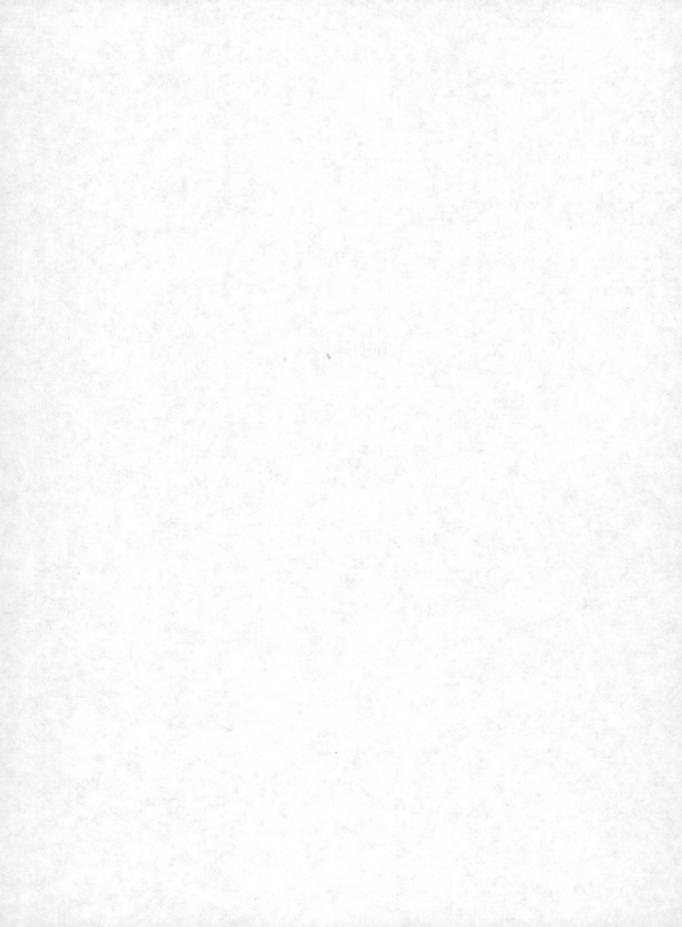
CHAPTER 5



# A TENTATIVE CLASSIFICATION OF THE LANGUAGES OF THE MT. BOSAVI REGION

#### R. Daniel Shaw

### 5.1. Introduction

The material presented here for the languages of the Mt. Bosavi region of Western Papua (see Map 4 ) was largely collected by the author on a survey conducted during September, 1971. The present classification is somewhat divergent from that which was previously believed to exist for the area. A tentative classification for the area was first published by Voorhoeve (1968) and though we refine that classification somewhat, the present paper can by no means be considered definitive.

The Swadesh 100 word list was used as the basis for the data presented here. Following Gudschinsky (1956) each list of vernacular terms was compared by the inspection method and scored as cognate or non-cognate, similar to the method used by McElhanon (1967).

What follows is a rather detailed analysis of the material for the six groups of the East Strickland Plain which is then compared with the available material for the Papuan Plateau. Together the groups from these two areas comprise the Bosavian region of the Central and South New Guinea Stock (Voorhoeve, 1970).

An interesting aspect of linguistic relationships which complicates classification of the groups along the eastern bank of the Strickland River, but is also evident in many parts of New Guinea, is the occurrence of cognate chains (McElhanon, 1970). Thus each group is closely related to the group next to it, and is related to each successive group to a lesser degree. Therefore a classification based entirely upon standard lexicostatistical methods simply mirrors this complication.

The outcome of the chaining phenomenon is that of immediate geographical mutual intelligibility. The communalect chains involve many groups which share mutual intelligibility along the chain, but groups at the far ends of the chain are unintelligible with each other. This, of course, introduces the problem of where to draw language boundaries. If one does, in fact, posit boundaries, where along the chain are they made and what is the criteria for making them?

Wurm and Laycock (1961) address themselves to this problem. They maintain that lexicostatistic material in itself is not sufficient, and that mutual intelligibility must be considered. For this reason they posit a cognate figure of close to 70% as being more realistic for determining language boundaries (at least in New Guinea) rather than the 81% figure determined by Swadesh (1955). The 70% figure is supported by Healey (1969:117) in his review of Dyen's classification of Austronesian languages (Dyen 1965). Keeping both mutual intelligibility and the more realistic lexicostatistic relationship in mind, we now outline the groups of the Bosavian region.

### 5.2. Lexicostatistical Overview

The lexicostatistical figures presented in Table 1 need the following comment.

