Einzelsprachliche Ereigniskonzeptualisierung und
Thinking for Speaking – Muttersprachler und Lerner im Vergleich

Svenja Bepperling & Holden Härtl
Universität Kassel
svenja.bepperling | holden.haertl@uni-kassel.de
Sapir-Whorf-Hypothesis:

“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.”

see Whorf (1956: 213)
Sapir-Whorf-Hypothesis:

“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.”

see 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; Vigliocco et al. 2005); spatial reasoning (cf. Levinson 1996; Pederson et al. 1998; Li & Gleitman 2002))

contradictory evidence and conclusions

Problem of circularity: cause and effect of cognitive differences are interpreted differently (cf. Härtl 2009; Handwerker 2012; Gleitman & 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 in an ideal world

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 tasks:

- 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)
Figure 1: Language production model (cf. Levelt 1989)

see Levelt (1989); Slobin (1996)
“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)

(a) The dog ran into the house.

(b) Le chien est entré dans la maison en courant.

‘The dog entered the house by running.’

Manner of motion is a salient category in these languages which affects event conceptualization (cf. Slobin 2000; 2003)
- We 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.”

  (s. 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

see Stutterheim et al. (2012) among others
Grammaticalized aspect

- Aspects are different ways of viewing the internal structure of a situation (cf. Comrie 1976)

- A situation can be presented “with its boundaries” (i.e. perfective) versus “without its boundaries” (imperfective) (cf. Klein 2009: 52)

see Herweg (1990); also Stutterheim et al. (2012); Klein (1994); Krause (2002)
Time of situation and topic time

*The student was smoking pot when the Dean came in.*

TSit: the student’s smoking pot
TT: the dean’s entrance

\[\begin{array}{c}
\text{TT} \\
\text{TSit}
\end{array}\]

Imperfective aspect: TT \(\subseteq\) TSit

see Klein (1994); Reichenbach (1947); Lübbe & Rapp (2013)
Language-specific strategies in event-related **discourse** organization

**English** (‘now-I-see’ perspective):

\[ \text{TT}_n \subseteq \text{TSit}_n, \text{TT}_n = \text{TU}_n \]
\[ \text{TT}_{n+1} \subseteq \text{TSit}_{n+1}, \text{TT}_{n+1} = \text{TU}_{n+1} \]

*The figure is starting to dig.*
*He is digging.*
*He is being sucked down by the sand.*

**German** (‘and-then’ perspective):

\[ \text{TSit}_n \subseteq \text{TT}_n \]
\[ \text{TSit}_{n+1} \subseteq \text{TT}_{n+1}, \text{TT}_{n+1} > \text{TSit}_n \]

*Die Figur fängt zu graben an.*
*Und dann nimmt er ein Stück Stein.*
*Und dann macht er ein Loch in den Boden.*

see Carroll & Stutterheim (2003); Stutterheim, Carroll & Klein (2003) among others
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, n = 2 x 17)
- 2 *learner* groups of different levels of proficiency
  (8th (n = 9) and 12th grade (n = 8) at school)
Empirical Study: Design

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
Critical item
Crosslinguistic comparison

- We do not find a significant relativist effect in crosslinguistic comparison.
Within-language comparison

- However, we find a **tendency** for **English** speakers to encode **less EPs** in verbalization (V) than in memorization (M)

![Bar chart showing endpoints mentioned by English speakers]

- Memorization: 69.39%
- Verbalization: 58.16%

$p = .10$
$n = 169$
Empirical Study: Results

Comparison learners vs. native speakers

- **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

\[
p = .002 \text{ (M)}
\]
\[
p < .001 \text{ (V)}
\]

n (natives) = 369

n (learners) = 195
Empirical Study: Results

Comparison learner levels

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

Endpoints mentioned by beginner vs. advanced students in both test conditions

- $p = .043$
- $n = 195$
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

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

![Bar chart: Endpoints mentioned by beginner vs. advanced students in both test conditions without simple forms](chart)

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.

There are two women and they are walking and the right one is wearing a hat. And they walk to a house and [uhm] on a street.

Three people are walking on a ground and they go to a house.

$p = .10$ (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 English 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.

Thank you.


