PHONOLOGY AND SYNTAX OF SEDANG, A VIETNAM MON-KHMER LANGUAGE

Kenneth D. Smith

A DISSERTATION

in

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Variations of the basic noun phrase with an initial noun phrase head are augmented by the count noun phrase, pluralized noun phrase, pronoun reference phrase, and prepositional phrase which occur in the subject, object, and indirect object slots of clauses. The verb phrase (which follows the subject) consists of a preverbal adverb, a verbal particle, one or two preverbs, and one or more main verbs. The main verbs are classified in terms of the clause type(s) in which they may occur, and include quotative, container, bitransitive, semitransitive, transitive, intransitive, equative, and existive verbs.

Apart from the above nuclear clause elements, there are peripheral clause elements which include a temporal phrase (prenuclear), locative phrase, adverbial phrase, and final particles (all postnuclear). The adverbial phrase subsumes the manner phrase, similitive phrase, comparative phrase, descriptive phrase, quantitative phrase, purposive phrase, and volitional phrase.

Variations of the basic clause types include permuted and transformed clauses. The former are the postposed subject clause, the object (or complement) emphasis clause, the locative emphasis clause, and the adverbial emphasis clause. The latter are the echo subject clause, the imperative clause, the benefactive clause, the reflexive clause, the reciprocal clause, the focus clause, and the interrogative clause.

Statistics are provided to indicate the relative frequency of the various syntactic units in natural text, using, in part, a 27,437-word concordance as well ex an exacting analysis of 765 clauses.

Occasional affixation in Sedang encompasses four major affixes: the causal, the reciprocal, and the adversative prefixes, and the nominal infix.

Apart from vocatives, exclamations, and responses, sentences are analyzed as consisting of one or more clauses. Complex sentence types include the conditional sentence, the causal sentence, the contrastive sentence, the concessive sentence, and the resultant sentence.

Morpheme reduplication, repetition, expansion, series, ellipsis, onomatopoeia, special descriptives, and poetic form are also briefly discussed.

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TABLE OF ABBREVIATIONS

(Numbers refer to section where abbreviation is defined,
though it may occur prior to that section in the text)

ABBREVIATIONS FOR PART TWO, SEDANG PHONOLOGY

C	consonant, 4.0
C_1	initial single consonant, 4.0
C_f	final consonant, 4.0
C_m	cluster modifier, 4.0
C_p	presyllable consonant, 4.0
Fr	French, 6.2
G, VG	glided vowel, 4.0
Hr	Hre, 6.1
LR	lax register, 4.1
N	nasalization, 4.0
PC	Proto-Chamic, 6.2
PNB	Proto-North-Bahnaric, 6.0
R	register, 4.0
Sdg	Sedang, 6.1
Skt	Sanskrit, 6.2
TR	tense register, 4.1

V	simple vowel, 4.0
V_p	presyllable vowel, 4.0
Va	central vowel glide, 4.2
Ve	front vowel glide, 4.2
VN	Vietnamese, 6.2
$\hat{Vo}$	back vowel glide, 4.2

Digraphs and uncommon orthographic symbols:

â	short schwa
e	[ɛ]
ê	[e]
ch	[č]
ng	[ŋ]
nh	[ñ]
o	[ɔ]
ô	[o]
ơ	schwa
s	retroflexed s̲
y	[ɰ]
x	[s]
∅	no consonant, open syllable
ʔ, ˈ , -	glottal stop
ˇ	(in languages other than Sedang) also short vowel
ˈ	preglottalization of consonants
´	vowel laryngealization

`   vowel nasalization; in non-standard Sedang

               represents breathy vowels

~   vowel naso-laryngealization

ABBREVIATIONS FOR PART THREE, SEDANG SYNTAX

AdvEmp CL	adverbial emphasis clause, 11.1
AdvP	adverbial phrase, 10.3
anN	animate noun, 7.3
an-plM	animate plural marker, 7.3
apNum	approximate number, 7.2
B CL	bitransitive clause, 9.3
B Vb	bitransitive verb, 8.1
B VP	bitransitive verb phrase, 8.1
Ben CL	benefactive clause, 11.2
BenP	benefactive phrase, 11.2
bNP	basic noun phrase, 7.1
C CL	container clause, 9.2
C Vb	container verb, 8.1
C VP	container verb phrase, 8.1
CausConj	causal conjuntive, 13.2
CL	clause, 9.0
Cl	classifier, 7.2
cN	countable noun, 7.2
cNP	count noun phrase, 7.2
Co	complement, 9.7
CoConj	coordinating conjunctive, 12.7

CoEmp CL	complement emphasis clause, 11.1
CompP	comparative phrase, 10.3
CompPt	comparative particle, 10.3
ConcConj	concessive conjunctive, 13.4
CondConj	conditional conjunctive, 13.1
Conj	conjunctive, 13.0
ContConj	contrastive conjunctive, 13.3
Dem	demonstrative, 7.1
DesP	descriptive phrase, 10.3
DName	descriptive name, 7.1
Eq CL	equative clause, 9.7
Eq Vb	equative verb, 8.1
Eq VP	equative verb phrase, 8.1
Eq1 CL	zero verb equative clause, 9.7
Eq2 CL	xê 'be' equative clause, 9.7
Eq3 CL	chiang 'become' equative clause, 9.7
Eq4 CL	oî 'be' equative clause, 9.7
eS CL	echo subject clause, 11.2
Ex CL	existive clause, 9.8
Ex Vb	existive verb, 8.1
Ex VP	existive verb phrase, 8.1
Excl	exclamation, 13.7
Foc CL	focus clause, 11.2
FocP	focus phrase, 11.2
FocPt	focus particle, 11.2

fPt	final particle, 10.4
Frag	clause fragment, 12.9
gen-plM	general plural marker, 7.3
GName	geographical name, 7.1
I CL	intransitive clause, 9.6
I Vb	intransitive verb, 8.1
I VP	intransitive verb phrase, 8.1
Imp CL	imperative clause, 11.2
IO	indirect object, 9.1
Kin	kinship term, 11.2
Loc	locative, 7.1
LocEmp CL	locative emphasis clause, 11.1
LocP	locative phrase, 10.2
ManP	manner phrase, 10.3
ManPt	manner particle, 10.3
Mult	(number) multiplier, 7.2
N	noun, 7.1
NomInter	nominal interrogative, 7.1
NP	noun phrase, 7.0
NPH	noun phrase head, 7.1
Num	number, 7.2
NumInter	numeral interrogative, 7.2
O	object, 9.1
OEmp CL	object emphasis clause, 11.1
plM	plural marker, 7.3

plNP	pluralized noun phrase, 7.3
PName	personal name, 7.1
Pred	predicate, 9.1
PRefP	pronoun reference phrase, 7.4
Prep	preposition, 7.5
PrepP	prepositional phrase, 7.5
Pron	pronoun, 7.1
pS CL	postposed subject clause, 11.1
PurP	purposive phrase, 10.3
PurPt	purposive particle, 10.3
pVb	preverb, 8.3
pvAdv	preverbal adverb, 8.5
Q CL	quotative clause, 9.1
Q Vb	quotative verb, 8.1
Q VP	quotative verb phrase, 8.1
Quan	quantitative word, 10.3
Quanf	quantifier, 10.3
QuanfP	quantifier phrase, 10.3
QuanP	quantitative phrase, 10.3
QuanPt	quantitative particle, 10.3
Recip CL	reciprocal clause, 11.2
RecipP	reciprocal phrase, 11.2
Refl CL	reflexive clause, 11.2
ReflP	reflexive phrase, 11.2
ReflPt	reflexive particle, 11.2
RelPt	relative particle, 7.1

RelrPt	relator particle, 7.5
ResConj	resultant conjunctive, 13.5
Resp	response, 13.8
S	subject, 9.1
S CL	semitransitive clause, 9.4
S Vb	semitransitive verb, 8.1
S VP	semitransitive verb phrase, 8.1
Sim	similitive expression, 10.3
SimP	similitive phrase, 10.3
SimPt	similitive particle, 10.3
sPt	series particle, 12.8
SubTemp	subordinated temporal expression, 10.1
T CL	transitive clause, 9.5
T Vb	transitive verb, 8.1
T VP	transitive verb phrase, 8.1
Temp	temporal (word), 10.1
TempDem	temporal demonstrative, 10.1
TempNP	temporal noun phrase, 10.1
TempP	temporal phrase, 10.1
TempSub	temporal subordinator, 10.1
vAdj	verbal adjective, 7.1
Vb	(main) verb, 8.1
vDes	verbal descriptive, 7.1
Voc	vocative, 13.6
VolP	volitional phrase, 10.3
VolPt	volitional particle, 10.3

VP	verb phrase, 8.0
vPt	verbal particle, 8.4
w	with
$_x$Vb	unstated verb class, 8.0
$_x$VP	unstated verb phrase type, 8.0
$\emptyset$	zero verb, 9.7
(...)	outer brackets in formula: optional occurrence, Introduction
...:(...)	inner brackets in formula: restrictive filler requirement, Introduction
-	separates syntactic elements in phrase and clause formula

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PART ONE: INTRODUCTION

The Sedang speak a Mon-Khmer language of the North
Bahnaric branch and have lived traditionally in central
Kontum Province in the South Vietnam central highlands.
Their population has been variously estimated at from
25,000 to 60,000 (NCTXH, 1960) to 80,000 (NNCDT, 1959)
(these two references cited by Hickey (1964)).

They refer to themselves as róteang (though the term
also has the connotation of the more inclusive "montagnard"),
which, when translated into Bahnar (hódang) and transliter-
ated into French, is equivalent to Sedang. Devereux (1937,
1938) has given their ethnonym as hã(rhn)deː(ng).

A brief survey of their history is given in chapter 1,
and chapter 2 presents some details of the Sedang culture.
Chapter 3 summaries the erroneous classification of the
Sedang as Austronesian and the basis upon which it is
classified as North Bahnaric.

CHAPTER 1   HISTORICAL AND GEOGRAPHICAL SETTING

The recorded history of the Vietnam area begins with
the arrival of high-caste Indians, following in the wake of
traders who apparently had been visiting the area for a long
time. This Indian colonization had taken root by the begin-
ning of the Christian era. Nothing is known, of course, of
the prehistoric migrations that resulted in the dispersion
of people, like the Sedang, throughout the area. The Funan
kingdom was probably the most ancient kingdom encountered
by the Indians and was located in the general area now occu-
pied by Cambodia. Sanskrit inscriptions in Southeast Asia
date from the early centuries of this era. The Chinese had
contact with Funan as indicated in their histories. North
of Funan was a small kingdom known as Kambuja, accessible to
the Indians by an overland route through Siam and Laos. A
fine bronze image of Buddha datable in the 2nd or 3rd cen-
tury found in the coast of the South China Sea indicates
that the Indians had established contact also with the Cham-
pa kingdom who were extended along the eastern coast of the
peninsula.

The fall of Funan occurred about the middle of the 6th
century, due to the growing power of the king of Kambuja. At

the beginning of the 7th century the Kambuja kingdom encompassed the whole of Cambodia and Cochin China. Kambuja was then a dominant power in Indochina during the 9th and 10th centuries. The Kambuja king defeated the Chams in a naval engagement in 1181, but the kingdom broke down when the Thais invaded in the 13th century.

In 1371 the Chams attacked Annam (in what is now North Vietnam) and sacked Hanoi, but in a counterattack the Champa (northern) capital of Indrapura was lost to Annam in 1402. During the next century Annam annexed the whole of Champa down to (present-day) PhuYên, but a diminutive Cham state continued in the south for some centuries. A succession of Cham kings was recognized by China until 1543. A Cham court existed in that region until the 18th century when the Annamese took PhanRang.

Except for the Khmers, the recorded history of the area does not deal with the Mon-Khmer peoples of Vietnam. They certainly must have been affected by the warring between Funan and Kambuja, between Kambuja and Champa, and between Champa and the Annamese. Lexical borrowing does attest to their contact with the Champa people, if not also with the Indian colonizers (cf. such borrowings in Sedang, 6.2).

Lexico-statistics show that the four branches of Mon-Khmer found in Vietnam (Khmer, Bahnaric--Sedang is North Bahnaric (cf. chapter 3), Katuic, Vietnamese) are divergent within the range of 18-32% (Thomas, 1966b; Thomas and Head-

ley, 1970; Smith, 1974a). For lack of any other indication
or record, glottochronology can indicate a probable point in
time when these language branches separated. Taking the
lesser cognate relation (or more distant in time) as the
more probable point, it can be surmised that Proto-Mon-Khmer
split apart about 3800 years ago, or 1800 BC $\pm$ 500 years at
9/10 confidence level (Gudschinsky, 1956; Gleason, 1955.88).
The Bahnaric group has a principal division at 42-51%, separ-
ating North and South Bahnaric; or, 2,000 years ago, about
0 AD $\pm$ 300 years. The North Bahnaric languages are separated
by a range of 53-74% (see chapter 3), suggesting successive
splittings starting about 1400 years ago, or 600 AD $\pm$ 200
years.

Correlating these dates with the areal history cited
above suggests:

(1) Mon-Khmer separated into its major branches in the pre-
historic past;

(2) Bahnaric separated into its north and south divisions
during the time of the Funan kingdom. Perhaps Funan was a
Bahnaric group; unfortunately there is no linguistic infor-
mation on the Funan people.

(3) The first principal splits within North Bahnaric occur-
red during the period of warring between Kambuja and Funan.

(4) Later splits within North Bahnaric which ultimately led
to the separation of a people known today as the Sedang oc-
curred during the period of warring between Kambuja and

Champa.

Glottochronological studies also suggest that the Cham people left their Austronesian (or Malayo-Polynesian) cousins and reached the shores of Southeast Asia about 850 BC ± 450 years (30-40%: Thomas and Healey, 1962.26-27; Dyen, 1963. 19). The Chamic people subsequently split with an incursion into the Vietnam highland area by the Plateau Chamic people about 800 AD ± 200 years, probably during the time of the Khmer-Champa wars and also probably after the separation of North and South Bahnaric.

The entrance of the Chamic people into the highlands was the last major factor in determining the general location in the highlands of the Vietnam montagnard groups: the South Bahnaric groups in the south just north of Saigon, the Plateau Chamic groups extending from Banmethuot north to Pleiku, the Bahnar (Central Bahnaric?, cf. chapter 3) between Pleiku and Kontum, and the North Bahnaric language groups throughout Kontum Province and eastward to the coast. The Katuic people are north of the North Bahnaric groups, but separated from them by the Mekong River-South China Sea watershed. See Map 1.1.

The Sedang have thus been located in the central portion of what is now known as Kontum Province. The former government district center of Toumorong was probably the geographical center of the Sedang; the district centers of DakSut and DakTo, connected by National Highway #14, were on

**ETHNIC MINORITIES
OF SOUTH VIETNAM**

Quang Tri

BRU

Hue

PACOH

South China Sea

Danang

KATU

L E G E N D

Language Boundary ......
Language Name BAHNAR etc.
Place Name Dalat etc.

NORTHERN RESETTLED GROUPS:

MAN	Near Banmethuot
MUONG	Near Banmethuot , Tuc Trung
WHITE TAI	Near Dalat
BLACK TAI	Near Dalat , Pleiku
NUNG	Near Dalat
THO	Near Dalat , Long Khanh

This map does not show any new
resettlements

TAKUA

DUAN CUA

Quang Ngai

JEH KATUA

KAYONG

SEDANG

TODRAH

HRE

RENGAO

HALANG MONOM

Kontum

BAHNAR

Pleiku

JARAI

Qui Nhon

Phu Bon HARDI

Tuy Hoa

RADE

Banmethuot

E. MNONG

C.MNONG

Nha Trang

N.ROGLAI

Dalat

STIENG

S.ROGLAI

CHRU CHAM Phan Rang

KOHO

W.CHAM

S.ROGLAI

CHAM

CHRU

CHRAU JRO

Chau Doc Saigon

W.CHAM

Summer Institute of Linguistics 1974

Map 1.1 Ethnic minorities of South Vietnam

the western edge of their area; the military outpost of Mang
Buk on the eastern edge; and Kon Hreng (or Kon Hring, as it
is known outside the Sedang area), the largest (though dia-
lectally strange) village of Sedang, in the southwest. The
Sedang have thus been bounded (clockwise from the north) by
the Jeh, Duan, Cua?, Kotua, Hrê, Todrah, and Rengao peoples.
The Bahnar, Jarai (a Chamic group), and Halang peoples have
not been very much further away to the southwest. With the
watershed on the north and eastern sides of the Sedang area,
the lines of communication have been with the southwest.
In the west the Poko River flows south and ultimately west
into Cambodia at the Yali Falls; in the east the Dak Nge
River flows south to the Dak Bla River which encircles Kontum
City before flowing into the Poko River. In the south the
Tea Oi (or Dak Ui) River flows southwest to the Poko River.
The most prominant river for the Sedang, however, is the Tea
Póxái (or Dak Pai) River which winds through the central
Sedang area from north of Toumorong to the Kon Hreng area
where it flows into the Poko River. See Map 1.2. The area
is generally very mountainous, but the Sedang probably stay
below 3,000 or 4,000 feet elevation (Kontum City has an ele-
vation of 1800 feet). South Vietnam's highest mountain,
Ngoc Linh, 8364 feet elevation, known by the Sedang as Ngo
Éang, is in the northern Sedang area. It is in an area of
tremendous rainfall and is the scene of much Sedang folk-
lore.

Map 1.2 The Sedang area (only a few villages are indicated)

The French Catholic missionaries first entered the
Vietnam central highlands about 1843 to flee persecution by
the Buddhists in the QuiNhon area. They established their
first mission in Kontum in 1849 in the northern area of the
Bahnar tribe among whom their mission has concentrated its
work. On October 16, 1853, however, Father Dourisboure bap-
tized the first two Sedang catechumen (Guilleminet, 1952.
III.1).

In 1862 there was an epidemic among the Bahnar which
was blamed on the presence of foreigners by the sorcerers, at
which time "the Sedang aggravated the situation by attacking
villages" (Hickey, 1967.746). Such activities by the Sedang
must have been commonplace, in that the Sedang have been char-
acterized by the French as warriors and makers of arms, util-
izing the iron deposits in their area. Brenier (1948.76)
says that "the fighting qualities of the Sedang are indisput-
able".

In 1885 there were reports that the Sedang streams con-
tained gold and other minerals. In an effort to exploit the
area a Belgian adventurer, Marie David de Mayréna, Comte de
Ray, set upon a scheme in which he was proclaimed "the King
of the Sedang". Born in 1842 in Toulon, Var, and married in
1869, he later got the name of Baron, Charles de Mayréna,
while living in Saigon. In 1888 he entered the highlands
armed and with the concurrence of government, military and
religious leaders to enter into an alliance with Pim, the re-

puted chief of a grouping of Bahnar, Jarai and Sedang vil-
lages. The expressed purpose of the alliance was to contri-
bute to extending French influence in those areas, quenching
Jarai hostility, and finding a route through the area to
Attopeu, Laos. On June 3, 1888, a constitution was signed
(Soulié, 1927.82ff), apparently written in French and
Sedang. Article 2 stated that since the Sedang teritories
were the most extensive in the confederation, it would take
the name Royaume Sedang. Article 3 established Mayréna, ap-
parently a man of "striking personality, high courage,
boundless self-confidence and marvelous vanity" (Clifford,
1926.854), as Roi des Sedangs. Succession was to be hered-
itary or appointive by the King. A blue flag with a white
cross and red star was designed. The King was given absolute
authority. Human sacrifice was forbidden. Freedom of relig-
ion was granted. Subsequently a postal and customs service
was created; for pictures of four postage stamps see Marquet
(1927.opp. p. 96), each stamp saying "Deh Sedang". Three
decorations were proclaimed ("l'Ordre royal Sedang, celui de
Sainte-Marquerite et le Mérite Sedang"); for colored pictures
of the medals see Marquet (1927.opp. p. 88). The shield of
the kingdom bore the five words Sedang, Kedra, Deh, Begueur,
Marie--i.e. Marie the master who rules the Sedang nation.
Mayréna renounced his French citizenship and broke up his
marriage. Several Sedang chiefs and their villages have been
identified as part of the confederation: Lieu of Kon Hering,

Thiam of Kon Keton, Blak of Dak Dry, Brun of Pelu Tebau, and
Upico of Kon Trang.

International intrigue apparently entered the scene. In
Mayréna's attempts to secure finances and protection for ex-
ploitation of the area, he reportedly offered to hand the
kingdom over to the Germans. Mayréna took a trip to Europe
returning via Singapore. There, in 1890, and under very mys-
terious and unclear circumstances, he died--and with him so
died his Sedang kingdom. (On this entire episode see Clif-
ford (1926), Hickey (1967), Ner (1927), Marquet (1927), and
Soulié (1927).)

During the 1930's the Sedang opposed French administra-
tion and attacked their outposts (Hickey, 1967.753) and
burned bridges along the highway.

The takeover of Vietnam by the Japanese on March 9, 1945,
had its effects upon the highlanders. It was said that the
Japanese feared only the "moi" (savage) regiments in French
uniform, while they were rather contemptuous of the other
native regiments (Devereux, 1947.394).

After the French regained control at the end of 1945 the
VietMinh were in the highlands and the highlanders fought
with both sides. (The Sedang continue to call the VietCong
by the term VietMinh.) Many Sedang men today can still re-
call their experiences with the French army. In 1954 Kontum
Province came under the control of the government of South
Vietnam, although the infiltration of Communist units into

the remote areas caused the Sedang people to be divided,
forcibly or otherwise. The Sedang have fought on both sides
of the present conflict. During the 1960s the South Vietnam
government began moving villages from the distant, isolated,
and indefensible areas to locations along the highways. As
the communist offensive gained strength the government con-
centrated Sedang villages in the areas of DakTo, TanCanh,
and Mang Buk. DakTo was briefly overrun in the summer of
1968. In the spring 1972 offensive the communist forces
pushed through central Kontum Province until they were halted
outside Kontum City. The tribal people fled before them,
though many were cut off before escape. Those caught be-
hind the communist forces were separated from others who
became refugees in camps about Kontum and Pleiku cities.
Without immediate prospect of returning to their traditional
lands, almost 10,000 of those refugees--Sedang, Jeh, Rengao,
Hrê, Maroi, as well as Bru from the northern parts of South
Vietnam--were resettled in Phu Bôn Province and southeast of
Banmethuot in areas traditionally belonging to the Jarai and
Rade, respectively, Austronesian groups.

In May, 1974, the fall of Dak Pek, center of the Jeh
north of the Sedang area, forced the government to evacuate
Mang Buk where several thousand Sedang had established vil-
lages and maintained rice terraces. These Sedang then join-
ed the flood of Sedang refugees around Kontum.

Then in March, 1975, the South Vietnamese government

was forced to evacuate the highland provinces altogether and
the communist North Vietnamese forces gained complete con-
trol of the area. The Sedang were once again divided as
some remained in Kontum Province while others fled to the
coastal areas which quickly proved to be no refuge.

Beside the unfortunate human toll and social dislocation
caused by the war, there is the additional linguistic shock
of intermingling peoples not only of different related lan-
guages but also of different linguistic stocks. Thus the
next decade may cause the evolution of a further dimension
in the linguistic history of such Vietnam montagnards as the
Sedang.

(On general history of the Southeast Asian area see
Coedès (1966).)

CHAPTER 2 CULTURAL SKETCH

This brief sketch of Sedang culture is included only as an orientation to their way of life and is divided into a few topics: livelihood, social organization, religion, dress, and industry.

Livelihood. The Sedang are farmers, hunters, trappers, and fishers. Their basic crop is rice. They practice slash and burn agriculture in swiddens scattered around the villages, using a given field for two or three years before abandoning it; twenty or thirty years later they may return to a field, cut down and burn the jungle overgrowth, and plant with their dibble sticks another crop of rice. In a few areas (e.g. Mang Buk, Kon Hreng) paddy rice is cultivated. They have a variety of implements like hoes and axes with which they also plant and cultivate corn and manioc in their fields. Within the village they maintain gardens in which they grow tobacco, squash, pepper, potatos, bananas, and other fruits and vegetables. In the surrounding jungles they hunt for deer, boar, wild chickens, tigers, etc.; their crossbows and arrows have been replaced with guns, except that the security situation of recent years has restricted most of their hunting. The

men weave and make a variety of bamboo traps for catching small animals, birds, and fish. The women go out and cut firewood which they carry back to the village in high-piled back baskets. The women have the responsibility of carrying water, caring for the children, weaving cloth, pounding and winnowing rice, and meal preparation. Rice wine, as well as wine prepared from other foods, is almost always present in large jars tied to the center post of their houses. Chickens and pigs, cows and water buffalo are kept for sacrifices and food. Hickey (1967.757) reports that there continues to be instances of slavery among the Sedang.

Social organization. The largest Sedang social unit is the village. Occasionally villages have banded together to make attack against a mutual enemy, but intervillage political ties are not predominant among the Sedang (Devereux, 1937). A Sedang village will have as few as three houses or, as in Kon Hreng, as many as several hundred. The extended family lives together in a house though each immediate family has its own apartment.

Their kinship system is bilateral and after marriage they practice bilocal residence; i.e., after marriage they will spend a few weeks with one set of parents--either set-- and thereafter live permanently with the other. (For Sedang kinship terminology see Smith (1974b).) Marriage is permitted only if at least six generations--counting up and down--

separate a boy and girl; i.e. they cannot have the same
great-great-grandparents. Marriage outside the tribe is per-
mitted; warring parties have gone to Bahnar and Jarai areas
to secure women for wives. Polygamy has been practiced
though forbidden by the Catholic priests.

Respect is given to the elders. Decisions are made by
the older men together, meeting in the village communal house
which also often serves as the dormitory for bachelor boys.
A village chief may be selected to organize the villagers
into group projects like widening paths, repairing fences,
etc.

Soulié (1927.69) says that a Sedang boy would not be
respected as a man until his first murder.

Religion. The Sedang have been animists, believing in a
pantheon of gods, and making sacrifices and offerings to the
spirits which surround their lives. Sacrifices are demanded
by the shamans in time of death, illness, planting, harvest,
etc. Chickens, pigs, and water buffalo are slain at the base
of the spirit pole after a night of drinking and dancing.
Their expensive Laotian garments are brought out for the danc-
ing, accompanied by the playing of gongs, cymbals, and drums.
At death, dancing proceeds to the burying ground outside the
village where the casket with the body is buried and a small
shelter erected in which are placed various foods and imple-
ments for use by the spirit of the deceased.

Devereux (1938) discusses the place of divination and the throwing of dice in their culture.

Human sacrifice was specifically prohibited in the constitution of the Sedang Kingdom of 1888 (Article 8, Soulié, 1927.84), but was reported by Cupet (1893.218) and as recently as 1930 by Devereux (Hickey, 1964.149).

Today many Sedang villages, perhaps most of those who fled the communists, are at least nominally Roman Catholic and have forsaken many of the former "heathen" practices.

Dress. The traditional dress of Sedang men has been a loin-cloth, and of Sedang women a skirt. They wrap blankets around themselves in cold weather. Since their participation in the French army, the men have worn pants, shirts, boots, etc., though not necessarily at home in the village. Women have started wearing blouses. Beads around the neck, bracelets on the wrists, or rings through the ear are adorn-ments often seen on women. The women have exquisite skirts and the men robes from Laos which are reserved for special imes of sacrifice, dancing, or festivity.

Industry. Early records about the Sedang mention their iron working, a factor which possibly prepared them materially to be warriors in the past. Another natural resource of their area is cinnamon, though it has not been exploited as much by the Sedang as by the Cua to the northeast.

References. Other descriptions of or references to Sedang
culture--none of any significant depth--include the follow-
ing: Baudesson (1919?.54-55, on marriage); Brenier (1948, a
review of Devereux (1947)); Cupet (1893.216,218, on human
sacrifice); Devereux (1937, on social units of tribe, region,
village, house, family, and individual); Devereux (1938, on
divination and dice throwing); Devereux (1947, on various
qualities of the Sedang); Guilleminet (1952, on laws and
marriage); Hickey (1964, a general sketch); Hickey (1967.753,
on spiritism); Hoffet (1933.24, drawings of Sedang houses);
Mansuy (1929.83, on prehistoric studies); Maspero (1929a, a
general discussion); Maitre (1912); Smith (1974a, the kin-
ship system).

CHAPTER 3   LINGUISTIC AFFILIATION

The distinction between the Chamic and the Mon-Khmer
languages (though not always making an Austronesian versus
Austroasiatic break) has almost always been made by those
who have classified the languages or people of Vietnam.
Sedang is unique, however, among the Vietnam languages in
that it has been classified with both groups by serious
scholars.

The Chamic connection. Schmidt (1906.18), in Die Mon-Khmer-
Völker, constructed a superfamily composed of Austronesian
and Austroasiatic languages. The latter was divided into
seven subgroups. The first group was a "Mixed group" in-
cluding Cham, Rade, Jarai, and Sedang. The second group was
a "Mon-Khmer group" including Mon, Khmer, Bahnar, and
Stieng. The stated basis of the mixed group was that those
languages were Mon-Khmer in construction and word-building,
but have appropriated a considerable number of Malayan loan
words, including the personal pronouns and numerals. In
evaluating this group Thomas (1964b.152) correctly asserts
that this group is "fanciful" in that Cham, Rade, and Jarai
are indisputably Austronesian and Sedang is clearly related

to Bahnar. Schmidt's reviewers, Ray (1907) and Finot (1907), as well as the French translation of his book (Schmidt, 1907), repeated the same classification. Przyluski (1924. 390) was under Schmidt's influence as he said that the Mon-Khmer family had three civilized languages to attest to its antiquity: Mon, Khmer, and Cham. He then classified the Mon-Khmer languages "geographically" and established a central group with Khmer, Bahnar, Stieng, and Rengao, and an eastern group with Cham, Jarai, Rade, and Sedang which shared a Malayan influence. Schmidt (1926.138, 140) retained the same mixed group of Cham, Radê, Roglai, Jarai, and Sedang. Marquet (1927.74) says that the "Moi"--Sedang, Jarai, Rengao, Radê--are undoubtedly of Malayo-Polynesian origin. Kieckers (1931.114) repeats Schmidt's grouping, placing Sedang in a Cham language group of Austroasiatic. Sebeok (1942.206) attempts to summarize the grouping of languages but retains Sedang within a Cham group of Mon-Khmer languages. And as recently as 1952 Paublee (1952.652), though not confusing Austroasiatic with Austronesian languages, nevertheless included Sedang with Cham as part of the Indonesian group of Malayo-Polynesian languages. And Reynaud (1962) attempted to form sound laws within Bahnar, Jarai, and Sedang, as well as between them and Vietnamese.

Mon-Khmer conjecture. Writing at the same time that Schmidt was preparing his earliest work, Cabaton (1905.271-2), on the

basis of many word lists, realized the necessity to estab-
lish three families of languages: (1) those with Malayo-
Polynesian resemblances (including Cham), (2) those like
Khmer (including Stieng, Chrau), less like Khmer (Bahnar,
Sedang, Halang), and somewhere between this group and the
following group (Khmu°, Lamet); and (3) those like Tibeto-
Burman and Tai. Sedang, it is noted, is here correctly
classified with Bahnar and Halang.

Correct classification has sometimes been mixed with
untechnical jargon, as when Mayrena, the King of the Sedang,
is quoted (Soulié, 1927.26) as saying that Cham and Jarai
were similar but "quant aux dialectes Bahnar et Sedang, ils
ne sont pas très différents de l'annamite vulgaire. D'ail-
leurs, auprès de ces tribus, j'aurai pour interpretes les
Pères de la Mission des Bahnars."

Maspero (1929b.64-65) subdivides the Mon-Khmer family
without specific criteria into many groups, including a
Bahnar group (Rengao, Jalung, Galar, Halong) and a Sedang
group (Dadrah, Halang, Rengao, Kamrang). Devereux (1937.1;
1938.125) only classified Sedang as a "typical Mon-Khmer Moi
tribe". Brenier (1948.75), reviewing Devereux's 1947 article,
speaks of "the Bahnar (a branch of the Sedang)"!

Pinnow (1959.3) has a classification similar to Maspero
with Mon-Khmer subdivided into many groups including a
Bahnar group (Bahnar, Rengao, Jalung, Halong, etc.) and a
Sedang group (Sedang, Dadrah, Halang, Rengao, etc.). The

German language atlas (Salzner, 1960.4) subdivides Austro-
asiatic into a west group (Khasi, Nicobarese, etc.), east
group (Mon, Khmer, "Moi"), a Chamic group, and Yumbri. Sedang
is classified with the Moi of the east group on a par with
Bahnar. Bahnar subsumes Rengao, Jelung, Halong, etc., and
Sedang subsumes Dadrah, Halang, Rengao, Duan, Hre, etc.

Coedès (1962; 1966.33), the venerated Southeast Asian
historian, discussing differences in language and kinship
relations, notes that the Cham and related tribes speak lan-
guages belonging to the Indonesian family and have a matri-
archal system, whereas there is another group, consisting of
the Bahnar, Sedang, Mnong, and other tribes whose languages
belong to the Mon-Khmer group and whose family is usually
patriarchal.

Voegelin and Voegelin (1966.28) repeat a classification
similar to that of Maspero and Pinnow.

Structural classification. On the basis of a lexico-statis-
tical study Thomas (1966) clearly distinguished the Katuic
(Katu, Pacóh, Bru) and Bahnaric branches of Mon-Khmer in Viet-
nam. Cognate percentages also enabled a further distinction
to be made between the North (Cua, Hrê, Sedang, Bahnar, Mônâm,
Jeh) and South (Chrau, Koho, Mnong, Stieng) Bahnaric language
groups. This study was expanded by Thomas and Headley (1970)
to include a Pearic branch and to present an outline of the
general Mon-Khmer framework. Sedang continued to be correct-

ly classified as North Bahnaric.

The present writer has confirmed these divisions (Smith, 1974a) utilizing a computer program that compared 281-item word lists from 32 languages and dialects of Vietnam with every other list and structured the languages into a language tree relationship on the basis of cognate percentages. Figure 3.1 shows a language tree of Vietnam languages derived from these comparisons in which Sedang is clearly shown to be North Bahnaric, indisputably separate from the Austronesian languages. Chart 3.1 shows the cognate percentage distance of the other 31 languages from Sedang using the 281-item word list and three subsets of the list.

Lexico-statistical studies are perforce a first approximation of genetic language relationships while the science awaits phonemic analyses of languages which permit structural studies and phonological reconstructions. Linguistics in Vietnam has recently arrived at this stage.

Thomas and M. Smith (1967) made the first phonological reconstruction, showing the clear relation between Jeh and Halang and positing Proto-Jeh-Halang. Smith (1972) then included Proto-Jeh-Halang with Bahnar, Hrê, and Sedang to reconstruct Proto-North-Bahnaric (cf. chapter 6). In this reconstruction Sedang was shown to be most closely related --on a phonological basis--to Hrê, both being descendants of Proto-Hrê-Sedang. Similar studies have also been made of the South Bahnaric languages (Blood, 1968; Phillips, 1971
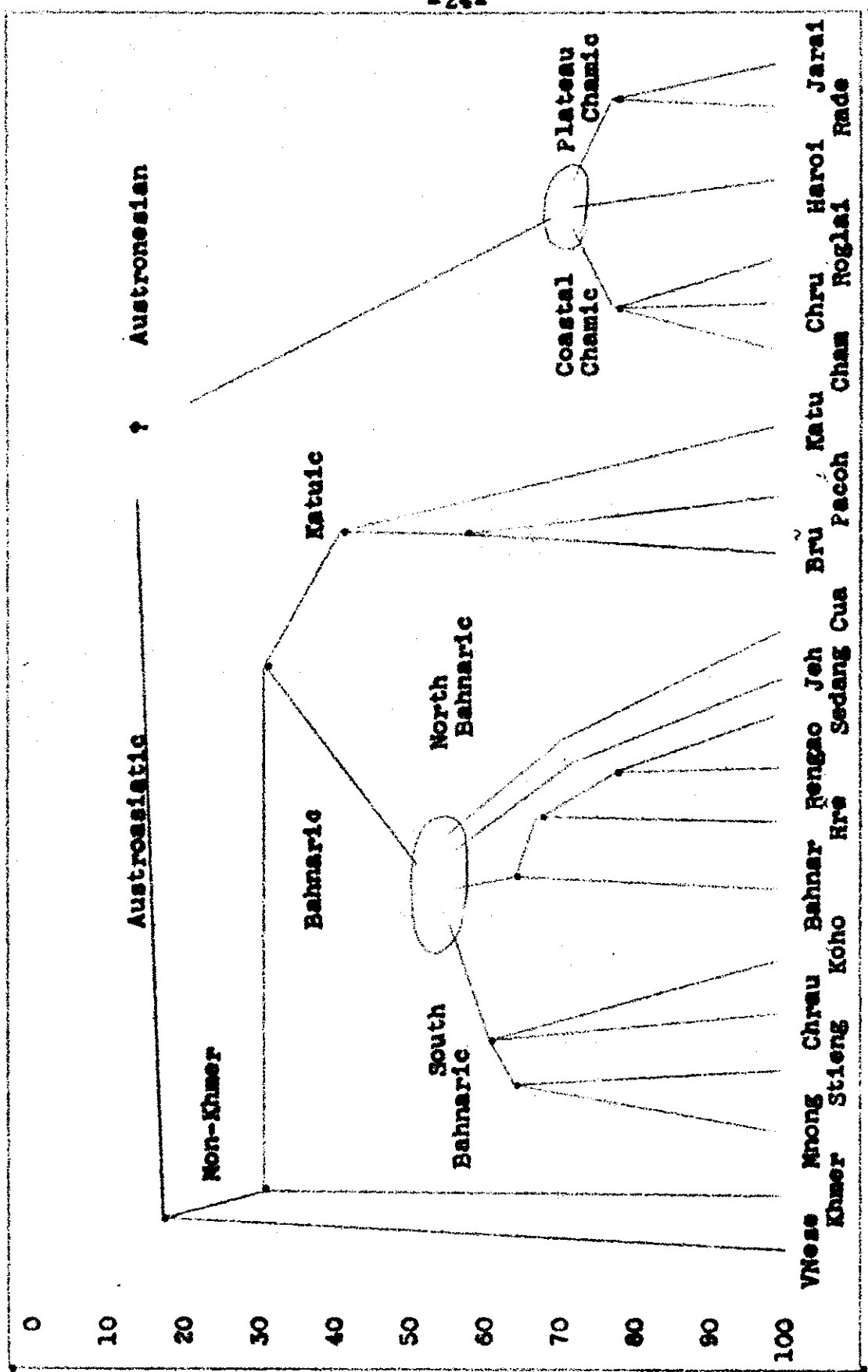
Figure 3.1   Language tree of Vietnam languages derived from 281-word list cognate
              percentage comparisons (adapted from Smith, 1974a) (circles indicate
              indistinct separations)

	212-word list	100-word list	281-word list	200-word list	differ-ence	Thomas (1966)
Greater Sedang	95	97	94	96	3	
Todrah	90	88	--	85	5	
Rengao	80	74	74	71	9	
Hre BaTo	72	76	66	68	10	
Hre SonHa	71	75	66	67	9	
Bahnar Kontum	67	64	62	59	8	
Bahnar Pleiku	65	63	59	57	8	
Jeh	67	58	60	56	11	
Cua	54	52	50	48	6	
Chrau Jro	49	47	44	39	10	44
Chrau Prang	49	47	44	39	10	
Mnong Rolam	49	46	44	39	10	46
Stieng	49	43	44	39	10	44
Koho Chil	49	40	44	39	10	
Koho Lach	48	38	44	39	9	
Mnong Central	50	42	43	38	12	
Koho Sre	47	39	42	36	11	39
Bru	31	33	30	28	5	31
High Katu	28	33	26	22	6	33
Low Katu	27	31	24	21	6	31
Vietnamese	26	30	24	26	10	
Pacoh	26	29	25	24	5	27
Khmer	27	23	25	24	4	
Jorai	21	19	19	19	2	
Rade	19	16	18	16	3	
Horoi	18	16	17	16	2	
Chru	17	19	16	16	3	
N. Roglai	17	18	16	15	3	
W. Cham	16	17	16	16	2	
E. Cham	15	17	15	14	3	
S. Roglai	15	16	14	13	3	

Chart 3.1   Cognate percentage of Sedang with 31 other
Vietnam languages and dialects (the 212-,
100-, and 200-word lists are subsets of the
281-word list, the 100- and 200-word lists
being the Swadesh word lists; the maximum
difference between these figures for each
language is indicated and the Thomas (1966)
percentage if available; taken from Smith
(1974a))

--which also duplicated the North Bahnaric work and reconstructed Proto-Bahnaric, but as a Ph.D. dissertation is yet unsubmitted) and Katuic languages (Dorothy Thomas, 1967).

