kimisu
224. <i>ripe</i>	su	su	ru
225. <i>afternoon</i>	samapu	samage	[aebe]
226. <i>heavy</i>	umi-	uni	[kedaa paa]
227. <i>name</i>	yano	yaro	[bi]
228. <i>not</i>	wae	wae	[dia]
229. <i>yellow</i>	kiame-	kame	[abu pia]
230. <i>yes</i>	ao	au	[e]
231. <i>young, small</i>	māno ¹¹	mano	[oge]

Events

271. <i>die</i>	ku-	ku-	koma
272. <i>eat</i>	na/ne-	ne-	na- SK
273. <i>give</i>	maka-	migi	gi-
274. <i>go</i>	pu	ubu, vi	pu

	FASU	FOE	KEWA
275. <i>hit</i>	ru-	hū	tu
276. <i>look at, see</i>	ase	sebe	asa pea SK
277. <i>make</i>	pe	e	pea EK, pa,pi SK
278. <i>open door</i>	ropa-	doba-	lomba
279. <i>pare</i>	wara	ware	warea EK
280. <i>stand</i>	reke	erahāī	reka
281. <i>steal</i>	hakima	agima	paake mea
282. <i>take</i>	mo	ma	mea
283. <i>turn round</i>	maparitae-	verode, veroverode	lekeya, petekepetekeya SK
284. <i>carry on shoulder</i>	maka ti-	[gage-]	tia SK
285. <i>exchange</i>	ropo	-	ropo pea EK
286. <i>plant</i>	poro-	[kohū]	poa
287. <i>light fire/cook</i>	[pa]	hisa	kira
288. <i>look at</i>	[ase]	ere-	anda
289. <i>shoot</i>	[kare]	viri	pia
290. <i>speak</i>	[some]	de	la

Notes to Appendix A

1. Both Kewa *ini* and *le* belong to the cognate set. *ini* probably retains an old suffix *-ni*, marking inalienability. Such a marker is also found in body part names in other languages of the East New Guinea Highlands Stock, e.g. in Enga, Ipili, Huli, Sau, Wiru. It has the form *-nV* or *-kV* (the vowel generally harmonising with the preceding vowel), presumably from a protoform *-*ŋgV*. Kewa, Fasu and Foe seem to have retained this suffix in a few names of body parts only. In Kewa it is *-nV*, in Fasu and Foe both *-nV* and *-kV*, *-gV* or *-xV* seem to occur. The following sets possibly show a petrified inalienability marker: (1) Kewa *-ni*; (2) Foe *-xa*; (3) Fasu *-ne*; (4) Foe *-xo*, Kewa *-ne*; (8) Fasu *-ki*, Foe *-gi*; (9) Fasu *-ko*, Foe *-xo*; (12) Fasu *-na*, Foe *-na*; (13) Fasu *-ke*, Foe *-ge*; (16) Fasu *-ko*, Foe *-xo*; (19) Foe *-xo*; (24) Foe *-xu*; (26) Fasu *-ne*, Foe *-ko*; (28) Fasu *-ko*, Foe *-ne*.

2. In the Kewa form *yogane*, *-ne* is suspected to be the inalienability marker, and *yo-* an unidentified morpheme (from **d²o-*, and perhaps meaning *body?*) with which *-ga-* *skin* was compounded. Compare the following cognates: Tebera: *segãĩ*, Wiru: *yogele*, Sau: *yonkele-ke*, Mendi: *songen*, Enga: *soge*, Huli: *dongone*, Pogaia: *huk^uan*, Pa: *sigã*, and cognates lacking **dzo-*: Awin: *kate*, Ok (Lowland) *kat*, **kaa*; (Mountain) **kaal*; Kubo: *koro*, Samo: *koropu*, Beami: *katofu*, *kafoto*, Kaluli: *togof*.

3. Fasu: *fako* = *intestines*. It could be a cognate of Ok **fakan*, *intestines*; if so, *-ko* would not be a petrified suffix (see note 1).

