

# Language dominance as the main predictor for syntactic transfer in heritage speakers acquiring L3 English

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# LaGoHLA: Heritage language acquisition on the lake

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# Outline

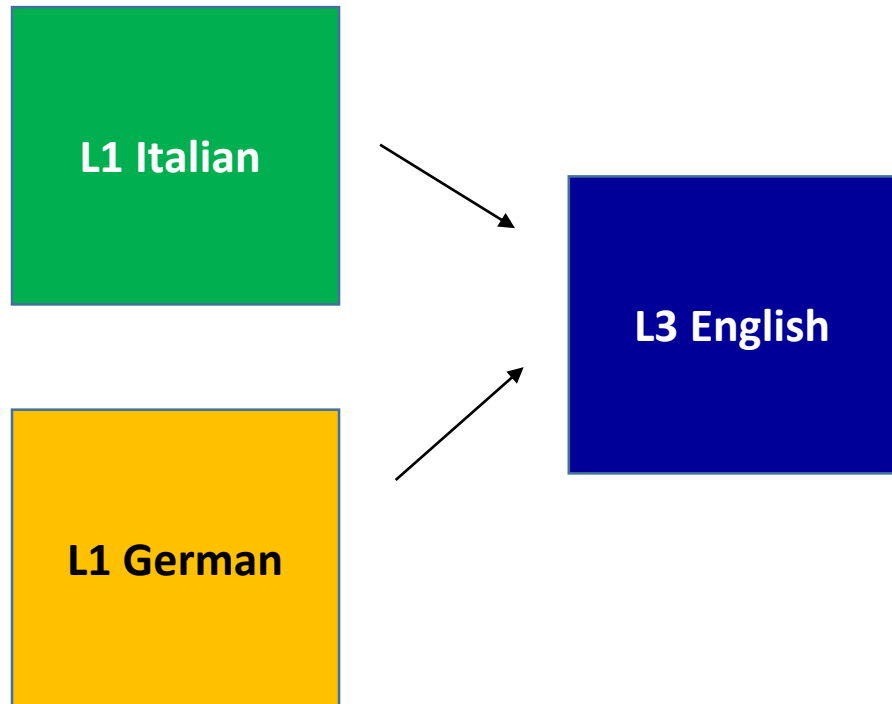
## 1. Background

- Third language acquisition
- Heritage speakers

## 2. This study

- Hypotheses
- Participants
- Methods
- Preliminary results

# Third Language Acquisition



- For us, L3 is the **chronologically third language** acquired
- Early German-Italian **early bilinguals** acquiring L3 English
- As **heritage speakers** (HSs), they are dominant in the majority language

# Who is a heritage speaker?

A language qualifies as a **heritage language [HL]** 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**.

... 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).

(For discussion see Benmamoun et al. 2013, Kupisch & Rothman 2016)

# Some L3 transfer models

L2 Status Model (Bardel & Falk 2007, 2012)

→ Predicts L2 transfer in late L2 learners

The Typological Primacy Model (Rothman 2009, 2011, 2015)

→ Predicts *wholesale* transfer from the language perceived as the most similar

The Linguistic Proximity Model (Westergaard et al. 2016)

→ Predicts *selective* transfer from the language perceived as the most similar

Cumulative Enhancement Model (Flynn et al. 2004)

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# Methodological considerations

## Type of knowledge

- HSs have automatized knowledge of their L1s
- HSs do not perform as well on written tasks / tasks that draw on declarative language knowledge (Montrul 2016)

## Language dominance

- HSs are often not balanced bilinguals
- Language dominance as a predictor for transfer into L3 (Lloyd-Smith et al. 2016)



## 2. Hypotheses

- I. Syntactic transfer into L3 English will occur predominantly from German, the dominant language and the typologically closer language
  
- II. Transfer from German will be more prominent in German-dominant bilinguals than in balanced bilinguals

### **Aim:**

To ascertain whether syntactic transfer into L3 English is affected by the degree of language dominance in the two L1s

# Participants

<b>Participants</b>	<b>Form of bilingualism</b>	<b>L1 Italian AoO</b>	<b>L1 German AoO</b>	<b>L3 English AoO</b>
n=7	Simultaneous 2L1	0	0	6-12
n=13	Successive eL2	0	3-6	6-12