First of all, Duna and Bogaya show an interesting relationship to languages of the Bosavi area. Duna was at one time (Wurm, 1960) thought to constitute a Family-level isolate of the ENGH stock. More recent evidence (from Voorhoeve, reported in Wurm, 1971) suggests that Duna is a member of the CSNG stock. A comparison of Duna with Huli (of the West Central Family of the ENGH stock) on the one hand, and with Bogaya (a language southwest of Duna) on the other, shows the following lexicostatistical relationships:

Duna-Huli 27-32% (46 to 54 related of 170 words)

Duna-Bogaya 20-28% (34 to 47/170) Huli-Bogaya 5-10% (7 to 18/170)

Therefore, although Duna shows an almost equal lexical relationship with both Huli and Bogaya, the latter two show a more remote relationship. Grammatical evidence would seem to support the inclusion of both Duna and Bogaya within the CSNG stock. However it seems wise, without more data, to leave Duna and Bogaya as unplaced Family isolates of the CSNG Stock.

Secondly, the high relationship of Fasu with languages of the Bosavian area is again noticeable (compare Chapter 4). However, Fasu has similarities with the ENGH Stock as well as with, for example, Kaluli of the CSNG Stock. As we stress later in this chapter, more detailed study is needed in this area.

Table 1
Percentages of Shared Basic Vocabulary

ח	٠,	n	•
v	u	.11	a

28	Bogaya	ı												
9	9	Pa												
5	10	9	Agala											
8	13	11	70	Konai										
4	6	10	69	71	Kubo									
5	7	12	65	64	83	Samo								
5	7	13	55	55	71	87	Honibo							
5	7	13	52	53	69	79	80	Bibo						
9	9	11	16	16	25	27	27	27	Biami					
9	6	12	12	15	18	18	21	24	55	Etoro				
9	10	9	12	10	17	18	18	20	45	65	Onabasulu			
8	8	11	8	10	14	16	16	16	41	37	56	Kaluli		
8	8	9	7	11	9	10	10	11	17	28	36	39	Kasua	
8	5	9	5	8	6	7	7	7	11	28	32	35	32	Fasu

Finally by comparing all the groups of the East Strickland Plain with the Pa, inhabiting the region west of the Strickland River from the Cecelia River south almost to Lake Murray, an average of 12% lexicostatistic relationship is noted. This is considerably lower than the 36% figure presented by Voorhoeve (1968), and may result from our unfamiliarity with phonetic shifts and other factors which result in relationships not apparent by simple inspection. However, as we hope to show, this lower figure is consistent with the cultural background of the situation. Certainly, at least for the present date, the Strickland River acts as a cultural and linguistic barrier of considerable importance.

## 5.3. Groups on the East Strickland Plain

Beginning in the north, the following groups are encountered:

- (1) Approximately 200-300 people who call themselves Agala live at the upper reaches of the Burnett and Liddle Rivers, in the rugged terrain east of the Strickland River.
- (2) The Konai people numbering 300-400 live along both banks of the Strickland River as well as to the west beyond the Murray River. They share 70% of the lexical items with Agala, and are mutually intelligible with them, as well as with the Kubo and Samo to the south.
- (3) Approximately 1000 Kubo inhabit a large area from the Carrington River in the north, and extending in south-easterly direction to the Nomad River. Though differences exist between individual communities, there is only a 6% divergence between Gamoso in the north and Honabi in the south. Kubo has a 71% lexicostatistic relationship with Konai and is mutually intelligible with all the groups of the Plain.
- (4) The Samo, bounded by the Strickland River to the west, the Nomad River to the south, and the Kubo people to the north and east, number about 650. They share 83% of the lexicon with the Kubo, 87% with the Honibo and are mutually intelligible with all the other groups on the Strickland Plain.
- (5) The Honibo people live south of the Nomad River in a vast waste land that is sparsely settled the group numbering about 700. There is a 15% divergence in the speech of those in the northern part of the area along the Rentoul River and those living along the Tomu River to the south. However, under the living conditions dictated by the hostile environment this is quite understandable. The Honibo have an 87% lexicostatistic relationship with Samo and 80% with Bibo, and are mutually intelligible with both.

(6) The Bibo are the eastern most group of the Strickland Plain with a little over 400 people living between the Nomad and Rentoul Rivers with the Papuan Plateau rising to the east. They share high cognate counts with the rest of the Plains groups and are mutually intelligible with the Honibo to the south and both Samo and Kubo to the north.

