VERBAL CLAUSES OF SARANGANI BILAAN

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ONE OF THE MOST IMPORTANT FEATURES OF THE CLAUSE systems of Philippine languages is *focus*, i.e. the formal property by which attention is called to one nonpredicate nuclear element of a clause.[1] Attempts to describe the clauses and verb morphology of Philippine languages without consideration of focus result in the obscuring of the system.[2]   Recently, discoveries in the *classification of verb stems* of Philippine languages have led to further refinements in the description of clauses and verb morphology, viz. the specification of what affixes occur with what verb stems and the explanation of accompanying function differences of clause level elements.[3]

The purpose of this paper is to describe the types of verbal clauses in Sarangani Bilaan,[4] using the following criteria to contrast the types: (1) the focus of the clause,[5] (2) the stem classes in the predicate,[6] (3) the obligatory and optional elements of the clause nuclei.   We follow the tagmemic model.[7]

A clause is any string of tagmemes which consists of only one predicate tagmeme among the constituent tagmemes of the string, and which fills a slot on the sentence level.[8]   The two main kinds of verbal clauses

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[1] For further discussion of focus, see Footnote 9 of Jannette Forster, "Dual Structure of Dibabawon Verbal Clauses," *Oceanic Linguistics* 3.44 (1964).

[2] For a recent example of Tagalog verbs described without focus, see Teodoro A. Llamzon, "Main Transient Formations in Tagalog," *The Philippine Journal of Science* 95.143.57 (1966).

[3] See Lawrence A. Reid, *An Ivatan Syntax* (Special Publication No. 2 of Oceanic Linguistics, 1966), 11-17; Robert G. Ward and Jannette Forster, "Verb Stem Classes in Maranao Transitive Clauses," *Anthropological Linguistics* 9:6.30-42 (1967); Jannette Forster and Myra L. Barnard, "A Classification of Dibabawon Active Verbs," *Lingua* (in press).

[4] The Sarangani dialect of Bilaan has approximately ten thousand speakers, located in the southern part of Cotabato Province on the island of Mindanao. The data for this paper were collected from 1959 to 1965 under the auspices of the Summer Institute of Linguistics. The phonemes of Sarangani Bilaan are: *a, a* (low back), *b, d, e* (high central), *e* (mid front), *f, g, h, i, k, l, m, n, ng, o, q* (glottal stop), *s, t, u, w, y.* For a description of the phonemes of the Koronadal dialect of Bilaan, see James and Gladys Dean, "The Phonemes of Bilaan," *The Philippine Journal of Science* 84.311-22 (1956).

[5] This is described by Kenneth L. Pike in "A Syntactic Paradigm," *Language* 39.216-30 (1963)

[6] A similar classification for the Koronadal dialect of Bilaan is found in Norm Abrams, "Word Base Classes in Bilaan," *Lingua* 10.391-402 (1961).

[7] Robert E. Longacre, *Grammar Discovery Procedures* (The Hague: Mouton and Co., 1964) and Kenneth L. Pike, *Language in Relations to a Unified Theory of the Structure of Human Behavior,* second rev. ed. (The Hague: Mouton and Co., 1967).

[8] Longacre, *op. cit.,* 35.

are active and causative. These then are divided into four basic types according to the grammatical focus of the predicate, viz. subject focus, object focus, direction focus, and accessory focus.[9] Only the tagmeme in focus may be manifested by the ⟨TOPIC⟩ pronoun set. Topic (i.e. the tagmeme being focused) may further be identified as the tagmeme which may be placed in prepredicate position for emphasis.

We make the distinction between participant role (the lower case notations) and grammatical role of the nonpredicate tagmemes because each verbal clause is structurally oriented toward (i.e. focuses) either the subject, the object, the direction, or the accessory; and these four grammatical functions do not have a one-to-one correspondence to the participant roles.[10] This distinction may be noted especially in the active accessory focus, where the grammatical role of accessory has the participant role of goal when class 2 and class 4 verb stems occur in the predicate; whereas the accessory has the participant role of instrument when class 1 and class 7 verb stems occur. This distinction between grammatical and participant roles is also significant with regard to causative versus active clauses.

We present the nuclei of active clauses and then the nuclei of causative clauses. The formulas represent the usual order of tagmemes. Nuclear tagmemes are the predicate and those tagmemes which may be in focus. Peripheral tagmemes are never in focus, viz. time and location. Time and location occur either initial, medial, or final in any verbal clause. In the following examples, time and location tagmemes are enclosed in parentheses.

(*dtuq di bali*)—L *n-bel-am qigem.*
 there house   roll out-you mat
'You roll out the mat there at the house.'
(*malbutang*)—Ti *s-m-aloq bigkoq.*
last night   m-hunt   Bigko
'Last night Bigko went hunting.'
n-ebe-n (*gine*)—Ti *kafi* (*dtuq di gumligo*)—L.
n-take-she recently coffee there field
'Just a little while ago she took coffee to the field.'
m-neq qale (*deqen*)—L (*walu butang*)—Ti.
m-stay they there eight night
'They stayed there eight nights.'

