

Grammaticalized Verbs in Lolo-Burmese

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Summary Below I will present an analysis of a set of verbs in Burmese which concatenate with each other and with full verbs to form complex predicates which themselves function as unitary predicates in simple sentences. These complex predicates I will call V*'s and the process which forms them 'verb incorporation.' Okell has called these verbs auxiliary verbs¹ and has characterized them as those elements which "precede clause-markers in verb clauses" and "occur in compounds following a wide variety of other verbs." I will attempt to demonstrate that this set of over fifty verbs can be further subcategorized into five groups, which form a sloppy hierarchy of increasing grammaticalization, a trait whose definition will take into account boundness, the presence or absence of complements and complementizers in underlying structure, the possibility of direct negation, flexibility of scope, and surface ordering. I will show that there is a degree of semantic coherence to these predicates and their subcategorizations, and suggest several ways in which their semantic properties might be linked to their grammaticalized syntactic behavior. I will also claim that there is a degree of arbitrariness in the subcategorizations--that the behavior of the system cannot be predicted from semantic facts alone. Where appropriate, I will compare analogous verbs and processes in Lahu and Lisu.

A linguistic problem of long standing has been that of determining the category membership of morphemes in a given language. This aspect of grammar writing has always been complicated by the dynamic processes of language change, through which elements become relexicalized and regrouping takes place among the form-classes of the lexicon. Often category labels such as noun, verb, auxiliary, particle, and so on have been bandied about with little concern for careful definitions, or transferred in a Procrustean way from one language to another with insufficient attention to language particular formal and functional criteria.

There has been a resurgence of interest of late in questions of category membership and categorial change, particularly among verbs. Arguments have been presented for the separation or coalescence of modals and auxiliaries and main verbs.² Work on serial verbs and co-verbs in some African languages and Chinese has led to proposals that verbs have undergone categorial change into prepositions or particles.³

The Lolo-Burmese languages, as well as other languages of the Tibeto-Burman group, evince verb categories of a particular sort.

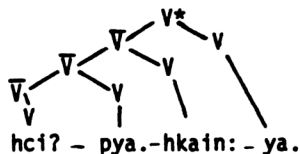
Certain subsets of the complement-taking verbs of these languages (many but not all of these can occur alone as main verbs--a point to which I will return below) suffer reduction of their complement structures and concatenate into tightly bound strings of verbs into which neither NP arguments nor any other morphemes can intrude (for behavior of the negative and complementizers see below). As Matisoff puts it in his grammar of Lahu(henceforth LG), "the Tibeto-Burman languages in general, and Lahu in particular, are remarkable for the apparent ease with which two or more verbs may be strung together or concatenated to form complex verbal nuclei."⁴

I will call these verbs 'incorporable verbs' to emphasize the tightness of the bonds which link them, and the process which creates these strings 'incorporation'. 'Compound verbs' seems incompatible with the complexity and non-coordinateness of their internal structure. The strings themselves I will refer to as V*'s, partly for brevity's sake and partly because the strings themselves seem to function as unitary predicates--complex words--in simple sentences.

Loosely speaking, then, incorporation is a process by which the predicates P, Q, R, S , say, of a set of embedded propositions with additional arguments x, y, z (I attempt to mirror OV syntax in these logical forms): $(((((x)S,y)R,x)Q,w)P)$ are extracted and fused into a single complex predicate $S-R-Q-P$ with arguments x, y, z : $((z,y,x)S-R-Q-P)$. For example,⁵

- (1) ahpwa:ci:-kou hci?-pya.-hkain:-ya.-te
 old lady-OBJ scrape-show-ask-must-PRT.
 "(I) had to ask the old lady to show (me) how to scrape (it)."

contains the V* hci?-pya.-hkain:-ya. consisting of the full verb hci? 'scrape', and the three incorporable verbs pya. 'show (how)', hkain: 'ask', and ya. 'must'. The pronominal arguments are optionally expressed in most sentences, but if they were there, they could not intrude into any part of V*, but would rather be found strung out along with ahpwa:ci:-kou 'old lady' in initial position in a relatively free order. In other words, the relatively simple structure of the sentence, roughly (NP)(NP) NP V*-PRT, belies its complex logical form, which is reflected only in the internal structure of V*, which is not coordinate, but rather has the constituent structure



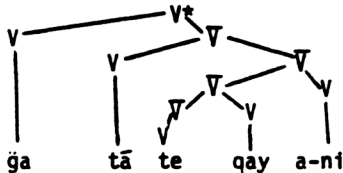
correctly reflecting the scopes of the various predicates which have

been incorporated.

