Language-Specific Event Conceptualization and Thinking for Speaking – A Comparison of Natives and Learners

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“We dissect nature along lines laid down by our native language [...] the world is presented in a kaleidoscopic flux of impressions which has to be organized by our minds – and this means largely by the linguistic system in our minds.”

Whorf (1956: 213)
Does our language influence the way we think and see the world?

Do speakers of different languages conceptualize events differently?

Do second language learners adapt to target-language like conceptualization patterns?

1 Linguistic Relativity and Event Conceptualization
   Linguistic Relativism
   Research Questions
   Aspect and Event Conceptualization

2 Empirical Study
   Design and Method
   Results and Discussion

3 Conclusion
Renewed interest in linguistic relativism since 1950ies has led to a vast amount of research conducted in various research areas (e.g. gender and object perception (cf. Phillips & Boroditsky 2003; Vigiliocco et al. 2005); spatial reasoning (cf. Levinson 1996; Pederson et al. 1998; Li & Gleitmann 2002)

contradictory evidence and conclusions

Problem of circularity: cause and effect of cognitive differences are interpreted differently (cf. Härtl 2009; Handwerker 2012; Gleitmann & Papafragou 2013):

- Sources of cognitive differences are often confounded with linguistic differences
- If cognitive difference only shows through linguistic performance, line of argumentation becomes circular

Solution:

separation of linguistic and non-linguistic tasks
Cross-linguistic event conceptualization: Do differences in lexicalization patterns of motion events lead to differences in event perception?

Analysis of attention allocation in linguistic and non-linguistic task:

- Language-specific attention allocation during linguistic task (speech planning while watching the clip)
- No differences in non-linguistic task of freely inspecting the clip

Results point to Thinking for Speaking effects

Cf. Papafragou et al. (2008)
“‘Thinking for Speaking’ involves picking those characteristics that (a) fit some conceptualization of the event, and (b) are readily encodable in the language. I propose that, in acquiring a native language, the child learns particular ways of thinking for speaking.” (Slobin 1996: 76)
Research Questions

- We want to investigate **language-specific effects** (here: grammatical aspect) on **event conceptualization** patterns

- We aim to examine conceptualization patterns in both a **verbalization** (Thinking for Speaking) and a **memorization** task ("beyond" a purely verbal task)

- With respect to **German learners of English**, we want to examine how they proceed in applying an aspectual perspective on events as regards **information selection**

  “And, further, once our minds have been trained in taking particular **points of view** for the purposes of speaking, it is exceptionally difficult to be retrained.” (Slobin 1996: 91)
Research paradigm: **Aspect and Event Conceptualization**

According to a variety of studies:

- **English** speakers focus on the progression of an event and mention a possible endpoint rarely (‘phasal decomposition’)
  
  “a car is driving along the road”

- **German** speakers conceptualize an event through a ‘holistic perspective’, including a possible endpoint
  
  “ein Auto fährt zu einem Dorf”
  
  a car drives to a village

Stutterheim et al. (2012)
Aspect and Event Conceptualization

phasal decomposition  holistic perspective on motion events

Explanation: nature of **aspectual system** of a language

**English**

- Aspect is **obligatorily** marked in present tense (-ing)
- Only **progressive aspect** is grammaticalized; simple forms are unspecified

**German**

- Aspect is **optionally** marked in all tenses (**periphrastic construction**; *Rheinische Verlaufsform*)
- Finite verbs are obligatorily marked only for **tense**

Stutterheim et al. (2012); Comrie (1976); Klein (1994); Krause (2002)
Do second language learners adapt to target-language like principles of information selection?

- General consensus lies with respect to the difficulties L2 learners display when speaking in the TL both at a microstructural and a macrostructural level of information organisation and selection.

- Even very advanced L2 learners apply native-language like preferences in encoding event components.

