The Evolution of
a Tibeto-Burman Pronominal Verb Morphology:
A Case-Study from Kham (Nepal)

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Kham is a Tibeto-Burman language spoken in the Dhaulagiri
and Rapti Zones of west-central Nepal by an estimated 30 or 40
thousand so-called "Magars" of the four northern subtribes--
the Bhuda, Gharti, Pun, and Rokha. Their ethnic identity with
the Magars may account in part for the reason why Kham was
never mentioned in the early literature.[1] To my knowledge, the
only available descriptions of the language are written either
by myself or in co-authorship with Nancy Watters, my wife.
Prior to our work which began in 1970 it appears that even the
mere existence of the language had been mentioned only twice
in the literature--first by the British Ministry of Defence
(1965:96), and later by Hitchcock (1966:4), though there may be
other references I am not aware of.

The Kham represented in this paper must not be confused
with the Kham spoken by the Khampas of Khams province in
Eastern Tibet, nor with the language of the semi-nomadic
Khampas who have inhabited Western Nepal for an indeterminate
period (Rai, 1973). To avoid ambiguity with either the Magars,
or with the Khampas, my wife and I, when referring to the
people as an ethnic community, have come to call them "Kham-

Magars" (Watters and Watters, 1973; Watters, 1975). We continue, however, to refer to the language itself as "Kham," which is the name used by the people themselves.

Typology.

Kham has loose lexical bonds with Shafer's West Central Himalayish Section (1966), composed of Chepang, Hayu, and Magar. Shafer observes that although the genetic relationship of these three languages is not so clear "they have more in common with each other than with any other language or group of languages." His classification appears to have been established purely on lexical grounds. Of these three languages, two of them, namely Chepang and Hayu, exhibit typical features of the complex pronominalized type languages of East Himalayish. That is, their verbal morphologies include personal affixes designating the person and number of both the subject and object (1st, 2nd, 3rd person X sg, dl, pl number X incl, excl for 1st dl and pl). In addition, they share in an *East Himalayish* trait which has been referred to as "participant ranking" in *Chepang* (Caughlev, 1973), and a "person hierarchy" in Hayu (*Michailovsky, 1974*). A *similar* system is attested for Bahing (Bauman, 1974). The systems are complex and each language has its own rules, but in general, only the dominant argument of a transitive verb is marked in the verb for person and number agreement. In the more complicated cases, the number of the recessive argument is marked as well, and in certain combinations, the person and number of both arguments is marked. In Chepang and Sunwar there is furthermore an overt morphological affix in the verb to indicate whether the dominant argument marked in the verb is a subject or an object. (For a brief

comparison of these two systems, see Hale and Watters, 1973).

Kham too has a complex pronominal verb morphology, but it cannot be said to share in the typical morphological features of East Himalayish as does Chepang and Hayu. In Kham there is no inclusive/exclusive distinction in the first person, nor is there a dominance hierarchy for marking person and number in the verb. In transitive verbs the person and number of both arguments is marked in the verb in all cases (even where one of the arguments is inanimate). Bauman (1974), on the basis of wide comparisons all across TB argued convincingly for the position that the complex pronominal verb morphology of the family "reverts to a feature of the proto-language." He was forced, however, to conclude that there are many deep-seated differences between Kham and the typical patterns found in other TB pronominalized languages. He notes that Kham "more than any other language seems to overstep the norms." For example, regarding the phenomena of tense/aspect concord in TB he is forced to the conclusion that "Kham seems to be a true exception at this point." Regarding object affixes, which in other TB languages typically have a high incidence of correlation with intransitive subject affixes, he is forced to eliminate Kham from consideration "by reason of its exceptional agglutinative approach to affixation." Regarding the predominate pattern of pronominal suffixation in his sample of languages, he is able to provide a rationale for the negligible cases of prefixing in other languages, but concedes to the fact that Kham "resists explanation on this as on other criteria."

I was of the opinion that the patterns of pronominal affixation in Kham were of sufficient divergence from the norm in TB as to be explained only in terms of an independent

innovation. Surprisingly, the verbal syntactic pattern of
affixation in Kham is S-V-O, a pattern which is found in Munda--
the group of languages which are most commonly proposed as a
substratal source for the pronominal verb morphology in TB.
Pinnow (1966) shows that the verbal syntactic pattern in Munda
can be traced to an earlier SVO order. Kham, however, is an
extremely well behaved SOV language (Greenberg 1963, Lehmann
1973, Kuno 1974) leaving no trace of having undergone a change,
and an earlier SVO word order must be rejected. Therefore, in
accounting for the 'odd' syntactic patterns in the Kham verb I
looked for internal motivations in keeping with SOV principles.
Recalling Cowgill's (1963) observation that the morphophonemic
complexity of affix classes in Indo-European is in direct pro-
portion to its antiquity, I considered the highly agglutinative,
almost isolating, verbal morphology of Kham of particular sig-
nificance. Cowgill proposed that, "Applied to non-Indo-European
languages (his) observation might help to determine the relative
age of different sets of affixes: the more morphophonemic alter-
nation a set shows or entails in adjoining morphemes, the longer
it is likely to have been in the language." What follows, then,
is the result of my pursuit to substantiate these assumptions
on the basis of a fairly detailed survey of other Kham dialects.
It is hoped that the study will positively benefit the whole
study of diachronic universals.

A Proposed Historical Development.

     After an investigation of other Kham dialects in May 1975
I was surprised to find that Kham does, in fact, have origins
in a native TB system such as that proposed by Bauman. The
reconstructed system very closely resembles those systems in

the Kanauri dialects of West Himalayish, in which only subject affixes are attached to the verb. Innovative processes at work in early Kham, however, resulted in morphological flipping such that affixes designating the subject came to be <u>prefixed</u> to the verb stem, and an original set of affixes designating the object came to be suffixed to the verb. The innovations have been so far reaching in Taka Kham (a Northwest dialect in which I had done all my previous study) that traces of an earlier system are almost entirely lost from view. I will demonstrate that these innovative processes have been closely associated with the underlying syntactic processes of ergativity, genitivization, and certain focus and thematic considerations. What follows is a step by step account of the evolutionary process involved in producing the modern system in Taka Kham.

Stage One--the Early Pronominal System.