An example from Lahu of even greater complexity is⁶

- (2) nà ġa-tā-te-qay-ani-ve-yò
 I must-begin-do-continue-try-PRT.-PRT.
 "I will have to begin trying to continue doing this."

which contains a V* ġa-tā-te-qay-ani consisting of a full verb te 'do', two left-incorporating verbs (a category not found in Burmese to which I will return later) ġa 'must' and tā 'begin', and two right-incorporating verbs qay 'continue' and a-ni 'try', along with an additional argument nà 'I', 'this' being unexpressed. The basic sentence structure NP V*-PRT-PRT is quite similar to (1), and again the complex logical form is reflected only in the internal structure of V* which, due to the presence of the left-incorporated predicates, displays ambidextrous branching:



Not all elements of V* behave identically. Previous grammatical treatments of these verbs have differed with respect to both the number of subcategorizations proffered and the differentiating criteria employed. Okell, in his Reference Grammar of Colloquial Burmese (henceforth BG), has taken a broad approach, making no formal divisions amongst the V* elements (bound morphemes occurring between the head, or 'lowest', verb and the clause marking particle (e.g. te in (1) above)), but rather simply noting peculiarities of behavior as they occur. He calls the V* elements 'auxiliary verbs' and characterizes them as follows:

Among other compound verbs there are some which contain verbs (relatively few in number) that occur in compounds following a wide variety of other verbs--in fact virtually any other....When these very productive verbs occur in compounds they are called 'auxiliary members' or simply 'auxiliary verbs', and the compounds containing them are called 'auxiliary compounds'. (BG p. 25)

Cornyn and Roop⁷ propose two categories where Okell has one: 'auxiliary verbs', which "function both as full verbs and as modifiers immediately following full verbs," and 'secondary part-

icles', which are "bound forms which follow the verb and precede final particles." Aside from the use of 'immediately', which presupposes incorrectly that there can be only one 'auxiliary verb' in any given V*, the significant aspects of this categorization are first, the decision to deny verbhood to some V* elements, and second, the use of boundness, or inability to occur alone as a full verb, as a differentiating criterion. In fact, roughly forty percent of V* elements do not have full verb homophones, but the application of this diagnostic is quite problematic from a methodological point of view, owing to the fact that the mere presence of a full verb homophone does not guarantee 'non-boundness' in the absence of a consideration of the semantic relatedness between the homophones.

Matisoff, in LG, distinguishes five subcategories among the V* elements of Lahu, basing himself on both "distributional and semantic criteria." He distinguishes 'pre-head versatiles', which I have referred to above as 'left-incorporated verbs'; 'juxta-capitals', which occur directly after the head verb; 'medials', a semantically heterogeneous open class which are mutually exclusive; 'caudals', which are very abstract in meaning and occur in final position in V*'s; and 'variables', which are aspectual in nature and have great 'concatenative freedom'.

Before presenting my classification of the V* elements for Burmese, two caveats are in order. First, the hierarchy below does not constitute a claim about diachronic development, i.e. that given incorporable verbs are changing categorially through time in any direction along the hierarchy. More comparative-historical work is required before claims of this kind can be substantiated. The hierarchy is simply an indication, synchronically speaking, of 'verbiness', an arrangement of groups of V* elements in such a way as to place the most verb-like elements at one end (Group I) and the most particle-like elements at the other (Group V). Second, these subcategories are not neat, and the idiosyncratic behavior of a number of verbs remains unresolved. Some order has been imposed upon the chaos, but reclassifications and further subcategorizations may very well be necessary, if not major revisions. The system is not perfectly static, and the amount of dialectal and idiolectal variation in the location of particular elements along the hierarchy is unclear. The classification scheme is presented in diagrammatic form below:

