

The role of language dominance for syntactic and phonological transfer into L3 English

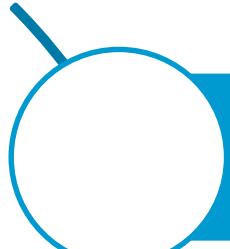
L3 Workshop: Multilingual Language Acquisition, Processing and Use
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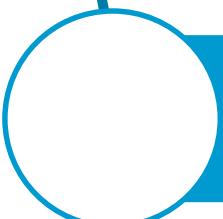
Overview

1. Background:
 - Heritage speakers in L3
 - Language dominance
2. Our study
3. Results
4. Discussion

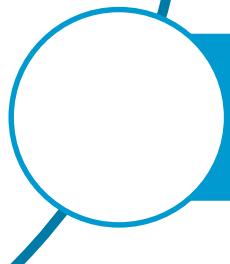
Our focus



L3 transfer in **early bilinguals** (Italian-German)

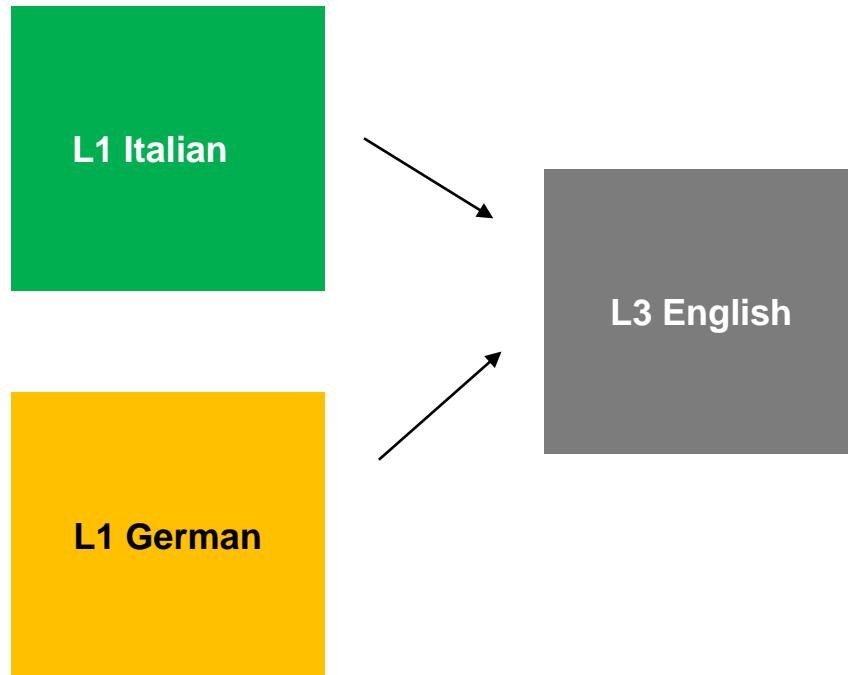


Comparing transfer across domains (**syntax** vs.
phonology)



The potential role of **language dominance**

L3 in heritage speakers (HSs)



What is a heritage language?

“A language qualifies as a heritage language if it is a **language spoken at home** or otherwise readily available to young children, and crucially this language is **not a dominant language of the larger (national) society**.

Like the acquisition of a primary language in monolingual situations and the acquisition of two or more languages in situations of societal bilingualism/multilingualism, the heritage language is acquired on the basis of an **interaction with naturalistic input** and whatever in-born linguistic mechanisms are at play in any instance of child language acquisition.”

(Rothman 2009: 156)

Some L3 studies using heritage speakers

Main observations:

- Transfer often seems to occur from **typologically closest** and **dominant** language (e.g.: Sağın Shimşek 2006, Iverson 2009, Kupisch et al. 2013, Giancaspro et al. 2015, Lloyd-Smith et al. 2016)
- Positive transfer from **HL** has been related to **bilingual balance** or **use** (e.g., González-Ardeo 2001, Gabriel et al. 2014, 2015)
- Transfer may occur from both L1s **depending on phenomenon** (Westergaard et al. 2016)

L3 studies using HSs

Possible assumptions for HSs:

- 1) **Language dominance** may be the driving force for transfer
- 2) The source may depend on the **domain** of investigation

Measuring language dominance

Consensus

- Proficiency should be measured in both L1s
- Dominance measure should provide “**relative weight**” between languages (Montrul 2015)

Varied approaches

- Use of **objective proficiency measures**, or
- Self-reported aspects of **exposure/use** (e.g. BLP, Birdsong 2012)
- **Both?**

In this study, we use a an **objective proficiency measure** (vocab task)

Transfer across domains

“[T]he mechanisms underlying crosslinguistic influence will vary according to the linguistic domain under investigation [...] For example, it is obvious that **syntactic CLI** may require at least some explanatory principles that are quite **different** for those operating in **phonological CLI**”

(Sharwood Smith and Kellerman 1986: 7)

Domains of investigation

(I) Syntax: Embedded wh-questions

- Displays asymmetry across the 3 languages

(II) Phonetics-phonology: Accent rating

- Phonetic-phonological CLI is operationalized as perceived accentedness (Wrembel 2012; Lloyd-Smith, Gyllstad & Kupisch 2016)

Research questions

- 1) Does transfer stem from one or both languages?
- 2) Is this the same for the domains of syntax and phonology?
- 3) Does the transfer source relate to degree of bilingual balance?

Selected L3 models

	Prediction
Typological Primacy Model (Rothman 2009, 2011, 2015)	Wholesale transfer from one language at initial state
Linguistic Proximity Model (Westergaard et al. 2016)	Selective, structurally-based transfer from either/both languages
Scalpel Model (Slabakova 2016)	Selective transfer from either/both languages (affected also by, e.g., input, use, complexity).

2. OUR STUDY: Participants

Bilinguals

- 21 Italian-German bilingual university students (mean age=23)
 - Simultaneous (n=7)
 - Successive (n=14)

Controls

- 10 monolingual English NS students (mean age = 30)
- 10 monolingual German NS students (mean age = 23)
- 10 monolingual Italian NS students (mean age = 23)

Methods

1. Dominance measure:

- Y/N vocabulary task in Italian & German (50 real words, 25 non-words)
- Words appear on screen, participants vote by mouse click

2. Syntactic transfer measure:

- Acceptability judgement task (48 stimuli)
- Stimuli presented acoustically, participants vote by mouse click

3. Foreign accent measure:

- 51 speech samples à 10 seconds (21 bilinguals + 30 monolingual controls)
- Rated for accent strength and accent origin (32 NS raters)

Syntax task: main test conditions

(1) Italian transfer condition (ITC) (n=6)

* Julia	doesn't	know	where	went	Lukas
Giulia	<i>non</i>	sa	dove	<i>è andato</i>	<i>Luca.</i>

