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March 4, 2015  
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# Multilingual Language Acquisition

The Role of Transfer, Metalinguistic Awareness and the  
Number of Previously Learned Languages

# Multilingualism

“A multilingual individual can be defined as a person who is able to communicate in two or more languages.” (Cenoz, Hufeisen, Jessner, 2003, p.2)

# What is special about a multilingual?

- A higher level of metalinguistic awareness
- Cross-linguistic influence between the multilingual's languages
- An increased level of cognitive control and a higher ability of interference suppression

# Metalinguistic Awareness

- “the ability to focus on linguistic form and to switch focus between form and meaning” (Jessner, 2008, p. 277)
- “metalinguistic awareness, n. – an awareness, esp. when learning a language, that the rules of that language (grammatical, phonological, pragmatic, etc.) are an arbitrary linguistic code independent of meaning” (Oxford English Dictionary)
- Multilinguals are expected to have a higher level of metalinguistic awareness than monolinguals
- Highly proficient bilinguals tend to have a higher level of metalinguistic awareness than less proficient bilinguals
- Metalinguistic awareness is regarded as a key factor in language acquisition which accelerates the language learning process

# Cross-linguistic influence and transfer

- “the influence of a person’s knowledge of one language on that person’s knowledge or the use of another language” (Jarvis & Pavlenko, 2010, p.1)
- “Transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired.” (Odlin, 1989, p. 27)

# Transfer

- Transfer can have a facilitating or inhibiting effect on language learning, production and perception (positive or negative transfer)
- Transfer can occur in all linguistic subsystems (syntax, lexis, morphology, phonology, orthography, pragmatics)
- Transfer can occur from the L1 or any other language, can be forward ( $L1 \rightarrow L3$ ) or reverse ( $L2 \rightarrow L1$ ) and uni- or bidirectional ( $L1+L3 \rightarrow L2$ )
- (Positive) transfer is most likely to occur from a typologically closely related source language, an L2, a recently used and acquired language and a highly proficient language

# Negative Transfer

- “negative transfer occurs when assumed similarities conflict with objective differences” (Jarvis and Pavlenko, 2010, p. 182)
- Results in mis-production or misinterpretation
- More frequent among less proficient learners

# Positive Transfer

- “Positive transfer occurs when assumed similarities are compatible with objective similarities.” (Jarvis and Pavlenko, 2010, p. 182)
- Facilitating and accelerating effect of transfer in language learning
- More frequent among more proficient learners
- Is less easily detectable than negative transfer, since its outcome is correct language production or perception



# Cognitive Control

- Multilinguals generally have a higher level of cognitive control than monolinguals do, especially a higher level of interference suppression
- By speaking only one of several possible languages, a multilingual has to focus on one specific task (speaking that one language) and ignore task irrelevant information (the other languages s/he speaks) → interference suppression
- The level of cognitive control among multilinguals is enhanced by language proficiency, a younger age of L2 acquisition, the frequency of using both (or more) languages, as well the time span of being multilingual

# Native and non-native language influence in additional language learning

- an exploratory study

# Background

- Transfer is hard to measure and most previous studies are limited due to
  - i. a low number of participants (case studies)
  - ii. limited linguistic input
  - iii. focus on restricted linguistic units (e.g. V2 transfer), no holistic picture

# Research Question

- Does a multilingual use his language background differently than a monolingual when acquiring a new language?

# Participants

- **main test group:** 27 adult learners of Danish;  
L1 English, most recent Ln Danish;  
12 monolinguals (L2 learners), 10 bilinguals (L3 learners), 5 trilinguals (L4 learners)
- **control group:** 8 adult learners of Danish;  
L1 German, L2 English, most recent Ln Danish;  
4 bilingual (L3 learners), 4 trilinguals (L4 learners)