	I	II	III	IV	V
V* element	X	X	X	X	X
Free scope	X	X	X	X	
+ Complement	X	X	X		
+ Complementizer	X	X			
Nominalized complement	X				

E.g.,

Group I: kaun: 'enjoy Xing', nei 'be(loc.), progressive', pi: 'finish Xing'
ya. 'manage to X'

Group II: a?, htai?, lau? 'should X', kaun: 'wise, advisable to X'

Group III: ci. 'try to X', hnain 'able to X', pya. 'show how to X'
la: 'come to X'

Group IV: sei 'cause X', hcin 'want to X', pyan 'return to X, X again',
ye? 'have the heart to X'

Group V: lein: 'likely that X', thei: aspect, pa politeness, pei
'euphonic'

Elements of Groups I-IV have 'free scope', that is their order in V^* determines the semantic interpretation of scope, which in Burmese always proceeds from right to left. Hence in (3)

- (3) pa?wun:cin-ahla.-ha aei:-dan-kou mei.-thwa:-sei-lau?-pa-te
surrounding-beauty-SUBJ cold-damage-OBJ forget-go-cause-enough-
polite-PRT

"The beauty round about was enough to make (one) forget the severe cold."

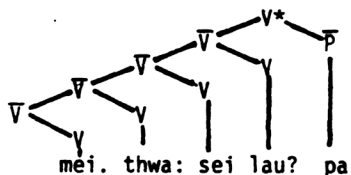
the scope relations are ((((mei.)thwa:)sei)lau?). Moreover, the predicates occur in various permutations, with corresponding changes in interpretation. Elements of Group V, on the other hand, are fixed in their ordering, much like the English modals and verb auxiliaries. They occur in more or less the order⁸

(hya)(pa)(EUPH)(sei)(lein)(ASP)(sou.)

where EUPH refers to a set of euphonic elements whose meaning, if any, is unclear, ASP refers to a mutually exclusive group of aspectuals, and sei is not the causative, but a 'third singular imperative'. One can formalize this distinction between Group IV and Group V by a miniature phrase structure grammar of V^* :

$$V^* \longrightarrow \bar{V} \hat{\ } (\bar{P}) \ ; \ \bar{V} \longrightarrow (\bar{V}) \bar{V} \ ; \ \bar{P} \longrightarrow (\text{hya}) \hat{\ } (\text{pa}) \hat{\ } (\text{EUPH}) \hat{\ } (\text{sei}) \hat{\ } (\text{lein}) \hat{\ } (\text{ASP}) \hat{\ } (\text{sou.})$$

where differences in interpretation of scope of Group IV predicates (as well as predicates of Groups I-III in incorporated form) are reflected in differences in dominance relations and the frozen, essentially parallel relation among Group V predicates is reflected in a coordinate structure with fixed ordering slots, all optional. So the structure of the V^* in (3) would be, e.g.,



Elements of Group IV must occur in incorporated form. Elements of Groups I-III can occur in incorporated form, but may also govern complements. The complements of incorporable verbs of Groups I and II are marked by overt complementizers, lou. and hpou., respectively. The evidence for complements in the case of Group III predicates is indirect, as we will see below.

Ordinary complements in Burmese may be nominalized (NP-S) or not (S). Nominalized complements cooccur with noun particles like the object marker kou. S complements do not. For example, many emotive factives and perception verbs take NP-S complements marked by ta (actually a noun meaning 'thing'), e.g.,

- (4) pin.-thwa:-nei-ta myin-hke.
 take-go- prog.-CMP see-back
 "...see (them) taking (them)..."

where myin 'see' has the complement pin.-thwa:-nei marked by the complementizer ta. Verbs of saying, thinking, and other non-factives take S complements marked by the 'root' complementizers, such particles as te, me, pi, hpou:, etc. (root because they also mark the superordinate V* in independent clauses, as in e.g., (1)). An example of complements of this type is the double embedding in (5):

- (5) yu:-te-mya: htin-ma-la: mā-thi.-hpou:
 mad-CMP-vague think-CMP-PRT not-know-CMP
 "I don't know whether they would think me mad or something."

which contains the complement yu: marked by the complementizer te, embedded under htin 'think', in turn embedded under thi. 'know'. These S complements do not cooccur with noun particles, with the possible exception of verbs like tu 'be similar' whose complements seem to be marked by the noun particle ne. 'instrumental' and yet also by root complementizers:

- (6) pye?-thwa:-pi-ne. tu-te
 go wrong-go-CMP-inst. be similar-CMP
 "It looks as if (it) has gone wrong."