A verbal paradigm from the Southwestern Kham dialect of Mhai suggests the following approximations for proto subject suffixes in the Kham verb:

	<u>sg</u>	<u>dl</u>	<u>pl</u>
1st	-ng	-ci	-e
2nd	-n	(?)	(?)
3rd	-o	(?)	-m

Figure 1. Proto subject affixes in the Kham verb.

The 1st dual form -<u>ci</u> was probably only a vestigial form even at the proto stage, but it at least shows a link with the native TB form which Bauman reconstructs as a possible *<u>si</u>.

My present assumption is that the inclusive/exclusive distinction was lost with the dual. Dual was again redeveloped independently. It is quite clear that the modern dual forms are recent. In the Bhuji dialect of NW Kham (which is the most conservative in terms of phonological change) the independent dual pronouns are ge nis 'we two' and je nis 'you two' (I am not sure of the 3rd dual pronoun). In Taka, the two forms have contracted to 1st 'gin, and 2nd 'jin. In Maikot of NW, the forms have further contracted to 1st gĩ, and 2nd jĩ.

There is no evidence to support a view that proto Kham had anything other than subject forms affixed to the verb-- much like the system in Kanauri. There are, in fact, a remarkable number of correspondences between the Kham and Kanauri pronominal verb affixes. According to Brandreth (1878) the Milchan dialect of Kanuri has: (he shows no dual forms)

	sg	pl
1st	-k	-e
2nd	-n	-en
3rd	-o	-e

Figure 2. The pronominal subject affixes in Milchan.

Furthermore, the suffixed pronominal forms of proto Kham have apparent links with the East Himalayish languages. For example, in EH, 3rd pl is often represented by mi/me, as in Limbu, Sunwar, Bahing, and Hayu.

There are other rather remarkable similarities between the pronominals of EH and those of WH (West Himalayish). In EH the common 1st sg pronoun employs some sort of velar stop,

as in gu, go, ko, ka, etc. In some of the languages there is
an oblique form (associated with the genitive) which typically
ends in -ng, as in kong (Sotang and Kulung), and kang (Dhimal).
Some of the languages, especially Khaling, have tended to
crystallize their pronouns in what appears to have been the
oblique form, with the result that the pronominal inflection is
no longer productive. The free pronoun in Khaling is ung. In
Central Kanauri of WH the inflectional system is still produc-
tive, and the genitive of 1st sg go is ang, which clearly re-
sembles EH. Far on the other end of the pronominal map is
Tiddim Chin with 1st sg ka, and a corresponding conjunct collo-
quial form -ing.

2nd singular is equally interesting. 2nd sg has two
competing forms--na, which is general in TB, and khe (and its
equivalents) which is general in the Bodish languages. In EH
the two forms occur compounded, possibly in what was an oblique
form, as in khene (Limbu), khana (Bantawa-Rai), and gyana
(Thulung-Rai). In those languages of EH in which the inflec-
tional system is still productive, as in Kulung, the form of
the oblique case is an. In Central Kanauri the nominative form
of 2nd sg is ka with a genitive kan. The conjunct pronominal
form is -an.

What I am suggesting is that perhaps the subject pro-
nominal verb affixes in EH, WH, and the Chin languages for
that matter, were introduced at some ancient time in the history
of TB when pronominal inflection was a productive process, and
that the verbal forms may be ultimately associated with the
genitive.[2] Khaling, more than any other language in EH, seems
to have crystallized its free pronouns in what may have at one
time been the oblique case. The free pronouns in Khaling are:

	sg	**dl**	**pl**
1st Incl.	ung	ici	ik
2nd	in	eci	en
3rd	am	amsu	amhim

Figure 3.   Personal pronouns in Khaling (Toba and Toba, 1975).

These pronouns bear striking resemblance to the verbal affix forms of Kham (and of Kanauri as well). In the following paradigm, I have taken the liberty to supply the 2nd dl and pl forms from Kanauri, since they are missing in my reconstruction of Kham.

	sg	**dl**	**pl**
1st	-ng	-ci	-e
2nd	-n	(-ec)	(-en)
3rd	-o		-m

Figure 4.   The verbal affix forms of proto Kham, with missing forms supplied from Kanauri.

Stage Two--3rd Person Object Affixes.

Stage 2 of pronominal verb affix development in Kham is the development of 3rd person object affixes. The development was controlled by, or closely associated with the ergativity system in Kham. My definition of ergativity follows that of Comrie (1973). In Comrie's 'ergative configuration' the subject of the intransitive verb and the object of the transitive verb are both in the unmarked case, while the subject of the transi-

tive verb is in the agentive or instrumental case. In the
'nominative configuration' the subjects of both the intransi-
tive and transitive verbs are in the unmarked (nominative)
case, which the object of the transitive verb is in the accus-
ative case.

Kham has a 'split-ergativity' system--3rd persons partic-
ipating in the ergative configuration, while 1st and 2nd persons
participate in the nominative configuration. The modern system,
however, has borrowed the accusative/dative marker -lai from
Nepali which is optionally applied to the object of transitive
verbs, thereby weakening the notion of ergativity. The early
accusative marker (used on 1st and 2nd person objects) was
probably -na, a morpheme still used in some modern dialects of
Kham. Due to the areal influence of Nepali, however, even -na
has a distribution analagous to the Nepali -lai. These facts,
however, do not prevent me from positing a true ergative con-
figuration for 3rd person in early Kham. Bailey (1909) observes
for Central Kanauri that the accusative is generally the same
as the nominative. He further observes that the agentive case
is not used for intransitive verbs, but "nouns which are the
subject of transitive verbs are in the agent case for all
tenses. 1st and 2nd personal pronouns are in the nominative
case. Pronouns of the 3rd person are in the agent case for
past tenses, otherwise they are in the nominative."

It is precisely this kind of a system--one of split-
ergativity--which would breed the pattern found in Kham of
prefixing 3rd person objects to the verb stem. The ergative
configuration being restricted to 3rd person, 3rd person pro-
nominal objects were in the unmarked case and came to be
appended to the verb stem as prefixes. 1st and 2nd person

object pronouns were not appended to the verb for the simple
reason that they participated in the nominative configuration,
and thus had an intervening accusative case marker between the
personal pronoun and the verb stem.[3]

It appears that the redevelopment of the dual distinction
(which had been generally lost) had already occurred prior to
the appendage of 3rd person pronouns. Immediately following
the free 3rd pl pronoun 'ya, the numeral 'nis 'two' was added,
and this was later contracted to 'yani 'they two.' In contra-
distinction to the new dual form, a new 3rd pl was developed
utilizing the nominal pluralizing morpheme -ra (in competition
with -ng). This resulted in 'yara which is current in some
dialects, or yang which is current in others. Singular 'ol
was never appended to the verbal complex, its absence being
sufficient to establish contrast.