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[9] As in Ward and Forster, *op. cit.*, for Maranao, we make focus difference more basic than verb stem class in the description of clauses; each focus set is further subdivided on the basis of stem class. Reid, *op. cit.*, for Ivatan and Forster and Barnard, *op. cit.*, for Dibabawon make the primary division by stem class, with further subdivisions by focus.
[10] Forster, *op. cit.*, 28.

There are further sections on emphatic clauses and morphophonemic changes. Symbol explanations, the pronoun sets, and the verb stem classes are given in three appendixes.

I. ACTIVE VERBAL CLAUSE NUCLEI

An active verbal clause nucleus contains one obligatory noncausative predicate tagmeme inflected for focus and an obligatory topic tagmeme plus other optional and obligatory tagmemes.

Subjective verbal clauses

Subjective verbal clauses are divided into three classes. All verb stem classes occur in one of the three classes of subject focus.

(1) $\text{SubvbCl}_{1,3} = + \text{Ps}_{1,3}: \text{Vs}_{1,3} + \text{Sac/T}: \langle \text{TOPIC} \rangle \pm \text{Ddi}:$
     $\langle \text{NONTOPIC}^1 \rangle +/\pm \text{Og}: \langle \text{NONTOPIC}^1 \rangle$

Formula reads: A subjective verbal clause, of stem classes **1 and 3,** consists of a subjective verbal predicate filled by subject focused **verbs** from stem classes 1 and 3 plus obligatory topic subject-as-actor **tagmeme** manifested by $\langle \text{TOPIC} \rangle$ plus an optional direction tagmeme **manifested** by $\langle \text{NONTOPIC}^1 \rangle$ plus an optional object-as-goal tagmeme **manifested** also by $\langle \text{NONTOPIC}^1 \rangle$.

Examples:

Class 1:

m-alob (qale)—T ku quyen fligo.
m-wash   they   Uyen dish
'They wash the dishes for Uyen.'

Class 3:

m-asá (qale)—T ku quyen liblu.
m-read   they   Uyen book
'They read the book to Uyen.'

There is a subclass of this type, the predicate of which is filled by class 1' or class 3', in which the object tagmeme is not optional but obligatory.

Examples:

Class 1':

d-am-yo (qale)—T deg tingáq.
m-bathe they   me child
'They bathe the child for me.'

Class 3':

t-m-atek (qale)—T *deg qigem.*
m-drop   they   me mat
'They drop the mat to me.'

(2) SubvbCl$_{2,4}$ = + Ps$_{2,4}$: Vs$_{2,4}$ + Sac/T: $\langle$ TOPIC $\rangle$
                  $\pm$ Ddi: $\langle$ NONTOPIC^1 $\rangle$ +/$\pm$ Ag: $\langle$ NONTOPIC^1 $\rangle$

Examples:

Class 2A:

m-lé (qale)—T *deg qanuk.*
m-give they   me chicken
'They give a chicken to me.'

Class 2B:

ftatek (qale)—T *deg sulat.*
drop they   me letter
'They drop the letter to me.'

Class 4A:

t-am-doq (qale)—T *deg dad ngáq.*
m-teach   they   me plural child
'They teach the children for me.'

It is to be noted that with class 4A verb stems an accessory-as-goal tagmeme usually occurs; there are, however, occurrences when only the predicate and topic are obligatory.

There is a subclass of this type, the predicate of which is filled by class 2A' or 4B, in which the accessory tagmeme is not optional but obligatory.

Examples:

Class 2A':

s-am-lob (qale)—T *defi naláf.*
m-drop off they   me fish
'They drop off the fish for me.'

Class 4B:

fileq (qale)—T *deg kayo qén.*
lay down they me wood that
'They lay that wood down for me.'

(3) SubvbCl$_{5,6,7}$ = + Ps$_{5,6,7}$: Vs$_{5,6,7}$ + Sac/T: $\langle$ TOPIC $\rangle$
                  $\pm$ Ddi: $\langle$ NONTOPIC^1 $\rangle$

Examples:

Class 5:

dyo (qale)—T *di yéqél.*
bathe they   water
'They bathe at the water.'

Class 6A:

foqol (qale)—T di yéqél qén.
go downstream they water that
'They follow that river downstream.'

Class 6B:

m-léq (qale)—T di báli.
m-return they   house
'They return home.'

Class 7:

m-agin (qale)—T gami.
m-accompany they us
'They accompany us.'

Objective verbal clauses

Objective verbal clauses are divided into two classes.

(1) $ObjvbCl_1 = + Po_1: Vo_1 \pm Sac: \langle NONTOPIC^2 \rangle \pm Ddi:$
     $\langle NONTOPIC^1 \rangle + Og/T: \langle TOPIC \rangle \pm Ainst: comNp$

Example:

n-alob-la ku quyen (kulang)—T sabun qén.
n-wash they Uyen   pot   soap that

'They wash the cooking pot for Uyen with that soap.'

