Cross-Linguistic Influence in Second Language Acquisition: A Study on Event Conceptualization Patterns

Svenja Bepperling & Holden Härtl
Universität Kassel
svenja.bepperling | holden.haertl@uni-kassel.de
“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
   Aspect and Event Conceptualization
   Research Questions

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
“‘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)
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 führt zu einem Dorf*”
  
a car drives to a village

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Stutterheim et al. (2012)
phasesal 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 grammaticized; 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
Critical item
Crosslinguistic comparison

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

![Bar chart showing endpoints mentioned by English and German speakers](chart.png)

- Not significant
- n = 396
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]
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
Comparison learner levels

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

$p = .05 (M)$

$n = 195$
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

\[ n.s. \]
\[ n = 118 \]
 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
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.