G. NEG know-3SG where AUX.3SG go-PTCP-MSG L.

(2) German transfer condition (GTC) (n=6)

* Julia	doesn't	know	where	Albert	last	week	was
Julia	<i>weiß</i>	<i>nicht,</i>	wo	<i>Albert</i>	<i>letzte</i>	<i>Woche</i>	<i>war</i>

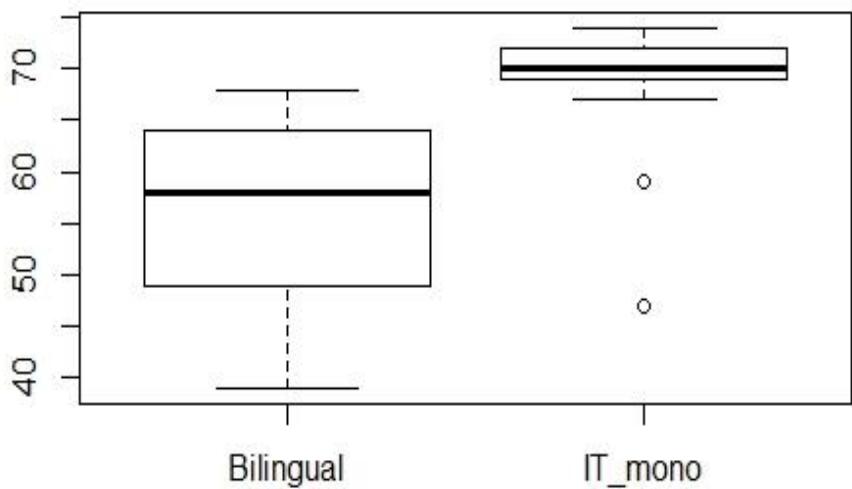
J. know-3SG NEG where A. last-ACC.FSG week-ACC.FSG be-IMPF-3SG

(3) Control items and fillers (n=36)

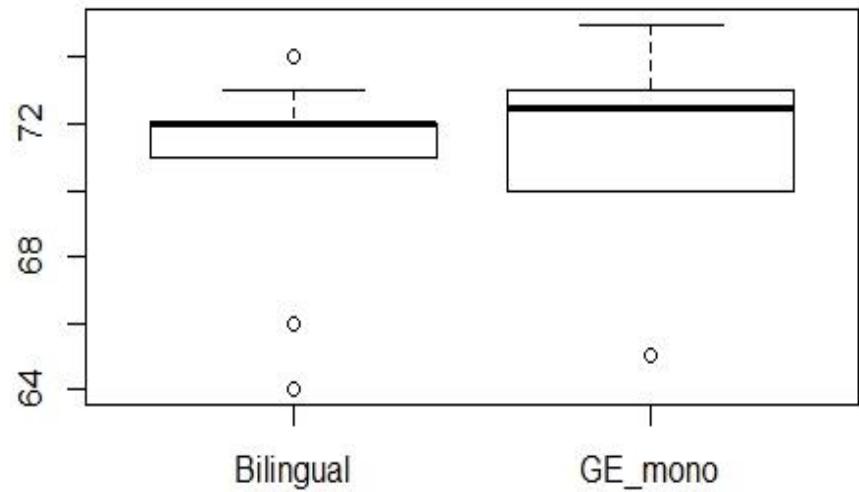
- Grammatical in English, ungrammatical in Italian
- Grammatical in English, ungrammatical in German
- Ungrammatical in all languages