It is clearly evident that 3rd person object verbal pre-
fixes were, in fact, at one time free, isolable forms from
their present day phonological shape. The prefixes still re-
tain something of their inherent tones, so that the combination
of prefix + stem in these cases is exactly analagous to the
tone compounding of compound nouns.[4] True prefixes are atonal,
that is, they receive their tonal characteristics from the stem
to which they are attached. Thus, the affixation of 3rd person
objects is of sufficient antiquity for tone compounding to have
occurred, but not of such antiquity that the morphemes have
lost their tonal identity.

The modern 3rd person pronouns are really more demon-
strative in character than what we normally think of as pro-
nouns, two of the forms being often deictic in nature, and the

third form being a sort of anaphoric pronoun whose antecedent is an indefinite relative pronoun (jo, a Nepali loan), as in:

    'ao   'this person'
    'no   'that person'
    'ho   (as in 'whoever drinks poison, he will die')

At the end of Stage 2, pronominal verb morphology in Kham included all persons suffixed as subjects (from Stage 1) and 3rd persons prefixed as objects.

$$\left.\begin{array}{c}\text{'yara-}\\ \text{'yani-}\\ \emptyset\end{array}\right\} \text{ stem + tense-} \left\{\begin{array}{l}\text{all}\\ \text{subjects}\\ \text{suffixed}\end{array}\right.$$

Figure 5. Pronominal verb morphology in Kham at the
end of Stage 2.

Stage Three--the Origin of Modern 1st and 2nd Person Pronominal Verb Affixes.

a) 1st and 2nd Person Subject Affixes.

Kham, in keeping with basic SOV characteristics, has no native relative pronouns, but instead makes use of relative participles. Proto Kham had two relative participial constructions. One (henceforth the 'subjective participle') was formed by adding -o to verb roots. As such, it made unique reference to the subject of the relativized clause (either as an adjective or as a nominalization), as in:

    ja:h-o 'mi: 'the man who put it down'
    ja:h-o   '(he) who put it down'

but NEVER:

        *ja:h-o 'ri:h   'the water which was put (poured)'

The so-called 'adjectives' are formed in the same manner in Kham, from a special semantic class of attributive verbs, as in:

        gyo:h-o 'mi: 'the man who is big, the big man'
        gyo:h-o   '(he or that) which is big, the big one'

There is evidence of a second relative participle in proto Kham which was formed by adding -s to verb roots. As such, it made unique reference to the object of the relativized clause (henceforth, the 'objective participle'). The passive form of this participle was -si-s, which also made unique reference to the object, but without any implicit reference to a subject. Bailey (1915) describes a passive or stative participle in Lower Kanauri which ends in -shi-s, the passive alone being -shi. Thus, the passive of yong-mu 'to nourish' is yok-shi-mu 'to be nourished,' and the passive participle is yok-shi-s 'nourished one.' He does not report a participial -s being attached to verb roots without its being conjoined to the passive (unless the verb is stative). I am, however, positing such a structure for proto Kham.

These relative participles functioning in or as NPs were subject to NP derivations. Most notably, the non-passive objective participle (in which an agent was implied) was subject to a possessive derivation with the underlying subject (agent) of the relativized verb being viewed as the possessor. That is, in the participle, agent is related to the action in a way analagous to the relation of possessor to possessed item.

Thus, comparing an actual noun with the nominal objective
participle, we have the following:

> 'nga: nga-
> 'je: je-   'ja: (jug)
> 'ol o-   poh-s (hitting)
> 'ya: ya-

being translated as: 1) 'the jug of my, your pl, his, their
ownership,' which is analagous to 2) 'the one of my, your pl,
his, their hitting.'

The assertion that the pronominal prefixes on the non-
passive objective participle are, in fact, possessive pronouns
receives strong support from their phonological identity with
the possessive pronouns occurring with nouns. Prefixed 1st and
2nd person (sg and pl) possessive forms, whether attached to
nouns or to the objective participle, are atonal. That is,
phonological compounding does not occur with these prefixes.
Their tonal behavior is determined by the inherent tone of the
stems to which they are appended.

3rd person dl and pl possessive prefixes, on the other
hand, are tonal, forming compounds with the stems to which they
are attached. The 3rd singular prefix o-, however, is atonal,
patterning after the 1st and 2nd person prefixes. My point is
that even though the tones are irregular from one person form
to the next, they are nevertheless invariant across nominal and
verbal stems--supporting the view that they are, in fact, one
and the same.

I should also mention that the 1st and 2nd person dual
forms 'gin- and 'jin-, respectively, do not pattern after the

other 1st and 2nd person forms, but have the same tonal charact-
eristics as 'ni. This is due to the fact that they have devel-
oped from the contraction of ge'ni and je'ni ('we two' and 'you
two'). The original ge- and je- were atonal, but by combining
and contracting with the following 'ni they picked up its tonal
characteristics.

b)   1st and 2nd Person Object Affixes.

Schachter (1973) shows that there are striking formal
similarities between constructions involving restrictive rela-
tive clauses and certain focus constructions such as the cleft
sentence. The relationship is valid not only for English, but
for many other unrelated languages. Schachter's observation is
valid for Kham as well and helps clarify the origin of 1st and
2nd person object affixes. The non-passive objective participle
discussed above is equivalent to an English restrictive relative
clause of the type, 'the one whom I saw.' True to form, the
construction in Kham has as one of its basic optional trans-
formations a cleft-like construction. The cleft sentence has
no surface copula as in English, consisting instead of two
conjoined NPs, the first of which expresses 'given' informa-
tion, and the second 'new' information (Halliday, 1967). Thus,
where the objective participle participates in such a cleft
construction, the participle itself serves as one of the two
NPs, and its referent or antecedent (the object) is invariably
the other NP. Where the object is a personal pronoun, the
order is objective participle + object pronoun, the relative
being given information and the object complement new, as in:

a) 'nga: nga-⎤
b) 'nxng nx- ⎬ poh-s
c) 'no-e o- ⎦

⎧ a) 'nga:
⎨ b) 'nxng
⎩ c) 'ge:

where a)→ b) is 'nga: nga-poh-s 'nxng 'the one of my hitting
is you' ('the one I hit was you,' or 'you are the one I hit'),
and c)→ a) is 'no-e o-poh-s 'nga: 'the one of his hitting is
me' ('the one he hit was me,' or 'I am the one he hit').

