Morphological Innovation and Subgrouping: Some Tibeto-Burman Notes
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0. **Introduction.** This paper attempts to contribute both to the theory and the practice of Tibeto-Burman subgrouping through the examination of the patterns found in the distribution of certain morphological innovations. The use and value of morphological innovations for subgrouping is illustrated with the examples provided by innovative yes/no interrogative particles, negatives, and a periphrastic causative formed from ***tir** 'to send; to cause'.

1.0 **Methodology.** Subgrouping often constitutes a far more difficult task than the simple discovery of a genetic relationship. It is further complicated by the fact that many of the similarities between closely-related languages are the product not of a common inheritance but of what Sapir termed drift; that is, the common starting point provided by a common origin often conspires with what are universal diachronic tendencies to produce parallel but historically quite independent paths of development among genetically related languages. The picture is still further complicated by the areal convergence produced by widespread multilingualism. Recent work on areal linguistics has shown that multilingualism is capable of producing extensive convergence across genetic boundaries (Emeneau 1956, Masica 1976); it is only reasonable to assume that the widespread multilingualism found among closely-related languages would at least produce as great a degree of convergence.

Nonetheless, the principle behind subgrouping is quite simple: subgrouping is done exclusively on the basis of shared innovations. The value of a shared innovation is further increased if accompanied by a complementarily-shared obsolescence (Greenberg 1957:49); thus, if two languages replace an older morphological construction with a newer one, this double agreement is of increased significance for judging the prior existence of a common historical period. In fact, it is precisely in cases of syntactico-morphological innovation that shared obsolescences coupled with shared innovations are most readily detectable.

The corollary to the above principle is equally simple: since shared retentions can occur independent of a period of common development, their presence cannot constitute subgrouping evidence. Although this corollary is self-evident, even a cursory glance at the discussions of subgrouping in the literature on Tibeto-Burman makes it necessary to state it.

2.0 **The yes/no interrogative marker < PTB *ma 'not'.** Simon (1942) noted that the **-m** of the Classical Tibetan interrogative marker **ham** was ultimately to be derived from the negative marker PTB/PST *ma ~*mi 'negative'; DeLancey (1978 a,b) laid out the path that the derivation must have taken. The *ma 'negative' is found abundantly attested throughout Tibeto-Burman and Sino-Tibetan and unquestionably reconstructs to the earliest stages of the language family. The *ma 'interrogative marker', however, is an innovation, whose origins are to be found in the syntax and semantics of disjunctive questions.

Chao (1947:40-1) describes Cantonese disjunctive questions as involving a choice between alternatives. The most elaborate disjunctive question is the A-not-A question which spells out the choice between something and its negative:

nee zek-mu-zek in° ah?
you smoke-not-smoke **in° ah**
'Do you smoke?'

The least elaborate disjunctive question again has a positive sentence but the negative disjunct is represented only a single final particle: **mah, mhe°, a°,** or **ah.** Etymologically, the first two particles are related to the negative marker *ma; semantically, Chao describes the tagged on final particle as equivalent to the French **n'est-ce pas?**

Such disjunctive questions are the rule rather than the exception in Tibeto-Burman; examples can be found in language after language. It is obvious that such constructions were the source the widespread *ma interrogative markers. The negative in sentence-final position was reinterpreted as an interrogative marker for yes-no questions. Then, at least in some cases, this yes-no interrogative was extended to use as a general interrogative. Certainly, the functional distribution of the *ma in Tibeto-Burman supports this analysis; wherever the *ma interrogative is found marking general questions, it is also found marking yes-no questions but not vice versa.

Burmic Division: Kukish Section. In Shafer's Kukish Section of the Burmic Division of Tibeto-Burman, question particles derived from *ma 'NEGATIVE' are found in eight of the eleven branches: Southern Chin [Khami, Khimi], Lakher [Lakher], Old Kuki [Langrong, Hrangkhol, Hallam, Tsiru, Aimol, Kolhreng, Kom, Purum], Central Chin [Lushei, Haka (Lai), Bawm-Zo], Northern Chin [Tiddim, Siyin (=Śiyang), Thado], Western Branch [Empeo], Eastern Naga Branch [Angami, Rengma], and Mikir [Mikir]. On the other hand, it is definitely not found in Meithlei of the Meithlei Branch and the data on the Northern Naga Branch shows A-not-A questions but not a sentence final particle from *ma 'NEGATIVE'. This data is summarized in Chart 2.0 found below.