3. Results: Y/N vocabulary task

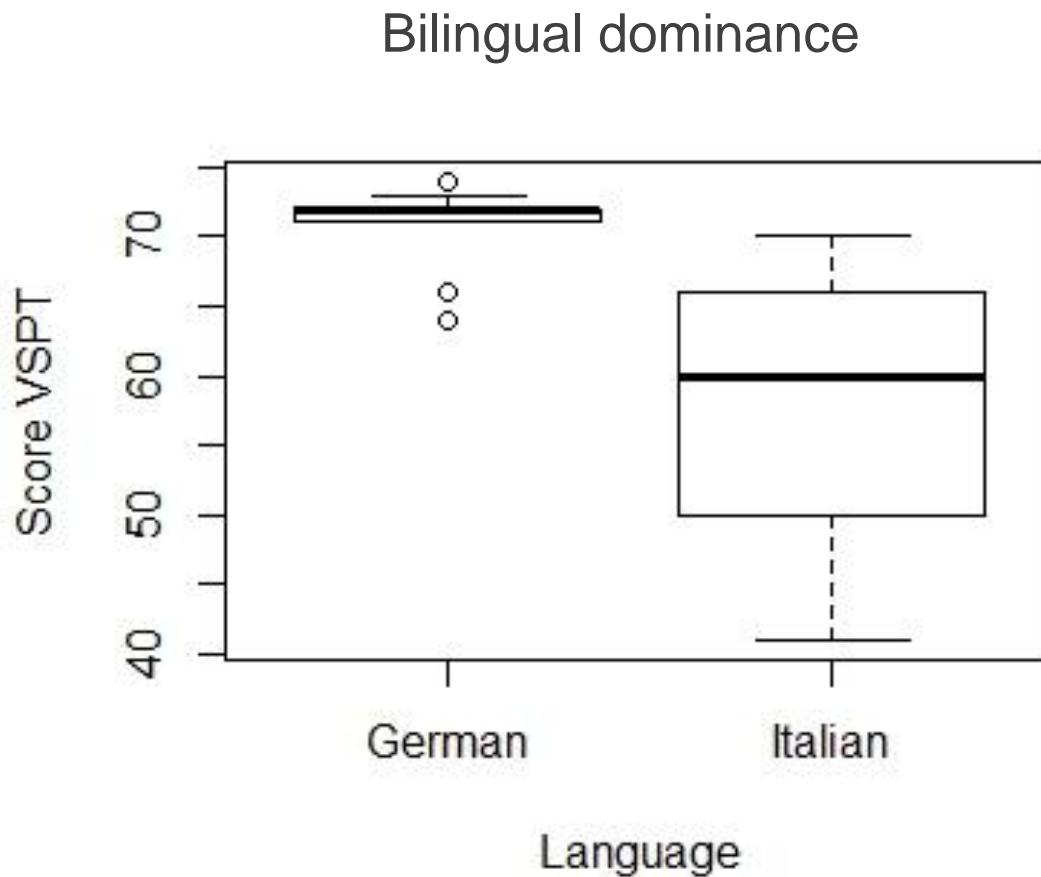
Italian vocabulary



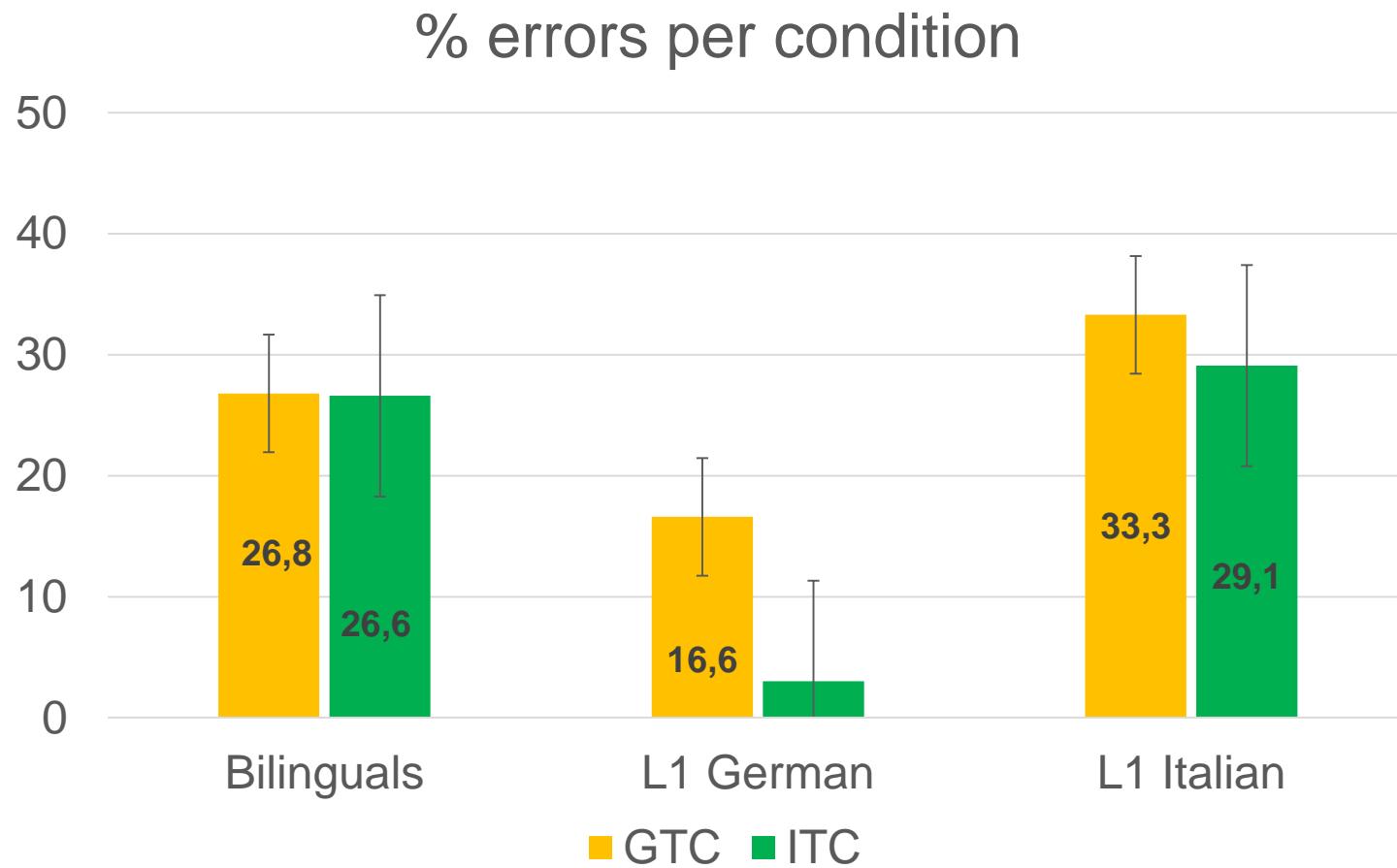
German vocabulary



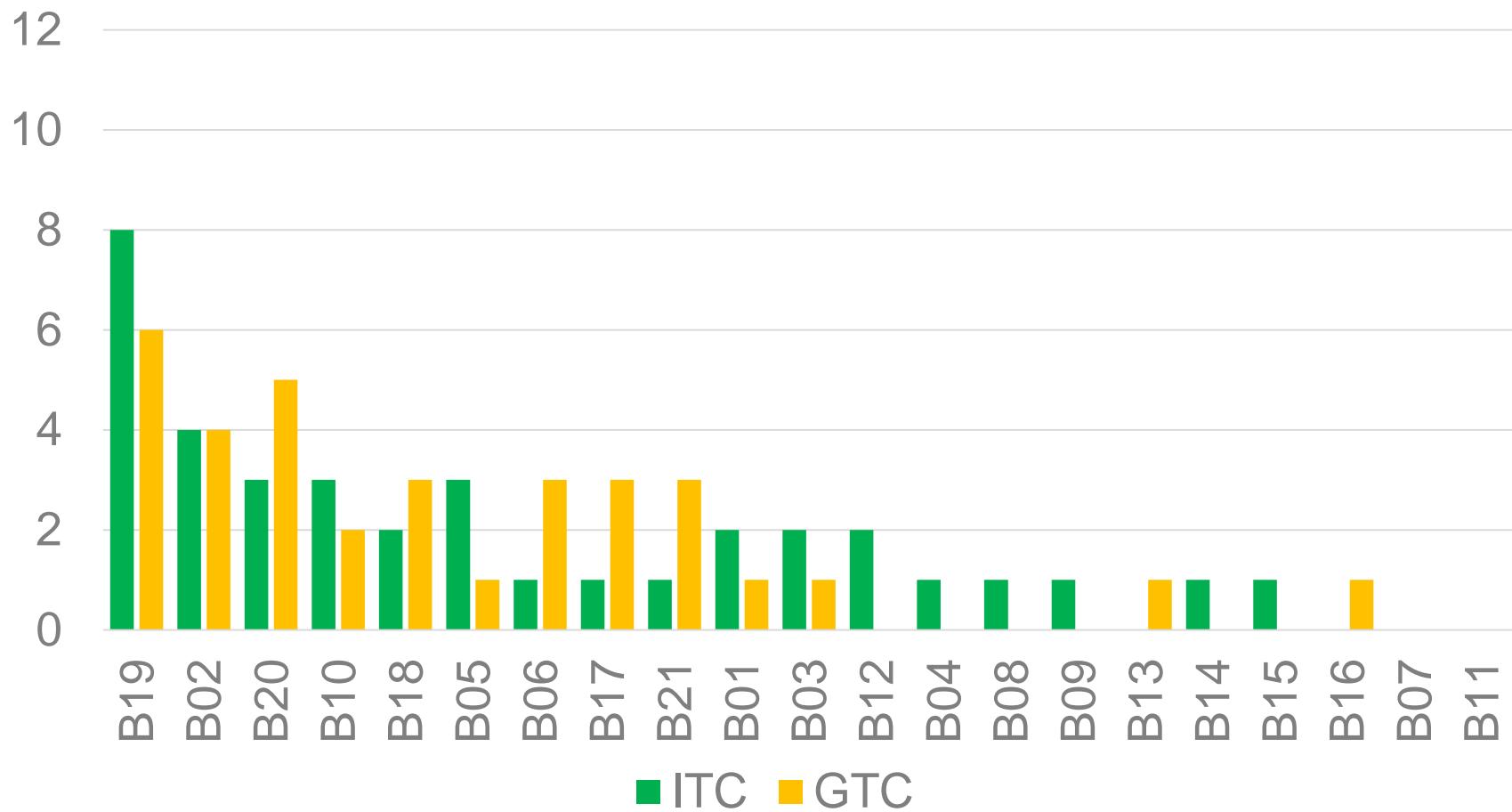
Results: Y/N vocabulary task



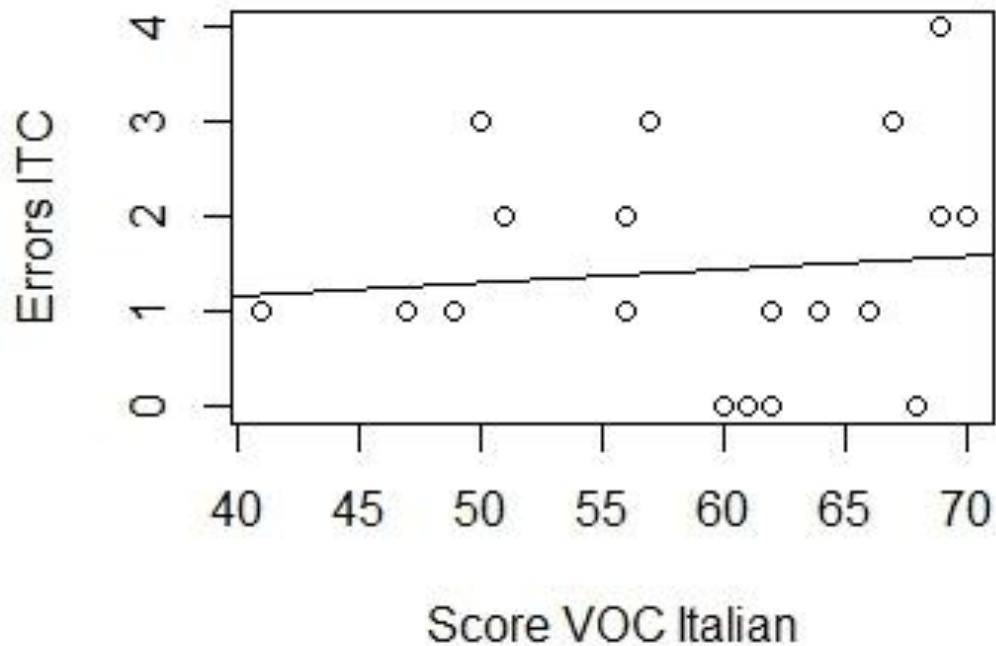
Results: Syntax



Errors per condition (bilinguals)