Although in early Kham this was an optional syntactic
process, the process became frozen into a morphological unit
through its invariant order and recurrent usage (the modern
cleft is a slightly modified form). The object pronominals
came to be incorporated into the complex and *phonetic assimila-
tion* occurred in the following way:

	Thabang	Taka	
s-'nga:	-sxng	-'na	(fronting of velar nasal)
s-'nxng	-sxn	-'ni	
s-'je:	-ci	-'ci	(devoicing in both dialects)
s-'ge:	-si	-'si	(prefix pre-emption in both

dialects--a very common occurrence in Kham, especially where
s- precedes a velar consonant, as in PTB s-kyur> Kham syur
'sour,' PTB s-g-la > s-gya >Kham sya 'moon,' etc.).

It is of considerable significance that these object
pronominal affixes ('na, 'ni, 'sin, 'cin, 'si, 'ci) though
morphologically bound and syntactically frozen, are, phonologi-
cally speaking, still separate words. A phonological word, it
will be recalled, consists of a stem pitch and a suffix pitch.
I noted earlier that certain pronominal prefixes (notably 3rd

person prefixes), by tonal assimilation, were 'welded' onto the verb stem in such a way as to form phonological compounds. With the verbal pronominal forms presently under discussion, however, no such assimilation has taken place. The tones on these forms are <u>stem</u> pitches. In such cases, the <u>suffix</u> pitch which inherently follows the verb stem collides with the pro-nominal <u>stem</u> pitch, and tone *perturbation occurs.*

After the assimilation of the participial marker -<u>s</u> with the object pronominal forms, the other relative participial -<u>o</u> apparently came into usage on these forms. Although the earlier <u>form</u> of contrast between subjective and objective participles (-<u>o</u> vs. -<u>s</u>) was lost, the distinction itself was <u>not</u> lost. In current usage, where the relative is preceded by a possessive pronoun, the relative uniquely refers to the object of the rel-ativized verb, otherwise it uniquely refers to the subject, as in:

o-poh-o   '(that) which he struck'
poh-o   '(he) who struck it'

In an earlier analysis of Kham (1973a) I referred to the objective participle as the "passive verb form" since when functioning at a clause level the syntactic object was invari-ably fronted in the sentence to thematic position (OSV), as in:

'ao   'zihm ram-e   o-'jxy-o   'this house was
this   house Ram-agt he-built-it   built by Ram'

Where the objective participle functions in this manner, however, the construction consists of the following constituents:[5]

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'ao 'zihm     /     ram-e o-'jxy-o       Ø
Subject              Pred-nominative     Copula
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It is not possible for the agent to function in thematic position for the simple reason that it is tied syntactically to the participle as possessor. As a result, its semantic content is very similar to the English passive. Its literal meaning is something like, 'this house is of Ram's building.'

In a later analysis (1973b) I discovered that this particular verb form when used in an active word order (SOV) performs a very interesting function in the organization of narrative discourse. In that special function, I referred to the verb form as the "orientation" verb form (to contrast it from the regular "narrative" form I will refer to it henceforth as such). Its function could still be referred to as a relativizing one perhaps, but instead of functioning relative to NPs, it functions relative to a whole discourse. A narrative discourse typically starts off with a complete sentence (in active order) whose final verb is in orientation (or objective participial) form. It sets the stage of the narrative by orienting the hearer to the spacial and circumstantial setting in which the narrative takes place. In stories of more than one 'episode' it will occur again to "reset" the stage. It also occurs occasionally within an episode to give the hearer certain information needed for the interpretation of particular events (but which does not belong to the series of events itself). It is as though the speaker steps out of the story momentarily to insert relevant background information.

Stage Four--Metamorphosis.

Before the developments of Stage 4 began, pronominal morphology on verbs was such that "orientation" verbs (from the objective participle) were complete in their affixation of pronouns designating both subject and object. Pronouns designating the subject were prefixed, and those designating the object (except 3rd person) were suffixed. In the regular "narrative" form verbs, however, the affixation of object pronouns was not complete. All subject pronouns were suffixed (a trait retained from the proto-language), and only 3rd person object pronouns were prefixed (from Stage 2). This created a curious 'polarity' between the syntactic arrangement of narrative forms versus orientation forms, such that in orientation verbs the syntactic arrangement was:

sub-verb-obj

and in narrative verbs,

obj-verb-sub

where only 3rd person pronouns occur in the object slot.

Since the orientation verb was contrastively complete in its affixation of pronouns designating both subject and object, and narrative verbs were complete only in case there was a 3rd person object, a linguistic 'osmosis' took place in which 1st and 2nd person object forms were copied from the orientation verb into the incomplete narrative verb. Later, once the precedent of copying orientation forms into the narrative verb had been established, even the prefixed subject forms (from Stage 3a) were copied into the narrative verb. Finally, the original

suffixed subject forms dropped off and the metamorphosis was complete. Thus, what began as an osmotic process ended in a move towards symmetry. Following is an illustration of the various steps of Stage 4 as it applied in the Taka dialect. (In the examples poh 'hit' will be used as a representative verb stem, and 'kx/'ke 'past' will be used as a representative tense).

narrative form	orientation form	commentary
poh 'kx-ng		Stage 1--finite narrative verb inflected for person and number--here 1st sg.
	poh-s	The non-passive objective participle
	nga-poh-s	Stage 3a--possessive prefix corresponding to agent prefixed to nominalized verb.
	nga-poh-s 'je:	Stage 3b--object referent of the objective participle functioning in cleft constr.
	nga-poh-'ci	The syntactically frozen cleft construction with phonetic assimilation.
	nga-poh-'ci-u	Addition of relativizing affix--modern orientation form.
poh-'ci 'kx-ng		Stage 4a--copy of 1st and 2nd person object markers into narrative verb.
nga-poh-'ci 'kx-ng		Stage 4b--copy of prefixed subjects. A move towards symmetry.
nga-poh-'ci-'ke		Stage 4c--loss of old subject marker. Modern narrative form.