- University students, born in southern Germany
- Attended German schooling system
- Some sts of Italian philology (compare: re-learners Polinsky 2015)

	Participant	IT VOC
Balanced	12GIU	68
	01CRI	67
	02VAN	67
	16TER	66
	05DAV	65
	14OCH	62
	04GRA	60
	07LIS	60
	11ANN	59
	13FRA	58
	10FIL	55
GE dominant	03ANN	54
	09SAR	54
	17LOR	54
	18SAH	49
	08MAR	47
	19MAU	46
	20PAO	46
	15LAU	45
06SHA	42	

## Language dominance

- Balanced bilinguals (n=11)
- GE-dominant bilinguals (n=9)

Form of bilingualism:

- eL2 speakers tend to be balanced
- 2L1 speakers tend to be GE dominant

# 3. Methods

3.1 Vocab task (VSPT)

3.2 Syntax task (Bimodal grammaticality judgement task)

## 3.1 Vocabulary size proficiency test (VSPT)

- Yes/No test with 75 items: 50 real words/25 non-words
- Words from DIALANG placement test
  - DIALANG: online proficiency test in 19 languages
  - VSPT developed as placement test for DIALANG (Paul Meara & colleagues)
  - VSPT shown to be quick and effective measure of general proficiency (Alderson 2005)

