TIBETAN PRENASALIZED INITIALS

Betty Shefts Chang and Kun Chang
University of California, Berkeley,
and Academia Sinica

I. PRECONSONANTAL

Almost a century ago, in the introduction to his *Dictionary*, Jäschke said that the graphic symbol འ, now sometimes called "a-chung", represented "the vowel absolute, the pure vocalic note, freed altogether from any presence of a consonant" (xiv), whether it was used before symbols representing vowels or stops or after symbols representing consonants. The nasal reflexes of a-chung before stops, found "throughout Khams, and in the rest of Tibet at least in compound words" (xv) he attributed to a carelessness in closing the nasal passage. Clauson and Yoshitake (1929), similarly, interpreted preconsonantal a-chung as "a very short vowel, like the Hebrew *sh^{e}va*", and suggested that "*in practice*, it will be found very difficult to pronounce this sound without some of the breath escaping through the nose and giving a nasal element to it, particularly if the monosyllable in which it occurs is in the middle, and not at the beginning of the sentence, and if care is taken to avoid introducing the glottal stop" (p. 849). At the same time, they spoke of the "overwhelming body of evidence in favour of the nasal value of འ as a prefix in certain cases" (p. 857). The evidence they referred to is to be found in Chinese Buddhist texts of the eighth to tenth centuries in Tibetan transcription, where a character with an Ancient Chinese nasal initial was transcribed as Tibetan a-chung followed by a stop or where, as Clauson and Yoshitake put it, "the prefixed h- nasalizes the radical" (p. 857).

Attempts to explain away the nasal correlates of a-chung on the

basis of difficulty in pronouncing oral vowels are, of course, futile: many languages have pure, unnasalized vowels. And still, the notion of a secondary development of the nasal reflexes of preconsonantal a-chung from a pure vowel haunts Sino-Tibetan linguistics, where the pure vowel as the source of a nasal prefix has been elevated to a proposed Proto-Sino-Tibetan status. In another proposal, Tibetan preconsonantal a-chung is said to derive from, and represent, a glottal stop. (Ignored here is the fact that Tibetan orthography has another symbol, ཨ, for the glottal stop.) A Tibetan paradigmatic opposition of m- and this glottal stop is referred to, with noncausative function attributed to the m-; ignored are such doublets as mthun-pa, a-chung-thun-pa 'to agree', mtšhor-po, a-chung-phyor-po 'pretty', mkhyud-pa, a-chung-khyud-pa 'to embrace', the masses of noncausative verbs with the a-chung prefix, and the fact that the "prefix" m- appears to be a sandhi result of nasal and labial, in either order (Chang 1971:X.23 ff.). The nasal of this elusive noncausative m- is supposed to be the source of voicing in Tibeto-Burman. In fact, it is a-chung which stands in this cognate position. For example: 'to drink', written Tibetan a-chung followed by thuŋ-ba, Liang-shan Lolo (Szechuan) ndo[33], Lisu (Yünnan) daw[4].

We would like to present a counterproposal. That is, written Tibetan sequences of a-chung and stops or affricates represent reflexes of Proto-Tibetan prenasalized stops which derive from Proto-Tibeto-Burman and, ultimately, Proto-Sino-Tibetan prenasalized stops. Tibetan dialects which have prenasalized stops in initial position corresponding to written Tibetan a-chung followed by stops are, then, more conservative or archaic in this respect than those which do not. A conservative dialect like Chamdo has, for example, mbʊ[3] 'worm' where written Tibetan has a-chung followed by bu and the Lhasa dialect has pu. Most likely the Tibetan writing system was devised for a dialect which was the forerunner of the Lhasa dialect or a Lhasa-type dialect in which the nasal preinitial had already been denasalized. Therefore, the symbol ཨ ("a-chung") was used rather than

the established nasal symbols. That the symbol for the glottal stop, ཨ, was not used either is proof that the nasal had not given way to a glottal stop. There is no contradiction in the reconstruction of a Proto-Tibetan nasal preinitial and the positing of a nonnasal stage on the way to its eventual loss. Sankrit, for example, has the reflex a for Indo-European syllabic *m̥ and *n̥, and one of the Miao dialects (Shui-wei in Lung-li, Kweichow) has glottalization as its reflex for the Proto-Miao-Yao nasal preinitial.