Despite the lexico-statistical classification of Bahnar with the North Bahnaric languages, both North Bahnaric phonological studies cited above suggested rather a South Bahnaric classification of Bahnar, explaining the northern geographical location of the Bahnar as a result of migration away from the South Bahnaric languages caused by the highland incursion of the Plateau Chamic language groups. Subsequently Gregerson, Smith, and Thomas (1973) have proposed that Bahnaric, with Alak, may be from another Bahnaric branch --Central Bahnaric. Thus, the most recent view concerning the structural, genetic relationship of the Bahnaric languages is as follows:

Bahnaric languages

1. North Bahnaric

   Sedang, Rengao, Halang, Jeh, Mönâm, Kayong, Hrê, Tödrah

2. Central Bahnaric

   Bahnar, Alak

3. East Bahnaric

   Cua, Kótua

4. South Bahnaric

   Stieng, Mnong, Kóho, Chrau

5. West Bahnaric

Loven, Nyaheun, Oi, Brao, etc.

PART TWO: SEDANG PHONOLOGY

Introduction to Part Two

In Sedang phonology there is unusual dynamism of both
synchronic and diachronic dimensions. Sedang phonology dif-
fers significantly from that of neighboring languages; wide-
spread mergers have left holes in the phonological pattern
which are currently being filled by new loans. This diachron-
ic aspect is discussed in chaper 6. Many stages of the his-
torical development of Sedang phonology are still apparent in
Sedang dialects for, as the Sedang say, Rem pólê tôpui ti ê
'Every village speaks differently.' Synchronic variations
of Sedang phonology are presented in chapter 5. These two
discussions, however, must be preceded by the presentation of
a single complete (synchronic) phonological system of Sedang
representing one dialect (chapter 4). The dialect chosen is
that known as rótéang kóklai 'Sedang that uses kóklai "what"'
which is a principal and central (ethno-) dialect, taking
that subdialect of rótéang kóklai which retains final nasals
with laryngealized vowels (instead of denaso-delaryngealized
forms with glottal stop replacement). This dialect is most

readily intelligible both orally and in written form to the broadest scope of Sedang speakers. This dialect is spoken in villages such as Tea Kólap, Dak Rówang, and Va Móna.

In applied linguistics (e.g. preparation of literacy materials) the writer has found that phonological statements of the phonemes of a language are frequently inadequate; they need to be supplemented by statistical studies of the frequency of occurrence of each phoneme in both dictionary lists and sample texts as well as by detailed distributional statements (as outlined in, for example, Gudschinsky (1973)). The present phonological statement attempts to give emphasis to both the distribution and the frequency of each phoneme.

The frequency of phonemes in text, as cited in chapter 4 as "text count", indicates the number of occurrences of a given phoneme in a 27,437-word corpus of Sedang texts for which a concordance had been prepared (see Acknowledgements) and the phonemes subsequently counted by a computer program (cf. Smith, 1974f). The frequency of phonemes in a dictionary listing, cited as "dictionary count", was determined two ways. For presyllables and main syllable initial consonants and consonant clusters, the writer's approximately 5,000-word manuscript Sedang-English dictionary was used and the phonemes counted manually; for elements of the vowel plus final-consonant clusters (because of the unavailability of the writer's larger rhyming dictionary of Sedang words which would have facilitated such counts) a tabulation of the 1409

different words which occur in the aforementioned 27,437-word corpus of texts was substituted as a dictionary and the phonemes counted in the computer program referenced above.

The Sedang practical (basically phonemic) orthography is used throughout with phonetic detail given for each non-standard symbol where it is introduced. (See also List of Abbreviations for Part II.)

Sedang phonology was described in Smith (1968), but that of chapter 4 is completely rewritten and expanded. Sedang dialectology of chapter 5 is a summary of that presented in Smith (1967b, 1969b, 1973a, b); and the historical description of Sedang phonological development is a summary from the Sedang point of view of material presented in Smith (1972) and Gregerson and Smith (1973).

(C, consonant; V, vowel; G, vowel glide; N, nasalization;
R, register identification; subscripts: p, presyllable; m,
consonant cluster modifier; i, initial; f, final) All words
are of either the lax register (clear, normal vowels) or the
tense register (laryngealized, "creaky voice" vowels). The
phonological statement of Sedang emphasizes both the distri-
bution and the frequency of each phoneme. The frequency of
phonemes is cited as both "dictionary count" and "text
count", the former based on a 5,000-word dictionary, the
latter on a 27,437-word text.

The Sedang area is replete with geographically identi-
fiable dialects affecting each aspect of Sedang phonology.
The Sedang have at least seventeen terms identifying certain
(ethno-)dialects. The de-nasolaryngealization phenomenon
crosses the Sedang area such that tense register words with
final nasal consonants in the west and southwest correspond
to words without vowel laryngealization, with final nasal
consonants replaced by final glottal stop, and with back-,
front-, and unglided vowels (reflecting the bilabial, alve-
olar, and velar nasal consonants, respectively) in the cen-
tral Sedang area.

The phonological development of Sedang from Proto-North-
Bahnaric evidences massive loss of final consonants and con-
siderable shifting of words from the tense register to the
lax register. There are traces in Sedang of Sanskrit, Cham-
ic, French, Vietnamese, and Bahnar borrowings.

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CHAPTER 4 A SEDANG PHONOLOGICAL SYSTEM

4.0 Introduction

Phonological words in Sedang are either mono- or bisyllabic. Monosyllabic words consist of one (usually) stressed "main syllable". Bisyllabic words consist of a preliminary unstressed "presyllable" and a (following) stressed main syllable.

Bisyllabic words functionally are generally found among the open classes of words—nouns, descriptive names, verbal adjectives and main verbs, although bisyllabic words are also found in closed classes—pronouns (but not the personal pronouns), numbers, classifiers, temporals (see Part Three).

Monosyllabic words functionally are found in all word classes, but some word classes are almost exclusively composed of monosyllabic words. The only open class of words which is predominantly monosyllabic is personal names (7.1). The closed classes of words which are predominantly monosyllabic include personal pronouns, demonstratives, plural markers, prepositions (except kódam, pópêng), preverbs (except mó-éam, póxiam), verbal particles, preverbal adverbs (except hórun), equative verbs, the existive verb, the many particles of clause peripheral phrases, final particles (except 'di'do),

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exclamations, responses (except ô-ôh), series particles,
and clause conjunctives (except tôma). Monosyllabic func-
tion words if spoken (unnaturally) in isolation are stressed;
many in context are unstressed.

A dictionary count shows that 60% (2854/4768) of Sedang
words are monosyllabic whereas in text 91% (25,038/27,437)
are monosyllabic. Thus bisyllabic words play the lesser role
in both instances (40%, 9%, resp.).

Affixation is restricted to monosyllabic roots forming
bisyllabic derivatives. One trisyllabic derivative has been
encountered, however, with the adversative affix ló- (lókódé
'(adversity of) kill') raising the question of analyzing ló-
as a particle rather than as an affix (12.3).

The main syllable consists of an initial consonant
position (4.1) filled by an initial single consonant (C_i)
with or without a preceding and/or following consonant clus-
ter modifier (C_m) followed by a register-identified (R) vowel
plus final-consonant cluster (4.2) filled by a simple (V) or
glided (VG) vowel (with optional nasalization (N)) and final
consonant (C_f).

Presyllables (4.3) consist of a presyllable consonant
(C_p) and presyllable vowel (V_p).

A phonological word may thus be summarized:

presyllable   main syllable

Word: $(C_pV_p)(C_m)C_1(C_m)V(G)(N)(C_f)R$

                    initial   vowel plus
                    consonant   final-consonant
                    position   cluster
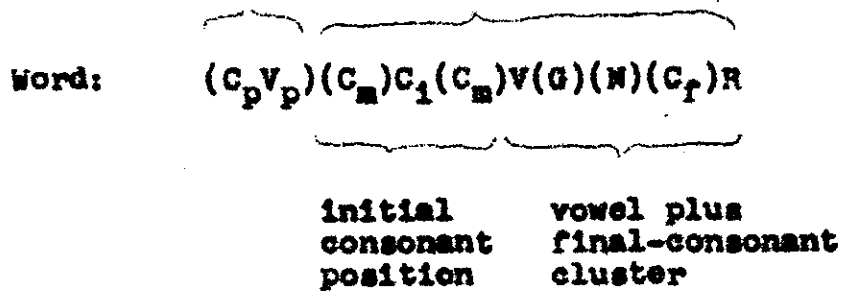
A minimal phonological word: á 'I'

A maximal phonological word: tóklóam 'to run into each

                                    other'

                              hó'ràk 'bloody'

                              kó'blin 'to be very full'

Phonological word reduplication is discussed in 4.4, and alphabetization in 4.5.

4.1 Initial consonant position

The initial consonant position of the main syllable may be filled by either an initial consonant or initial consonant cluster.

The dictionary count shows that 69% (1960/2854) of all monosyllabic words have a single consonant--in opposition to a consonant cluster, and 78% (1498/1914) of all bisyllabic words have a single consonant. Or, among all words 73% (3458/4768) have single consonants whereas in text 86% (23,454/27,437) of all words have a single consonant. Thus

consonant clusters play the lesser role. Consonant clusters
occur more frequently in monosyllabic than bisyllabic words
(31% versus 22%), but only one word in seven in text has a
consonant cluster.

See 4.3 for cooccurrence restrictions of presyllables
and following initial consonant. See 4.2 below for cooccur-
rence restrictions of nasalized vowels and preceding initial
consonant. There is no other observable cooccurrence restric-
tion of initial consonant with following vowel, vowel glide,
final consonant, or register identification.

Initial single consonants. The initial single consonants are
charted in Chart 4.1. The four basic articulatory positions
are bilabial, alveolar, alveopalatal, and velar.

There is a series of five voiceless stops including
glottal stop. Before (otherwise) initial vowels glottal stop

		Bilabial	Alveolar	Alveo-palatal	Velar	Glottal
Stop	vl	p	t	ch	k	ʔ
	vd	b	d	j	g	
	nasal	m	n	nh	ng	
Oral	vl	x s	x s			h
	vd	v	l r	y		

Chart 4.1   Initial single consonants, C_1

is unwritten in monosyllabic words and is written with a
hyphen in bisyllabic words. The digraph ch represents [č].

There is a series of four prenasalized voiced stops [mb,
nd, ñj, ŋg].

There is a series of four nasals. The digraphs nh and
ng represent [ñ, ŋ].

x is a voiceless alveolar grooved fricative [s]; s is a
voiceless retroflexed alveolar fricative [ş] which in some
(older, toothless?) speakers occurs as a whistle. (In Smith
(1968) the retroflexed fricative was analyzed as a consonant
cluster xr for reasons of economy; that analysis is here
abandoned for psycholinguistic reasons--educated Sedang com-
pletely rejected its orthographic implications); h is a voice-
less glottal fricative though it assimilates to the shape of
the following vowel.

Chart 4.2 shows the frequency of the single consonants
in both the dictionary and text count. Four voiceless stops
account for 38% of all words in the dictionary--a result of
specific historical sound mergers (6.1). As a group the four
voiced stops occur infrequently in the dictionary (10%)
in that they are not reflexes from Proto-North-Bahnaric. The
least frequent consonant, y, is currently entering the lan-
guage thru loans from Bahnar, Vietnamese and French.

Contrary to all other initial consonants, n, l, b, and j
occur more frequently in (the less frequent) bisyllabic words
than in monosyllabic words. n has a high proportion of cooc-

	Dictionary Count				Text Count	
	Monosyl.	Bisyl.	All words			
	No.	No.	No.	%	No.	%
t	256	165	421	12	2982	12
p	222	109	331	10	1825	8
ch	197	88	285	8	1126	5
k	158	103	261	8	2868	12
x	165	95	260	7	787	3
n	62	171	233	7	703	3
l	53	160	213	6	1161	5
h	145	57	202	6	1149	5
m	121	76	197	6	2442	10
r	113	83	196	6	279	1
ʼ	119	69	188	5	4139	18
d	56	86	142	4	560	2
b	34	65	99	3	145	1
ng	53	44	97	3	563	2
v	55	34	89	3	1014	4
j	37	42	79	2	154	1
nh	35	26	61	2	94	0
s	50	9	59	2	68	0
g	19	15	34	1	1375	6
y	10	1	11	0	20	0
Total	1960	1498	3458	101	23454	98

Chart 4.2   Dictionary and text frequencies of initial
single consonants

currence with presyllables hó- and kó-; l with kó- and pó-;
b with hó-, kó-, ró-, and tó-; and j with hó- and tó-.

The ranking of these consonants by text frequency differs
from the dictionary count under the influence of high fre-
quency function words. The ranking of consonants by text
frequency is, in part, cited in Chart 4.3 with 18 highly in-
fluential function words with their rank (among all words in
the text) and text frequency. Minus the effect of their oc-
currence in the listed function words, the text frequency of
the single consonants begins to correspond more to their
dictionary count frequency. Note, for example, the infre-
quent occurrence of g in text apart from the pronoun gá.

    pa 'father'

    ta 'to place within'

    cha 'body; to get; to be able'

    ka 'to eat'

    a 'to, toward'

    ba 'to shine'

    da 'to hold for pouring into; to pull latch'

    ja 'grandmother; to carry'

    ga 'dawn'

    ma 'eye; brass; wrist, ankle'

    na 'sister; fish net; time'

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Cons. rank	Cons.	Function word	Function	Word rank	Word freq.	Cons. freq. in funct. words	Cons. freq. in other words
1	ʔ	á	Pron 'I'	3	684		
		ôh	Neg.Pt.	7	478		
		a	Prep. 'to'	14	329		
		eh	Pron. 'he'	15	306		
		ái	pVb, T & Ex Vb	16	290		
		ah	future Pt.	17	285		
		u	pVb, PurPt	19	277	2649	1490
2	t	ti	Neg.Pt.,ManPt	6	521		
		ta	Neg.Pt	10	355	876	2106
3	k	kó	Dem.	4	593		
		ki	RelPt	8	404		
		kô	RelrPt	21	233	1230	1638
4	m	me	Dem 'that'	1	1707	1707	735
5	p	pin	Pron 'we'	18	284	284	1541
6	g	gá	Pron 'he,...'	2	1334	1334	41
7	l	-	-	-	0	0	1161
8	h	hiáng	vPt 'already'	9	376	376	773
9	ch	-	-	-	0	0	1126
10	v	vai	Pron 'they'	5	558		
		va	pVb,C Vb 'want'	12	333	891	123

Chart 4.3   Initial single consonant frequency in the 18 most frequent function words

nha   'grass'

nga   'top edge of container'

xa   'to weave; to cut meat'

sa   'mother-in-law'

ha   'crowded'

va   'to want'

la   'to dip in water; (of sun) to set'

ra   'certainly; to ambush'

ya chǎ   'house lizard'

<u>Initial</u> <u>consonant</u> <u>clusters</u>. There are five types of simple
consonant clusters with cluster modifier (C_m) either before
or after the cluster center. The cluster center is a simple
initial consonant (as described above) though not all simple
consonants function as a cluster center. There are two con-
sonant cluster types with the cluster modifier before the
cluster center:

(1) <u>h</u>-, voicelessness, for voiceless nasals and orals: <u>hm</u>,
<u>hn</u>, <u>hnh</u>, <u>hng</u>, <u>hv</u>, <u>hl</u>, <u>hr</u>, <u>hy</u>.

(2) <u>'</u>- (apostrophe), glottal, for preglottalized voiced stops,
nasals, and orals: <u>'b</u>, <u>'d</u>, <u>'m</u>, <u>'n</u>, <u>'nh</u>, <u>'ng</u>, <u>'v</u>, <u>'l</u>, <u>'r</u>. <u>'g</u>
does not occur and <u>'j</u> questionably once (except in personal
names (Smith, 1969c.190)) consistent with Southeast Asian
areal phonology. <u>'y</u> does not occur because <u>y</u> as a recent

phoneme in Sedang hasn't developed this cluster yet. Another

Sedang researcher, Wanda Jennings, reports (in personal corre-

spondence) a series of preglottalized voiceless stops ('p,

't, 'ch, 'k) in some words here analyzed as having voiceless

stops.

There are three consonant cluster types with the cluster

modifier after the cluster centers:

(3) -h, aspiration, for the aspirated consonants: ph, th, kh

(a very small proportion of Sedang speakers claim to distin-

guish ch and chh).

(4) -l: pl, tl (perhaps only a dialectal variant of kl), kl,

bl, gl, ml.

(5) -r: pr, tr, kr, br, dr, gr, mr, ngr.

Complex consonant clusters have a cluster modifier both

before and after the cluster center. The following have been

observed: 'br, 'dr, 'mr, 'ngr, 'bl, hngr (only in two person-

al names).

The above consonant clusters are shown in Chart 4.4.

Most cluster centers are members of two or three different

consonant clusters; m belongs to five, b and ng each to four,

and y only to one. Single consonants which do not occur as

cluster centers are ch, j, x, s, h, and ' (glottal stop).

The dictionary and text frequencies of the consonant

clusters is given in Chart 4.5. dr has an unusually high

occurrence in bisyllabic words, especially with presyllables

ho- and ko-. pr has a higher text frequency than dictionary

Cluster modifier:	-h	-l	-r	h-	'-	'-r	'-l
Cluster center:							
p	ph	pl	pr				
t	th	(tl)	tr				
k	kh	kl	kr				
b		bl	br		'b	'br	'bl
d			dr		'd	'dr	
g		gl	gr			'gr	
m		ml	mr	hm	'm	'mr	
n				hn	'n		
nh				hnh	'nh		
ng			ngr	hng	'ng	'ngr	
v				hv	'v		
l				hl	'l		
r				hr	'r		
y				hy			

Chart 4.4   Consonant clusters, $(C_m)C_1(C_m)$

frequency because of the high text occurrence of the pronoun prei 'those two' and container verb pro 'to do'; kh because of the quotative verb khen 'to say'; 'n because of the container verb 'nai 'to know'; and hl because of the container verb hlo 'to see'.

Chart 4.6 indicates the frequency of cluster centers,

	Dictionary Count				Text Count	
	Monosyl.	Bisyl.	All words			
	No.	No.	No.	%	No.	%
dr	39	116	115	12	514	13
tr	72	31	103	8	361	9
kl	73	28	101	8	397	10
kr	75	26	101	8	149	4
pr	84	5	89	7	420	11
pl	58	12	70	5	68	2
kh	55	9	64	5	328	8
'n	31	23	54	4	396	10
hr	44	10	54	4	121	3
hn	35	15	50	4	73	2
hl	34	10	44	3	343	9
hm	37	7	44	3	128	3
ph	40	2	42	3	41	1
'b	27	12	39	3	173	4
24 others	190	110	300	23	471	12
Total	894	416	1310	100	3983	101

Chart 4.5   Dictionary and text frequencies of consonant clusters

	Dict. count		Text count	
	No.	%	No.	%
k	266	20	874	22
p	201	15	529	13
d	180	14	545	14
t	129	10	469	12
b	107	8	259	7
n	104	8	469	12
m	93	7	169	4
l	69	5	371	9
r	68	5	143	4
nh	40	3	23	1
v	21	2	23	1
g	16	1	9	0
ng	13	1	97	2
y	3	0	3	0
Total	1310	99	3983	101

Chart 4.6 Dictionary and text frequencies
of cluster centers

subsuming together all consonant clusters of which they are
a part. Chart 4.7 indicates the frequency of cluster modi-
fiers, subsuming together all consonant clusters of which
they are a part.

	Dict. count		Text count	
	No.	%	No.	%
-r	503	39	1479	37
h-	229	18	796	20
'-	219	17	703	18
-1	214	16	507	13
-h	129	10	460	12
'-1	11	1	35	1
'-r	5	0	3	0
Total	1310	101	3983	101

Chart 4.7 Dictionary and text frequencies
of cluster modifiers

phá   'different'

tha   'to hurry'

kha   'to block--as a road block'

pla   'to mediate; flame'

tlua 'white'

klá   'tiger'

bla   'to push over'

glá gláng   'to fly hither and yon--as of leaves'

mloi   'fireworks'

pra   'sacrifice harness'

tra   'to shine; to strip leaves of plant'

kra 'old'

bro 'to prepare'

drá 'shelf'

gram 'to run into a stick on a trail'

mrá 'wicked'

tóngroh 'tall, elderly sick person'

hma 'to be acquainted with'

hna 'to bud'

hnha '(of butterfly wings) to lie down'

hngám 'heavy'

hva 'to chip'

hla 'dead'

hra 'clean; to lack'

hyó 'to scrutinize'

'ba 'never, at long last'; 'ba tonen 'shooting
     range'

'dó 'classifier for bamboo; small boat'

'jó 'a narrow but tall pile'

'mo 'to hug'

'na '(series particle)'

'nham 'to soak up water'

'ngei 'up high'

'vè 'bowtrap arms'

'lau 'papaya'

'ráng 'classifier for arrows'

be 'bre 'commonplace'

'drun 'dra 'lots of something (as of bamboo)'

'greô 'fork, rake'

'mruô 'arguer'

'ngráng 'cast iron'

'bla 'type of glutinous rice'

4.2 Vowel plus final-consonant clusters

The vowel system cannot be discussed apart from final
consonants in that a different set of vowels is found to
occur with each final consonant, i.e. not all vowels occur
with all final consonants. More important, neither vowels
nor final consonants can be discussed apart from "register"
in that not all final consonants or otherwise permitted vowel
plus final-consonant clusters occur with both registers. It
has been shown (Gregerson and Smith, 1973; Phillips, 1971;
Smith, 1972) that the historical development of vowel plus
final-consonant clusters has differed considerably for the
two registers (6.1). Though the following sections each
deal with a separate entity of the vowel plus final-conson-
ant cluster, their interdependence will be noted. ("Vowel
plus final-consonant cluster", VC_f, is to be read as "a
cluster of vowel plus final consonant" in that there are no
final consonant clusters.)

Register. Each vowel plus final-consonant cluster is iden-
tified as belonging to either one of two registers (R) which
are here termed tense register (TR) and lax register (LR).
(Terminologically there is not yet consensus among Southeast
Asian linguists for the register phenomena. Some of the sets
of terms in current use are given in Chart 4.8.)

In Sedang (unlike other Mon-Khmer languages) lax register
vowels (orthographically unmarked) are clear and "normal".

Tense register	Lax register	Halang: Cooper and Cooper (1966.97) Jeh: Gradin (1966.46) Ngeq: R. Smith (1973.84) Hrê: Phillips (1973) Sedang
First register	Second register	Khmer: Henderson (1952.151) Jacob (1968) Hrê: Phillips (1962) Bru: Miller (1967)
Low series	High series	Khmer: Jenner (1966.37)
Head register	Chest register	Khmer: Henderson (1952) Mon: Shorto (1962, 1967)
Retracted tongue-root position	Advanced tongue-root position	Rengao: Gregerson (1971, 1973) Cf. Halle & Stevens (1969)

Chart 4.8 Register terminology in Mon-Khmer linguistics

Tense register vowels (orthographically marked with acute ´)
are laryngealized or glottalized; there is trillization of
the vocal cords. The term "tense" thus refers to the tens-
ing of the vocal folds required to produce this marked, slow
trillization, sometimes called "creaky voice" (cf. Ladefoged
(1971) for a photograph of the vocal cords in creaky voice
position).

Spectrograms of the Sedang laryngealized syllables ap-
pear the same as the corresponding clear vowels during the
syllable peak with normal pulsing. The vowel termination in
non-rapid speech, however, is unique. The time duration be-
tween successive glottal pulses increases and glottal vibra-
tions become irregular. Some pulses are separated by as much
as 25 to 32 milliseconds (which, if periodic or continuous,
would correspond to as low as 40 to 30 hertz). One series of
laryngealized glottal pulses in the syllable pá has been
measured as having successive pulses separated by 11,13, 15,
18, 18, 24, 32, 25, 27 milliseconds. Spectrographic analysis
shows that during laryngealization energy is concentrated
about the first and second formants with no lower harmonics
visible on the typical spectrogram. And these formants are
not characterized by (the typical) clearly spaced harmonics;
instead the formants appear quite fuzzy, in that there are
many very closely spaced harmonics. In words with vowel
glides, semivowels, or final nasals, there is generally a
point toward the end of the vowel duration at which glottal

pulse timing starts to spread out, marking the beginning of
the laryngealized phase. Such laryngealization is then
carried through even the final nasal consonants.

Spectrographic analysis of Sedang vowels does not show
any register differences of vocalic openness (i.e. tongue
height). Consonant voicing, pitch, and vowel harmony,
though frequently related to register in other languages,
do not pertain to the Sedang situation. Register in Sedang
is described only by the feature of voice quality as given
above.

All the vowels and vowel glides occur (structurally) in
both register sets although open syllable o̱a̱, i̱o̱ have not
been observed. The final consonants -p̱, -ṯ, -ḵ, -ẖ, -1ẖ
structurally do not occur with the tense register. Of the
other final consonants (as will be noted below) there are
some vowel plus final-consonant clusters, though presumed
structurally possible, which have not been observed with
both registers. There is no observable relation or restric-
tion between register and either the presyllable or the con-
sonants of the initial consonant position.

The lax register occurs more frequently than the tense
register in both the dictionary count (69%, 979/1409) and
the text count (68%, 18,576/27,437). That both these per-
centages are equivalent indicates that function words are not
predominantly of one register.

There is Sedang folk-linguistic terminology which dis-

tinguishes the two registers: próng (TR) and prông (LR) (Smith, 1973a).

Register contrastive pairs of words:

ka 'to eat'; ká 'fish'

kan 'big'; kán 'chief'

bau 'to wash face'; báu 'field rice'

póla 'chaff'; polá 'elephant tusk; between'

ma 'eye'; má 'we two (excl.)'

xôi 'to err'; xôi 'to sacrifice'

Simple vowels. Sedang has seven simple (or unglided) vowels (V) as shown in Chart 4.9. The simple vowels occur in both open and closed syllables and with both registers. Simple vowels are more common than glided vowels in both the dictionary count (81%, 1135/1409) and the text count (87%, 23,819/27,437). The frequency of the simple vowels is given in Chart 4.10. The vowel a, typical of most Southeast Asian languages, has the highest count in both cases.

Chart 4.9 Simple vowels, V

	Dict. count		Text count	
	No.	%	No.	%
a	348	31	9419	40
o	194	17	2711	11
ô	161	14	3559	15
e	133	12	3316	14
ê	111	10	2077	9
i	96	8	1731	7
u	92	8	1006	4
Total	1135	100	23819	100

Chart 4.10 Dictionary and text frequencies
of simple (unglided) vowels

chí 'clean; kind of tree'

chê 'tea'

ché 'cloth'

chá 'tree sap; great-great-grandchild'

ti 'up high'

tê 'to sell; to go down; only'

ta 'to place within; spear trap'

tu 'hood, umbrella; anthill'

tô 'hot'

to 'monkey; to get up onto; general classifier;

bean'

tíng   'to sacrifice; tail'

têng   'sorcery'

táng   'to look for; chair'

tòng   'bent tree in spear trap'

tóng   'pond; to please; to save'

Vowel glides. The vowel glides (VG) include four central glides (Va), three back glides (Vô), and two front glides (Ve) as shown in Chart 4.11.

Central glides (Va)		Back glides (Vô)		Front glides (Ve)
ia [iᵊ]	ua [uᵊ]	iô [io]	uô [uo]	ie [iᶜ]
ea [eᵊ]	oa [oᵊ]	eô [eo]		ôe [oᶜ]

Chart 4.11 Vowel glides, VG

Central glides have an end point approximating a schwa; back glides an [o]; and front glides an [ı] or [ɛ].

Central glides occur in open syllables and before all final consonants except -i, -u, and -ih (on final consonants see following subsection). (óa has not been observed in an open syllable; other incomplete patterns are noted below.) Back glides occur in open syllables and before velars -ng and -k, and before -h. Front glides occur only in open syllables. (Orthographically the circumflex in êa, ôa, etc.

is redundant and thus hereafter unwritten: ea, oa, etc.)

Charts 4.12 and 4.13 show the dictionary and text counts of vowel glide frequency. Central glides are most common, front glides least common. The text frequency of ia surpasses the other central glides because of the influence of function words hiáng 'already' (rank 9, 378 times), pian 'we' (18, 284; elsewhere in this dissertation spelled pin), and kia 'ghost' (23, 231), chiang 'become' (36, 145). No other central glide occurs before tea 'water' (47, 118). The text frequency of oe is greater than ie because of the combined effect of the phrase poe rópoe 'to cut soapberry', the theme of one of the folktales included in the data base for the count.

kea   'trap; to make design'

kia   'spirit'

koa   'pipe'

kua   'to hold; to hug; roof'

	Dict. count		Text count	
	No.	%	No.	%
Va	227	83	3128	87
Vô	30	11	369	10
Ve	17	6	121	3
Total	274	100	3618	100

.Chart 4.12 Dictionary and text frequencies
of vowel glide types

	Dict. count		Text count	
	No.	%	No.	%
Central glides				
ea	71	31	610	20
ua	62	27	519	17
ia	61	27	1598	51
oa	33	15	401	13
Total	227	100	3128	101
Back glides				
eo̶	17	57	305	83
uo̶	11	37	49	13
io̶	2	7	15	4
Total	30	101	369	100
Front glides				
ie	12	71	51	42
ôe	5	29	70	58
Total	17	100	121	100

Chart 4.13 Dictionary and text frequencies
of vowel glides

te̊o 'to carry'

tiô 'to follow'

tuô 'to bend over'

kie 'to strip bamboo'

kôe 'to fold'

Final consonants. The final consonants (C_f) are shown in
Chart 4.14, with minor final consonants enclosed within par-
entheses. The dissimilarity of the final consonant inventory
from the initial single consonant inventory (as well as from
the presyllable consonant inventory) recommends the establish-
ment of a separate consonantal system for each position.

	Bilabial	Alveolar	Palatal	Velar	Unarticulated
Stops	-p	-t	-k	-k	
Nasals	-m	-n		-ng	
Vocoids	-u [w]	(-l -r)	-i [y]		
Aspirates			(-ih)[yh]		-h
Glottals			(-i) [yˀ]		(-)[˚ˀ]

Chart 4.14 Final consonants, C_f

Final glottal stop (-_), -i, -l, and -r are very infre-
quent, though entering the language through loans from neigh-
boring languages. -ih and -i are complex unit phonemes [ih,
i˚] (Smith 1968.56-57). Only final nasal and vocoid con-
sonants occur in tense register clusters whereas all occur in
lax register clusters; all consonants except nasals occur with
nasalized vowels (see below). Chart 4.15 shows the dictionary
and text frequencies of final consonants and their absence in
open syllables (#). More than one word in three is an open
syllable word (i.e. ends with either a vowel or vowel glide)
and in text this increases to every other word. Final nasals,

	Dict. count		Text count	
	No.	%	No.	%
#	504	36	13760	50
-ng	224	16	3179	12
-i	164	12	4384	16
-h	108	8	2254	8
-u	103	7	836	3
-n	72	5	1190	4
-m	68	5	840	3
-k	62	4	428	2
-t	40	3	330	1
-p	30	2	80	0
Minor cons.				
-ˇ	15	1	94	0
-ih	10	1	36	0
-l ~ -r	6	0	12	0
-ǐ	3	0	14	0
Total	1409	100	27437	99

Chart 4.15   Dictionary and text frequencies
of final consonants including
open syllables (#)

-i, -u, and (unaccountably) -h are the most frequent final consonants inasmuch as they have not undergone drastic reduction like the voiceless stops, aspirates, glottals, -l, and -r (6.1).

> ta '(comparative); to place within; spear trap'
>
> tap 'to bury; to exercise'
>
> kat 'cabbage; to tie'
>
> tak 'bran'
>
> tam 'to wallow; to sleep in field; to fall down (of branches)'
>
> tan 'to scoup up (fish)'
>
> tang 'to be erect; if; to feel'
>
> tau 'pig's nest outside village'
>
> tai 'to be completed; entire'
>
> tah 'to take off (clothes)'
>
> tal ~ tar 'a (flat) board'
>
> tui 'to rake field'
>
> tuih 'to sacrifice'
>
> kómǎi 'machine' (final -i)
>
> tóxǐ 'sea' (final -_)

Nasalization. Main syllable vowels and glided vowels may have contrastive nasalization (N) in certain restrictive preceding and following environments. (Orthographically nasalization is marked with a grave ˋ; nasolaryngealization with a tilde ˜.)

The preceding environment for nasalization of the vowel must be glottalization (either glottal stop or h), and/or r or v in the main syllable. Most presyllables (4.3) seem to permit nasalization of the main syllable vowel if the above criterion is present. Chart 4.16 illustrates these restrictions.

C_i:	Glot.	h	r	'r	hr	v	'v	hv
$C_p V_p$:								
ø	àu	hà		'rè	hrài		'vè	hvãi
hó-	hó-eó	hóhiã	hórẽ	hó'ràk			hó'vã	
kó-	kó-à	kóhôi		kó'ràu		kóvà		
mó-	mó-àu	móhã		mó'riù	móhrê			
pó-	pó-ùk	póhã						
ró-	ró-àh	róhe				róvèi		
tó-	tó-ìt				tóhrà			
i-						ivã		
u-	u-ùt							

Chart 4.16 Examples of preceding environments permitting vowel nasalization (note: the columns r and hv are insignificant if there is no phonemic difference between hór- and hr- and between hóv- and hv- (cf. 4.3))

The following environment for nasalization of the vowel must be an open syllable (ø), -h, voiceless stop (although p has not been so observed), and the vocoids -i and -u. (Neither has -ih been observed nasalized although it consists

of two nasalization-permitting environments -i and -h. As
noted above, the final stops and -h do not occur in tense
register clusters, so do not permit nasolaryngealization
either. Chart 4.17 illustrates these restrictions.

C_f:	-ø	-h	-t	-k	-i	-u
Nasalized vowels	e	eh	mohot	hak	ho-ui	mohau
Nasolaryngealized vowels	he	x	x	x	hai	ko-ou

Chart 4.17 Examples of following environment permitting
vowel nasalization (x indicates structural
restriction for laryngealization)

Nasalized vowels are uncommon, occurring in only 3%
(42/1409) of the words of the dictionary count (my full dic-
tionary listing includes about 94 nasalized words) and in
2% (451/27437) of the text count. Despite the general in-
frequent occurrence of nasalized vowels within the stated
nasalization-permitting environments, nasal vowels are on a
par with oral vowels: in the limited environment where 94
nasalized vowels occur, there also occurs only 124 non-nasal-
ized vowels; or, in such environments 43% of the words are
nasalized. Though nasalized words are in the minority in
such environments one suspects that nasalization is normal
and oral vowels are marked. For example, Vietnamese hoc 'to
study' has no nasal aspect, yet as a recent borrowing into
Sedang, occurs nasalized as hok.

Chart 4.18 cites the dictionary and text frequencies of the four-way register and nasal contrast.

	Oral vowels				Nasal vowels			
	Dict.		Text		Dict.		Text	
	No.	%	No.	%	No.	%	No.	%
Clear vowels	947	67	18363	67	32	2	215	1
Laryngealized vowels	420	30	8623	31	10	1	238	1

Chart 4.18   Dictionary (1409 words) and text (27,437 words) frequencies of vowels with register and/or nasal modification

Nasal and register contrastive sets:

ha	'crowded'	LR - oral
há	'open mouth'	TR - oral
hà	'Dak Ha village name'	LR - nasal
hã	'also'	TR - nasal

ia	'few'	
iá	'to respect' (ia)	
ià	'section of field; to dry rice; a river name'	
iã	'easy'	

Summary of vowel plus final-consonant clusters.   The principal structural cooccurrence features of the vowel plus final-consonant clusters are:

(1) The register contrast pertains only to the open syllables

and those with final nasals, -i̲, or -u̲.

(2) The nasal-oral contrast pertains to all syllables except those with final nasal consonant.

(3) The seven simple vowels occur in open syllables and with each final consonant, though in varying patterns. All seven have been observed only with -ng̲, -k̲, and -h̲. Only five or six vowels have been observed with -m̲, -n̲, -p̲, and -t̲ (although structurally it seems as though these holes are coincidental). Structurally it appears that -i̲ is restricted to just five clusters ei̲ ⌐ei⌐, ai̲, ui̲, ôi̲, and oi̲, and that -u̲ is restricted to just three clusters iu̲, au̲, ou̲. The other final consonants, -˘̲, -i̲, -ih̲, -l̲, and -r̲, are minor consonants with too infrequent occurrence to state the structural relations which they may develop except that the complex finals -i̲ and -ih̲ will not extend beyond the patterns of their component parts -i̲, -˘̲, or -h̲.

(4) Central glides occur only in open syllables and with final nasals, stops, and -h̲.

(5) Back glides occur only in open syllables and with final velars -ng̲ and -k̲ and with -h̲.

(6) Front glides occur only in open syllables. (They have not been observed nasalized.)

Chart 4.19 shows all vowel plus final-consonant clusters observed to date. The three parts of the chart group those clusters with (a) both register and nasal contrasts, (b) only register contrasts, and (c) only nasal contrasts.

	Open syl., ∅		-i		-u	
	Oral	Nasal	Oral	Nasal	Oral	Nasal
Clear vowels	ì u ê ô e a o	ì̃ ũ ẽ è à ò	uì ei ôi ai oi	ùi èi òi ài	iu ôu au	ìu àu
	ìa ua ea oa	ìa ùa èa òa				
	iô uô eô					
	ie ôe					
Laryn. vowels	í ú á ô é á ó	ĩ ẽ̃ ẽ̃ ã̃	éi ói ái ói	ói ãi	íu ôu áu	õu õu
	ía úa éa	ĩa ũa ẽa				
	uô eô	eô				
	íe ôe					

Chart 4.19 Vowel plus final-consonant clusters: part (a) Clusters with both register and nasal contrasts (each sector of the chart has four vertically-adjacent boxes enclosing, from top to bottom, single vowels, central glides, back glides, and front glides)

	-m			-n			-ng		
Clear vowels	im		um	in		un	ing		ung
			ôm			ón	êng		ông
	em	am	om	en	an	on	eng	ang	ong
	iam		uam	ian		uan	iang		uang
							eang		oang
									uông
Laryn. vowels			úm	ín		ún	íng		úng
			ə́m						
	ém	ə́m	óm	én	án	ón	éng	áng	óng
	íam		úam	ían		úan	íang		úang
	éam			éan			éang		óang

Chart 4.19 Vowel plus final-consonant clusters: part (b)
Clusters with only register contrasts

-p		-t		-k	
Oral	Nasal	Oral	Nasal	Oral	Nasal
ip up		it	ìt ut	ik ok	ìk uk
ôp				êk ôk	ềk ồk
ep ap		et at ot	àt òt	ek ak ok	èk àk òk
iap uap		iat uat	'	iak uak	
eap				eak	èak
				iôk uôk	iồk

-h		-		Others
Oral	Nasal	Oral	Nasal	
ih uh	ìh ùh	ǐ ǔ		-ih: ôih, uih
êh ôh	èh òh	ê̌ ǒ		-i: ai, oi
eh ah oh	èh àh òh	ě ǎ ǒ		-l: el
iah uah				-r: ar
eah oah				
uôh				

Chart 4.19 Vowel plus final-consonant clusters: part (c)
Clusters with only nasal contrasts

Though Chart 4.19 includes 196 different observed clusters,
at least 312 different combinations seem structurally possi-
ble--many of which, with additional data, will undoubtedly be
found. The text material used for the dictionary and text
frequency counts included only 166 different vowel plus final-
consonant clusters among its 1409 different words. Only
twenty-two of these clusters account for 43% of the words
and 69% of the text. Chart 4.20 lists these 22 clusters--
i.e. all clusters which have either a dictionary or text
count of at least 2%.

4.3 Presyllables

Presyllables ($C_p V_p$) are the unstressed-consonant-plus-
vowel syllables which precede the stressed main syllables
described above. There are five types of presyllables: basic
presyllables account for 96% (4586/4766) of all presyllables;
basic consonantal reduplicative presyllables, 3%; the other
three types only 1%. Partial morpheme reduplication (12.6)
accounts for some, but not all, reduplicative presyllables.