<https://dialangweb.lancaster.ac.uk/setals>

← ◀ ▶ ▶ ? 📄 DIALANG

## Placement Test

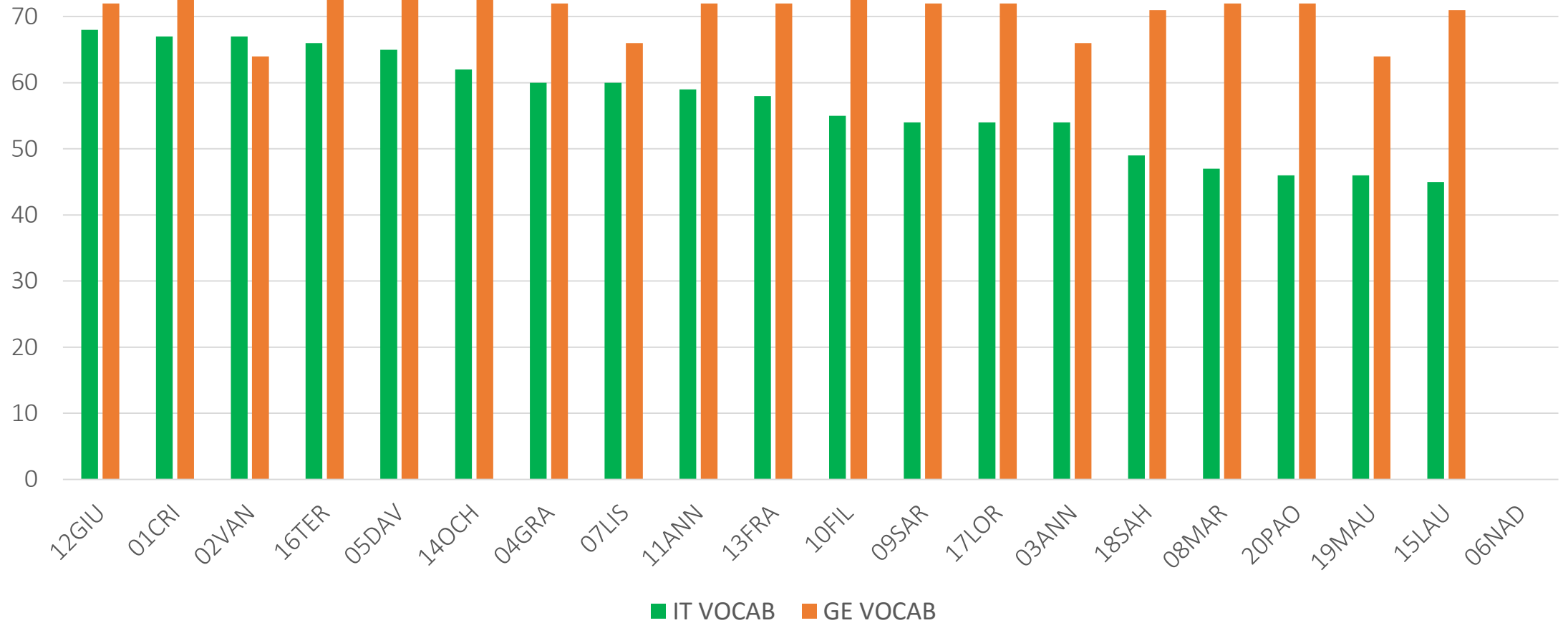
= Yes     = No

<input checked="" type="radio"/> <input type="radio"/> to campaign	<input checked="" type="radio"/> <input type="radio"/> to decite	<input checked="" type="radio"/> <input type="radio"/> to review
<input checked="" type="radio"/> <input type="radio"/> to futt	<input checked="" type="radio"/> <input type="radio"/> to megalize	<input checked="" type="radio"/> <input type="radio"/> to celebrate
<input checked="" type="radio"/> <input type="radio"/> to bourble	<input checked="" type="radio"/> <input type="radio"/> to markle	<input checked="" type="radio"/> <input type="radio"/> to demolish
<input checked="" type="radio"/> <input type="radio"/> to fear	<input checked="" type="radio"/> <input type="radio"/> to abolish	<input checked="" type="radio"/> <input type="radio"/> to administer
<input checked="" type="radio"/> <input type="radio"/> to preyout	<input checked="" type="radio"/> <input type="radio"/> to root	<input checked="" type="radio"/> <input type="radio"/> to erode
<input checked="" type="radio"/> <input type="radio"/> to study	<input checked="" type="radio"/> <input type="radio"/> to distinguish	<input checked="" type="radio"/> <input type="radio"/> to fabulation
<input checked="" type="radio"/> <input type="radio"/> to savedown	<input checked="" type="radio"/> <input type="radio"/> to outlate	<input checked="" type="radio"/> <input type="radio"/> to join
<input checked="" type="radio"/> <input type="radio"/> to compile	<input checked="" type="radio"/> <input type="radio"/> to sink	<input checked="" type="radio"/> <input type="radio"/> to settle
<input checked="" type="radio"/> <input type="radio"/> to motivate	<input checked="" type="radio"/> <input type="radio"/> to encompass	<input checked="" type="radio"/> <input type="radio"/> to driggle
<input checked="" type="radio"/> <input type="radio"/> to witness	<input checked="" type="radio"/> <input type="radio"/> to chariover	<input checked="" type="radio"/> <input type="radio"/> to mention
<input checked="" type="radio"/> <input type="radio"/> to emerge	<input checked="" type="radio"/> <input type="radio"/> to strang	<input checked="" type="radio"/> <input type="radio"/> to struggle
<input checked="" type="radio"/> <input type="radio"/> to prinkle	<input checked="" type="radio"/> <input type="radio"/> to permit	<input checked="" type="radio"/> <input type="radio"/> to yell

