How Low Can You Go? Contact Effects in Manange (Sino-Tibetan, Nepal)

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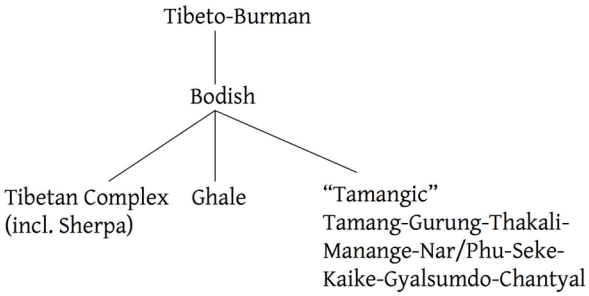
I. The Context for this Talk

- Matras & Sakel (eds.) 2007: A crosslinguistic survey & analysis of structural effects of language contact via access to 27 language- or area-specific contributions
- Horizontal (language samples) & Vertical dimensions (affected structural categories)
- Borrowing: The adoption of structural features into a language as the result of some level of bilingualism in the history of the relevant speech community (p.1)
    - MAT(ter) Borrowing: Morphological form and/or phonological shape from one lg. replicated in another lg.
    - PAT(tern) Borrowing: Strategy re-structuring modeled on an external source (explored in more detail in Matras & Sakel 2007)
- 'Typical' examples: PAT incorporation of TAM & definiteness (e.g. Kurmanji, W. Armenian, Neo-Aramaic & Persian in Anatolia region; Matras & Sakel 2007: 844-845); MAT loanwords (cf. Haspelmath to appear; Haspelmath & Tadmor, eds. in prep.)
- More 'interesting' examples: rare cases of MAT replication of TAM markers (e.g. Berbice Dutch Creole from Ijo and from Dutch; Kouwenberg 1994); PAT prosodic domain restructuring
- Recognition that the distinction sometimes not motivated, e.g. word-order changes really only PAT in type, or that both types valid simultaneously
- Residual Questions (that are interesting for me):
    - Can phonological change be PAT as well as MAT (e.g. Sakel 2007)?
    - If so, are the mechanisms behind PAT-type changes like those proposed in Matras & Sakel 2007? (This involves special attention to the Vertical dimension of contact-induced change)
- My goals:
    - Survey some examples of MAT/PAT-type in one ST lg. of Nepal
    - Revisit some individual generalizations put forth in the volume in the context of Manange & contact-induced prosodic changes

II. Manange: The "Extralinguistic" Setting

- The extralinguistic setting is as important to consider as structural consequences



- A.K.A. Nyeshang, Nyeshangte, Manangba, Manangbhot; Spoken by members of a single ethnic group of under 5,000 spkrs in northern Manang District, Nepal (map)

- Manang: Culturally & linguistically heterogeneous; Mananges (and Gurung) are dominant ethno-linguistic groups of Manang; Hoshi 1986; Hildebrandt 2003, 2004
- Endangerment status: small, but relatively viable, w/some prospect for endangerment (Kincade 1991)
- Manange history of contact is complex, Nepal history of contact also complex
- Noonan (2003): Himalayish Contact, Bodish Contact, Tibeto-Burman & I-E Contact
- Rural Language Community: Manange a regional lingua-franca; most contact within Bodish; Nepali bilingualism
- Urban Community:
    - Newer; mostly due to economic pursuits; Nepali the lingua-franca, and most younger Urban speakers have life long bilingual acquisition
    - Manange diglossia: Manange in domestic situations; Nepali elsewhere/public
- Such scenarios over many generations provide opportunity to look at Indic impact on Tibeto-Burman system

III. Structural Consequences of Contact with Nepali

- Within sub-grouping contact effects trickier to recognize

A. MAT-borrowing

Phonology

- Retroflex plosives /ʈ, ʈʰ/; these are contrastive in word-initial position for commonly used words (e.g. *[1]ʈu* 'sit/stay', *[4]ʈʰu* 'six'), but are marginal in lexicon frequency; Retroflex a reliable feature of South Asian linguistic area (Masica 2001; Noonan 2003)

Nominal System/Other Parts of Speech

- Many (western) Tibeto-Burman lgs. lack a numeral classifier system; Nepali has *-janā* for human count nouns & *–tʰa* for non-humans (Acharya 1991: 100). The strategy in Manange could be viewed as both MAT & PAT

