The Steppe – seedbed of languages

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Why are languages similar?

• Universal tendencies: *mama*-words
• Chance: Eng. *eat* – Mongolian *it*
• Diffusion (borrowing): linguistic areas
• Genetic relationship: family trees
• Human genetics?? (Dediu & Ladd 2007)
Family trees

Altaic language family

Turkic  Mongolic  Tungusic  Korean  Japanese
Linguistic areas

• Eurasian steppe
  Agglutinating, suffixing, vowel harmony
  Altaic, Uralic

• Southeast Asia
  Isolating, monosyllabic, tones, numeral classifiers
  Sino-Tibetan, Tai-Kadai, Hmong-Mien, Austroasiatic
Family vs. diffusion

- Genetic relation (family tree)
  only linguistic forms are relevant

- Diffusion
  linguistic form *and* linguistic structure relevant
Spread zones and residual zones


- **Spread zones**: Few languages, little diversity (Eurasian steppe, ...)

- **Residual zones**: Many languages, high diversity (Caucasus, ...)
Central Eurasian spread zone
(Nichols 1997)
Locus and range of Proto-Indoeuropean
(Nichols 1997)
Iranian languages

(Nichols 1997)
Turkic and Mongolic
(Nichols 1997)
Steppe language spreads

- Proto-Uralic (?) 6000 BP
- Proto-Indo-European 5500 BP
- Iranian 4000 BP
- Turkic 2000 BP
- Mongolian 800 BP

Nichols 1997
Punctuated equilibrium

Robert M.W. Dixon 1997. *The rise and fall of languages*

Languages develop quietly for thousands of years, but these periods are interrupted by punctuation, when they develop quickly, due to outer factors. The family tree model is applicable only for punctuation.

Spread of agriculture one reason for punctuation
Peter Bellwood 2001, (< Colin Renfrew)
Two examples of diffusion

- Tones
  many languages in East and Southeast Asia have developed lexical tones

- Vowel harmony
  what is the origin of vowel harmony??
Languages tend to borrow structural features but use their own resources to realize them.

A specific tone system is never borrowed by a non-tonal language but only the idea of using tones. The tones are developed through internal changes in the language.
Standard Chinese:

<table>
<thead>
<tr>
<th>Type</th>
<th>Characters</th>
<th>Pinyin</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>high:</td>
<td>mā 媽</td>
<td>‘mother’</td>
<td></td>
</tr>
<tr>
<td>rise:</td>
<td>má 麻</td>
<td>‘hemp’</td>
<td></td>
</tr>
<tr>
<td>fall:</td>
<td>mà 罵</td>
<td>‘to scold’</td>
<td></td>
</tr>
<tr>
<td>low dip:</td>
<td>mǎ 馬</td>
<td>‘horse’</td>
<td></td>
</tr>
</tbody>
</table>
Vietnamese:

mid: ba ‘three’

fall: bà ‘grandmother’

rise: bá ‘to hug’

low dip: bā ‘bane’

low glottal: bã ‘haphazard’

rise glottal: bā ‘residue’
### Kammu tonogenesis

<table>
<thead>
<tr>
<th>E Kammu</th>
<th>N Kammu</th>
<th>E Kammu</th>
<th>N Kammu</th>
</tr>
</thead>
<tbody>
<tr>
<td>puas</td>
<td>púas</td>
<td>‘deer’</td>
<td></td>
</tr>
<tr>
<td>taañ</td>
<td>táañ</td>
<td>‘weave’</td>
<td></td>
</tr>
<tr>
<td>kaap</td>
<td>káap</td>
<td>‘jaw’</td>
<td></td>
</tr>
<tr>
<td>máar</td>
<td>márar</td>
<td>‘salt’</td>
<td></td>
</tr>
<tr>
<td>ṇo?</td>
<td>ṇo?</td>
<td>‘rice’</td>
<td></td>
</tr>
<tr>
<td>Ṽa?</td>
<td>lá?</td>
<td>‘leaf’</td>
<td></td>
</tr>
<tr>
<td>ṿaañ</td>
<td>ráañ</td>
<td>‘tooth’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bu?</td>
<td>pù?</td>
<td>‘breast’</td>
<td></td>
</tr>
<tr>
<td>dee</td>
<td>tèe</td>
<td>‘oneself’</td>
<td></td>
</tr>
<tr>
<td>gaañ</td>
<td>kàañ</td>
<td>‘house’</td>
<td></td>
</tr>
<tr>
<td>mee</td>
<td>mèe</td>
<td>‘you’</td>
<td></td>
</tr>
<tr>
<td>ṇo?</td>
<td>ṇo?</td>
<td>‘to fear’</td>
<td></td>
</tr>
<tr>
<td>roɔj</td>
<td>roɔj</td>
<td>‘fly’</td>
<td></td>
</tr>
<tr>
<td>raañ</td>
<td>ràañ</td>
<td>‘flower’</td>
<td></td>
</tr>
</tbody>
</table>
Vietnamese tonogenesis