If we look at Sino-Tibetan, and particularly the Chinese cognates, we find abundant evidence testifying to the antiquity of the nasal which was the source of Tibetan preconsonantal a-chung. In some cognates, both Tibeto-Burman and Chinese, we find corresponding to written Tibetan a-chung and a stop initial either (A) a prenasalized stop (in some cases voiced where the Tibetan stop is voiceless) or (B) a simple nasal. In others (C), we find a voiced stop where Tibetan has a-chung followed by a voiceless stop; that is, the nasal had caused voicing of the stop before it was lost. (Such reflexes of prenasalized stops are common in the Miao-Yao dialects.) For example:

A. 1. 'a mask', WT N-bag, Gyarong (Suo-mo dialect; Szechuan) mbâk (I shall henceforth transcribe written Tibetan preconsonantal a-chung as N-, both to emphasize the historical origin, in Tibetan, of this sound, and to account for its reflexes in those Tibetan dialects which have preserved the nasal.)

2. 'to chase after, drive', WT N-ded-pa, Nahsi (Li-chiang; Yünnan) ndy^{55}

3. 'to fly', WT N-phir-ba, Nahsi (Li-chiang) mbi^{11}

B. 1. 'dragon', WT N-brug, Gyarong (Suo-mo) tarmok (*ta-mrok)

2. 'to grudge', WT N-khon-pa, Lepcha (Sikkhim) ŋón

3. 'to disappear, die', WT N-bud-pa, N-bud, Chinese 沒 *məṭ (K492 b: *mwəṭ)

(Chinese reconstructions are for the phonetic-compound period and incorporate suggestions made in Tung 1944, 1948, Li 1971, and Chang and Chang 1972; Archaic Chinese reconstructions—in parentheses—are from Karlgren 1957.)

4. 'pasture-ground; herdsman', Chinese 牧 *mjəuk (K1037 a–c: *mi̯ôk). WT N-brog; N-brog-pa

C. 1. 'to weave', WT N-thag-pa, Nahsi (Li-chiang) dɑ[11]

2. 'to fly', WT N-phir-ba, Lisu (Yünnan) bi[33]

3. 'thick', WT N-thug-pa, Chinese 稠 *djəug (K1083 m: *d'i̯ôg)

The Chinese sound corresponding to Tibetan a-chung before a stop must have been nasal before the establishment of phonetic compounds in the Chinese writing system. Just how early this was it is difficult to say with certainty; most of the phonetic compounds cited in Karlgren's *Grammata Serica Recensa*, however, occur in the *Shuo-wen*, the first Chinese dictionary, which was completed around 100 A. D.

A phonetic-compound series is made up of characters which share a common graphic element denoting a common phonetic element. In the case of 'to disappear, die' (B.3 above), the graphic element 歹 is shared by, for example, 沒 *mət 'to die' and 玟 *mət 'a kind of of jade' (K492 d). There is no indication here of the stop origin of *mət 'to die'; in another character, 斃 *bjad (K341 f: *b'i̯ad) 'to die', there is no indication of the nasal preinitial: all characters sharing a common phonetic element in Karlgren's series 341 have an oral labial-stop initial. We have inferred merging of the nasal and stop in the case of *mət 'to die' before the establishment of this phonetic compound (Chang and Chang 1976.343 ff.); the relationship of *mət 'to die' and *bjad 'to die' we assume to be one of doublets, either with and without nasal preinitial to begin with or with loss of the nasal preinitial in the case of *bjad.