(1)

*[4]ŋi-**tʰa***	*[1]kola*	*[4]ʃi-**tʰa***	*[3]pʌle*
two-CLASS	child	one-CLASS	leg
'two children'		'one leg'	

Clause Combining/Clausal Coordinators

- Coordination via typical T-B strategies like a clause-chaining affix *–tse* or else no overt marking

(2)

a. *[1]juŋ* *[4]tsʰoŋ* ***[1]lʌ-tse*** *[2]kʰje* *[1]kʰʌ-tsi*
stone sell **do-CC** profit come-PERF
'I sold stones and made a profit.' (or, 'Because I sold stones, I made a profit.')

b. *[1]u* *[3]ja* *[2]tipal=ko* *[2ʃ]ʌmlepʰre* ***[1]jʌ-tse*** ***[1]lʌ-tse***
dist yak some=DEF forget **go-CC** **do-CC**

[1]kʰim=ko *ʌle* ***[1]lʌ-tse*** *ʌtse* *tẽ* *[1]ʈu* *[1]mi*
3.pl=DEF SEQ **do-CC** like.this then stay EVID
'Having forgotten (about their friends), having done this, those yaks stayed in the valley.'

c. *tʰjʌpʌ* ***[2]prĩ*** *[4]ŋi* *ra* *[1]nẽ* *[1]tʰen-tsi*
yeast **put** two day alone put/leave-PERF
'I put the yeast in (the mash) and left it alone for two days.'

- Also frequent use of Nepali word/phrase/clausal coordinators *ra* and *ani* in addition to Bodish *tẽ*

(3)

a. [1]pʰʌ=ko **tẽ** [3]pje=ko
husband=DEF CONJ wife=DEF
'the husband and the wife'

b. [1]nʌkju **ɾʌ** [4]ʃi [4]pʰolpʌ=ɾi [1]mo [1]mu
dog **CONJ** one frog=INDEF COP EVID
'There was a dog and a frog.'

c. Grandma: [2]tʰaŋ=ko [1]kʰʌ-tsi nʌ [1]a-tʌ?
smell=DEF come-PERF or NEG-become?
'Did (an alcohol) smell come or not?'

Auntie: [1]a-tʌ **ani** [2]pe=ko
NEG-become **and.then** beer=DEF

[3]naŋ=ri [2]tsʰaŋ-tsi.
inside=LOC fill-PERF
'No, it didn't, and then I put the beer inside (of a pot).'

Lexicon

- Loanwords fairly common, but not overwhelmingly so: of 1127 entries in LWTP, about 12% almost certainly loanwords of varying ages (Hildebrandt to appear)

Table 1. Loanwords by Semantic Class (Nepali & English Source Languages)

		Nouns	*Verbs*	*Adjectives*	*Adverbs*	*Function words*	***Total***
Source language	Nepali	65	9	3	0	2	**79**
	English	6	0	0	0	0	**6**
Total Loanwords		71	9	3	0	2	**85**
Nonloanwords		507	230	97	7	86	**927**
Total		**578**	**239**	**100**	**7**	**88**	**1012**

- Older loans show phonological adjustments to be more in line with Manange (& T-B) profile; however, some more recent loans retain an Indic phonological profile

Table 2. Some Recent Loanwords

Form	*Source*	*Meaning*	*Form, older/rural Mananges*
samundra	Nepali	sea	kjʌmtso
koʈʰa	Nepali	room	[3]tsʌpe
boʈʌl	English	bottle	various forms
pʌriwʌr	Nepali	family	pʰope

B. PAT-borrowing, Pt. I

Nominal Structures

- Manange is typical of Bodish/Himalayish & I-E languages of SA linguistic area in having (split) ergative-absolutive alignment, realized by case marking & split-ergativity is reconstructed back to Proto-Tibeto-Burman (DeLancey 1989)
- However, a difference in the way ergativity is marked in rural & urban lg. use
- Rural system split aligns with modality

(4) Realis

[1]*mriŋ*=*tse*	[2]*naka*	[2]*pʰuŋ*	[2]*kʰol-tsi*
woman=ERG	chicken	egg	boil-PERF

'The woman boiled the egg.'

