Tone in PaTani and Central Tibetan: parallel developments?1

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1. INTRODUCTION

It is generally assumed among Tibeto-Burmanists that languages of the West Himalayish subbranch² of the Tibeto-Burman language family are not tonal. The aim of this paper is to show that at least one language of this subbranch (PaTani) is tonal. PaTani (also referred to as Manchati) is spoken in the PaTan valley in Himachal Pradesh, India. There has been very little work done on it, and none of the published works (e.g. S. Sharma 1987, D. Sharma 1989) identify it as a tone language. To quote D. Sharma:

"The glottal fricative /h/ tends to be realized as high falling tone in a prepausal position, as in /meh/ = /me/. /ah/ = /a/ 'mouth, beak'. In Pattani tone is, however, a non-phonemic feature." (D. Sharma 1989:31)

The phonetic facts concerning PaTani tone are very similar to those of Central Tibetan. Similarities in the tone patterns in these two languages are not because the tones are cognate. Proto-Tibetan did not have tone, suggesting that these are parallel independent developments in each language. Though there has been some work done on tonogenesis in some Bodish languages (e.g. Sedláček (1959), Sprigg (1972), and Chang and Shefts (1964) on Central Tibetan, and Mazaudon (1975) on Tamang), it is hoped that a case-study of PaTani tone will contribute towards getting a better understanding of tonogenesis in this branch of TB.

Tibeto-Burman

Bodic

Bodish

Tibeto-Kanauri Tibetan:

West-Himalayish:

Western, Central, Southern, Khams, Amdo, Monpa Kanauri-Manchati/PaTani, Bunan-Theobar, Chandangsi-Rangkas

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The position of West Himalayish within the TB language family is shown below (following DeLancey 1987):

2. TONE IN PATANI

PaTani has two distinctive tones: high and low. The following minimal pairs show that tone is phonemic in PaTani. The high tone is represented here by "1" and the low tone is represented by "2".

du ²	'he/she/it'	du ¹	'a dish made of flour'
ri2	'fleld'	ri ¹	'a measuring pot'
ka ²	'chest'	ka ¹	'walnut'
1a2	'month'	la ¹	'goat (female)'
p12	'accusative marker'	p11	'four'
ya(g)2	'dinner'	ya(g)1	'yak'

In PaTani, as in Central Tibetan, breathiness is associated with the low tone and there is a rising pitch on open and long syllables (e.g. r12 'man'). In PaTani the vowel following a voiced consonant frequently has a low tone and the vowel following a voiceless consonant frequently has a high tone. This is reminiscent of modern Central Tibetan where the vowel following a Written Tibetan voiced consonant has a low tone and the vowel following a voiceless consonant has a high tone. However, unlike Central Tibetan, voicing is phonemic in PaTani. The minimal pair given below is illustrative:

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Tu1 'smoke' Du1 'cloud'
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in PaTani there is only one consonant cluster (stop/nasal + r/y/w) that is permissible in initial position. In most cases there is a correlation between the voicing of the first consonant of the cluster and the tone on the following vowel.

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tre2i# 'sheep' kro1 'charcoal'
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PaTani has a word-tone pattern, where in polysyllabic morphemes only the first vowel has contrastive tone and subsequent syllable(s) have levelled tone, i.e. if the first syllable has a high tone, then subsequent vowels have slightly lower pitch; and if the first syllable has a low tone, then subsequent vowels have slightly mid pitch. The levelled tone is represented by "#". In sequences of vowels too, the second vowel has a levelled tone, which seems like a rising/falling tone depending on the tone of the preceding vowel. For example,

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la<sup>2</sup>tsan# 'moon' ro<sup>2</sup>ki# 'black'
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me²tsə[#]mi[#] 'woman' cho²a[#] 'wheat' so¹i[#] 'cold'

In PaTani some nouns are formed by reduplicating the first syllable. In such cases too, the second syllable has a levelled tone. For example,

kir1kir# 'circle'