In some cases, however, the Archaic Chinese nasal initial is found in a phonetic-compound series with characters which have an Archaic Chinese

stop initial. We have taken this to mean that at the time these phonetic compounds were devised the words they represented had prenasalized stop initials. For example:

D. 1. 'to wipe', WT N-phyid-pa, Chinese 㿽 *N-p(h)jit (K405 s: *mi̯ĕt) 'to wipe (a vessel clean)" The characters in this series have *p-, *b'-, and *m- in both Ancient and Archaic Chinese.

2. 'to tie', WT N-dogs-pa, btags, Chinese 紐 *N-djəug (K1076 g: *ni̯ôg). The reconstructed Ancient Chinese initials in this series are *t', *ń-, and *s-. For Ancient Chinese *t'- in series with *ń-, Karlgren reconstructed Archaic Chinese *t'n-; we suggest that the source was, rather, *nth-.

In yet other cases where the phonetic-compound series by its inclusion of both stop and nasal initials implies prenasalized-stop initials, the Archaic Chinese stop is voiced where the Tibetan stop was voiceless. We have here inferred voicing by the nasal. For example:

E. 1. 'to wash', WT N-khrud-pa, bkrus, Chinese 浣 *N-kwan or *N-gwan (K257 o: *g'wân)

2. 'dark', WT N-thibs-po, Chinese 黮 *N-thəm, *N-dəm (K658 n: *t'əm, *d'əm).

(There are stop and nasal-ending doublets within Chinese. The disproportionately large number of Chinese nasal endings where we reconstruct a prenasalized stop initial suggests, however, that at least in these cases articulatory lag may be the explanation for the nasal ending.)

Where Chinese has a voiced-stop initial in a series composed wholly of stop-initial words and Tibetan has a prenasalized voiceless stop we may infer that Chinese, too, had the nasal but that it was lost before the time of the phonetic compounds. For example:

F. 1. 'thick', WT N-thug-pa, Chinese 稠 *djəug (K1083 m: *d'i̯ôg): Proto-Chinese *N-t(h)-.

2. 'to wash', WT N-khrud-pa, bkrus, Chinese 澣 *gwan (K140 m: *g'wân): Proto-Chinese *N-k- (cf. example E.1).

In view of the examples throughout Sino-Tibetan of nasality corresponding to a-chung before stops and affricates, the makeup of this preinitial may be assumed to have been one of nasal followed by vowel: it is generally felt that the Sino-Tibetan preinitials were originally full syllables, though, in many cases, where they have been preserved they are now merely the first elements of consonant clusters. The Tibeto-Burman Gyarong dialects of Szechuan, which do have full-syllable preinitials, offer a clue to the phonetic form of the Sino-Tibetan noncausative nasal prefix.

Gyarong has for the reconstructed causeative *s- both consonantal reflexes (e.g. s-, ʂ-) and full-syllable reflexes (e.g. sa-, sə-). For the noncausative (stative, reflexive, and so forth) it has both a nasal which assimilates to the position of the following consonant and a full syllable: na-, nə-. That is, when the vowel is lost, the dental nasal assimilates to a labial stop by becoming labial, to a velar by becoming velar. For example: 'to be sick', Tzu-ta nego, Kham-to ke-nuu goo (a-šluu naa ke-nuu goo döö ñwos 'yesterday he was ill'), Tsa-ku-nao kənəguo, Chos-kia kinigo 'to ail'). Losing the vowel, this n- yields velar ŋ- in Nahsi (Li-chiang) ŋgo[11] 'to be sick', Hsi-hsia *ŋo 'illness'.

Probably not all prefixes current in Sino-Tibetan dialects can be related to a common Proto-Sino-Tibetan prefix. If any prefix can be said to be Proto-Sino-Tibetan it is, however, the causative *s-. That both Gyarong s- and sa- occur in causative function lends support to the view that this sa- is a retention of the old Sino-Tibetan prefix and not an innovation, which in turn makes it more likely that Gyarong na- was the original form of the Sino-Tibetan noncausative prefix.