(5) Irrealis (Future)

[1]*mriŋ**=*tse*	[2]*naka*	[2]*pʰuŋ*	[2]*kʰol(-pʌ)*
woman*=ERG	chicken	egg	boil(-NOM)

'The woman will boil the egg.'

(6) Irrealis (Immediate)

[1]*ŋʌ**=*tse*	[1]*nʌkju=ri*	[2]*prim-pi*	[1]*lʌ-tsi*
1(SG)*=ERG	dog=LOC	hit/kick-IMM	do-PERF

'I prepared to/was about to hit/kick the dog.'

- Urban speakers no split: All A-arguments of transitive verbs show *=tse* enclitic, regardless of aspect or modality encoding of verb-event
- Interestingly, Nepali split ergativity is different from both the rural & urban patterns, where *–ley* occurs on A-arguments of transitive verbs only in perfective aspect
- Nominal constituent ordering also different between two Manange communities
- Nepali: lexical adjectives are pre-nominal (AN) e.g. *miʈʰo kʰana* 'tasty food'
- Most Bodish languages: both NA & AN attested, but more conservative lgs. (e.g. Nar-Phu) strongly NA, and pre-nominal ordering in Bodish is generally assumed to be a newer pattern via contact with Indic lgs. (Bickel 2001; Masica 2001; Noonan 2003)
- Rural speakers: [1]*nʌkju* [1]*tʰjʌ-pʌ* dog big-NOM '(the) big dog'
- Urban speakers: [1]*tʰjʌ-pʌ* [1]*nʌkju* big-NOM dog '(the) big dog'
- Interestingly, this emergent AN ordering with urban speakers results in the blurring of an important syntactic diagnostic distinguishing lexical verbs from verb-like adjectives, as lexical verbs in a relative-clause construction (i.e. in the NP) are pre-nominal, while verb-like adjectives are always post-nominal for rural speakers

Verbal Structures

- For most Bodish lgs, causation is mostly via periphrastic structure (Noonan 2003)

(6) Manange Periphrastic Causation Strategy

[1]amʌ=tse	***[1]lʌ-tse***	*[1]ŋʌ=tse*	*[1]tʰaŋ*	*[1]pʰja-tsi*
mother=ERG	**do-CC**	1SG=ERG	floor	clean-PERF

'My mother made me clean the floor.'

- Morphological strategy also available, which looks like it could be modeled on affixal causation marking in Nepali

(7) Manange Morphological Causation Strategy

[1]ŋʌ=tse	*[3]tʃʌ*	*[1]le*	***[1]lʌ-tsi***
1.SG=ERG	tea	warm	**do-PERF**

'I made the tea warm/warmed the tea.'

(8) Nepali Morphological Causation (Acharya 1991: 168)

Subhadrā	*suśīla-lāī*	*bhāta*	*khũw-**āu**-chin*
Subhadrā	Suśīla-DAT	rice	eat-**CAUS**-3SGPRES.FEM

'Subhadra makes Susila eat rice'

- For rural speakers, morphological coding of aspect not present w/negated verbs

9) Affirmative

[1]ŋʌ=tse	*[1]kola=ri*	*[3]ʃitaŋ*	***[1]lʌ-tsi***
1.SG=ERG	child=LOC	scold	**do-PERF**

'I scolded the child.'

(10) Negative

[1]ŋʌ=tse	*[1]kola=ri*	*[3]ʃitaŋ*	***[1]a-lʌ***
1.SG=ERG	child=LOC	scold	**NEG-do**

'I did not scold the child.'

- Urban speakers do not acknowledge this dependency, & both negated/non-negated verbs host the full range of aspect morphology e.g. *[3]ʃitaŋ* ***[1]lʌ-tsi*** & *[3]ʃitaŋ* ***[1]a-lʌ-tsi***