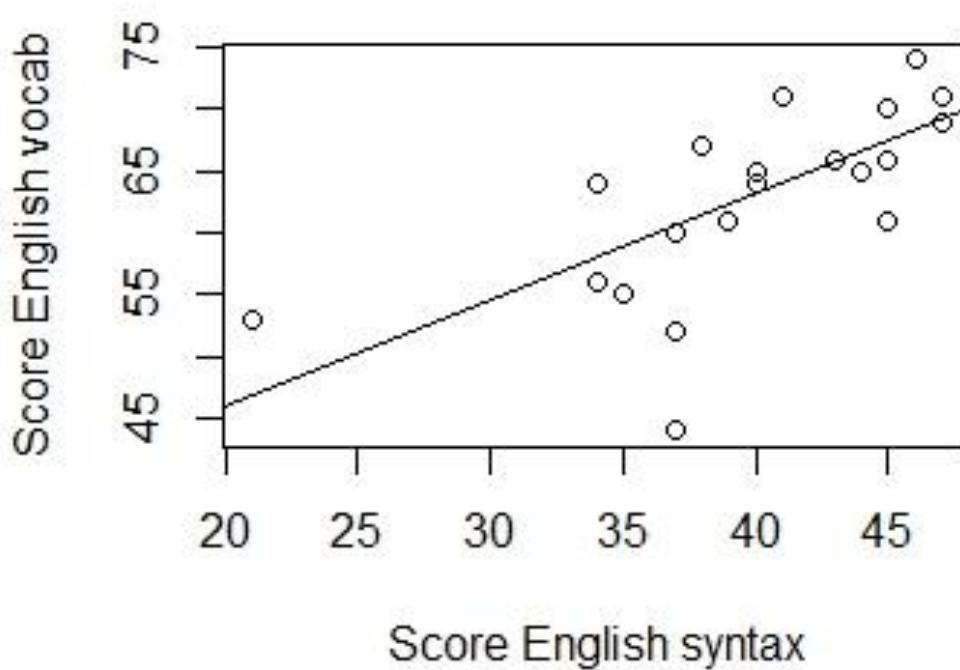


Dominance and ITC



- No relation between dominance and transfer from Italian (ITC)

English Vocab vs. English Syntax



Highly significant relation
between vocab and overall
syntax scores in English

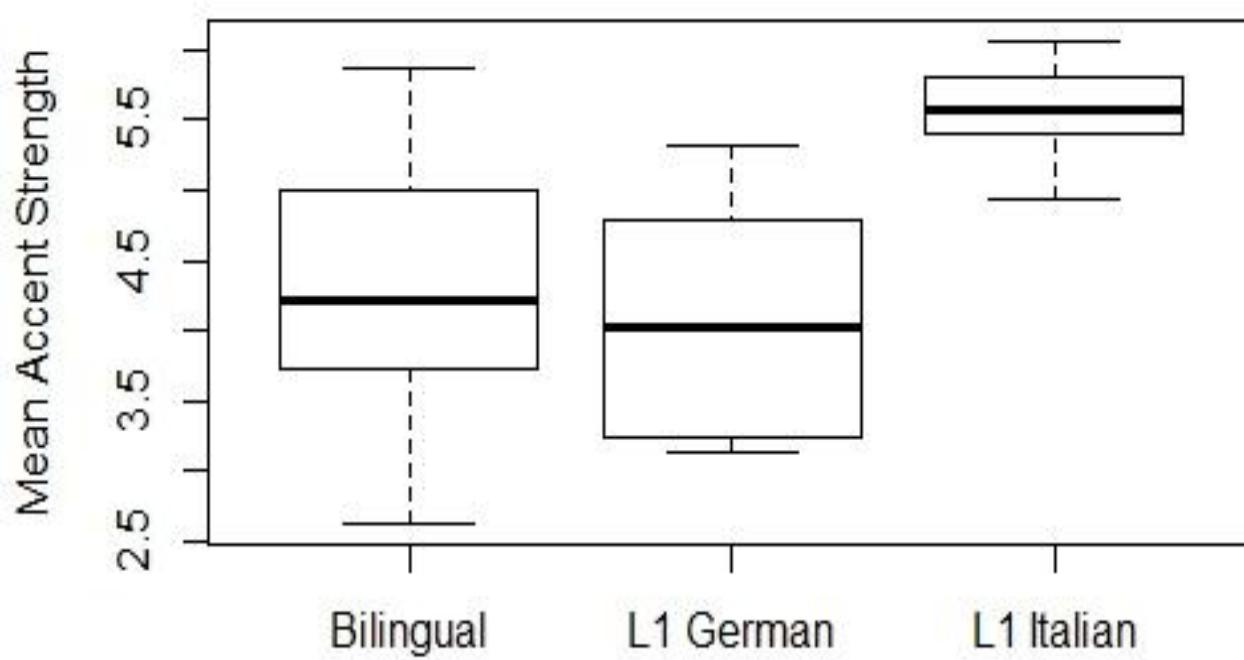
($\beta=0.85$, $SE=0.21$, $t=4.05$,
 $p=<0.005$)