II. VOICED STOPS PRECEDED BY s-

After a nasal, stops may be voiced; they may also be shielded from devoicing changes. The Miao dialect of Shih-men-k'an in Kweichow, for example, preserves the Proto-Miao-Yao voicing contrast in both simple stops and prenasalized stops; the Yao dialect of Thailand described by Lombard shows voicing of voiceless stops after a nasal, but devoicing of voiced stops only when a nasal did not precede:

	Proto-Miao-Yao	Shih-men-k'an	Thailand Yao
1. 'to kill'	*t- (C1)	to^{33}	tai R
2. 'to die'	*d- (C2)	do^{31}	tai EL
3. 'tree'	*N-t- (C1)	ntau^{33}	diaŋ R
4. 'fish'	*N-br- (B2)	mbə 33	byau RFL

The paradigm of one group of Tibetan noncausatives, I below, includes at least one form which does not begin with the nasal a-chung; in another group, II below, there is no such form. When the initial of these noncausatives is a voiced stop, the causative of group II has s- followed by a voiced stop; the causative of group I does not. We suggest that in group II, s- was prefixed to a noncausative base beginning with the nasal a-chung; in group I, s- was prefixed to the stop. Examples of these two types of causatives are listed at length in Chang 1971:VII.1 ff.; We give one of each sort here to illustrate this point:

I. Noncausative: N-byuŋ-ba, byuŋ 'to come out, emerge'
Causative: N-byin-pa, phyuŋ (*s-b- → *sp- → *p- → ph-), d-byuŋ, phyuŋ 'to cause to come forth; to take out, remove'

This is the characteristic causative of type I. A rarer type preserves the s-:

Noncausative: N-bub-pa, bub, ___, bub(s) 'to be turned upside down'
Causative: s-pub-pa, s-pub-s 'to turn upside down' (*s-b- → sp-)

II. Noncausative: N-du-ba, N-du-s 'to come together, to assemble'

Causative: s-dud-pa, bs-du-s, bs-du, s-du-s 'to collect, gather' (*s-N-d- → sd-)

The layering of prefixes—if the a-chung was a prefix in such cases—would not be unprecedented. Some Gyarong (Suo-mo) examples:

1. kə-mdam 'to fall down by itself'
   kaptham 'to cause to fall down'
   ka-sə-mdam 'to cause something or someone to fall down by itself'
   kasəptham 'to cause someone to make something fall down'
2. kəŋgri 'to destroy oneself' (reflexive)
   ka-kri 'to destroy' (transitive)
   kasəŋgri 'to cause someone to destroy himself'
   ka-sə-kri 'to cause someone to destroy'

In 'snake' we find a Tibeto-Burman cognate with a nasal where Tibetan has s- followed by a voiced stop: WT sbrul, Old Burmese mruy. In this case, Chinese either did not have the nasal or lost it before losing the *s-, so that we find 蝮 *phjəuk (K.1034 j: *p'i̯ôk), which suggests changes such as those posited for some instances of *sb- in Tibetan: *sb- → *sp- → *p- → ph-. (The Burmese merging of nasal and stop appears to have occurred primarily when the point of articulation was labial; hence the different developments of 'snake' and 'sweat'—WT rŋul ← *ŋrul ← *N-grul? *N-k(h)rul? Old Burmese khruy.)

III. THE NASAL PREINITIAL WITH FRICATIVE-INITIAL BASES

Where Tibetan has a fricative initial in the perfect tense and an a-chung prefix in the present tense, the prefix is followed by an affricate. For example: 'to explain', perfect b-šad, present N-tšhad-pa. That is, the joining of nasal and fricative has resulted in affrication (Li 1933.147 f.) or the production of an epenthetic stop (Chang 1971:VI.2). The correlation of a Chinese affricate (or stop resulting from deaffrication) with a Tibetan