Numerals

- Numerals follow a base-ten system: *[2]tʃu* 'ten'; *[4]ŋiʃu* two-ten 'twenty'; *[2]sumtʃu* three-ten 'thirty'; *[4]pʰlitʃu* four-ten 'forty', *[4]ŋʌtʃu* five-ten 'fifty', etc.
- Consecutive counting within bases via addition of single units to the multiple: *[1]tʃukre* ten-one 'eleven', *[1]tʃuŋi* ten-two 'twelve', *[1]tʃupsẽ* ten-three 'thirteen' etc.; *[4]ŋiʃu [4]kri* two-ten-one 'twenty one', *[4]ŋiʃu [4]ŋi* two-ten-two 'twenty-two', etc.).
- Base-ten system probably a recent innovation via contact with similar systems in Indic lgs.; comparison w/other Bodish lgs. like Tamang (Nepal) & Dzonghka (Bhutan) reveals either remnants of, or else complete, vigesimal (base-twenty) systems (Mazaudon 2003)

- Base-ten system in Manange has probably been in place for awhile, as these combinations come with their own special phonotactic patterns e.g. ^{2}*sẽ*, 'three' vs. ^{2}*sumtʃu* 'thirty' and ^{4}*ʈ^{h}u* 'six' vs. ^{4}*ʈ^{h}uktʃu* 'sixty'

C. PAT-borrowing, Pt. II (?)

Prosodic Re-structuring: Tone change in Manange

- "Very Bodish" prosodic property: Four-way lexical tone system, based mainly on vowel pitch (F_0) properties, and secondarily on segment phonation properties (**Nepali is not tonal**)

Table 3. Manange Tones

Tone	Pitch Properties	Initial Onset Consonant Properties	Example
1	Low Level	N/A	*ʈu* 'sit/stay'
2	High Level	N/A	*ʈu* 'thread'
3	Very High Falling	Unaspirated if Obstruent	*ʈu* 'cereal'
4	Mid-High Falling	Aspirated if Obstruent	*ʈ^{h}u* 'six'

- The phonation distinction not retained with sonorant-initial words (e.g. ^{1}*ŋje* 'chew'; ^{2}*ŋi* 'seven'; ^{3}*ŋje* 'milk'; ^{4}*ŋje* 'spill')
- For urban speakers, the structure of the tone system shows marked phonetic changes

Chart 1. Average F_0 Patterns for 400 words from 4 Tones: RURAL

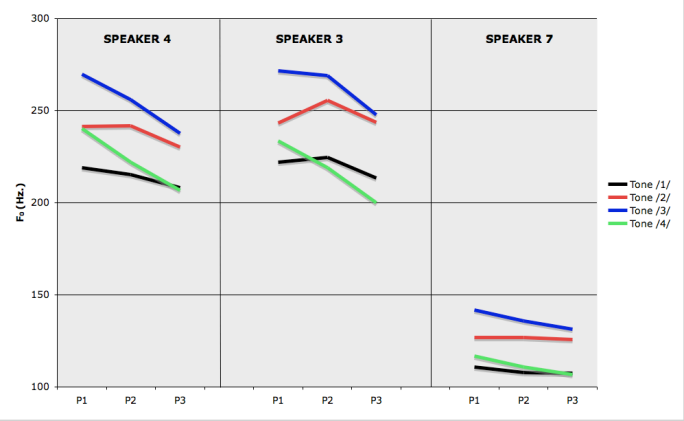
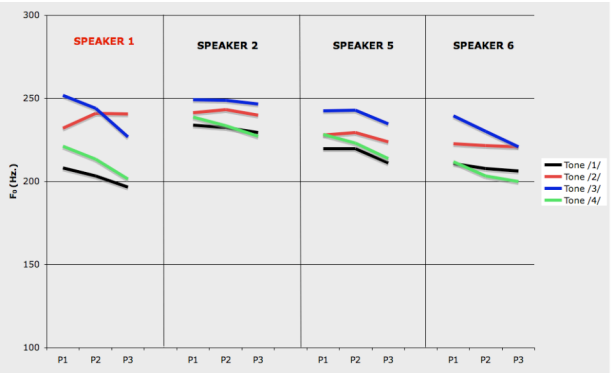


Chart 2. Average F_0 Patterns for 400 words from 4 Tones: URBAN



- Also: For many urban speakers, the conceptualization/discrimination of tones is still partially intact, but with some increased category "fuzziness"
- Borrowing from Nepali? It is not clear what exactly would be borrowed
- Is this PAT-borrowing? Again, difficult to observe the pivot-mechanism on which these changes can be based
- Is there anything more to say or observe?
- This appears to be a rare type of change, whereby the phonetic merger precedes a conceptual merger (i.e. words are perceived as different, but produced as same)
- And in fact, certain lexical members still retain phonetic tone properties of conservative system, so whatever is happening to tone in Urban Manange, it is in-progress
- In addition, the change is not random in its phonetic dimensions, as it is possible to observe certain gradient and functional factors which are driving the rate and direction of the change (Hildebrandt 2007)

