The Himalayan Enclave Hypothesis & Bipartite Stems
Kristine A. Hildebrandt, University of Leipzig
khilde@uni-leipzig.de

0 Macroareas & Enclaves
- Typological Enclaves (Bickel & Nichols 2003)
- Himalayas & Caucasus: zones of structural deviation within larger pan-Eurasian Macroarea = 'Macroarea vs. Enclave'

MAP 1. Languages in Himalaya & Caucasus vs. Rest of Eurasia (Bickel & Nichols 2003)

• 'Enclave': a linguistic sub-area that shows a greater within-group variance of the presence of certain features, while the surrounding Macroarea has more within-group homogeneity

1 Enclave Variables
- Verb inflectional synthesis
- Polypersonal verb agreement
- Conjunct/disjunct system
- Multiple possession classes
- Double marking of possessive & object relations

- Bipartite stems
- Bipartite: A stem that is discontinuous or segmentable into two parts for certain morphological operations (Bickel & Nichols, to appear; Nichols 2003/to appear)

2 Discontinuity via formative interposition between 2 stem pieces
- This interposition usually evidenced via prefixation

(2) Limbu (Tibeto-Burman, Kiranti) Bipartite Stem
kusĩŋip-ma
understand-NOM 'to understand' (van Driem 1987: 352)
kusĩŋ me-ni:t-t-u-n
understand, NEG-understand, 3PAT-NEG
'(She) did not understand.'

- In Limbu compounds, inflectional morphology applies iteratively

(3) Limbu Verbal Compound
dza 'eat' + sur 'finish' 'finish eating'
kɛ-dza-m kɛ-sur-u-m-aŋ ta-ʔɛ
2-eat3P-pA 2-finish3P-pA-and show.up-1sPS/NPT
'I'll show up when you have finished eating.' (van Driem 1987: 119)

- Bickel & Nichols: Tested for a significant relationship between the presence/absence of bipartites in a genetically balanced sample of languages and the location of those languages in either the larger macroarea or the enclaves

CHART 1. Bipartites in Enclaves & Rest of Eurasia N = 38 languages
(Bickel & Nichols 2003)
However: Language sample incomplete; results marginally significant; low reliability
Thus: an ongoing need to track languages with/without bipartites in both Eurasia & Enclaves
My sample: A random, balanced sub-sampling of languages from major sub-groupings of all families in both areas; ‘filling in’ more empty cells regarding presence/absence of bipartites

1 Bipartite Stems

- Bipartite stem: a single stem segmentable into two parts for certain morphological operations
- First noted for: Washo & also for Klamath (Jacobsen 1980; DeLancey 1996); other North American lgs (e.g. Cree, Lakhota, Kutenai, Wichita)
- Nakh-Daghestanian (Nichols 2003/to appear), Oceanic~Asian lgs. (e.g. Kuot, Gooniyandi, Kewa, Paiwan, Ket, Dumo) & at least one African language (Yoruba)
- Sino-Tibetan/Tibeto-Burman: Limbu, Belhare, Newar, Qiang, Kyirong Tibetan, Manange

Bipartites vs. Other Complex Stem-Words

- Interposition is not infixation: location of infix prosodically determined, while interposition not prosodically determined
- Bipartites are not compounds: combination of 2 roots to create a new stem-word, with some stranding of morphology that applies to only one piece of the compound (e.g. Eng: passerby; German: Schwanengesang ‘swan song’) (Fabb 2001); bipartites semantically opaque, interposed formative applies to entire stem as a whole
- Bipartites are not incorporation: compounding of (noun) with verb/adjective to create a complex form that is a clausal predicate; tend to show valency alterations, specialized semantics, stripped-down or limited morphology, phonological cohesion (Gerdts 2001); bipartites a morphologically simple stem form with formative interposition
- Variation in what has been called ‘bipartite’:
  - Combination of lexical prefix + stem (instrumental theme, manner, location)
  - Initial piece may adjust valency of resulting larger verbal construction
  - For others, no discernable semantics to either piece’
  - For some ‘pieces’: a wide range of combinatorial possibilities/patterns; for others: very restricted

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SEMANTICS</th>
<th>VALENCY (if verbal)</th>
<th>COMBINATION POSSIBILITIES</th>
<th>INSERTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporation</td>
<td>both pieces transparent</td>
<td>single (reduced)</td>
<td>flexible-definiteness restrictions: different phrasal heads</td>
<td>inflectional/derivational morphemes</td>
</tr>
<tr>
<td>Compound</td>
<td>word1 + word2... = stem</td>
<td>single</td>
<td>some restrictions</td>
<td>interposed morphology archaic/targets single piece</td>
</tr>
<tr>
<td>'Complex Stem'</td>
<td>gram. element + stem = stem</td>
<td>single</td>
<td>some restrictions</td>
<td>inflectional formatives (prefixation applies once, but targets both pieces)</td>
</tr>
<tr>
<td>BIPARTITE</td>
<td>single stem-word</td>
<td>single</td>
<td>restricted; single word</td>
<td>certain inflectional formatives (prefixation applies once, but targets both pieces/entire stem)</td>
</tr>
</tbody>
</table>