Notice from the illustration above that in early Kham the tense-person complex 'kx-ng was an isolated phonological unit separated from the verb stem (this is clear from the modern shape of the tense affix in Taka). Thus at the 4a object-copy stage, the unit poh-'ci was transposed wholesale into a position preceding·the tense-person unit.

Next I will illustrate a sample evolution from Taka where the subject is 1st or 2nd person and the object is 3rd person. (In the preceding sample, both subject and object were from 1st or 2nd person categories).

narrative form	orientation form	commentary
poh 'kx-ng		Stage 1--finite narrative verb inflected for person and number--here 1st sg.
'yara-poh 'kx-ng		Stage 2--appendage of 3rd person object pronouns.
	poh-s	The non-passive objective participle.
	nga-poh-s	Stage 3a--possessive prefix corresponding to agent prefixed to nominalized verb.
nga-'ra-poh 'kx-ng		Stage 4b--copy of prefixed subject. The syllable ya is replaced by new subject. (Note that 4a is not relevant here).
nga-'ra-poh-'ke		Stage 4c--loss of old subject marker. Modern narrative form.
	nga-'ra-poh-o	The modern orientation form.

Where the subject and object are both 3rd person, the evolution in Taka was as follows:

narrative form	orientation form	commentary
poh 'ke-m		Stage 1--finite narrative verb inflected for person and number of subject-- here 3rd pl.
'yara-poh 'ke-m		Stage 2--appendage of 3rd person object pronouns.
'yara-poh-'ke-rx		A change in the form of 3rd pl subject from m to rx. The modern narrative form.
	'yara-poh-o	The modern orientation form.

In the Southwestern Kham dialect of Mhai, the metamorphosis of narrative verbs is not nearly so complete as it is in Taka and other Northwestern dialects, and therefore offers some valuable clues as to the intermediate steps in Stage 4--thus substantiating my claims for the proposed evolutions in the three samples above. In Mhai, all forms (except those with 2nd person subjects) which were contrastively complete at the end of Stage 2 for person and number of both subject and object (i.e. 1st and 3rd person subjects with 3rd person objects) underwent no further change. Thus, in Mhai we have:
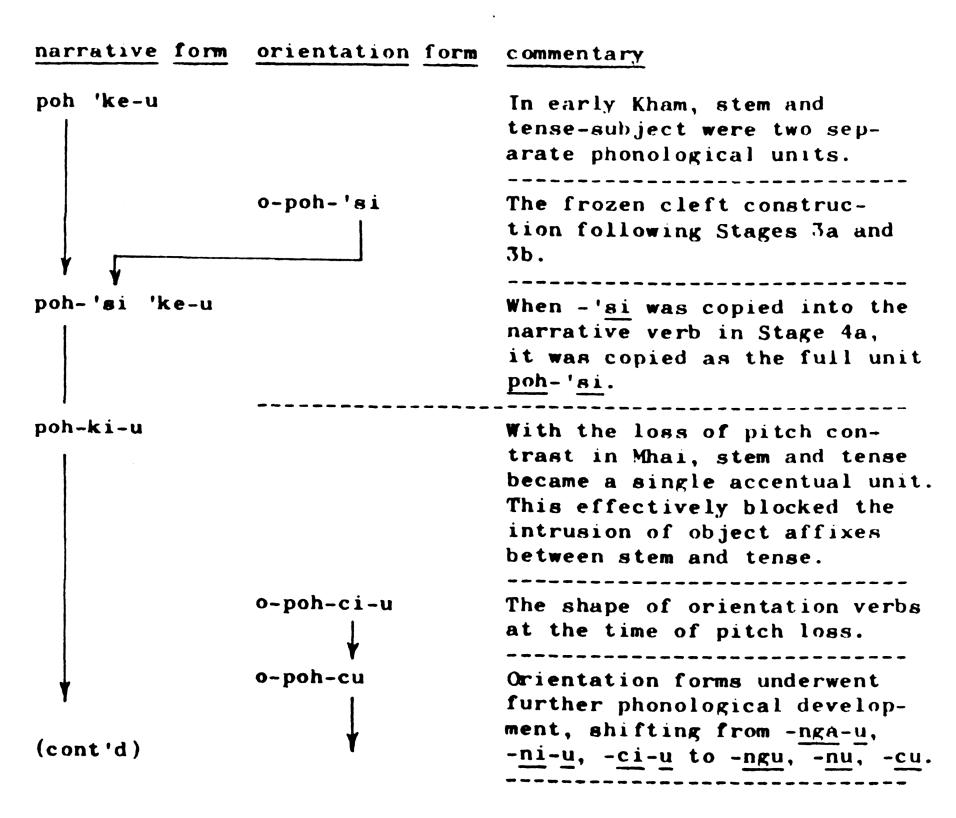
Object ➘		3rd Person		
Subject ➘		singular	dual	plural
	sg	poh-kx-ng	yan-poh-kx-ng	yara-poh-kx-ng
1st	dl	poh-kx-ci	yara-poh-kx-ci	yara-poh-kx-ci
	pl	poh-k-e	yara-poh-k-e	yara-poh-k-e
	sg	poh-k-u	yan-poh-k-u	yara-poh-k-u
3rd	dl	poh-ki-ni	yan-poh-ki-ni	yara-poh-kx-m
	pl	poh-kx-m	yara-poh-kx-m	yara-poh-kx-m

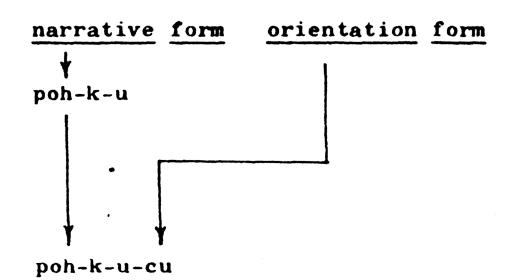Figure 6.   1st and 3rd person subjects with 3rd person
objects in Mhai.