Results (II): Foreign accent

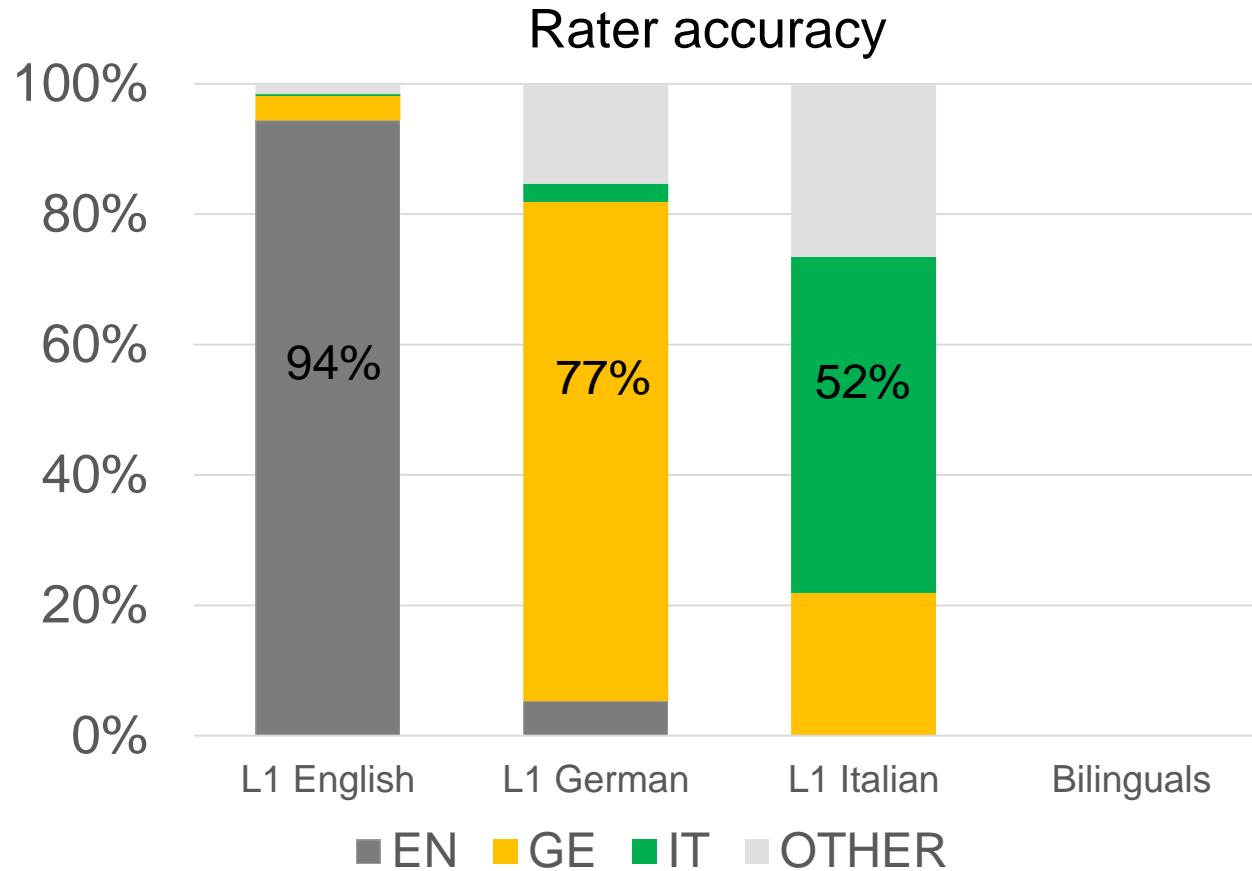
Accent rating task

- 51 samples (21 bilinguals + 30 monolingual controls)
- Rated by 32 English NSs for:
 - 1) Foreign accent strength (1=No foreign accent; 7=Strong foreign accent)
 - 2) Origin of accent (**German**, **Italian**, **English**, **Other**)

