Constraints on Code-blending: Evidence from Acceptability Judgments

Linguistic Society of America Annual Meeting
New Orleans, LA January 2020

Diane Lillo-Martin 1, Ronice M. de Quadros 2, Jonathan B. Bobaljik 3, Deanna Gagne 1, Lily Kwok 1, Sabine Laszakovits 1, Marilyn Mafra 2, Susanne Wurmbrand 5
1 University of Connecticut; 2 Universidade Federal de Santa Catarina; 3 Harvard University; 4 Gallaudet University; 5 Universität Wien

https://slla.lab.uconn.edu/bibibi/0

Unique context of language transmission (Compton 2014)

95% of deaf children are born to hearing parents
80% of children born to Deaf parents are hearing

Heritage Bilingualism effects

• Cross-linguistic influence
• Code-switching
• Variable fluency
• Code-blending

Bilingual heritage language users

CODAs

Code-blending

Simultaneous production of (aspects of) an utterance in sign and speech

Types of code-blending

• Coinserion
  • Simultaneous production of (one or more) spoken words and signs
• Full blending
  • Both languages use the same structure
  • Both languages follow the structure of one
  • Simultaneous production of distinct structures
  • When is this permitted?

Note: A single utterance may combine more than one blend

Questions

• What are the linguistic constraints on code-blending?
  • Is it possible to account for code-blending patterns using one derivation that combines features from the two languages? (Lillo-Martin, Gagne & Chen Pichler 2016; Koulidobrova 2016)
  • Or is it necessary to allow for two separate derivations, one for each language? (Branchini & Donati 2016)
• Are there differences between individuals based on competence levels (a potential heritage language effect)?
Code-blending Constraints

How similar/different are speech and sign in code-blending?

- Possible differences
  - Word order
  - Morphological expression
  - Prosody
  - Lexical choice

Method: Participants

- Coda participants from two language pairs: ASL/English (US) and Libras/Portuguese (BR)
- All have at least one Deaf, signing parent

<table>
<thead>
<tr>
<th>Group</th>
<th>N (US)</th>
<th>N (BR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 High sign fluency</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>2 Low sign fluency</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>COMBINED</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>

Method: Task

- Acceptability judgment task
- Sentence types very similar across the language pairs
- Target items designed to check most likely cases of non-congruence

Item types

- Word order
- Possible language contrasts
  - Causative
  - Passive
  - Idiom
- Additional structures
  - Fillers

Method: Procedure

Acceptability Judgment
Results:
Group Differences
The average scores for the lower proficiency groups are more compressed compared with the higher proficiency groups.

Average Scores by Group - US

Average Scores by Group - BR

Results:
Order inversions
Generally high ratings for inversions under one node

Late linearization

Results:
Causative (a)
Spoken & sign language transitive causative

Both languages use the same transitive causative structure

Late linearization: word order inversion in the adjunct phrase

Results:
Causative (b)
Spoken language transitive causative with signed intransitive change-of-state

Two structures – too distinct for blending

Results:
Passive (a)
Spoken language passive with signed OV

Initial NP is topic

No agent expressed

Impersonal verb in sign with spoken passive verb
Results:
Passive (b)
Spoken language passive with signed SVO
FAMILY    BUY            DOG
The dog was bought by a family

* Two structures – too distinct for blending

Results:
Idioms (a)
Spoken language idiom with signed literal translation equivalents
WE         SHOOT+      WIND
We were shooting the breeze

* Structural synthesis isn't enough

Results:
Idioms (b)
Spoken language idiom with signed meaning equivalent
NOT       WORRY       SMALL PROBLEM
Don't worry over spilt milk

* Structural synthesis isn't enough
Discussion: Return to research questions (a)

- What are the linguistic constraints on code-blending?
  - Is it possible to account for code-blending patterns using one derivation that combines features from the two languages? (Lillo-Martin, Quadros & Chen Pichler 2016)
  - Or is it necessary to allow for two separate derivations, one for each language? (Branch & Dronet 2016)

Discussion: Constraints on code-blending

- Congruent structures preferred
  - Following either/bot languages
- Non-congruent structures allowed for
  - Inversions under one node
  - Structural incompatibilities
    - Transitive causative and intransitive change-of-state
    - Passive with by-phrase and active SVO
    - Semantic compatibility is required above syntactic compatibility
    - Idioms

Discussion: Return to research questions (b)

- Are there differences between individuals based on competence levels (a potential heritage language effect)?
- Codas with higher ASL fluency are more critical than those with lower fluency

Conclusion

- "The bilingual is not two monolinguals in one person" – Grosjean (1989)
- Code-blending reveals complex rule-governed interactions between languages
- Codas – display characteristics of heritage language users

Acknowledgments

- Many thanks to: participating Coda adults; Deaf comparison participants; families in earlier developmental studies
- This material is based upon work supported by the National Science Foundation under Grant No. 1734120. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Thank you