- In the specific case of motion events with an inferable endpoint (goal), German learners have been shown to uncover English perspectivation strategies.

  cf. Stutterheim (2003); Stutterheim & Carroll (2006); Stutterheim et al. (2003)
Empirical Study: Design

Method

Elicitation study based on short, silent video clips (film retelling) with two test conditions

- **Verbalization** task
  Answering *What is happening?* **during** information intake

- **Memorization** task
  Answering *What is happening?* **after** information intake and after movie has finished

Participants:

- 2 **native** reference groups (English and German)
- 2 **learner** groups of different levels of proficiency (8th and 12th grade at school)
Material:

- 45 animated video clips containing animate and inanimate entities (6 seconds)
- 12 critical items displaying motion events with inferable endpoints
- 27 distractor items displaying everyday situations
Empirical Study: Design

Critical item
Crosslinguistic comparison

- We do **not** find a significant **relativist** effect in crosslinguistic comparison

![Graph showing endpoints mentioned by English and German speakers](image)
However, we find a **tendency** for **English** speakers to encode **less EPs** in verbalization (V) than in memorization (M)

\[ p = .10 \]
\[ n = 169 \]
Learners mention significantly less endpoints than both native groups in both test conditions (and show a tendency to omit EPs in V more frequently than in M)

Possible explanation: since aspectual marking is not yet habitualized and automatized, learners have to “fill” the “aspectual slot” with increased cognitive costs.
Empirical Study: Results

Comparison learner levels

- Beginners mention more EPs than advanced students; this notably shows in the memorization task

\( p = .043 \)
\( n = 195 \)
Comparison learner levels

- Beginners show a tendency to mention more EPs than advanced students; this notably shows in the memorization task.

- Assumption: This correlates with the usage of simple aspect that beginners frequently apply.

Empirical Study: Results

Endpoints mentioned by beginner vs. advanced students

<table>
<thead>
<tr>
<th></th>
<th>Beginners</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbalization</td>
<td>43.48</td>
<td>34</td>
</tr>
<tr>
<td>Memorization</td>
<td>56.25</td>
<td>37.25</td>
</tr>
</tbody>
</table>

$p = .05$ (M)

$n = 195$
Comparison learner levels without simple aspects

- Assumption: It seems to be easier for learners to not mark aspect and stick to the **German strategy** of including endpoints

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Endpoints mentioned by beginner vs. advanced students in both test conditions without simple forms

<table>
<thead>
<tr>
<th></th>
<th>Beginners</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent EPs mentioned</td>
<td>41.38</td>
<td>38.2</td>
</tr>
</tbody>
</table>
```

n.s.

n = 118
Empirical Study: Results

Aspect marking and EP encoding at beginner level

- Beginners tend to encode **less EPs** when marking aspect, which notably shows in the verbalization task.

- Assumption of increased **time-pressure** of filling the aspectual slot in verbalization seems to be further confirmed.

\[ p = .10 \text{ (V)} \]
\[ n (M) = 47 \]
\[ n (V) = 46 \]
- We found **no cross-linguistic effects** of grammatical aspect on event conceptualization.

- However, we found a **tendency** for English native speakers to encode **less endpoints in the verbalization** task; we interpret this as a *Thinking for Speaking* effect with respect to English: *During the speech planning process*, those categories that are obligatorily encoded in a language draw the speaker’s attention to **relevant event components**.

- With respect to **learner** languages, we found a **significant main effect** in that they encode **less endpoints** than native speakers.
We argue the increased cognitive costs associated with the additional, non-habitualized grammatical slot to be responsible for the decreased endpoint encoding in learners.

We argue the difficulties of aspect marking (morpho-syntactic category) and EP encoding (semantic category) to be due to the difficulties of processing according to the Interface Hypothesis:

Structures involving an interface between “narrow syntax” and other cognitive domains are less likely to be acquired completely due to processing limitations in L2 acquisition.

Thank you.

(Sorace & Filiaci 2006; Sorace 2011)


Lundquist, Björn (2010). Telicity, Stativity and the Progressive in Swedish and English. lingbuzz/001107