In Mhai, the metamorphosis of Stage 4 began as it did in
Taka--perhaps before the split between NW and SW dialects--
an osmotic process in which non-3rd person object affixes were
transposed from orientation verbs into the incomplete narrative
verbs.   Strangely, however, in the early stages of Mhai evolu-
tion only 1st pl -'si was transposed into the narrative verb.
Other 1st and 2nd person object forms were delayed and trans-
posed into the narrative verb at a much later date--in a decayed
form and in a different syntactic position.   Consider the
following examples, the first two of which illustrate forms
with the 1st pl -'si (which was transposed early), and the rest
of which illustrate other objects:

Taka	Mhai	
poh-si-ke-o	poh-si-k-u	'he hit us'
poh-si-ke-rx	poh-si-kx-m	'they hit us'
poh-ni-ke-o	poh-k-u-nu	'he hit you'
poh-ci-ke-o	poh-k-u-cu	'he hit you pl'
poh-na-ke-o	poh-k-u-ngu	'he hit me'

In Taka, the object affixes in the example (-si, -ni, -ci, -na) all follow the verb stem in a systematic way. In Mhai, however, after the introduction of -si, the pattern of affix-ation changes. The reason for this shift is likely to be accounted for in terms of a loss of contrastive pitch distinc-tions in Mhai. As mentioned earlier, it is obvious from Taka that tense was formerly an isolable morpheme, for it still carries an inherent stem pitch. In the southern sub-dialects of NW, however, contrastive pitch is generally absent. This may or may not be the case for Mhai which is in the same general area. Assuming it to be true, as I suspect, the evolution of objects pronominals in Mhai would have been as follows:

narrative form	orientation form	commentary
poh 'ke-u		In early Kham, stem and tense-subject were two sep-arate phonological units.
	o-poh-'si	The frozen cleft construc-tion following Stages 3a and 3b.
poh-'si 'ke-u		When -'si was copied into the narrative verb in Stage 4a, it was copied as the full unit poh-'si.
poh-ki-u		With the loss of pitch con-trast in Mhai, stem and tense became a single accentual unit. This effectively blocked the intrusion of object affixes between stem and tense.
	o-poh-ci-u	The shape of orientation verbs at the time of pitch loss.
	o-poh-cu	Orientation forms underwent further phonological develop-ment, shifting from -nga-u, -ni-u, -ci-u to -ngu, -nu, -cu.
(cont'd)		

(cont'd from preceding page)

narrative form	orientation form	commentary

poh-k-u

The earlier two morphemes ki-u contracted into a single syllable -ku analagous to the development of i-u forms in the orientation verb.

----

poh-k-u-cu

The later developed object forms -ngu, -nu, -cu, etc. (from preceding page) were copied into the narrative verb in their decayed form following the accentual unit of stem + tense. This form of object copy occurred only where the subject was 3rd sg. In all other cases the blockage of Stage 4a was total.

Notice that where object incorporation took place early (which is true of all objects in Taka, and true only of -si in Mhai) the pronominal forms si, ni, ci, na/nga had not yet undergone phonological decay in the orientation forms and were copied into the narrative verbs in a phonological stable position and thus protected from phonological change. Their stability in the narrative verb apparently tended to arrest their change in the orientation verb as well. Thus, we have -si-u in both Mhai and Taka, but -na-o, -ni-u, and -ci-u only in Taka. In Mhai they are -ngu, -nu, and -cu respectively. The following examples illustrate the orientation forms:

Taka	Mhai	
o-poh-na-o	o-poh-ngu	'he hit me'
o-poh-ni-u	o-poh-nu	'he hit you'
o-poh-ci-u	o-poh-cu	'he hit you pl'

In the full development in Taka, and only in the incipient
stages of Mhai, the order of development in Stage 4 was:
a)   incorporation of object affixes (linguistic osmosis),
b)   copy of prefixed subject affixes (a move towards
     symmetry,
c)   loss of old subject suffixes.

In Mhai, the blockage of step a) greatly hampered the
development of pronominal affixes in the narrative verb.   The
new order switched to:
a)   copy of prefixed subject affixes
b)   loss of old subject suffixes
c)   incorporation of object affixes in the position
     previously occupied by old subject affixes.

The only forms in Mhai which have successfully completed
the new cycle are those in which the subject is 1st person and
the object is 2nd person.   It is fairly obvious that the new
cycle began its initial stages immediately after the blockage
of the original Stage 4a.   Notice the following forms:

nga-poh-kx-n   'I hit you'
nga-poh-kx-cin   'I hit you dl'
nga-poh-kx-ci   'I hit you pl'

gin-poh-kx-n   'we dl hit you'
gin-poh-kx-cin   'we dl hit you dl'
(same as 1st pl)   'we dl hit you pl'

ge-poh-kx-n   'we hit you'
ge-poh-kx-cin   'we hit you dl'
ge-poh-kx-ci   'we hit you pl'

From these forms it is obvious that the trend in Mhai of attaching pronominal object forms <u>after</u> tense was already in force. It also seems safe to assume that these 2nd person object pronominals were incorporated into the narrative verb before their phonological decay in the orientation verbs, for the forms are -<u>n</u>, -<u>cin</u>, and -<u>ci</u> (not -<u>nu</u>, -<u>cinu</u>, or -<u>cu</u>). At the time of affixation they were probably -<u>ni</u>, -<u>cini</u>, and -<u>ci</u>, later reduced to the present forms through the loss of -<u>i</u> (the -<u>i</u> was retained on -<u>ci</u> because -<u>c</u> *is not a possible final* consonant in Kham). With the loss of the vowel -<u>i</u> in the narrative forms, resistance to change was lost in the orientation forms as well, leaving the following forms:

nga-poh-nu	'I hit you'
nga-poh-cinu	'I hit you dl'
nga-poh-cu	'I hit you pl'

The final forms to consider are those in which the subject is 2nd person. These forms have developed only as far as Stage 4a in the new scheme (for Mhai). That is, they have accomplished the copy of prefixed subjects, but have not yet lost the old subject suffixes (subject is redundantly marked). Thus, what was formerly:

poh-kx-n	'you hit him, me'
poh-si-kx-n	'you hit us dl, pl'
yan-poh-kx-n	'you hit them dl'
yara-poh-kx-n	'you hit them'
poh-kx-cin	'you dl hit him, me, us dl'
yan-poh-kx-cin	'you dl hit them dl'
yara-poh-kx-cin	'you dl hit them'

poh-kx-ci	'you pl hit him, me'
poh-si-kx-ci	'you pl hit us dl, pl'
yara-poh-kx-ci	'you pl hit them dl, pl'

has currently become (after the copy of prefixed subject):

nx-poh-kx-n	'you hit him, me'
nx-poh-si-kx-n	'you hit us dl, pl'
nx-na-poh-kx-n	'you hit them dl'
nx-ra-poh-kx-n	'you hit them'
jin-poh-kx-cin	'you dl hit him, me, us dl'
jin-nx-poh-kx-cin	'you dl hit them dl'
je-ra-poh-kx-cin	'you dl hit them'
je-poh-kx-ci	'you pl hit him, me'
je-poh-si-kx-ci	'you pl hit us dl, pl'
je-ra-poh-kx-ci	'you pl hit them dl, pl'

Presumably, the next development we may expect is the loss of the old subject affixes, and finally the incorporation of the object affixes in the position formerly occupied by the subject affix. Who knows? We may live to see some of it!