An important characteristic of PaTani phonology is that in word final position nasals and liquids are pronounced, but stops are unreleased. In the latter case the preceding vowel is not long. Since stops are unreleased and lenis, it is hard to characterize them as voiced or voiceless. Final stops are, however, pronounced when a suffix is added to them, or when they are part of a compound. For example,³

 $gu(d)^1$ 'hand' $ra(g)^2$ 'stone' $mo(d)^2$ 'face' $ya(g)^1$ 'yak' yak^1-ku^2 'two yaks' $mig^2ti^{\#}$ 'tear [eye water]' (cf. mig^2 'eye', ti^1 'water')

It was pointed out earlier that PaTani has a word-tone system, where non-initial vowels have a levelled tone. However, in polysyllabic words the vowel preceding the unreleased stop seems to have a high/rising tone.

T1¹llr(g)¹ 'egg' nyu¹ra(g)¹ 'a day after tomorrow' ka¹Te(g)¹ 'bitter' bən²Də#yo(d)¹ 'vulture'

Tone of suffixes and postpositions

Suffixes get the levelled tone. The possessive marker -o/-ku/-tu is one such suffix.

puk²-o# tsam¹ 'body hair' body-POSS wool

³ The final stops are represented here by voiced stops. This is consistent with the intuitions of my informant.

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sin1-o# mis2to#ri# carpenter
wood-POSS carpenter
tsha1-ku# ca1 'salted tea'
salt-POSS tea
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Postpositions (such as case markers and number markers), on the other hand, always have a low tone, irrespective of the voicing of the postposition. For example,

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a<sup>1</sup> -ku<sup>2</sup> 'two mouths'
mouth - DUAL
ka<sup>1</sup>Tu# -re<sup>2</sup> 'children'
child - PLURAL
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Tone in compounds

In PaTani the second morpheme of a compound does not have a independent tone; instead it has a levelled tone, as seen below.

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m1g<sup>2</sup>t1# 'tears' (cf. ti<sup>1</sup> 'water')
sa<sup>1</sup>-p1# 'fourteen' (cf. p1<sup>1</sup> 'four')
sa<sup>1</sup>-pa# 'fifteen' (cf. pa<sup>1</sup> 'five')
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PaTani has borrowed a lot of vocabulary items from Indic language. Some of the borrowed items have been nativized and they have acquire tone, for example cor^1 'thief', ca^1 'tea'. But there are some borrowed items that do not have distinctive tone, for example bo#go#to# 'food However, all borrowed items undergo the same morphological processes a native words, for example cor^1-ku^2 'thieves (DUAL)'.

3. TONOGENESIS IN CENTRAL TIBETAN AND PATANI

The studies done on tonogenesis in TB and elsewhere (e.g. Haudricourt 1954, Matisoff 1973, Maran 1973, Mazaudon 1975) show the in many TB languages the development of tone seems to have been triggere by the reduction of initial clusters (e.g. Central Tibetan)⁴ or the loss of

⁴ The development of tones in Tamang is similar to the development of the high and low tor series of Tibetan (Mazaudon 1975).

voicing opposition in the initial consonant (e.g. Karen (Haudricourt 1954)). Matisoff (1973) reconstructs the Proto-TB syllable structure as:

(P1) (P2) C1 (G) V(:) (Cf) (S).

where P is a prefix, C_1 is the initial consonant, G is a glide, V the vowel, ":" stands for vocalic length, C_f for final consonant, and S for suffixal -s (Matisoff 1973:78). The prefixes reconstructed for Proto-TB are: b, d, g, m, r, r, l, s.

Proto-Tibetan did not have tone. In modern Central Tibetan tone developed as a consequence of the decay of initial consonant clusters. Central Tibetan has two series of tones, high and low, along with two series of initial stops, voiceless aspirated and voiceless unaspirated. In some dialects of modern Central Tibetan there is a falling tone when Written Tibetan has -b, -d, -g, -m, -s (root final or suffixal) in final position.

