Background

Segalowitz’ three-dimensional fluency concept (2010)

Cognitive fluency and problem-solving mechanisms

Potential of the qualitative approach for (L3) attrition research

Constraints of the qualitative approach

Research on the relationship between utterance fluency and cognitive fluency

Quantitative approach

Based on an analysis of features of utterance fluency (e.g. speech rate, pause position, pause duration)

Exemplary studies:

- Schmid/Fagersten (2010) document differences in the number of hesitation phenomena between attriters and non-attriters and interpret them according to their location as indicators of the attriters’ difficulties in lexical retrieval.
- Bergmann et al. (2015) prove a higher degree of fluency for monolingual speakers than for L2 speakers and L1 attriters and interpret these results as evidence for language competition during bi-multilingual speech production.

Qualitative approach

Based on a combined investigation of features of utterance fluency and the speakers’ retrospective comments about their speech production

Exemplary studies:

- Kahng (2014) proves that lower proficiency learners can report better on cognitive processes in a stimulated-recall study than higher proficiency learners. She interprets these findings as evidence for different levels of automatization in speech production between the two groups.

The complex relationship between utterance and cognitive fluency

![Image](file://path/to/image)

The pilot study

Objective: Which contribution can this qualitative approach make to (L3) attrition research?

Selected results

The complexity of the relationship between utterance and cognitive fluency

<table>
<thead>
<tr>
<th>Step</th>
<th>Position and the planning of distant structures</th>
<th>Age</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Extract: Position at the end of the utterance</td>
<td>33 years</td>
<td>German English</td>
</tr>
<tr>
<td></td>
<td>Retrospective comment: Position at the end of the utterance</td>
<td>39 years</td>
<td>German English</td>
</tr>
<tr>
<td></td>
<td>Step 2: I wanted to say ‘the father wants to search for the son’, but I did not know ‘search’. Therefore, I decided to say ‘he goes to the other room’.</td>
<td>27 years</td>
<td>German English</td>
</tr>
</tbody>
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The complexity of the relationship between utterance and cognitive fluency

<table>
<thead>
<tr>
<th>Step</th>
<th>Position and the monitoring of already uttered utterances</th>
<th>Age</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Extract: Position at the end of the utterance</td>
<td>33 years</td>
<td>German English</td>
</tr>
<tr>
<td></td>
<td>Retrospective comment: Position at the end of the utterance</td>
<td>39 years</td>
<td>German English</td>
</tr>
<tr>
<td></td>
<td>Step 2: I was not sure if it was the correct form.</td>
<td>27 years</td>
<td>German English</td>
</tr>
</tbody>
</table>

The complexity of the relationship between utterance and cognitive fluency

<table>
<thead>
<tr>
<th>Step</th>
<th>High degree of utterance fluency in combination with unconscious use of other languages</th>
<th>Age</th>
<th>Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Extract: Position at the end of the utterance</td>
<td>33 years</td>
<td>German English</td>
</tr>
<tr>
<td></td>
<td>Retrospective comment: Position at the end of the utterance</td>
<td>39 years</td>
<td>German English</td>
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Potential of the qualitative approach for (L3) attrition research

On the one hand, the retrospective comments (see [11][44]) give interesting qualitative insights into speech production in the context of L3 attrition and can be used as a complementary qualitative data source to quantitative measures of utterance fluency.

On the other hand, the examples [52][77] document the complexity of the relationship between utterance and cognitive fluency that is not always direct and prospective. Thus, the results presented above support Segalowitz’ perspective and can contribute to a new methodological discussion in attrition research.

Constraints of the qualitative approach

Despite this potential, the qualitative approach based on stimulated recall also has its constraining points. First, it does not allow an evaluation of all hesitation phenomena occurring in a speech sample. Secondly, in some cases, a doubt about the concerned phenomenon remains (e.g. [6]). Thirdly, it is necessary to practise an interview behaviour that is little guiding and manipulating as possible.

References


Discussion

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