Table 4. Factors Behind Phonetic Changes

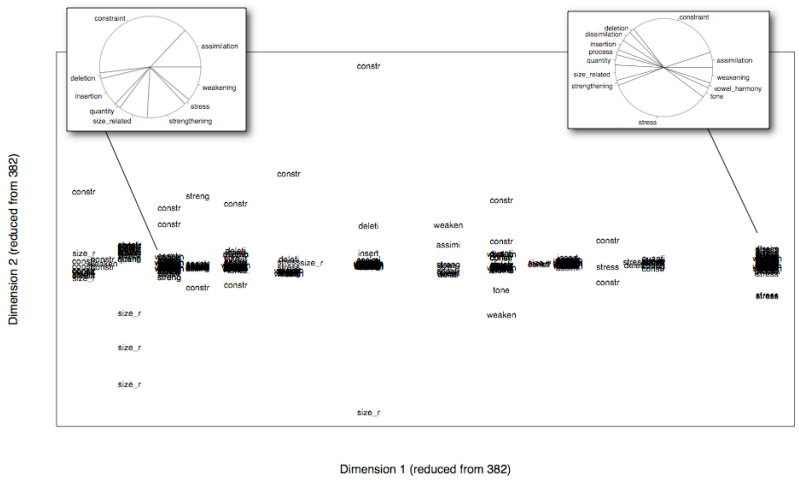
Factor	Rural System	Urban System
Intrinsic Pitch (the acoustic interaction between vowel height and F_0)	Intrinsic Pitch shows non-significant tone overlap effects	Intrinsic Pitch shows significant tone overlap effects
Voice Onset Timing ~ F_0 Interactions (the acoustic interaction between delayed voicing after aspirated consonants and following vowels)	The overall F_0 of vowels following aspirated onsets is lowered, but not significantly	The effect is significant
Lexical Frequency (the idea that frequency of usage corresponds with certain phonological reductive effects)	Non-frequent words show less evidence of the above factors	Non-frequent words significantly resemble the conservative system

- A PAT-classification here is perhaps not appropriate, however a simple 'tone merger' analysis is just another type of description
- Interesting in the perspective long-term historical contact in this region because of the diachronic phenomenon of tonogenesis in genetically diverse lgs of SE Asia (cf. Matisoff 1973; Thurgood 2002); Proto-Tibeto Burman syllable: $C_pC_pC_iV(:)C_fC_s$
- Maybe PAT in type, as contact resulted in syllable template restructuring & incipient tonality

D. Prosodic Domain (Re-)organization & the PAT/MAT Distinction

- A more general question: does the PAT-analysis apply to deeper level prosodic properties?
- Phonological profiles of languages must also include diagnostics and interrelations of prosodic domains: (mora), syllable, foot, phonological word, phonological phrase, intonation phrase, phonological utterance
- Are these domains (and their properties) subject to the same principles of contact-influence laid out within the MAT/PAT approach?
- To what extent are prosodic domain types and properties indicative of within-family patterns? To what extent are there within-family deviations and do such deviations correspond with areality as defined & justified via other features?
- The Autotyp Word Domains project: Survey diagnostics for the domain-type known as "phonological words" in typological perspective, with a special focus on patterns in 3 families across the greater S/SE Asia area & into Europe
- Specifically in a theory-neutral perspective: the phonological word is a domain of phonological generalization that must make reference to morphological structures
    - e.g. the tone-bearing unit in Manange is the p-word (not the syllable or foot; the domain of vowel harmony in Hungarian is the p-word
- Our findings (Bickel et al 2008/to appear): When considering different properties for p-words & also the relative sizes of p-words across lgs., alot of diversity

