Markers of (dis)fluency across signers' profiles in French Belgian Sign Language (LSFB). A comparative analysis between Native, Near-Native and Late Signers

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1. Research question

- 3 groups: Native, Near-Native and Late Signers
- Several linguistic criteria involved in (Dis)Fluency

2. Background

- Impact of a delayed L1 Acquisition at the level of Proficiency and Comprehension (Mayberry 1991)
- Lack of studies at the level of Fluency and Production

3. Theoretical framework

Componential approach of (Dis)Fluency (Götz, 2013)
- Combination of measurable markers (fluencemes)
- Not only interruptions of the flow of speech, hesitations
- But also strategies to manage the discourse

4. Methodology

3.1) Data selection on extra-linguistic criteria

Deaf signers of LSFB

<table>
<thead>
<tr>
<th>Parents status</th>
<th>Deaf</th>
<th>Hearing</th>
<th>Hearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of LSFB acquisition</td>
<td>From birth</td>
<td>Before 6</td>
<td>After 9</td>
</tr>
<tr>
<td>Education</td>
<td>With Deafs</td>
<td>With Deafs</td>
<td>With Hearings</td>
</tr>
</tbody>
</table>

3.2) Annotation of linguistic criteria in ELAN

Markers of (dis)fluency (fluencemes):
- palm-ups
- stops of the hands between signs
- word search gestures
- truncations
- gaze directions
- co-occurring non-manuals

3.3) Data analysis in Excel and SPSS

- speed and use of both hands
- frequency and ratio of fluencemes
- Mean comparison and correlation

5. Results

5.1) Fluencemes that do not distinguish groups

<table>
<thead>
<tr>
<th>Fluencemes that do not distinguish groups</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>native signers</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>near-native signers</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>late signers</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

5.2) Gaze direction partly distinguishes groups

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</tr>
</tbody>
</table>

5.3) Why?

- No influence of above fluencemes
- No influence of break time

5.4) Maybe different articulation strategies

- Track: activation of one or two hands

6. Summary

- No distinction in the frequency of linguistic criteria involved in (Dis)Fluency between signers with different language background
- That is for palm-ups, stops between signs, word search gestures, and floating gazes
- Except for rate of articulation: Native Signers (LSFB from birth) faster versus Near-Native/Late Signers (delayed LSFB) slower
- And therefore, for the number of hands involved in signing and the number of addressed/spatialized gazes (positive correlation p<0.05)

7. Discussion

- Relative impact of L1 delayed acquisition on Production and Fluency
- Acquisition of some markers of (dis)fluency locked in time
- Acquisition of some other markers of (dis)fluency achieved at any time

8. Further issues

- Holds of hands
- Repeated signs
- Phonological economy (Parissot & Villeneuve 2007)
- Combinations of fluencemes
- Functions of fluencemes
- Additional signers

REFERENCES


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