# VSPT – Our adaptation

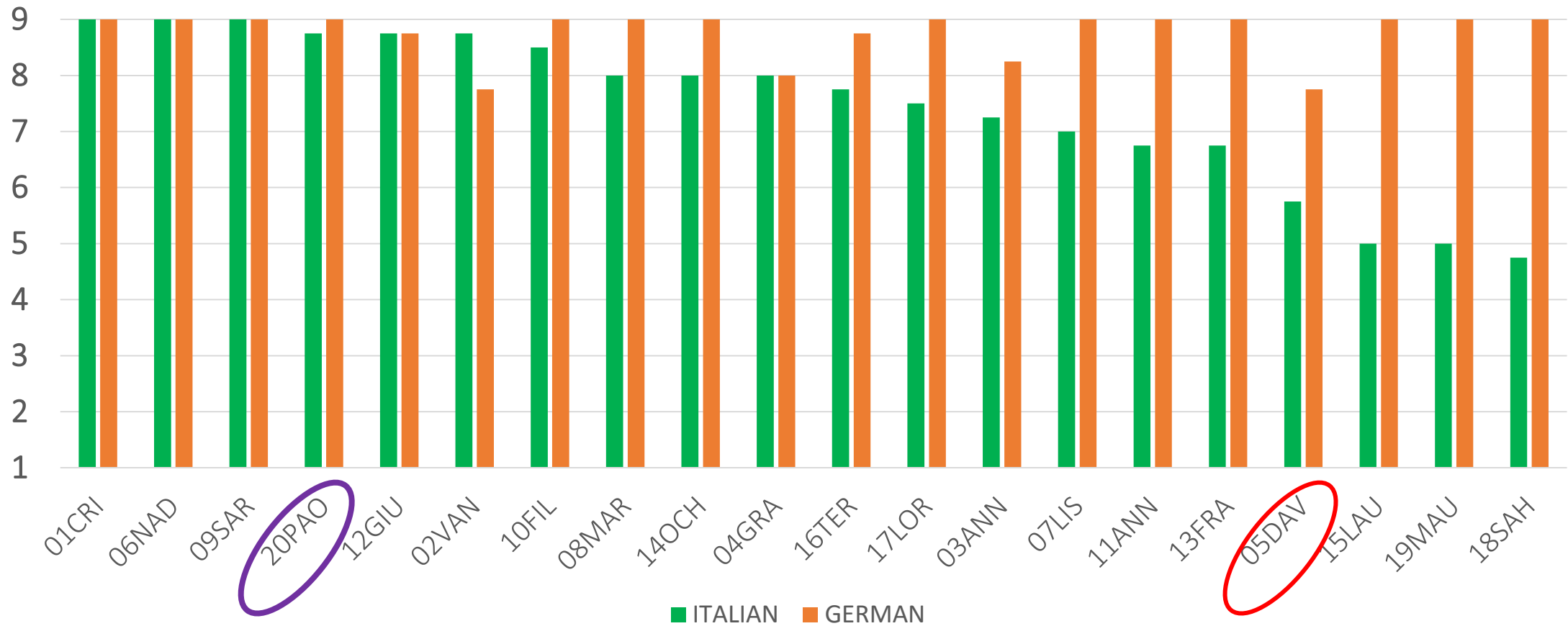
- Method
  - Single word appears on screen
  - Participant clicks “Yes” if the word exists or “No” if it doesn’t
  - Reaction time measured by Presentation<sup>®</sup>
  
- Scoring system
  - 1 point for answering “Yes” to a real word
  - 1 point for answering “No” to a non-word
  - Maximum score: 75