Basic presyllables. Basic presyllables are restricted to a
limited set of basic presyllable consonants followed by a
schwa vowel (written -ə-) except that with an initial (un-
written) glottal the vowel may be either schwa (here written
ə- (ə never occurs without a preceding consonant)) or i-.
The basic presyllables are shown in Chart 4.21. The presyl-

	Dict. count		Text count	
	No.	%	No.	%
-a	72	5	2290	8
-o	69	5	1416	5
-ôu	38	3	454	2
-ei	37	3	715	3
-á	35	2	2456	9
-ai	35	2	1912	7
-u	30	2	526	2
-ó	28	2	373	1
-ê	26	2	423	2
-áng	25	2	377	1
-i	24	2	1162	4
-ǒi	23	2	509	2
-ang	23	2	297	1
-éang	22	2	229	1
-oh	22	2	206	1
-ah	20	1	528	2
-eh	17	1	581	2
-ôh	16	1	688	3
-e	13	1	1833	7
-ôi	11	1	441	2
-iáng	5	0	491	2
-ǒo	3	0	647	2
144 others	815	58	8883	32
Total	1409	101	27437	101

Chart 4.20 Dictionary and text frequencies of 22 most common vowel plus final-consonant clusters (including open syllables)

	Bilabial	Alveolar	Palatal	Velar	Glottal
Stop	pó-	tó-		kó-	a-, i-
Nasal	mó-				
Oral		ló-, ró-			hó-
Minor	bó-	xó-	jó-		

Chart 4.21 Basic presyllables showing basic presyllable
consonant set, C$_p$ (the consonant symbols have
the same phonetic value as given for initial
consonants (4.1))

lables bó-, xó-, and jó- occur so infrequently that they are
considered minor presyllables.

Presyllables pó-, tó-, kó-, and mó- are sometimes, but
not usually, affixes; ló- is usually an affix (12.1-5).

Presyllables hó- and ró- are followed by a non-phonemic
[ə] before voiceless stops; thus: róta [rˀ sta].

There are various cooccurrence patterns and restrictions
between the presyllables and following consonants or conson-
ant clusters. mó- only rarely precedes a voiceless consonant
other than h and glottal, and never precedes homorganic b or
v. Complementing this presyllable pó- only rarely precedes
a voiced stop (sometimes pó- and mó- are permitted alternate
presyllables before voiced stops of some words) and never
precedes homorganic m or v. Presyllable kó- does not precede
homorganic g. By definition no basic presyllable precedes a
consonant identical to the presyllable consonant (such would

be a basic consonantal reduplicative presyllable, for which
see below). Aspirated consonant clusters (ph, th, and kh)
and the complex consonant clusters rarely occur following a
presyllable. Initials y and hy, recently introduced into
Sedang, have not yet been observed in bisyllabic words (ex-
cept Bahnar loan bóyang 'God'). Chart 4.22 lists all ob-
served basic presyllables with the consonants or consonant
clusters which they precede. The minor presyllables are not
included in the chart but have been observed only as follows:
bó--, bón-, bóhn-, bór-, bóy-; jól-, jór-, jóx-; xó'd-, xól-,
xóm-, xór-. Though Chart 4.22 includes 219 different ob-
served clusters, at least 444 different combinations seem
structurally possible.

The presyllable vowel discriminates between bisyllabic
words and monosyllabic words with an initial consonant clus-
ter in the following pairs: ph- and póh- (the latter, but not
the former, permits vowel nasalization); pl- and pól-; pr-
and pór-; th- and tóh-; tl- and tól-; tr- and tór-; kh- and
kóh- (the latter, but not the former, permits vowel nasaliza-
tion); kl- and kól-; kr- and kór-; mr- and mór-; hm- and hóm-;
hn- and hón-; hnh- and hónh-; and hng- and hóng-. The follow-
ing contrasts are at best only tenuous: hv- and hóv-; hr- and
hór- (both members of these two pairs permit nasalization);
hl- and hól-. There is no bisyllabic word with presyllable
and initial consonant corresponding to the consonant clusters
ml and hy.

(Chart 4.22)

	mó-	pó-	tó-	kó-	hó-	ró-	ló-	a-	1-
p	x	REDUP	tóp-	kóp-	hóp-	róp-	lóp-	ap-	1p-
ph	x	"		kóph-					
pl	x	"	tópl-	kópl-		rópl-		apl-	1pl-
pr	x	"	tópr-						1pr-
t	mót-	pót-	REDUP	kót-		rót-	lót-		1t-
th	x		"	kóth-	hóth-	róth-		ath-	
tl	x		"						
tr	x	pótr-	"	kótr-	hótr-	rótr-	lótr-		
ch	x	póch-	tóch-	kóch-		róch-	lóch-	ach-	
k	x	pók-	tók-	REDUP	hók-	rók-	lók-		
kh	x	pókh-	tókh-	"			lókh-		
kl	x	pókl-	tókl-	"	hókl-		lókl-		1kl-
kr	x	pókr-	tókr-	"	hókr-	rókr-	lókr-	akr-	1kr-
b	x	x	tób-	kób-	hób-	rób-			
bl	x	póbl-		kóbl-	hóbl-	róbl-			
br	x	x	tóbr-	kóbr-	hóbr-				
'b	x	pó'b-	tó'b-	kó'b-		ró'b-			
'br	x	x							
'bl	x	x		kó'bl-					
d	mód-	pód-	tód-	kód-	hód-	ród-			
dr	módr-	pódr-	tódr-	kódr-	hódr-				1dr-
'd	mó'd-	x	tó'd-	kó'd-		ró'd-			
'dr		x							

	mó-	pó-	tó-	kó-	hó-	ró-	ló-	a-	i-
j	mój-	pój-	tój-	kój-	hój-	rój-			
g	móg-	x	tóg-	x	hóg-	róg-	lóg-		
gl		x		x					
gr	mógr-	x		x					igr-
'gr		x		x					
m	REDUP	x	tóm-	kóm-	hóm-	róm-	lóm-	am-	im-
ml	"	x	tóml-						
mr	"	x	tómr-	kómr-	hómr-				imr-
hm	"	x	tóhm-		REDUP	róhm-	lóhm-		
'm	"	x	tó'm		hó'm-	ró'm-			
'mr	"	x							
n	món-	pón-	tón-	kón-	hón-	rón-			in-
hn	móhn-	póhn-	tóhn-	kóhn-	REDUP				
'n	mó'n-	pó'n-		kó'n-	hó'n-	ró'n-	ló'n-	a'n-	i'n-
nh	mónh-		tónh-	kónh-	hónh-	rónh-		anh-	
hnh		póhnh-		kóhnh-	REDUP			ahnh-	
'nh	mó'nh-	pó'nh-	tó'nh-				ló'nh-		
ng	móng-	póng-	tóng-	kóng-	hóng-	róng-	lóng-	ang-	ing-
(ngr)			tóngr-						
hng					REDUP				
'ng			tó'ng						
'ngr									
v	x	x	tóv-	kóv-	hóv-	róv-			iv-
hv	x	x			REDUP				
'v	x	x		kó'v-	hó'v-				

	mó-	pó-	tó-	kó-	hó-	ró-	ló-	a-	l-
l		pól-	tól-	kól-	hól-	ról-	REDUP	al-	ll-
hl		póhl-	tóhl-	kóhl-	REDUP		"		
'l		pó'l-	tó'l-	kó'l-	hó'l-		"		
r	mór-	pór-	tór-	kór-	hór-	REDUP			lr-
hr	móhr-	póhr-	tóhr-		REDUP	"			
'r	mó'r-	pó'r-	tó'r-	kó'r-	hó'r-	"			
y	x	x	x	x	x	x	x	x	x
hy	x	x	x	x	x	x	x	x	x
x		póx-	tóx-	kóx-		róx-			
s		pós-	tós-			rós-		as-	
h	móh-	póh-	tóh-	kóh-	REDUP	róh-	lóh-		ih-
-	mó--	pó--	tó--	kó--	hó--	ró--	ló--	REDUP	REDUP

Chart 4.22   All observed basic presyllable plus initial
consonant or consonant cluster combinations
(parentheses about initial consonant cluster
indicates it has not been observed apart from
a presyllable; REDUP indicates reduplicative
pattern for which see following sections; x
indicates strong structural pressure against
its occurrence)

Chart 4.23 shows the dictionary and text frequencies of all presyllables.

	Dict. count		Text count	
	No.	%	No.	%
Basic presyl.				
kó-	455	23	680	28
tó-	371	19	508	21
hó-	267	13	258	11
ró-	273	14	300	13
pó-	221	11	253	11
mó-	134	7	262	11
ló-	53	3	25	1
í-	41	2	32	2
a-	32	2	16	1
Minor presyl.				
bó-	9	1	7	0
xó-	19	1	1	0
jó-	3	0	0	0
Redup. presyl.				
19 types	36	2	37	1
Total	1914	98	2399	100

Chart 4.23 Dictionary and text fre-
quencies of presyllables

Basic consonantal reduplicative presyllables. In basic consonantal reduplicative presyllables, the presyllable has a basic presyllable consonant (cited above) but precedes an initial consonant or consonant cluster with an identical consonant. The presyllable vowel may be either schwa, -i-, or -u-, as shown in Chart 4.24. There does not appear to be any factor which conditions the presyllable vowel in these cases, so they are presumed contrastive despite the otherwise noncontrastive character of the presyllable vowel in basic presyllables. If the main syllable vowel is i or u and corresponds to the presyllable vowel, the basic consonantal reduplicative presyllable is indistinguishable from the basic complete reduplicative presyllable described below (cf. kiki, hihia, i-iu).

Basic complete reduplicative presyllable. In basic complete reduplicative presyllables, the presyllable has a basic presyllable consonant (cited above) preceding an initial consonant or consonant cluster with an identical consonant and a presyllable vowel duplicative of the main syllable vowel (though unglided and with neither register nor nasal contrast). Cf. the following:

ê-êa	hêhê
ô-ôh	lalám
pêpé	lelém
toton	momot

-ó-	-i-	-u-
móm-	mim-	sum-
póp-		pup-
		pupl-
		pupr-
tót-	tit-	tut-
	tith-	
tótr-		
kók-	kik-	kuk-
		kukh-
kókl-	kikl-	kukl-
		kukr-
	hih-	huh-
rór-	rir-	rur-
lól-	lil-	lul-
lóhl-		luhl-
		lu'l-
	i-- (i-ia)	u-- (u-uh)
	xix-	xux-

Chart 4.24   Basic consonantal
reduplicative
presyllables

Extended <u>consonantal</u> <u>reduplicative</u> <u>presyllable</u>. In extended
consonantal reduplicative presyllables, the presyllable has
a presyllable consonant or consonant cluster other than a
basic presyllable consonant, duplicative of the main syllable
initial consonant or consonant cluster, and a presyllable
vowel -i- or -u-. If the main syllable vowel is i or u, and
corresponds to the presyllable vowel, the extended consonant-
al reduplicative presyllable is indistinguishable from the
extended complete reduplicative presyllable (cf. <u>chuchua</u>,
<u>numúm</u>).

-i-	-u-
'bi'bôi	
chichôu, chichu	chuchi, chuchie, chuchiu
	dudat
'di'do, 'di'dot	
krikróu	krukréo
nino	nunit
	hnuhnai
'ni'no	
nhinhon	nhunhiat
pripro	
hrihroh	
tritrôu	

Extended <u>complete</u> <u>reduplicative</u> <u>presyllable</u>. In extended
complete reduplicative presyllables, the presyllable has a

presyllable consonant or consonant cluster other than a basic presyllable consonant, duplicative of the main syllable initial consonant or consonant cluster, and a presyllable vowel duplicative of the main syllable vowel.

> drədrai, drədreng
>
> 'mo'mo, 'mo'mo
>
> ngongó
>
> prôprông

The above five types of presyllables with following environment when relevant may be summarized as follows and as in Chart 4.25.

$C_p V_p \dot{...}:$

(1)	$C_p \acute{o}...$	Basic presyl
(2)	$C_p - \acute{o}/1/u - (C_m)C_p(C_m)...$	Basic cons redup presyl
(3)	$C_p V C_p V...$	Basic comp redup presyl
(4)	$(C_m)C_1(C_m) - 1/u - (C_m)C_1(C_m)...$	Ext cons redup presyl
(5)	$(C_m)C_1(C_m)V(C_m)C_1(C_m)V...$	Ext comp redup presyl

Not included within the presyllable structures described above are two words with nasalization of the presyllable vowel:

> ũ-ùt   'small red bird'
>
> 'rũ'rŏh   duplicative form of 'roh 'to excise,
>
> extract'

Also not included are chókhóng 'shoes' (borrowed from Bahnar) and ulap 'a village name'.

Presyllable consonantal reduplicativity:	Non-reduplicative consonant	Reduplicative main syllable consonant	
Presyllable vowel:	-ó-	-i-, -u-	Duplicative main syllable vowel
Presyllable consonants: Basic presyllable consonant set C_p	1. Basic presyllable (96%) $C_p\acute{o}$	2. Basic consonantal reduplicative presyllable (3%) C_p-ó/i/u-	3. Basic complete reduplicative presyllable C_pV
All other consonants and consonant clusters $(C_m)C_1(C_m)$	X	4. Extended consonantal reduplicative presyllable $(C_m)C_1(C_m)$-i/u-	5. Extended complete reduplicative presyllable $(C_m)C_1(C_m)V$

Chart 4.25   Presyllable types (arrows indicate partial overlap of definition with main syllable i and u vowels)

4.4 Phonological word reduplication

Prior to this point, this chapter has described the various features of mono- and bisyllabic phonological words. It should be noted that almost all lexical words consist of a single phonological word. There are a few lexemes, however, which consist of more than a single phonological word, but may be two or three mono- or bisyllabic phonological words with duplication of one or more phonological parts. Onomatopoeia (12.10) uses extensive phonological word reduplication.

Monosyllabic phonological word reduplication:

    Complete word reduplication:

        'blut 'blut   'little by little'

    Consonant-vowel reduplication:

        bang bal   'kind of catfish'

        dang dak   'to climb up steep mountain'

    Initial and final consonant reduplication:

        'but 'bat   'scattered all over the place'

        kung king kóng   'elbow'

    Initial consonant reduplication:

        rê róng   'a fearful cry'

        blu blep   'to rush in'

        bling blea   'an "x" mark'

        chek chang   'to lie on one's side'

        kung keo   'knee tendon'

Bisyllabic phonological word reduplication:

    Presyllable and initial consonant reduplication:

        kó'blôu kó'bla 'very crowded'

        kó'nôk kó'nak '(of wet flesh) to be white and

                puffy'

4.5 Alphabetization

Alphabetization of Sedang words in this dissertation as well as in other publications (Smith, 1967a; (primer series)) is based upon the following principles:

(1) Where Sedang phonology and orthography parallel Vietnamese, follow the Vietnamese alphabetization system used by Nguyễn-Dình-Hòa in Hoa's Vietnamese-English dictionary which is based primarily on the usual order of the Roman alphabet as in English. This implies the following:

(a) Digraphs and consonant clusters are alphabetized as units, not inserted within single letter sections; cf. ch, kh, ng, nh, ph, th, tr.

(b) Vowel letters with added vowel diacritics are alphabetized as units after the vowel without the diacritic; cf. Vietnamese a, ă, â; e, ê; o, ô, ơ; u, ư; but Sedang e, ê; o, ô.

(c) In vowel glides each letter is considered a separate entity.

(2) Where Sedang phonology and orthography differs yet parallels Vietnamese, follow the Vietnamese established pattern.

(a) Sedang has consonant clusters not found in Vietnamese, but these are alphabetized as units (cf. Vietnamese tr); thus bl, br, 'b, 'bl, 'br are alphabetized apart from b; ml, mr, hm, 'm are alphabetized apart from m.

(b) Sedang marks register and nasalization as Vietnamese marks tone. Vietnamese tone diacritics are alphabetized as though the tone diacritic was inserted immediately following the vowel and before any final consonant, if present. The alphabetic order of Sedang diacritics thus is: _ (laryngealization), ˌ (nasalization), ˷ (nasolaryngealization).

(c) In Sedang orthography _ represents final glottal stop whereas in Vietnamese it represents a short vowel. In Sedang alphabetization it follows the above diacritics and has priority over any following letter (in another word).
3. Where Sedang and Vietnamese phonology, and thus orthography, differ, Sedang practice must determine its own conventions.

(a) Sedang has a phoneme and letter not found in Vietnamese which nevertheless is alphabetized in the usual Roman manner; cf. j.

(b) Sedang has bisyllabic words unlike Vietnamese. Bisyllabic words are alphabetized as a group immediately following monosyllabic words beginning with the same letter.

(c) Sedang voiceless consonants, orthographically consonants preceded by an h, are considered digraphs (or trigraphs) and are alphabetized immediately following the con-

sonant (or consonant's presyllable) so modified, rather than
within the h̲ section.

(d) Sedang preglottalized consonants, orthographically
consonants preceded by an apostrophe ', are considered di-
graphs (or trigraphs) and are alphabetized immediately fol-
lowing the consonant (and its presyllable and other conson-
ant clusters) so modified. Voiceless consonants are alpha-
betized before preglottalized consonants.

(e) In vowel glides the circumflex in e̲a̲, o̲a̲ and e̲o̲ is
redundant; thus the circumflex is omitted (e̲a̲, o̲a̲, e̲o̲), yet
the vowel letter is alphabetized with all other similar cir-
cumflexed vowels to retain similar vowel quality within the
section.

The order of sections within a Sedang dictionary or the
Sedang alphabetic order follows. This is a practical rather
than theoretical alphabet in that other sections may be added
as consonant clusters or presyllables not now included may
occur. (- indicates bisyllabic word; b̲ó̲-, etc. represents
any bisyllabic word beginning with b̲ regardless of presyl-
lable vowel)

> ´, `, ˜, ˘ , a-, b, bó-, bl, br, 'b, 'bó-, 'bl,
> 'br, ch, chó-, d, dó-, dr, dró-, 'd, 'dó-, 'dr, e,
> ê, ê-, g, gl, gr, 'gr, h, hó-, i, i-, j, jó-,
> 'j, k, kó-, kh, kl, kr, kró-, kv (see chapter 5),
> l, ló-, hl, 'l, m, mó-, ml, mr, hm, 'm, 'mó-, 'mr,
> n, nó-, hn, hnó-, 'n, 'nó-, ng, ngó-, ngr, hng,

'ng, 'ngr, nh, nhơ-, hnh, 'nh, o, ô, ô-, p, pó-,
ph, pl, pr, pró-, r, ró-, hr, hró-, 'r, 'ró-, s,
t, tó-, th, tl, tr, tró-, u, u-, v, hv, 'v, x,
xó-, y, hy.

CHAPTER 5   SYNCHRONIC PHONOLOGY: DIALECTAL VARIATIONS

The Sedang themselves distinguish at least seventeen
Sedang (ethno-)dialects (Smith, 1969b, 1973b). Their ethno-
dialectal terminology focuses principally on the variations
of the vowel plus final-consonant cluster ai, as it occurs
in the Sedang word kóklai 'what?' and ti lai 'how, why?'.
Other differences are terminological or are variations of
the initial consonant cluster. The seventeen ethnodialects
(with vowel plus final-consonant cluster variations in paren-
theses) are:

1. rótéang kólĕ   (ĕ)

2. rótéang kólei   (ei)

3. rótéang kikle   (e)

4. rótéang kóklai   (ai)

5. rótéang kókli yau   (i)

6. rótéang kókli   (i)

7. rótéang kia kiklei   (ei)

8. rótéang kia klĭ   (i)

9. rótéang ti lai   (ai)

10. rótéang ti lài   (ài)

11. róteang ti loi   (òi)

12. róteang tea lei   (èi)

13. róteang chu li   (ì)

14. róteang chu lei   (ẻi)

15. róteang chu lai   (ǎi)

16. róteang nam lai   (ai)

17. róteang ko'nân   (-)

(̣ indicates a breathy vowel, ̣ a dipping contour like the
Vietnamese hỏi tone, â a short schwa vowel as in Vietnamese).
Map 5.1 locates these ethnodialects in the Sedang area.

Though the ethnodialectal terminology focuses on the
pronunciation of only one or two specific words in the var-
ious Sedang areas, the vowel plus final-consonant variations
occur correspondingly in the Sedang areas in all words with
final -ai (e.g. mai 'brother- or sister-in-law', plai 'fruit',
tai 'entire', kai 'to be able', vai 'they', kó'nai 'behind',
phai 'to be full', etc.). These vowel plus final-consonant
cluster variations of the standard or central Sedang -ai
include variations of vowel, final consonant, and register:

(1) Vowel variations. The main vowel in standard -ai
is seen above to vary through the range i, ê (in ei), e,
a and o. Some of these vowels are diphthongized with -i.
The general pattern--though not consistently true--is that
-ai occurs throughout the central Sedang area, -i in the west
and south, -ei in the southwest, and -e in a pocket east of
DakTo. This highlights a principal feature of Sedang dia-
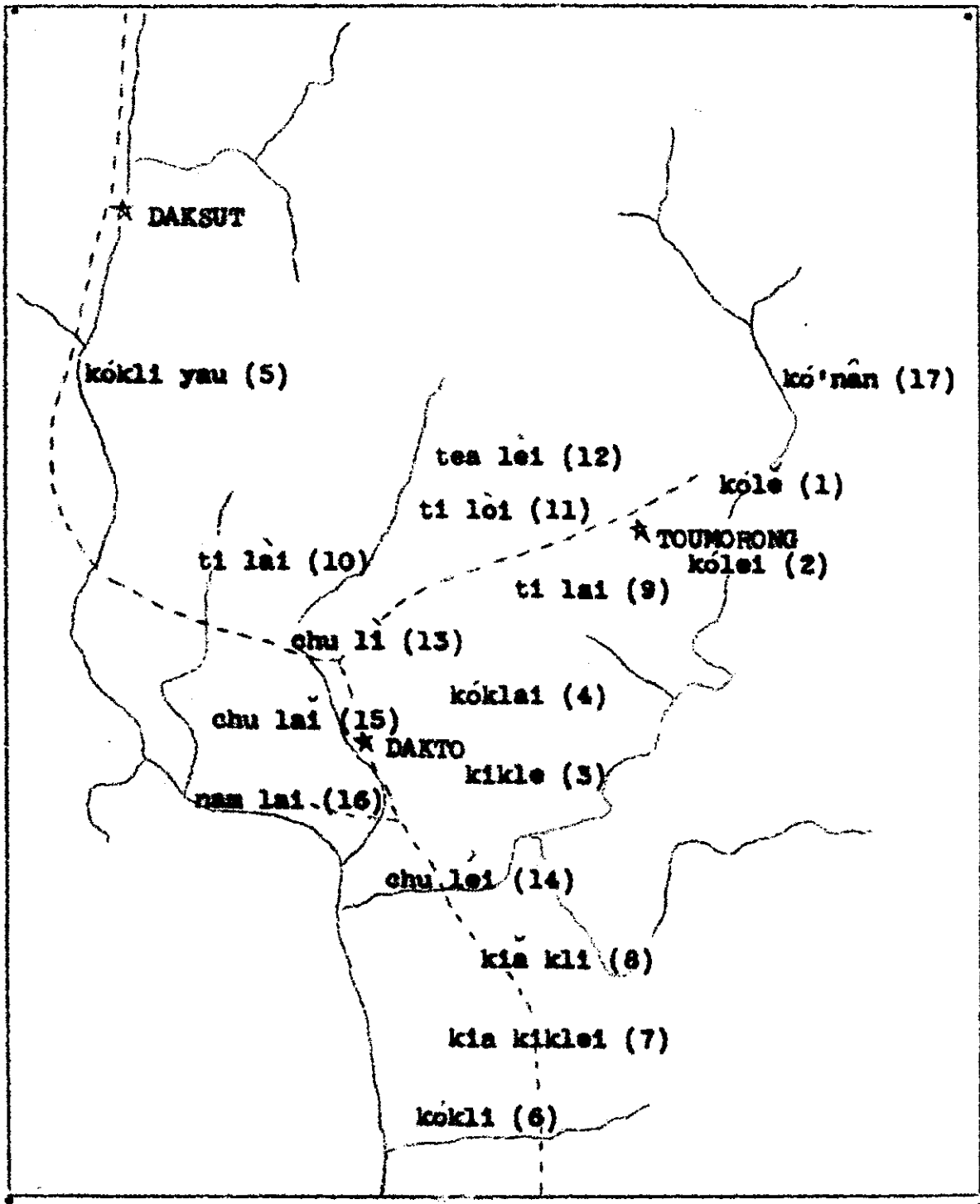
Map 5.1   Location of Sedang ethnodialects (numbers cor-
respond to numbered list in text; stars indicate
government district centers)

lects as well as that which best describes the differences
of the Vietnam Mon-Khmer languages--vowel instability.
Indeed Thomas (1964b.160-161) has summarized that one diffi-
culty in Mon-Khmer comparative studies "is the complexity of
the vowel shifting that has taken place in Mon-Khmer making
it very difficult to establish regular patterns....Other
comparativists have stated flatly that regular sound-laws
simply do not exist in Mon-Khmer vowels..."

As was shown in chapter 4, vowels are an integral part
of the vowel plus final-consonant cluster. In dialectal
variations, vowels are also conditioned by this environment.
For example, whereas open syllable a and á are stable
throughout the Sedang area, with a following consonant the
vowel may vary in different ways. The varying a in -ai has
already been noted. Note also: (a) -au (as in plau 'thigh',
xau 'afraid', kau 'serpent-head fish', rópau 'thousand',
etc.) has alternate forms -ôu in the southeast and -u in
most border areas; (b) -ah (as in tópah 'seven', xah 'play',
pah 'snake', tah 'castrate', etc.) has alternant forms -eih
in DakSut Sedang and -eh in a large southwestern area.

Similarly many other vowels in the vowel plus final-
consonant clusters shift in the Sedang area, each having its
own peculiar--and sometimes indistinct--geographical spread
and many thrusting their isoglosses through the heart of
central Sedang. Note, for example: (a) -ôh (as in môh
'nose', pôh 'roast', kôh 'greet', etc.) has variants -oh in

the west and a few other central pockets and -uh in border
areas; (b) -ôu (as in ôu 'drink', pôu 'drunk; carry on back',
tôu 'breast', kópôu 'buffalo', etc.) has variants -au in the
west and -o in the southeast; (c) -ei (as in kóchei 'sneeze',
pei 'work', mei 'rain', xei 'horse', etc.) has variants -e
in the west, -i in the east, and -ie in KonHreng Sedang.
And similarly the vowels in many, if not most, of the vowel
plus final-consonant clusters have variant forms in some
Sedang area differing from that of central Sedang as describ-
ed in chapter 4. Also, a lax register cluster will vary in
a different manner than the corresponding tense register
cluster.

(2) Final consonant variations. The cluster -ai is
shown above to have among its variants a final glottal stop.
A principal dialect feature of Sedang in areas to the west
of National Highway #14 and in the border areas near Todrah
and Rengao is retention of final consonants which central
Sedang has lost (cf. phonological development of Sedang from
Proto-North-Bahnaric, chapter 6). In the southern (Todrah?,
cf. Gregerson and Smith, 1973) area there is a merging of
voiceless stops with final glottal stop.

(3) Register variations. The lax register cluster -ai
is shown above to have accompanying breathiness in the west
and south as the Sedang area merges into the Rengao and
Todrah language areas. This is a dialect characteristic
of the lax register clusters in general. Whereas in central

Sedang the register contrast is manifested by normal vowels
for the lax register, in the border areas, like the surround-
ing languages, it is manifested by breathy vowels; similar-
ly whereas in central Sedang the tense register is manifest-
ed by laryngealized vowels, there are clear vowels in the
border areas.

There are other dialect variations not suggested in the
ethnodialectal terminology, including differences in the pre-
syllable, initial consonants, and the denasolaryngealization
phenomenon:

(4) Presyllable variations. Presyllables are generally
unstable in Mon-Khmer languages with frequent (sometimes in-
explicable) consonant changes or loss. The Sedang dialects
also examplify such presyllable instability. Usually pre-
syllable variation is not structural; rather each word with a
presyllable is a law unto itself, having its own pattern of
variants. Two systematic presyllable variations may be noted,
however: (a) ró- with non-phonemic a before voiceless stops
(as in rokai 'boar', rokong 'mouth', roteang 'Sedang', ropam
'field shed', etc.) has variants hó- or h- in the west, s- in
Kotua Sedang (near Mang Buk), and unpredictable dropping of
the non-phonemic a throughout the central and greater Sedang
area; (b) presyllable metathesis occurs in at least two south-
west central Sedang villages (Tea Jong, Tea Koxan), as in:

      akpau   for kópau 'blanket'

      akxiang   for kóxiang 'bone'

ardá	for	róda	'to stutter'
arhêng	for	róhêng	'to like'
astá	for	róta	'handspan'
apxí	for	póxí	'trigger'
apxám	for	póxám	'wild chicken'

(5) Initial consonant variations. The most notable initial consonant variation is that some x̱ (i.e. those which are reflexes of PNB *y rather than PNB *s (see chapter 6), like x̱ûan 'Vietnamese', x̱éang 'spirit', x̱au 'afraid', x̱ón 'tall', etc.) of central Sedang sometimes have a y variant in the northwest and south, and always in the more distant border areas.

(6) Denasolaryngealization phenomenon. The process of denasolaryngealization is perhaps the most intriguing aspect of Sedang dialects because of its very stark change across the Sedang area and because it affects a wide range of vowel plus final-consonant clusters, including such frequent clusters as áng, éang, íang, etc. It is described in Smith (1973a.55):

> "Words having a final nasal consonant (m, n, or ng) and a clear tense register vowel in Proto-North-Bahnaric as well as in the present-day languages surrounding the Sedang language area have a laryngealized tense register vowel in Early Sedang. Though some portions of the Sedang language area continue to retain the laryngealized vowel and final nasal, more recently there has developed a further progression wherein a strengthened laryngealization of the vowel has affected the final nasal consonant to the point of cutting it off prematurely with a glottal stop, or sometimes entirely

dropping the nasal and replacing it with a
final glottal stop. Laryngealization of the
vowel, whether present or absent, then becomes
irrelevant, inasmuch as final glottal stop
does not elsewhere occur in these dialects....

Each phase of the denasolaryngealization process
is still current today among Sedang dialects and
neighboring languages. The process has been
stated as a rule..., in which V represents any
clear vowel, V̇ any laryngealized vowel, N any
final nasal n, m, or ng, (N) a weakly articu-
lated nasal, and a raised dot · a lengthened
vowel:

VN of Area A becomes V́N in Area B, which becomes
V́·(N) and V(N)q in Area C, which becomes
V(∅-ô-i/e)q and Vq in Area D. (The alternate
forms for the first type of Area D correspond to
the three nasals ng, m, and n, respectively.)

Area A includes KonHreng Sedang as well as neighboring

Rengao and Todrah; Area B includes Dakṣut Sedang as well as

the western and southeastern Greater Sedang areas; Area C

is southwestern central Sedang and Area D is central Sedang.

This gives rise to such variant forms as:

		'Sedang'	'five'	'four'	'squash'
Area A		hôdeang	pótam	pun	pian
Area B		rótéang	pótám	pún	pián
Area C,	type 1	róté·a(ng)	pótá·(m)	pú·(n)	pí·a(n)
	type 2	rótea(ng)q	póta(m)q	pu(n)q	pia(n)q
Area D,	type 1	róteaq	pótaôq	puiq	pieq
	type 2	róteaq	pótaq	puq	piq

Dialects differ in vocabulary as well as in pronuncia-

tion. Though the vocabulary of villages of central Sedang

are 98-100% cognate with each other, the vocabulary of vil-
lages in border areas drops to 88-90% cognate with central
Sedang. A few notable vocabulary differences are:

      lám, brôk 'to go'

      hme, pua 'cooked rice'

      ngoh, nhong, da 'older brother'

      kódê, hóna, pólot 'to kill'

      ti déi, ngôi, hió 'to have a good time'

Vocabulary differences of 10-12% in the border areas
together with the many and sometimes major sound shifts,
produces sufficient problems for intelligibility that such
groups as Sedang-Rengao in the west about Dakôot, and Tódrah
in the south near Konhreng (whom Rengao call 'Sedang" and
Sedang call "Rengao"), and the Kótua in the east near Mang
Buk cannot be included within the Sedang language area.

More detail of Sedang dialects with accompanying maps
is given in Smith (1967b). There is little or no information
on the social concomitants of the dialects.

CHAPTER 6 DIACHRONIC PHONOLOGY: DEVELOPMENT FROM
PROTO-NORTH-BAHNARIC

6.0 Introduction

As was shown in chapter 3, Sedang has derived from
Proto-North-Bahnaric (PNB) but has undergone considerably
more sound change than its neighbors. Mergers have produced
holes in the sound system which are now being filled as
Sedang reverts to a typical North Bahnaric sound system (6.1).
The lexicon has also been influenced by borrowings from
various contact languages (6.2). The PNB information is
from Smith (1972), a study based on 571 cognate sets. A
brief inspection of Proto-Bahnaric reconstructions by Phill-
ips (1971) indicated essentially similar results and would
not substantially affect this discussion.

6.1 Principal sound changes from Proto-North-Bahnaric

The principal sound changes from PNB will be discussed
by word position as in chapter 4.

Initial consonants and consonant clusters. PNB had the same
inventory of twenty initial consonants as Sedang now has, as
shown in Chart 4.1 (section 4.1)--but the PNB and Sedang con-
sonants do not have a one-for-one correspondence. Sedang

voiceless stops, nasals, and orals (except _y_) derive, in part, from the same type of consonants in PNB.

PNB		Sdg	
*pun		puan	'four'
*tap		tea	'slap'
*chang		chang	'sword'
*kan		kan	'big, tall'
*um		uam	'to winnow'
*mon		muan	'nephew, niece'
*nung		nong	'goose'
*nhin		nhen	'clearly'
*ngok		ngo	'mountain'
*soq		xo	'get'
*srok		so	'body louse'
*hak		hea	'vomit'
*wih		veh	'return'
*lem		lem	'good'
*rut		roe	'buy'

In addition, however, Sedang voiceless stops have derived from PNB voiced stops and preglottalized voiced stops.

PNB		Sdg	
*bong		poang	'casket'
*qbok		poa	'grandfather'
*deng		ting	'little finger'
*qdum		tuam	'ripe, red'
*jang		cheang	'work'
*gang		kang	'spirit pole'

Sedang nasals have also derived from PNB preglottalized nasals.

PNB	*qme	Sdg	mei	'rain'
	*qnaw		neŏ	'new'
	*qnhĕt		nha	'grass'
	*qngok		ngoa	'brain'

And Sedang x also derives from PNB *y and *qy.

| PNB | *yang | Sdg | xéang | 'spirit' |
| | *qyùng | | xuông | 'get up, stand' |

Consonant clusters follow the same patterns: preglottalization was lost, voiced stops with *-l and *-r became voiceless, voiceless consonant clusters were retained. The one exception to these generalization is that in bisyllabic words *dr was retained in Sedang though in monosyllabic words *dr merged with *tr.

PNB	*qdring	Sdg	triáng	'drinking straw'
	*brĕl		prĕ	'peanut'
	*blèw		plau	'thigh'
	*hmaq		hma	'acquaintance'
	*kadrì		kódrai	'female'
	*dreng		tríng	'yellow'
	*trùh		trôh	'arrive'

Consequently three conspicuous holes developed in the Sedang initial consonant system: (1) there were no voiced stops, (2) there were no preglottalized consonants (areal phonology shows that 'j and 'g are rare anyway), and (3) there was no y. Chart 6.1 illustrates most of these initial consonant sound shifts. The high frequency of voiceless stops and dr

PNB	Sedang	Sedang pattern holes
*p, *b, *'b ——> p		b, 'b
*t, *d, *'d ——> t		d, 'd
*ch, *j, *'j ——> ch		j, ('j)
*k, *g, *xg ——> k		g, ('g)
*q ————————> glottal stop		
*m, *'m ————> m		'm
*n, *'n ————> n		'n
*nh, *'nh ————> nh		'nh
*ng, *'ng ————> ng		'ng
*w ————> v		
*l ————> l		
*r ————> r		
*qy, *y, *s ————> x		y
*sr ————————> s		
*h ————————> h		

Chart 6.1 Proto-North-Bahnaric sources for
Sedang initial single consonants
(Sedang consonant clusters not
included)

and the low frequency of voiced stops and y in Sedang now,
as shown in chapter 4, attest to these mergers.

These three holes have since been filled. Some voiced
stops can be traced to Proto-Hre-Sedang origin (cf. Sdg
kóbô, Hr kabô 'who'; Sdg kódo, Hr kadoh 'hat'; Sdg gong, Hr

gòng 'outside'; and Sdg bo, Hr qmok 'window'; Sdg bàu, Hr
qmaw 'field rice') but most have entered the language in words
not yet tracable. Preglottalization is also returning to
Sedang under the influence of areal phonology in loan words
from several languages. y, apparently the most recent pho-
neme to enter the language, is tracable to loans from Bahnar
(yang, bóyang 'God', yoh '(sentence final particle)'), Viet-
namese (ya 'dạ, exclamation'; yep 'sandal'), and French
(móyô 'T-shirt').

Vowel plus final-consonant clusters. PNB, like most of the
North Bahnaric languages today but unlike Sedang, had a two-
register system in which tense register (TR) vowels were
clear and "normal" and the lax register (LR) vowels breathy.
The register system of Sedang has become relatively more
tense in that the former clear TR vowels became laryngealized,
and the former (relaxed) breathy LR vowels became clear.
(Two intermediate register stages are described below.)

In addition to fourteen final consonants like the Sedang
final consonant system shown in Chart 4.14 (section 4.2), PNB
also had palatal finals *-ch and *-nh; the PNB finals *-l and
*-r were distinctly separate phonemes. There is an exact
correspondence between PNB final nasals of both registers
and Sedang final nasals (except that for *-nh Sedang has -n
after back vowels, -ng elsewhere).

LR: PNB *pliam   Sdg pliam   'leech'

        *khin   khen   khen   'dare'

        *qdunh   ton   'long time'

        *plinh   pleng 'sky'

        *kung   kŏng   'steps'

TR: *maham   mŏheam 'blood'

        *kapen   kópen 'loincloth'

        *tanh   tĕn   'weave'

        *manenh   mónĕng 'crossbow'

        *mang   máng   'night'

This is the extent of exact correspondence, however, between
PNB and Sedang final consonants because of the influence of
the register system and drastic consonant reduction. Sedang
retained final voiceless stops in syllables of the LR (ex-
cept that for *-ch Sedang has -k after front vowels, and -t
after back vowels) but lost them (i.e. they merged with open
syllables) in syllables of the TR which syllables then became
LR open syllables (*-ch developed e Sedang -i diphthong after
back vowels); that is, the clear TR PNB vowels followed by
voiceless stops retained their clear quality but switched
registers doing so to become clear LR Sedang vowels instead
of retaining their register identification and becoming lar-
yngealized.

LR: PNB *ap   Sdg ap   'cook'

        *mut   mot 'enter'

        *huch   hut   'suck'

	*klèch	klek	'deaf'
	*qnhìk	'nêk	'hoe'
TR:	*katăp	kóta	'egg'
	*măt	ma	'eye'
	*hmuch	hmuî	'ant'
	*tĕch	tê	'sell'
	*qdak	tea	'water'

Syllables with final *-h developed similarly: Sedang retained
*-h in LR syllables but lost it in TR syllables where the
vowel remained clear (though sometimes became diphthongized
with -i or -u) and switched to the LR.

LR:	PNB *tapăh	Sdg tópah	'seven'
TR:	*pah	pa	'chop'
	*peh	pei	'pound rice'
	*kachuh	kóchôu	'spit'

The register contrast of PNB syllables with final glot-
tal stop has been lost, with the former LR syllables gener-
ally developing diphthongs with -i or -u in Sedang, and the
former TR syllables becoming simple vowels or -u diphthongs
also of the LR in Sedang.

LR:	PNB *ta-èq	Sdg tó-ò	'burp'
	*jìq	chai	'sick'
	*kamòq	kómôu	'dirty'
TR:	*krăq	kra	'old'
	*uq	ôu	'drink'

PNB diphthongs with *-w and *-y retain the register

ants themselves have been lost completely except that for *-l
Sedang has a -u reflex after back vowels.

LR: PNB *jǐl   Sdg chi 'deer'

       *(q)bǔl   pôu 'be drunk'

       *chìr   chia 'dig'

TR: *apǎl   pó 'mortar'

       *kul   : ..   kǒu 'to bark'

       *qbar   péa 'two'

PNB open syllable vowels of the LR have developed -i
and -u diphthongs in Sedang whereas those of the TR have
developed the diphthongs in some cases and remained simple
vowels in others. The register contrast is retained through-
out.

LR: PNB *brì   Sdg prei 'wild'

       *krò   krôu 'cry'

TR: *phe   phái 'husked rice'

       *hla   hlá 'leaf'

       *tamo   hmǒu 'stone'

Chart 6.2 illustrates the various register and final
consonant shifts from PNB to Sedang.

