FREIE UNIVERSITÄT BERLIN

Dahlem Center for Linguistics

«Pope» or «Porridge»?

The Acquisition of Consonant Length in L2 Italian

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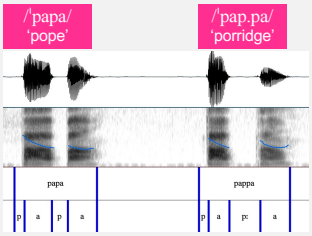
Team of the DFG Project: "Production and perception of geminate consonants in Italian as a foreign language: Czech, Finnish, German and Spanish learners in contrast"

1 Introduction



Background

- One important characteristic of (Standard): **geminates**, **phonetically long consonants,** that build minimal pairs with their phonetically short counterparts (e.g., *papa* vs. *pappa*).
- There are 15 **lexical** (word-internal) geminates and 5 **inherent geminates** that are always pronounced as long (e.g., *grazie* [tːs] 'thank you').
- Since geminates appear in only **3.3% of the world's languages**, they are considered so-called marked consonants.
- According to Eckman's (1977) **Markedness Differential Hypothesis**, such sounds pose particular difficulties for foreign language learners (see, e.g., Lado 1957; Derwing & Munro 2015; Colantoni et al. 2015).

Research Questions:

Does the **first language** play a crucial role in the perception of geminates in L2 Italian?

Which **other intra- or extralinguistic** factors can be identified?

Is there a **universal** or **language-specific** hierarchy of geminates that poses difficulties for non-L1 speakers?

AIMS OF THE PROJECT
→ To contribute to the SLA research by exploring how adult **learners with different L1 background** acquire (word-internal) consonant length in L2 Italian.
→ To bring the linguistic knowledge gained with empirical methods into the **language classroom**.

2 Hypotheses

1. **L1**: Since the first language is always „active" while learning (Westergaard et al. 2016: 13) and a transfer is taking place (cf. Flege & Bohn 2021), the perception of quantity is expected to be determined by L1: **Finnish** (vowel and consonant length in stress/unstressed position) > **Czech**/**Slovak** (vowel length in stress/unstressed position) > **German** (vowel length in stress position) > **Spanish** (no consonant and no vowel length).
2. **Stress position**: The perception of the length contrast is expected to be easier in the most prominent post-stress and pre-stress position (e.g., *sàppolo* vs. *sàpolo; sappòlo* vs. *sapòlo*) compared to less prominent unstressed positions (e.g., *sappolò* vs. *sapolò*).
3. **Proficiency**: Learners' perception abilities are expected to **improve at proficiency** level C (proficient users) compared to levels B (independent users) and A (basic users).
4. **Sound type**: The type of sound and the presence/absence of voicing are expected to show different tendencies in learners' perception due to the inherent acoustic properties.

3 Methods

100 learners of Italian
25 L1 Czech
23 L1 Finnish
24 L1 German
20 L1 Spanish
8 L1 Slovakian
22 L1 Italian

Production & Perception experiment (ca. 60min)

- Semi-spontaneous data: short sociolinguistic interviews
- Controlled data: repetition task; reading of a short text and word list
- Perception Identification and Perception AX-Discrimination Task (*present data*)

AX-Discrimination Task

- **Verifies** whether learners perceive the difference in consonant quantity.
- **Items**: 45 pairs of pseudowords, controlled according to word length (three syllables), stress position (pre-stress/post-stress with long stressed vowel/post-stress with short manipulated stressed vowel/unstressed), and consonant type.

"Do the two items belong to the same word (e.g., *sappòlo* vs. *sapòlo*)?" **YES / NO**

4 Results

First language (***):

- The strongest impact: learners with **L1 that has quantity contrast perceive differences** in L2 Italian more often than speakers of a L1 that does not have this quantity contrast (= *Perceptual Assimilation Model*,; *Speech Learning Model revised* (SLM-r); *Linguistic Proximity Model)*.

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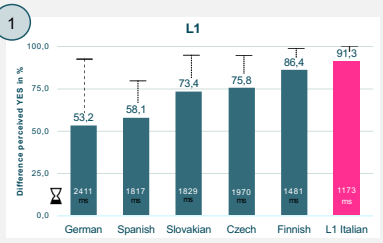

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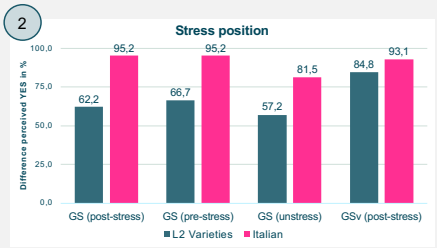


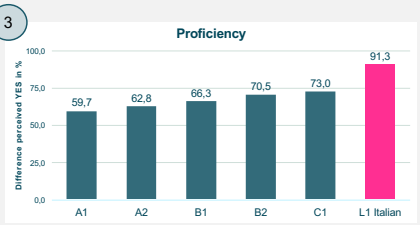
Stress position (**):

- Unstressed position shows the lowest recognition values (cf. Sorianello 2014).
- L1 Italian speakers display high sensitivity for consonantal length both in stress position (93%-96%) and unstress position (81,5%).

Proficiency (*):

- More advanced learners are better "performers" compared to less advanced learners (cf. Altmann et al. 2012).
- Further individual variation (!)

3



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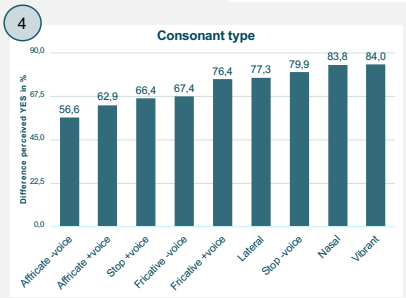

Sound (**):

- Sonorants (nasals, laterals, vibrants) are more easily categorized than obstruents (stops, fricatives, affricates) – voiceless stops being the exception (cf. Dmitrieva 2017).
- Language-specific differences: Finnish learners: 97% accuracy with voiceless plosives; Spanish learners: 100% accuracy with rhotics; L1 group: high accuracy across all sound types.

5 Summary & Outlook

- The perception of differences in consonantal length is strongly influenced by multiple factors. While **learners' proficiency** level plays a minor role, **L1, the position of word stress, and the type of sound** are more significant determinants.
- These initial findings have **implications for foreign language acquisition** and **teaching**, especially in the context of training phonological contrasts in a new L2.
- In the next phase of this research, it will be explored whether the observed behaviors in perception and production of quantity are **symmetric** or **asymmetric**:

- Finally, it will also be tested **how L1 Italian speakers** perceive and interpret L2 consonant length.

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ProPer geminates in ITA-L2
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