There are a total of six major closely related languages and dialects ( = communalects) with a total population of about 3300 inhabiting an area area approximately ninety miles long and twenty miles wide along the eastern bank of the Strickland River. Table 2 shows the linguistic relationships between these groups and clearly establishes the chaining which takes place.

Table 2

Linguistic Comparison of Groups on the East Strickland Plain

South to North

Agala - Konai	70%	Bibo - Honibo	80%)
Agala - Kubo	69% Mutually	Bibo - Samo	79% Mutually
Agala - Samo	65% Intelligible	Bibo - Kubo	69% Intelligible
Agala - Honibo	55%	Bibo - Konai	53%
Agala - Bibo	52%	Bibo - Agale	52%

Central, North to South

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Samo - Agala 65%

Samo - Konai 64%

Samo - Kubo 83%

Samo - Honibo 87%

Samo - Bibo 79%
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### 5.4. Language Groups on the Papuan Plateau

North to South

The author has not been able to personally collect the material for the groups on the eastern portion of the Papuan Plateau. However, except for material in Etoro, which is sparse, others have contributed materials on the area. The sources vary and this could result in a certain amount of skewing of the interpretation. The following, however, emerges as a tentative picture:

- (1) Dominating the Plateau west of Mt. Sisa in the north and Mt. Bosavi in the south are 3500 Biami. Though there is some divergence between communities the Biami act as a single linguistic entity, and have an average lexicostatistical comparison of 25% with the groups of the Strickland Plain. However, they show a greater linguistic affinity to the groups on the plateau to the east of them, generally with relationships in the vicinity of 40 to 50%.
- (2) Numbering about 500 the Etoro people live on the Plateau south of Mt. Sisa. Unfortunately the material available is woefully inadequate, and, therefore, a list has not been included in the appendix. What is available indicates a cognate count of approximately 55% with Biami. In personal communication with T. Hoey (APCM) and C.L. Voorhoeve there is good indication of mutual intelligibility between the two groups.
- (3) The Onabasulu occupy an area about midway between Mt Sisa and Mt. Bosavi and number approximately 300. They share about 65% with the Etoro to the northwest and about 56% with the Kaluli to the south. In personal communication, T. Ernst indicated that the Onabasulu are not mutually intelligible with either of these groups.
- (4) The Kaluli (see also 4.3.) consist of approximately 1400 people living to the north of Mt. Bosavi. The available material indicates a lexicostatistical relationship of 41% with Biami. Kaluli is related to Kasua on the southern slopes of Mt. Bosavi by 39%, but the latter is related to Biami by only 17%. This again suggests the effect of chains of relationships when attempting a classification of languages within the area.

Though there are many cultural similarities between the Plateau people and those of the Strickland Plain, the area seems to be more diverse in the linguistic realm. Table 3 presents the material available for the Plateau and compares it with the languages to the west on the Plain and to the east toward Lake Kutubu. In both cases the final language compared is outside the region presently in focus.

Table 3

Linguistic Comparison of Groups on the Papuan Plateau

Biami	- Etoro	55%	Kasua	-	Kaluli	39%
Biami	- Onaba	sulu 45%	Kasua	-	Onabasulu	36%
Biami	- Kalul	i 41%	Kasua	-	Etoro	28%
Biami	- Kasua	17%	Kasua	-	Biami	17%

Western Tre	nd	Eastern Trend				
Etoro - Biami	55%	Biami - Et	oro 55%			
Biami - Samo	27%	Etoro - Ka	sua 28%			
Samo - Pa	12%	Kasua - Fa	su 32%			

From the material presented thus far, it appears that the Biami and other groups of the Papuan Plateau are more closely linked to the groups to the east of them (Franklin's Kutubuan, see Chapter 4), than to the west. Indeed, in discussing the Kaluli, Schieffelin (1971) points out that their physical and cultural affinities appear close to those of the peoples of the Lake Kutubu area. The linguistic data available seems to support his observation.

### 5.5. Cultural Characteristics

Culturally the groups of the Bosavi Region exhibit a much closer relationship than the linguistic diversity suggests. Located in the center of the Island of New Guinea, the entire region is covered by dense rain forest watered by over 200 inches of rain per year. The land rising from 300 feet on the Strickland Plain to 2500 feet on the Plateau consists of parallel ridges rising between innumerable streams and small rivers.