(2) $ObjvbCl_3 = + Po_3: Vo_3 \pm Sac: \langle NONTOPIC^2 \rangle \pm Ddi:$
     $\langle NONTOPIC^1 \rangle + Og/T: \langle TOPIC \rangle$

Example:

b-n-asa-la ku quyen (liblu)—T.
n-read-they   Uyen   book
'They read the book to Uyen.'

Directional verbal clauses

Directional verbal clauses are divided into two classes.

(1) $DirvCl_2 = + Pd_2: Vd_2 \pm Sac: \langle NONTOPIC^2 \rangle + Ddi/T:$
     $\langle TOPIC \rangle \pm Ag: \langle NONTOPIC^1 \rangle$

Examples:

Class 2A:

b-an-lé-m (qale)—T qanuk.
n-give-you they   chicken
'You give a chicken to them.'

Class 2B:

f-an-tuf-ám (basoq)—T *qaweng.*
n-send down-you Baso   boat
'You send down the boat to Baso.'

(2) $DirvbCl_{6,7} = + Pd_{6,7}: Vd_{6,7} \pm Sac: \langle NONTOPIC^2 \rangle$
$+ Ddi/T: \langle TOPIC \rangle$

Examples:

Class 6A:

f-n-oqol-la (qi yéqél)—T.
n-downstream-they river
'They send (it) downstream.'

Class 6B:

n-ulé-la (gami)—T.
n-laugh-they us
'They laugh at us.'

Class 7:

n-ilá-gu (qale)—T.
n-run-I   them
'I ran away from them.'

Accessory verbal clauses

Accessory verbal clauses are divided into two classes on the basis of the situational roles of the accessory tagmeme. In class 1 the situational role of the accessory is instrument, and in class 2 it is goal.

(1) There are two types of class 1 accessory verbal clauses.

(a) $AccvbCl_1 = + Pacc_1: Vacc_1 \pm Sac: \langle NONTOPIC^2 \rangle$
$\pm Og: \langle NONTOPIC^1 \rangle + Ainst/T: comNp$

Example:

qaloh-gu fligo (sábun qani)—T.
wash-I   dish   soap this
'I'm using this soap to wash the dishes.'

(b) $AccvbCl_7 = + Pacc_7: Vacc_7 \pm Sac: \langle NONTOPIC^2 \rangle$
$+ Ddi: \langle NONTOPIC^1 \rangle + Ainst/T: comNp$

Example:

qagot-gu di kayo (tnaloq-gu)—T.
hold on-I   tree   finger-my
'I'll hold on to the tree with my fingers.'

(2) There is one type class 2 accessory verbal clause.

$AccvbCl_{2,4} = + Pacc_{2,4}: Vacc_{2,4} \pm Sac: \langle NONTOPIC^2 \rangle$
$\pm Ddi: \langle NONTOPIC^1 \rangle + Ag/T: \langle TOPIC \rangle$

Examples:

Class 2A:

blé-gu dale (qanuk)—T.
give-I them chicken
'I'll give a chicken to them.'

Class 2B:

ftufá-gu dale (qi qaweng)—T.
send down-I them   vinta
'I'll send down the boat to them.'

Class 4A:

dlu-la deg (kodáq)—T
chase-they me horse
'They chase after the horse for me.'

Class 4B:

fuléq-am ku beted (slági)—T
return-you Beted agong
'You return the agong for Beted.'

It has been noted that with three stems of class 4 the topic may be accessory-as-instrument. This subtype has the following formula:

$$\text{AccvbCl}_4 = + \text{ Pacc}_4 \text{: Vacc}_4 + \text{Sac: } \langle \text{NONTOPIC}^2 \rangle \underset{\pm}{+} \text{Ddi:}$$
$$\langle \text{NONTOPIC}^1 \rangle \underset{\pm}{+} \text{Ainst/T: } \langle \text{TOPIC} \rangle$$

Example:

dlu-la kodáq (skél qén)—T.
chase-they horse switch that
'They use that switch to chase the horse.'

Type of Cl.	Tagmemes which occur				
Sub 1,3	+ Ps 1,3	+ Sac/T $\pm$ Ddi	$\pm$ Og		
Sub 2,4	+ Ps 2,4	+ Sac/T $\pm$ Ddi		$\pm$ Ag	
Sub 5,6,7	+ Ps 5,6,7	+ Sac/T $\pm$ Ddi			
Obj 1	+ Po 1	$\pm$ Sac $\pm$ Ddi	+ Og/T	$\pm$ Ainst/T	
Obj 3	+ Po 3	$\pm$ Sac $\pm$ Ddi	+ Og/T		
Dir 2	+ Pd 2	$\pm$ Sac + Ddi/T	$\pm$ Ag		
Dir 6,7	+ Pd 6,7	$\pm$ Sac + Ddi/T	.		
Acc 1	+ Pacc 1	$\pm$ Sac	$\pm$ Og	+ Ainst/T	
Acc 7	+ Pacc 7	$\pm$ Sac $\pm$ Ddi		+ Ainst	
Acc 2,4	+ Pacc 2,4	$\pm$ Sac $\pm$ Ddi	+ Ag/T	"+ Ainst/T	

Chart 1   Summary of active verbal clauses

II. CAUSATIVE VERBAL CLAUSES

Causative verbal clauses contrast with active verbal clauses in that: (1) the predicate tagmeme is inflected by *f-* for causative, (2) the situational role of the subject is that of causer of the action, (3) the situational role of the object is that of actor.