4. The forms represent different dialects in Foe.

5. Fasú: hame = *clanfriend*. Corresponding terms occur in the Mt Bosavi and East Strickland languages: Beami: sama, Samo: samo.

6. In the Mt Bosavi and East Strickland Families, cognates meaning *mother's brother* are found: babo, bab.

7. Cognates sharing the general meaning of *sibling-in-law* are also found in the Mt Bosavi and East Strickland languages (bas, base), in Duna-Pogaia (paluni, bato), and in the Ok languages (baat, baasim).

8. Foe: kanuma, kanama = *ashes*.

9. We don't know whether the two terms are synonyms, refer to different kinds of fences, or reflect dialectal differences.

10. Fasú: nomo = 'nominative form'; Foe: nomo = 'focussed form'.

11. The Fasú term also means *young of an animal*. In Beami, the cognate form maḽḽ means *child*.

APPENDIX B

Fasu-Beami Cognates

The grouping of the items follows Appendix A, but the items are here numbered consecutively with notes interspersed. The number in parenthesis cross-refers to Appendix A, or expands it - in which case the number is underlined>. A total of thirty-eight new forms are added below. The phonological analysis of Beami, although not complete, suggests the following symbols: p, t, k, f, s, h, m, n, r, w, y, i, e, ə, a, o, u. The symbols p, t, k, represent labial, alveolar and velar stops which are mostly voiced intervocally and tend to become unvoiced elsewhere. The velar stop tends to become a voiced velar fricative when between two low back vowels. r represents a voiced alveolar flap or retroflex flap or a flapped lateral. All vowels can occur with nasalisation. There seems to be no opposition between n and r in an environment of nasal vowels: māñōʷmārō, hĩñĩʷhĩrĩ.

- | | FASU | BEAMI |
|---|----------|--------|
| 1. (1) <i>eye</i>
h:s also in 19,25,54,66. | hĩ | si |
| 2. (3) <i>nail</i>
kitafene presumably is an old compound < kita-fene, fene corresponding to ifĩ. Fasu also has another probable cognate of ifĩ, i.e. fe <i>edge</i> . Onanafi (between Etoro and Kaluli) has ifini. | kitafene | ifĩ |
| 3. (4) <i>skin</i>
Etoro has the metathesis form kofoto; Kasua has kapo (Kaluli displays metathesis of the first two consonants: katofu > togo:f). | kau | katofu |

- | | FASU | BEAMI |
|--|-----------|----------------|
| 4. (5) <i>thigh</i> | pau | pesere, masere |
| The link is tenuous and rests upon such outside evidence as Kewa: palaa, Onanafi: fere, Huli: bahiri-ni, Wiru: mana, Pa: mere-. | | |
| 5. (7) <i>wing</i> | auwa | awkia |
| 6. (8) <i>bone</i> | kiki | -ki, kiwi |
| -ki occurs only in names of body parts. In Central Beami the word is kasa; kiwi is found in the eastern fringe of the Beami area (Komiofi, Etoro). k:k also in 3,10,18,21,22,23,36,38,41,42,46,53, 62,71,72,77. | | |
| 7. (9) <i>breast</i> | hoko | toto |
| 8. (10) <i>jaw, chin</i> | akai fatu | pakato |
| t:t also in 16,19,29,33,74. | | |
| 9. (10 + 23) <i>beard</i> | kamasi | māyāpo |
| māyāpo consists of may- + -apo <i>hair</i> (see below, 15). The link is tenuous. | | |
| 10. (15) <i>shoulder</i> | kinu | kita-ki |
| Kaluli has kelen. It seems possible that also Fasu: kita- in kitafene <i>nail</i> (Nr. 2) and Beami: kita- <i>shoulder</i> are cognates. The clearest cognate of Fasu: kinu is the proto-Ok form reconstructed *cʷiin (Healey 1964). | | |
| 11. (17) <i>tongue</i> | aru | āri |
| r:r also in 34,44 (cultural items), 69,71. | | |
| 12. (18) <i>teeth</i> | mere | pēsē |
| m:p also in 13,36,40. Outside evidence: Awin: phete, Pa: pere, mare. | | |
| 13. (19) <i>back of body</i> | mati | pari-ki, pa-ki |
| 14. (21) <i>cheek</i> | pare | pæ |
| p:p also in 4,24,27,39,53,70; loss of -r- in Beami also in 13,16, 38,74. | | |