If one examines now predicates of Groups I and II, it turns out that they can occur either in incorporated form or with complements,

nominalized and marked with the complementizer lou, in the case of Group I verbs, S complements marked with hpou, in the case of Group II verbs. Hence the Group I predicate ya 'manage' can occur unincorporated, as in e.g., (7a); or incorporated, e.g., (7b).

- (7a) sa:- lou.-kou mā-ya.-hpu:
eat-CMP-OBJ not-manage-CMP
"I didn't manage to eat."

- (7b) sa: - mā-ya.-hpu:
"I didn't manage to eat."

And the Group II verb lau? 'be enough' similarly, e.g. (8a,b).

- (8a) ahku.la.hka.ne. sa:-hpou. mā-lau?-hpu:
with present eat-CMP not-enough-CMP
salary
"His present salary is not enough to live on."

- (8b) ahku.la.hka.ne. mā-sa:-lau?-hpu:
"His present salary is not enough to live on."

Note the presence of the object marker in (7a), kou, as well as the change in position of the negative ma from (8a) to (8b), to which we will return later.

It is also the case that non-incorporable full verbs can occur with precisely these same complements, e.g., the emotive with the NP-S complement in (9) and the verb of ordering with the S complement in (10):

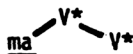
- (9) yei hcou:-lou. mā-wa.-hpu:
water bathe-CMP not-be satisfied-CMP
"(I)don't feel(I) have had a satisfying wash."

- (10) maun: hpyou?-hpou. pyo:-te
gong take -CMP tell-CMP
down
"(He) told (me) to take down the gong."

Hence these complements are not peculiar to incorporable verbs, which differ from full verbs only by occurrence in incorporated form.

Group III predicates present the most classificatory difficulties. The negative ma in simple sentences is attached immediately before the verb. If V*'s function as unitary predicates, as I have claimed, then one would expect ma to be attached immediately before them, which we might formalize as Chomsky-adjunction to V*:

Negative Attachment



This is in fact the case with most V*'s. Note, for example, the change in position of the negative in (8b), which would follow automatically from a formulation of this kind, after lau? and sa: were incorporated into one V*. But I deliberately included example (7b) because there ma is not initial, but rather appears to be an 'interior daughter' of a V*, modifying ya., not sa:. The question then is: has incorporation actually taken place in (7b), with the negative then 'moving in' to, if you will pardon the expression, glom on to ya., or is it simply the case that we have no incorporation, that the complementizer lou. has been deleted, but the NP-S complement structure remains and we have two V*'s masquerading as one? It seems that initial attachment of ma is always possible, even in sentences like (7b). But when the complementizer is not present Group I verbs are quite often directly negated. The importance of this issue for the classification of Group III verbs lies in the fact that these verbs, though never governing complements marked by overt complementizers, are precisely those verbs which are capable of direct negation, even when apparent interior daughters.

If indeed we have two V*'s, then we expect the alternations in position of the negative to correspond to alternations in the scope of negation--one V* versus another, the V* of the embedded complement versus the V* of the matrix sentence. If, on the other hand, we have one V* with the negative 'moving in', then we are dealing with a kind of 'Neg-raising' phenomenon, with the difference, however, that many of the verbs involved, particularly those of Groups I and III, are not typical neg-raising predicates.