All but a few of the predicates in causative clauses look the same, but we are interpreting these predicates to carry the different foci, even though no marker is seen. The reason for this is: (1) a different tagmeme of the clause may be in focus, (2) there is a continuity with active verbal clauses. The subject focus marker *m-* does not occur because of the morphophonemic loss of *m* following *f*. The object focus marker $\langle n\text{-}\rangle$ occurs only with: (1) Class 3 stems that do not have membership in both transitive and intransitive clauses and (2) Class 4A stems that begin with a single consonant. The direction focus marker $\langle n\text{-}\rangle$ does not occur in the predicate when the clause is causative direction focus.

When causative clauses are accessory focus, the situational role of the accessory tagmeme is goal. Causative clauses with accessory-as-instrument in the situational role have not been found.

Causative subject verbal clauses

CaSubvbCl = + cPs:Vc + Sca/T: $\langle$TOPIC$\rangle$ $\pm$ Oac: $\langle$NONTOPIC[1]$\rangle$
        $\pm$ Ag: $\langle$NON-TOPIC[1]$\rangle$

Examples:

Class 1:

f-akol (ge)—T dale kasiláq.
cause-dig you they camote
'You have them dig (your) camote.'

Class 2A:

fa-blé (ge)—T dale qanuk.
cause-give you they chicken
'You have them give (your) chicken.'

Class 2B:

fa-flaqán (ge)—T dale qanuk.
cause-feed you them chicken
'You have them feed (your) chicken.'

Class 3:

fa-skuyá (ge)—T dale kodáq.
cause-race you them horse
'You have them race (your) horse.'

Class 4A:

fa-tdoq (ge)—T dale dad ngáq.
cause-teach you them pl. child
'You have them teach (your) children.'

Class 4B:

fa-fileq (ge)—T dale kayo.
cause-lay you   they wood
'You have them lay (your) wood down.'

Causative objective verbal clauses

CaObjvbCl = + cPo: Vc + Sca: $\langle$NON-TOPIC$^2\rangle$ + Oac/T: $\langle$TOPIC$\rangle$
$\pm$ Ddi: $\langle$NON-TOPIC$^1\rangle$ $\pm$ Ag: $\langle$NON-TOPIC$^1\rangle$

Examples:

Class 1:

f-alob-am (qale)—T ku quyen fligo.
cause-wash-you they   Uyen   dish
'You have them wash the dishes for Uyen.'

Class 2A:

fa-blé-m (qale)—T gami qanuk.
cause-give-you they we chicken
'You have them give us a chicken.'

Class 2B:

fa-fkaqán-am (qale)—T qi tingaq naláf qén.
cause-feed-you they   child fish that
'You have them feed the child that fish.'

Class 3:

f-an-basá-m (qale)—T liblu.
cause-n-read-you they book
'You have them read the book.'

Class 4A:

fa-tdo-am qale—T ku bigkoq dad ngaq.
cause-teach-you they   Bigko pl. child
'You have them teach the children for Bigko.'

Class 4B:

fa-fileq-am (qale)—T deg kayo.
cause-lay-you they   me wood
'You have them lay the wood down for me.'

Causative directional verbal clauses

CaDirvbCl = + cPd: Vc + Sca: $\langle$NON-TOPIC$^2\rangle$ + Oac:
$\langle$NON-TOPIC$^1\rangle$ + Ddi/T: $\langle$TOPIC$\rangle$ $\pm$ Ag: $\langle$NON-TOPIC$^1\rangle$

Examples:

Class 2A:

fa-blé-m máq (qale)—T *qanuk.*
cause-give-you father they chicken
'You have father give them a chicken.'

Class 2B:

fa-fkaqán-am ku yéq (qale)—T *knaqán.*
cause-feed-you mother they food
'You have mother feed them the food.'

All natural stems of Class 2, i.e. Class 2A, can occur with causative in direction focus. It should be noted, however, that only those derived stems that originate from natural transitive stems, i.e. Class 1 and Class 3, have been found in causative direction focus. Derived stems of Class 2 originating from intransitive verb stems do not occur in causative direction focus.