# VSPT score IT vs. GE

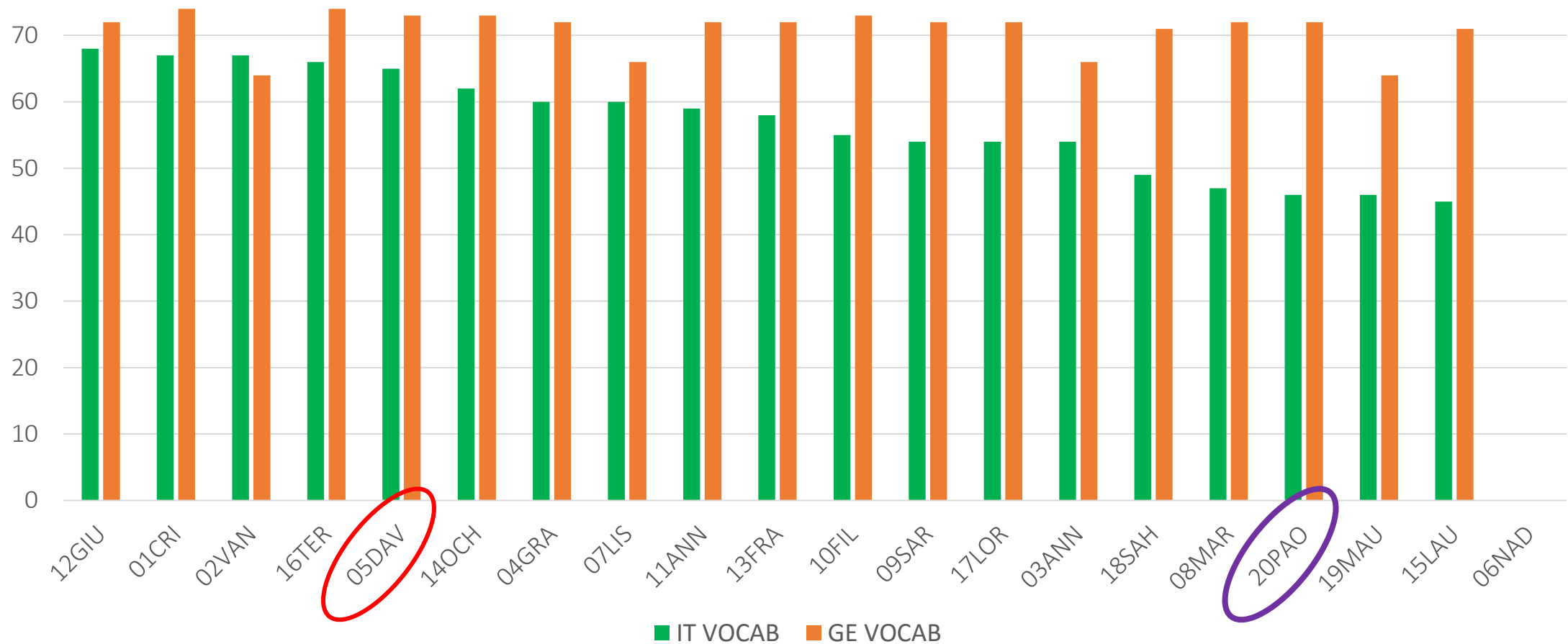




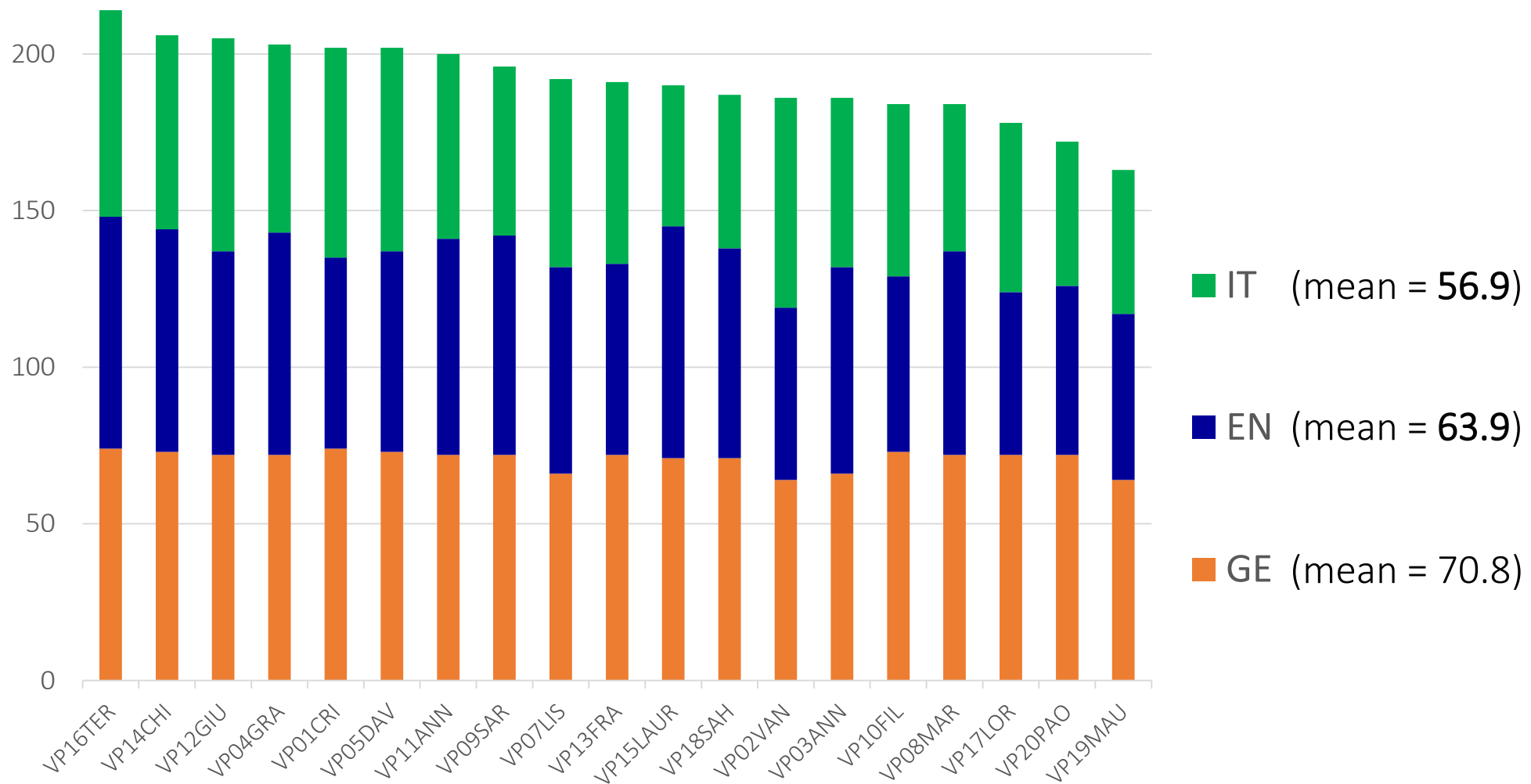
# Self-assessed proficiency in the four skills