The evidence in BG does not support a difference in meaning for the negative alternations. Okell cites, e.g., the pair

- | | | |
|------|--------------------|--------------------|
| (11) | <u>ma-yu-thwa:</u> | <u>yu-ma-thwa:</u> |
| | not-take-go | take-not-go |

as having the same meaning "not take away." There is still a possibility that there are real differences in usage between the alternative members, but that the semantic distinctions, due perhaps to the nature of the predicates involved, are not readily accessible to introspection. There is some comparative evidence to support this view from Lahu and Lisu. In LG, Matisoff claims that "the position of ma depends on both the particular verbs involved and the precise shade of meaning." Take for example a V* negation pair from Lahu which is quite similar to (11):

- | | | |
|------|------------------|------------------------------|
| (12) | <u>mā bəʔ</u> ce | "doesn't even try to shoot" |
| | not shoot down | |
| | <u>bəʔ mā</u> ce | "shoots but it doesn't fall" |
| | shoot not down | |

It is fair to point out, however, Matisoff's caveat in this regard: "many informants stoutly deny that there is any meaning difference at all."

In Lisu¹⁰ we find such semantic oppositions as

- (13) jye4 ma5 hchi4 "need not go"
 go not need
 mi5 ma5 ye3 hchi4 "don't need to cultivate"
 not need

If further research on these V* negation pairs in Burmese uncovers evidence for differences in the scope of negation similar to those which appear to be operating in (12), then this would support the two-V* hypothesis, in which the differing position of the negative depends upon whether it is the complement verb or the matrix verb which is negated, with Group III verbs being negatable because they actually do have S complements(unmediated) in constituent structure.

The one-V* hypothesis essentially claims that the position of the negative is a function of particular verbs only. We would not then expect to find a correlation between the verbs which allow neg-raising of this kind and sets of incorporable verbs defined by any other criteria, since the movement of the negative would be a purely isolated phenomenon. But in fact we do find such correlations. The verbs of Group II, those which take S complements marked by *hpou*., though of course negatable in unincorporated form, are rarely or never negated in incorporated form. If incorporation were an obligatory consequence of complementizer deletion for these verbs, this fact would follow. Semantically, many of these verbs are of the normal neg-raising type. Consider for example the Group II predicate *kaun*: 'wise, advisable to X' and the fundamental synonymy of "It is not advisable that X" and "It is advisable that not X." This might partially account for the development of obligatory incorporation with these verbs, since the alternating positions of the negative would be devoid of functional significance. (It should be pointed out however, that for some verbs of Group IV, which are never negatable, this is not the case, e.g., *sei* 'cause')

A second correlation involves us in a thorny area of Burmese juncture: initial consonant voicing. This rule voices initial obstruents in most phonological environments(obstruents remain unvoiced after stoptone syllables, that is vowels followed by strong glottal stops), provided the boundary between the voiceable segment and the preceding syllable is sufficiently weak. It is undoubtedly an over-simplification to say that the weakest boundary blocking this rule is the word boundary. Okell notes that several degrees of juncture may be required in Burmese phonology, and that voicing alone cannot be a necessary and sufficient criterion for wordhood (that is to say, the absence of voicing in a voiceable segment alone signalling a preceding word boundary):

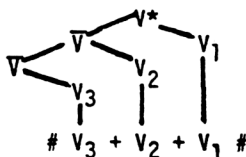
For analyses in which a definition of 'word-limits' is indispensable, juncture features must of course be a primary consideration, but they need to be supplemented by other criteria of a more formal nature than those suggested by Minn Latt. Much may be expected from further investigation of tonal patterns, stress, and intonation;

....It may well emerge that a single distinction between units in close juncture forming a 'word' and units in open juncture forming separate 'words' is not enough. It may be more satisfactory to recognize a greater variety of types of links, and so to establish several types of combined unit, some of them occupying intermediate positions between the tight 'compound word' and the loose 'phrase'.

However making this simplifying assumption, namely, that there are two boundaries '+' and '#' and that voicing operates across the former but not the latter, has interesting consequences in light of my earlier claim that V*'s are words. The simplified version of the voicing rule would then be:

Initial Obstruent Voicing [+obs] → [+voi] / $\begin{matrix} V & + \\ [+stop] & \text{---} \\ \text{tone} & \end{matrix}$

Now if V*'s are words, then a typical three element V* would be supplied with boundaries as follows:



Hence one would expect that interior elements of V*'s like V₂ would voice their initial voiceable obstruents, and that initial elements like V₁ would not.