The Sedang final consonant system thus developed a num-
ber of structural holes: no palatal stop or nasal; no stops
or -h in TR syllables; no complex finals (-ih, -ǐ), glottal
stop, -l, or -r in either register. Four of these holes are
now being filled by loan words but only in the LR; their fre-
quencies of occurrence are the very lowest attesting to their

Lax Register			Tense Register	
Breathy vowels	Clear vowels			Laryngealized vowels
PNB	Sedang		PNB	Sedang

*Vm ──→ Vm   *Vm ──→ V̀m

*Vn ──→ Vn   *Vn ──→ V̀n
*Vnh   *Vnh
*Vng ──→ Vng   *Vng ──→ Vng

*Vp ──→ Vp   *Vp
*Vt ──→ V̀t   *Vt
*Vch   *Vch
*Vk ──→ V̀k   *Vk
*Vh ──→ Vh   *Vh
*Vyh ──→ Vih   *Vyh
*Vyq   (V̌i)   *Vyq
*Vy ──→ Vi   *Vy ──→ V́i
*V ──→ V   *V ──→ V́
*Vq   (V̆)   *Vq
*Vr   (Vr)   *Vr
*Vl   (Vl)   *Vl
*Vw ──→ Vu   *Vw ──→ V́u, V̂o
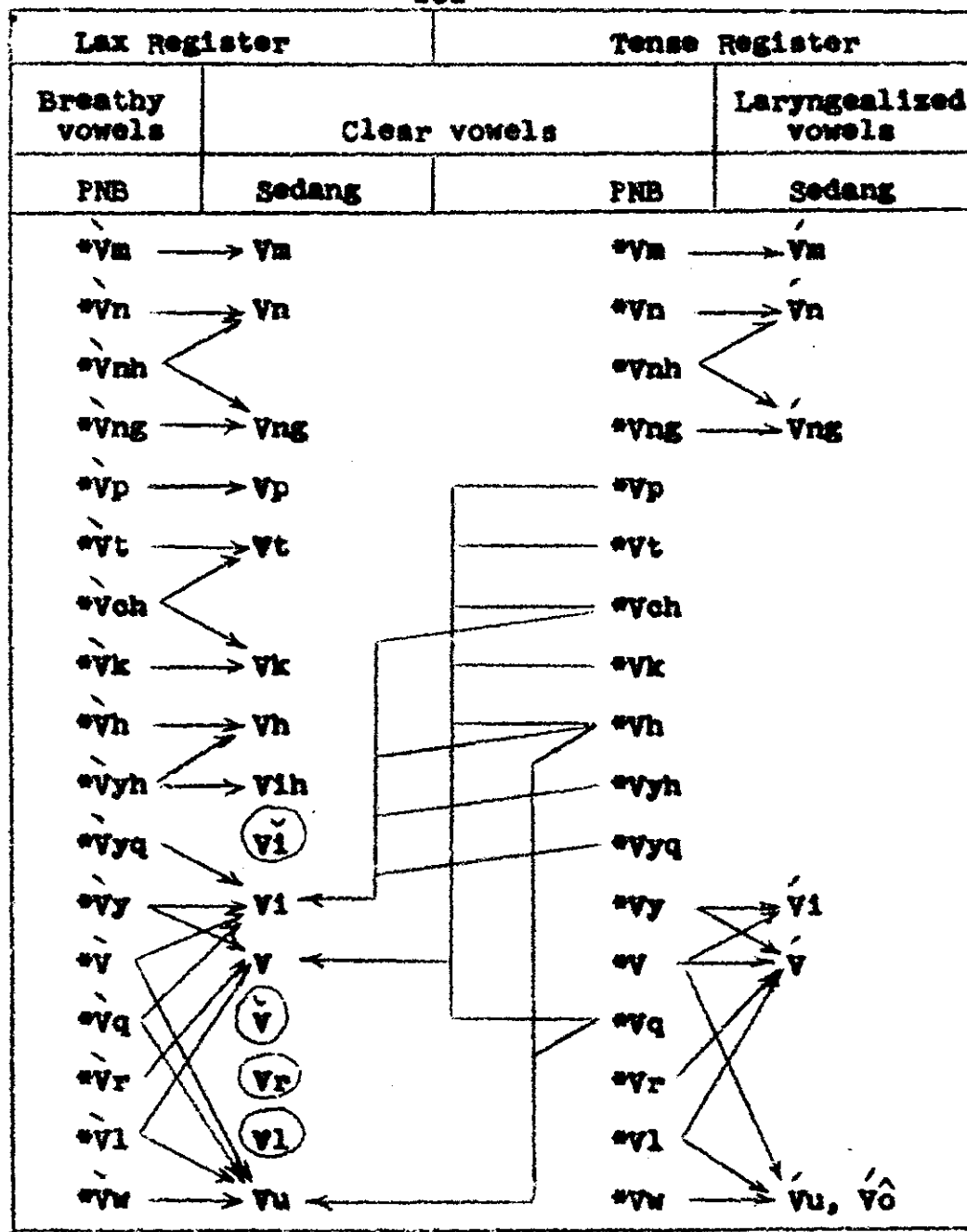
Chart 6.2   Sound changes of vowel plus final-
            consonant cluster of both registers
            from PNB to Sedang (adopted and expanded
            from Gregerson and Smith (1973.162))
            (circled items indicate holes in the
            Sedang phonemic pattern after this
            development from PNB but subsequently
            being filled)

recent introduction: $\breve{V}$, $\underline{Vl}$, $\underline{Vr}$, and $\underline{V\breve{l}}$. These loans are most-
ly from neighboring languages which retained these finals
from PNB.

The development of the Sedang register system from PNB
requires two intermediate three-register (howbeit phonetic,
not phonemic register) stages. (Three phonetic register
contrasts within two register systems have been reported in
Bru by Miller (in personal discussion) and Todrah (Gregerson
and Smith, 1973)).

> "This is necessitated by the observation that
> (1) if S(edang) had lost the tense register stops
> before the tense register open syllable vowel
> became laryngealized, then the vowels before those
> lost stops would have become laryngealized in S--
> but they are clear. Likewise (2) if the lax reg-
> ister stops had become clear before the tense reg-
> ister stops were lost, then all stops would have
> been lost--but the lax register stops have been
> retained. Therefore at an intermediate stage there
> necessarily had to be (1) open-syllable laryngeal-
> ized vowels, (2) clear vowels with stops, and (3)
> breathy vowels with stops." (Smith (1972.16))

Specific vowel correspondences between PNB and Sedang
are difficult to state apart from the specific cluster, in
that most vowel correspondences are affected by register and/
or final consonant. A generalization, however, can be noted
regarding vowel length contrast. Sedang does not have vowel
length contrast as reconstructed in PNB. Sedang glided
vowels reflect PNB long vowels and PNB short vowels never
have glided reflexes in Sedang; but some PNB long vowels may
be unglided in Sedang.

Presyllables. Like initial consonants, the PNB presyllable voiced stops have voiceless consonant correspondences in Sedang and *cha- has merged with *ta- and *ka-. Otherwise the correspondences are equivalent (i.e. Sdg pó- derives from *pa-, etc.) except that Sedang hó- derives from both *ha- and *sa-, and Sedang i- from *ja-.

PNB *pagang	Sdg pókeang	'medicine'
*tasam	tóseam	'things'
*chatraw	tótrau	'pigeon'
*chapang	kópeang	'palm (hand)'
*kasôm	kóxôm	'lizard'
*baqdăm	pótam	'five'
*daqbăng	tópang	'bamboo sprouts'
*jala	ila	'thornbush'
*gaqdim	kótem	'onion'
*maham	móheam	'blood'
*hanăm	hónăm	'year'
*sanĕnh	hónĕng	'tooth'
*ramun	rómuan	'soft'

6.2 Lexical borrowing

Many Sedang words clearly have genetic cognates in, for example, Bahnar and Vietnamese (as shown in Chapter 3). Apart from these, however, there are loaned or borrowed words

from several languages of varying depths in Sedang. The oldest, and almost inscrutable, are Sanskrit and Austronesian loans dating from the period of the Indianized Champa kingdom period of the first millenium AD. French loans date from the hundred year period of French colonization of the 19th and 20th centuries. There are Vietnamese and Bahnar loans from recent decades and English loans from the period of the American involvement in the Vietnam war.

Sanskrit. Sanskrit loans in the Vietnam Mon-Khmer languages were probably introduced through the Chamic languages which had the direct contact with the coastal Indian colonizers on the one hand as well as with the Mon-Khmer tribal peoples of the mountain areas of the other hand. These loans are too few to permit anything more than speculation at this time. Thomas and Headley (1970.408) cite "a few (6) possible Sanskrit resemblances" for Mon-Khmer words in their study, four of which have Sedang cognates:

Skt phala 'fruit'	Sdg plai 'fruit'
asva 'horse'	xei 'horse'
manusya 'man'	móngê 'person'
udaka 'water'	tea 'water' (cf. PNB
	*dak 'water')

The Vietnamese are known throughout much of Southeast Asia by a term like yuan (PNB *yun, Sdg xuan) which some relate to Skt yavana 'stranger, Greek'. Thomas (1974) dis-

putes this, speculating upon a Chinese yueh origin.

Headley (1973) includes the following two words which may have an Austronesian rather than Sanskrit origin.

Skt karpasa 'cotton'   Sdg kópei 'kapok'

    jala 'net'   chéa 'fish net'

Other Sanskrit linguistic influence noted in the Vietnam languages has been surveyed (Smith, 1974c); the following Sedang words are a few of those which seem to be related.

Skt pati 'master, lord'   Sdg pótáu 'king'

    jan 'grow'   chiang 'to become'

    dárah 'wife'   dróh 'unmarried girl'

    pura 'town'   pólê 'village'

    visesa 'eminence'   pózeh 'supernatural'

    brahma 'a (celibate) student'

                                rótám 'bachelor'

    ratha 'wagon'   róta tá 'to encircle'

    upakára 'service, favor'   pókua 'to rule'

    kapala 'skull'   ko 'head' (cf. PMB

                                *ngal)

    putrí 'daughter'   kódrai 'female'

    kalinga 'Indian' (area now called Orissa)

                                kliang 'an unknown

                                land'

pūjā 'worship, offering   póchau 'shaman'

Chamic. The Chamic (Austronesian, Malayo-Polynesian) people
of Vietnam have doubtless been in contact with the mountain
Mon-Khmer peoples since their arrival on the coast of Viet-
nam. They have forced a wedge between the Bahnaric people
so that Bahnar and the southern tier of the North Bahnaric
language groups (Hrê, Rengao, Halang) are in contact with the
Haroi and Jorai (Chamic) people in the central highlands from
QuiNhon to PleiKu and KonTum. It is sometimes difficult to
trace the origin of resemblances found in the two language
groups. Those with probable Chamic origin borrowed by the
Mon-Khmer peoples as listed by Headley (1973) and present in
Sedang include the following (the Proto-Chamic (PC) forms
are from Lee (1966)):

           PC *truh 'arrive'   Sdg trôh 'approach'
              *jurŭm 'needle'   truam 'needle'

On the other hand, among the seventy-two words listed by
Headley as having probable Mon-Khmer or Austroasiatic origin
--though this is by no means certain--and with Sedang cog-
nates are the following:

           PC *jōng 'axe'   Sdg chuông 'axe'
              *rŏng 'back'   róng 'back'
              *cagʔu 'bear'   rókou 'bear'
              *ćĭm 'bird'   chêm 'bird'
              *kang 'chin'   kéang 'chin'

krual 'citrus'	krui 'citrus'
*eh 'to defecate'	eak 'to defecate, dung'
*sagor 'drum'	hóka 'drum'
*ruai 'fly'	rôi 'fly'
Jorai kodim 'onion'	kótem 'onion'
PC *bube 'goat'	pupéi 'goat'
*hang 'peppery hot'	háng 'peppery hot'
*kalang 'kite, eagle'	kléang 'eagle'
*sula 'leaf'	hlá 'leaf'
*plum 'forest leech'	pliam 'leech'
*kamuᶾn 'nephew'	muán 'nephew, niece'
*(a)ha 'open mouth'	há 'open mouth'
*hŭng 'papaya'	róhung 'papaya'
*lumãh 'rhinoceros'	rómê 'rhinoceros'
*blah 'to fight'	tópla 'to fight, war'
*bala 'tusk'	póla 'tusk'
*čih 'write'	chêh 'write'

Other words of "uncertain origin" listed by Headley which have resemblances in Sedang include:

PC *kubau 'buffalo'	Sdg kópôu 'buffalo'
*mata 'eye'	ma 'eye'
*amah 'gold'	mea 'gold'
*phau 'gun'	phau 'gun'

Aymonier and Cabaton (1906) in their Cham-French dictionary include references to Mon-Khmer languages, including Sedang and Bahnar, in their lexical entries indicating the

extensive cross-cultural contact which they recognized.
Some of the resemblances which they indicated, not listed
above, include:

Cham pluk 'canoe'	Sdg plong 'canoe'
mróng 'black'	prăng 'black'
ribău 'thousand'	rópau 'thousand'

French. The first French contact with the Sedang occurred
following the entrance of French missionaries into the high-
lands at Kontum about 1851. Subsequently government and
military outposts were established. French loans in Sedang
testify to these areas of French influence: western arti-
cles, food, government, and military terms. Among them are
the following which, it can be noted, do not hesitate to
. utilize the less frequent phonological features, such as
presyllable bó-, initial voiced and preglottalized stops.

Fr ballon 'ball'	Sdg bólong, bó'long 'ball'
béret 'beret'	bórê, brê, pórê 'hat'
bureau 'office'	bórô 'office'
boîta 'can'	'buat 'canned food'
salade 'salad'	hólat, xólat 'let-
	tuce'
canon 'artillery'	kónong 'artillery'
café 'coffee'	kóphè 'coffee'
la carte 'map'	lógat 'map'

maillot 'T-shirt'	móyô 'T-shirt'; cf.
	VN may ô)
bateau 'boat'	pótôu 'boat'
francais 'French'	prang 'French'
radio 'radio'	ródiô 'radio'
tomate 'tomato'	tómat 'tomato'
sac 'bag'	xak 'bag'
sou 'penny'	xu 'penny'
soupe 'soup'	xup 'soup'
zéro 'zero'	xórô 'zero'

Vietnamese. With the diminution of French influence, the Vietnamese established governmental, military, and economic predominance in the Sedang area with concurrent linguistic influence in the Sedang lexicon. As with French loans, the Vietnamese loans also utilize voiced stops and preglottalized consonants, yet there is conformity to Sedang phonology. Vietnamese tones are not carried over except that Vietnamese hoi and ngã tones usually are reflected by Sedang final -h; Vietnamese general classifier for objects cái is usually reflected by bisyllabic words with presyllable kó- (cf. 12.5). Vietnamese loans are too many to list here, but include the following:

VN bái 'lesson'	Sdg 'bái 'lesson'
bi 'marble'	'bi 'marble'
châm 'period'	châm 'period, dot'

chử 'letter'	chu 'letter'
gác 'guard'	gak, kak 'to guard'
gach 'brick'	gat 'brick'
hoc 'study'	hòk 'study'
khăn 'towel'	ken 'towel'
gói cái thó/thú 'to mail a letter'	
	kôih kóthô 'to mail a letter'
xà-bông 'soap'	kóbông 'soap'; cf. Fr. savon
cái bàn 'table'	kó'bang 'table'
cái hôp 'small can'	kóhôp 'small can'
cái ly 'a glass'	kóli 'a glass'
cái mái 'machine'	kómai 'machine'
cái tu 'cupboard'	kótu, kótuh 'cupboard'
cái so 'number'	kóxo 'number'
cao su 'rubber'	kóxu 'rubber'; cf. Fr. caoutchouc
làng 'village'	lang, léang 'village'
mỹ 'America(n)'	mih 'America(n)'
phô 'downtown'	phô, phóng 'downtown'
truóng 'school'	trung 'school'
ui 'to iron, grade'	uih 'to iron'

Bahnar. Bahnar influence in the Sedang area may extend further back than either the French or Vietnamese. Bahnar loans

must be distinguished from the much greater number of Bahnar

cognates in Sedang. There are three clues to distinguishing

Bahnar loans from the cognates:

(1) Bahnar loans are used for modern articles not contem-

poraneous with the PNB period:

> Sdg mráng 'chalk'

(2) Bahnar loans have different cognate forms in Sedang:

Bahnar loan--	Bahnar cognate--
Sdg dak 'village name designator'	
	tea 'water'
kon 'village name designator'	
	kúan 'child'
mônê, bônê 'to thank'	móna 'to thank'
yang, bóyang 'God'	xeang 'spirit'

(3) Bahnar loans utilize Sedang phonemes not derivable from

PNB:

> Sdg brot 'robber'
>
> 'bok 'honorific title'
>
> di 'honorific pronoun'
>
> duk 'boat'
>
> glaih 'hailstone'
>
> módok 'to teach'
>
> pe '(imperative form)'
>
> róbot 'to memorize'

English. The American involvement in the war during the
1960s enabled Sedang men to serve with the American Special
Forces. Frequently their families lived with the soldiers
in the military camps. Thus English loans have entered
Sedang in areas of military terminology and names of other
western materialism which the US soldiers took with them.
Such loans are too recent to be catalogued with the assurance
that they are not just part of a dying montagnard English
pidgin.

PART THREE: SEDANG SYNTAX

Introduction to Part Three

The syntactic analysis of this Part is basically tag-
memic, with insights gained from Pike (1967), Pike and Pike
(1974), Longacre (1964), Cook (1969), and others. Formulas
(or charts where such seem more illustrative) are given for
phrase and clause constructions; the latter are in the tra-
dition of Elson and Pickett (1960)--the two-cell tagmeme--
although the text accompanying the formulas specifies role
(actor, scope, undergoer, locative, etc.) suggesting the
four-cell tagmeme of Pike and Pike. Transformations are
used to describe variations of clause types. Patterning and
structure are primary in the determination of grammatical
categories rather than meaning or semantics; the latter is
specified if there is an evident correspondence. (For a
description of a related language--Rengao--in which semantic
categories are given priority over formal syntactic cate-
gories see Gregerson (1971).)

Primary emphasis in this description is given to clause
structure. Clauses fill sentence level slots and consist of

nuclear and, optionally, peripheral elements. Nuclear elements are the more independent part of the construction whereas the peripheral elements are the dependent part. The former include the subject, predicate, indirect object, and (direct) object slots which determine the basic clause types described in chapter 9. The latter include the prenuclear temporal slot and the postnuclear locative, adverbial, and final particle slots described in chapter 10. Variations of the basic clause types (chapter 11) entail permutations of word order of both nuclear and peripheral elements and transformations of the basic clauses. The lower hierarchical elements which fill clause level slots are the noun phrase (chapter 7) and verb phrase (chapter 8).

Various other aspects of Sedang word- or clause-level syntax are given in chapter 12. Five (complex) sentence types are included in the last chapter. Analysis of paragraph and discourse structure is beyond the scope of this dissertation.

Throughout this Part syntactic units are described, restated in formula form (sometimes in chart form) and illustrated. Word classes are established and their membership suggested; for the smaller word classes all known members are listed whereas for the larger classes only a token sample is presented. There are a few function words which are assigned to more than one word class creating an overlapping of word classes--perhaps these are homonyms? Cross-references make

explicit such overlapping. All examples are glossed and
their syntactic structure stated. A slash in a Sedang exam-
ple separates alternate (sometimes dialectal) variants of
the word (e.g. 'báng/'máng). In glosses of single words
commas are used to separate alternate English equivalents
and colons are used to separate literal and idiomatic equiv-
alents. In glosses of phrases, clauses and sentences, paren-
theses are used both (1) for supplying the content of Sedang
words omitted by ellipsis and (2) for clarification. In the
brief syntactic statement supplied following each example
abbreviations are used for which see Table of Abbreviations
which, in turn, identifies the chapter and section where
each item is defined. In the earlier chapters to illustrate
some contained or embedded units a syntactic structure may
be used which has not yet been introduced. In the syntactic
statement the nuclear elements are subsumed under the basic
clause type and its variations; peripheral elements are given
in order, separated by commas; syntactic slots are separated
from their fillers (when specified) by colons; clauses and
(complex) sentences are enclosed within parentheses; repeated
elements are enclosed in parentheses followed by "x2", "x3",
etc. Included parentheses not preceded by comma or colon
indicate a subordinated or embedded clause. In chapters 7
and 8, before clause structure is discussed, included paren-
theses sometimes contain only a syntactic amplification of
the preceding term. Any example without a syntactic descrip-

tion is syntactically identical to the previous example or statement.

Parallel to the computational emphasis of Part II, throughout this Part statistics are provided to indicate the relative frequency of the various syntactic units in natural text. Two different bases are used. For indicating the frequency of specific words or short phrases a 27,437-word collection of discourses, narratives, etc. is used for which a word concordance had been prepared (see Acknowledgements). For indicating the frequency of specific phrase or clause types a shorter sample of this collection--765 clauses--is used for which an exacting analysis was made. Examples, however, are also drawn from the larger reservoir of language material available in the author's notes, dictionary, and vernacular publications (see Bibliography).

CHAPTER 7 NOUN PHRASES

7.0 Introduction

Noun phrases (NP) are syntactic units composed of one or more words with, potentially (i.e. barring only ellipsis (12.9)), a noun as head and are used semantically to denote actor, recipient, beneficiary, goal, means, location, etc. Noun phrases are used for the nuclear subject, (direct) object, indirect object, locative, and complement elements of clauses (see chapter 9) and for the peripheral temporal, locative, and adverbial clause elements (see chapter 10).

This chapter describes the five types of Sedang noun phrases. In both the basic noun phrase (7.1) and the pronoun reference phrase (7.4) the noun phrase head occurs phrase initial. The latter is an expansion of pronouns, an element of the former. In all other noun phrases an element of the noun phrase--and that for which the phrase is named--occurs before the noun phrase head: a number in the count noun phrase (7.2), a plural marker in the pluralized noun phrase (7.3), and a preposition in the prepositional phrase (7.5).

After the description of each noun phrase and the introduction of each word class occurring therein, there is a fur-

ther discussion of each word class.

Apposition, or expansion of the noun phrase, is treated as a clause level phenomenon (12.7).

7.1 Basic noun phrase

The basic noun phrase (bNP) may consist of a sole noun phrase head (NPH), being either a noun (N), a personal name (PName), or a pronoun (Pron).

> kóta 'egg' (N)
>
> hngei 'house'
>
> nôu 'mother'
>
> A-Pía 'A-Pia (a story princess)' (PName)
>
> gá 'he, she, it' (Pron)

In the basic noun phrase the noun phrase head is always phrase initial. A noun phrase head noun may be modified by a second and, infrequently, a third (descriptive or modifying) noun.

> kóta í 'egg-chicken: chicken egg' (N N)
>
> mónat hngei 'wall-house: house wall'
>
> ing bo chéang 'side-opening-gate: the gate side
>
>   (of village)' (N N N); in I-C analysis the
>
>   relationship would be (N(N(N)))

A noun phrase head noun, whether or not followed by a second or third descriptive noun, may be modified by any of the following:

(1) a personal name to identify a specific animate being;

rótăn Préang 'youth Preang (a story prince)'

    (N PName)

kla Neak 'ghost Neak (a story ghost)'

nŏu A-Jok 'mother (of) A-Jok' (parents are

    named by any of their children's names)

pa o Ngá 'father-child-Nga: father of child

    Nga' (N N PName); in I-C analysis the rela-

    tion ship would be (N(N(PName)))

(2) a personal name or pronoun (or pronoun reference phrase

(PRefP, 7.4)) to indicate personal relationship;

    báu Pó-ŏng 'Po-ong's rice' (N PName)

    pólê gá 'his village' (N Pron)

    kúan a 'my child'

    hngei vai tómoi 'the strangers' house' (N PRefP)

(3) a geographical name (GName) to identify a designated

geographic feature;

    Kong Xúan 'Vietnamese land' (N GName)

    Váng Poa 'Poa Pass'

    Tea Póxai 'Poxai River'

    Ngo Eang 'Eang Mountain'

(4) a descriptive name (DName) to specify a specific rather

than a generic item;

    kla tréang '<u>treang</u> tiger: leopard' (N DName)

    chêm hlum '<u>hlum</u> bird: Kingfisher'

    lóang plai trai 'banyan fruit tree' (N N DName)

    chêm lóang plai trai 'banyan fruit tree bird'

(N N N DName)

or (5) a verbal descriptive (vDes), being a main verb (Vb) or verbal adjective (vAdj)(see below).

 mónge 'mei 'evil person' (N vAdj)

 tea tóu 'hot water'

 kia kôk 'crazy ghost'

 'bok xôi 'sacrificing westerner: priest' (N Vb)

  Any of the preceding varieties of the basic noun phrase may be followed (1) by the relative particle (RelPt) ki plus an embedded clause (CL), noun phrase, demonstrative (Dem), or number (Num) (ki Num is an ordinal number; see 7.2 for Numbers), or (2) by a prepositional phrase (PrepP) (see 7.5). The nominalizer tódréang 'thing, matter, problem' frequently does not have ki before a clause or noun phrase. ki may be elided before clauses. Neither relative clauses nor prepositional phrases have been observed iterated in this construction.

 tritrôu ki ai mông 'mosquito which has a beak'

  (N ki T CL)

 pókeang ki chiang xiam kóla 'powder which

  becomes a bamboo clump' (N ki Eq3 CL)

 lóang ki gá ko nah 'tree which he chopped

  yesterday' (N ki T CL)

 lóang ki kak 'wood which dried: dried wood'

  (N ki Eq1 CL)

 kléang ki ê 'another eagle' (N ki Eq1 CL)

péang ki hlá 'the side with leaves' (N ki N)

kia ki me 'that ghost' (N ki Dem)

hai ki moi 'the first day' (N ki Num)

tódróang á 'nai 'the things I know' (tódróang

    CL)

tódróang kong kliang 'the matter of Kliang

      land' (tódróang NP)

tiu gá mot tung tónei 'the place he entered the

      earth' (N CL)

pu tung pole 'friends in the village' (N PrepP)

The relative particle ki is the eighth most frequent
word in the 27,437-word text, occurring 404 times; and ki me
is the eighth most frequent two-word sequence in text occur-
ring 76 times.

Further, any of the above varieties of the basic noun
phrase may be followed by a demonstrative (Dem), locative
(Loc), temporal demonstrative (TempDem, 10.1), or, if the
noun phrase is non-specific, by a nominal interrogative
(NomInter).

tea mih me 'that Mih River' (N GName Dem)

kuan gá me 'that child of his' (N Pron Dem)

'bok xoi me 'that priest' (N Vb Dem)

Preang me 'that Preang' (PName Dem)

hai ta 'that day' (N Dem)

á ko 'I myself' (Pron Dem)

kia ki ê ko 'this other ghost' (N ki CL:(vAdj)

Dem)

chiak cham   'the field down there' (N Loc)

kong xúan tai   'the Vietnamese country up there'

   (N GName Loc)

dôh eh cham   'your son-in-law down there' (N Pron

   Loc)

kong pin nah   'our country formerly' (N Pron

   TempDem)

The basic noun phrase may thus be summarized as in Chart

7.1.

N	-N	-N	PName	-ki-	-CL		-Dem
			Pron		-NP		-Loc
			PRefP		-Dem		-TempDem
			-GName		-Num		-NomInter
			-DName				
			-vDes	-PrepP			

Chart 7.1 Basic noun phrase (the basic noun phrase
      consists of any one or more items in the linear
      order given, but not more than one item per box;
      bracketed items cooccur with ki; prehyphenated
      items are non-initial and optional; at least one
      non-hyphenated item must necessarily occur)

Nouns. Nouns (N) form a very large class of words, only a few

of which are included herein. Most nouns are, like those cit-

ed above, mono- or bisyllabic words; that is, one phonological

word. There are also compound nouns and formula nouns which, however phonemically different, function syntactically like all other nouns.

Compound nouns consist of two phonological words. Some compound nouns have a meaning derivable from that of their parts.

nòu pa   'mother-father: parents'

ja poa   'grandmother-grandfather: grandparents'

Other compound nouns have a meaning which cannot be derived from their composite parts.

hlá mó-éa   'leaf-?: paper'

nhòng o   'elder-younger sibling: relatives'

kúan kia   'child-ghost: animals'

on hngei   'fire-house: family'

Other compound nouns are composed of parts with no known meaning apart from the compound.

bling blea   'an "x" mark'

Formula nouns group four specific items together to represent an entire generic grouping.

chu í kópòu ro   'pig-chicken-buffalo-cow:

formula for all domestic animals'

Sometimes formula nouns form a rhyming pattern in which the second item rhymes with the third, following the general poetic rhyming pattern in which the last word of a line will rhyme with the first word of the following line (or a word near the beginning of the line(12.12; Smith, 1973c). Despite

their similarity such rhymes are not as common in Sedang as
has been reported, for example, in Halang (Cooper, 1973).

rómóang vai khán jía   'Laotian robe-Jórai

cloth-long garment-shawl: formula for all

kinds of blankets and robes'

(Note that the Central Sedang denasolaryngealized form of
khán is khai which rhymes with vai; the latter, being a
Jorai term, does not have a nasolaryngealized form in
Sedang.)

Countable nouns (cN) are discussed in 7.2; animate
nouns (anN) in 7.3.

Pronouns. Personal pronouns (Pron) form a small class of
words whose semantic system is characterized by singular,
dual and plural number, and inclusive and exclusive first
person forms, as shown in Chart 7.2, except that there is no
dual/plural contrast for the second person category. The

	Singular	Dual	Plural	
1st P	á	má	ngin	Excl.
		pá	pin	Incl.
2nd P	eh	po		
3rd P	gá	prei	vai	

Chart 7.2 Sedang personal pronouns

apparent incompleteness of the pronominal system at this point corresponds to an aspect of current development of pronominal systems among the North Bahnaric languages in which the forms *bri and *chop have derivatives with varying meanings within the 2nd-3rd person dual and 2nd person dual-plural areas of meaning. The Sedang pó is not cognate with any pronoun of the neighboring languages (Smith, 1974d).

There are five additional pronouns with other semantic features: the personal interrogative and indefinite pronoun kóbo 'who?, anyone', the impersonal interrogative kiklai 'what?', the indefinite pronoun 'na 'some(one)', and the in-law respect pronouns chuô and kódrá. chuô is a second person singular pronoun 'you' used with all in-laws except brother- and sister-in-laws who use the o/mai reciprocal terms. kódrá is a third person singular and dual pronoun 'he, she, those two' used of all married couples if one of them is addressed chuô. (Smith, 1974b).

> on kóbó 'whose fire' (N Pron)
>
> Ái kóbó oh. 'There isn't anyone.' (Ex CL:(Ex
>
> > Vb, Pron), fPt)
>
> Kiklai kóchep á kó. 'What pinched me here?'
>
> > (T CL:(Pron, T Vb, Pron), LocP)
>
> 'Na khén iá, 'na khén chuan. 'Some say iá;
>
> > some say chuan.' ((T CL:(Pron, Q Vb, N))x2)
>
> Chuô róngei ti me neó. 'You sing like that some

more.' (I CL:(Pron, I Vb), ManP, fPt)

In Smith (1969a.115-122) another description of Sedang
pronouns is given utilizing a tree-branching diagram and the
binary values of the features hearer, speaker, non-singular
and non-specific number. This analysis, included in a
generative transformational analysis of Sedang affixation,
proposed a means for "adding pronouns" as required for the
reciprocal prefix to- (12.2).

In a 27,437-word text with 1409 different words, three
of the five most frequently occurring words are pronouns. One
in every twenty words is the pronoun gá. The ten personal
pronouns (as shown in chart 7.2) occur 3,627 times so that
one in every 7-8 words in the text is a pronoun. Chart 7.3
indicates the ranking and frequency of the ten personal pro-
nouns in the large text.

A study of two-word sequences in that same text indicates
that the pronouns gá, vai, á, and pó also occur frequently
in certain common syntactic sequences. Chart 7.4 shows ten
frequent two-word sequences with pronouns with their fre-
quency and syntactic function. One of every three occur-
rences (607/1707) of me 'then, that', shown below to be the
most frequent word in text, occurs contiguous to a pronoun
(including those across clause and sentence boundaries);
and one of every three occurrences (133/376) of the verbal
particle hiang 'already' occurs following a pronoun. Of the
other function words cited in the chart, 10-20% of their oc-

Rank	Pronoun	Frequency
2	gá	1334
3	á	684
5	vai	558
15	eh	306
18	pin	284
30	preí	161
43	pó	127
77	ngin	74
103	má	51
109	pá	46
	Total:	3627

Chart 7.3 Rank (of most frequent words) and frequency (of occurrence) of pronouns in 27,437-word text

currences are contiguous to a pronoun. Only gá me and dei pó are immediate constituents within a phrase; the others are contiguous only as frequent members of contiguous syntactic units on the clause level.

Personal names. Sedang personal names (PName) are almost always (99%) monosyllabic. In determining personal names parents avoid both meaningful words and other known names.

Rank	Sequence	Fre- quency	Syntactic function	Chapter
1	me gá 'then he'	215	CL: Temp, S:Pron	10
5	gá me 'that he'	129	NP: Pron, Dem	7
13	me vai 'then they'	61	CL: Temp, S:Pron	10
14	me. gá 'that. He'	60	CL: fPt. S:Pron	10
15	á va 'I want'	55	CL: S:Pron, VP	9
18	gá hiáng 'he already'	51	CL: S:Pron, VP	9
20	gá u 'he still'	49	CL: S:Pron, VP	9
21	á hiáng 'I already'	49	CL: S:Pron, VP	9
25	kô gá 'now he'	44	CL: NP/Temp, S:Pron	10
37	dei pó 'together'	37	RecipP: RecipPt,Pron	11

Chart 7.4   Rank, frequency and syntactic function of common two-word sequences with pronouns in 27,437-word text

Personal names thus form a large open class of words. With the search for unique personal names there is consequently a skewing of the phonological system. The common phonological features of the general vocabulary are rare among personal names, and vice versa. Cf. Smith, 1969c.

The use of a prefix I- or A- before names to indicate sex (common among the Jeh, Rade, etc.) is not generally practiced by the Sedang.

Geographical names. Geographical names (GName) are those terms used to identify specific geographic features and do

not occur apart from the preceding designator: rivers (Tea...
or Dak...), countries (Kong...), mountains (Ngo...), mountain
passes (Yáng...), and villages. Village names usually begin
with one of the following designators (to show relative use
of these designators the number in parentheses indicates the
number of specific villages known to use the term as included
in my Sedang dictionary):

> Tea... (or Dak..., a Bahnarism) 'water' (62)
>
> Xúan... (or Kon..., a Bahnarism) 'child' (56)
>
> Tu... 'an anthill' (10)
>
> Mang... '(?)' (8)
>
> Váng... 'mountain pass' (3)

Village names not utilizing one of the above designators
include: Jóxia, Kôh Kông, Lang Lá, Ling Lá, Lông Ruǎ,
Komoh, Ngok Rring, Pólê ('village') Kiǎ, Rang Rea, Teng
Mong, Va Móná, Vak Xang, Yang Móná.

Descriptive names. Descriptive names (DName) are those terms
assigned to things of nature to extend the folk taxonomy from
the generic to the specific and form a large class of words.
Descriptive names do not occur apart from the noun being de-
scribed. Descriptive names frequently indicate color, size,
etc., although many have no (recoverable) meaning apart from
the specific thing so named. For example, the group of klá
'tiger' includes:

> klá mónge (mónge 'people') 'man-eating

tiger'

klá hónan (hónan '?', is also used as a name

for a kind of kótón 'bat' and a kind of

priat 'banana') 'a large tiger'

klá tréang (tréang '?', is also used as a

name for a kind of nha 'grass', chok 'shrew',

and plai 'fruit') 'leopard'

klá chêm (chêm 'bird') 'a small tiger'

klá hónian (hónian '?') 'a tiger'

Verbal descriptives. A verbal descriptive (vDes) may be any
main verb (excluding equative verbs and the existive verb) or
a verbal adjective (vAdj). The main verbs are defined and
discussed in 8.1, but to illustrate their occurrence as verbal
descriptives in noun phrases they will be prematurely intro-
duced here. The most common main verbs in this function are
transitive verbs.

ngê tia 'the answering person' (N, vDes:(Q Vb))

tíu kôm 'waiting place' (N, vDes:(C Vb))

plai lôi 'abandoned fruit' (N, vDes:(B Vb))

tróang hóda 'escape trail' (N, vDes:(S Vb))

bau ka 'eating rice' (N, vDes:(T Vb))

'bok xói 'sacrificing westerner: priest'

drou ou 'drinking wine'

hagei 'nhie 'destroyed house'

tógong eak 'defecating place' (N, vDes:(I Vb))

Verbal adjectives are discussed in the next paragraph.
Thus verbal descriptives may be formulated as follows (read
slash as "or"):

vDes: Q Vb/C Vb/B Vb/S Vb/T Vb/I Vb/vAdj

Verbal adjectives. Verbal adjectives (vAdj) function as
verbal descriptives in noun phrases, as predicate complements
in equative clauses (9.7), as descriptive phrases (10.3), and
as an element of the quantitative particle phrase (10.3).
Verbal adjectives form a large class of words. The last word
of each of the following phrases is a verbal adjective illus-
trated here in a noun phrase as a verbal descriptive; each
phrase may also be read as an equative clause.

        pólê ache   'near village' (N vAdj)
        tómẻam be   'enough things'
        hlá bông   'white leaf'
        hme chíu   'burned rice'
        hngei há   'crowded house'
        chiak hóngẻ   'distant field'
        rónó hóngiú   'cold season'
        hmẻu kan   'big rock'
        kia kôk   'crazy ghost'
        drôh lẻm   'beautiful girl'
        to hla   'dead monkey'
        hónẻm móngẻm   'lacking year: famine'

mónge 'mei 'evil person'

tómoam hngám 'heavy thing'

chang peng 'full basket'

mónge rótôh 'bad person'

vó ton 'old jar'

tea tôu 'hot water'

béu tuam 'ripe rice'

The word tai 'to be completed, gone' functions as a verbal adjective in all cases except in the above noun phrase.

Demonstratives. There are three degrees of proximity shown by demonstratives (Dem):

close	kô	'this, here'
intermediate	me	'that'
distant	tá	'that'

The indefinite demonstrative is lai 'any'.

In the 27,437-word text the word me is the most frequent word, occurring 1707 times or once for every sixteen words. This word was not distinguished in the count, however, for its various functions (cf. Temp me (10.1), fPt me (10.4), ContConj me (13.3), ResConj me (13.5)). The word kô is the fourth most frequent word, occurring 593 times; whereas the Dem tá is ranked 86, occurring only 65 times.

Locatives. Locatives (Loc) are used to express geographical location. The locatives include:

cham	'down there, lower, downstream'
hódrol	'before, in front of'
kó'nal	'behind, in back of'
'ngei	'up there' (vertical orientation)
pông	'above, upstream'
tai	'up there, upstream'
xuap	'down there, lower, downstream'

Two locatives may occur together, as in:

Gá heó loàng a 'ngei tai. 'He climbed the

    tree way up high.' (T CL, LocP:(Prep, Loc,

    Loc))

Nominal interrogatives. There are three nominal interrogatives (NomInter) which are used in noun phrases.

lai	'which?, what?'
klai	'which?, what?'
kiklai	'which?, what?'

u lai 'where?' (N, NomInter)

tròang lai 'which path?, what path?'

kónou klai 'which man?, what man?'

keng kiklai 'which country?, what country?'

7.2 Count noun phrase

The count noun phrase (cNP) is used when indicating a specific quantity. A number (Num) is phrase initial and,

except in special cases of ellipsis (see 12.9), must be followed by either a classifier (Cl) or countable noun (cN) which does not require a classifier. The head noun categorized by the classifier follows the classifier but, in the simple count noun phrase, is usually elided if the context has already implied it.

> môi to ket 'one frog' (Num Cl N)
>
> pun ngê rótän 'four young men'
>
> pêa to 'two (something)' (Num Cl)
>
> pái ngê 'three beings'
>
> pótän liän 'five piastres' (Num cN)

The head noun of the count noun phrase is, in essence, the head noun of a basic noun phrase and may be modified by following modifiers as described in 7.1.

> pái rónó kôxái rái 'three pieces of rattan
>
> vine' (Num Cl N N)
>
> môi ngê A-Piá me 'that one person A-Pia'
>
> (Num Cl PName Dem)
>
> môi póléang ráng gá me 'his one arrow' (Num Cl
>
> N Pron Dem)
>
> môi to ket dro 'one dro frog' (Num Cl N DName)
>
> môi xu khei 'one red cent' (Num cN vAdj)

The count noun phrase may be summarized as in Chart 7.5.