The interpretation of the data is relatively straightforward. Because the eight branches above all have direct evidence of an innovated *ma interrogative particle, this is taken as evidence for grouping them together. No comment can be made on the Luhupa Branch, since no data from Luhupa languages was analyzed. It should be noted that the failure of a language to appear in one of columns of the chart may reflect nothing more than the fact that it was not analyzed. However, in the case of Sema and several Ao dialects of the Eastern Branch, the analysis showed no evidence of such a marker; nonetheless, both Angami and Rengma of the branch did contain evidence. In the case of Ao, it is unlikely that the failure to discover the particle is due to the uneven quality of the data base; instead, it simply does not have evidence of the particle.

Southern Chin

Khami - mo
Khimi -mei

Lakher

Lakher -ma

Old Kuki

Langrong -m@
Hrangkhol -mo
Hallam -m@
Tsiru -mǒ
Aimol -mǒ
Kolhreng -mǒ
Kom -mo
Purum -mǒ

Mikir Branch

Mikir má 'FRAGEPARTIKEL; oder'

Meithlei Branch

Central Chin

Lushei -em/-m@
Haka (Lai) m@
Bawm- Zo -mê

Northern Chin

Tiddim Chin hiam
Siyin zi'am
(=Siyang) mo
Thado -m/-ham/-am

Western Branch

Empeo -me

Eastern Naga Branch

Angami -ma 'YN Q'
Rengma -mu 'NEG. YN Q'

Northern Naga Branch

A -not - A questions only

Chart 2.0: The distribution of interrogative particles derived from PST *ma 'NEGATIVE'

Notes: The subgroupings are those of Shafer (1966-7, 1974). No data from the Luhupa Branch was analyzed.

Shafer's Baric [=Bodo-Garo (Barish) & Konyak (Nagish)]. Shafer's Baric division is composed of his Barish Section [=Bodo-Garo] and his Nagish Section [=the Konyak or 'Naked Naga' languages]. The evidence provided for the unity of this subgrouping by the innovated *ma interrogative marker is less than decisive but is nonetheless intriguing.

Shafer's Baric Division

Barish Section — Nagish Section

North Central Branch — Western Branch

Garo -ma
-mai

Bodo -ma

Phom me- (mə-)
'general interrogative'

If the widespread distribution of this particle is attributed to common origin, then it certainly constitutes evidence for the unity of Bodo-Garo with the Konyak languages. Both Bodo-Garo and Konyak are well established

subgroups, and their unity has been suggested by Burling (1983) on the basis of lexical evidence. The presence of non-*ma-derived interrogatives in Deori Chutiya [Bodo-Garo] and in Nocte and Chang [Konyak] might argue for independent but parallel development (after all, the derivational mechanism is relatively simple) of the *ma-interrogatives in Bodo, Garo, and Phom except that in all three cases the present phrase-final interrogative looks etymologically suspiciously like what are non-interrogative sentence-final particles in other languages. Thus, while Garo has final strings such as **sok-ba-ku-ja-ma** 'Has he not arrived?' (Burling 1961:36) in which the final two morphemes are the innovative negative **ja** followed by the innovated interrogative **ma**, itself a former negative, in Deori Chutiya a number of the interrogatives are marked simply by **-ya** 'or not'; simple truncation is certainly sufficient to get from the Bodo **-ja-ma** to the Deori Chutiya **-ya**. The Nocte and the Chang interrogatives similarly look like they can be analyzed as resulting from the truncation of a sentence + *ma interrogative structure, resulting in the reanalysis of the sentence final particle as an interrogative. The very abundance of reputed interrogative particles and the widespread appearance of cognates elsewhere occurring as declarative sentence-final particles argue for this analysis. In any case, such particles do not argue against a common origin for the *ma interrogatives of Garo, Bodo, and Phom. [Note: An obvious question of whether the common origin is at a higher level or just at the Baric Division level remains unanswered.]