It turns out that verbs of Groups IV and V, those highly grammaticalized elements which never take complements and are always in incorporated form, behave in just this way. It also turns out that verbs of Groups I and II, when preceded by complements marked with the complementizers lou. and hpou., are not voiced. This is also expected in the above analysis, since the verbs in this situation are not incorporated, hence the initial (or only) elements of V*'s and preceded by word boundaries. But interestingly, verbs of Group III generally do not have voiced initial obstruents in appropriate phonological environments, even when they are apparently interior elements of a V*. Furthermore, when verbs of Groups I and II undergo complementizer deletion, verbs of Group I do not voice but verbs of Group II do. Put another way, one can say that there is a high negative correlation between negative attachment and initial consonant voicing: just those verbs which allow direct attachment of ma in the appropriate contexts do not undergo voicing in those same contexts.

In a one V* analysis with a 'neg-raising' rule, these voicing facts would be completely idiosyncratic. Particular verbs would have to be marked for whether or not they voiced when interior daughters of V*. Furthermore, these same verbs would have to be marked as 'neg-raising verbs' and the correlation between the two phenomena would not be captured. In the two V* analysis, however, these facts would follow automatically. Group II verbs would voice after complementizer deletion because of their obligatory incorporation and would not be negatable for the same reason. Group I and Group III verbs, due to the retention of their complements, would not voice and would be negatable.

This cannot be taken as conclusive evidence for the two V* hypothesis, because the correlation mentioned above is not perfect and because of the simplifying assumption about boundaries which is not independently motivated. There is still a residue of irregularity. But I think the above analysis is suggestive, and it is to be hoped that a better understanding of Burmese juncture and semantics will improve it.

To what extent can the formal properties of the above sub-categorizations be associated with semantic characteristics? We have already seen that the verbs of Group II, which undergo obligatory incorporation after complementizer deletion and hence are not negatable in incorporated form, cluster, with one or two exceptions, around the meaning "should, ought, advisable" and thus occupy an intermediate position on a strength scale of deontic (obligation or permission-based) predicates ranging from "permit, may, can" at the weak end to "must, need, etc.," at the strong end. This intermediate position characterizes many of the classic neg-raising predicates. In the words of Horn, a leading authority on neg-raisers:

What is common to all NR predicates is the relative slimness of the functional difference between the pre-raised form with lower neg and the logical form with neg taking wide scope.

It may be that this semantic characteristic caused, or at least failed to hinder, the development of obligatory incorporation with these predicates, since 'pernicious ambiguity' would not result. On the other hand, some universal non-neg-raisers are also not negatable, like *sei* 'make, cause'.¹³ Furthermore, if we look at the comparative evidence, it becomes apparent that many functional equivalents and/or cognates diverge in their negatability. For example, Lahu *pi* 'give', a benefactive in V*'s, never undergoes *ma* attachment, but Burmese *pei:*, with the same meaning, is a Group III verb and hence is often found with *ma*, as in

- (14) reidiyou pyin ma-pei:-hnain-hpu:-te.
 radio mend not-give-able-PRT-PRT
 "(He) says (he) can't mend the radio for (me)."

In Lisu, V* ability modals like hwa'lye3, hku4, ku', wa3 tend to be negatable by ma5, whereas ability modals in Burmese like hnain, a: are not. So we find¹⁴