- | | FASU | BEAMI |
|---|------------|--|
| 15. (23) <i>hair</i> | iti | hĩnĩ |
| hĩnĩ or hĩrĩ is found in Eastern Beami (Komiofi) and in Etoro; Central Beami has hināpo (-apo being a morpheme meaning <i>hair</i> , <i>feather</i> as in witapo < wita + apo, <i>cassowary feather</i>) | | |
| 16. (27) <i>saliva</i> | totofae | tefo |
| Also noted Beami: kafu, Etoro: kahũ. | | |
| 17. (31) <i>fat, grease</i> | sawe | sěfě |
| s:s also in 42,44,72,74, but 44 and 72 are cultural items, 72 being the recently introduced sweet potato. | | |
| 18. (32) <i>elbow</i> | arm + koma | arm + kumu |
| m:m also in 9,19,20,25,28,30,35,37,58. | | |
| 19. (33) <i>navel</i> | himu tipu | otatipu, simukofo |
| Eastern Beami (Komiofi) has otatipu in which -tipu corresponds with Fasu: tipu; the rest of Beami has simukofo in which simu- corresponds with Fasu: himu (= <i>belly</i>). | | |
| 20. (34) <i>rope, vein</i> | memetere | momoke |
| 21. (35) <i>forearm, eight</i> | kari | koto |
| 22. (36) <i>liver</i> | kasoko | toko |
| Compare 15, where kamasi corresponds with mǎy-. | | |
| 23. (37) <i>tail</i> | keno | nǎko |
| Assuming metathesis of the consonants. | | |
| 24. (38) <i>behind</i> | patera | parigia |
| Both forms are obviously related to the words for <i>back of body</i> (Nr. 13). | | |
| 25. (51;56) <i>clanfriend,</i>
<i>taboo</i> | hame | sama (<i>clanfriend</i>);
sema (<i>taboo</i>) |
| 26. (55) <i>grandfather</i> | kauwa | auwa |

- | | FASU | BEAMI |
|--|--------|-----------|
| 27. (59) <i>mother sibling</i> | papa | papa |
| Fasu = <i>mother's sister</i> ; Beami = <i>mother's brother</i> . Related forms in the East Strickland and Awin-Pa Families also mean <i>mother's brother</i> (Samo: babo, Bibo: bab, Pa: babo). | | |
| 28. (63) <i>mother</i> | ama | æme |
| 29. (64) <i>father</i> | ata | ata |
| 30. (67) <i>child</i> | mano | mārō/mānō |
| Fasu: mano = <i>young, small; young of an animal</i> . | | |
| 31. (71) <i>axe</i> | hānu | hay, hayi |
| 32. (78) <i>netbag</i> | aku | atu |
| atu was noted in the Etoro area; Beami has esa. | | |
| 33. (85) <i>arrow</i> | tare | tati |
| 34. (90) <i>knife</i> | ferepe | herepe |
| 35. (91) <i>plaited bag</i> | mate | māsi |
| 36. (108) <i>flying fox</i> | kaima | karepa |
| 37. (111) <i>bird</i> | mena | māni |
| In several places in Beami the form hega was noted, cognate with Duna: hega and East Strickland siga, sigo, siu. The geographical distribution of the two forms is not clear.
n:n also in 23,30,57,58,67. | | |
| 38. (112) <i>crayfish</i> | kiso | kesoro |
| 39. (113) <i>leech</i> | tepo | hepe |
| 40. (114) <i>hornbill</i> | nuamo | tawapo |
| 41. (115) <i>fly</i> | kofo | kakopæ |
| 42. (126) <i>path</i> | ikia | iti |
| iti in Eastern Beami and Etoro only; the common Beami word is roko. | | |