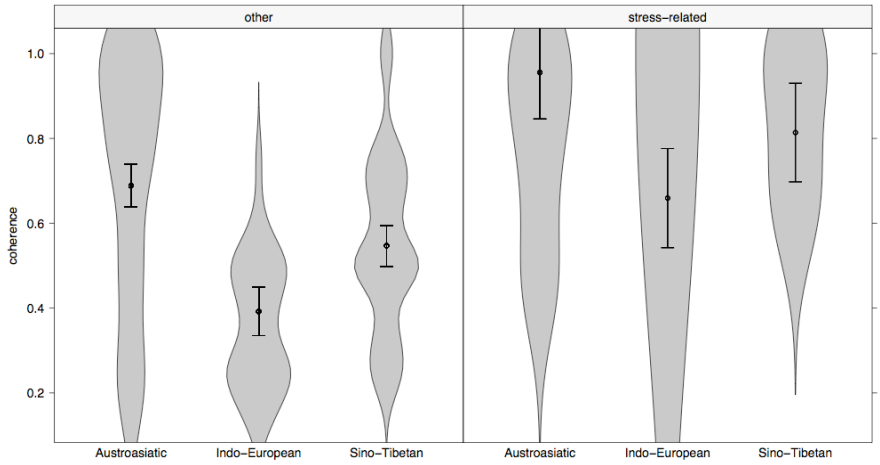
Chart 3. Diversity in word domains (properties & size); 63 Languages Sampled



- Such diversity causes problems for predictions about p-words & the prosodic hierarchy within generative approaches (NB. stress properties stand out as a possible candidate for universality)

- We took a special look at p-word patterns within language samples from three families (Austro-Asiatic, Sino-Tibetan, Indo-European) & we also looked at p-word patterns in languages from 3 linguistic areas: Western Europe, South Asia, SE Asia
- Areality showed no effects (i.e. P-word patterns do not significantly identify South Asia vs. other areas)
- But genealogy does show a significant difference: The p-word patterns robustly identify AA, ST and IE; i.e. the p-word properties & sizes are good traits of the 3 families

Chart 4. P-word Types & Sizes in Three Families (stress-defined treated separately)



- Upshot: prosodic organization at "deeper", more abstract levels (i.e. 'beyond the segment' or emic unit) may be more resistant to borrowing effects
- I.e. despite the presence of these three families in well known linguistic areas, the p-word as a prosodic domain type corresponds more so with family type
- This still leaves questions of prosodic domain re-structuring in specific contact situations

IV. Concluding Comments

- In most cases, contact-induced change in Manange observable within the MAT/PAT framework
- Other cases may fall outside of this framework and may be best examined via consideration of gradient and sociolinguistic/usage factors
- And in fact, deeper-level linguistic re-organization as a consequence of contact may be more difficult to evidence

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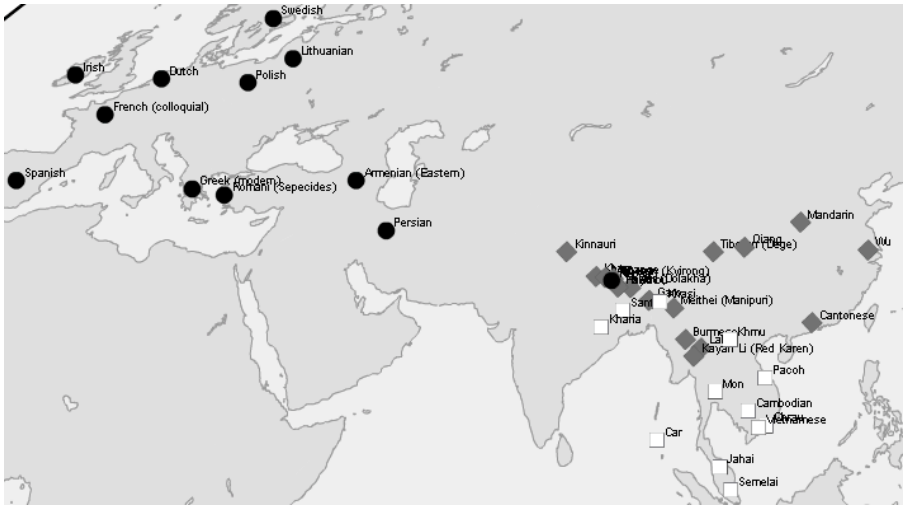
Map 1. The languages from IE, ST, AA Families



Map 2. The languages from Western Europe, South Asia, Southeast Asia Areas