Written Tibetan still retains prefixes and manners of articulation which gave rise to modern tones. In Central Tibetan the loss of prefixes caused the merger of *prefixed nasals and liquids with the *unprefixed nasals and liquids. This triggered the tonal split where the former produced high toned syllables and the latter low toned syllables. *Voiced stops (prefixed and unprefixed) produced low tone and *prefixed voiceless stops, which got reanalyzed as voiceless unaspirated stops, produced high tone. *Unprefixed voiceless stops, which got reanalyzed as voiceless aspirates, retained a neutral tone. (See Sedláček 1959, Chang and Shefts 1964, Sprigg 1972.)

The development of the falling tone from final obstruents seems to have been done in the following stages. First the final obstruents became final glottal stop. This glottal stop itself became glottal stricture, accompanied by a lengthening of the preceding vowel and a falling tone (Shefts 1968). It is generally assumed that tones developed in two steps in Central Tibetan. First the distinctive tones developed on the initial syllable, and the falling tone developed later on. That seems to be the reason why the falling tone is not there in all varieties of Central Tibetan. PaTani provides evidence in favor of this assumption. Notice that PaTani has distinctive tone on the first syllable but no falling tone.

The description of PaTani given above shows that tone is phonemic in PaTani. This conclusion is drawn on the basis of the minimal pairs and the regularity in the tone patterns found in free stems, suffixes and in postpositions. Another language belonging to the West Himalayish subgroup for which I have data is Kinnauri. Kinnauri does not have tone. Two main phonetic differences between Kinnauri and PaTani are: (i) Kinnauri has initial s- clusters, e.g. spu body hair; and (ii) final stops are released in Kinnauri. Now the tonal patterns found in PaTani are reminiscent of the

tonal patterns found in some Bodish languages, like Central Tibetan and Tamang. In PaTani as well as in languages like Central Tibetan and Tamang the phonological word is the domain of tonal oppositions. What does this suggest about tonogenesis in West Himalayish in general and PaTani in particular?

The tonal pattern of PaTani is very similar to that of Tibetan: (i) both languages have two series of distinctive tones, high and low; (ii) there is a correlation between voicing of the consonant and the tone on the following vowel; (iii) tone on non-initial syllables is predictable; and (iv) there is a rising tone on open and long syllables (e.g. mi^2 'man'). In PaTani (as in Central Tibetan) the development of tone seems to have been due to the mutation of the initial consonant cluster. Notice that PaTani does not have these prefixes. The r in consonant clusters of /stop + r/ is parallel to the non-initial (medial) r of Written Tibetan, exemplified in words such as: 'khrid 'lead', sprang 'beg', dran 'to think of', where the consonant immediately before r is the main consonant, and the initial consonant is the prefix. The absence of prefixes in PaTani can be shown by comparing a few cognates in PaTani and Written Tibetan.

Written Tibetan	PaTant	Gloss
'di	d12	'this'
lnga	nga ¹	'five'
skra	kra ²	'hair'
gyag	$ya(g)^2$	'yak'
dgu	ku ²	'nine'
du=ba	ţú	'smoke'

These cognates exemplify the loss of prefixes, and in some cases of voicing (cf. 'nine' and 'smoke') in Patani. It is possible that tone in PaTani developed as the old consonantal system decayed through cluster simplification. However, unlike Central Tibetan, in PaTani the voicing distinction is phonemic even in the initial segment. Does this suggest that it has a different tonogenesis than some other TB languages like Central Tibetan? It is possible that as the voicing distinction was getting lost, it was reinforced because of the large number of vocabulary items being borrowed from Indic. This might explain why (i) both voicing and tone are phonemic in PaTani; and (ii) at the same time there is some correlation between tone and voicing of the initial consonant. At this stage these are mere speculations. In order to examine whether the tones of modern PaTani can be related in a systematic way to other Bodish languages like Central Tibetan and Tamang, there is a need (i) to do a phonological study of some other languages belonging to this subgroup; and (ii) to compare sets of cognates.

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