Conclusions.

My treatment of Kham pronominal verb prefixes recalls to mind Konow's treatment of such prefixes being basically possessive pronouns modifying an underlying noun. Similarly, Maspero (1948) concluded that "the pronoun designating the subject was considered a determinant of the verb and, taking the same form and the same place as the determinant of the noun (possessive), was prefixed to the verb. The pronoun designating the

object was considered a complement of the verb and was suf-
fixed to the verb. A verb having both an agent and an object
was placed between the prefixed subject and the suffixed
object."

Apparently, both Konow and Maspero based their con-
clusions on the syntactic similarities between nouns and verbs.
Konow, attempting to explain how these two very different syn-
tactic classes could be so similar, jumped to the conclusion
that the TB verb was basically a noun. Any syntactic similar-
ities between nouns and verbs in Kham, however, are linked
historically through an intermediate form--the nominalized
verb or objective participle--and it would be utterly wrong
to assert that the verb itself has nominal characteristics.[6]

Footnotes.

[1] The Magars are a tribe of recognized ancient standing in
West Nepal, and their name was adopted not only by Kham
speakers, but also by other ethnic communities in the west
whose languages are obviously of the Gurung Branch (e.g.,
the Chantel Magars, and the Tarali Magars).

[2] In the face of Darai (south-central Nepal) and related
languages, this is not at all an unlikely possibility. Pro-
nominal verb affixes in Darai clearly resemble the possessive
pronouns suffixed to nouns (Kotapish and Kotapish, 1975).
Emeneau (1965) shows related phenomena in Iranian, Indo-Aryan,
and even Dravidian. Although these languages are unrelated
to TB there may be implications for areal or typological uni-
versals not yet understood.

3 Actually, more central to the argument is the fact that -na,
the accusative marker, has an affixial status, and when attached
to noun stems it allows for the completion of the word tone
(word tone being composed of a stem pitch and a suffix pitch--
see footnote 4). The accentual unit or phonological foot
being complete, compounding is not free to occur. With the
pronouns 'yara and 'yani, on the other hand, only the stem
pitch was realized on the pronoun itself, the suffix pitch
coalescing with the following verb stem. Such is the phenomenon
of word compounding.

4 Tone in Kham, like tone in other Nepalese TB languages, is
a word phenomenon. Word tone in Kham has the further complex-
ity of being neatly divided into a stem pitch and a suffix
pitch (two phonetic pitches to a single toneme). Thus, the
full tonal potential of a word is realized 'ideally' only if
the word stem (any number of syllables) is followed by a mor-
phological suffix, as in:

   'zihm-kx   'at the house' (Tone 1--high stem, low suffix)

   ka:h-lai   'to the dog' (Tone 2--falling stem, rising suff.)

   If, on the other hand, in a given sequence, the word stem
is not followed by a morphological suffix, a tone collision
occurs. The suffix pitch associated with the first stem coa-
lesces with the stem pitch of the following stem, causing tone
perturbation, as in:

   'mi: 'cyu:-ke-o   'he looked at the man'

where the low Tone 1 suffix pitch associated with 'mi: occurs
on top of the high Tone 1 stem pitch of 'cyu:, causing the
phonetic pitch of 'cyu: to be mid.

In compounds, two stems harmonize in such a way that tone collision no longer occurs. The inherent tone of either stem, however, is still retrievable. This can be seen in the following set of examples:

a) ka:h'ma cyu:-ke   'look at the bitch!'

b) ka:h'ma-lai cyu:-ke   'look at the bitch!'

The inherent tone of the first member in the compound (ka:h 'dog') determines the tone of both syllables in the compound (i.e. the stem pitch of the compound), but only in case there is no suffix attached to the compound. The second stem of the compound ('ma 'female') determines the tone of the word (stem and suffix), but only in case there is a morphological suffix attached. Thus in a) the compound word ka:h'ma manifests a Tone 2 stem pitch because Tone 2 is the inherent tone of ka:h, and the compound is not followed by a suffix. In b), on the other hand, the compound is followed by the suffix -lai. Thus, the second member of the compound, 'ma, which is inherently Tone 1, determines a Tone 1 suffix pitch for the suffix -lai. Since there is only one possible tone per word (stem pitch + the associated suffix pitch), the whole word (stem and suffix) manifests Tone 1 in its two parts.

5 That this is an equative copular construction can be seen by negativizing the construction. Although the positive equative copula is a 'zero' morpheme, the negative is ma:hkx, as in:

'ao ram-e u-'zihm ∅   'this is Ram's house'

'ao ram-e u-'zihm ma:hkx   'this is not Ram's house'

kewise, with the objective participle:

'ao 'zihm ram-e o-'jxy-o Ø
'this house is of Ram's building'

'ao 'zihm ram-e o-'jxy-o ma:hkx
'this house is not of Ram's building'

Chomsky (1970) identifies two nominal types in English--
erived nominals,' and 'gerundive nominals'--on the basis
at only derived nominals have full NP characteristics. The
jective participle in Kham is a nominal of derived nominal
atus in terms of its derivational potential. Its functions
rallel those of an NP, including subject, object, locative,
edicate nominative, etc., and may take any of the NP case
rkings. It can be possessed, and takes negative and plural
rkers associated only with NPs. None of these processes
e applicable to verbs, and only some of them are applicable
 the gerundive. For example:

ntactic function/	objective part.	gerundive	verbal
minal negative	yes	yes	no
minal plural	yes	yes	no
cusative	yes	yes	no
minative	yes	no	no
entive	yes	no	no
ssessive	yes	no	no
cative	yes	no	no

References.

Bailey, T. Grahame. 1909. A brief grammar of the Kanauri
language. ZDMG 63:661-687. Reprinted in Studies in
North Indian Languages (London, 1938).

_____. 1915. Introduction to Lower Kanauri. Linguistic
studies from the Himalayas. London. Reprinted by Asian
Publication Services (New Delhi, 1975).