Causative accessory verbal clauses

CaAccvbCl = + cPacc: Vc + Sca: ⟨NON-TOPIC²⟩ + Oac:
    ⟨NON-TOPIC¹⟩ ± Ddi: ⟨NON-TOPIC¹⟩ + Ag/T: ⟨TOPIC⟩

Examples:

Class 1:

f-akol-am dale deg (kasiláq)—T.
cause-dig-you they me camote
'You have them dig camote for me.'

Class 2A:

fa-blé-m dale deg (kasiláq)—T.
cause-give-you they me camote
'You have them give me camote.'

Class 2B:

fa-fdak-la ku beted dale (báli)—T.
cause-raise-they Beted they house
'They had Beted raise the house for them.'

Class 3:

fa-skuyá-m dale (kodáq)—T.
cause-race-you they horse
'You have them race the horse.'

Class 4A:

fa-tdoq-am dale ku quyen (nini)—T.
cause-teach-you they Uyen Nini
'You have them teach Nini for Uyen.'

Class 4B:

*fa-fuléq-am dale deg (slági)—*T.
cause-return-you they me agong
'You have them return the agong to me.'

Type of clause	Tagmemes which occur				
Sub Focus	+ cPs	+ Sca/T $\pm$ Oac			$\pm$ Ag
Obj Focus	+ cPo	$\pm$ Sca	+ Oac/T	$\pm$ Ddi	$\pm$ Ag
Dir Focus	+ cPd	$\pm$ Sca	$\pm$ Oac	+ Ddi/T	$\pm$ Ag
Acc Focus	+ cPacc	$\pm$ Sca	$\pm$ Oac	$\pm$ Ddi	+ Ag/T

Chart 2. Summary of causative verbal clauses

III. EMPHATIC CLAUSES

The topic of a clause may be emphasized by being permuted to prepredicate position.

Examples:

eSubvbCl = (*qale*)—eT *m-alob.*
                They   wash
                'They are washing.'

eObjvbCl = (*kulang*)—eT *n-alob-la.*
                  pot   wash-they
                  'It is the pot they are washing.'

eDirvbCl = (*qale*)—eT *b-an-lé-m.*
                  they   give-you
                  'They are the ones that you give to.'

eAccvbCl = (*sábun*)—eT *qalob-am.*
                  soap   wash-you
                  'Use soap to wash with.'

The topic of subjective clauses may be redundantly emphasized when manifested by ⟨TOPIC⟩ pronoun except second and third person singular. Topic cannot be so emphasized when it is already in prepredicate emphasis position. Redundant emphasis topic follows the clause topic and is manifested by ⟨NONTOPIC[1]⟩ pronouns.

Examples:

*m-uléq (gu)—*T (*deg*)—eT *nan.*
m-return I   me   now
'I'm going home now.'

k-maqán (*qito*)—T (*gito*)—eT.
m-eat   we (incl)   we (incl)
'Let's all eat.'

dyo (*qale*)—T (*dale*)—eT.
bathe they   they
'They are bathing.'

When ⟨TOPIC⟩ and ⟨NONTOPIC¹⟩ pronouns have the same form, ⟨NONTOPIC²⟩ is substituted for ⟨TOPIC⟩.

*k-m-aqán gami gami nan.
m-eat   we (excl) we (excl) now
'We're going to eat now.'

  k-m-aqán-mi gami nan.
  m-eat-we   we now
  'We're going to eat now.'

IV. MORPHOPHONEMICS

The morphophonemic changes in Sarangani Bilaan consist of the addition and loss of phonemes.

Loss of phonemes

Stem initial glottal stop (*q*) is dropped upon prefixation:

m + *qimoq*	=	*mimoq*	'to do, make'
f + *qagin*	=	*fagin*	'to cause to accompany'
k + *qila*	=	*kila*	'running'

When *m* is prefixed to a root beginning with either *f* or *b*, the *f* or *b* is dropped and the *m* is retained, except when the root pattern is CVC:

m + *fwes*	=	*mwes*	'to uncover'
m + *fule*	=	*mule*	'to plant'
m + *blé*	=	*mlé*	'to give'
m + *bunge*	=	*munge*	'to bear fruit'

When the root pattern in CVC, C_1 being *b* or *f*, both *m* and *b* or *f* are retained:

m + *bat*	=	*mbat*	'to throw'
m + *buk*	=	*mbuk*	'to smoke'
m + *fok*	=	*mfok*	'to wash clothes'

In fast speech, word final *-h* is dropped preceding the enclitic pronouns:

munáh + *-n* = *munán*   'his forerunner'
baweh + *-m* = *bawem*   'your face'
baweh + *-la* = *bawela*   'their face'

Addition of phonemes

Only clusters of two consonants may occur. Upon prefixation, an *a* is added preceding a consonant cluster. Therefore, glottal initial bases (which lose their glottal) can take two prefixes before adding *a*; single consonant initial bases can take one prefix before adding *a*; consonant cluster initial bases add *a* before a prefix occurs.

s + *m* + *s* + *qebe* = *samsebe*   'continually bringing'
g + *m* + *bat*   = *gambat*   'able to throw'
g + *m* + *g* + *blé*   = *gamgablé*   'able to give'