# VSPT score It vs. Ge



# VSPT: German, Italian, English



## 3.2 Syntax test

### Bimodal grammaticality judgement test

- 48 test items (24 grammatical, 24 ungrammatical)
- 4 test conditions
- Clause type: wh-question (matrix and embedded)
- Contextualized to increase naturalness
- Stimuli presented acoustically and under pressure

# Main test conditions

## 1) Italian condition

**\* Julia doesn't know where went Lukas**

*Giulia non sa dove è andato Luca.*  
 G. NEG know-3SG where AUX.3SG go-PTCP-MSG L.

## 2) German condition

**\* Julia doesn't know where Albert last week was**

*Julia weiß nicht, wo Albert letzte Woche war.*  
 J. know-3SG NEG where A. last-ACC.FSG week-ACC.FSG be-IMPF-3SG

## 3) Double transfer condition

**\*What eat the children?**

*Cosa mangiano i bambini?*  
*Was essen die Kinder?*  
 what eat-3PL DEF.ART-NPL child-NPL

# Test conditions

	<b>GE TRANSFER</b>	<b>IT TRANSFER</b>	<b>DBL TRANSFER</b>	<b>CONTROLS</b>
<b>English</b>	*	*	*	*
<b>German</b>	Gr	*	Gr	*
<b>Italian</b>	*	Gr	Gr	*

# Syntax test: procedure

1. Auditory and visual stimuli delivered in Presentation®
2. Participant listens to sentence
3. Decides whether the sentence is acceptable (click Yes) or unacceptable (click No)
4. If participant clicks No, the sentence appears on the screen
5. Participant provides verbal correction

Demonstration follows...