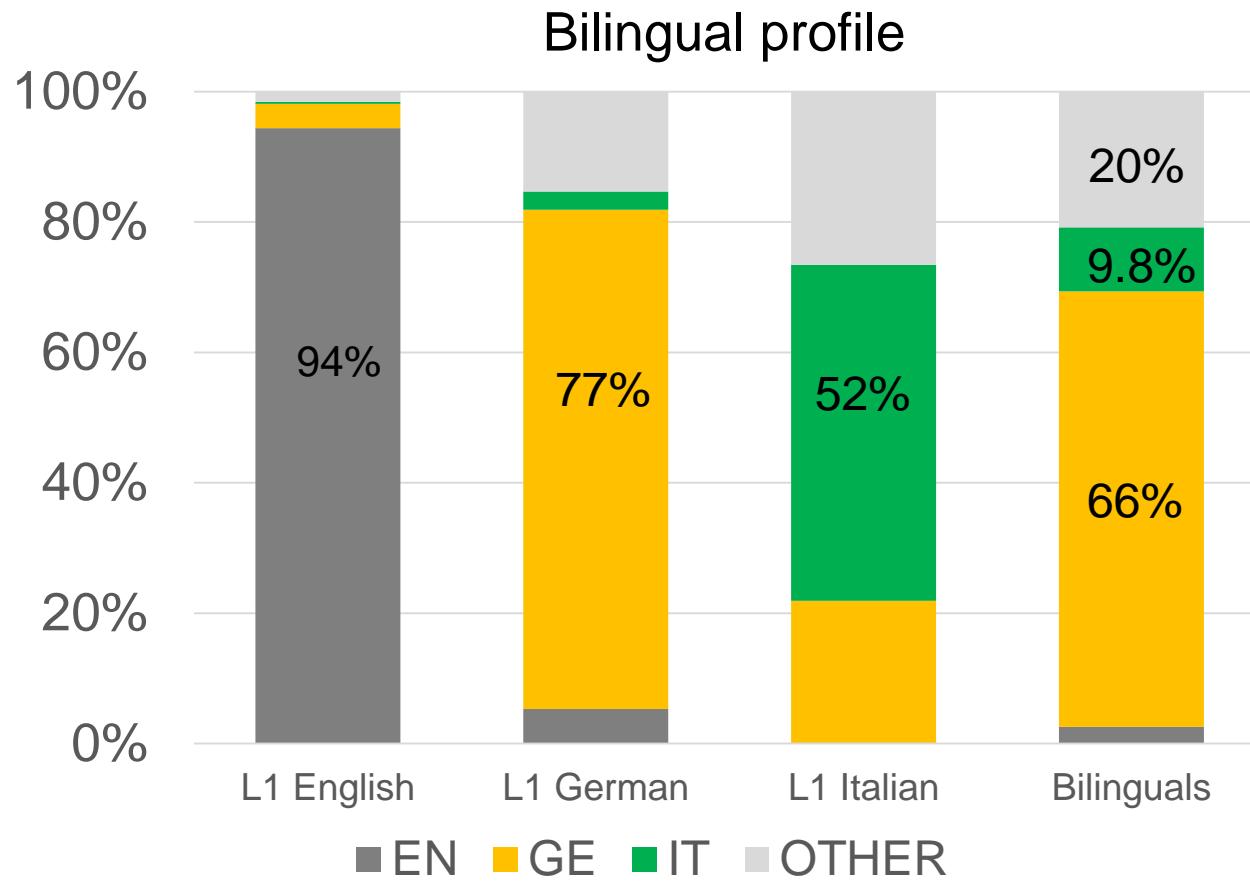
Mean accent strength (1=no FA; 7 = strong FA)



