1.1 Background

- Repair disfluencies are disfluencies within self-repairs.
  - Disfluencies: unfilled pauses and filled pauses.
- Advanced non-native speakers (L2) still show different disfluency behaviours than native speakers (L1). (cf. Duschen & Kemm 2012, Belz & Klapi 2013)
- No systematic studies comparing German L1 and L2 data so far.

2.1 Terminology

- Repairs consist of (cf. Shriberg 1994)
  - a reparandum (RD) – the utterance to be repaired.
  - an optional interregnum (IR) – the temporal region between RD and RS.
  - a reparans (RS) – the repairing utterance.
- Tokens in the RS are classified into subrepair categories
  - repetitions (r).
  - substitutions (s).
  - insertions (i).
- Subrepair categories r and s will later be merged into one category rs.

2.2 Method

- L1 & L2 spontaneous speech: Berlin Map Task Corpus (BeMaTaC) (Sauer & Lüdeling 2013)
  - instructors describe a map with landmarks to instructees.
- German L2 speakers beyond C1 level (Common European Framework of Reference for Languages).
- Annotation of repair instances with EXMARaLDA (Schmidt & Wörner 2009)
  - Repair tier with repair frame: RD – IR – RS.
  - Subrepair tier with subreparns within RS: r, s, i.
- Query and export via ANNIS (Zélés et al. 2009).
- Distributional and multivariate analysis.

3.1 Results

<table>
<thead>
<tr>
<th></th>
<th>NoIR (%)</th>
<th>IR (%)</th>
<th>Repairs (%)</th>
<th>Tokens</th>
<th>Duration</th>
<th>Dialogues</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>141 (0.59)</td>
<td>98 (0.41)</td>
<td>239 (0.02)</td>
<td>11.192</td>
<td>66min</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>L2</td>
<td>148 (0.58)</td>
<td>109 (0.42)</td>
<td>257 (0.01)</td>
<td>21.330</td>
<td>77min</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

⇒ The frequency distribution of L1 and L2 repairs with IR does not deviate significantly from the expected one ($\chi^2 = 0.1; df = 1; p = 0.75$).
⇒ The distribution of the subrepair relations i, r and s differs significantly for L1 and L2 ($\chi^2 = 45.8; df = 2; p < 0.001$).

3.2 Analysis by distributions

- Conditions L1/L2 and IR/No IR.
- Interactions of rs and i with content words (C) and function words (F).

3.3 Analysis by linear mixed-effects model

This model takes speaker specific variation into account.

- No effect is found for differences between L1 and L2.
- Subrepair variant rs only significant predictor for IR occurrence (Estimate -0.74, Std.Error 0.15, z value -4.78, p < 0.001).
  ⇒ rs tends not to be preceded by an IR.
  ⇒ For L1 and L2 speakers, insertions tend to be preceded by an interregnum.

Conclusion

- Advanced L2 speakers produce more disfluencies when paralleling L1 repair patterns.
- Speaker specific variation shows no difference between L1 and L2.
- Subrepair phenomena may influence the utterance of interregnum.

⇒ It seems that the ease of planning repetitions and substitutions on the one hand and the difficulty of planning insertions on the other hand are mirrored by the nonexistence or existence, as the case may be, of an IR for both L1 and L2.

References