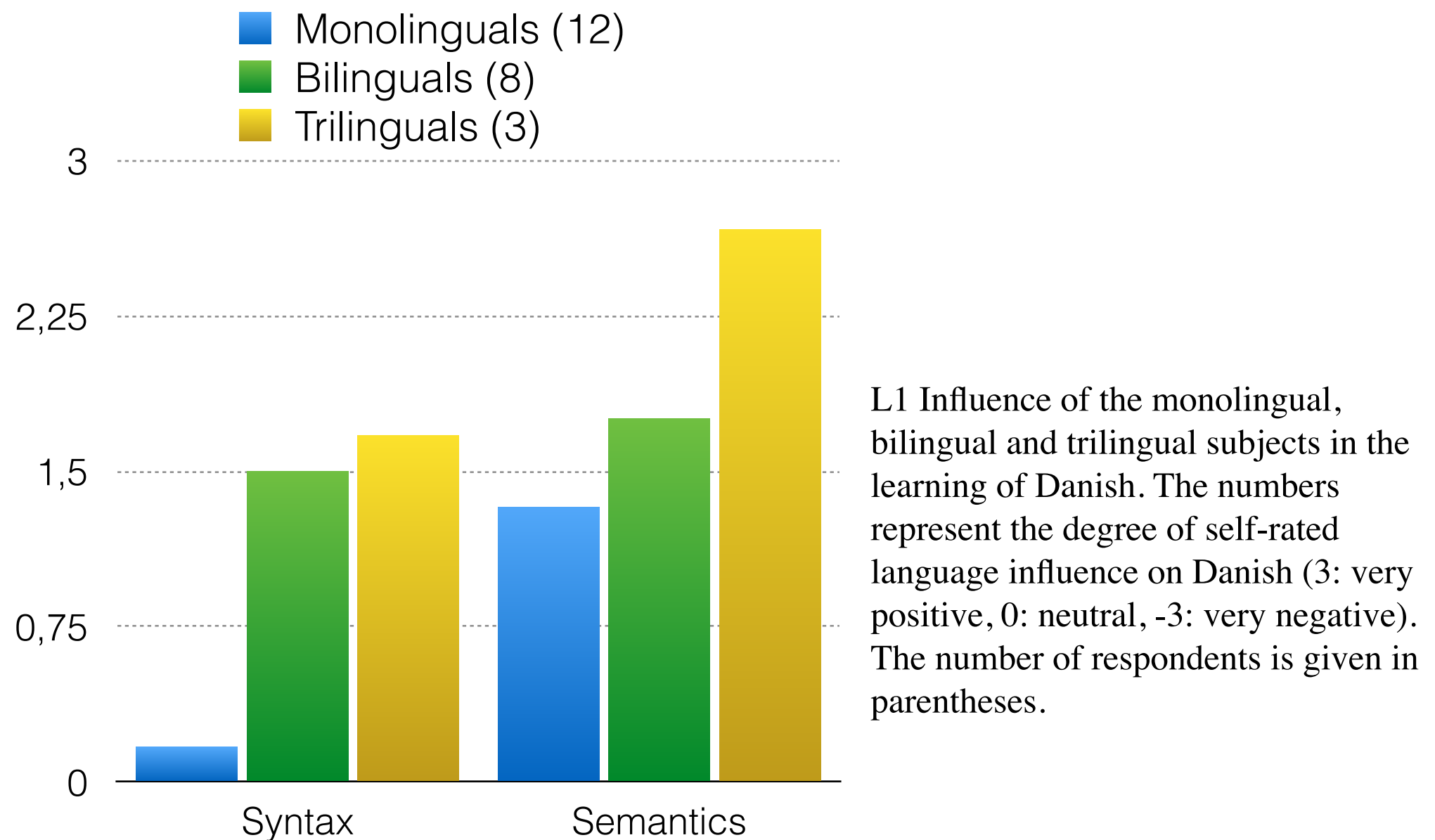
# Methods: Questionnaire

- Bio questions
- Linguistic background (which languages have been learned, at what age, to what proficiency, amount of language use)
- Self-rated influence of the previously acquired languages on the acquisition of Danish (on syntax, semantics, phonology, orthography and discourse)

# Analyses

- Simple comparison: the self-rated previous language influence on the learning of Danish was compared among the monolingual, bilingual and trilingual test subjects
- Statistical validity: the means of the self-rated occurrence of transfer from the L1 English for monolinguals and multilinguals were compared in an independent samples t-test (multilingual test subjects with a more closely related language to Danish than English were excluded)

# Results





# Results

- Independent sample t-test for monolinguals ( $n=12$ ) and multilinguals ( $n = 11$ )
- The monolinguals had a lower group average for syntax ( $M = 0.167$ ,  $SD = 1.642$ ) than the multilinguals ( $M = 1.546$ ,  $SD = 1.036$ ); this difference ( $M = 1.379$ ,  $SD = 0.579$ ) is significant ( $t(21) = 2.382$ ,  $p = 0.027$ )
- The difference between the two groups did not turn out to be statically significant in the area of semantics ( $p = 0.087$ )

# Conclusions

- A multilingual seems to be able to activate his L1 for positive transfer, whereas a monolingual does not seem to be able to benefit from his L1 background
  - There seems to be a tendency towards a higher benefit from the previous language background for trilinguals than for bilinguals
  - An increased level of metalinguistic awareness might be the reason for an increased occurrence of L1 transfer among multilinguals
  - Transfer more likely for multilinguals than for monolinguals
- The results have to be regarded with caution, since the study is based on self-report

# Future Research

- Does language learning become easier with each language learned?
- Does the number of languages increase the level of metalinguistic awareness?
- Does the number of languages trigger a higher occurrence of (positive) transfer, which at the same time facilitates and accelerates the language learning process?
- Is there a limit for the ideal number of languages studied? Does (successful) additional language learning compete with language maintenance and language attrition?
- Do the cognitive benefits of multilinguals increase with each language learned?
- Does an increased level of cognitive control/interference suppression facilitate and accelerate the language learning process?

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