	FASU	BEAMI
43. (127) <i>tree</i>	ira	i, ifa
Eastern Beami, Etoro, Kaluli and Kasua have i.		
44. (132) <i>sweet potato</i>	supuru	siapururu
45. (135) <i>wind</i>	fofo	fo
46. (134) <i>stone</i>	eke	iki
47. (140) <i>water</i>	hē	hārō
48. (141) <i>coconut</i>	pasi	fay
49. (142) <i>blackpalm sp.</i>	waipa	waipu
Etoro has wāya, Kaluli: wayo.		
50. (143) <i>betelnut</i>	pono	molopi
51. (144) <i>sand</i>	sakipu	posekai
Just a guess, assuming that it is possible that the forms consist of *sakai + *pu in different order.		
52. (145) <i>ball</i>	poro	moto (= <i>clump, ball</i>)
53. (146) <i>hole</i>	koparu	kerapo
Assuming that one of the forms shows metathesis of r and p.		
54. (147) <i>ground</i>	hāuwaka	osobo
55. (202) <i>he</i>	e	e
56. (204) <i>all</i>	su	huru
57. (205) <i>I</i>	ano	na
58. (205) <i>I</i>	nomo	namo
59. (208) <i>you sg.</i>	ne	ti
See 4.4.		
60. (210) <i>they</i>	i	iri
61. (227) <i>name</i>	yano	dyō

	FASU	BEAMI
62. (232) <i>thunder</i>	kikiri	ku kere- (= <i>to thunder</i>)
63. (233) <i>bad</i>	watiki-(sa)	watere-(y)
64. (234) <i>white</i>	pakae-(sa)	fare-(y)
65. (235) <i>first</i> Etoro has afāte.	fana	afātefā
66. (236) <i>long, tall</i> Etoro: setate; Kasua: senapo.	horopo	sotake, sata
67. (272) <i>eat</i>	ne-	na-, mo-
68. (277) <i>make, do</i>	pe-	pæ-
69. (280) <i>be (standing)</i>	reke-	rere-
70. (287) <i>cook</i>	pai-	pey (= <i>cooked</i>)
71. (289) <i>shoot</i>	kare-	kara-
72. (291) <i>sing; song</i>	kesa- (<i>sing</i>)	kesāmi (<i>song</i>)
73. (292) <i>painful, have pain</i> te-		se-(y)
74. (293) <i>rotten</i>	tore-(sa)	tosa-(y)
	This would be a case in which the Beami form preserves in its stem an old suffix -sa, still productive in Fasu.	
75. (294) <i>call</i>	wa-	we-
76. (295) cf. (135) <i>blow</i>	fo-	fura-
77. (296) <i>be (sitting)</i>	kake	kare-
	Beami: kare- is an existential verb, but it is not known if it refers exclusively to 'sitting' objects.	
78. (297) <i>look for, find</i>	ko- (<i>find</i>)	oko- (<i>look for</i>)
79. (298) <i>climb</i>	he-	hete-
80. (299) <i>come</i>	pe-	ma-/mi-
	Beami ma- and mi- are suppletive stems.	
81. (300) <i>cry</i>	hiripu-	tii-

APPENDIX C

By comparing Appendices A and B, the following probable cognates are shared between Beami, Foe and Kewa. The numbers in parenthesis cross-refer to the lists in Appendices A and B.