Num	-Cl	(-bNP(NPH:N))
		-bNP(NPH:cN)

Chart 7.5 Count noun phrase (the count
noun phrase consists of either
horizontal reading with the
outer-bracketed element optional,
the inner-bracketed items speci-
fying restrictive filler re-
quirement)

Numbers. The basic numbers (Num) form a decimal system.

môi   'one'

péa   'two'

pái   'three'

pún   'four'

pótäm   'five'

tódrou   'six'

tópah   'seven'

tóheäm   'eight'

tóchên   'nine'

There are four **number multipliers** (Mult) which follow the

basic numbers and by which they are multiplied:

chat   'tens'

    môi chat '10' (Num x Mult)

    péa chat pái '23' (Num x Mult + Num)

hríng   'hundreds'

    pún hríng '400' (Num x Mult)

    pótäm hríng tódrou chat topah '567'

(Num x Mult + Num x Mult + Num)

ropau   'thousands'

toheam ropau '8000' (Num x Mult)

moi chat pea ropau toohen hring pai chat

potam '12,935' ((Num x Mult + Num) x

Mult + Num x Mult + Num x Mult + Num)

rotuh   'millions ?'

The numeral interrogative (NumInter) to lai 'how many, how much' functions as a number.

to lai 'bang chiak 'how many fields' (NuCl N)

to lai hring to honou 'how many hundred rice

houses' ((NumInter x Mult) Cl N)

to lai honam 'how many years' (NumInter cN)

The approximate number (apNum), consisting of any two successive basic numbers, is used to mean 'several' and also functions as a number. The value of the numbers may suggest the approximate quantity without being specific.

apNum: Num Num
          1   i+1

pea pai to nge 'several (two-three) persons'

(apNum Cl N)

pun potam pum 'several (four-five) round

things' (apNum Cl)

Ordinal numbers are formed by ki Num; see 7.1 for an example. (Also Smith (1975).)

<u>Classifiers</u>. Classifiers (Cl) form a modest-sized closed set of words and are required for counting most items. Each classifier is used with a specific (though open) set of words which usually have either shape, size, or function in common. The general classifier <u>to</u> overlaps many of the other classifiers. Some classifiers are also nouns which require some other classifier when used as a noun; cf. <u>kóta</u>, <u>pôu</u>. There is also some overlapping within the classifiers; cf. <u>'noang</u> and <u>púm</u> which both classify <u>kóta</u> 'egg'. The classifiers are listed below.

The general classifier:

> to   classifier for most animals, beings,
> body parts, baskets, buildings and parts
> of buildings, geographical features,
> <u>chang</u> 'swords', <u>kónep</u> 'scissors', etc.

The classifier <u>to</u> occurs without a preceding number if the sense is 'only' or 'only one' and, in this case, usually, but not always, with the final particle <u>xo</u> 'only' (cf. 10.4).

> Á va ka to kónai xo. 'I want to eat rat only.'
>
> (T Cl, fPt)
>
> da hlo to tíng kónai. 'He saw a boar tail.'
>
> (T Cl w C Vb)

Other classifiers:

> 'bang/'mang -classifier for plots of ground:
> <u>chiak</u>, <u>poh</u> 'fields', <u>deang</u> 'garden'; also
> for <u>peam</u> 'fish trap'

buang   -classifier for blankets and garments:
  jia, ken, hmóu

'do   -classifier for bamboo: kólá, pó-ó

kómea   -classifier for clusters of bamboo: pó-ó

kópau   -classifier for garments: rómoang, khán,
  duoh, kang, kópan, pókhom

kóta   -classifier for flat things: hlá 'leaves',
  hlá mó-ea 'sheets of paper', chiu 'disks',
  hmou ko'deang 'flat stones', cheng hleng,
  koang 'gongs', chuóng 'axe', kóxiang pha
  'shoulder blades', ton, kótum, ding 'trays',
  xing 'trays'; also for hódro 'kettles'

kótôu   -classifier for crabs: kóteam, ase

kótôu   -classifier for things that can be held
  in the hand

'noang/noang -classifier for round objects: tu-ua
  'squash', priat 'bananas', hmou 'stones',
  plai 'fruits', hódro 'small kettles', plôi
  'gourds', kóta 'eggs', vó 'jugs', 'nhen koe
  'wrapped rice'

nge   -classifier for human-like beings: kuan
  'children', kónou 'men', kódrai 'women',
  rótam 'boys', drôh 'girls', kia 'ghosts',
  xeang 'spirits', Mih 'Americans', nha
  'scarecrow', etc.

pa   -classifier for xiam móná 'bird wing',

chum 'bird breasts'

pang   -classifier for klong 'sections of

bamboo'

pou   -classifier for tu-ua 'squash'

pum   -classifier for round objects: kóta

'eggs', plôi '(Sedang round) gourds', plai

'fruits', pián, tu-ua, pou 'squash'

póleang   -classifier for short stubby things:

hóneng 'teeth', rang 'bullets and quills',

hó'rang 'fingers', xak 'hairs', xua 'quills'

pla   -classifier for rolled up things: duh

'sleeping roll', hman 'pants'

ro   -classifier for poa 'area under shoulder

blades'

róno   -classifier for long, narrow objects:

kópen 'loin cloth', rai 'rattan', plôi

'(Vietnamese long) gourds', pah 'snakes',

tókoa, kóxóm 'long lizards', oa ngang

'earthworms', kau, trua, rópong, ka trê,

etc., various long fish, ning nong 'eels'

xiam   -classifier for loang 'trees', vo

'jugs'

Countable nouns. Countable nouns (cN) are those nouns which

do not require a classifier when preceded by a number.

Countable nouns belong to several semantic groups of quantity:

(1) Time: hónám 'year', chóu 'hour', hāi 'day', khě 'month', máng 'night', póla máng tíng 'week', xei 'after-noon', etc.

      péa chat hónám 'twenty years' ((Num x Mult) cN)

(2) Money: lián 'a piastre', kak 'a tenth piastre', xu 'a hundredth of a piastre'

      môi hríng lián 'one hundred piastre' ((Num x

          Mult) cN)

(3) Parts of wholes: hódroh 'verse of song', na 'time, turn', pa 'side, half', pôe 'piece', xôh 'time, turn', chúan, ià 'row in field'

      Pin rôe mam môi xôh péa hríng. 'We buy meat

        one time two hundred (piastres).' (T CL,

        QuanP:(Num cN), QuanP:(Num cN))

      Klá ka môi pa kótei gá xo. 'The tiger ate one

        side of his buttocks only.' (T CL:(O:cNP), fPt)

(4) Baskets: chang, chea, ró, etc., various sized baskets
A few other nouns may occur without a classifier: hódro 'kettle', hónôu 'rice house', tíu 'place'.

      Gá va pôu péa chang. 'He wants to carry two

        basketsful.' (T CL(O:NP:(Num cN)))

7.3 Pluralized noun phrases

The pluralized noun phrase (plNP) is used to indicate quantities without use of a specific number. The pluralized noun phrase consists of a plural marker followed by a basic

noun phrase with or without an intervening classifier, or by
a pronoun reference phrase with <u>vai</u> (7.4(6)). There are two
kinds of <u>plural markers</u> (plM): general and animate.

There are four <u>general</u> <u>plural markers</u> (gen-plM): <u>tai</u>
<u>tang</u> 'all (of a given set)', <u>hen</u> 'many' (cf. Quan <u>hen</u> (10.3)),
<u>túm</u> 'every', <u>rem</u> 'each', and a compounded emphatic general
plural marker <u>túm rem</u> 'each and every'.

        tai tang kia 'all ghosts' (gen-plM N)

        tai tang vai 'all of them' (gen-plM Pron)

        hen mónge drôh 'many girls' (gen-plM N N)

        hen tódroang 'many problems' (gen-plM N)

        túm kán pólê 'every village chief' (gen-plM

           N N)

        túm tódroang 'all problems, matters' (gen-plM N)

        túm vai krm kónou 'all the old men' (gen-plM

           PRefP)

        rem hai 'each day'

        rem pum 'each round object' (gen-plM Cl)

        túm rem ngê 'each and every person'

Two of these general plural markers, <u>tai tang</u> and <u>hen</u>,
may occur after (as well as before) a noun (though not after
a longer noun phrase). In the post-noun position a reduplica-
tive emphatic form of <u>hen</u> also occurs: <u>hen hín</u>/<u>hen híng</u>.

        kia tai tang 'all the ghosts'

        tódroang hen 'many problems'

        tódroang hen hín 'very many problems'

The animate plural marker (an-plM) is mau and is followed by a basic noun phrase whose noun phrase head must be an animate noun (anN) (without a classifier), by ki CL, or by the pronoun reference phrase with vai (7.4(6)).

mau chu leang 'villages chiefs' (an-plM anN N)

mau róteang 'Sedang people' (an-plM anN)

mau ki chia tónap 'those who dig graves' (an-plM
ki CL(T CL))

mau vai kra kónou 'the male elders' (an-plM PRefP)

A mau pluralized noun phrase may delimit a preceding noun.

khu mau vai me 'that group of them' (N plNP:
(an-plM, PRefP:(vai Dem)))

The pluralized noun phrase may thus be represented as shown in Chart 7.6.

	-bNP
gen-plN-	
	-PRefP(Pron:vai)
an-plM(mau)-	-bNP(NPH:anN)
	-ki CL

Chart 7.6 Pluralized noun phrase (plNP)
(the pluralized noun phrase
consists of any two elements
in horizontally-adjacent
boxes; inner-bracketed items
specify restrictive filler
requirement)

* -143-

7.4 Pronoun reference phrase

The referent of a third person pronoun or of a third
person component of other dual or plural pronouns is made
specific in the pronoun reference phrase, though the ref-
erent may also include the speaker or hearer. The implicit
third person component may be clarified and made explicit
by a following (noun or) basic noun phrase. The pronoun
reference phrase may function as a pronoun in the basic noun
phrase. (Cf. Smith (1974d) for a discussion of the mechan-
ism of some Sedang pronoun reference across clause and sen-
tence boundaries.)

(1) The pronoun reference phrase with má 'we (excl.) two'
identifies for the hearer with whom the speaker is iden-
tifying himself by use of the dual pronoun.

       má o 'my younger sibling and I' (má N)

       má pa á 'my father and I' (má N Pron)

(2) The pronoun reference phrase with ngin 'we (excl.) all'
identifies for the hearer with whom the speaker is identi-
fying himself by use of the plural pronoun.

       ngin róteang ko 'we Sedang people (you are

       not one)' (ngin N Dem)

(3) The second person plural pronoun pó 'you all' may encom-
pass an absent third person party. The third person party
may be made explicit with the pronoun reference phrase.

       pó dóh 'you and your son-in-law' (pó N)

(4) The pronoun reference phrase with gá 'he, she, it'

makes explicit the pronoun referent, usually by citing the personal name.

ga kóxet tlua 'he, i.e. Koxet Tlua' (ga PNume)

(5) The pronoun reference phrase with preí 'those two' identifies, if necessary, the identity of the referents of the dual third person pronoun. There are four forms which this can take. The N which usually occurs in this construction as formulated below may be expanded to simple noun phrases.

(a) preí N if both referents are describable by the same term;

preí cháu 'the two grandchildren'

preí kódraí 'the two women'

(b) preí N N or

(c) preí N preí N or

(d) N preí N if both referents are not describable by the same term.

preí óng meh 'the two brothers-in-law'

preí poa cháu 'the grandfather and grandchild'

preí klá preí koa 'the tiger and the turtle'

preí pa preí kuan 'the father and the child'

Xôu preí na Xôu 'Xou and Xou's sister'

pa Xôu preí vá Xôu 'Xou's father and Xou's

  father-in-law'

tódroang preí chó preí mónge 'the matter

  of the dog and the person' (NP:(N PNefP))

(6) The pronoun reference phrase with <u>vai</u> 'they' identifies the referent of the plural pronoun. In addition to a (noun or) basic noun phrase the referent may be described by a verbal adjective (7.1). Only this pronoun reference phrase may be preceded by the general animate pluralizer <u>mau</u> (7.3).

vai dróh 'the girls' (<u>vai</u> N)

vai pólê 'the villagers'

vai tómoi 'the strangers'

vai ê 'the others' (<u>vai</u> vAdj)

vai kra 'the elders'

mau vai rótam 'the young men' (plNP:(<u>mau</u> PRefP:

(<u>vai</u> N)))

khu mau vai me 'that group of them' (N plNP:(<u>mau</u>

PRefP:(<u>vai</u> Dem)))

7.5 Prepositional phrase

The prepositional phrase (PrepP) is used as a filler of the indirect object (locative) slot of the semitransitive clause (9.4) and of the locative and temporal peripheral slots in other clauses (10.1-2). As stated above (7.1) the prepositional phrase may also be a part of a basic noun phrase. The prepositional phrase has an initial preposition (Prep) followed by any of the above noun phrases, a demonstrative, or a locative. By ellipsis (12.9) most prepositions may occur without a following noun phrase.

The prepositional phrase may thus be summarized:

PrepP: Prep - bNP/cNP/plNP/PRefP/Dem/Loc

a hngei   'to the house' (Prep bNP:(N))

'báng á   'with me' (Prep bNP:(Pron))

'báng moi nge kónou   'with one man' (Prep

cNP:(Num Cl N))

tung tai tang pólè   'in all the villages' (Prep

plNP:(gen-plM N))

kô vai kónou   'vis-a-vis the men' (Prep PRefP:

(vai N))

tung me   'in there' (Prep Dem)

hing pèng   'the area up above' (Prep Loc)

Prepositions. The following prepositions (Prep) are used in prepositional phrases:

a   'to, toward'

'báng   'with'

dreng   'with'; cf. TempSub dreng 'while' (10.1)

dreng eh   'with you' (Prep Pron)

dro 'in the middle, in the midst'

dro troang   'in the path' (Prep N)

hing/hong   'in the vicinity of'

hong eham   'the area down below' (Prep Loc)

ko   'to, in relation to'; note its use also

in SimP and CompP (10.3) and BenP (11.2);

cf. fPt kô (10.4)

kódam   'beneath, below'

kódam Kon Hreng   'below Kon Hreng village'

(Prep N GName)

'nang   'diminished to'

Mot 'nang kreng.   'Enter up to the knees.'

(S CL:(S Vb, PrepP:(Prep N)))

pópêng   'above'

pópêng tónei   'above the ground' (Prep N)

sap   'from'

Lam sap Kon Tum. 'Go from Kontum.' (S CL:

(S Vb, PrepP:(Prep N GName)))

ti   'up high in, up high on'

Ga ôi ti lóang. 'It lives up high in the

tree.' (I CL, LocP:(Prep N))

tung   'in, within, into'

Preo tung kong. 'Return into the jungle.'

(S CL:(S Vb, PrepP:(Prep N)))

The preposition kódam has a nominal use as in:

Homi ko'neh tung kodam. 'The comb fell in the place

underneath.' (I CL, LocP:(Prep N))

The preposition kô also has a relator use as a relator
particle (RelrPt) (1) identifying possession (but also see
RelPt ki above (7.1)) and (2) marking (sometimes) indirect
objects in clause structure (9.1-2). See also kô with final

particles (10.4).

7.6 Distribution and frequency of noun phrases

Chart 7.7 lists 81 different noun phrase forms which
occur 953 times in the analyzed sample of continuous text.
Each of these noun phrase forms is included in a noun phrase
description above; there are other combinations, however,
which are structurally possible (some, but not all, of which
have been observed elsewhere) not occurring in this limited
sample. The chart indicates the frequency of each phrase
type in each of the five clause slots in which noun phrases
occur.

Corresponding to the frequency of the various clause
types in which they occur, noun phrases occur most often in
the subject slot (529 times), less often in the object (254)
and locative (136) slots, infrequently in the indirect object
and temporal slots. The basic noun phrase contains the
greatest variety of forms (41 of 81) and occurs most fre-
quently (85%) in this text sample. Pronouns occur five
times more frequently than nouns in the subject slot; where-
as nouns occur 2-1/2 times more frequently than pronouns in
the object slot. Prepositional phrases are restricted to
the locative and temporal slots except for their infrequent
occurrence within the basic noun phrase itself. Noun phrases
can theoretically be expanded maximally to six or more
components; but the eight phrase forms having only one

component account for 615 noun phrase occurrences (65%). Twenty-four 2-component phrases account for 232 occurrences; thirty 3-component phrases account for 78 occurrences; seventeen 4-component phrases account for 26 occurrences; and the only two 5-component phrases account for only 2 occurrences. There are no 6-component or larger noun phrases in the sample.

(Chart 7.7)

Basic noun phrase					S	IO	O	LocP	TempP
N					60	3	105	8	
N	N				2		10	3	
N	N	N	DName				1		
N	N	N	.	Dem			1		
N	N		PName				1		
N	N		PName	Dem	2				
N	N		Pron		1				
N	N		Pron	Dem	1		4	1	
N	N		DName	Dem	1				
N	N		vDes				1		
N	N		vDes	Dem			1		
N	N			NomInter			1		
N	N		.	Dem	1		2	5	
N			PName		10		7	2	
N			PName	Dem	4				
N			Pron		13		9		
N			Pron	CL			1		
N			Pron	Dem	6		6		
N			Pron	Loc	1				
N			GName				1		
N			DName		2				
N			vDes		3		6		
N			vDes				1		
N			vDes NP	Dem				1	

	S	IO	O	LocP	TempP	
Basic noun phrase, continued						
N vDes Prep NP			2			
N ki CL	2		2			
N CL			2			
N ki CL Dem			1			
N ki Dem	2		4			
N Dem	14	1	15	9	4	
N Loc				2		
N NomInter			2	4		
N Prep N Dem		1				
PName	6					
PName Dem	3		2			
Pron	364	15	43	1		
Pron ki CL	1					
Pron ki NP	1	1				
Pron Dem	10		10			
Pron Loc		1				
Pron Prep N			1			
Total basic noun phrases	510	22	242	36	4	814

	S	IO	O	LocP	TempP	
Count noun phrase						
Num Cl	2					
Num Cl N			1			
Num Cl N DName					1	
Num cN		1		1	3	
Num cN Dem				1		
Num...	2					
Total count noun phrases	4	1	2	2	3	12
Pluralized noun phrase						
tai tang N		2				
tai tang...			1			
túm N			4			
túm N N			1			
túm N N Dem			1			
Total pluralized noun phrases		2	7			9
Pronoun reference phrase						
pó N	1					
gá PName			1			
préi N N	1					
préi N préi N	1					
vai N	5					
vai N Dem			1			
vai Pron Loc		2				

	S	IO	O	LocP	TempP
Pronoun reference phrase, continued					
vai N Pron Dem	1				
N pó N	1				
N mau vai Dem	1				
Total pronoun reference phrase	11	2	2		15
Ellipsis of the noun phrase head					
...GName				1	
...Dem	4		1		
Total instances of ellipsis	4		1	1	6
Prepositional phrase					
Prep...				1	
Prep N				27	
Prep N N				7	
Prep N N N				1	
Prep N N Dem				3	
Prep N Pron				2	
Prep N vDes				2	
Prep N ki CL				1	
Prep N ki CL Dem				1	
Prep N Dem				10	
Prep Pron				6	
Prep Pron Dem				1	

	S	IO	O	LocP	TempP
Prepositional phrase, continued					
Prep má N				1	
Prep vai N ki CL				1	
Prep mau ki CL				1	
Prep Dem				24	
Prep Loc				8	
Total prepositional phrases				97	97
Total all noun phrases	529	27	254	136	7 953

Chart 7.7 Variety, distribution and frequency of noun phrases in sample text

CHAPTER 8 VERB PHRASES

8.0 Introduction

The verb phrase (VP) is that part of a clause which occurs following the optional subject (except in the subject-less existive clause) and before the object, indirect object, or complement slots of all normal or major clause types. The verb phrase functions as the (simple) predicate of the sentence.

The verb phrase consists of one or more (main) verbs (Vb) and/or one or two preceding preverbs (pVb), optionally preceded successively by a verbal particle (vPt) and/or a preverbal adverb (pvAdv). All four elements may be present; a main verb or preverb must be present. The verb phrase may thus be summarised as follows (post-hyphenated elements can not be phrase final, hyphenated elements within parentheses indicate a second or third (concatenated) similar element). This is a general formula in that verb phrase types ($_x$VP) correspond to the verb class ($_x$Vb) of the last verb in the phrase, as outlined in the following section.

$_x$VP: pvAdv- vPt- pVb (-pVb) ((Vb-)Vb-)$_x$Vb

Each of these verb phrase components will be discussed
in the following sections in the reverse of their linear
order. Both verb phrase types and main verb subclasses are
discussed in 8.1. The last section cites the variety and
frequency of the verb phrase in the sample analyzed text.

8.1 Main verbs

Main verbs (Vb) are those elements which alone may fill
the verb phrase slot in clauses without depending upon the
context. (Preverbs may also occur alone, but the context im-
plies the elliptic main verb.) In the maximal verb phrase
main verbs occur last, following preverbs (8.3); the next
(non-VP) element of the clause follows the main verb.

There are eight main verb subclasses which correspond to
the verb phrase type in which they may occur which, in turn
and for the first six listed verb subclasses, corresponds to
the maximal or "highest" clause type in which the verb
phrase may occur. Figure 9.1 in section 9.0 shows six basic
clause types in which the six corresponding verb phrases
occur. Lowest in the figure is the intransitive clause in
which (and only in which) the intransitive verb phrase oc-
curs; highest in the figure is the quotative clause in which
the quotative verb phrase (and only the quotative verb
phrase) occurs. But the verb phrase corresponding to any
"higher" clause type may occur in any "lower" clause type as
indicated by descending arrows in the above-mentioned figure.

(In the examples of Sedang clauses cited throughout the text, if a given verb phrase occurs in a "lower" clause type it is so indicated in the abbreviated syntactic statement following the example (e.g., "T CL w B Vb" indicates a transitive clause with bitransitive verb).)

The eight verb subclasses follow.

Quotative verbs. Only quotative verbs (Q Vb) may occur in the quotative verb phrase (Q VP) which only occurs in the quotative clause (Q CL, 9.1). Q Vbs form a small subclass of verbs which include the following. Each quotative verb may be followed by a direct quote.

eng	'to ask'
khën	'to tell, say'
kreo	'to call'
pa	'to request'
póchan	'to advise, warn'
tia	'to answer'
tòi	'to tell, say'
tómiat	'to think, consider'
thë	'to command'; cf. pVb the 'must' (8.3)

(The distinction between khën and tòi is sometimes given as a matter of respect. Younger people tòi with older people whereas older people khën with younger people.)

<u>Container verbs.</u> Only container verbs (C Vb) occur in the
container verb phrase (C VP). The container clause (C CL,
9.2) is the highest clause type in which the container verb
phrase may occur. C Vbs form a small subclass of verbs
which include the following. Because the C VP may be follow-
ed maximally by a ("contained" or embedded) clause each of
the following C Vbs is so illustrated.

Am á ka hme. 'Give, permit - me to eat rice.'
(C CL(T CL))

Ja á ói u me. 'Take, carry, guide - me to live
over there.' (C CL(I CL, LocP))

Kom kuan preó. 'Wait - for child to return.'
(C CL(I CL w S Vb))

Kónó á tópe xeh. 'Recognize - that I am
pregnant.' (C CL(Ben Eql CL))

Loh pó lo dei. 'Permit, allow - you to go out.'
(C CL(Ben I CL w S Vb))

Lóu ma pei 'bang. 'Release, permit - us to
pound (rice) together.' (C CL(I CL w T Vb,
LocP)

Hlo ga hiáng pou. 'See - he is already drunk.'
(C CL(I CL))

Nóni ga hla. 'Guess, suppose, think - he is dead.'
(C CL(Eql CL))

Hma eh 'mei. 'be acquainted, familiar - he is evil';
cf. pVb <u>hma</u> 'to know about, do habitually' (8.3)

Hnê pin pé hme. 'Teach - us to cook rice.'

(C CL(T CL))

'Nai kia ka mónge. 'Know, understand - ghosts

eat people.'

Ngán gá ói a tóniam. 'Look at, see - him (being)

in the forge.' (C CL(I CL, LocP))

Pou eh chai klea. 'Dream - you have diarrhea.'

(C CL(Eql CL))

Pro eh chiang mónge lem. 'Do, make - you become

a good person.' (C CL(Eq3 CL))

Tang gá chuat. 'Hear, listen - him make noise.'

(C CL(I CL))

Va eh preó. 'Want - you to return.'; cf. preverb

va 'to be about to' (8.3) and PurPt va 'in

order to' (10.3) (C CL(I CL w S Vb))

Xau gá lóka ma. 'Be afraid - he will eat us.'

(C CL(T CL w lc-T Vb))

Xo chok pong xiam kóla. 'Get, take - a shrew to

cut through the bamboo.' (C CL(T CL))

Bitransitive verbs. Only bitransitive verbs (B Vb) occur in
the bitransitive verb phrase (B VP). The bitransitive clause
(B CL, 9.3) is the highest clause type in which bitransitive
verb phrase may occur. B Vbs form a small subclass of verbs
which include the following. Because the B VP may be fol-
lowed maximally by an object noun phrase and an indirect ob-

ject prepositional phrase, each of the following B Vbs is
so illustrated.

Chôu báu tung hngei. 'Place, put - rice in

house.' (B CL)

(Hu)hvat pókeang a kó. 'Throw - powder here.'

Kùm báu tung hngei. 'Pile - rice in house.'

Lôi ko a 'ngei. 'Leave, abandon - head up high.'

Ta préi tung vó. 'Place, put - the two in a jug.'

Hvang gá tung trap. 'Throw - him into mud.'

Xang klóng a kóng. 'Slide - the bamboo (cylinder)

onto the arm.'

Semitransitive verbs. Only semitransitive verbs (S Vb) occur
in the semitransitive verb phrase (S VP). The semitransitive
clause (S CL, 9.4) is the highest clause type in which semi-
transitive verb phrases occur. S Vbs form a small subclass
of verbs which include the following. Because the S VP may
be followed maximally by an indirect object noun phrase, each
of the following S Vbs is so illustrated.

Chai a hngei. 'Return - home.' (S CL)

Kótau Kontum. 'Run - to Kontum.'

Kleh tung hlau. 'Fall - into the bamboo.'

Klêng Ngo Eang. 'Go up - Mount Eang.'

Lam troang. 'Go - on the path.'

Lo hông cham. 'Go out - on the down side.'

Mot truam. 'Enter - the hole.'

Preó póle. 'Return - to the village.'

Siam a ngia pa. 'Approach - to in front of

father.'

Veh a me. 'Return - there.'

Transitive verbs. Only transitive verbs (T Vb) occur in the transitive verb phrase (T VP). The transitive clause (T CL, 9.5) is the highest clause type in which transitive verb phrases occur. T Vbs form a large, perhaps the largest, sub-class of verbs which include the following. Because the T VP may be followed maximally by an object noun phrase, each of the following T Vbs is so illustrated.

Ai hme. 'Have - rice.'; cf. pVb ai (8.3) and

Ex Vb ai (below) (T CL)

Ap pom. 'Roast - potatoes.'

Chai klea. 'Sick - intestines.'

Cheh hla mó-ea. 'Write - a book.'

Ha rókong. 'Open wide - mouth.'

Hou eh. 'Curse - you.'

Ka hme. 'Eat - rice.'

Ko klong. 'Chop - bamboo.'

Loi a. 'Believe - me.'

Hneng tea. 'Carry - water.'

Ok tea. 'Pour - water.'

Peng chem. 'Shoot - birds.'

Pei chiak. 'Work - field.'

Po nha.   'Hoe - weeds.'

Hoe po.   'Buy - salt.'

Tiu 'bok.   'Follow - priest.'

Um phai.   'Winnow - rice.'

Intransitive verbs.   Only intransitive verbs (I Vb) occur in
the intransitive verb phrase (I VP).   The intransitive clause
(I CL, 9.6) is the highest and only clause type in which the
intransitive verb phrase occurs.   I Vbs form a large subclass
of verbs which include the following.

eak   'to defecate'

hea   'to vomit'

hiam   'to breathe'

huam   'to bathe'

iu   'to whistle'

koi   'to sleep'

koohei   'to sneeze'

long   'to sing a lullaby'

hla   'to die'; cf. vAdj hla 'to be dead' (7.1)

mei   'to rain'

oi   'to live'; cf. pVb oi 'to continue to be'
      (8.3), Eq Vb oi 'to be'(below)

pote   'to rest'

to   'to laugh'

xah   'to play'

xuong   'to get up'

Equative verbs. Only equative verbs (Eq Vb) occur in the equative verb phrase (Eq VP). The equative clause (Eq CL, 9.7) is the only clause type in which the equative verb phrase occurs. Eq Vbs form a very small subclass of verbs which include the following and define the four equative verb phrases in which they occur.

Eq1 Vb: ø   '(the zero copula)'

Eq2 Vb: xê   'to be'

Eq3 Vb: chiang   'to become'; cf. pVb chiang 'to be able to' (8.3)

Eq4 Vb: ói   'to be'; cf. I Vb ói 'to live' (see above),
          pVb ói 'to continue to be' (8.3)

Existive verb. Only the existive verb (Ex Vb) occurs in the existive verb phrase (Ex VP). The existive clause (Ex CL, 9.8) is the only clause type in which the existive verb phrase occurs. ("Existive" is taken from Pike and Pike (1974, p. 4.24, 4.27) which, in turn, was taken from Hale (1973).) There is only one member of this subclass of verbs.

          ái   'there is/are'; cf. pVb ái (8.3) and T Vb
          ái (above)

8.2 Verbal concatenation

Main verbs may be concatenated into a series of two, three, or four (and structurally, but not practically, more)

adjacent verbs. There are three types of verb concatenation:
reduplicative concatenation, simple concatenation, and (a
composite of these) complex concatenation.

Reduplicative concatenation. For stylistic or emphatic pur-
poses a main verb may be repeated one or more times. Some-
times this indicates a repeated or prolonged action.

> Gá ko ko ko muih. 'He chopped and chopped and
> > chopped (the trees in the) field.' (T CL)
> Prei tókat tókat tókat. 'They wrestled and
> > wrestled and wrestled.' (I CL)
> Ne gá prŏk prŏk prŏk. 'Then he went and went
> > and went.' (Temp, I CL w S Vb)

Simple concatenation. For description of successive
actions main verbs may be concatenated together. Most
commonly the first verb is a semitransitive verb expressing
motion followed by (a) another semitransitive verb, (b) a
transitive verb, or (c) a quotative verb.

> (a) chai trŏh 'return and approach'
> > xuŏng kótau 'get up and run'
> > lăm lo 'go and exit'
> > mot prŏk 'enter and go'
> (b) lăm módró 'go and trade'
> > met ŏu 'enter and drink'
> > chu rŏe 'go down and buy'

kótau peng 'run and shoot'

(c) chu eng 'go down and ask'

tak tói 'go up and say'

The main verb 'nai 'to know' is frequently followed by another main verb with the idea of knowing how to do something.

'nai cheh 'know how to write'

'nai ka 'know how to eat'

But there does not appear to be any restriction upon the verb types which may occur together in this way. The last of the concatenated verbs determines the permitted clause type occurrence (3.0).

póchan the 'warn and command' (Q - Q Vb)

xah tia 'play(fully) answer' (I - Q Vb)

róngei to 'sing and laugh' (I - I Vb)

krí ka 'pick (fruit) and eat' (T - T Vb)

puat xo 'reach in and get' (S - C Vb)

kótau xau 'run (being) afraid'

róxa xau 'nervous and afraid' (I - C Vb)

Concatenation of three main verbs corresponds to these same above types.

chu hóda ehai 'go down and flee and return' (S - S - S Vb)

tóng mot ehai 'carry, enter and return' (T - S - S Vb)

'nai tópui toveh 'know how to speak and return (an answer)' (C - I - I Vb)

Complex concatenation. Complex concatenation consists of the repetition of a main verb with the addition of one or more other main verbs. Or the repeated verb may be the last verb in the series.

> tak tak ngán xo 'go up, up, look for and get'
>
> (S - S - C - C Vb)
>
> tiu tiu tiu kléng 'follow, follow, follow,
>
> going up' (T - T - T - S Vb)
>
> mot prok prok prok 'enter and walk, walk,
>
> walk' (S - S - S - S Vb)

8.3 Preverbs

In the maximal verb phrase preverbs (pVb) follow verbal particles (8.4) and precede the main verb (8.1-2). Preverbs may occur alone as a clause or be the only element of the verb phrase present in a clause (except for páng ti and u, see below), though the absent main verb will be implied from the preceding context. Semantically preverbs relate to the involvement of the actor in the predication.

The preverbs form a small class which includes the following.

> ai 'be definitely'; about 75% of its occurrences
>
> are in negated verb phrases; cf. T Vb
>
> ai 'to have' and Ex Vb ai 'there
>
> is/are' (8.1); ai in its combined uses
>
> is the sixteenth most frequent word in

the 27,437-word text occurring 290
times.

Gá ta ái hla. 'He did not die.' (I CL)

'Bok ái hlo á ôh. 'The foreigner did not
see me.' (T CL, fPt)

Ôh ta ái hóu. '(He) did not curse.' (I CL
w T Vb)

'Bok xoi ái loh ôh. 'The priest did not
permit it.' (I CL w C Vb, fPt)

bua 'to try to, to attempt to'

Bua ehu ngán 'noi. '(You) try and go down
and see.' (Imp I CL w C Vb, fPt)

bua ka 'try to eat'

cha 'to be able to'; cf. N cha 'body', T Vb cha
'to get' and S Vb cha 'return' (8.1)

Pin cha ka rókai. 'We can eat boar.' (T CL)

Á pa cha ói rótro. 'I cannot be happy.'
(Eq4 CL)

chiá 'to do or become increasingly so'

Gá chiá lêm ta. 'She became increasingly
more beautiful.' (Eq1 CL, CompP)

chiang 'to be able to'; cf. Eq Vb chiang 'become'
(8.1)

Ne gá ôh ta chiang pro kan póle. 'But he
wasn't able to work as a village chief.'
(Temp, T CL w C Vb)

Gá oh ta chiang to xeh oh. 'It wasn't able
to cross by itself.' (Refl I CL w S Vb,
fPt)

dá 'to continue to'

Eh dá dea lôi. 'You continue to pour (it)
out.' (Imp I CL w T Vb)

hêng 'to crave'

A hêng ka ká. 'I crave to eat fish.' (T
CL)

kai 'to be able to'; always used with a negative
particle

A kai 'blei ôh. 'I'm unable to win.' (I CL
w T Vb, fPt)

Gá ta kai koi. 'He was unable to sleep.'
(I CL)

khên 'to dare to'

Gá khên ôh - ói tung ró kó. 'He did
not dare to stay in this basket.' (I CL,
fPt),(I CL, LocP)

Eh hôm khên? 'Do you dare (to stay here)?'
(I CL)

khoh 'should, ought to, to permit'; is always used
in the negative, e.g. oh ta khoh 'taboo'
or interrogative a hom khoh 'is it per-
mitted?' except in affirmative response
(10.7) khoh 'not taboo'

Vai ôh ta khoh ka chó me nah.   'It was taboo

for them to eat dog back then.' (T CL,

fPt)

Khoh ôh - ka kóteó tung ngo me.   'It's not

permitted to eat sugarcane on that

mountain.' (I CL, fPt),(T CL, LocP)

klei 'to finish, conclude, stop, end, after'

Klei po nha neó vai pótē.   'After hoeing

weeds some more, they rest.' (TempP(T CL,

fPt), I CL)

ka klei róngei kó.   'We are finished sing-

ing.' (I CL, LocP)

líng 'to do habitually or continuously'

Á pa líng u róngei xua o á u krou.   'I

cannot continue singing because my child

is crying.' ((I CL), CausConj(I CL))

mó-éam 'to do with difficulty, to try hard to'

U hiat dei. Xei kó ah mó-éam ka dei ket

dro.   '(She) forgot again. In the after-

noon (she) tried hard (to remember) to

eat the dro frog.' (Refl I CL w T Vb)

(TempP, Refl T CL)

hma 'to know about, to do habitually'; cf. C Vb

hma 'be acquainted with' (8.1)

Oa hma bong dei a xiam tróng.   'He always

urinated at the base of the eggplant.'

(Refl I CL, LocP)

Hma hlo vai pôu 'di'do.   '(He) was accustomed
to see them drunk all the time.' (C CL
(I CL, fPt))

ói 'to continue, remain'; observed to occur only
before Ex Vb ái 'there is/are' (8.1);
cf. I Vb ói 'to live', Eq Vb ói 'to
be' (8.1)

Nô kó ói ái péa pái to rói xo. 'Now
there are remaining two or three flies
only.' (Temp, Ex CL, fPt)

A hôm ói ái dróu neó? 'Is there still
more wine?' (Ex CL, fPt)

páng 'to be able to'
Gá óh ta páng hla. 'He couldn't die.'
(I CL)

Ja gá hiáng páng tópui. 'His grandmother
could speak.' (I CL)

Gá óh ta páng pei chiak. 'He couldn't
work in the fields.' (T CL)

páng ti 'to be unable to'; may not occur
without a following main verb
Kónóu á páng ti lém ti kô. 'My husband
can't be good like this.' (Eql CL, ManP)

Páng ti péng. '(She) was unable to fill
(it).' (I CL w T Vb)

póxiam 'to start to, to begin to'

    Ga póxiam mot neo. 'He began to go in some

        more.' (I CL w S Vb, fPt)

    I póxiam rong. 'The rooster begins to crow.'

        (I CL)

hro 'to be able to'; usually used in the negative

    Pin hro 'blei oh. 'We are unable to win.'

        (I CL w T Vb, fPt)

    Eh ta hro ja. 'You are unable (to do it),

        grandmother.' (I CL w elided verb, Voc)

the (sometimes athe, a Bahnarism) 'must, be

      necessary'; cf. Q Vb the 'to command'

      (8.1)

    Pin the dea loi hódroi. 'We must pour (it)

      out first.' (I CL w T Vb, DeaP)

u 'still, continue to'; may not occur without a

      following main verb; cf. N u 'place',

      PurPt u 'in order to'

    U ai hmou. 'There are still stones.' (Ex

      CL)

    Ga u hiat dei. 'She continued to forget.'

      (Refl I CL w T Vb)

uan 'to do something quickly, for the first time'

    Uan pe pe hme 'noi. '(He) quickly cooked

      rice.' (T CL, fPt)

va 'to be about to, to want to'; cf. C Vb va 'to

want' (8.1) and PurPt <u>va</u> 'in order to'
(10.3); in some sentences the distinc-
tion between this pVb and the C Vb is
difficult to discern; <u>va</u> in its combined
uses is the twelfth most frequent word
in the 27,437-word text, occurring 333
times

Kong va mei.   'It (the land) is about to rain.'
  (I CL)

Á va róngei - hôm hã.   'I want to sing too.'
  (I CL)(Resp, fPt)

Va.   '(I) want (to eat).' (Prag)

Two preverbs may occur together in a verb phrase. The
following have been observed together.

  páng u

    Ga pa páng u chai.   'He wasn't able to
      return.' (I CL w S Vb)

va cha

    Pó-ia va cha ka 'nang.   '(I'm) just about
      able to eat (it) for sure.' (I CL w T Vb,
      fPt)

8.4 Verbal particles

In the maximal verb phrase verbal particles(vPt) follow
preverbal adverbs (8.5) and precede preverbs (8.3). Verbal
particles must be followed by either a preverb and/or a main

verb (except for the responses hiáng and ta hài). Seman-
tically the verbal particles relate to the state of the pred-
icate: affirmation (including tense), denial and question.
Also, two verbal particles are negative imperatives (though
some final particles are also imperatives).

Verbal particles form a small class which includes the
following.

    a hài, hài 'yet?', a hai choi 'ever yet?';

        with stress on hài the preceding a is

        frequently elided; the answer requires

        either dé, hiáng, ta hài, choi

        (see below) or the response (hài)

        'nhiah (10.7)

   A hài lôi. 'Have (you) quit yet?' (I CL w

     C Vb).

   Kh a hài choi ka xei? 'Have you ever eaten

     horse(meat)?' (T CL)

  a hôm, hôm '(yes-no question marker)'; with

        stress on hôm the preceding a is fre-

        quently elided; the answer requires

        either a response hôm or ô-ôh (10.7),

        oh ta (see below), or an affirmative

        statement

   Kh a hôm hlo rôtam me. 'Have you seen that

     boy?' (T CL w C Vb)

   Hôm xei? 'Is that so?' (Eq2 CL)

chói, hài chói, ta ái chói 'never', òh ta

  chói la lai 'never ever'; used as an

  answer to an a hai question (see above)

Ga chói hou a. 'He never cursed me.'