The second and third person singular pronoun enclitics occur as *-m/-n* respectively. When they occur with a word ending in a consonant other than *h*, *a* is added before the enclitic. When they occur with a word ending in a vowel, the *-m/-n* only occur.

bunge + *n* = *bungen*   'its fruit'
sigal + *m* = *sigalam*   'your arm'

Normally, affixes *m* and *n* occur as prefixes, i.e. with single consonant initial bases, glottal stop initial bases, and when they co-occur with other prefixes. When only affixes *m* and *n* occur with bases beginning with consonant clusters, however, they occur as infixes following the first consonant of the base, unless that consonant is *f* or *b*. An *a* is then added preceding the affix.

m + *dsuq* = *damsuq*   'to sacrifice'
n + *blé*   = *banlé*   'to give'

Geminate consonant clusters cannot occur in Sarangani Bilaan. Therefore, when a prefix is added to a base beginning with the same consonant as the prefix, *a* is added to separate the two like consonants.

f + *fusuk* = *fafusuk*   'cause to enter'
s + *satu*   = *sasatu*   'together'

The consonant *-m-* is added to the prefix *gu-* preceding stems beginning with a glottal stop, a nasal, or *l*.

gu + *m* + *qinum* = *guminum*   'drinking place'
gu + *m* + *layeq* = *gumlayeq*   'clothes line'
gu + *m* + *neq*   = *gumneq*   'dwelling place'

Appendix A

Explanation of abbreviations

Cl	Clause
T	Topic
V	Verb
vb	Verbal
P	Predicate
Ca, c	Causative
Sub, s	Subject focus
Obj, o	Object focus
Di, d	Direction focus
Acc, acc	Acessory focus
S	Subject tagmeme
O	Object tagmeme
D	Direction tagmeme
A	Accessory tagmeme
ca	Causer
ac	Actor
g	Goal
di	Direction
inst	Instrument
$\langle$TOPIC$\rangle$	$\langle$TOPIC$\rangle$ pronouns, common noun phrase, proper noun phrase
$\langle$NONTOPIC[1]$\rangle$	$\langle$NONTOPIC[1]$\rangle$ nonactor pronouns, common noun phrase, proper noun phrase
$\langle$NONTOPIC[2]$\rangle$	$\langle$NONTOPIC[2]$\rangle$ actor pronouns, common noun phrase, proper noun phrase
m- m-,-m-,-am-	Subject focus marker
n- n-,-n-,-an-	Object/Direction focus marker
comNp	common noun phrase
/	Slot name symbols on either side indicate simultaneous occurrence of tagmemes
+	Obligatory tagmeme
±	Optional tagmeme
+/±	Obligatory tagmeme under certain conditions
e	Emphasis
L	Location tagmeme
Ti	Time tagmeme

Appendix B

Pronoun sets

⟨TOPIC⟩	⟨NONTOPIC²⟩	⟨NONTOPIC¹⟩	
qagu or *gu*	*-gu* or *-ta*	*deg* or *dagu*	'I, me'
ge	*-m* or *-am*	*ge*	'you (singular)'
kenen	*-n* or *-an*	*kenen*	'he, him, she, her'
qite	*-ta*	*gite*	'we, us (dual)'
gami	*-mi*	*gami*	'we, us (exclusive)'
qito	*-to* or *-ito*	*gito*	'we, us (inclusive)'
gamu	*-yu*	*gamu*	'you (plural)'
qale	*-la*	*dale*	'they, them'

⟨TOPIC⟩ indicates topic.

⟨NONTOPIC²⟩ indicates nontopic actor or possessor.

⟨NONTOPIC¹⟩ indicates nontopic direction or object.

Appendix C

Verb stem classes

Verb stems are divided into two main classes: transitive and intransitive. This division is made on the basis of how these stems function when inflected with causative *f-*. Transitive stems inflected with *f-* become causative stems, occurring in causative clauses. Intransitive stems, inflected with *f-* become derived transitive stems, occurring in active clauses. However, as derived stems, they may have an intrinsic causative meaning within the verb. See Chart 3.

Natural transitive	Causative
qalob 'to wash'	+ *f-* = *falob* 'to cause to wash'
Natural intransitive	Derived transitive
muléq 'to return (home)'	+ *f-* = *fuléq* 'to return something'

Chart 3

A few verb stems have dual membership as both transitive and intransitive verbs. See Chart 4.

Natural transitive	Natural intransitive
dyo-la tingáq (sabun)—T.	*dyo (qale)*—T.
'They use soap to bathe the child.'	'They are bathing.'

Chart 4

A few natural transitive stems of classes 1 and 3 are classed as derived transitive stems when they occur with *f-*, since the derived forms function grammatically in class 2. See Chart 5.

Natural transitive	Derived transitive
kaqán 'to eat'	+ *f-* = *fkaqán* 'to feed'

Chart 5

No intransitive stems can occur in causative clauses.