1. <i>eye</i>	(A,B.1)	Foe and Kewa (F, K)
2. <i>nail</i>	(A.3, B.2)	F, K
3. <i>skin</i>	(A.4, B.3)	F, K
4. <i>wing</i>	(A.7, B.5)	F, K ?
5. <i>bone</i>	(A.8, B.6)	F
6. <i>breast</i>	(A.9, B.7)	F
7. <i>tongue</i>	(A.17, B.11)	F
8. <i>tooth</i>	(A.18, B.12)	F
9. <i>back</i>	(A.19, B.13)	K
10. <i>hair</i>	(A.23, B.15)	K
11. <i>father</i>	(A.64, B.29)	K
12. <i>mother</i>	(A.63, B.28)	K
13. <i>path</i>	(A.126, B.42)	F
14. <i>tree</i>	(A.127, B.43)	F
15. <i>I</i>	(A.205, B.57)	F, K
16. <i>you</i> (sg.)	(A.208, B.59)	F, K
17. <i>he</i>	(A.202, B.55)	F, K
18. <i>all</i>	(A.204, B.56)	F
19. <i>name</i>	(A.227, B.61)	F
20. <i>small</i>	(A.231)	F
21. <i>eat</i>	(A.272, B.67)	F
22. <i>stand</i>	(A.280, B.69)	F?, K

Additional cognates can be added to the above basic terms.

- | | |
|------------------------------|-----------------------------------|
| 23. <i>louse</i> (A.106) | B: imu |
| 24. <i>ear</i> | B: kē, F: kia, K: kale |
| 25. <i>speak</i> (A.290) | B: sia ta- |
| 26. <i>black</i> | B: amunə-bui, F: budu, SK: busupi |
| 27. <i>we</i> | B: nini, K: niaa |
| 28. <i>sit</i> (A.290, B.77) | B: fi-, K: pira |

By examining non-basic vocabulary items, still other cognates can be added:

- | | | |
|-----------------------------|-----------------|-----------------|
| 29. <i>thigh</i> | (A.5, B.4) | F, K |
| 30. <i>chin</i> | (A.10, B.8) | F |
| 31. <i>shoulder</i> | (A.15, B.10) | F ? |
| 32. <i>cheek</i> | (A.21, B.14) | K |
| 33. <i>saliva</i> | (A.27, B.16) | K |
| 34. <i>grandfather</i> | (A.55, B.26) | F, K |
| 35. <i>clan brother</i> | (A.51,56, B.25) | F, K |
| 36. <i>mother's sibling</i> | (A.59, B.27) | F, K |
| 37. <i>bag</i> | (A.78, B.32) | F |
| 38. <i>flying fox</i> | (A.108, B.36) | K |
| 39. <i>banana</i> | (A.136) | F, K (B: kai) |
| 40. <i>grandmother</i> | (A.66) | F, K (B: ayā) |
| 41. <i>vine</i> | | B: ēfē, K: ope |
| 42. <i>taboo/in-law</i> | | B: bae, K: pase |

APPENDIX D

LEGEND

- BAINAPI (North Aramian) Gainapi (Franklin 1970) perhaps also Sarego.
- BEAMI (Bosavian) Bedamini (Voorhoeve 1970).
- FASU (West Kutubuan) Kaipu (Wurm) Kaibu or Lake Kutubu (Capell 1969) Namomebo (Bridges).
- FIWAGA (East Kutubuan) Beaver Falls.
- FOE (East Kutubuan) Kutubu or Mubi River (Williams 1940-41); Foi-i or Mubi River (AR 1926-27); Foi (Franklin 1968); dialects of Mubi, Fimuga, Ifigi and Kafa (Voegelins 1965).
- KAIPU dialect of Fasus; also called Sisipia or Namu (J. May, personal communication).
- KALULI (Bosavian) Ologo (APCM).
- KASUA (Bosavian) Bosavi (Voorhoeve 1968) Ikifaro (Bridges).
- KEWA (West Central) Kewa-pi (Wurm 1960).
- KWARE (Bosavian).
- NAMUMI (West Kutubuan).
- POLE (West Central) Rule (unpublished), Kewa dialect.
- SAU (West Central) Samberigi (Capell 1962); Okani or Tugi (AR 1921-22).
- SOME (West Kutubuan); dialect of Fasus.

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