affricate of this sort offers support for the assertions that (1) a Chinese nasal corresponding to a written Tibetan stop preceded by a-chung shows merging of nasal and stop and (2) the Chinese nasal is an indication of the antiquity of the nasal quality of a-chung before stops in Tibetan. That is, affrication and nasality are both marks of the present tense, depending on the initial of the verb base. On those rare occasions when the speakers of the Lhasa dialect with whom we worked had a reflex of the present tense, this appeared without preinitial but with an initial which indicated that there had been a preinitial. For example: WT N-džig-pa, žig 'to be ruined', Lhasa cịq 'to be destroyed' (Chang 1971:VIII.4); without preinitial, written Tibetan dž- would correspond to a Lhasa aspirated initial, as in WT dža 'tea', Lhasa cha. Chinese, like Lhasa Tibetan, has lost the preinitial but preserved the affricate which resulted from the joining of nasal and fricative. Examples:

1. 'to rise', WT N-tšhar-ba, šar, Chinese 作 *tsak (K806 1: *tsâk) WT -r: Chinese *-g/*-k:
   a. WT tša-ra 'oak', Chinese 柞 *tsak, *dzak (K806 p-q: *tsâk, *dz'âk)
   b. WT phor-pa 'cup', Chinese 杯桮 *pəg (K999 o, p: *pwəg)
2. 'to explain', WT N-tšhad-pa, bšad, Chinese 闡 *thjan (K147 x: *t̂'i̯an) WT palatal affricate initial: Chinese dental stop followed by *j/*i:
   a. WT N-tšhad-pa, tšhad 'to cease', Chinese 竣 *tshwjən (K468 q: *ts'i̯wən 'to retire, cease'), 殄 *diən (K453 k: *d'iən); the second example shows voicing by the nasal prefix.
   b. WT gtšig-ka, gtšig-pu 'only', Chinese 祇 *tjig (K867 i: *t̂i̯eg)
   c. WT mtšhu 'beak', Chinese 觜 *tswjig, *tsjig (K358 t: *tsi̯war, *tsi̯ăr), 喙 *tug, *tjug (K128 u: *tu, ?/t̂i̯əu). On the correspondence of a vocalic ending in Tibetan and a velar-stop ending in Chinese, see WT dŋo 'edge of a knife', Chinese 鍔 *ŋak (K788 m: *ngâk) 'edge of a sword'.

WT oral ending: Chinese nasal ending:

a. WT N-khyag(s)-pa 'to freeze, coagulate', Chinese 凝 *ŋjəŋ (K956 h: *ngi̯əng)

b. WT N-thug-pa 'thick', Chinese 濃 *nəuŋ, *nj̊əuŋ (K1005 i: *nung, *nj̊ung)

c. WT N-thibs-po 'dark', Chinese 黯 *N-thəm, *N-dəm (K658 n: *t'əm, *d'əm)

IV. THE NASAL PREINITIAL WITH LATERAL-INITIAL BASES

A. WT ld- : WT l-, ST l-

Among verbs with a simple l- initial in the perfect tense form we find present-tense forms with ld- initials. Li Fang-kuei (1933.149 f.) suggested that the source of this ld- could be the same as that of the affricate in the present-tense forms of fricative-initial bases, namely, an a-chung prefix. For example:

*a̱-š- → a̱-t-šh- a̱-tšhi-ba, ši 'to die'

*a̱-l- → *a̱-d-l- → *dl → ld- l-dog-pa, log 'to return'

The production of an epenthetic stop here can be explained as a transition from the nasal to the lateral (Chang 1971:II.13). Again, as with fricative-initial bases, Chinese cognates show the epenthetic stop, corroborating the assumptions made on internal evidence for Tibetan and allowing us to make the same assumptions about Sino-Tibetan. Apparently, prenasalized lateral initials underwent certain common changes in the prehistories of Chinese and Tibetan; only the metathesis of *dl- to ld- is lacking in Chinese. That is:

*N-l- → *N-d-l- → *dl- < Chinese *dj- [dy]
Tibetan ld-

In some instances, the l- initial is seen in an alternate base in Tibetan; in others, the l- is found in Tibeto-Burman cognates. For example:

1. WT ldaŋ-ba, ldaŋs (*N-laŋ-ba, *N-laŋs, with nasal preinitial in both present and perfect, as in N-du-ba, N-dus 'to come together'), also laŋ-ba, laŋs 'to rise, get up', Chinese 上 *djaŋ (K726 a–d: *d̂i̯ang)
2. WT ldag-pa, bldags, bldag, ldog (*N-lag-pa, *b-N-lags, *b-N-lag, *N-log) 'to lick', Chinese 舐 *djig (K867 f: *d̂'i̯ĕg). l- initial in Tərung (Yünnan) la, Lepcha lók.

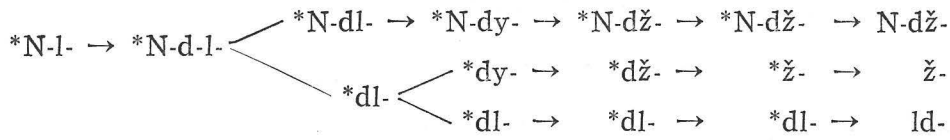
   WT -a- : Chinese *-ji- before *g/*k:

   a. WT phyag 'arm', Chinese 臂 *pjig (K853 s: *pi̯ĕg)
   b. WT N-tšhags-pa, btšags 'to walk', Chinese 蹐 *tsjik (K852 b: *tsi̯ĕk) 'to walk with small steps'

B. WT ž-, N-dž- : WT l-, ST l

There is some agreement on the origin of written Tibetan ld- in a sequence of whatever a-chung represented and a following l. The source of the written Tibetan palatal fricative or affricate following a-chung to which there corresponds either a Tibetan l- doublet or a Sino-Tibetan cognate with an l initial is more controversial. Bodman (1971) posited *ly-. Lepcha cognates, such as lyón 'young', WT gžon-pa, do have an ly- here. (For additional examples and discussion, see Chang and Chang 1975. 406 ff., 487.) Lepcha -y- may, however, derive from an *s- prefix, as in 'to smell', WT mnam-pa, Lepcha nóm, WT snam-pa, Lepcha nyóm. One major problem in Sino-Tibetan linguistics is the identification of the various reflexes of the preinitials or prefixes. In the case of 'young', however, Lepcha and written Tibetan clearly do not have the same preinitials or prefixes; note the g- of Tibetan. Nishida (1960.159) reconstructed Common Tibeto-Burman *z-bdli for 'four' to account for such reflexes as written Tibetan bži, Purik zbzhi [zbži], Gyarong kəwudə (*kə-bdə), Common Burmese liy[2], Moso lo[33], and Common Tibeto-Burman *g-bdli 'land' to account for Written Tibetan gži-ma, Old Burmese mliy, Written Burmese mre. At one point in our reconstructions we have in common with Nishida a *dl; this is, however, at an intermediate stage,

as it is in our derivation of ld- from *N-l-. Again we posit a prenasalized *l, in part because of the Gyarong -d-, which we interpret as epenthetic in the environment between a nasal and a lateral and in part because of Gyarong cognates with a nasal, such as 'bow', Written Tibetan gžu, Gyarong -mňe, Written Burmese le, Old Burmese liy (Nishida 1960.159). For written Tibetan N-dž- with evidence of an *l- base we have posited retention of the nasal; examples of this sort are 'grass', WT N-džag-ma (*N-lag), Gyarong -lak and 'neck', WT N-džiŋ-pa (*N-liŋ), Chinese 領 *ljiŋ (K823 f: *lịěng), Lepcha tŭk-liŋ, tŭŋ-liŋ. That is:



In the case of 'to arrange', nasal, stop and *l may be reconstructed for the presumed Chinese cognate of written Tibetan N-džog-pa, bžag: 掉 *N-diaug and *N-drauk or *N-dlauk (K1126 m: *d'iog and *nŏk ["dnŏk?"]). The initials in Karlgren's phonetic-compound series 1126 include *t-, *t'-, *t̂'-, *d'-, and *n-, implying prenasalized-stop initials at the time these phonetic compounds were established. The second reading, for which Karlgren reconstructed -ŏ-, is found in the *Ch'ieh-yün*'s second division, for which reconstructions of *-r- and *-l- have been the most convincing.