Chart 6 shows how both natural and derived transitive stems can be made causative.

Natural trans *qalob* 'to wash'	+ *f-* = *falob* 'to cause to wash'
Derived trans *fuléq* 'to return'	+ *f-* = *fafuléq* 'to cause to return'
Derived trans *fkaqán* 'to feed'	+ *f-* = *fafkaqán* 'to cause to feed'

Chart 6

Approximately 150 verb stems were used in the determination of these stem classes. Of this number, more than one-third occurred in class 1. Chart 7 displays the seven verb stem classes.

Class 1	Sac		Og	Ainst
Class 2	Sac	Ddi		Ag
Class 3	Sac		Og	
Class 4	Sac			Ag or Ainst
Class 5	Sac			
Class 6	Sac	Ddi		
Class 7	Sac	Ddi		Ainst

Chart 7. Verb stem classes. The vertical dimension gives the seven verb stem classes. The horizontal dimension gives the tagmemes which can occur as topic with each stem class in active clauses. Classes 1-4 are transitive; 5-7 are intransitive.

Class 1 verb stems

Stems in class 1 occur in active clauses in the following focuses: subject, object, and accessory. In subject focus the predicate is marked by the subject focus marker ⟨m-⟩, and the subject-as-actor is topic. In object focus the predicate is marked by the object focus marker ⟨n-⟩ and the object-as-goal is topic. In accessory focus the predicate is uninflected for focus, and the accessory-as-instrument is topic. Class 1' consists of a few verb stems that have membership in both transitive and intransitive (Class 5) classes. These stems require an obligatory object-as-goal in subject focus when occurring in Class 1'.

In causative clauses this stem class is found in subject, object, and accessory focuses. In each case the predicate is uninflected for focus and the subject-as-causer, the object-as-actor, and the accessory-as-goal, respectively, are topics.

Examples of class 1 verb stems are listed below:

1. *qalob*	'to wash'	6. *qebe*	'to bring'
2. *qakol*	'to dig'	7. *dak*	'to pound'
3. *tbulud*	'to cut hair'	8. *fok*	'to wash clothes'
4. *klang*	'to cut'	9. *dyo*	'to bathe someone'
5. *tbél*	'to sew'	10. *stifun*	'to assemble something'

Stems 9 and 10 are from class 1'.

Class 2 verb stems

Stems in class 2 are divided into subclasses A (natural) and B (derived), and they occur in subject, direction and accessory focus. In subject focus the predicate is marked by the subject focus marker ⟨*m-*⟩ and the subject-as-actor is topic. In direction focus the predicate is marked by the direction focus marker ⟨*n-*⟩ and the direction-as-direction is topic. In accessory focus the predicate is uninflected for focus and the accessory-as-goal is topic. Class 2A' consists of a few verb stems that have membership in both transitive and intransitive (Class 5) classes. These stems require an obligatory accessory-as-goal in subject focus when occurring in class 2A'.

Class 2B stems are derived mainly from class 6 and class 7 stems affixed by *f-*. Two stems have been observed from class 5. Also a few stems from class 1 and class 3 act as derived stems affixed by *f-*.

In causative clauses this stem class is found in the following focuses: subject, object, direction, and accessory. Class 2 is the only stem class that occurs in all four foci of causative clauses. In each focus the predicate is uninflected for focus, and the subject-as-causer, the object-as-actor, the direction-as-direction, and the accessory-as-goal, respectively, are topics.

Examples of class 2 verb stems are listed below:

A (Natural)

1.	*blé*	'to give'	6.	*fni*	'to beg'
2.	*bat*	'to throw'	7.	*tulen*	'to relate'
3.	*dsuq*	'to sacrifice'	8.	*bal*	'to ask permission'
4.	*tyáq*	'to divide'	9.	*dek*	'to command/send'
5.	*salil*	'to peek at'	10.	*slob*	'to drop off'

Stems 9 and 10 are from class 2A'.

B (Derived)

1.	*ftufá*	'to go down/send down'	6.	*febe*	'to send'
2.	*ftatek*	'to drop'	7.	*fkaqán*	'to feed'
3.	*fagot*	'to hold'	8.	*fdem*	'to loan'
4.	*ftabeng*	'to get help'	9.	*fdak*	'to raise a house'
5.	*fatdak*	'to spill/sprinkle'	10.	*fbayád*	'to sell'

Class 3 verb stems

Stems in class 3 occur in active clauses in the following focuses: subject and object. In subject focus the predicate is marked by the

subject focus marker ⟨*m-*⟩ and the subject-as-actor is topic. In object
focus the predicate is marked by the object focus marker ⟨*n-*⟩ and the
object-as-goal is topic. Class 3' consists of a few verb stems that have
membership in both transitive and intransitive (Class 5) classes. These
require an obligatory object-as-goal in subject focus when occurring in
class 3'.