The people of the region live principally on sago and garden produce. Shifting horticultural gardening techniques necessitate considerable movement of the population as the sago in an area is used up and gardens give out. The principal crops include numerous varieties of banana, pandanus, breadfruit, and pitpit. Most of the protein comes from wild pig, cassowary, small marsupials, snakes, grubs, and fish, but these consistitute a rather small portion of the total diet. Domestic pigs are kept and allowed to run loose, but as with many New Guinea peoples they are eaten primarily on ceremonial occasions.

This movement of people based upon food production tends toward a nomadic existence with people living in relatively small, isolated groupings. The social organisation of all the groups is quite similar, each extended family living separately in its own long house surrounded by gardens. As the gardens are depleted, new ones are planted, and eventually the cycle begins again by the building of a new long house in association with the new gardens.

These isolated hamlets scattered throughout the dense forest are associated with other similar groups with whom the men exchange sisters for wives, get together for certain ceremonial occasions and cooperate

in military functions. The military activity of most of the people of the region consisted, until recently, of raiding parties. Often the raids were carried out at a considerable distance, the principal purpose being the desire to procure meat. The Biami seem to have been particularly successful in these activities resulting in a wide spread fear of this large language group, especially among those living on the Strickland Plain.

By looking at the linguistic evidence, we may be able to postulate that the people of the entire Bosavi region originated somewhere to the east, possibly near Lake Kutubu, and ultimately from the vicinity of the Gulf. As the people migrated westward, a split took place, some continuing westward onto the Papuan Plateau while others moved southwest around Mt. Bosavi and subsequently onto the Strickland Plain. Those who occupied the plateau eventually re-established their contact with the southern branch of the migration in the form of raiding. Though probably a relatively homogeneous group when they arrived on the Plain, the desire to protect themselves from what was apparently frequent raiding, eventually resulted in a wide distribution of peoples exhibited by the present communalect chain.

The languages of the Plateau appear to be lexically more distinct from each other than those on the Plain. This could be the result of a more rugged terrain effecting less contact among the people. This distinctness may also simply reflect the lack of conclusive data from the area.

Unfortunately the mythology of the peoples lends little support to the forgoing migration theory. Most of the origin tales relate the beginnings of each group at or near their present locality. However, the cultural similarities and the progressive change in the linguistic distribution throughout the region indicate considerable affinity of all the languages.

### 5.6. Classification of the Bosavian Region

The lexicostatistic material presented here indicates a number of closely related groups dispersed along the plain on the east bank of the Strickland River. Mutual intelligibility between the groups is quite high except between those at the extreme ends of the chain. This factor is a product of the degree of interaction between the groups, so that those who share geographic borders exhibit a greater degree of mutual intelligibility than those which share no boundaries. Whether these

groups classify as dialects or separate languages within a family is not readily evident from the linguistic material.

Should one view the groups as constituting a single language, then the lower limit of 77.5% (adjusted for the Swadesh 100 list and lowered to 70% for the full list) is severely violated in that the geographically extreme groups have only a 52% lexicostatistic relationship. Should one classify the groups as a family of languages, however, the subclassification into languages becomes somewhat arbitrary.

Using the lowered percentage figure for positing a classification based upon lexicostatistics produces the results displayed in Figure 1. On this basis there would be four distinct languages. Based strictly on lexical reasons we are forced to separate Bibo from the Kubo-Samo-Honibo grouping due to the low lexical count (69%) between Kubo and Bibo. These four languages appear to group themselves on the basis of geographical location, those to the north showing a high degree of similarity which is somewhat distinct from the southern group which, in turn, displays considerable similarity, divergence having begun perhaps about 800 years ago in both groups.

Taking mutual intelligibility into consideration we turn to the application of the transportation model in relation to the communication problem as proposed by Grimes (1968). Using this model we can, for the data given here establish a mutual intelligibility threshold of twenty-five, and make the further assumption that the grammatical structures of the given languages are relatively similar. The classification based on mutual intelligibility is represented in Figure 2. Here all the groups of the Strickland Plain are compared with Samo. The groups to the south of the Carrington River show a marked similarity with a threshold of twenty-one, putting them well within the twenty-five figure set as an upper limit. Thus these four groups act as one language with four dialects.

The two groups north of the Carrington River compare with Samo at a mutual intelligibility threshold of 35 and with each other at thirty. Thus we feel these should be classed as separate languages.

In spite of the lexical distinction between Kubo and Bibo we feel that the mutual intelligibility of the two groups and the close relationship of both to Samo supports our considering them as dialects of one language.