Bodish [Tibetan]. This type of innovation occurred independently in some of the Bodish languages including Central Monpa **-mo** [Tsangla Branch], Classical Tibetan **-ham** [Bodish Branch], Jyarung **ma-** (preverbal) [rGyarung Branch], and Kham **ma-** (preverbal). These are in three of Shafer's four branches of his Bodish division, and thus look like they are from one source.

Other. Within Chinese, Mandarin **ma**, Cantonese **ma**, and Haka **-mo** are all sentence-final question particles, but these appear to have been innovated, since Archaic Chinese seems to have no evidence of such a sentence-final interrogative marker.

3.0 Innovated negatives. The universality of the *ma 'NEGATIVE' in Tibeto-Burman makes the presence of an innovated negative relatively easy to identify. In most cases, the value of such an innovation for sub-grouping is increased by the fact that it has totally replaced the older *ma.

Bodo-Garo [=Barish Section]

North Central Branch	Jalpaiguri Branch	South Central Branch	Western Branch	Eastern Branch
Garo -ja	Wanang -ca	Atong -ca	Bodo -ya	Deori Chutiya -a (?)

Chart 3.0a: Bodo-Garo innovated negatives.

The first four are cognate negatives innovated from *ma V *ja. Originally, the *ma was the negative marker and the *ja was a sentential particle serving

another function. The second stage in the process was the reinterpretation of the -ja as part of the negation marking producing a discontinuous negative *ma V -ja. The final stage, of course, is the dropping of the original *ma as redundant. If the -a of Deori Chutiya is cognate, then all branches of Bodo-Garo share this innovation; if not, only the first four do. In any case, the innovation provides subgrouping evidence. [Note: the colloquial use of the French **pas** as a negative marker produces a somewhat similar case].

Karenic. The Karenic languages provide not one but two distinct innovated negatives.

Karenic

Moulmein Sgaw	tə?-bá?	Bassein Pho	?è?
Bassein Sgaw	tə?-bá?	Moulmein Pho	?e?
		Palaychi	?èɁ

Chart 3.0b: Karenic innovated negatives.

Both are innovated but neither appears to have come from the other. The first is a discontinuous form tə?..bá? , which seems to have its origins in the *ta 'PROHIBITIVE' prefix of Tibeto-Burman combined with a sentence-final particle *ba. Its origin, I suspect, correlates with the innovation of SVO < *SOV word order in Karen. As in many of the Tibeto-Burman languages, the original negative *ma may have been postverbal occurring before a sentence-final particle. With the shift toward SVO, pressure for a preverbal negative occurred, providing a motivation for the reinterpretation of the preverbal *ta 'PROHIBITIVE' as not just a negative marker for imperatives but as a general imperative.

4.0 Innovated causatives. Throughout Tibeto-Burman innovated causatives are found independently derived from various full verbs with meanings such as 'to send', 'to give', 'to make', etc. Such constructions have evolved from fully periphrastic structures comparable to the English 'He made him steal the money'; however, now many of these structures are morphological rather than syntactic. The periphrastic causative *tir < *tir 'to send' is an excellent example of such a construction. As is evident from Chart 4.0, *tir in its purely causative sense is restricted to four subgroups of Chin: the Central Chin Branch, the Old Kuki Branch, the Lakher Branch, and to just one language in the Northern Chin Branch [Ralte]. Its occurrence in Ralte is reported in Wolfenden (1929), but he associates the form not with *tir but with another etymon. However, as note 6 accompanying Chart 4 makes clear, the Ralte reflex is cognate to the forms in the other three sub-groups. Thus, the *tir causative is evidence for grouping together at least these four branches of Chin against the other seven branches of Kuki-chin. [for chart 4.0, see the next page].

