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

→ 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)
Some L3 transfer models

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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
<table>
<thead>
<tr>
<th>Participants</th>
<th>Form of bilingualism</th>
<th>L1 Italian AoO</th>
<th>L1 German AoO</th>
<th>L3 English AoO</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=7</td>
<td>Simultaneous 2L1</td>
<td>0</td>
<td>0</td>
<td>6-12</td>
</tr>
<tr>
<td>n=13</td>
<td>Successive eL2</td>
<td>0</td>
<td>3-6</td>
<td>6-12</td>
</tr>
</tbody>
</table>

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

- to campaign
- to futt
- to bourble
- to fear
- to preyout
- to study
- to savedown
- to compile
- to motivate
- to witness
- to emerge
- to prinkle

- to decite
- to megalize
- to markle
- to abolish
- to root
- to distinguish
- to outlate
- to sink
- to encompass
- to chariover
- to strang
- to permit

= Yes  = No

to review
to celebrate
to demolish
to administer
to erode
to fabulation
to join
to settle
to driggle
to mention
to struggle
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®

• 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

Italian-German heritages speakers: Transfer into L3 English
Self-assessed proficiency in the four skills
VSPT score It vs. Ge

Italian-German heritages speakers: Transfer into L3 English
VSPT: German, Italian, English

- **IT** (mean = 56.9)
- **EN** (mean = 63.9)
- **GE** (mean = 70.8)
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.

2) German condition

*Julia doesn’t know where Albert last week was

Julia weiß nicht, wo Albert letzte Woche war.

3) Double transfer condition

*What eat the children?

Cosa mangiano i bambini?

Was essen die Kinder?
## Test conditions

<table>
<thead>
<tr>
<th></th>
<th>GE TRANSER</th>
<th>IT TRANSFER</th>
<th>DBL TRANSFER</th>
<th>CONTROLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>German</strong></td>
<td>Gr</td>
<td>*</td>
<td>Gr</td>
<td>*</td>
</tr>
<tr>
<td><strong>Italian</strong></td>
<td>*</td>
<td>Gr</td>
<td>Gr</td>
<td>*</td>
</tr>
</tbody>
</table>
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...
The children drink warm milk each night.

What eat the children?
Performance on syntax task relates well to vocab task
Inappropriate responses per condition in %

- IT TRANS: 24.8%
- GE TRANS: 28.8%
- DBL TRANS: 61.6%
- CONTROLS: 12.8%
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
## Language dominance

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

The table above shows the language dominance scores for various participants. Participants are categorized into three groups: Balanced, GE dominant, and FOB. The scores range from 42 to 68.
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?”
*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
Selected references