Figure 1
Lexically Based

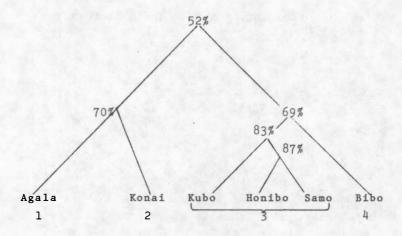
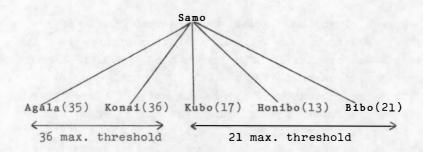


Figure 2
Mutual Intelligibility Based



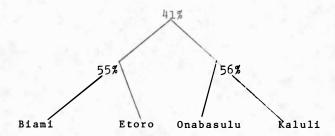
Therefore by lowering the lexicostatistic percentage required for language membership, and by accounting for mutual intelligibility, we here posit that the groups of the East Strickland Plain comprise a family composed of three languages, one of which has four dialects. Unfortunately, there is no composit local name for the Kubo-Samo-Honibo-Bibo language, as only the dialect names are used by the people.

The Papuan Plateau appears to contain four languages as displayed in Figure'3, each of which is quite distinct from the other. Kasua, which

may also belong with this group appears at present to join with the Kutubuan groups to the east.

Figure 3

Languages of the Papuan Plateau



Thus the groups of the East Strickland Plain and the Papuan Plateau appear to act as part of a language stock (CSNG) with two distinct families. Cultural relationships support the linguistic data, and serve to set the entire Bosavi area apart from other areas of Papua New Guinea.

#### 5.7. Conclusion

Classed together, the languages of the Bosavi Region act as a linguistic and cultural unit. The languages of the Papuan Plateau show a greater affinity to the Kutubuan area than those of the East Strickland Family. Relating the present distribution of both linguistic and cultural data results in some interesting speculation on the divergence of past migration routes.

Within the region there are two language families which further divide into a total of seven languages. The Papuan Plateau Family appears to be internally more distinct than those of the Plain, but this may be a result of lack of data. The criteria for classifying the language chain of the East Strickland Plain are based upon a lowering of the lexicostatistic relationship to 77.5% for the lower limit of a language, and accounting for mutual intelligibility.

The present linguistic diversity on the Plain has been related to cultural factors, primarily raiding carried out by the Biami on the lowland peoples. It is interesting, in this respect, to compare the east and west banks of the Strickland River. Though the Pa, on the west

bank, point toward the east when discussing their origin, they must have crossed the river prior to the arrival of the Biami on the Plateau and, therefore, managed to escape the effects of raiding. The Pa presently extend over an area comparable in size to the entire language chain on the east bank with much less variation. However, the lexicostatistic divergence between the Plateau languages and the Pa is about the same (11%) as that between the Plains languages and the Pa (12%) indicating a separation of about the same length of time.

The Plains people must have arrived approximately 1000 years ago as one language. As they sought protection against raids from the Plateau peoples they gradually separated, migrating northward along the Strickland River. This movement resulted in linguistic chaining where communities exhibit a high degree of mutual intelligibility. Apparently the Strickland River to the west and the ranges to the north have acted as barriers shielding the region from intrusion from the Fly River Basin as well as from the Highlands (see 5.2. for a comparison with Pa and Duna).

Clearly more data, particularly from the Plateau, is necessary for a definite classification of the Bosavian area. It is not our intent to present the above classification as a definitive analysis of the region. Rather it is hoped that this paper will encourage research which will contribute to a greater understanding of linguistic relationships both within the region, and to the rest of Papua New Guinea as a whole.

### APPENDIX A

## Legend

An alphabetical list of languages and dialects of the Bosavian Stock is presented here. Each language is listed, followed (in parentheses) by the language family of which it is a member, any alternate names known to the author (or found in the literature), and finally the sources from which the material has been gathered. Abbreviations are: CMML (Christian Missions in Many Lands), SGBM (Soverign Grace Baptist Mission), APCM (Asia Pacific Christian Mission).

- AGALA (East Strickland); Sinale (Telford, CMML).
- AWIN-PARE (West Strickland) dialects, Bat (Capell, 1969); perhaps Awin, Akium, Ba, Pate, Minomin (Barth, 1971).
- BIAMI (Papuan Plateau) Bedamini (local name used in self-reference) (Voorhoeve, 1969; Shaw).
- BIBO (East Strickland) dialect of Kubo-Samo-Honibo-Bibo; Gubusi (Voorhoeve, 1968; Shaw).
- BOGAYA (CSNG Stock) also Pogaia (Telford, CMML).
- DUNA (CSNG Stock) (Wurm, 1960).
- ETORO (Papuan Plateau) Tuguba (Roberts, SGBM); Etoro; also Kuresa, Hurusu (Butler).
- HONIBO (East Strickland) dialect of Kubo-Samo-Honibo-Bibo; Aiba (Shaw).