+



Yes

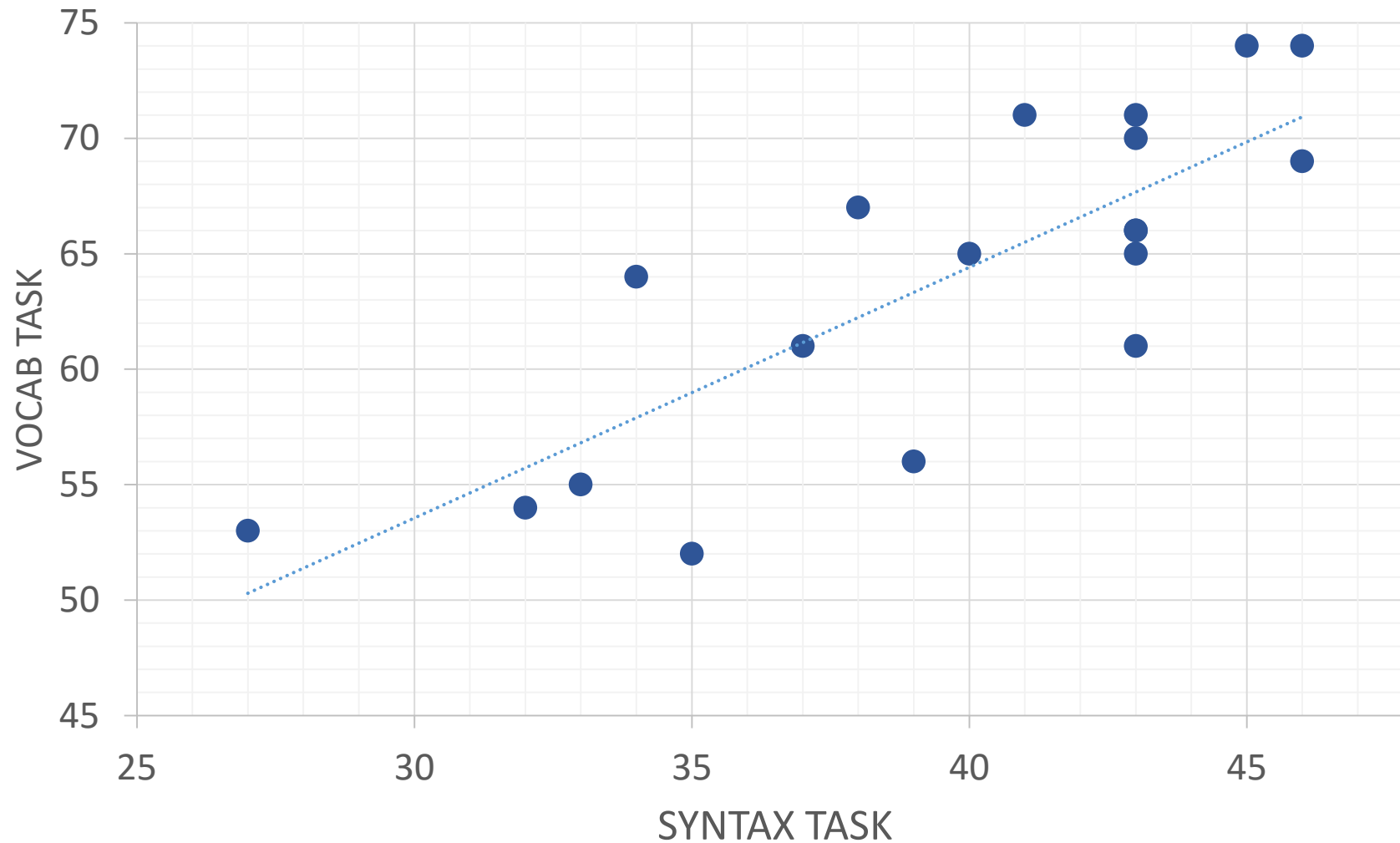
No

The children drink warm milk each night.

What eat the children?

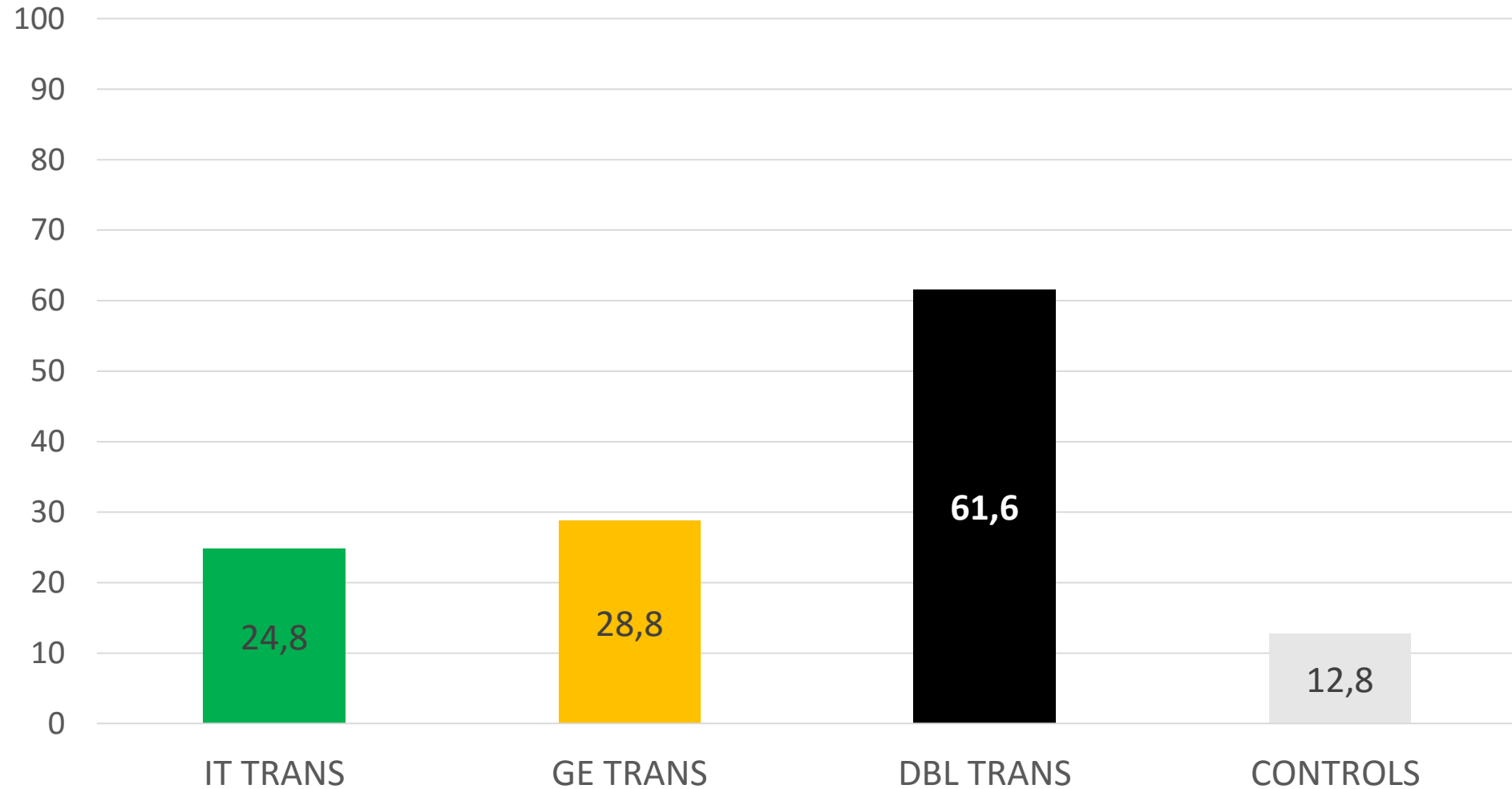
Recording...