Haudricourt’s hypothesis:

<table>
<thead>
<tr>
<th>*voiceless</th>
<th>voiced</th>
<th>stop</th>
<th>fricative</th>
</tr>
</thead>
<tbody>
<tr>
<td>mid</td>
<td>fall</td>
<td>rise</td>
<td>low dip</td>
</tr>
<tr>
<td>low glottal</td>
<td></td>
<td></td>
<td>rise glottal</td>
</tr>
</tbody>
</table>
Mongolian vowel harmony

pharyngeal (−ATR)  
non-pharyngeal (+ATR)  
neutral

Diagram:

- a
- o
- u
- e
- o
- i
Mongolian vowel harmony

jaw or xunj
‘go’ ‘enter’ ‘plait’

jaw-ʊŋ or-ʊŋ xunj-ʊŋ
jaw-ʃa or-ʃa xunj-ʃa
jaw-x-ig or-x-ig xunj-x-ig

xeekş og uc it
‘adorn’ ‘give’ ‘see’ ‘eat’

xeekş-uŋ og-uŋ uc-uŋ it-uŋ
xeekş-ʃe og-ʃe uc-ʃe it-ʃe
xeekş-x-ig og-x-ig uc-x-ig it-x-ig
Tungusic vowel harmony

Solon

Mongolian
Vowel harmony ~ pharyngealization

Solon

Palestinian Arabic
Scenario for “harmonogenesis”

- A language with ‘emphatic’ (pharyngealized) consonants but no vowel harmony (Arabic)

- The feature ‘pharyngeal’ spreads from pharyngealized consonants to adjacent vowels (most varieties of Arabic, e.g. Palestinian Arabic)

- Pharyngealized and plain consonants merge (Maltese; Tunisian Arabic)

- Pharyngealization spreads through the word (Tunisian Arabic; Mongolic and Tungusic)
Mongolian as a Southeast Asian language

<table>
<thead>
<tr>
<th>Old Mongolian</th>
<th>Halh</th>
<th>Meaning</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>*sehyl</td>
<td>suul</td>
<td>‘tail’</td>
<td>2&gt;1</td>
</tr>
<tr>
<td>*kʰøkʰe</td>
<td>xox</td>
<td>‘blue’</td>
<td>2&gt;1</td>
</tr>
<tr>
<td>*masi</td>
<td>maš</td>
<td>‘very’</td>
<td>2&gt;1</td>
</tr>
<tr>
<td>*kʰonin</td>
<td>xonj</td>
<td>‘sheep’</td>
<td>2&gt;1</td>
</tr>
<tr>
<td>*nilkʰa</td>
<td>njalx</td>
<td>‘baby’</td>
<td>2&gt;1</td>
</tr>
<tr>
<td>*ahula</td>
<td>vulž</td>
<td>‘mountain’</td>
<td>3&gt;1</td>
</tr>
<tr>
<td>*huhutʰa</td>
<td>vuth</td>
<td>‘bag’</td>
<td>3&gt;1</td>
</tr>
<tr>
<td>*sipahun</td>
<td>šowu</td>
<td>‘bird’</td>
<td>3&gt;2</td>
</tr>
<tr>
<td>*pisilak</td>
<td>pjalszæg</td>
<td>‘cheese’</td>
<td>3&gt;2</td>
</tr>
</tbody>
</table>
The forms of languages were shaped by diffusion in the Steppe – equilibrium

Outer factors caused them to spread – punctuation

Spread zone – Steppe
Residual zone – Outskirts
Bibliography (1)