  Tomu River; also Orogo groups called Patamo, Nauru, Sonia (Butler).
- KALULI (Papuan Plateau) (Rule; Schieffelin, Fordham University, unpublished).

- KONAI (East Strickland) Kanai (Barth, 1971); Mirapmin (by the Faiwolmin, Barth, 1971).
- KUBO (East Strickland) dialect of Kubo-Samo-Honibo-Bibo; Daba (Voorhoeve, 1968; Shaw).
- ONABASULU (Papuan Plateau) Waragu (Ernst, University of Michigan).
- SAMO (East Strickland) dialect of Kubo-Samo-Honibo-Bibo; Supai (Voorhoeve, 1968; Shaw).

#### APPENDIX B

#### Grammatical Notes on Samo

#### Karen Shaw

This section gives a tentative grammatical sketch of two main aspects of the Samo language: the pronouns and the verbs. Because there are no detailed grammatical materials published on languages of the general Strickland-Mt. Bosavi area, the sketch should be useful for comparative purposes. The pronouns and verbs, for example, can be compared with not only the well known Highland languages, but also with those to the West, such as Telefolmin.

### Personal Pronouns

By observing form and function three sub-classes of personal pronouns in Samo may be distinguished. These are given in Table 1.

If a clause does not contain an overt object form, Class 1 pronouns may be used to fulfill the subject function.

yo na-bo (3rd.s.subj. eat-past) He ate. 1

1st. first person
2nd. second person
3rd. third person

s. singular pl. plural

subj. subject

fut. future  $\gamma$  nasalised vowel subord. subordinate

morphophonemic changeallomorphic variation

A period between words indicates multiword glosses.

The following phonemes occur in Samo: b,t,d,k,g,f,s,h,m,l,w,y,i,e,a,u,o,ou, and nasalisation. All of these symbols represent the usual phonetic quality as would be expected, except that o represents the phonetic [o] and ou represents the phonetic [o]. In addition n (which is an allophone of 1) has been added to the orthography for future transfer to the national language. The abbreviations used are as follows:

If an object form (noun) which could not possibly function as the subject does occur, a Class 1 pronoun may still fulfill the subject function.

- yo wo na-bo (3rd.s.subj. sago eat-past) He ate sago.
- If, however, the object form (noun) could conceivably function as the subject, then the pronoun which functions as subject (or follows a noun functioning as subject for clarification) must be Class 11.
  - ye boi na-bo (3rd.s.subj. snake eat-past) He ate (the) snake.
  - sofou ye boi na-bo (dog 3rd.s.subj. snake eat-past) (the) dog he ate (the) snake.
  - ye teba ou-bo (3rd.s.subj. cut. lumber hit-past) He hit (the) table. (Although the subject in this example seems to be quite obvious, the speaker refused to replace the Class 11 ye with the Class 1 ye, saying the table could have hit the man if it had fallen on him!)

If an object form (noun) is to be replaced by a personal pronoun, it must always be by a Class 1 pronoun.

yo boi nq-bo (3rd.s.obj. snake eat-past) (the) snake ate him (it).

If both the subject form (noun) and the object form (noun) are replaced by personal pronouns then the subject form would have to be replaced by a Class 11 pronoun since the object form must be replaced by a Class 1 pronoun.

ye yo ou-bo (3rd.s.subj. 3rd.s.obj. hit-past) He hit him.

Although the usual clause order in Samo is: Subject, Object, Predicate, this is not an absolute rule. If the object (or anything else in the clause) is to be focused upon, this will come first, hence the need for the above rules for pronouns.

Class lll pronouns differ from Class ll pronouns only in the singular. These pronouns are possessive pronouns which must be used with a noun, i.e. the noun which they possess.

The inclusive-exclusive dichotomy appears only in the first person dual forms, although there is also a Class l third person plural pronoun (yq) which seems to indicate them, but not him or those others. This distinction has not been noted elsewhere, however.

Class 1 pronouns may be affixed to show reflexive action by the reflexive marker -wa.