V. THE NASAL PREINITIAL WITH r-INITIAL BASES

Tibetan clusters of nasal and r pose many problems. Simon (1975) cites a variety of evidence for his posited "Tibetan Initial Clusters of Nasals and R", *ŋr-, *nyr-, *nr-, and *mr-, clusters which may be preceded by h̲-, b-, and s- prefixes: (1) The rare occurrence in written Tibetan of snr- and smr- clusters. (2) Clusters of r and a following nasal, e. g. rŋa 'drum', rnyaŋ-ba 'to rinse', rna 'ear', and rma 'wound'. All instances of such clusters he sees as the result of metathesis. *s- may, however, be another source of r- before a nasal, and appears particularly likely when

there are s- + nasal/r- + nasal doublets, both with the same function, e. g. s-nur-ba or r-nur-ba 'to crush', causative to nur-ba 'to crumble to pieces' (Chang 1971:II.1 ff.). Also, the r- of written Tibetan may be first in the cluster because of metathesis but the nasal itself may derive from a prenasalized stop, as in the case of 'sweat' discussed above (WT rŋul, Old Burmese khruy). In many instances, however, lack of evidence, internal or comparative, precludes a definite determination of the source of the Tibetan r-nasal cluster. (3) Written Tibetan cognates in which r- initials alternate with stops followed by medial -r-. Both the r and the stop may occur either in absolute-initial position or prefixed by h-, b-, or s-. In some cases, Simon cites Archaic Chinese or Tibeto-Burman cognates with nasal initials in support of his reconstructed nasal; for some of the other sets it is not clear what the basis for the nasal reconstruction is: *ŋru 'angle, corner, horn', to account for ru/rva 'horn' and gru/grva 'angle, corner', *ŋraŋs 'entire, complete', to account for such cognates as raŋs-pa 'entire, complete', hgraŋ-ba 'to satiate', bgraŋ-ba '(to make complete) to count', or *mrim 'series, succession', to account for rim 'series' and hbrim-(pa) '(to deal with a succession of recipients=) to distribute', where the change from *mr- to hbr- is interpreted as one of "*prefixed* nasal to plosive", i. e. denasalization (*hmr- → hbr-?). An alternative treatment of correspondences where Chinese has a nasal and Tibetan has a-chung followed by a stop is to recognize the nasal quality of a-chung and reconstruct a prenasalized stop for Proto-Chinese. For 'pasture-ground', WT N-brog (Simon's "hbrog"), Chinese 牧 *mjəuk (K1037 a¬c: *mi̯ôk) we have accordingly reconstructed a Proto-Chinese *N-b- (Chang and Chang 1976.350). In general, considering the widespread Sino-Tibetan merging of nasal pre-initial and stop initial, one must proceed with caution in reconstructing initial clusters of nasal and *-r- such as *mr-.

In some cases where s- precedes and -r- follows, Simon's reconstruction of a nasal coincides with that of B. Chang (1971). For 'to mix', WT sre-ba, Simon's *snre (1975.249), B. Chang's posited *s-ạ-r- (=*s-N-r-) was