Bauman, Jim. 1974. Pronominal verb morphology in Tibeto-
Burman. Linguistics of the Tibeto-Burman Area, ed. by
Jim Bauman and Graham Thurgood. Vol 1, No 1:108-155.
Berkeley.

Benedict, Paul K. 1972. Sino-Tibetan: a conspectus. Cambridge:
Cambridge University Press.

Bieri, Dora. 1975. Is Sunwar a pronominalized language?
Kathmandu: S.I.L. (mimeo).

_____ and Marlene Schulze. mms. Clause patterns in Sunwar.

Brandreth, E.L. 1878. On the non-Aryan languages of India.
JRAS:1-32.

British Ministry of Defense. 1965. Nepal and the Gurkhas.
London: Her Majesty's Stationery Office.

Caughley, Ross. 1973. Participant rank and verbal cross
reference in Chepang. Kathmandu: S.I.L.

_____. 1975. Chepang pronominalization. Kathmandu: S.I.L.
(mimeo).

_____. mms. Clause patterns in Chepang.

Chomsky, Noam. 1970. Remarks on nominalization. Readings in
English transformational grammar, ed. by Jacobs and
Rosenbaum. Waltham Mass: Blaisedell.

Comparative Vocabularies of Languages of Nepal, ed. by Burkhard
Schöttelndreyer. Kirtipur: S.I.L. (mimeo).

Comrie, Bernard. 1973. The ergative: variations on a theme. Lingua 32: 239-253.

Cowgill, Warren. 1963. A search for universals in Indo-European diachronic morphology. Universals of language, ed. by Joseph H. Greenberg. Cambridge: M.I.T. pp91-113.

Emeneau, Murray. 1965. India and historical grammar. Annamalai University Publications in Linguistics 5, Annamalainagar.

Greenberg, Joseph H. 1963. Some universals of grammar with particular reference to the order of meaningful elements. Universals of language, ed. by Joseph H. Greenberg. Cambridge: M.I.T. pp 58-90.

Hale, Austin and David Watters. 1973. A survey of clause patterns. Clause, sentence, and discourse patterns in selected languages of Nepal, ed. by Austin Hale and David Watters. (S.I.L. Publications in Linguistics and Related Fields No 40). Part II, pp 175:249. Norman: Summer Institute of Linguistics.

Halliday, M.A.K. 1967. Notes on transitivity and theme in English, Part 2. Journal of Linguistics 3: 199-244.

Henderson, E.J.A. 1957. Colloquial Chin as a pronominalized language. Bulletin of the School of Oriental and African Studies 20: 323-327.

Hitchcock, John T. 1966. The Magars of Banyan Hill. Case studies in cultural anthropology, ed. by George and Louise Spindler. Stanford.

Hodg son, Brian H. 1874. Essays on the languages, literature and religion of Nepal and Tibet. London. Reprinted Varanasi: Bharat-Bharati, 1971.

Holzhausen, Anna. 1973. Kulunge Rai clause types. Nepal Studies in Linguistics I, ed. by Austin Hale. Kirtipur: S.I.L. and I.N.A.S. pp 15-26.

Kotapish, Sharon. 1973. Darai cases. Nepal Studies in Linguistics I, ed. by Austin Hale. Kirtipur: Summer Institute of Linguistics and Institute of Nepal and Asian Studies. pp 27-38.

Kotapish, Carl and Sharon. 1975. A Darai-English, English-Darai glossary. Kirtipur: Summer Institute of Linguistics and Institute of Nepal and Asian Studies.

Kuno, Susumu. 1974. The position of relative clauses and conjunctions. Linguistic Inquiry Vol 5, No 1:117-136.

Lehmann, W.P. 1973. A structural principle of language and its implications. Language, Vol 49, No 1: 47-66.

Linguistic Survey of India. 1909. ed. by George Grierson. Calcutta: Superintendent of Government Printing.

Maspero, Henri. 1948. The affixation of person pronouns in the so-called 'pronominalized' Himalayan languages, tr. by F.S.V. Hale. (From notes sur la morphologie du Tibeto Birman et du Munda, BSL 44: 158-185).

Michailovsky, Boyd. 1974. Hayu typology and verbal morphology. Linguistics of the Tibeto-Burman Area, ed. by Jim Bauman and Graham Thurgood. Vol 1, No 1: 1-26. Berkeley.

Pinnow, H.-J. 1966. A comparative study of the verb in the Munda languages. Studies in comparative Austroasiatic linguistics, ed. by Norman H. Zide. The Hague: Mouton.

Rai, Nabin Kumar. 1973. Khampa: ek ardha bhramanashila jati. Contributions to Nepalese Studies, Vol 1, No 1: 64-75. Kirtipur: Institute of Nepal and Asian Studies.

Schachter, Paul. 1973. Focus and relativization. Language, Vol 49, No 1: 19-46.

Shafer, Robert. 1966. An introduction to Sino-Tibetan. Wiesbaden: Harrassowitz.

Toba, Ingrid. 1973. The Khaling verb. Nepal Studies in Linguistics I, ed. by Austin Hale. Kirtipur: SIL and INAS.

Toba, Sueyoshi and Ingrid. 1975. A Khaling-English, English-Khaling glossary. Kirtipur: SIL and INAS.

Watters, David E. 1971a. Kham phonemic summary. Tibeto-Burman phonemic summaries - X. Kathmandu: S.I.L. and Tribhuvan University. (mimeo).

_____. 1971b. A guide to Kham tone. Guide to tone in Nepal part III. Kathmandu: SIL and Tribhuvan University. (mimeo).

_____. 1973a. Clause patterns in Kham. Clause, sentence, and discourse patterns in selected languages of Nepal, ed. by Austin Hale. (Summer Institute of Linguistics Publications in Linguistics and Related Fields No. 40). Norman: Summer Institute of Linguistics. Part I, pp 39-202.

_____. 1973b. Speaker-hearer involvement in Kham. Kirtipur: Summer Institute of Linguistics.

_____. 1975. Siberian shamanistic traditions among the Kham-Magars of Nepal. Contributions to Nepalese Studies, Vol 2, No 1: 123-168. Kirtipur: Institute of Nepal and Asian Studies.

Watters, David and Nancy. 1973. An English-Kham, Kham-English glossary. Kirtipur: SIL and INAS.