In causative clauses this stem class is found in subject, object and
accessory focus. In subject focus the predicate is uninflected for focus
and the subject-as-causer is topic. In object focus the predicate is
also uninflected for focus, except that some class 3 stems (viz. those
which do not have membership in both transitive and intransitive classes)
occur with the object focus marker ⟨*n-*⟩, and the object-as-actor is topic.
In accessory focus the predicate is uninflected for focus and the accessory-
as-goal is topic.

Examples of class 3 verb stems are listed below:

1. *dem*   'to borrow'   6. *fláwi*   'to sun'
2. *lad*   'to steal/snatch'   7. *skuyá*   'to race'
3. *basá*   'to read'   8. *tatek*   'to drop'
4. *kaqán*   'to eat'   9. *ska*   'to separate'
5. *tlas*   'to change'   10. *stufiq*   'to alternate'

Stems 7 through 10 are from class 3'.

Class 4 verb stems

Stems in class 4 are divided into subclasses A (natural) and B
(derived), and they occur in subject and accessory focus. In subject focus
the predicate is marked by the subject focus marker ⟨*m-*⟩ and the subject-
as-actor is topic. In accessory focus the predicate is uninflected for
focus and the accessory-as-goal is topic. A few stems in the accessory
focus occur with either the accessory-as-goal or the accessory-as-instru-
ment as topic. Class 4B stems are derived from class 6 and class 7
stems. These derived stems require an obligatory accessory-as-goal tag-
meme in subject focus.

In causative clauses this stem class is found in subject, object, and
accessory focus. In subject focus the predicate is uninflected for focus
and the subject-as-causer is topic. In object focus the predicate is unin-
flected for focus (except class 4A stems beginning with a single consonant,
in which case they are inflected with ⟨*n-*⟩) and the object-as-actor is
topic. In accessory focus the predicate is uninflected for focus and the
accessory-as-goal is topic.

Examples of class 4 verb stems are listed below:

A (Natural)

1.	*kitin*	'to carry in hand'	5.	*tdoq*	'to teach/point'
2.	*linge*	'to hear'	6.	*dlu*	'to chase'
3.	*kná*	'to dream'	7.	*tlo*	'to call'
4.	*laloq*	'to follow'			

B (Derived)

1.	*falwáq*	'to cast out'	6.	*fafoqol*	'to send downstream'
2.	*fila*	'to run something'	7.	*fafidang*	'to purposely close the eyes'
3.	*fileq*	'to lay something'	8.	*fuleq*	'to return something'
4.	*fneng*	'to brighten'	9.	*fneq*	'to detain'
5.	*fafusuk*	'to put inside'	10.	*fulé*	'to make laugh'

Class 5 verb stems

All stems of this class also occur in a transitive class. As intransitive verbs, class 5 stems occur only in active subject focus with the subject-as-actor as topic. The predicate is not marked for focus, that is, by sub-jective focus marker ⟨*m-*⟩. Only two of the verb stems from this class may be derived: *dek* 'to command/send' and *tatek* 'to drop'.

Examples of Class 5 verb stems are listed below:

1.	*dyo*	'to bathe'	5.	*stufiq*	'to alternate'
2.	*skuyá*	'to race'	6.	*dek*	'to command/send'
3.	*tatek*	'to drop'	7.	*slob*	'to drop off'
4.	*ska*	'to separate'	8.	*stifun*	'to assemble'

Class 6 verb stems

Stems in class 6 occur in active subject and active direction focus. They are divided into two subclasses (A and B) on the basis of the occurrence of subject focus inflection. In subject focus, subclass A stems are uninflected; while subclass B stems are inflected. Subject-as-actor is topic in both cases. In direction focus the predicate is marked by the direction focus marker ⟨*n-*⟩ and the direction-as-direction is topic.

Examples of class 6 verb stems are listed below:

A.			B.		
1.	*tufá*	'to go down'	1.	*tdák*	'to leak'
2.	*fusuk*	'to enter'	2.	*neng*	'to shine'
3.	*foqol*	'to go downstream'	3.	*quléq*	'to go home'
4.	*fidang*	'to close eyes'	4.	*lwáq*	'to come out'
			5.	*qulé*	'to laugh'

Class 7 verb stems

Class 7 stems occur in active subject, active direction, and active accessory focus. In subject focus the predicate is marked by the subject focus marker ⟨*m-*⟩ and the subject-as-actor is topic. In direction focus the predicate is marked by the direction focus marker ⟨*n-*⟩ and the direction-as-direction is topic. In accessory focus the predicate is uninflected for focus and the accessory-as-instrument is topic.

Examples of class 7 verb stems are listed below:

1.	*qileq*	'to lie down'	6.	*kwák*	'to cry'
2.	*neq*	'to stay'	7.	*tabeng*	'to help'
3.	*qutáq*	'to vomit'	8.	*qagot*	'to hold'
4.	*tu*	'to perspire'	9.	*qayeng*	'to fly'
5.	*qila*	'to run'	10.	*qagin*	'to accompany'