(15) ngwa4 ye3 ma5 ku' "I can't do it."
 I do not can

 wu4 ma5 hku4 "can't buy it"
 buy not can

Complementizer deletion with verbs of Groups I and II has the effect of preventing the modification of the complements by particles. The complements must be mediated by a complementizer in order for additional particles to be added. This is reminiscent of the well-known stunted tense and adverbial systems of certain kinds of infinitival complements in Indo-European languages, but it is difficult to see how this follows from any concrete semantic characteristics of the V* verbs as against full complement taking verbs, though it is certainly true that V* verbs are more 'abstract' in some sense. One rather well-defined property of a healthy majority of incorporable verbs, however, is that they are 'same-subject verbs'. In other words, for these verbs, the subjects of their complements must be coreferential with the subjects of the verbs themselves (compare, e.g., the ill-formedness of English *I managed for John to go, *I tried for John to go, *I was able for John to go, etc.). Another group of V* predicates are characterized by having their complement as their only argument, e.g., kaun: in the meaning 'likely to'. The ultimate effect of both of these properties is that when verbs of this type are incorporated together into one V*, there are not too many distinct NP arguments hanging around. As we saw earlier, incorporation is a process which extracts predicates from multiply embedded propositions, fuses them into a tightly bound string, and leaves the arguments behind. In Matisoff's more elegant description, two 'hemistiches' are created, one containing a string of loosely associated NP's (and other elements), the other a string of tightly bound verbs. This, coupled with the fact that word order does not mark case relations in Burmese, and that the case-marking system is minimal, suggests that if incorporable verbs were all multi-place predicates with no constraints on arguments, a most perniciously ambiguous situation would obtain, with numerous possibilities of association between NP's in the first hemistich and verbs in the V* hemistich. So it seems reasonable that just those verbs with the abovementioned constraints should be the incorporable ones. But exceptions strike again, and there are a number of V* verbs like pya. 'show how', hkain: 'ask', which are not same-subject verbs.

A third formal property of incorporable verbs is that which distinguishes Group IV and Group V: frozen word order. Again examining comparative evidence uncovers a good deal of arbitrariness. Lahu has a group of V* verbs which have no formal counterparts in Burmese, the 'left-incorporating verbs' or 'pre-head versatiles'. Unlike incorporable verbs in Burmese, these verbs incorporate to the left

of the initial or lowest 'head' verb and have scope proceeding from left to right rather than from right to left as in e.g., (2) above. But the crucial characteristic of these verbs, which number thirteen, is that they must occur in a fixed order to the left. Moreover, these fixed-order strings are not multiply ambiguous as to all possible permutations of scope, but rather can only express the scope relations embodied in the left to right sequence imposed. Because of constraints on space, I will not elaborate on or justify my analysis of these verbs, which has them taking ve complements in normal position and obligatorily undergoing a cyclical inversion rule after ve deletion with a blocking condition sensitive to the identity of the 'receptor' verb after inversion and incorporation to ensure correct ordering. This analysis has the advantage of correctly predicting the 'sentence recastings' required to express scope relations not embodied in the fixed order imposed on the verbs in incorporated form. The important fact at present is that several of these verbs, e.g. ga 'have to', la 'ask', ga? 'return, again', although frozen in Lahu, are the rough semantic equivalents of verbs which are free in Burmese, namely ya 'have to', hkain 'ask', pyan 'again'. So again this casts some doubt on the possibility of accounting for the behavior of these verbs on the basis of their semantic properties.

FOOTNOTES

1. Many of the Burmese examples below are from J. Okell's excellent and richly exemplified A Reference Grammar of Colloquial Burmese, in 2 vols., Oxford University Press, London, 1969. The page references for the examples are (1):395,(3):334,(5):361,(6):150,(8a,b):333,(9):346,(14):382.
2. cf. J.R. Ross, "Auxiliaries as Main Verbs"
3. Cf. Givon(1971), Li and Thompson(1973), Hyman(1975).
4. J.A. Matisoff, The Grammar of Lahu, Berkeley, U. of California Press, 1973.
5. Abridged from Okell, op. cit. p.395.
6. Matisoff, op. cit., p.200
7. Cornyn and Roop (1968)
8. There are some irregularities in the position of pa which will not concern us here.
9. Cf. Horn(1971), Horn(1975), Bartsch(1973)
10. Fraser, Handbook of the Lisu (Yawyin) Language, Rangoon, Government Printing Office, 1922.
11. Okell, op. cit., p.224
12. Horn(1975), p.288
13. But note the sentence cited in Horn(1975). Lauren Bacall to Humphrey Bogart in "Dark Passage": "I thought I had a good life here, but your going away doesn't make it seem good anymore."
14. Fraser, op. cit.

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