  (T CL)

Tóring me a hài chói lam oh. 'I've

  never gone to that area.' (I CL w S Vb)

de 'currently (progressive action)'; cf. N

  de 'middle', TempP de 'while' (10.1)

Plong me de ai ha. 'That canoe still

  exists.' (CoEmp Ex CL, fPt)

Prei me de tókat. 'Those two are wrest-

  ling still.' (I CL)

hiang 'already (past tense marker)'; indicates

  completion; used in answer to an a hai

  question (see above); hiang may occur

  as a response fragment or may, by ellip-

  sis, be sentence final (12.9), else must

  be followed at least by a preverb or main

  verb

A hiang an eh pókeang. 'I already gave

  you the powder.' (Ben T CL w C Vb)

ma ta 'don't (imperative)'; cf. Imp CL (11.1)

No ko eh ma ta hnap troang a hou. 'Now

  don't you block my path, okay?' (Temp,

  Imp T CL, fPt)

ôh pa, pa 'not (negative)'; ôh is stressed, pa

'   unstressed--usually ôh is elided with

consequent loss of a stress peak

Vai nòu pa nhóng o ôh pa va gá. 'The

parents and relatives don't want him.'

(T CL w C Vb)

A pa 'nai ti lai. 'I don't know why.' (I CL

w C Vb, ManP)

ôh ta, ôh ti, ôh tu, ta, ti, tu 'not (nega-

tive)'; ôh is stressed, ta/ti/tu un-

stressed--sometimes ôh is elided with

consequent loss of a stress peak; ti is

an infrequent variant of ta; as the only

case in Sedang of vowel assimilation to

a following consonant, tu occurs only

before the C Vb or pVb va; cf. fPt ôh

(10.4) with which ôh ta frequently co-

occurs; as a two-(phonological)word se-

quence ôh ta is the second most frequent

two-word sequence in the 27,437-word

text, occurring 176 times, and as a

three-word sequence occurs in the first

two most frequent sequences: ôh ta ai

40 times and ôh ta 'nai 32 times

Ôh ta ai báu i ka. 'There is no rice to

eat.' (Ex CL, PurP)

A óh ti 'nai. 'I don't know.' (I CL w C Vb)

Ih khen óh tu va à. 'You say (you) don't

    want me.' (C CL w Q Vb(T CL))

Pin ta lém cha. 'We are not well.' (Eql CL)

pói ta 'don't (imperative)'; cf. Imp CL (11.2)

    Pói ta ám má óh. 'Don't give us two (any).'

    (Imp Ben I CL w C Vb, fPt)

    Ih pói ta ka à. 'Don't eat me.' (Imp T CL)

ta hài 'not yet'; used as a negative answer to

    a hài (see above)

A ta hài pé hme. 'I have not yet cooked

    rice.' (T CL)

Verbal particles may not be compounded. Whereas in all

examples cited in this section a main verb (or vAdj) follows

the verbal particle, in 8.3 there are several examples of a

preverb following the verbal particle.

The negative particle óh, which occurs as óh pa, óh

ta, óh ti and óh tu and as the negative final particle óh

(10.4), is the seventh most frequent word in the 27,437-word

text, occurring 478 times.

The negative particle ta, which occurs as ma ta, óh ta,

ta, pói ta and ta hài, is the tenth most frequent word, oc-

curring 355 times. The verbal particle hiang is the ninth

most frequent, occurring 376 times.

8.5 Preverbal adverbs

In the maximal verb phrase preverbal adverbs (pvAdv) are
initial, followed by verbal particles (8.4). Preverbal ad-
verbs may not occur alone in the verb phrase but must be fol-
lowed at least by a preverb or main verb. As noted below,
some preverbal adverbs may precede the subject.

Preverbal adverbs are a small class which includes the
following.

> hómun   'also, usually'; hómun infrequently occurs
> > before the subject
>
> > Ngin hómun kódê eh. 'We will also kill you.'
> > > (T CL)
>
> > Kgê me gá hónun ôh ta ái lián. 'That
> > > person usually does not have money.'
> > > (T CL)
>
> hlik 'necessary, needful'; observed to occur only
> > before va
>
> > Gá hlik va ka. 'He had to eat.' (I CL w T Vb)
>
> hmeô pa 'unnaturally, unaccustomed, strangely'
>
> > Hmeô pa tó. '(He) laughed unnaturally.'
> > > (I CL)
>
> hmou pa 'with great desire'
>
> > Hmou pa ti róngei. '(I) really don't want to
> > > sing.' (I CL)
>
> > A hmou pa chiang xeh ti kô. 'I really
> > > want to be like this.' (Refl Eq3 CL, ManP)

neó 'to have just'; cf. fPt neó 'again, more'

(10.4)

Ga neó loi. 'He just (now) believed.' (I

CL w T Vb)

hnoi 'immediately, right away'; frequently

cooccurs with fPt hloi 'immediately'

(10.4)

Vai va kódê ga me ga hnoi preo hloi.

'They were about to kill him so he re-

turned immediately.' ((T CL), ResConj(I

CL w S Vb, fPt))

re 'slowly but surely'

Kong re xei. 'Afternoon came on slowly.'

(I CL)

Ton re ache rópan. 'After a long time (he)

slowly (approached) nearer the field

house.' (AdvEmp S CL w elided S Vb,

QuanP)

xuan 'also'; infrequently may occur before the

subject

Kónou xuan huan hong peng. 'The husband

also bathed further up(stream).' (I CL,

LocP)

Preverbal adverbs may not be compounded. The examples

above cite instances of preverbal adverbs occurring before

verbal particles, preverbs, and main verbs.

8.6 Variety and frequency of verb phrases

Chart 8.1 lists 14 different verb phrase forms which occur 715 times in the analyzed sample of continuous text. Each of these verb phrase forms is included in the description above; there are other combinations, however, which are structurally possible (some, but not all, of which have been observed elsewhere) but not occurring in this limited sample.

Single main verbs occur most often (65%). Three different 2-component phrases--verb-verb, preverb-verb, and verbal particle-verb--each occur about 10% of the time. All other verb phrase types occur infrequently. There is no observed restriction of verb phrase type with any of the clause types (chapter 9).

				No.
			Vb	459
			Vb Vb	70
			Vb Vb Vb	5
		pVb	Vb	67
		pVb	Vb Vb	2
	vPt	pVb	Vb	16
	vPt	pVb	Vb Vb	1
pvAdv	vPt	pVb	Vb	1
pvAdv		pVb	Vb	2
		pVb pVb	Vb	1
	vPt		Vb	85
	vPt		Vb Vb	2
pvAdv	vPt		Vb	1
pvAdv			Vb	5
Totals: pvAdv 9	vPt 106	pVb 89	Vb 637	
		pVb pVb 1	Vb Vb 75	
			Vb Vb Vb 3	
9	106	90	715	715

Chart 8.1 Variety and frequency of verb phrases in sample text

CHAPTER 9 BASIC CLAUSE TYPES: NUCLEAR ELEMENTS

9.0 Introduction

Clauses (CL) are the principal, and usually the only, component of the next higher syntactic level, the sentence (chapter 13). Clause structure relates the predicate or verb phrase (chapter 8) to the various nuclear nominal phrases (chapter 7) as well as to other peripheral clause level fillers (chapter 10). Clauses also occur embedded in the basic noun phrase (7.1). This chapter describes the occurrence of nuclear clause elements in the basic clause types and chapter 10 the peripheral elements whereas chapter 11 describes variations—both permutations and transformations—of the nuclear and peripheral elements of these basic clause types. (Nuclear elements are the more independent part of the construction whereas the peripheral elements are the dependent part.)

There are eight major clause types as determined by the number, order, and/or type of nuclear nominal phrases. Only the subject noun phrase is (optionally) common to all types (except the existive clause), though its semantic significance may be different (cf. 9.1-6 versus 9.7).

Six basic clause types are interrelated by verb phrase

occurrence potential. ("Potential" implies an element is
absent only by ellipsis (12.9) and is otherwise considered
essential for grammatical completeness whereas "optional"
indicates an element may be absent and is not essential for
grammatical completeness.) The verb phrase known by the
same name as these six clause types occurs in that clause
type and of any lower--but not higher--clause type. Figure
9.1 shows these interclause relationships; "higher" and
"lower" clause types refer to relative position of clause
types in this figure. The quotative clause in the "highest"

Q VP: Q CL

Q VP

C VP: C CL   B CL   :B VP

Q VP, C VP   B VP   B VP

T VP: T CL   S CL :S VP

Q VP, C VP, B VP, S VP   B VP, S VP

I VP: I CL
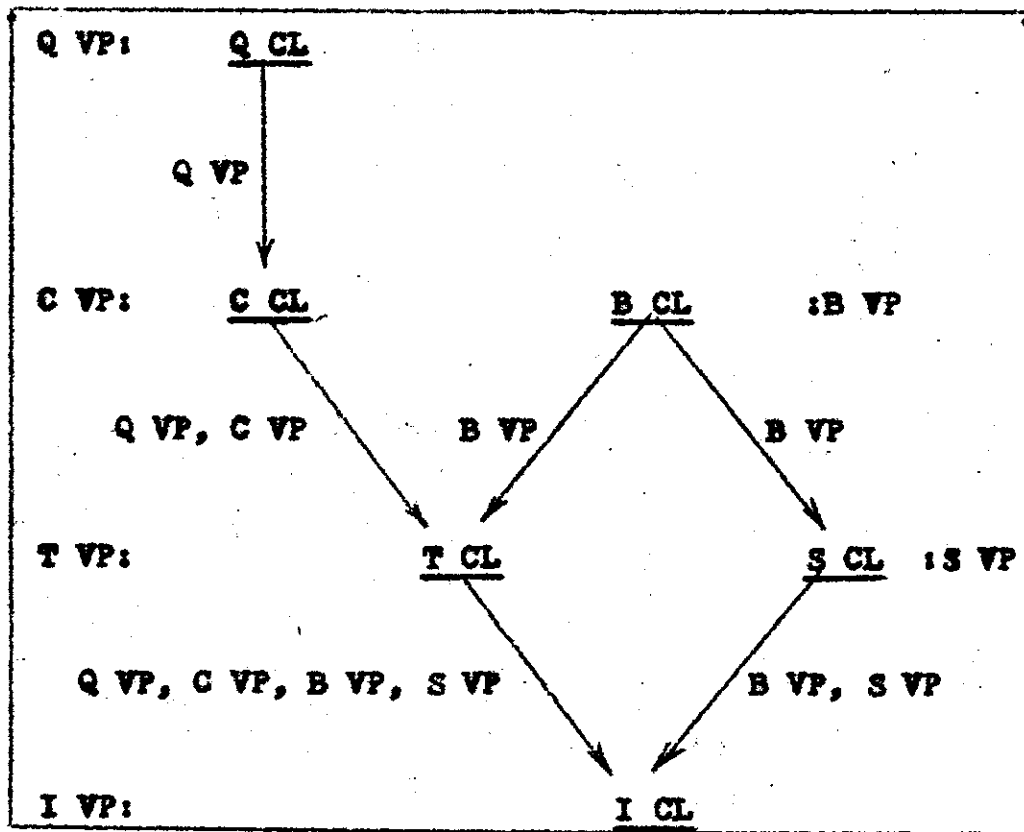
Figure 9.1 Interclause relationships and verb
phrase potential

clause type; the intransitive clause is the "lowest" clause type. Quotative verb phrases (Q VP) occur in the quotative clause (Q CL), as well as in the container clause (C CL), the transitive clause (T CL), and the intransitive clause (I CL). Container verb phrases (C VP) occur in the container clause, the transitive clause, and the intransitive clause. Bitransitive verb phrases (B VP) occur in the bitransitve clause (B CL), as well as in the transitive clause, the semitransitive clause (S CL), and the intransitive clause. Transitive verb phrases (T VP) occur in the transitive clause as well as in the intransitive clause. Semitransitive verb phrases occur in the semitransitive clause as well as in the intransitive clause. But intransitive verb phrases occur only in the intransitive clause. These six clause types are discussed in 9.1-6. The two other basic clause types are the equative clause (Eq CL, 9.7) and the existive clause (Ex CL, 9.8). In 9.9 the frequency of these basic clause types in the sample analyzed text is indicated.

Some of the examples used in this chapter are imperative clauses which, though included among the clause transformations of chapter 11, do not differ by order of constituents from the corresponding basic clause.

9.1 Quotative clause

The quotative clause (Q CL) has an optional subject (S) as actor filled by a noun phrase, and, by definition, each of the following in order: a predicate (Pred) filled by a quotative verb phrase (thus, potentially, a quotative verb), and an object (O) as (direct) quotation filled by any free syntactic unit from a discourse down to a single word. There is usually a juncture or brief pause preceding the object quotation, and the quotation has an intonation independent of that of the main clause; this juncture and intonation distinguish the quotative clause from other clause types in the cases where the quotation may otherwise be an indirect rather than a direct quotation. The quotative clause thus has the following form.

Q CL: (S:NP-) Pred:Q VP -O:Quote

(Some quotative verbs are listed in 8.1.)

        Kia khén, "Kóbó thé?" 'The ghost said, "Who

        commanded?"' (Q CL(I CL w Q Vb))

        Me rótám me kreó, "A-Pia." 'Then that fellow

        called, "A-Pia."' (Temp, Q CL(Voc))

About 10% of all quotative clauses in the analyzed text state the addressee; such clauses are here included among the benefactive clauses (see 11.2).

9.2 Container clause

The container clause (C CL)--so named because it in-
cludes an embedded or "contained" clause (Thomas 1971.72)--
has an optional subject as actor filled by a noun phrase, and,
by definition, each of the following in order: a predicate
filled by a quotative verb phrase or a container verb phrase
(thus, at least potentially, a quotative or container verb),
and an object as statement filled by a clause. The contain-
ed clause may be of any clause type, including another
container clause. With a quotative verb in the container
clause the subject of the contained clause is not present if
it has the same referent as that of the container clause,
but is present if it doesn't have the same referent; this is
an indirect quotation. With a container verb in the con-
tainer clause the contained clause usually has an explicit
subject; a conjoining of two container main verbs would be
verbal concatenation (8.2). There is no juncture preceding
the contained clause. The container clause thus has the
following form:

C CL: (S:NP-) Pred:Q VP/C VP -O:CL

Examples are cited below with each type of permitted verb
phrase. (Some container verbs are listed with following
clauses in 8.1.)

Q VP: Kh khèn òh tu va á. 'You say (you) don't want

        me.' (C CL w Q Vb(T CL))

        Á tang vai tói klá hiáng ka chói. 'I hear

        (that) they say a tiger has killed a deer.'

        (C CL w Q Vb(C CL w Q Vb(T CL)))

        Á tang ái vai tói va cheng. 'I hear there are

        those (who) say (they) want gongs.' (C CL

        w Q Vb (Ex CL:(Co:(C CL w Q Vb(T CL)))))

C VP: Á pro eh lém. 'I'll make you good.' (C CL(Eql

        CL))

        Tang hiáng ám prei ka hme. 'Tang already gave

        (or permitted) the two to eat rice.' (C CL

        (T CL))

        Ga 'nai mau kia ka móngè. 'He knows those

        ghosts eat people.' (C CL(T CL))

9.3 Bitransitive clause

The bitransitive clause (B CL) has an optional subject
as actor filled by a noun phrase and, by definition, each of
the following in order: a predicate filled by a bitransitive
verb phrase (thus, potentially, a bitransitive verb), an
object as undergoer filled by a noun phrase (i.e. any of
the phrases described in chapter 7 except the prepositional
phrase), and an indirect object as locative filled by a
prepositional phrase. The bitransitive clause thus has the
following form:

B CL: (S:NP-) Pred:B VP -O:NP -IO:PrepP

(Some bitransitive verb phrases with following object and
indirect object are listed in 8.1.)

B VP: Pin chôu bau tung hngei. 'We put the rice in the

          house.' (B CL)

          Gá hvang gá tung trap. 'He threw him in the mud.'

9.4 Semitransitive clause

     The semitransitive clause (S CL) has an optional subject
as actor filled by a noun phrase and, by definition, each of
the following in order: a predicate filled by a bitransitive
verb phrase or semitransitive verb phrase (thus, potentially,
a bitransitive verb or a semitransitive verb), and an indi-
rect object as locative filled by a prepositional phrase in
the case of bitransitive verb phrases or by any noun phrase
in the case of semitransitive verb phrases. The semitransi-
tive clause thus has the following form (asterisks identify
cooccurrence restrictions):

S CL: (S:NP-) Pred:B VP*/S VP** -IO:*PrepP/**NP

(Some semitransitive verb phrases with following indirect
object prepositional phrase are listed in 8.1.)

B VP: Oá chòu tung hngei. 'He put (it) in the house.'

           (S CL w B Vb)

           Lôi a 'ngei. 'Leave (it) up high.' (Imp S CL w B

           Vb)

S VP: 'Ma kleh tung rótòh. 'Some fell in bamboo.' (S

           CL)

           Kódra kótra pópêng tónei. 'The in-laws stepped

           above the earth.'

           Á chu kong leò. 'I'm going down to Laos.'

           Vai to hngei kò. 'They climb up to the house.'

9.5 Transitive clause

The transitive clause (T CL) has an optional subject as actor filled by a noun phrase and, by definition, each of the following in order: a predicate followed by a quotative verb phrase, a container verb phrase, a bitransitive verb phrase, or a transitive verb phrase (thus, potentially, a quotative, container, bitransitive, or transitive verb), and an object as undergoer filled by a noun phrase. The transitive clause thus has the following form:

T CL: (S:NP-) Pred:Q VP/C VP/B VP/T VP -O:NP

(Some transitive verb phrases with following noun phrase are listed in 8.1.)

Q VP: Á va tôi tódróang. 'I want to tell something.'

       (T CL w Q Vb)

       'Ma khên ia. 'Some say ia.'

C VP: Ga pro kómua. 'He made a scraper.' (T CL w C Vb)

       Xeang véang ga me. 'The spirit helped him.'

       Va hlo ro. '(You) want to see a cow.'

B VP: Kh hvang pókeang ki me. 'You throw that powder.'

       (T CL w B Vb)

T VP: Vai kra pei chiak. 'The old people work the fields.'

       (T CL)

      $_K$oa me kuka ting. 'The turtle bit the tail.'

       Ga tó'dôu moi póleang honéng. 'He broke one

       tooth.'

9.6 Intransitive clause

The intransitive clause (I CL) has an optional subject as
actor followed by a noun phrase and, by definition, only a
following predicate filled by a quotative verb phrase, a
container verb phrase, a bitransitive verb phrase, a semi-
transitive verb phrase, a transitive verb phrase, or an
intransitive verb phrase (thus, potentially, a quotative,
container, bitransitive, semitransitive, transitive, or in-
transitive verb). The intransitive clause thus has the fol-
lowing form:

I CL: (S:NP-) Pred:Q VP/C VP/B VP/S VP/T VP/I VP

(Some intransitive verb phrases are listed in 8.1.)

Q VP: Khẻn ti me. '(He) said (it) like that.' (I CL w Q Vb, ManP)

Tak tỏi tai. 'Go up there and tell (it).' (Imp I CL w Q Vb, LocP)

C VP: Me prẻi u hlo ti me neỏ. 'The two same (it) like that again.' (I CL w C Vb, ManP, fPt)

A tu va ỏh. 'I don't want (it).' (I CL w C Vb, fPt)

B VP: Lỏi. 'Quit (it).' (Imp I CL w B Vb)

S VP: Me prẻi u mot. 'Then the two went in.' (Temp, I CL w S Vb)

Kuan gá me kỏtau kỏtau. 'His child ran and ran.' (I CL w S Vb)

T VP: Vai chỏi neỏ. 'They plant more.' (I CL w T Vb, fPt)

Oh ta loi ỏh. '(I) don't believe (it).'

Gẻ ỏh ta ái. 'He doesn't have any.' (I CL w T Vb)

I VP: A tỏpui. 'I talk.' (I CL)

Ga hie. 'He is scratched up.'

Nóngẻ koi. 'A person sleeps.'

Kia kỏtong. 'The ghost stumbled.'

Chart 9.1 summarizes the above six basic clause types and indicates the occurrence in them of the various verb phrases. Figure 9.1 above is another means of indicating the occurrence of the verb phrase subtypes in the various

clause types.

CL type	Nuclear slots			
Q	(S:NP-) Pred:Q VP		-O:Quote	
C	(S:NP-) Pred:Q VP/C VP		-O:CL	
B	(S:NP-) Pred:	B VP	-O:NP -IO:PrepP	
S	(S:NP-) Pred:	*B VP/**S VP	-IO:PrepP*/NP**	
T	(S:NP-) Pred:Q VP/C VP/B VP/	T VP -O:NP		
I	(S:NP-) Pred:Q VP/C VP/B VP/S VP/T VP/I VP			

Chart 9.1 Occurrence of verb phrase types and nuclear ele-
ments in the various basic clause types
(asterisks indicate cooccurrence restrictions)

9.7 Equative clauses

Equative clauses (Eq CL) state in the complement (Co) a
character of the (sometimes potential) subject. There are
four types of equative clause differing by (1) the occurrence
requirement of the subject, (2) the specific equative verb
phrase, (3) the complement filler possibilities, and (4) im-
perative transformation possibilities (11.2). Each of the
four types of equative clauses is named for the equative verb
occurring in it.

Zero verb equative clause. The zero verb equative clause
(Eq1 CL) has an obligatory (thus unique among all clause
types) subject as item filled by a noun phrase, and, by defi-

nition, a following predicate filled by a verb phrase with
the "zero" (∅) copula (Eql VP) and a following complement
as character of subject filled by a noun phrase or verbal
adjective. The zero verb equative clause thus has the fol-
lowing form:

Eql CL: S:NP - Pred:Eql VP - Co:NP/vAdj

The zero verb equative clause may not be transformed to an
imperative. (Some verbal adjectives are listed in 7.1 as
they function as verbal descriptives in the noun phrase.)

Co:NP: Pŏng Hlung kŏ kŏnou gá. 'This Pong Hlung is
             her husband.' (Eql CL)
          Mŏi ngé A-Pia. 'One person was A-Pia.'
          Ga truam tŏmei. 'It was an earth hole.'
          Inai pa A-Pia me Pŏ-ong. 'A-Pia's father's name
             is Po-ong.'
          Ga páng ti mŏi hríng ngé. 'He wasn't one
             hundred people.'

Co:vAdj: Beu tuam. 'The rice was ripe.'
          Koa páng ai tei. 'The turtle was definitely
             strong.'
          Ga hiang tuam. 'He was smart.'
          Pŏlŏ gá me ro. 'That village of his was happy.'

x̂ê 'be' equative clause. The x̂ê 'be' equative clause (Eq2
CL) has an optional subject as item filled by a noun phrase
and, by definition, a predicate filled by a verb phrase
with the x̂ê equative verb (Eq2 VP) and an optional comple-
ment as character of subject filled by a noun phrase, verbal
adjective, adverbial phrase (AdvP; 10.3), or clause. Most
(95%) of the x̂ê 'be' equative clauses contain a negative
or interrogative in the verb phrase. This clause type may
not be transformed to an imperative. The x̂ê 'be' equative
clause thus has the following form:

Eq2 CL: (S:NP-) Pred:Eq2 VP (-Co:NP/vAdj/AdvP/CL)

Co:NP: Gá ôh ta x̂ê móngê. 'He's not a person.' (Eq2
               CL)

Co:vAdj: X̂ê me a hôm x̂ê kan? 'Is that thing big?'

Co:AdvP: Ôh ti x̂ê ti kó. '(It's) not like this.'

           Ôh ta x̂ê trói chó pin. '(It's) not like our
               dogs.'

Co:CL: Gá x̂ê hneng tea ôh. 'He's not (one who) carried
               water.'

Minimal: Hôm x̂ê? 'Is (that) so?'

           Ôh ta x̂ê. '(It) is not (like that).'

           X̂ê ôh. '(It) is not (like that).'

chiang 'become' equative clause. The chiang 'become' equative
clause (Eq3 CL) has an optional subject as item filled by a
noun phrase and, by definition, a predicate filled by a verb
phrase with the chiang equative verb (Eq3 VP) and an option-
al complement as character of subject filled by a noun
phrase or verbal adjective. The chiang 'become' equative
clause may be transformed to an imperative (11.2). This
clause thus has the following form. (Cf. pVb chiang 'to be
able'.)

Eq3 CL: (S:NP-) Pred:Eq3 VP (-Co:NP/vAdj)

Co:NP: Kóxêt hiáng chiang mónge. 'The mushroom had
                become a person.' (Eq3 CL)
           Pókseng chiang kóla. 'Powder became bamboo.'
Co:vAdj: Ga hiáng chiang kro. 'He became rich.'
           Ki me ga chiang pleng ta. 'Like that he became
                smarter.' (AdvEmp Eq3 CL, CompP)
Minimal: Oh ta chiang. '(It) didn't become (that).' (Eq3
                CL)
           Chiang. '(It) became (that).'

ói 'be' equative clause. The ói 'be' equative clause
(Eq4 CL) has an optional subject as item filled by a noun
phrase and, by definition, a predicate filled by a verb
phrase with the ói equative verb (Eq4 VP) and an obligatory

complement as character of subject filled by a verbal ad-
jective. Thus this clause has uniquely only one filler for
the complement. It may be transformed to an imperative
(11.2). (Cf. I Vb ói 'to live'.) The ói 'be' equative
clause thus has the following form:

Eq4 CL: (S:NP-) Pred:Eq4 VP - Co:vAdj

            Óa ta ói reh. 'He wasn't alive.' (Eq4 CL)

            Rótàm me ói 'nai. 'That fellow was down low.'

The four equative clauses are compared in Chart 9.2.

Clause type	Nuclear elements			Eq. verb
Eq1 CL	S:NP -	Pred:Eq1 VP	-Co:NP/vAdj	∅
Eq2 CL	(S:NP-)	Pred:Eq2 VP	(-Co:NP/vAdj/AdvP/CL)	xê
Eq3 CL	(S:NP-)	Pred:Eq3 VP	(-Co:NP/vAdj)	chiang
Eq4 CL	(S:NP-)	Pred:Eq4 VP	-Co: vAdj	ói

Chart 9.2 Equative clauses

9.8 Existive clause

The existive clause (Ex CL) affirms or denies the exis-
tence of something. There is only one verb which occurs in
the existive clause: ai 'there is/are'. The existive clause
has, by definition, a predicate filled by a verb phrase with
the existive verb ai (Ex VP) and an optional complement as

item filled by a noun phrase or clause. The existive clause
thus has the following form:

Ex CL: Pred:Ex VP   (-Co:NP/CL)

Co:NP: Xuan ái kónóu. 'There is also a husband.' (Ex

           CL)

           Ái tróang lám a kó. 'There is a (going) path

           here.' (Ex CL, LocP)

           Ôh ta ái tódroang xôi ôh. 'There is not

           sin.' (Ex CL, fPt)

Co:CL: Ái kóbó 'blei gá ôh. 'There was no one who

           could beat him.' (Ex CL(T CL), fPt)

           Sap nah ôh ta ái kóbó khén ti me. 'For a

           long time there hasn't been anyone who spoke

           like that.' (TempP, Ex CL(I CL w Q Vb), ManP)

           Ne ái préi tóhôu dei pó. 'Then there were

           those two who cursed each other.' (Temp, Ex

           CL(Recip I CL w <u>tó</u>-T Vb))

Minimal: Ái. 'There is.' (Ex CL)

           Ôh ta ái. 'There isn't.'

           Ái ôh. 'There isn't.'

9.9 Frequency of basic clause types

        Chart 9.3 indicates the frequency of the above basic
clause types in the sample analyzed text. The most common

-197-

CL types:	Verb phrase types:						Total
	Q VP	C VP	B VP	S VP	T VP	I VP	
Q CL	20						20
C CL	23	28					51
B CL			6				6
S CL			2	38			40
T CL	6	55	5		115		181
I CL	10	20	0	14	54	72	170
Total	59	103	13	52	169	72	468
Eq CL							93
Ex CL							20
Total							581

Chart 9.3 Frequency of verb phrase types occurring in basic clause types in sample text (holes in chart indicate clause types in which the verb phrase type does not occur for structural reason; a "0" indicates lack of an example in the sample text

combination of clause type and verb phrase type is the transitive clause with transitive verb phrase (20%). The most common cluase types are the transitive clause (31%) and intransitive clause (29%). The most common verb phrase type is the transitive verb phrase (29%).

CHAPTER 10   PERIPHERAL CLAUSE ELEMENTS

10.0   Introduction

The nuclear syntactic elements of clauses were dis-
cussed in chapter 9. Clauses also have optional non-nuclear
or peripheral elements which add detail to the clause and
are discussed in this chapter. The peripheral elements gen-
erally occur independent of clause type but are integrally
structured with the clause and include both prenuclear (10.1)
and postnuclear (10.2-4) elements. The only prenuclear
peripheral element is the temporal phrase (TempP). The
postnuclear peripheral elements include the locative phrase
(LocP), the adverbial phrase (AdvP), and final particles (fPt).
A clause may thus have the following form.

CL: (TempP-) Nuclear elements (-LocP) (-AdvP) (-fPt)

The order of these peripheral elements within a clause is not
rigid; though the above seems to be the norm, permutations do
occur. Each of these peripheral slots may be duplicated one
or more times within a clause. Note also that chapter 11
discusses variations of basic clause types entailing semantic-
motivated reordering of some of the peripheral elements dis-

cussed in this chapter. The various peripheral elements may, structurally, cooccur; but practically, none, one, or two are more common within a single clause.

10.1 Temporal phrase

The optional temporal phrase (TempP) is the only prenuclear peripheral clause element apart from emphatic phrases in some clause variations. The temporal phrase establishes the temporal context of the clause predication. The temporal phrase may be a temporal (word) (Temp), a temporal demonstrative (TempDem), a temporal noun phrase (TempNP), or a subordinated temporal expression (SubTempExp). Though the temporal phrase normally occurs initially and is prenuclear, the temporal phrase, like other peripheral elements without rigid word order requirements, sometimes occurs postnuclear. Approximately one in four clauses in text have an initial temporal phrase.

Temporals. The temporals (Temp) which may constitute a temporal phrase form a small class of words and phrases and include the following.

a hódrói	'at first'
la lai	'when?'
nô kó	'now'; occurs rather than the TempDem me
pó-ia	'in a little while'
ton	'for a long while'

The final particle neó 'more, again' (10.4) may be used

after a temporal as an intensifier or a marker of subsequent
action.

       nô ko neó   'and now'

       pó-ia neó   'and then again, in a little while'

Temporal demonstrative. There are four temporal demonstra-
tives (TempDem) which partially overlap the general demonstra-
tives (7.1) and final particles (10.4). Temporal demonstra-
tives also occur in the basic noun phrase (7.1).

      ah, kô ah 'in the future, following, next'; cf.

          fPt ah (10.4); ah in its combined uses is the

          seventeenth most frequent word in the 27,437-

          word text, occurring 285 times

      kó   'this, now'; cf. Temp nô kó

      me   'that, then'; sometimes introduces resul-

          tant (independent) clause of conditional sen-

          tences (13.1); cf. Dem me (7.1), fPt me (10.4),

          CondConj me (13.3), and ResConj me (13.5)

      nah   'in the past, former, previous'; cf. fPt

          nah (10.4)

Temporal noun phrase. A temporal noun phrase (TempNP) used
as a temporal phrase may be any basic (but time reference)
noun phrase (7.1) usually requiring a following temporal
demonstrative (TempDem). Time reference noun phrases include
the following.

hàl 'day'

    hàl kó 'today'

    hàl nah 'yesterday'

    hàl hmôl ah 'day after tomorrow'

    hàl hmôl nah 'day before yesterday'

    (hàl) so ah 'tomorrow'

    hàl tíng, hàl pótê 'Sunday'

    hàl môl 'day one: Monday', similarly the

        days of the week through Saturday

    hàl kóxǒ môl 'day number one: first day',

        similarly the dates of a month

    hàl dé 'noontime'

póla mǎng tíng 'week'

    póla mǎng tíng kó 'this week'

khé 'month'

    khé nah 'last month'

    khé môl 'month one: January', similarly

        the months of the year

kóxel 'in the afternoon'

    xel kó 'this afternoon'

la 'time'

    la lal 'when?'

    la me nah 'that former time'

rôh 'period'

    rôh nah 'ancient times'

    rôh kó 'these times'

róno   'season'

  róno kong mei   'rainy season'

so ah hmoi   'eventually, at some time in the

  future'

Subordinated temporal expression. A subordinated temporal
expression (SubTempExp) consists of a temporal subordinator
(TempSub) with a following temporal demonstrative, (time ref-
erence) basic noun phrase or clause. With a following clause
the temporal subordinator may be elided. **Temporal subordina-
tors** (TempSub) form a small class which includes the following.

  dé   'during, while'; cf. vPt dé 'current-

    ly, (progressive action)'

  dreng   'while'; cf. Prep dreng 'with' (7.5)

  klei   'after'; cf. pVb klei 'to finish'

  póla   'while'

  sap   'from'; cf. Prep sap 'from'

  tròh   'approaching, when, towards'; cf. S Vb

    tròh 'to approach'

Temporal subordinators with temporal demonstratives:

  dé me   'during that (time)'

  klei me   'after that'; functions as paragraph

    marker; eleventh most frequent two-word se-

    quence in the 27,437-word text occurring 67

    times

  sap nah   'from former times'

Temporal subordinator with basic noun phrase:

de khe ko   'during this month'

klei hónam me   'after that year'

troh hai ki me   'towards that day, near that day'

Temporal subordinator with clause:

de ga oi tung kuat   'while he stayed in the

communal house'

dreng pin km ah   'while we eat (in the future)'

póla nôu pei bau   'while mother pounds rice'

troh bau tumm neó   'when the rice ripened some

more'

Elided temporal subordinator with clause:

Hiáng ai pló prei ta plo tung chea.   '(After)

having plo (fruit) they put the plo in the

basket.' (SubTempExp:(T CL), B CL)

Kong hiang xei Xou lam ra krei.   'The afternoon

having come, Xou went to trap squirrel.'

(SubTempExp:(I CL), T CL)

Sometimes the temporal phrase functions semantically in
a logical sense, as follows.

me   'therefore, thus'; cf. ResConj me (13.5)

klei me neó   'furthermore'; cf. fPt neó

'more, again' (10.4)

The temporal phrase may thus be summarized:

TempP: Temp/TempDem/TempNP/SubTempExp

TempNP: bNP - TempDem

SubTempExp: TempSub - TempDem/NP/CL

10.2 Locative phrase

The optional locative phrase (LocP) is a postnuclear per-
ipheral clause element. In the locative emphasis clause (11.5)
the locative phrase occurs clause initial. The bitransitive
and semitransitive clauses (9.3-4) have an indirect object as
locative filled by a prepositional phrase. The semitransi-
tive clause locative position may, in addition, be filled by
any noun phrase. Whereas the bitransitive and semitransitive
clauses include locative phrases by definition, all other
clause types may occur with a peripheral locative phrase to
establish the location, goal, recipient or means of the
clause action. Locative phrases are locatives (Loc, 7.1)
or prepositional phrases (PrepP, 7.5). Less than 5% of
clauses in text have a peripheral locative phrase.

The locative phrase may thus be summarized:

LocP: Loc/PrepP

        Á u tro ilá tung ngia. 'I continually caught
             thorns in the face.' (T CL, LocP:(PrepP))
        Gá ái tódroáng xói 'báng A-Piá me. 'He did
             a wrong thing with that A-Piá.'

Hóba ke pópeng kóxah kó.   '(He) carries things

upon this shoulder.'

Ga hnai ngan tung vó me.   'He looked (for it) in

that jar.' (I CL w C Vb, LocP:(PrepP))

Prei ói a hngei hou.   'You two stay in the

house, okay?' (Imp I CL, LocP:(PrepP), fPt)

Ai póle vai hong xuap.   'There is a village of

theirs in the area down there.' (Ex CL, LocP:

(PrepP))

Ga de kótau tai.   'He's running up there.' (I CL

w S Vb, LocP:(Loc))

Vai va koi cham.   'They want to sleep down there.'

(I CL, LocP:(Loc))

10.3 Adverbial phrase

The optional adverbial phrase (AdvP) is a postnuclear
peripheral clause element. In the adverbial emphasis clause
(11.1) the adverbial phrase occurs clause initial. The ad-
verbial phrase modifies the predication of the verb phrase
and subsumes the following semantic types: manner phrase
(ManP), similitive phrase (SimP), comparative phrase (CompP),
descriptive phrase (DesP), quantitative phrase (QuanP), pur-
posive phrase (PurP), and volitional phrase (VolP). Between
10-15% of all clauses in text contain an adverbial phrase.

Adverbial phrases may thus be summarized:

AdvP: ManP/SimP/CompP/DesP/QuanP/PurP/VolP

Manner phrase. A manner phrase (ManP) describes the manner
in which the predication is sustained. A manner phrase con-
sists of one or two manner particles (ManPt) followed by a
demonstrative or nominal interrogative. There are three man-
ner particles: ti, to, ki (cf. RelPt ki (7.1)). The manner
phrases include the following.

   ti me   'like that'; most frequent adverbial

              phrase and third most frequent two-word se-

              quence occurring about 170 times in 27,437

              words of text

   to me, to ti me, to to me, ki me 'like that'

   ti ko, ti to ko 'like this'

   ti lai   'how, why'; sixth most frequent two-word

              sequence in text occurring 128 times

   ki klai 'what, for what'

The particle ti is the sixth most frequent word in the
27,437-word text, occurring 521 times. About 70% of these
occurrences are the ManPt ti, about 30% the negative vPt ti
(8.4).

The manner phrase may thus be summarized:

ManP: ManPt (-ManPt) - Dem/NomInter

Kia khên gá ti me. 'That ghost spoke to him

    like that.' (Ben I CL w Q Vb, AdvP:(ManP:(ManPt,

    Dem)))

A ti 'nai róngei ti lai. 'I don't know what to

    sing.' (I CL, ManP:(ManPt, NomInter))

Kh kótui loang ti lai. 'Why did you trip on the

    stick?' (T CL, ManP)

Hiang tai to me. '(That) is all--like that.'

    (Eql CL, ManP)

Similitive phrase. A similitive phrase (SimP) relates the
predication to a similar event. A similitive phrase consists
of the similitive expression (Sim) môi tiah 'the same, the
same as' optionally followed by a noun phrase or clause, or of
a similitive particle (SimPt) trói 'like' obligatorily fol-
lowed by a noun phrase or clause. The relator particle kô
may occur before the noun phrase. The similitive phrase may
thus be summarized:

SimP: Sim/SimPt- (-kô-) -(NP/CL)

Similitive expression alone:

    U hlo loang môi tiah. '(He) still saw the trees

    the same (as before).' (T CL w C Vb, SimP:

    (Sim))

With noun phrases:

Eh va hla môi tiah ngin. 'You will die the same
    as us.' (I CL, SimP:(Sim, NP))

Gá ái tei troi tómean ê ôh. 'He wasn't
    strong like other things.' (Eql CL, SimP:
    (SimPt, NP), rPt)

Eh pro trei gá. 'You do (it) like him.' (I CL
    w C Vb, SimP:(SimPt, NP))

Gá ko loang troi nah. 'He chopped down trees
    like before.' (T CL, SimP:(SimPt, NP))

Ôh ta xê troi cho pin. '(It) is not like our
    dogs.' (Eq2 CL, SimP:(SimPt, NP))

A hôm ái kê ki ê neó reh troi kô hae?
    'Is there anything else more nourishing like
    rice?' (Ex CL:(Co:(Eql CL, SimP:(SimPt kô N)))

With clauses:

Xak xoe gá tópui môi tiah hen mónge tópui.
    'His chest hairs talked the same as many
    people talking.' (I CL, SimP:(Sim, I CL))

Cho troi gá tói. '(It) is correct just like he
    says.' (Eql CL, SimP:(SimPt, I CL w Q Vb))

Comparative phrase. A comparative phrase (CompP) compares the
predication or the predication as modified by a following
descriptive or quantitative phrase (see below) to other events.
All comparative phrases have initially the comparative par-

ticle (CompPt) ta 'more'. If the compared event is, by ellip-
sis, not included in the clause then ta occurs alone.

Gá 'nai ta. 'He knows more.' (I CL w C Vb, CompP:
(CompPt))

Gá chia lém ta. 'She became increasingly more
beautiful.' (Eql CL, CompP:(CompPt))

Else the comparative particle ta is followed by the RelPt ko
and a noun phrase.

Gá o ta ko vai koa me. 'He was more marvelous
than those (other) turtles.' (Eql CL, CompP:
(CompPt, RelPt, PRefP))

Mónge ki 'mai lui ta ko pu tung pólé me. 'The
evil person surpassed all those in that
village.' (I CL, CompP:(CompPt, RelPt, bNP))

The comparative phrase may thus be summarized:

CompP: CompPt   -(RelPt   NP)

There is no superlative particle; the superlative sense
is given by the quantitative phrase quantifier o 'very much'
(see below) or by the comparative phrase ta ko vai 'more than
they'.