Table 1

Class 1 Pronouns: subject/object

Person	Singular	Du	ıal	Plural
		Exclusive	Inclusive	
First	ą	oli	ala	oi
Second	nç	n	[11	nį
Third	у ç		11	y <b>ą/</b> diyo

Class 11 Pronouns: subject

Person	Singular	Du	Plural	
		Exclusive	Inclusive	
First	ą	oliye	ala	оуе
Second	ną	nį	le	nįyę
Third	уę	- 11	e	diyę

Class 111 Pronouns: possessives

Person	Singular	Di	ual	Plural
		Exclusive	Inclusive	
First	mo	oliye	ala	oye
Second	nę	n	[le	nįyę
Third	ę	3.1-4	l e	diyę

q-wq ou-la (lst.s.subj.-reflexive hit-indefinite) I will hit myself.

Milo yq-wa ogo-bo (name 3rd.s.subj.-reflexive see-past)

Milo saw himself (in the mirror).

#### Verbs

There are two morphologically defined sub-classes of Samo verbs, determined by the method of forming the indefinite.

Class 1 verbs have the same stem for all forms of the verb and add the suffix -la for the indefinite (as well as the 1 form of all other suffixes which have allomorphs). This type of verb is the most common.

Ver	b Stem	Indefinite				
ogo to see		ogo-la	will see			
i	to go	i-la	will go			
biyą	to root	biya-la	will root			
ou	to hit	ou-la	will hit			
nę	to give	nę-la	will give			

Class 11 verbs have two stem allomorphs, the last syllable of the regular stem being dropped before the indefinite affix allomorph -da (and the d form of all other suffixes which have allomorphs).

Stem 1 (wi	Stem 11	(with	<pre>indefinite suffix)</pre>	
folo-bo	went up	fo-da	will	go up
hela-bo	call (an animal)	hę-da	will	call (an animal)
gala-bo	bit	go-da	will	bite
gęlo-bo	played	gę-da	will	play
dehelo-bo	made	dehe-da	will	make

Samo verbs may be dependent or independent, determined by affixation and use in independent or dependent clauses. Table 11 shows the dependent affixes which may be added to any verb stem. The following are examples of these dependent verbs.

- ...fesomami wodiyo i-<u>siyo-lo</u> mamasi he bebelo-<u>di-lo</u>-delo...

  (policeman back go-pl.-coordinate headmen focus line up-causative-coordinate-participial) ...the policeman turned and
  went, and the headmen having been made to line up...
- g Ugulaba i-ba, howotou-la (lst.s.subj. place go-fut.subord. work-indefinite) When I go to Ukarumpa, (I) will work.

- Ugulaba i-ma, sitowa i-bo (place go-past.subord. store go-past) When (I) went to Ukarumpa, (I) went (to the) store.
- Faliki yq-<u>lugwe</u> gelq-liyo (name laugh-simultaneous.same.subj. play-present) Ricky is laughing and playing.
- Faliki gę-dobo ą yq-liyo (name play-simultaneous.different.subj. lst.s.subj. laugh-present) (While) Ricky is playing, I am laughing.
- ousou a ogo-lobou koma elo-bo (man lst.s.subj. see-present. subord. embedded.subj. shoot-past) (The) man which I am seeing, shot (the pig).
- a boyo elo-mediya boyo na-diyo (lst.s.subj. pig shoot-contrary.to.fact.conditional pig eat-unreal) (If) I had shot (the) pig, (I) could/would have eaten (it).
- hou mu-liba a kiya-la (water fall-future.simultaneous.different. subj. lst.s.subj. sleep-indefinite) I will sleep (when) it will be raining.
- huga-<u>ya</u> hwq-bo (come-imperative.quote say-past) (He) said, "Come!".
- fesomami bebelo-<u>lo</u>-delo he oya-<u>loka</u>-lobe (policeman line upcoordinate-participial focus greet-pl-continuative) (The) policeman having lined up, (they all as a group) saluted.

Table II

Dependent Verb Affixes

	W-2	Subjective Action	Relationship		
		causative plural (done as a	-10 <sup>1</sup>	coordinate (and, so, but) future subordinate (if, when)	
		group-motion verbs	-lobou∿-dobou	present subordinate	
	-loka-	or verbs of being	- m a	past subordinate	
		plural (done as a	-mediyą	contrary to fact conditional	
Verb Stem +		group or reciprocally-	-lugwe	simultaneous, same subject	
		action verbs)	-lobo∿-dobo	simultaneous, different	
				subject, non-future	
			-liba∿-diba	simultaneous, different	
				subject, future	
			- y a	imperative quote	

It is possible that the coordinate affix -lo and the independent continuative affix -lobe -dobe may both be either dependent or independent, functioning on the sentence rather than clause level.