Table 1. Stem Types
2 An Updated Sampling & Sino-Tibetan Bipartites

- Taken from a balanced sampling of languages from both areas
- Himalaya & Caucasus Enclaves: 18 languages
- Rest of Eurasia: 34 languages (total N = 52)

<table>
<thead>
<tr>
<th>Major Sub-Groups</th>
<th>YES BIPARTITES</th>
<th>NO BIPARTITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinitic</td>
<td>X</td>
<td>Mandarin</td>
</tr>
<tr>
<td>Remnant Kamarupan</td>
<td>X</td>
<td>Mishmi</td>
</tr>
<tr>
<td>Brahmaputran</td>
<td>X</td>
<td>Garo</td>
</tr>
<tr>
<td>Himalayish</td>
<td>Dolakha Newar, KTM Newar, Limbu, Belhare</td>
<td>Hayu, Kham, Kinnauri</td>
</tr>
<tr>
<td>Qiangic</td>
<td>Qiang</td>
<td>Pumi/Prinmi</td>
</tr>
<tr>
<td>Kuki-Chin</td>
<td>X</td>
<td>Meithei, Lai Chin</td>
</tr>
<tr>
<td>Karenic</td>
<td>X</td>
<td>Kayah-Li</td>
</tr>
<tr>
<td>Lolo-Burmese</td>
<td>X</td>
<td>Lahu</td>
</tr>
</tbody>
</table>

Table 2. Sino-Tibetan Major Branches & Representative Languages With & Without Bipartites (Shaded Branches = Himalaya Enclave)

- Fisher's Exact (1-tailed): $p = .041$; (p < .05); Relationship marginally significant
- But still similar to Bickel & Nichols 2003
- Sino-Tibetan languages: Based on 9 major sub-groups, with uneven representation of languages per sub-group
- A per-grouping, genus-level, sample (not per-language)
- Do we find, within this single family, a similar relationship between sub-area and bipartites?

Chart 2. Bipartites in Enclaves & Rest of Eurasia (N = 52)

Chart 3. S-T Major Branches with Mixed Presence of Bipartites vs. No Bipartites, Across Areas (N = 9 Branches)

- Fisher's Exact (1-sided): $p = .226$ (p > .05); Not significant
• Very small sample; 1 Sub-grouping in Himalaya only NO bipartites (Brahmaputran) & 1 Sub-grouping in rest of Eurasia with MIXED bipartites (Qiangic)
• Results still interesting from a family-internal perspective
• Bipartites in Sino-Tibetan seem to be a recurring feature in an otherwise structurally diverse family
• Bodish & Qiangic languages have less rich, less interesting (concatenative) inflectional morphology, while Kiranti languages have more/richer; All 3 sub-groups share this stem type in common

Bipartites in Specific Languages of 3 Sub-groupings

• Interposition evidenced through formatives like possession, negation, agreement marking, and aspect prefixation:

(4) Negation: Manange (Bodish, Nepal, Himalaya)
khì jò a-mé jà
3.SG forget, NEGATIVE-forget, NONVOLITIONAL
'S/he forgets/forgot' (Hildebrandt 2004)

(5) Agreement: Belhare (Kiranti, Nepal, Himalaya)
là-nn-u-yakt-he
dance,3.NONSG.SUBJ-dance,IMPERFECTIVE-PAST
'S/he was dancing' (Bickel & Nichols to appear)

(6) Aspect: Qiang (Qiangic, China, Eurasia)
de-tei-le-wei
give,CONTINUOUS-give,HEARSAY
'(He) gave (them)...' (LaPolla 1996: 267)

3 Concluding Remarks

Bipartites as a Stem Type

• A strict, operational definition of bipartite stem vs. other (morphologically) complex stem-words
• Hallmark feature of bipartites: Interposition of prefixes

Bipartites as an Enclave Feature

• Data on more languages show significantly heterogeneous patterning of bipartites in Himalaya & Caucasus enclaves vs. the rest of Eurasia
• Genus-based sampling within Sino-Tibetan shows a heterogeneous, but non-significant, patterning of bipartites in the Himalaya enclave vs. the rest of Eurasia

References

LaPolla, Randy. 1996. A grammar of Qiang. Author Copyright.