Descriptive phrase. A descriptive phrase (DesP) adds descrip-
tive color to the predication. Unlike most other adverbial
phrases there is no particle used to introduce the descriptive

phrase. A descriptive phrase consists of a verbal adjective
(vAdj, 7.1) optionally preceded by either a verbal particle
(vPt, 8.4) and/or a preverb (pVb, 8.3). Not all verbal par-
ticles and preverbs, however, may occur in the descriptive
phrase.

Nónge ki me ka lém. 'That person bit (it) well.'

(I CL w T Vb, DesP:(vAdj))

Eh oi klai a ko. 'What are you doing here?'

(I CL, DesP:(vAdj), LocP)

Eh lam hódroi, a lam kó'nai. 'You go first,

I'll go last.' ((I CL w S Vb, DesP:(vAdj))x2)

Ga chai hiáng hónge. 'He returned already a

long way.' (I CL w S Vb, DesP:(vPt, vAdj))

Ga ka dei kuan oh ta be. 'He's eating his child

by himself (but it) is not enough.' (Refl T CL,

DesP:(vPt, vAdj))

Chuo rah plo a hai tai? 'You (father-in-law)

separate the plo fruit (are you) yet finished?'

(T CL, DesP:(vPt, vAdj))

Ga ou tea me hiáng va tai. 'He's drinking that

water (which is) already about gone.' (T CL,

DesP:(vPt, pVb, vAdj))

Vai ka rokai oh ta kai tai. 'They eat boar (but)

are unable to finish it.'

The descriptive phrase may thus be summarized:

DesP: (vPt)   (pVb)   vAdj

The descriptive phrase may occur among the nuclear ele-
ments if there is an object or indirect object, though a
verbal particle or preverb may not occur in the descriptive
phrase in this position.

> Préi tróh ache rópam. 'The two came near the
>
>   field house.' (S CL, DesP:(vAdj))
>
> Vai kódrai pe lem tum ke me. 'The women cook
>
>   well all those things.' (T CL, DesP:(vAdj))
>
> Kla hiáng ka tai choi me. 'The tiger ate all
>
>   that deer.'

Quantitative phrase. A quantitative phrase (QuanP) indicates
the extent of the predication. There are three types of quan-
titative phrase: A quantifier phrase (QuanfP), a count noun
phrase (cNP, 7.2), and a quantitative particle phrase (QuanPtP).
(1) The quantifier phrase (QuanfP) indicates the degree of at-
tainment of the predication and consists solely of a quanti-
fier word (Quanf). The quantifier may occur between a preverb
and main verb and thus modify the preverb specifically. There
are two quantifiers:

> ia   'a little'
>
> ó   'very much'

Gá kótau réng ia. 'He runs a little fast.' (I
CL w S Vb, DesP, QuanP:(Quanf))

Á róhêng ka ká ó. 'I crave to eat fish very
much.' (T CL, QuanP:(Quanf))

Ñódei ia. '(Sing) a little stronger.' (I CL w
mó-vAdj, QuanP:(Quanf))

Klei kong mei ah vai kódrei va ó lam drah tung
tea. 'Later after it rains the women want
very much to go look (for fish) in the water.'
(TempP, I CL w T Vb, QuanP:(Quanf), LocP)

Rôh vai kra mah vai va ó xak to lai. 'In old
times they wanted very much the hair of the
lai monkey.' (TempP, T CL, QuanP:(Quanf))

(2) The count noun phrase (cNP) may occur as a quantitative
phrase.

Pin rôe mam môi xôh pea hríng. 'We buy meat
one time (for) two hundred (piastres).' (T CL,
QuanP:((cNP), QuanP:(cNP))

(3) A quantitative particle phrase consists of the quantitative
particle (QuanPt) i 'until' followed by either (1) a verbal
adjective (7.1) or a quantitative word (cf. PurPt i 'in order
to').

Quantitative words (Quan) form a small class which in-
cludes the following and thus overlaps partially the general
plural marker, quantifier, and verbal adjective word classes.

hen   'many, a lot'

ia   'a little'

tai   'entirely'

Pin mén mónat hngei i kré. 'We pat the house wall
    until (it's) firm.' (T CL, QuanP:(QuanPt, vAdj))
Prei pe kódrai i chen. 'The two cooked the woman
    until (she was) well cooked.'
A tói i ia. 'I told a little.' (I CL w Q Vb,
    QuanP:(QuanPt, Quan))
Prei ka ka i tai. 'The two ate the fish up en-
    tirely.' (T CL, QuanP:(QuanPt, Quan))
A va ja pin xo i hen. 'I want to take us to get
    a lot.' (C CL(I CL w C Vb), QuanP:(QuanPt,
    Quan))
The quantitative phrase may thus be summarized:

QuanP: QuanfP/cNP/QuanPtP

QuanfP: Quanf

QuanPtP: QuanPt - vAdj/Quan

Purposive phrase. A purposive phrase (PurP) indicates the
purpose for the predication. A purposive phrase consists of
a purposive particle (PurPt) followed by a subjectless (em-
bedded) clause--though usually only the main verb of the
clause. There are three purposive particles (PurPt):

i   'in order to'; cf. QuanPt i 'until'

u   'in order to'; cf. pVb u 'still, continue

to' (8.3), N u 'place'

va   'in order to'; cf. pVb va 'to be about

to' (8.3), C Vb va 'to want' (8.1)

The purposive phrase may thus be summarized:

PurP: PurPt   -   CL

Ôh ta ai kóohai i ka.   'There aren't vegetables

to eat.' (Ex CL, PurP:(PurPt, I CL w T Vb))

Ga xo hmòu u hvang.   'He got a stone (in order)

to threw.' (T CL w C Vb, PurP:(PurPt, I CL w

B Vb))

Kia ki ae gá khen hneng tea va ka gà.   'That

ghost said (he'd) carry water in order to eat

him.' (C CL w Q Vb(T CL), PurP:(PurPt, T CL))

Xôu prei o ga xo plai tong, plai xôh hã i ta

tung kóohoi chai a hngei va ka.   'Xou and his

younger sibling got tong fruit and xoh fruit

also to put in the basket and return home in

order to eat.' (T CL w C Vb, fPt, PurP:(PurPt,

S CL w B Vb)), (S CL, PurP:(PurPt, I CL w T

Vb))

<u>Volitional</u> <u>phrase</u>. A volitional phrase (VolP) indicates that the predication is done in accordance with the wishes of some party. The volitional phrase consists of the volitional particle (VolPt) <u>hmang</u> <u>to</u> 'according to, according as' followed by a clause usually containing the container verb <u>va</u> 'to want, desire'. Thus:

VolP: VolPt   -   CL

Róngei hmang to chuô va. 'Sing according as you
      (sister-in-law) want.' (I CL, VolP:(VolPt, I
      CL w C Vb))

10.4 Final particles

The non-obligatory final particles (FPt) occur clause final. Final particles serve various semantic functions as noted below. Two or three final particles may cooccur as described below. About one in five clauses have a final particle. The particle <u>kô</u> occurs before many of the final particles without semantic significance. (Cf. RelrPt <u>kô</u> (7.5); <u>kô</u> in its various uses occurs about once for every one hundred words in text.) Final particles form a small class which includes the following.

ah, kô ah '(future marker)'; cf. TempDem <u>ah</u>
      '(future marker)'
Gá tiô pin ah. 'He will follow us.' (T CL,

fPt)

Pin ka môi ró kô ah. 'We will eat one bas-

ketful.'

ai, kô ai 'to have just'; ai occurs once for

every one hundred words in text

Eh a hôm hlo rótán lán tróang kô ai.

'Have you just seen a fellow going on

this path?' (C CL(S CL), fPt)

'di'do 'always, all the time'

Ga kôk 'di'do. 'He is always crazy.' (Eql

CL, fPt)

e '(question marker)'; occurs infrequently

Xuan me e. 'The Vietnamese, huh?' (Frag:(NP),

fPt)

èh -a weak question marker, 'huh?, is that so?',

accompanied by rising intonation; cf.

Exel èh (10.6)

Xau èh? '(You're) afraid, huh?' (I CL w C

Vb, fPt)

hã, kô hã 'also'; may occur non-finally or

among nuclear elements

Á hiang prei hã. 'I'm also tired.' (Eql CL,

fPt)

Ga hiang pôk ko kô hã. 'He is also grey

haired.'

Á ôh ta hèng hã ôu koa. 'I don't crave

either smoking a pipe.' (T CL, fPt)

hǒ -occurs only as hiǎ hǒ (see below)

heh -exclamatory or intensifier, accompanied by

rising intonation; cf. Excl heh

Mónge troi pa kô heh. 'A person like

us two!' (Frag:(NP, SimP, fPt))

Ta khên heh. '(You) don't dare, huh.' (Frag:

(vPt, pVb, fPt))

Gǎ hiáng lěm heh. 'He was really beautiful!'

(Eql CL, fPt)

hiǎ, kô hiǎ, hiǎ hǒ, hiǎ hǎ 'also, et

cetera, and so forth, and the like',

may subsume more than one clause

Ne pin cha ka rókai, chi, kê tung kong,

chói, hiǎ hǎ. 'Then we can eat boar,

barking deer, jungle animals, deer, and

so forth.' (Temp, T CL, fPt)

Pin ta mo, pin tóngie, hiǎ hǒ. 'We're sick,

we have malaria, etc.' ((Eql CL)x2, fPt)

Gǎ krui tung ngia, tung môh, tung ma, tung

tuan gǎ hiǎ. 'He was scratched in the

face, on the nose, in the eyes, on his

ears, etc.' (I CL, (LocP)x4, fPt)

hoh, hôh 'of course!'

Róngei trói kong pin hôh. 'sing like (we do

in) our country, of course!' (Imp I CL,
SimP, fPt)

Ói ti lóang hôh. '(It) lives in a tree,
of course!' (I CL, LocP, fPt)

hôu -mild imperative, 'okay?'; cf. T Vb hou 'to
curse'; appropriate affirmative return
comment is the Resp ou (10.7)

Kh kôm a hngei kó hôu. 'You wait at this
house, okay?' (Imp I CL w C Vb, LocP, fPt)

Ngán hôu. 'Consider this, okay?' (Imp I CL
w C Vb, fPt)

kôh 'of course, certainly'

Nä va läm kôh. 'Of course we want to go!'
(I CL w S Vb, fPt)

hlái 'very'

Gá u róke hlái. 'He's very clever.' (Eql
CL, fPt)

hlói 'immediately, right away'; frequently co-
occurs with pvAdv hnoi 'immediately,
right away' (8.5)

Gá pak pin hlói. 'It stung us right away.'
(T CL, fPt)

Gá hnoi ói xeh tung kong, hnoi chiang
kia hlói. 'He right away went to live
in the jungle and immediately became a
ghost.' (Refl I CL, LocP)(Eq3 CL, fPt)

me, kô me   -very weak semantically, perhaps suggests

alight resignation; cf. Dem me 'that' (7.1)

(with which the final particle may be con-

fused), Temp me 'that, then' (10.1),

ContConj me 'but' (13.3), ResConj me

'thus' (13.5)

Vai tang rótam preang kótau me. 'They heard

Preang run--.' (C CL(I CL w S Vb), fPt)

Hiang klei ba me. '(I) have also already

finished--.' (Frag:(vPt, pVb, fPt, fPt))

me 'certainly, of course'; usually occurs in

brief responses

Cho me. 'That's right, of course.' (Eq 1 CL,

fPt)

Va me. '(I) certainly want to.' (I CL w C

Vb, fPt)

nah, kô nah 'formerly, (past tense marker)'; cf.

TempDem nah 'in the past, formerly' (10.1)

'Bok the a róngei nah. 'The foreigner told

me to sing.' (C CL w Q Vb(I CL), fPt)

Ngin mot ling kô nah. 'We went in the army

back then.' (S CL, fPt)

neo, kô neo 'again, more'; cf. pvAdv neo

'to have just' (8.5)

Prei tóko neo. 'The two fought some more.'

(I CL w tó-T Vb, fPt)

Ok neó, ka neó.   '(He) poured more. (He)

ate more.' ((I CL w T Vb, fPt)x2)

'nang, hi 'nang, pang 'nang, kô 'nang -intensi-

fier

Me pin hla 'nang. 'And we will really be dead.'

(Temp, I CL, fPt)

Gá ton 'nang. 'He (was away) a real long

time.' (Eql CL, fPt)

Eh va ka ká pang 'nang. 'You really want to

eat fish.' (T CL, fPt)

Gá 'ló pah hi 'nang. 'He was certainly a

snake.' (Eql CL, fPt)

'nôi, kô 'nôi 'right away, the next thing,

immediately'; two of three occurrences of

'nôi are in imperative clauses (11.1)

Pro á lém 'nôi. 'Make me beautiful right

away.' (Imp Cl CL(Eql CL), fPt)

Á pé hme 'nôi. 'I'll cook rice next.' (T

CL, fPt)

Eh kôm a kô 'nôi. 'You wait here.' (Imp

I CL w C Vb, LocP, fPt)

Kôm kó 'nôi hôu. 'Wait here, okay?' (Imp

I CL w C Vb, fPt, fPt)

'nheh 'finally, ultimately'

Gá kua dei rópie kó u kótê neó u hla

'nheh. 'He scraped this tongue until it

broke more and (he) finally died.' (Refl T

CL, (PurP, fPt)x2)

ò 'okay?', a curt retort

Pó'lang ò. 'Bye now, okay?'

ôh 'not, (negative intensifier)'; one in two oc-

currences are in clauses with negative

verbal particles ôh ta, ôh pa, pôi ta,

ma ta (8.4)

Me ôh ti 'nai ôh. '(I) do not know.' (Temp,

I CL w C Vb, fPt)

Pôi ta ám má ôh. 'No, don't give (any) to

us.' (Imp C3 CL, fPt)

pĕ -intensifier; sometimes occurs in imperative

clauses, possibly a Bahnarism

Ga lám ko muih pĕ. 'He went to cut (his)

field.' (T CL, fPt)

Chu tôi pĕ. 'Go down and tell (them).'

(Imp I CL w Q Vb, fPt)

pôih 'finally'; frequently a discourse closer,

perhaps a Bahnarism

To me pôih á tôi. 'Like that, that's all,

I tell.' (AdvEmp I CL w Q Vb, fPt)

ra -intensifier, 'certainly'

Mónge troi pin ra. 'A person like us cer-

tainly.' (Frag:(NP, SimP, fPt))

Hlik va ka proi me ra. 'Really want to eat

those two.' (T CL, fPt)

tê, kô tê 'only, simply, plainly'

  Á tópui 'bang chu 'bang cho me te. 'I

    only talk with the pigs and with the

    dogs.' (I CL, (LocP)x2, fPt, fPt)

  Á koi môi mang tê. 'I slept there one

    night only.' (I CL, QuanP:(cNP), fPt)

xe 'as you know'

  Vai xang dei a kong kô xe. 'They slide

    (them) on their arms, as you know.' (Refl

    S CL, fPt)

xo 'only'; when modifying a noun phrase object or

    complement frequently cooccurs with a

    particle (classifier?) to preceding the

    noun phrase

  Ka trong me xo. '(He) only ate that eggplant.'

    (T CL, fPt)

  Ga oh te ôi xo la lai. 'He didn't live

    only ever: i.e., he never stopped work-

    ing.' (I CL, fPt, Temp)

  Tung khe ai to prei xo. 'On the moon there

    is only sand.' (LocEmp Ex CL, fPt)

  Pin xau to kia tung kong xo. 'We're afraid

    only of ghosts in the jungle.' (T CL w

    C Vb, LocP, fPt)

yoh, yôh, kô yoh 'certainly, of course'; a
Bahnarism

Klei me prei me xuan ôh ta cha koi 'bang
hã yôh. 'After that those two also
weren't able to sleep together, of
course.' (TempP, I CL, fPt, fPt)

The above final particles may cooccur in pairs; the fol-
lowing pairs have been observed.

ah hã, kô ah hôu, ah neó, ah tê

hã me, hã ra, hã yôh

heh 'nang

hiã ah, hiã hã, hiã hê, hiã me, hiã neó

me ah, me nah, me pé, me ra, me tê

kô nah yôh

neó hoh, neó hôu, neó me, neó ô, neó pé

'nang heh, 'nang me, 'nang yôh

'nôi hôu, 'nôi tê

ôh me

kô tê hiã, tê hôu, tê me, tê neó, tê kô tê

Three final particles may cooccur, though only two types
of combination have been observed: (1) initial me ai (fourth
most frequent two-word sequence in the 27,437-word text occur-
ring 142 times, though some such me may be Dem me) and (2)
final hôu, as follows.

me ai ra, me ai me, me ai hã
hê hiã hôu, ah neó hôu

CHAPTER 11   VARIATIONS OF CLAUSE TYPES

11.0   Introduction

Chapter 9 described the nuclear elements of the various basic clause types and chapter 10 the peripheral elements. This chapter indicates variations of the basic clauses. Two types of variation occur: permutation (11.1) and transformation (11.2). The permuted clauses are permutations of the clause elements, both nuclear and peripheral, of the basic clauses, whereas the transformed clauses are transformations of any of the basic or permuted clause types.

11.1   Permuted clauses

Permuted clauses involve both postpositional and prepositional permutation of clause elements. The subject may be postposed, whereas the object, complement, locative, and adverbial phrases may be preposed.

In that these permuted clauses are permutations of the basic clauses, a two-dimentional matrix of clause types results in which one paramter is the basic clause type and the other the permuted clause type. Chart 11.1 presents this matrix and certain structural holes; resultant clause types thus are: postposed subject quotative clause, postposed sub-

Permuted clause types:	Basic clause types:							
	Q	C	B	S	T	I	Eq	Ex
Norm (chapter 9)	X	X	X	X	X	X	X	X
Postposed subject	X	x	x	X	X	X	X	NO
Object/complement emp.	x	X	X	NO	X	NO	X	X
Locative emphasis	X	x	x	x	X	x	x	X
Adverbial emphasis	X	x	x	X	X	X	X	x

Chart 11.1   Matrix of permuted clause subtypes ("x" indicates structural possibility; "NO" indicates structural impossibility; and "X" indicates subtype occurs in data)

ject container clause, etc.; object emphasis quotative clause, etc.

Postposed subject clause.   The postposed subject clause (pS CL) makes explicit the subject of the clause, seemingly, in cases where the already elided subject (cf. subject phrase ellipsis, 12.9) is determined by the speaker to require being made explicit.   The postposed subject clause, rather than having the subject before the verb phrase, postposes the subject until after the nuclear clause elements, though its position among peripheral elements is not rigid.   All basic clause types except the xe 'be' equative clause (Eq2 CL) and the existive clause may be permuted to the postposed subject clause.   The resultant clauses are known as the postposed subject intransitive clause (pS I CL), etc.

The postposed subject clause may thus be summarized as follows; permuted word order is indicated in the second line.

pS CL: S - Pred - (O) - (IO) ...
Order: 1   2   (3)   (4)   --→ 2 (3)(4) 1

Ngán eh. 'Look--you.' (pSubj I CL w C Vb)

Tí va klai hã mónge rótoh. 'What does he also want--the bad person?' (pSubj T CL, fPt)

Hiang tai klóng me. 'They're all gone--the bamboo sections.' (pSubj Eql CL)

Object and complement emphasis clauses. The object and complement emphasis clauses (OEmp CL, CoEmp CL) emphasize the object of quotative, container, bitransitive, and transitive clauses or the complement of equative (excluding the xê 'be' Eq2 and ói 'be' Eq4 CLs) or existive clauses. In an object (or complement) emphasis clause the object (or complement) is permuted to the first or pre-subject slot of the nuclear clause. The object (or complement) phrase may also cooccur in its normal position. The resultant clauses are known as the object emphasis transitive clause (ObjEmp T CL), etc.

The object and complement emphasis clauses may thus be summarized:

OEmp CL: (S) - Pred - O - (IO) ...
Order: (1) 2 3 (4) ---> 3 (1) 2 (3) (4)

CoEmp (Eql/Eq3) CL: S - Pred:Eql VP/Eq3 VP - Co ...
Order: 1 2 3 --->

3 2 1 (3)

CoEmp Ex CL: Pred - Co ...
Order: 1 2 ---> 2 1

OEmp CL: Ga pa xeang veang ga me. 'He--the father spirit
helped him.' (OEmp T CL)

Ke me ga ai. 'Those things he has.' (OEmp T CL)

Ko ga me prei loi drea peang a 'ngei. 'Her head
they placed on the shelf up high.' (OEmp B CL)

Kia ki e ko a ta 'nai i hen. 'This other ghost
I don't know much about.' (OEmp T CL with C
Vb, QuanP:(QuanPt, Quan))

CoEmp CL: Rotam Hrai La inai ga. 'Youth Hrai La is his
name.' (CoEmp Eql CL)

Truam ga pa ai. 'His hole wasn't any more.'
(CoEmp Ex CL)

Locative emphasis clause. The locative emphasis clause
(LoeEmp CL) emphasizes the location of the predication,
whether the locative phrase is a nuclear element of a bitran-

sitive or semitransitive clause or a peripheral element of
some other clause. In a locative emphasis clause the loca-
tive phrase is permuted to the clause initial position. A
locative phrase may also cooccur in its normal position. The
resultant clauses are known as the locative emphasis transi-
tive clause (LocEmp T CL), etc.

The locative emphasis clause may thus be summarized:

LocEmp CL: S - Pred - (O) - Loc ...
Order: (1)   2   (3)   4   ---,

                                    4 (1) 2 (3)(4)

A me ta 'blei koa. 'Over there (he) didn't beat
    the turtle.' (LocEmp T CL)
A ko kia ka mónge a ko. 'Here a ghost ate a
    person here.'
Tung hngei ai konai. 'In the house there are
    rats.' (LocEmp Ex CL)

Adverbial emphasis clause. The adverbial emphasis clause
(AdvEmp CL) emphasizes an adverbial aspect of the predicate
of any basic clause type. In an adverbial emphasis clause
the adverbial phrase is usually permuted to the clause ini-
tial position although it may also occur between the subject
and predicate. An adverbial phrase may also cooccur in its
normal position. A final particle may also be prepositioned

following the emphatic adverbial phrase. The resultant
clauses are known as the adverbial emphasis intransitive
clause (AdvEmp I CL), etc.

The adverbial emphasis clause may thus be summarized:

AdvEmp CL: (S) - Pred - (O) - (IO) - AdvP (fPt)

Order: (1)   2   (3)   (4)   5   (6) ⟶

                    5 (6)(1) 2 (3)(4)(5)(6)

             or: 1 5 (6) 2 (3)(4)(5)(6)

Ti lai gá hôm xôk 'bang vai. 'Why, why did he
    fool around with them?' (AdvEmp I CL, LocP)

Ti me véang pam gá u hla. 'Like that (they) to-
    gether pounded her to death.' (AdvEmp T CL,
    PurP)

Rópap gá mot tung trap. 'Like a flash he entered
    into the mud.' (AdvEmp S CL)

Trôi tuan pin tómiat gá hlo ti me. 'Like our
    minds thought, he saw (it) like that.' (AdvEmp:
    (SimP:(SimPt, I CL w Q Vb)), I CL w C Vb, ManP)

To me pôih a tôi me. 'Like that--that's all--I
    speak.' (AdvEmp, fPt, I CL w Q Vb, fPt)

Kódrai gá rôkê pe dróu. 'His wife skillfully
    cooks wine.' (AdvEmp T CL)

11.2 Transformed clauses

Transformed clauses are transformations of basic and permuted clauses and involve both additive and substitutive transformations. The echo subject clause, the imperative clause, the benefactive clause, the reflexive clause, the reciprocal clause, and the focus clause entail additive transformations by which a syntactic element is added to (or repeated in) the basic clause, whereas the interrogative clause entails a substitutive transformation by which a specific word is substituted for that of some syntactic element already in the basic clause.

In that these transformed clauses are transformations of both basic and permuted clauses, these transformations function as matrix multipliers of the clause types shown in the matrix of Chart 11.1. Chart 11.2 presents the matrix (of Chart 11.1) as multiplied by each of the four matrix multipliers, indicating the possibility or impossibility of occurrence structurally and the (rare) instances of occurrence in the sample analyzed text.

Echo subject clause. The echo subject clause (ES CL) either emphasizes the subject or clarifies the subject by amplification. The echo subject clause is a transformation of a basic or permuted clause (except the postposed subject clause), repeating or "echoing" the subject after all other nuclear and peripheral clause elements. The repeated subject

Matrix multiplier / Clause transformation type:	Clause permutation type:	Basic clause types:							
		Q	C	B	S	T	I	Eq	Ex
Echo subject	Unpermuted	x	x	x	x	x	X	X	NO
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	x	x	x	NO	x	NO	x	NO
	Locative emp.	x	x	x	X	x	x	x	NO
	Adverbial emp.	x	x	x	x	x	x	x	NO
Imperative	Unpermuted	x	X	x	X	X	X	X	?
	Postposed subj.	x	x	x	x	x	x	x	NO
	Obj./Comp. emp.	x	x	x	NO	x	NO	x	?
	Locative emp.	x	x	x	x	x	x	x	?
	Adverbial emp.	x	x	x	x	x	x	x	?
Bene-factive	Unpermuted	X	NO	NO	NO	X	X	NO	NO
	Postposed subj.	x	NO	NO	NO	x	x	NO	NO
	Obj./Comp. emp.	x	NO	NO	NO	X	NO	NO	NO
	Locative emp.	x	NO	NO	NO	x	x	NO	NO
	Adverbial emp.	x	NO	NO	NO	X	x	NO	NO
Reflexive	Unpermuted	X	X	X	X	X	X	X	NO
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	x	x	x	x	X	x	x	NO
	Locative emp.	x	x	x	x	x	x	x	NO
	Adverbial emp.	x	x	x	x	x	x	x	NO
Reciprocal	Unpermuted	x	x	x	x	X	X	NO	NO
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	x	x	x	x	x	x	NO	NO
	Locative emp.	x	x	x	x	x	x	NO	NO
	Adverbial emp.	x	x	x	x	x	x	NO	NO
Focus	Unpermuted	x	X	x	x	x	X	X	NO
	Postposed subj.	x	x	x	x	x	x	x	NO
	Obj./Comp. emp.	x	x	x	x	x	x	x	NO
	Locative emp.	x	x	x	x	x	x	x	NO
	Adverbial emp.	x	x	x	x	x	x	x	NO
Inter-rogative	Unpermuted	X	X	X	X	X	X	X	X
	Postposed subj.	NO	NO	NO	NO	NO	NO	NO	NO
	Obj./Comp. emp.	*	*	*	NO	*	NO	*	*
	Locative emp.	*	*	*	*	*	*	*	*
	Adverbial emp.	*	*	*	*	*	*	*	*

Chart 11.2 Matrix of transformed clause subtypes ("x" indicates structural possibility; "X" indicates subtype occurs in data; "NO" indicates structural impossibility; "*" indicates interrogative element must correspond to permuted element)

phrase is either identical to the nuclear subject phrase or
is an expanded clarification of it. The resultant clauses
are known as the echo subject intransitive clause (eS I CL),
etc.

The echo subject clause may thus be summarized:

eS CL: S - Pred - (0) - (IO) - ...
Order: 1   2   (3)   (4)   (5) --→ 1 2 (3)(4)(5) 1

      Gá hiáng lui bã gá. 'He has also already fin-
         ished--he.' (eSubj I CL, fPt)
      Gá hiáng páng kótau kúan gá me. 'He is al-
         ready able to run--his child there.' (eSubj
         I CL w S Vb)
      Gá môí ngé gá me. 'He is a person--he.'
         (eSubj Eql CL)

Imperative clause. The imperative clause (Imp CL) expresses
a command or request. All basic and permuted clause types
(except the zero and xê 'be' equative clauses (Eql and Eq2
CL) and the existive clause (Ex CL)) may be transformed to
the imperative. The verbal particles ma ta 'do not' and
pôi ta 'do not' are negative imperatives (8.4); there is no
"positive" imperative particle. The imperative syntactic
elements do not always occur in imperative clauses; thus
some statistical syntactic features of imperative clauses

should be noted.

(1) Only about one in three imperative clauses has an explic-
it subject which is usually the pronoun ah 'you' or pó 'you
all'. Contrastively, over 70% of all basic clause types have
explicit subjects.

(2) About one in two imperative clauses has the final particle
hôu or 'nôi (10.4) or the compounded final particles 'nôi
hôu. hôu is used only in imperative clauses; 'nôi usually,
but not always, occurs in imperative clauses. The resultant
clauses are known as the imperative intransitive clause (Imp
I CL), etc.

The imperative clause may thus be summarized as follows;
probability figures indicate likelihood of occurrence of the
above element(s).

Imp CL: (S) - Pred - ... - (hôu)('nôi)

Probability: 33%   50%

        Làm tói vá hôu. 'Go and tell father-in-law,

              okay?' (Imp Ben I CL w Q Vb)

        Am a tàm tédroang pókéang 'nôi. 'Give me all

              kinds of magical powder.' (Imp Ben T CL)

        Ěh ngán a kó. 'You look here.' (Imp I CL w C Vb,

              LocP)

        Kôm a kó 'nôi hôu. 'Wait here, okay?' (Imp

              I CL w C Vb, LocP, fPt, fPt)

Lôi. 'Quit (it).' (Imp I CL w B Vb)

Hó-ùi. 'Help (me).' (Imp I CL w T Vb)

Pin nô kó pôi ta trói vai kre nah neó.

> 'Now we must not (do) like the former old
>
> people any more.' (Temp, Imp I CL w elided
>
> I Vb, SimP, fPt)

Other imperative clauses are illustrated in the fol-
lowing subsections.

Benefactive clause. The benefactive clause (Ben CL) speci-
fies the beneficiary or recipient of the predication. The
benefactive clause has a benefactive phrase (BenP) inserted
immediately following the predicate verb phrase of a quota-
tive, transitive, or intransitive clause. The resultant
clauses are thus known as the benefactive quotative clause
(Ben Q CL), etc.

The benefactive phrase consists of a pronoun, kinship
term (Kin), or other animate noun (anN), and may optionally
be preceded by the relator particle kô.

The benefactive clause may thus be summarized:

Ben CL: (S) - Pred - BenP - (O) ...

BenP: (kô -) Pron/Kin/anN

In clauses with the quotative verb phrase the benefactive phrase identifies the addressee.

Q CL: Vai khen ga, "Eh lam kiklai kong ko." 'They said
to him, "What are you doing walking in this
country?"' (Ben Q CL(S CL, ManP))

Prei tia ga, "Hom." 'Those two answered him,
"Okay."' (Ben Q CL(Resp))

A toi ko pa, "Hiang tai." 'I say to father,
"It's all done."' (Ben Q CL(Frag of Eql CL))

T CL: A va toi eh moi todroang. 'I want to tell you
one matter.' (Ben T CL w Q Vb)

A toi eh todrang 'nang. 'I tell you the truth
for sure.' (Ben T CL w Q Vb, fPt)

I CL: A chu toi ga. 'I'll go down and tell him.'
(Ben I CL w Q Vb)

Kreo tai tang pole. 'Call all the villagers.'
(Imp Ben I CL w Q Vb)

The benefactive phrase does not occur in container clauses in that the subject of the contained clause is the beneficiary of the predication. However container verb phrases in "lower" clause types may occur with the benefactive phrase.

T CL: Ngin am eh pokeang. 'We give you the powder.'
(Ben T CL w C Vb)

Pin ja eh troang hoda. 'We will show you the
escape route.'

Vai ôh ta ám kô gá hme ka. 'They don't give him
rice to eat.'

I CL: Pôi ta ám má ôh. 'Don't give us two (any).'

(Imp Ben I CL w C Vb, fPt)

The benefactive phrase with transitive verbs:

T CL: Eh pé pá dróu. 'You cook--for us--wine.'

(Ben T CL)

Má va pei pó poa dróu. 'We two want to pound--
for you and grandfather--rice.'

Á ko pá muih. 'I'll cut--for us two--a field.'

I CL: Á muih pá. 'I'll cut (a field) for us two.' (Ben
I CL w T Vb)

Á va móhnou eh. 'I want to show you (it).'

The benefactive phrase with intransitive verbs:

Gá xah chó. 'He played with the dog.' (Ben I CL)

Chó prei kou moi to mónhou. 'Their dog barked at
an anteater.' (Ben I CL)

The sample analyzed text has one permuted clause with
the benefactive transformation:

Xôu rókê o póto vai plong. 'Xou is very skilled
in taking them across by canoe.' (AdvEmp Ben
T CL)

The twenty benefactive clause transformations in the
sample analyzed text occur in three clause types and with
three verb phrase types as follows.

Ben Q CL:	Q VP 2			
Ben T CL:	Q VP 1	C VP 7	T VP 4	
Ben I CL:	Q VP 5	C VP 0	T VP 1	I VP 0

Reflexive clause. The reflexive clause (Refl CL) specifies that the subject or agent is particularly stressed or emphasized in relation to the predication. The reflexive clause has a reflexive phrase (ReflP) inserted immediately following the predicate verb phrase of any basic clause except only the existive clause. The resultant clauses are thus known as the reflexive quotative clause (Refl Q CL), etc. The reflexive phrase consists of either of two reflexive particles (ReflPt):

xeh, heh 'oneself, -self', an emphatic reflexive

dei 'alone, one's own, for oneself, by oneself';

cf. ReclpP dei po and PocPt dei below

The particle dei in its various uses (cf. also the reciprocal particle dei in the following subsection) is the twelfth most frequent word in the 27,437-word text, occurring 333 times, whereas the reflexive particle xeh ranks 45, occurring 121 times.

The reflexive clause may thus be summarized:

Refl CL: (S) - Pred - ReflP - ...
ReflP: xeh/dei

xeh: Gá u mot xeh tung trap me.   'He himself entered into that mud.'   (Refl S CL)

Gá ka rómua xeh tea hẽ gá me.   'He himself swallowed his spittle.' (Refl T CL)

Eh xo heh dôh kóbô kô hã.   'You yourself also get what son-in-law?' (Refl T CL w C Vb, fPt)

Préi ói xeh 'bâng me.   'The two themselves lived together there.' (Refl I CL, LocP)

Me gá loi xeh 'nang.   'Then she herself really believed.' (TempP, Refl I CL w T Vb, fPt)

dei: Gá ta dei kóxêt tung vó.   'He put for himself the mushroom in the jar.' (Refl B CL)

Gá preó dei pólê.   'He returned to his own village.' (Refl S CL)

Gá hlo dei ngoh.   'He saw his own brother.' (Refl T CL w C Vb)

Gá pôu dei vai 'nêng me.   'She carried by herself the young ones.' (Refl T CL)

Gá ka dei kódrai me hiâng tai.   'He ate by himself the woman all up.' (Refl T CL, DesP: (vPt, vAdj))

Klei me gá tómiat dei.   'After that he thought to himself.' (TempP, Refl I CL w Q Vb)

Gá lam muih dei neó.   'He went to cut the field some more for/by himself.' (Refl I CL w T Vb, fPt)

Gá hm boṃg dei a xiam tróng. 'He was used to
urinating alone at the base of the eggplant.'
(Refl I CL, LocP)

The sample analyzed text has one permuted clause and
three transformed clauses with the additional reflexive
transformation:

Kúan gá póu dei ing róng kó. 'The child--she
carried (him) by herself on this back side.'
(OEmp Refl T CL, LocP)

Nó kó ga hiang mójo dei neó A-Pia me ai. 'Now
she already loved (him) for herself some
more--that (Miss) A-Pia.' (Temp, eSubj Refl
I CL, fPt)

Nó kó eh búa ngán dei. 'Now you try and see for
yourself.' (Temp, Imp Refl I CL w C Vb)

Hóbai xeh ah. '(You) yourself watch out!' (Imp
Refl I CL, fPt)

The 64 reflexive clause transformations of basic clauses
in the sample analyzed text occur in seven clause types and
with seven verb phrase types as follows:

Q CL: Q VP 1

C CL: Q VP 1

B CL: B VP 1

S CL: B VP 1 S VP 5

T CL: Q VP 2 C VP 8   T VP 16

I CL: Q VP 2 C VP 4 B VP 2 S VP 2 T VP 6 I VP 11

Eq CL: Eq VP 2

Reciprocal clause. The reciprocal clause (Recip CL) ex-
presses mutual action by and one two or more agents. The
reciprocal clause has the reciprocal phrase (RecipP) inserted
immediately following the predicate verb phrase of any basic
clause except the equative and existive clauses; the verb
may be prefixed with the reciprocal affix tó- (see 12.2).
The resultant clauses are thus known as the reciprocal quo-
tative clause (Recip Q CL), etc.

The reciprocal phrase is dei pó 'together, with each
other' (pó is the dual-plural second person pronoun 'you-
all').

The reciprocal clause may thus be summarized:

Recip CL: (S) - (tó-)Pred - RecipP - (O) - ...
RecipP: dei pó

       Ah prei mónhen dei pó. 'Thereafter the two ar-
          gued with each other.' (Temp, Recip I CL)
       Me prei tókat dei pó. 'Then the two wrestled with
          each other.' (Temp, Recip I CL w tó-I Vb)
       Prei tóhou dei pó. 'The two cursed each other.'
          (Recip I CL w tó-T Vb)
       Ga va rou dei po khu kia me ai. 'He wanted to
          call together the group of ghosts.' (Recip
          T CL, fPt)

The seven reciprocal clause transformations of basic

clauses in the sample analyzed text occur in two clause
types and with three verb phrase types as follows.

T CL: T VP 1

I CL: C VP 1   T VP 2   I VP 3

Focus clause. The focus clause (Foc CL) indicates to whom
the predicate is related--though the semantic homogeneity of
this clause type is somewhat elusive. The focus clause has
a focus phrase (FocP) inserted immediately following the
predicate verb phrase of any clause except the existive
clause. The resultant clauses are thus known as the focus
quotative clause (Foc Q CL), etc.

The focus phrase consists of the focus particle (FocPt)
dei (cf. reflexive particle dei above) and a following pro-
noun (but not pó 'you all'--cf. reciprocal phrase dei pó
above), kinship term, or animate noun.

The focus clause may thus be summarized:

Foc CL: (S) - Pred - FocP - (O) - ...

FocP: dei - Pron/Kin/anN

dei kodra: Nô kô gá póchan thê dei kódrá i chu ôu dróu.

            'Now he advised and commanded with the in-

            laws to come down and drink wine.' (Temp,

            Foc I CL w Q Vb, PurP:(PurPt, T CL))

Ôh ta loh dei kódrá kótra pópêng tónei ôh. '(He)
    did not allow for the in-laws to step upon
    the ground.' (Foc C CL(S CL), fPt)

dei dôh: Klei me gá chiang kómei dei dôh neó. 'After that
    he became ashamed before his son-in-law more.'
    (Temp, Foc Eq3 CL, fPt)

dei o: Xôu tó dei o ti me. 'Xou laughed at his younger
    sibling like that.' (Foc I CL, ManP)
    Klei me Xôu kôm dei o. 'After that Xou waited
    for his younger sibling.' (TempP, Foc I CL
    w C Vb)

The sample analyzed text has one transformed clause
with the additional focus transformation:

    Eh kua dei pa. 'You hug your own father.' (Imp
    Foc I CL w T Vb)

The six focus clause transformations of basic clauses
in the sample analyzed text occur in three clause types and
with four verb phrase types as follows:

C CL: Q VP 1   C VP 1

I CL: Q VP 2   I VP 1

Eq CL: Eq VP 1

The above four clause transformations each entail in-
sertion of a phrase immediately following the predicate verb
phrase. These four phrases are here summarized:

BenP: Pron/Kin/anN

ReflP: xeh/dei

RecipP: dei pó

PooP: dei - Pron/Kin/anN

Interrogative clause. The interrogative clause asks a ques-
tion. All basic clauses may be transformed to interrogative
clauses. The "emphatic" permuted clauses may be transformed
to interrogative clauses only if the permuted element corre-
sponds to the interrogative element of the clause. Of the
above transformed clauses only the benefactive clause may be
further transformed to (benefactive) interrogative clauses.

The interrogative clause entails the substitution of an
interrogative word in the syntactic element of a clause or
phrase being questioned. Interrogative clauses have been
identified by the question mark rather than in the clause
formula following each example.