# English Syntax Task vs. English Vocab Task



Performance on syntax task relates well to vocab task

## Inappropriate responses per condition in %



# Hypotheses

- I. Syntactic transfer into L3 English will occur predominantly from German
- II. Transfer from German will be more prominent in German-dominant bilinguals than in balanced bilinguals

	Participant	IT VOC
<b>Balanced</b>	12GIU	68
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	07LIS	60
	11ANN	59
	13FRA	58
10FIL	55	
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	09SAR	54
	17LOR	54
	18SAH	49
	08MAR	47
	19MAU	46
	20PAO	46
	15LAU	45
06SHA	42	

# Language dominance

### ITALIAN TRANS

19MAU	6
20PAO	4
05DAV	3
10FIL	3
02VAN	2
03ANN	2
12GIU	2
18SAH	2
01CRI	1
04GRA	1
08MAR	1
09SAR	1
14CHI	1
15LAU	1
17LOR	1
07LIS	0
11ANN	0
13FRA	0
16TER	0
21SHA	0

### GERMAN TRANS

19MAU	6
20PAO	4
02VAN	4
18SAH	3
17LOR	3
21SHA	1
13FRA	1
10FIL	1
05DAV	1
03ANN	1
01CRI	1
16TER	0
15LAU	0
14CHI	0
12GIU	0
11ANN	0
09SAR	0
08MAR	0
07LIS	0
04GRA	0

### DBL TRANS

04GRA	6
05DAV	6
10FIL	6
12GIU	6
17LOR	6
20PAO	6
01CRI	5
02VAN	5
07LIS	5
18SAH	5
19MAU	5
08MAR	2
09SAR	2
13FRA	2
21SHA	2
11ANN	1
15LAU	1
16TER	1
03ANN	0
14CHI	0

It appears *possible* that

- **German dominants** have more problems with German Condition
- **Balanced bilinguals** have more problems with Double Transfer Condition

# Varying syntactic complexity

I) Italian condition: Julia doesn't know where went Lukas  
**embedded wh-structure**

II) Double transfer condition: What eat the children?  
**matrix wh-structure**

Avoidance of Do-support:

- \*What eat the children? → *“What eats the children?”*
- \*What sees Simone? → *“What see Simone?” / “What saw Simone?”*
- \*Where lives Jeff? → *“You can also say, ‘Where does Jeff live’”.*



## Preliminary conclusions

- GE-dominant speakers may transfer more heavily from German
- Maybe what we found in phonology (Lloyd-Smith et al. 2016) does not apply to syntax
- Whether this speaks for TPM (Rothman) and LPM (Westergaard) is a matter of debate

## Where to from here?

- Control data needed (monolinguals, possibly L2 speakers)
- Diversify language dominance measure
- Further investigations into syntactic complexity

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