Determine the speaker's L1

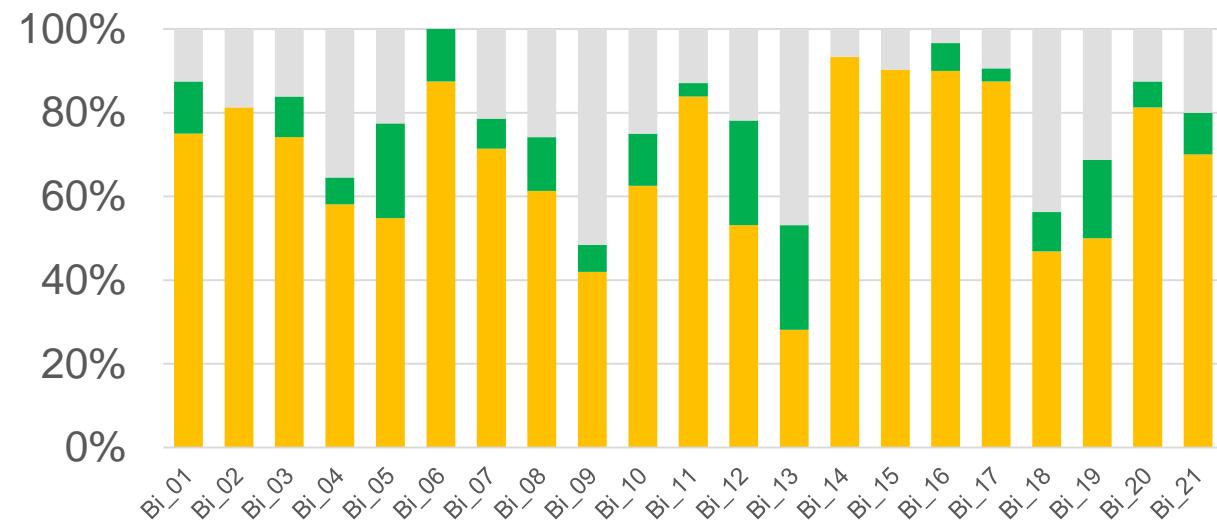


Determine the speaker's L1

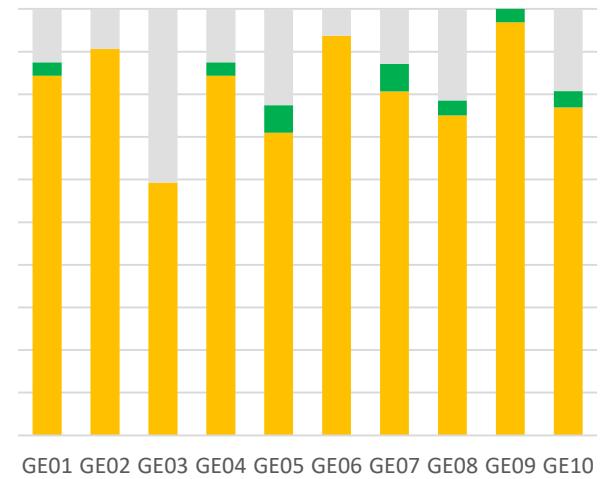


Origin of accent: Bilinguals vs. Germans

Bilinguals

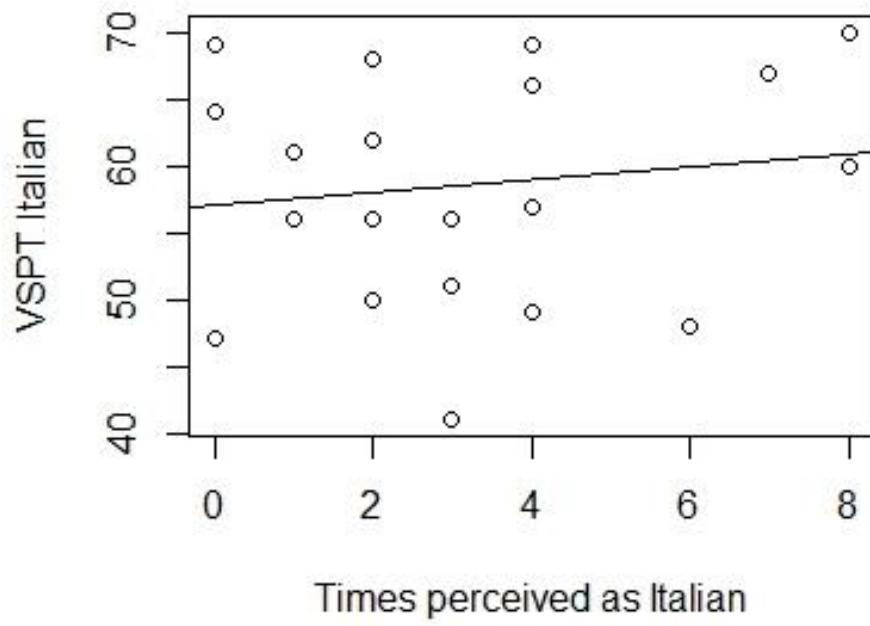
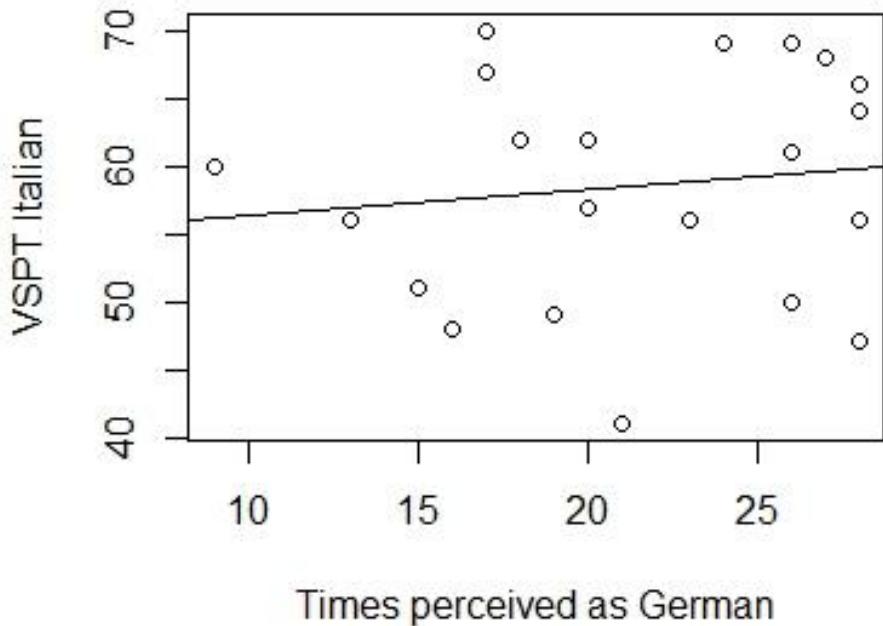


L1 Germans



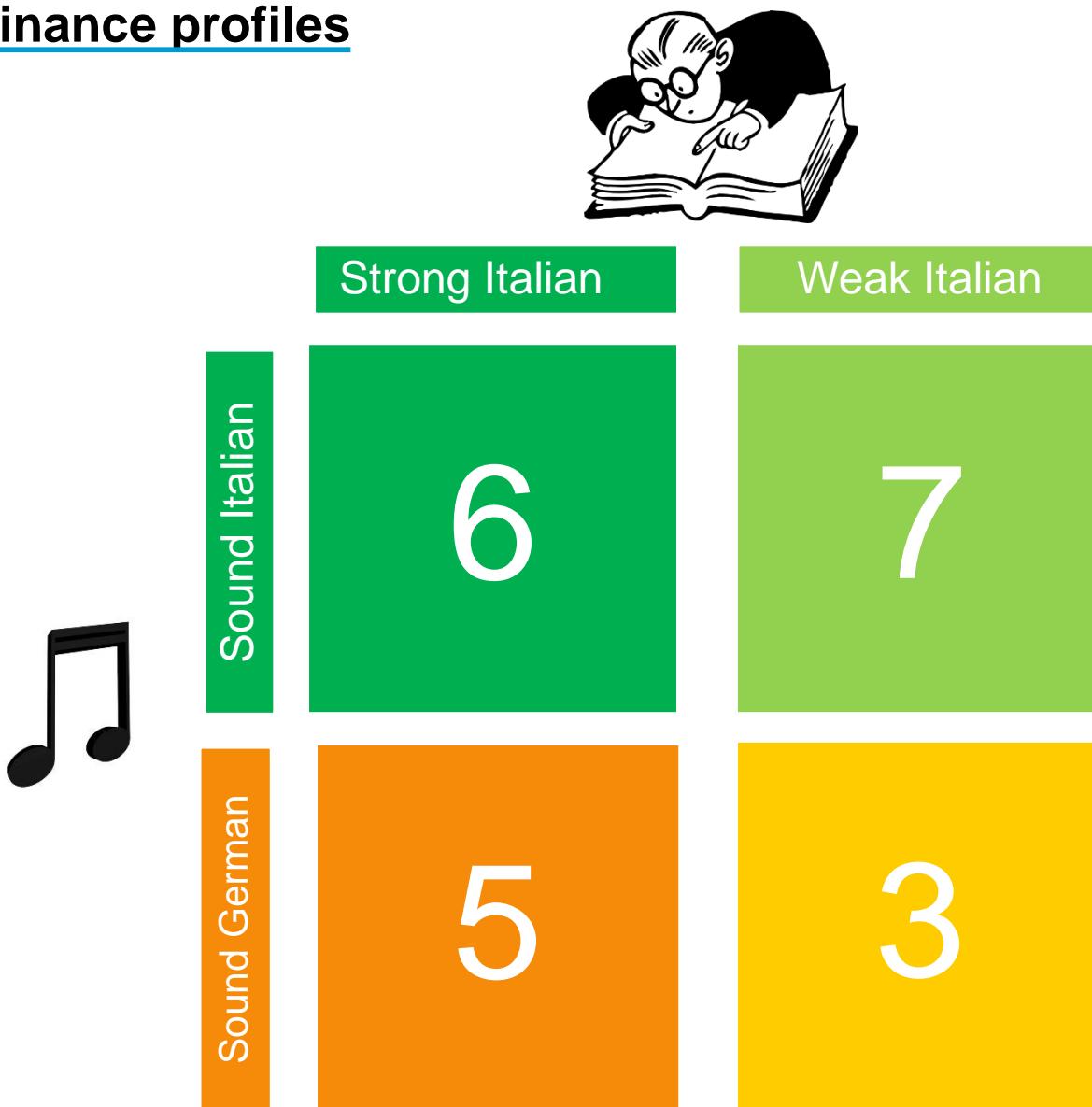
	L1 German	L1 Italian	Other
Bilinguals	66%	9.8%	20.8%
L1 Germans	77%	2.6%	15.3%