5.0 Conclusion. This paper has attempted to simultaneously contribute both to the theory and to the practice of Tibeto-Burman subgrouping. The actual innovations examined are either expansions of observations found in the literature or original with this work. The other purpose of the paper

Chart 4: The Distribution of *tir 'cause'[1,2]

Lakher	*tir 'cause'	*m-t'ir 'iron'
Mara	tua	t'ua
Old Kuki	***tir 'cause;send'**	***t'ir 'iron'**
Langrong	-tir-	t'ir
Hrangkol	-tir-	tir
Hallam	-tir-	t'ir
Kom	-tir-	t'ir
Central Chin	***tir 'cause'**	***t'ir 'iron'**
Lushai	-tir	t'ir
Ngente	-tir-	
Zahao	-tir-	
Hmar	-tir-	
[3]Pankhu		t'ir
Laizo (Osburne 1975)	-tér-	
Lai (Haka)	-tar	t'ir
Bawm-Zo (Reichle 1979)	-tir	
Banjogi	-tar, -ter	t'ir
Taungtha		[5]ʂɣ
Northern Chin		
Thado		t'i
[6]Râltê	-tik=	
Śiyang		tʂi
Tiddim Chin		

Notes on Chart 4:

[1]*tir 'causative', or more correctly reflexes of *tir, occur only in the Chin languages. In fact, the distribution is further restricted to just four of Shafer's five Chin subgroups--Lakher, Old Kuki, Central Chin, and Northern Chin; the non-occurrence of *tir in Southern Chin--the fifth Chin subgroup--may on the one hand be a reflection of the internal subgrouping of the Chin languages or it may just be the result of gaps in our data.

[2]Reflexes of *t'ir 'iron' are provided for their phonological parallelism.

[3]Shafer's Bom, according to Reichle (1979:12), is identical to Pangkhua (=Pankhu).

[4]Bawm-Zo is identical with Shafer's Banjogi (Reichle 1979:12).

[5]Shafer (1974:235) suggests this word is a loan from Southern Kukish, since he would expect śit.

[6]Apparently because of the unexpected final -k, Wolfenden (1929:188) tentatively equated Ralte -tik- with WT ạjug-pa (P. bčug, F. gžug, Imp. č'ug) 'to cause, compel,' noting that other instances of variation between -i- and -u- occur. However, the Ralte from -tik-, even the final -k, is a quite regular reflex of *tir.

In this connection, Shafer (1974:250) wrote in reference to final *-r in Northern Chin:

> There is considerable scattered evidence, which I shall not bring together here, to indicate that *-r did not drop without a trace, but that it was replaced by a glottal stop, at least in Thado and Siyang and this shift was perhaps affecting Ralte and Vuite.

Although Shafer had noted 'scattered evidence' of a glottal reflex, later authors found the stop in question to be velar not glottal. In particular, the correspondence of Lushai -r (Central Chin) to Tiddim -k (Northern Chin) was explicitly noted in Ono (1965) and again in Hillard (1974). Solnit (1979:112) went a step farther, providing twenty-one examples of the correspondence of Lushai -r to Tiddim -k; he also gave in passing four correspondin Siyin (=Siyang) forms with final -k:

Lushai	Tiddim Chin	Śiyin (=Śiyang)
zuár	-zuak	yuak 'sell'
páar	-paak	pak 'flower (n.)'
záar	-aak	a~ak 'fowl'
pèer	/peek	p'iak 'flat'

In short, the *-r to -k correspondence (or some variant of it) seems to occur in Tiddim Chin (=Kamhau), Śiyin (=Śiyang), Thado, Ralte, and Vuite, all Northern Chin languages.

Sources: Wolfenden (1929), Shafer (1974), Ono (1965), Hillard (1974), Osburne (1975), Reichle (1979), Solnit (1979)

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was to point out the value of such innovations for subgrouping. Such morphological constructions have a number of advantages over other

negative markers, and causative markers are typically found even in the most basic grammatical descriptions of a language. Second, the number of forms involved is significantly simplified over what is necessary for phonological innovations: further, the interpretation of 'exceptions' is not as demanding a task. And, finally, it is often the case that such innovations co-occur for obvious reasons with a simultaneous obsolescence, thereby providing dual evidence for a common period of development.[1]

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*I shall be astonished if all my errors should prove minor, and I will be grateful for the corrections of the readers. This paper is a response to the interest generated by my reading of Benedict (forthcoming, 1983) and DeLancey (1978 a,b). I also wish to thank Keith Record for his help. This material is based upon work supported by the National Science Foundation under Grant No. BNS-8203882.

[1]The one caveat, of course, is that parallel but independent morphological innovations do occur. Thus, the value of any given innovation for subgrouping evidence is inversely proportional to the likelihood that it resulted from an independent but parallel path of development.

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