Chart III shows the independent affixes which may be added to any Samo verb stem. The stem indicates a polite imperative. The following are examples of these independent verbs.

huga (come) Come.

huga-ye (come-imperative) Come.

huga-liya (come-negative.imperative) Don't come.

- a huga-la (lst.s.subj. come-indefinite) I will come.
- a huga-lamoi (lst.s.subj. come-non-past.negative) I will not
  come/am not coming.
- a huga-bo (lst.s.subj. come-past) I came.
- a huga-laha (1st.s.subj. come-past.negative) I did not come.
- a huga-lomo (lst.s.subj. come-prohibitive) I will never/should not come.
- a huga-liyo (lst.s.subj. come-present) I'm coming.
- ousou huga-lu (man come-report) (The) man is coming.
- ki-ya he ya-ma (here-from focus go.west-past) (We) went west from here.
- ousou i-siyo-bo (man go-pl-past) (The) men went.
- Bebelubi a na-lobi (place lst.s.subj. eat-imperfect) I was eating/used to eat (sugar) in Bebelubi.
- to-la-bu. ky-li ke na (die-indefinite-definite medicine this eat) Eat this medicine, (or you) will surely die!
- faleli e uya ne-ba\*-bu (airplane 3rd.s.possessive mother give-past-definite) (He) really gave (the toy) airplane (to) his mother!
- how hele he do-li (water only focus have/be-past. progressive) There was only water.
- biyo go-da-badi (bee bite/sting-indefinite-probable) (The)
  bee might sting (you).
- a Faliki dugo my-di-la (lst.s.subj. name clothing wear-causative-indefinite) I will cause Ricky to wear clothes (dress Ricky).

Table III

Independent Verb Affixes

	Subjective Action	T	ense/Mood	Aspect		
	-di- causative	-lobe∿-d	obe continuative	-bu	definite	
	-siyo- plural (done as a group-motion	-ma <sup>2</sup>	indefinite past	-badi	probable	
	verbs or verbs of	-bo <sup>2</sup>	past			
	being)	- y e	imperative			
	-loka- plural (done	-liya	negative imperative			
Verb Stem	as a group or	-laha	past negative			
	reciprocally-	-lamoi	non-past negative			
	action verbs)	-lomo	prohibitive			
		V-liyo	present			
		-1i	past progressive			
		-lobi∿-d	obi imperfect			
		- 1 u	reported			
		-diyo	unreal			
		-lobąlo∿	-dobalo already in pro	cess		

 $<sup>^1</sup>$ Aspect has only been recorded following the indefinite -la $^-$ da or the past -bo (ba $^*$ ).

<sup>&</sup>lt;sup>2</sup>It is theorised that the difference between -ma and -bo lies above the word level, probably on the paragraph or discourse level.

- no boi-yo gala-mediya to-<u>diyo</u> (2nd.s.object snake-actor bite-contrary.to.fact.conditional die-unreal) (If) you had been bitten by (the) snake, you would have died.
- holo hwa-lo oi gelo-bu-lobe (durative.time say-coordinate 3rd.pl.subj. wait-sit-continuative) Talked (for a) while, so we continued sitting waiting.
- ...ousou ebe howo-sogo-lo dimq-lo-delo home ha-lobalo (man banana work-plant-coordinate finish-coordinate-participial tree cut-in. process) ...having finished working planting bananas, (the) man was already in the process of cutting trees.
- sougou tiga na-loka-lobe (tobacco tie eat-pl-continuative)

  (They all as a group) continued smoking.

The indefinite affix -lan-Ja also occurs on the first verb of a verb phrase, in which case it acts as an infinitive.

- q i-la givq-bo (lst.s.subj. go-indefinite desire-past) I wanted to go.
- a wo ga- $\underline{la}$  i-live (lst.s.subj. sage pound-indefinite go-present) I am going to pound sage.
- how  $m_{\psi}$ -la homy-lu (water fall-indefinite ready-report)

  It is ready (about) to rain.

There are other affixes which are often added to verbs, but which have been classified as clause level clitics, since they also occur at the end of clauses which contain no verbs. These include such affixes as:

-ga quoted

-go emphatic

-o yelled

-siyo overheard

-dalo reported but not seen

-ba interrogative

-delo past participial

-doba future participial

Verbs may also become nouns or locatives by the addition of affixes.

that which hears (ear) to hear du-li du howotou-li ousou man who works (servant) howotou to work to-ma one who has died (dead one) to to die fofa-ma that which has been raised to raise fofa (platform or bridge) the down place to descend my-li mų

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