Dominance and perceived accent source

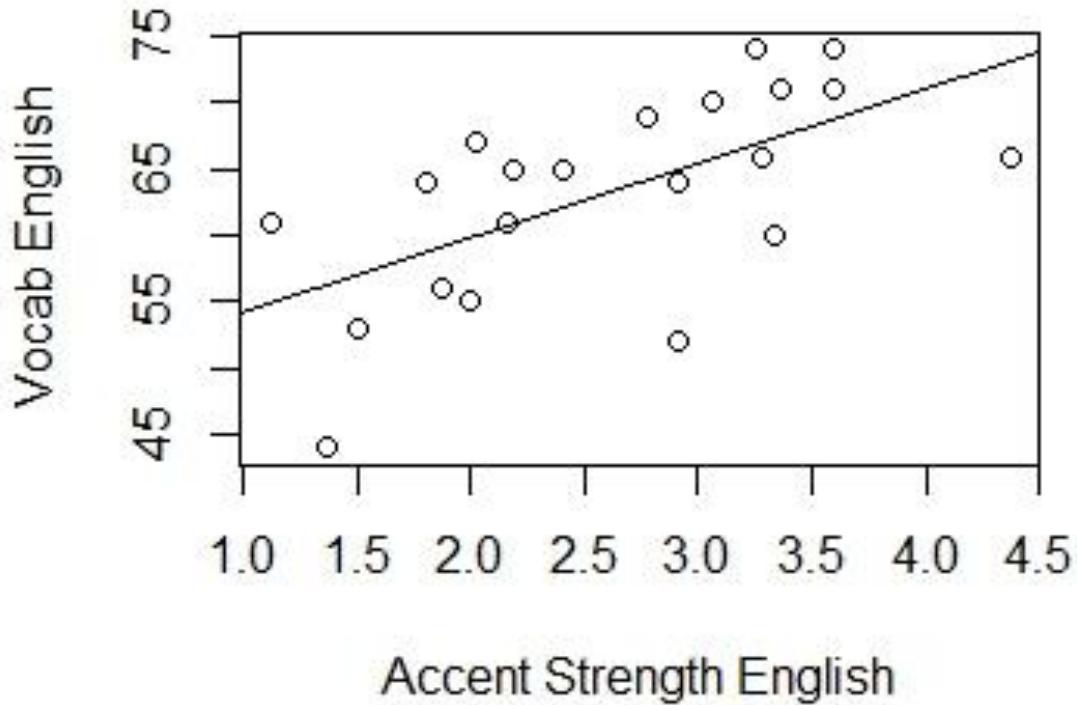


- No relation between dominance measure (Italian vocab) and source of accent

Dominance profiles



English vocab and accent strength



Highly significant correlation between English vocab and accent strength
($t=3.41$, $df=19$, $p<0.005$)

(cf. Wrembel 2012)

Summary of results

Syntax

- Syntactic transfer appears to stem from **both L1s** in equal measure
- Bilinguals behave like L1 Italians
- **Unrelated** to dominance

Foreign accent

- Phonetic-phonological transfer is **predominantly German**
- **Related** to dominance on a group level
- **Unrelated** to dominance on an individual level

Research questions

1) Does transfer stem from one or both languages?

- From **both languages**

2) Is this the same for the domains of syntax and phonology?

- It doesn't appear to be:
- **Syntax**: transfer occurs in equal measure from **both languages**
- **Foreign accent**: predominantly from **German** (cf. Lloyd-Smith et al. 2016)

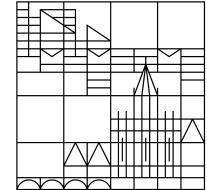
3) Does this relate to degree of bilingual balance?

- Not for **syntax**
- Only on a group level for **foreign accent**

Discussion

Why the difference between domains?

- **Syntactic representations** are active and **equally available** in both languages, irrespective of dominance/relative balance
- For **foreign accent** it could be that dominance of one language has an impact on the other language
- This is consistent with findings in early bilingual acquisition, where **phonology** seems to be **more affected by acceleration, delay and transfer** (see Kehoe 2015 for an overview) than syntax (see Kupisch, forthcoming for a comparison)



**Thank
you!**

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Selected references

- Birdsong, D., Gertken, L.M., & Amengual, M. *Bilingual Language Profile: An Easy-to-Use Instrument to Assess Bilingualism*. COERLL, University of Texas at Austin. Web. 20 Jan. 2012. <<https://sites.la.utexas.edu/bilingual/>>.
- Gabriel, C.; Rusca-Ruths, E. (2014): Der Sprachrhythmus bei deutsch-türkischen L3-Spanischlernern: Positiver Transfer aus der Herkunftssprache? In: Stéphanie Witzigmann und Jutta Rymarczyk (Hg.): Mehrsprachigkeit als Chance. Herausforderungen und Potentiale individueller und gesellschaftlicher Mehrsprachigkeit. Frankfurt: Lang.
- Giancaspro, David; Halloran, Becky; Iverson, Michael (2015): Transfer at the initial stages of L3 Brazilian Portuguese. A look at three groups of English/Spanish bilinguals. In: *Bilingualism* 18 (02), S. 191–207. DOI: 10.1017/S1366728914000339.
- Kupisch, Tanja; Snape, Neal; Stangen, Ilse (2013): Foreign language acquisition in heritage speakers: The acquisition of articles in L3-English by German-Turkish bilinguals. In: J. Duarte und I. Gogolin (Hg.): *Linguistic Superdiversity in Urban Areas*, Bd. 2. Amsterdam: John Benjamins Publishing Company (*Hamburg Studies on Linguistic Diversity*), S. 99–122.
- Kupisch,T. 2017. 2L1 simultaneous bilinguals as heritage speakers in morpho-syntax and phonology. In M. Schmid et al. (Eds), *The Oxford Handbook of Language Attrition*. Oxford: OUP (under review)
- Llama, Raquel; Cardoso, Walcir; Collins, Laura (2010): The influence of language distance and language status on the acquisition of L3 phonology. In: *International Journal of Multilingualism* 7 (1), S. 39–57. DOI: 10.1080/14790710902972255.
- Lloyd-Smith, Anika; Gyllstad, Henrik; Kupisch, Tanja (2016): Transfer into L3 English. Global accent in German-dominant heritage speakers of Turkish. In: *LAB*. DOI: 10.1075/lab.15013.llo.
- Montrul, Silvina (2015): Dominance and proficiency in early and late bilingualism. In: Jeanine Treffers-Daller und Carmen Silva-Corvalán (Hg.): *Language dominance in bilinguals. Issues of measurement and operationalization*. Cambridge: Cambridge University Press, S. 15–35.
- Kupisch,T. 2017. 2L1 simultaneous bilinguals as heritage speakers in morpho-syntax and phonology. In M. Schmid et al. (Eds), *The Oxford Handbook of Language Attrition*. Oxford: OUP
- Westergaard, M.; Mitrofanova, N.; Mykhaylyk, R.; Rodina, Y. (2016): Crosslinguistic influence in the acquisition of a third language. The Linguistic Proximity Model. In: *International Journal of Bilingualism*. DOI: 10.1177/1367006916648859.
- Wrembel, Magdalena (2012): Foreign accentedness in third language acquisition. In: J. Cabrelli Amaro, S. Flynn und J. Rothman (Hg.): *Third Language Acquisition in Adulthood*, Bd. 46. Amsterdam, Philadelphia: John Benjamins Pub. Co. (*Studies in bilingualism*, v. 46), S. 281–310.
- Wrembel, Magdalena (2014): VOT patterns in the acquisition of third language phonology. In: *Concordia Papers in Applied Linguistics (COPAL)* (5), S. 751–771.