Interrogative words have been included in various sec-
tions of the preceding chapters because of their varying
syntactic features. In this section the various interroga-
tive forms are summarized with reference to the relevant
sections.

kobó   'who?', Pron (7.1)

klai   'which?, what?', NomInter (7.1)

kiklai   'which?, what?', NomInter (7.1)

lai   'which?, what?', NomInter (7.1)

u lai 'where?', N-NomInter (7.1)

to lai 'how many?, how much?', NumInter (7.2)

a hôm, hôm '(yes-no question marker)', vPt (8.4)

a hài, hài 'yet?', vPt (8.4)

la lai 'when?', Temp (10.1)

ti lai 'how?, why?', ManP (10.3)

èh 'huh?, is that right?', fPt (10.4)

hôu 'okay?', fPt (10.4)

11.3 Frequency of clause type variations

Chart 11.3 indicates the frequency of all clauses in
the sample analyzed text, distinguishing both permuted and
transformed clause types. The unpermuted, untransformed
clause total (581) corresonds to those clause types present-
ed in Chart 9.3 (section 9.9). (Interrogative clauses were
not counted separate from other clause types in that their
syntactic feature is word class substitution rather than
permuted word order or additive transformation.) Over 75%
of the clauses are of the unpermuted-untransformed type.
Clause transformations (136) are more numerous than clause
permutations (40). Reflexive clauses (64) occur more than
three times as often as any other clause variation. Double
transformation clauses are rare (7); but transformations
of permuted clauses are exceedingly rare in natural text
(1).

	Clause transformations:								
	Basic	eSubj	Imp	Ben	Refl	Recip	Foc	Inter*	Total
Basic CL	581	5	34	20	64	7	6	-	717
Permuted CLs:									
Postposed subject	13								13
Obj/Comp Emp.	14				1				15
Loc. Emp.	2								2
Adv. Emp.	11								11
Total	621	5	34	20	65	7	6	-	758
Double-transformation CLs:									
eSubj-Refl		(1)			(1)				1
Imper-Refl			(5)		(5)				5
Imper-Foc			(1)				(1)		1
Total									765

Chart 11.3 Frequency of all clause types in sample text
distinguishing permuted and transformed
clauses (*not counted separately)

CHAPTER 12 AFFIXATION, REDUPLICATION, ETC.

12.0 Introduction

Apart from the noun and verb phrases, the basic clause
types with nuclear and peripheral elements and variations of
them described in the preceding chapters, there are other
somewhat "miscellaneous" syntactic features which pertain to
clauses. These are collected together and discussed in this
chapter before proceeding to a discussion of a higher syn-
tactic level in chapter 13.

The principal syntactic feature discussed here is the
occasional affixation found in Sedang encompassing four major
affixes (causal (12.1), reciprocal (12.2), adversative (12.3),
nominal (12.4)) and several minor affixes (12.5). Sedang
affixation has been previously described in Smith (1969a)
using a generative transformational grammar model.

The remaining sections of this chapter discuss such mis-
cellaneous topics as morpheme reduplication, repetition, re-
capitulation, expansion, series, ellipsis and clause frag-
ments, onomatopoeia, special descriptives and poetic form.

12.1 Causal affixes pó- and mó-

The causal affixes prefixed to a verb (except quotative,

equative, or existive verbs) or verbal adjective transform
these to a transitive verb in which the subject as actor
"causes" the stated predication upon the object as undergoer.
The affixes are semiactive, in that they may not be indiscrim-
inately affixed to semantically viable verbs though occasion-
ally a native speaker may use it in a new or novel situation.

There are two causal affixes: pó- and mó-. The affixes
may be prefixed only to monosyllabic words; yet only about
30-40% of presyllable pó- or mó- in verbs are the causal af-
fix—the others are bisyllabic words whose presyllable (today)
has no semantic value of its own. pó- characteristically oc-
curs with those words having initial voiceless consonants,
and mó- with those having initial voiced consonants or ini-
tial (written) vowels. But there are exceptions to both of
these generalizations. Furthermore there are morphophonemic
changes in which the initial voiceless consonant of some
verbs becomes voiced. Some words occur with both affixes.
mó- with morphophonemic change:

S Vb:	tá	'to go around'	móda	'cause to go around'
vAdj:	tang	'to be erect'	módang	'cause to be erect'
	tei	'to be strong'	módei	'cause to be strong'
	chai	'to be sick'	mójai	'cause to be sick'
	ton	'long time'	módon	'cause to be long time'

mó- without change:

T Vb:	at 'to fast'	mó-at	'cause to fast'
	ha 'to open mouth'	moha	'cause to open mouth'
	hriam 'to study'	móhriam	'to teach'
I Vb:	au 'to nurse'	mó-au	'cause to nurse'
	huam 'to bathe'	móhuam	'cause to bathe'
vAdj:	gok 'crowded'	mógok	'cause to crowd'

Affixation with pó-:

C Vb:	loi 'to abandon'	póloi	'cause to abandon'
B Vb:	kum 'to pile'	pókum	'cause to be piled'
S Vb:	chai 'to return'	póchai	'cause to return'
T Vb:	'blei 'to beat'	pó'blei	'cause to beat'
vAdj:	chen 'well cooked'	póchen	'cause to be well cooked'
	reh 'to be alive'	póreh/móreh	'to nourish'
pVb:	klei 'to finish'	póklei	'cause to finish'

Some affixed forms have (vestigial?) vowel nasalization and/or consonantal preglottalization not in the unaffixed forms.

T Vb:	ou 'to drink'	mó-ou	'cause to drink'
I Vb:	riu 'to awake'	mó'riu	'cause to awake'
vAdj:	reh 'to be alive'	mó'reh/pó'reh	'to resurrect'

Á módang lóang. 'I lift up the pole.' (T CL w mó-vAdj)

Á póklei ehén. 'I make finished (pay off) a

debt.' (T CL w pó-pVb)

Kódrai módot ehu. 'The woman stops the pig.' (T CL

w mó-I Vb)

Á móhriam eh tûm tódróang. 'I will teach you

all things.' (Ben T CL w mó-I Vb)

12.2 Reciprocal affix tó-

The reciprocal affix prefixed to a transitive verb (or
verb which may occur in a T CL) usually indicates that the
predication is "reciprocal" between those of the (necessarily
plural) subject. The reciprocal affix is tó-. Sometimes,
however, tó- indicates only that the (plural) actors perform
the predication together though not upon each other. The af-
fix may be prefixed only to monosyllabic verbs; yet only
about 30-40% of presyllable tó- in verbs are the reciprocal
affix. There are no morphophonemic alternations with recip-
rocal affixation except that with initial t roots the affix
sometimes is ti- (4.3). The verbal phrase with included
reciprocal affix usually occurs in the reciprocal clause fol-
lowed by the reciprocal phrase dei pó 'with each other'
(11.2). The reciprocal affix appears to be an active affix,
applicable to new situations.

Na tóchúa dei pó. 'We two obey each other.'

(Recip T CL w tó-T Vb)

Préi tóvéang dei pó. 'Those two help each

other.' (Recip T CL w <u>tó</u>-T Vb)

Ne préi tóhlo dei pó. 'Then those two saw each

other.' (Temp, Recip T CL w <u>tó</u>-C Vb)

Vai tóko dei pó, tópak dei pó. 'They cut each

other, stabbed each other.' ((Recip T CL w

<u>tó</u>-T Vb)x2)

12.3 Adversative affix <u>ló</u>-

The adversative affix prefixed to a verb (except equative

or existive verbs) indicates that the (potential) (object as)

undergoer is liable to the "adversity" of the predication.

The adversative affix is <u>ló</u>-. There are no morphophonemic

changes involving affixation with the adversative affix. The

adversative affix seems to be an active affix and appears to

be used with more verbs and with greater frequency than the

causal or reciprocal affixes. The adversative affix frequent-

ly cooccurs with the verb <u>xau</u> 'to be afraid'.

Poa eh lóhôu má. 'Grandfather, you curse us

two.' (Voc, T CL w <u>ló</u>-T Vb)

Pin xau rókái lólo. 'We're afraid boar will go

through (into our gardens).' (C CL (I CL

w <u>ló</u>-S Vb))

Gá lómot tung ko. 'He entered into here (to

bother us).' (S CL w <u>ló</u>-S Vb)

Though the adversative affix generally is affixed only
to monosyllabic verbs, its affixation to a bisyllabic verb
has been noted.

Á xeu eh lókódê á.   'I'm afraid you will kill
me.' (C CL(T CL w ló-T Vb))

Such a trisyllabic word gives rise to the possible analysis
of ló- as a verbal particle: (1) no other affix is prefixed
to a bisyllabic word and trisyllabic words are not otherwise
within the established syllable pattern; (2) the vowel of
ló- is sometimes spoken as a phonetic [o] with slight stress,
whereas the presyllable vowel is always schwa and unstressed
except in intentionally slow speech; (3) ló- is, suspicious-
ly, considerably more productive than the other affixes with
respect to the number of verbs with which it occurs; and (4)
neighboring languages do not have such an affix although the
other Sedang affixes are typical of the area. On the other
hand, it has been analyzed here as a prefix because (1) of
the general phonological pattern established by its typical
unstressed schwa vowel and (2) psycholinguistic reaction has
been favorable (Smith, 1969a.124-125).

12.4 Nominal affix -on-

The nominal affix infixed to a monosyllabic verb (except
equative and existive verbs) "nominalizes" it to form a seman-
tically related noun. The semantic relationship of the de-
rived noun to the verb, however, is not predictable but may be

instumental, resultant, or locative. The nominal affix is
-ón-, and is infixed between the initial consonant and fol-
lowing vowels forming a two-syllable word. If the initial
consonant is part of a consonant cluster with a following r,
then, because -nr- is not a permitted consonant cluster, the
nominal infix has the form -ód-. Because there are more ini-
tial consonants than presyllable types, there are various mor-
phophonemic changes of the initial consonants to permitted
presyllable consonants. All observed infixation patterns are
summarized in Chart 12.1. The presyllable pó- is not utilized
because of voicing of initial p to m. It is inexplicable (or
only an erratic statistical phenomenon?) why verbs with the
otherwise relatively common initial consonants l, m, and n do
not have nominalized forms. The nominal affix appears to be
active, usable in new situations.

chia	'to dig'	hónia	'shovel-hoe'
hea	'to vomit'	hónea	'spewing instrument: gun'
xoang	'to divide'	hónóang	'problem'
dea	'to add water'	kónea	'T-stick for measuring water in wine jar'
kang	'to fence'	kónang	'fence'
kleang	'to make trough'	kónéang	'trough'
krou	'to roll'	kódrou	'ball'
bua	'to test, try'	mómua	'test'
pán	'to raise'	mónán	'domestic animals'

Verb initial:	Presyllable type: hó-	kó-	mó-	ró-	tó-
ch-	hón-				
h-	hón-				
x-	hón-				
d-		kón-			
k-		kón-			
kl-		kón-			
kr-		kódr-			
b-			món-		
p-			món-		
pr-			módr-		
r-				rón-	
t-					tón-
tr-					tón-

Chart 12.1 Nominal affix -on- infixation patterns

prán 'to bait'   módrán 'bait'

ra 'to ambush'   róna 'a trap'

tiam 'to hammer'   tóniam 'forge'

tréng 'to cut'   tónéng 'cutting board'

12.5 Minor affixes

There are several minor affixes: the nominal affix kó-, the digital affix tó-, the ordinal affix mó-, and the velar animal affix.

Nominal affix kó-. The nominal affix kó- is prefixed to loan--mostly Vietnamese--substantives. This is a loan arising from the Vietnamese classifier cái which precedes many of these words in Vietnamese.

		VN:	
kó'bang	'a table'		cái bàn
kóhôp	'a can'		cái hôp
kókeó	'a bottle'		cái kéo
kóli	'a glass'		cái ly
kómai	'a machine'		cái máy

Digital affix tó-. The digital affix tó- is used in three instances with the numbers two to four to indicate fingers' width; in one instance there is an inconsistent voicing of the initial consonant.

péa	'two'	tóbéa	'two fingers' width'
pái	'three'	tópái	'three fingers' width'
pún	'four'	tópún	'four fingers' width'

Ordinal affix mó-. Borrowed from Bahnar, the ordinal number affix mó- is prefixed to the monosyllabic numbers one through four and, less commonly, other numbers. More typical in Sedang is the ordinal number phrase ki Num (7.1-2).

mómôi, ki môi	'first'	
mópéa, ki péa	'second'	
mópái, ki pái	'third'	
mópún, ki pún	'fourth'	

<u>Velar animal affix relic.</u> A disproportionately large number
of animal names begin with the velar <u>k</u>. The possibility that
this might be a relic of a hypothesized velar animal prefix
is intriguing and is explored in Smith,(1973d).

12.6 Morpheme reduplication

There are two types of morpheme reduplication: complete
and partial.

<u>Complete morpheme reduplication.</u> ("Complete") morphemes of
various classes (usually verbs, verbal adjectives, and ad-
verbial elements) are repeated or reduplicated in their en-
tirety for emphasis or intensification. Reduplicative concat-
enation of main verbs in the verb phrase (8.2) indicates a re-
peated or prolonged action.

> tei 'strong', tei tei 'very strong'
>
>> Gá khên ga tei tei ta. 'She said that he
>>
>>> is much stronger.' (C CL(Eql CL, CompP)
>>>
>>> w Q Vb)
>
> túan 'ear; smart', ta '(comparative)'
>
>> Gá túan túan ta ta. 'He is much much
>>
>>> smarter (than they).' (Eql CL, CompP)

Complete morpheme reduplication may be extended to the
story-telling device of repeating phrases to indicate pro-
longation or repetition of an action.

> Kía kóchôu kóhèa kóchôu kóhèa kóchôu kóhèa.

'The ghost spit spittle, spit spittle, spit
spittle.' (T CL)

Partial morpheme reduplication. Reduplication of a part of a
morpheme is (generally) a storytelling style which heightens
the climactic points and affords establishment of a rhythm
between stressed and unstressed syllables. Partial morpheme
reduplication is, like presyllable reduplication (4.5), the
reduplication of the initial consonant or consonant cluster
of (monosyllabic) verbs in the presyllable with a presyllable
i or u vowel or reduplicated main syllable vowel. Some story
tellers use this device with, seemingly, few constraints.

    ka 'to eat'; reduplication: kuka
    mot 'to enter'; reduplication: mimot
    Ne 'ni'no kuka mimot tung me. '(The snake) came
        out (of the water), killed (the girl), and
        entered into that (water).' (TempP, S CL)
    Bibrok lulea klea pah. '(He) went and slit open
        the snake's intestines.' (T CL)

12.7 Repetition, recapitulation, expansion

    In their oral development, clauses may be interrupted
for repetition, recapitulation or expansion with another
syntactically complete but reduplicative phrase. Expansion
of the verb phrase is seen in verbal concatenation (8.2).
The interruption never occurs after a particle linked to a

following phrase but usually after an otherwise syntactically
completed element of the clause. The interruption is usually
marked by juncture.

Subject phrase:

>Ah o ga me, A-Pia me ai khén... 'Later on
>
>>his younger sibling, that A-Pia said...'
>>(Temp, Q CL:((S)x2, Pred))
>
>Kia ki me, ga khén - ô-ôh. 'That ghost, he
>
>>said "No." (Q CL:((S)x2, Pred, O))
>
>Klei me prei óng meh, prei lam péng chém.
>
>>'After that the two brothers-in-law, the two
>>went to shoot birds.' (TempP, T CL:((S)x2,
>>Pred, O))

Object phrase:

>Kia am ga pókeang, túm tódróang. 'The ghost
>
>>gave him powder, all things.' (Ben T CL:(S,
>>Pred, (O)x2))
>
>Hógah kô ka mam tóng kô a, chám tóng kô
>
>>a. 'This Hogah ate my stolen food, my stolen
>>meat.' (T CL:(S, Pred, (O)x2))
>
>Prei lam péng chém, chém lóang plai trai. 'The
>
>>two went to shoot birds, banyan fruit tree
>>birds.'
>
>Ga kótun kótei mónge, kótei rókai, kótei choi.
>
>>'He hung up human buttocks, boar buttocks,
>>deer buttocks.' (T CL:(S, Pred, (O)x3))

Complement phrase:

> Kóncu á mónge rótoh, mónge 'mei. 'My hus-
>
> > band is a bad person, an evil person.' (Eq1
> >
> > CL:(S, (Co)x2))
>
> Pókeang chiang kóla, kóla 'drun 'dre. 'The pow-
>
> > der became bamboo, bamboo real thick.' (Eq3
> >
> > CL:(S, Pred, (Co)x2))

Locative phrase:

> Á u tro tung ngia kô hia, tung cha kô tê. 'I
>
> > scraped thorns in my face, in my body and so
> >
> > forth.' (T CL, (LocP, fPt)x2)
>
> Gá ai tódroang xôi 'bang gá, 'bang A-Pia
>
> > me. 'He did wrong with her, with that A-Pia.'
> >
> > (T CL, (LocP)x2)

Adverbial phrase:

> Me ga tuveh mo heh ta kô vai, lem heh ta kô
>
> > vai. 'Then he himself returned healthier than
> >
> > they, handsomer than they.' (Temp, Ben I CL w
> >
> > S Vb, (DesP, CompP)x2)

Another form of expansion is through the linking of ap-
propriate phrases with a <u>coordinating</u> <u>conjunctive</u> (CoConj)
without juncture. The coordinating conjunctives are:

> 'bang   'with, and'
>
> la   'or'

ôh   'or'; cf. negative particles ôh (8.4,
    10.4)

thau   'whether...or'

Kiá me 'bang tóná kia me klê tea me neó.

    'That tiger and that host of ghosts crossed
    that water again.' (S CL:(S, CoConj, S, Pred,
    O), fPt)

Nô kó á tói tódróang Kia Té Tou 'bang

    Kia Tépa Ko. 'Now I tell the story of Long
    Breasted Ghost and Double Headed Ghost.'
    (TempP, Ben I CL w Q Vb:(S, Pred, O:(N,((N,
    PName), CoConj, (N, PName)))))

Á 'nai ôh thau môi hónám thau péa hónám. 'I

    don't know whether one year or two years.'
    (I CL w C Vb, fPt; Frag:((CoConj, cNP)x2))

Tung pólê ái môi ngé kán pólê ôh chu leang.

    'In a village there is one kan pole village
    chief or (one) chu leang village chief.'
    (LocExp Ex CL:(Co:(NP, Conj, NP)))

Bum ngán hôm chiang môi tiah la ôh. 'Try and

    see (whether they) are capable the same or
    not.' (C CL(Eq3 CL, CoConj, Frag:(fPt)))

    Expansion of more than one element of a clause--especial-
ly of the final elements--is also common but might equally be

considered an instance of ellipsis of the earlier elements
(12.9).

Eh va pro móngau pro móngeang. 'You are about to
make black ants, to make red ants.' (T CL:
(S, pVb, ((C Vb, O)x2)))

Pin kua pó kua kiklai. 'We scrape melons,
scrape whatever.' (T CL:(S, (Pred, O)x2))

Á xôk 'báng vai drôh ki ê, xôk 'báng kódrai
ki ê ôh. 'I did not fool around with dif-
ferent girls, fool around with other women.'
(I CL:(S, (Pred, LocP)x2), fPt)

Eh móngé chiang pro tùm tódroang, chiang póxeh
hã. 'You will be a person creating all things,
doing miracles also.' (Eql CL(T CL; I CL, fPt))

Hmui, ki klai hia chiang móngé, chiang móngé
tai tang, chiang môi to pólê kan. 'Ants,
whatever, etc. became people, became people
entirely, became one big village.' (Eq3 CL:
((S)x2, fPt, (Pred, Co)x3))

12.8 Series

Series of single or multiple clause elements frequently
cooccur with one of three series particles (sPt): hia, 'lo
or 'na. 'na usually refers to indefinite groups of people
(7.1).

Prei chai a hngei ka dei 'na, prei te dei 'na
ha. 'The two returned home to eat, the two
sold their (things) also.' (S CL, Refl I CL w
T Vb, aPt; Refl I CL w T Vb, aPt; fPt)

Vai ka, mau 'na ka poh, mau 'na ka prong, mau
'na ka pe, hmang to vai tomiat xeh. 'They
ate, some ate roasted, some ate steamed, some
ate cooked, according as they themselves
thought.' (I CL w T Vb, (T CL:(S, aPt, Pred,
O)x3), VolP)

Tai tang pole va ka ro 'lo, chu 'lo, i 'lo. 'The
whole village was about to eat beef, pork,
chicken.' (T CL:(S, Pred, (O, aPt)x3))

Klei mot tung kong vai peng chem hia, ra choi
hia, xe ka hia. 'After entering the jun-
gle they shot birds and ambushed deer and
caught fish, etc.' (TempP:(TempSub, S CL), T
CL:(S,(Pred, O, aPt)x3))

12.9 Ellipsis and clause fragments

Ellipsis is the omission of a word or phrase considered
essential for grammatical completeness but not for the con-
veyance of the intended meaning. Ellipsis occurs frequently
and indicates, together with pronominalisation and responses
(13.8), the common dependence of one clause on another.
Elided elements are always recoverable from the preceding

discourse. Items elided commonly include the head noun of
noun phrases, the subject (such ellipsis was indicated as
"optional" in the clause formulas (chapter 9)), the main verb
of verb phrases (as indicated by the word "potential" in the
definitions of clause types), the verb phrase, and the noun
phrase of prepositional phrases. Ellipsis of the indirect
object phrase in the bitransitive clause is accounted for
in the transitive clause. Ellipsis of the (direct) object
phrase is accounted for in clause subtypes: semitransitive
clause from bitransitive clause, and intransitive clause
from quotative clause, container clause, or transitive
clause.

Noun phrase head ellipsis:

> Kô ko môi hiáng khên môi cháu, môi hiáng
>
> khên môi poa. 'Now one (person) has called
> one (person) grandchild, one (person) has
> called one (person) grandfather.' (Temp, Ben T
> CL w Q Vb)x2)

Subject phrase ellipsis:

> Ne kreó - mot. 'Then (he) called, "Enter."' (Temp,
> Q CL(Imp I CL w S Vb))

Main verb ellipsis:

> Pó-ia va cha A-Pia me neo. 'In a little bit (he)
> was about able to (catch) that A-Pia again.'
> (Temp, T CL w elided T Vb, fPt)

Ih ta hro. 'You are unable (to pound rice).' (I CL
  w elided T Vb)

Verb phrase ellipsis:

  Klei me pe gá - ma ta preó a hngei. 'After that
   his father (said), "Don't return home."' (TempP,
   Q CL(Imp S CL) w elided Q Vb)

Noun phrase or prepositional phrase ellipsis:

  Á va lám 'bảng. 'I want to go with (you).'
   (S CL)

  Klei me preí lám dreng va to kông i chai a hngei.
   'After that the two went together (with each
   other) to climb the ladder to return home.'
   (TempP, S CL, (PurP)x2)

Extensive ellipsis culminates in retention of only a
single major clause element—a clause fragment (Frag). A
clause fragment may cooccur with peripheral clause elements or
may consist solely of a verbal particle and/or a preverb, a
noun phrase, a locative phrase, an adverbial phrase, or a tem-
poral phrase. Vocatives, exclamations, and responses (10.5-7)
are sometimes isolated like clause fragments.

  Hiáng. '(I) already (saw the tiger)' (vPt)

  Oh ta kai. '(The child) is unable (to climb into
   the house).' (vPt-pVb)

  Hiáng klei hã me. '(The woman) had already fin-
   ished (winnowing the rice) also.' (vPt-pVb,
   fPt)

va. '(I surely do) want (to go to Kontum).' (pVb)

Chó kia me. '(It was) the dog of that ghost.'

(bNP)

A chiak. '(They slept) in the field.' (PrepP)

Ti me. '(Sedang sing) like that.' (ManP)

Noi tiah hen mónge. '(The chest hairs sing) the

same as many people.' (SimP)

Ah ton ton ton ton. 'A long long long long time

afterward (it happened).' (TempP)

12.10 Onomatopoeia

Sounds of animals and activities are mimiced by phrases
which fit the phonology of the language though usually con-
sist of several (phonological) words.

drih drih drih -sound of drums and gongs

hnhek hnhek hnhek -sound of a hoarse voice

pok pok pok -sound of a clear voice

ro ko rop -sound of horses galloping

tutoah tutoah tutoah -sound of two people pound-

ing rice together

tutoah toah tutoah toah tutoah toah -sound of

three people pounding rice together

'ble 'bla 'ble 'bla -sound of thunder

12.11 Special descriptives

The verbal adjectives described in 7.1 are typically only one (phonological) word. There are other descriptives which because of their phonological and/or semantic complexity require specific mention.

Register contrastive descriptive pairs. Some special descriptive word pairs which contrast size differ only, or significantly, by phonological register. Words of the lax register represent the larger; words of the tense register represent the smaller.

khei	'red, of normal size'	(LR)
klei	'red, but very tiny'	(TR)
rómon	'large and black'	(LR)
rómon	'small and black'	(TR)
ró'buang	'large hole'	(LR)
ró'bo	'small hole'	(TR)
ró'biu	'tiny hole'	(TR)
tótia	'large flying squirrel'	(LR)
tótua	'small flying squirrel'	(TR)

Phonologically similar descriptive pairs. Some descriptive
word sets have significant phonological similarity, frequently
uncommon consonant clusters. If there is any morphological
significance herein, however, it has been lost and is seem-
ingly unrecoverable.

      hódreh 'big'

      hódreng 'little'

      mot 'enter (one person)'

      'mot 'enter (many people)'

      róduang 'a large, short elderly person, confined
          to one place'

      róduang 'a large, short young person, confined
          to one place'

      tóngroh 'a large, tall elderly sick person'

      tóngren 'a thin young person, not moving about'

      rónuang 'a large tall young person confined to
          one place'

      ró'nuak 'a large, tall young person moving about'

'muô   'a short and fat young person'

a'muh   'a short and fat elderly person, sitting
    down'

ahnhuh   'a short and fat elderly person, walking
    about'

ró'mok   'a tall, fat young person'

ró'mo   'a fat young person, average height'

<u>Reduplicative</u> <u>descriptive</u> <u>terms</u>.   Some special descriptives
consist of phonologically (partially) reduplicated words.

rê róng   -description of a fearful cry

'drun 'dra   -description of dense bamboo

glá gláng glá gláng   -desc. of leaves flying
    hither and yon

kó'blôu kó'blá   -desc. of place crowded with
    people'

nunit nunit   -desc. of slowly moving things, as
    the last person in a line, a frog, a duck

hnô hónôe   -desc. of gentle slope of hill

hódru hódra   -desc. of a long, single file

pólau póla pólau póla   -desc. of way fish move
    about

prêprêp prêprêp   -desc. of water leaking out
    quickly

rômie rômm   -desc. of very many people

ró'mak ró'mían -desc. of lots of blood

rótrê rótrúm -desc. of a child's temper tantrum

hrei hrui -desc. of being all out up with

scratches

'rè 'rò -desc. of complete destruction

12.12 Poetic form

Poetic form has been explored in Smith (1973c). The principal features of Sedang poetry are as follows.

The principal rhyme pattern is to rhyme the last word of a line with a non-final word in the succeeding line. Adjacent lines have a parallel semantic structure with one or more pairs of near synonyms or functional equivalents such that each of the two lines has the same (poetic) meaning. The basic metre is alternate stressed and unstressed syllables.

Nôu A-Nóang, ô nôu A-Nôang tópui róbak,
x - x - x - x - x - x

Nôu A-Jak tópui lo hen.
x - x - x - x

'A-Noang's mother, A-Noang's mother talks

all the time;

A-Jak's mother talks a lot.'

In the above example, róbak and A-Jak rhyme; "x" indicates stressed syllables, "-" indicates unstressed syllables. Noang and Jak are siblings.

CHAPTER 13 SENTENCE TYPES

13.0 Introduction

Sentences are the principal component of the next high-
er syntactic level, the paragraph (not included within the
scope of this dissertation). Sentences consist of a single
(independent) clause with or without dependent clauses
(13.1-5) and/or either a vocative (13.6) or an exclamation
(13.7). Responses (13.8) occur independent of further
clause structure but are dependent upon the preceding dis-
course.

Chapters 7 through 12 discuss the various elements of
clause structure. All clauses described and most of those
illustrated above are complete and structurally independent
of adjacent clauses. They are therefore complete fillers of
the next higher syntactic level as simple sentences.

There are other instances of independent clauses strung
together within a common intonation contour but without any
further structural interrelationship. Semantically such
clauses are closely related, frequently citing successive rapid
action. These concatenated clauses are each analyzed as
simple sentences.

There are clauses, however, which are not thus indepen-

dent but are structurally dependent upon another clause.
This chapter discusses five such complex sentence types
(13.1-5) which consist of more than one independent clause.
About 6-7% of all clauses in the sample text are elements of
complex sentences; or, 2-3% of all sentences are complex
sentences.

Most complex sentences have a dependent clause intro-
duced by a conjunctive (Conj) and an independent clause.

Vocatives (13.6) and exclamations (13.7) usually, though
not always, occur immediately preceding or following a clause
to which they are appended to form a sentence. Occurring
isolated, like responses (13.8), they constitute a sentence.

Some peripheral syntactic elements described in the chap-
ters above as being clause level elements may also be sentence
level elements, especially among the temporal phrases and
final particles. Ellipsis of repeated identical elements
(e.g. subjects, objects) within successive clauses becomes a
sentence level phenomenon.

13.1 Conditional sentence

A conditional sentence has a dependent clause which
states a "condition" and an independent clause which states
the consequence. The dependent clause usually, but not
always, precedes the independent clause. A conditional
(clause) conjunctive (CondConj) precedes the dependent
clause. The first two conditional conjunctives listed are

used most frequently:

    tang 'if'

    ching 'if, perchance', with explicit implication

       of improbable condition

    chóu, chu 'if'

The independent clause is sometimes introduced by the
temporal me 'then' (10.1).

    Tang eh mó'no pin tung vó kô hiä me ngin ja eh

       tróang hóda. 'If you put us out of the jar,

       we will show you the escape route.' (CondConj

       (T CL w mo-I Vb, fPt), (Temp, Ben T CL))

    Gá tómiat - tang á khén oh kô ah á ôh ta

       cha ka. 'He thought, "If I say no, later on I

       won't be able to eat (her)."' (Q CL(CondConj

       (Q CL (Resp))), (TempP, I CL w T Vb))

    Tang chuô tó pôi ta veh ôh. 'If you (my in-law)

       laugh, do not turn away.' (CondConj(I CL),

       (Imp I CL w S Vb, fPt))

    Tang eh ôh ta módreó ki gá kó gá hómun pia.

       'If you don't return these (things) of his,

       he will also fight.' (CondConj(T CL w mó-S

       Vb), (I CL w T Vb))

    Ching eh chai tung pólô ah á thé vai pólô

       kode eh. 'If perchance you return into the

       village in the future, I'll tell the villagers

to kill you.' (CondConj(S CL, fPt), (C CL w
Q Vb(T CL)))

Ching ti me eh lo. 'If perchance (it is) like that
you go out.' (CondConj(Frag:ManP), (I CL w S
Vb))

Pá ôh ta kai to tea tang ôh ta ai plong. 'We
two ean't cross the water if there isn't a
eanoe.' ((S CL), CondConj(Ex CL))

Ah phe ka tai ká tung tró tang a ton. 'Later
on the wildcat-like animal will eat all the
fish in the trap if I am (gone) long.' ((Temp,
T CL, QuanP, LocP), CondConj(Eql CL))

The independent clause may have an embedded dependent
clause apart from the conditional clause of this sentence
type.

Tang pin te cheng ôh ta ai vai va xua rôh nô
ko vai va to xé xo. 'If we (try to) sell
gongs there aren't any (who) want (them) be-
cause nowadays they want only vehicles.'
(CondConj(T CL), ((Ex CL), CausConj(TempP,
T CL, fPt)))

Some conditional sentences do not have a conditional
conjunctive but the semantic content and the intonational
relationship of the adjacent clauses indicate this sentence
type.

Eh ti loi u loi. '(If) you don't believe (then)
    that's all.' ((I CL w T Vb), (I CL w C Vb))

Eh hvang pókeang ki me ah chiang tea kan. '(If)
    you throw that powder (then) later on (it)
    will become a large river.' ((T CL w B Vb),
    (Temp, Eq3 CL))

Tuan gá va ti lai hlo ti me. '(If) his mind want-
    ed (something) somehow (then he) saw (it) like
    that.' ((I CL w T Vb, ManP),(I CL w C Vb, ManP))

Ai rói pin chai tung cha. '(If) there are flies
    (then) we will be sick in body.' ((Ex CL, (I CL
    w T Vb, LocP))

13.2 Causal sentence

The causal sentence has a dependent clause which states
a reason or "cause", and an independent clause which states
the consequence. The dependent clause usually follows the
independent clause, though the order may be reversed. The
causal conjunctives (CausConj) are:

> xua   'because'; cf. ContConj xua 'but' (13.3)
>
> la   'because'

da ko páng ródei klai xua gá pa xeang véang
    gá me. 'This one was quite strong because he,
    the father spirit, helped him.' ((Eq1 CL),
    CausConj(OEmp T CL w C Vb))

Xeang veang ga me xua vai oh tu va ga me.

'The spirit helped him because they didn't
want him.' ((T CL w C Vb), CausConj(T CL
w C Vb))

Nô kó ga hiang chiang kro xua A-Pia xo ga
pókeang me nah. 'Now he had become rich be-
cause A-Pia had previously gotten him powder.'
((TempP, Eq3 CL), CausConj(Ben T CL w C Vb,
fPt))

Pa Xou va lam tung kong ha xua pa va zo ka.

'Xou's father went into the jungle also because
father wanted to get fish.' ((S CL, fPt),
CausConj(I CL w C Vb))

Xua ti me pa Xou lam tung kong. 'Because (it
was) like that Xou's father went in the jungle.'
(CausConj(Frag:(ManP)), (S CL))

Dôh ga tói, "Chuô da dea lôi nô kó xua
nah a tang vai tói tang pin va ou drou
pôm pin thé dea lôi hódroi." 'His son-
in-law said, "You (father-in-law) continue to
pour (it) out now because once I heard them
say if we want to drink potato wine we must
pour (it) out first.' (Q CL(Imp I CL w T Vb,
Temp), CausConj(Temp, C CL w Q Vb(C CL w
Q Vb(CondConj(T CL), (I CL w T Vb, DesP))))))

13.3 Contrastive sentence

The contrastive sentence has an independent clause stat-
ing a situation or event followed by a dependent clause
positing a contrary or "contrastive" situation or event.
The dependent clause is introduced by a <u>contrastive con-
junctive</u> (ContConj). There are three contrastive conjunc-
tives:

xúa   'but, except'; cf. CausConj <u>xua</u> 'be-
         cause' (13.2)

me   'but, except'; cf. Dem <u>me</u> (7.1), Temp <u>me</u>
         (10.1), fPt <u>me</u> (10.4), ResConj <u>me</u> (15.5)

tóma   'but, except'

Gá thế kôm kuan me kia ki me va ka gá me ai.
       'He said to wait for the child but that ghost
       wanted to eat him soon.' ((C CL w Q Vb(T CL
       w C Vb)), ContConj(T CL, fPt))
Khen tang pôm rem hai rem hai xúa dreng
       pin ka ah ôh ta hlo ka pôm. '(You) say (you)
       go look for potatoes every day but when we
       eat later on we don't see (or) eat potatoes.'
       ((C CL w Q Vb(T CL), (TempP)x2), ContConj
       (TempSub(I CL w T Vb, Temp), T CL))
Nôngé trôi pin ra xúa gá kia. '(He is) a per-
       son just like us except he's a ghost.' ((Prag:
       (Co:(NP), SimP, fPt)), ContConj(Eql CL))

Xo gá hme tung díng lém xúa gá ôh tu va ka

    ôh. '(She) got him rice in a beautiful serv-

    ing dish but he did not want to eat.' ((Ben T

    CL w C Vb, LocP), ContConj(I CL w T Vb, fPt))

Prei mot trmam hmou xúa tea tôu nô kó pa.

    'The two entered the hole (in the) rock but

    (it's) hot water (=DakTo) now, dad.' ((S CL),

    ContConj(Frag(Co:(NP)), Temp, Voc))

Nah klé hiáng ka ro vai, tómm ôh ta cha. 'Pre-

    viously a tiger had killed their cow but (they)

    didn't catch (it).' ((Temp, T CL), ContConj(I

    CL w T Vb))

13.4 Concessive sentence

    The concessive sentence has an independent clause stat-
ing a situation or event conjoined to a dependent clause
positing an exception or "concession" to that which was or
will be stated. The dependent clause is introduced by the
concessive conjunctive (ConcConj) ma lua, lua 'though, al-
though, yet, despite, whether or not'.

    Ma lua móngé ôh ta róhôi, vai tói gá

        móngé ôh ta róhéa, tung hngei gá hórmm

        tómm ai tum khu ké ki me. 'Although some-

        one may not be smart and they say he's not

        capable, in his house there are also custom-

arily all those things (i.e. necessary tools).'

(ConcConj((Eql CL), C CL w Q Vb(Eql CL:(Co:

(Eql CL))))), (LocEmp Ex CL))

13.5 Resultant sentence

The resultant sentence has an independent clause stating
a situation or event conjoined to a dependent clause stat-
ing a "resultant" situation or event. The dependent clause
is introduced by the resultant conjunctive (ResConj) me 'so,
so that, thus'. Cf. Dem me, Temp me, fPt me, ContConj me.

Vai va kóde gà me gà hnói preó hlói. 'They

were about to kill him so he returned immedi-

ately.' ((T CL), ResConj(I CL w S Vb, fPt))

13.6 Vocatives

Vocatives (Voc) occur either before or after a clause
or independently. When before a clause, vocatives are sep-
arated by juncture from the clause and have a separate into-
nation pattern. When after a clause juncture may be elided
and the vocative may occur within the clause intonation pat-
tern.

Vocatives are either personal names (7.1), kinship terms
extended to encompass all associates (e.g. 'bok, Bahnar for
'grandfather', is used for foreigners and highly respected
officials), or a kinship term followed by the personal name.

Ô Ja. 'Oh grandmother.'

A-Pía. 'A-Pia.'

A-Pía, pó'lang eh hôu nò kó. 'A-Pia, good-bye
   now, okay?' (Voc, T CL, fPt, Temp)

Ja Tê Tôu, eh a hôm hlo Kóxet Tlua làm
   troang kó ai. 'Grandmother Te Tou, have
   you seen (the fellow) Koxet Tlua going on this
   path recently?' (Voc, C CL(S CL), fPt)

Á kó-ok kó pa. 'I have a cold here, dad.' (I
   CL, LocP, Voc)

13.7 Exclamations

Exclamations (Excl) usually precede the clause but may
occur independently. Exclamations include the following.

   a 'ah'

   brei, tóbrei 'boo', to express disapproval or
         glee over an enemy's misfortune

      Brei, brei, Teang hiang hla. 'Hurrah, hur-
            rah, Teang is dead.' ((Excl)x2, I CL)

   e, è -expresses pensiveness

   eh -attracts attention, expresses shock or de-
         sire to change one's mind; cf. fPt eh
         question marker

      Eh, ngán hôu. 'Hey, look here, okay?' (Excl,
            Imp I CL w C Vb, fPt)

Ěh, tang ti me eh làm hódróí neó èh.

    'Hey, if (it is) like that you go in

    front.' (Excl, CondConj(Prag:(ManP)),

    (I CL w S Vb, DesP, fPt), fPt)

ei -exclamation of ridicule

hàh, hèh, hêh, hôh -expresses surprise

i, ih -feminine fright

me -expresses resignation to a situation or

    indicates that an event has been completed

ǒ 'okay?'

ô -attracts attention, often precedes vocative

ô vêh -expresses dismay

ôi, ôih -expresses dismay

têh, teh -surprise, 'what on earth!'

    Têh, kóbó pôe rópôe kó ai? 'What! who

    cut the soapberry?' (Excl, T CL, fPt)

tet, têt -surprise, astonishment

    Tet ti lai kô ah. 'What on earth!' (Prag:

    (Excl, ManP, fPt))

13.6 Responses

Responses (Resp) are dependent syntactic elements in
that they are triggered by specific questions which are
understood to be answerable either (1) by a repetition of
the clause with substitution of appropriate particles or
(2) by a single response word. Response words do not other-

wise occur within clause structure but have the sole function
of a single word response. (Other single word responses may
be formed, of course, by ellipsis of all but the appropriate
element of a clause; response words are not the result of
ellipsis.) Response words form a small class which includes
the following.

eô 'okay', affirmative response to imperative

hôm 'yes', affirmative response to an a hôm
   yes-no question

khoh 'permitted, not taboo', affirmative response
   to an a hôm khoh 'is it permitted?' question

'nhiah, hai 'nhiah 'not yet', negative answer to
   an a hai 'yet?' question

ôu 'okay', affirmative response to a hôu imper-
   ative

ô-ôh 'no', negative response to an a hôm yes-
   no question

Any preverb (8.3) or the verbal particles hiang 'al-
ready' or ta hai (8.4) may form, by ellipsis, single word
responses.