based on the fact that the noncausative 'to be mixed' has a-chung in all forms of the paradigm: N-dre-ba, N-dres, ___ N-dres (Chang 1971:IV.5). B. Chang interpreted the stop as epenthetic between the nasal and -r-. If s- was prefixed to a prenasalized base in the case of voiced-stop initials such as N-du-ba 'to come together', s-dud-pa ← *s-N-dud-pa 'to bring together', it can be argued that *s- was also added to a prenasalized *r-initial base, and that the nasal was lost in the environment between *s- and *-r-; that is, *s-N-re → sre. It is reasonable to suppose that if there was a nasal prefix and if there were r-initial bases we should find the two in combination. B. Chang's argument for a nasal in the protoform of 'son' (WT sras, Simon's *snras [1975.249], *s-ạ-r- [Chang 1971:IV.6]) is less persuasive; in the spoken Tibetan of Lhasa, there are, corresponding to written Tibetan sras-mo 'daughter' (honorific), doublets, one with a stop initial: sɛ̄ɛ̄mō, ʈɛ̄ɛ̄mō. Though B. Chang assumed that this stop was epenthetic between a nasal and *-r-, the environment *s- ... *-r- could also conceivably suffice to evoke the stop.

BIBLIOGRAPHY

Abbreviations: *BIHP, Bulletin of the Institute of History and Philology, Academia Sinica. JRAS, Journal of the Royal Asiatic Society of Great Britain and Ireland. JUSS*, Papers for the 1st Japan-US Joint Seminar for the Promotion of Science, 1976)

Bodman, Nicholas. "Some Phonological Correspondences between Chinese and Tibetan." Paper presented to the Fourth Conference on Sino-Tibetan Languages and Linguistic Reconstruction. Indiana University, 1971.

Chang, Betty Shefts. "The Tibetan Causative: Phonology." *BIHP* 42 (1971), 623–765.

Chang, Betty Shefts, and Kun Chang. "On the Relationship of Chinese 稠 *djəug and 濃 *nəuŋ, *njəŋ." To appear in *Monumenta Serica.*

Chan, Betty Shefts, and Kun Chang. "The Prenasalized Stop Initials of

Miao-Yao, Tibeto-Burman, and Chinese: A Result of Diffusion or Evidence of a Genetic Relationship?" *JUSS* 315–58. *BIHP* 47 (1976), 467–502.

Chang, Kun. "The Reconstruction of Proto-Miao-Yao Tones." *BIHP* 44 (1972), 541–628.

Chang, Kun, and Betty Shefts Chang. *The Proto-Chinese Final System and the Ch'ieh-yün.* The Institute of History and Philology Monographs; Series A, No. 26. Taipei: Academia Sinica, 1972.

Clauson, G. L. M., and S. Yoshitake. "On the Phonetic Value of the Tibetan Characters ཎ and ང and the Equivalent Characters in the ḥPhags-pa Alphabet." *JRAS* 843–62 (October, 1929).

Jäschke, H. A. *A Tibetan-English Dictionary.* London: Routledge and Kegan Paul, 1881. (Reprinted 1949)

Karlgren, Bernhard. *Grammata Serica Recensa.* Reprinted from *The Museum of Far Eastern Antiquities* (Stockholm), *Bulletin* 29 (1957).

Li, Fang-kuei. "Certain Phonetic Influences of the Tibetan Prefixes upon the Root Initials." *BIHP* 4 (1933), 135–57.

Li, Fang-kuei. "上古音研究 (Studies on Archaic Chinese Phonology)." Taipei: *The Tsinghua Journal of Chinese Studies,* New Series, 9 (1971), 1–61. Trans. G. L. Mattos. To appear in *Monumenta Serica.*

Nishida, Tatsuo. "The Numerals of the Hsi-hsia Language: Their Reconstruction and Comparative Studies." *The Memoirs of the Tōyō Bunko* 19 (1960), 123–67.

Simon, Walter. "Tibetan Initial Clusters of Nasals and R." *Asia Major* 19 (1975), 246–51.

Tung, T'ung-ho. "上古音韻表稿 (Archaic Chinese Phonology Charts: A Tentative Draft)." Lithographed ms., 1944; *BIHP* 18 (1948), 1–249.

[Received 16 March, 1977]

中 文 摘 要

本文主要的目的在强調藏文前置符號ང代表一個鼻音。不但現在藏語讀音證明這種解釋，漢語同源字也支持這種說法。