

Understanding the underlying mechanisms of cross-linguistic influence: Evidence from priming German-Italian bilinguals



Understanding the underlying mechanisms of cross-linguistic influence

WORK IN COLLABORATION WITH:

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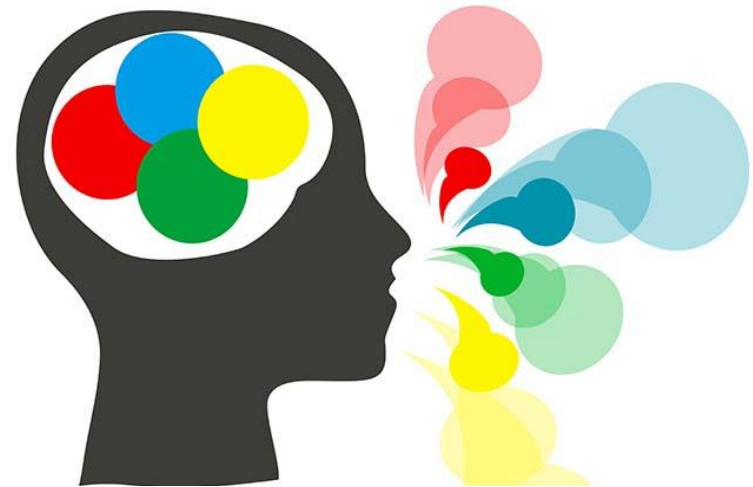
JACOPO TORREGROSSA



Introduction

Bilingualism is the norm for more than half of the world's population [Grosjean, 2021].

- How two (or more) languages are represented in the bilingual's mind?
- How they interact with each other?
- How such interactions develop with age?



Cross-linguistic influence (CLI)

Linguistic properties of a bilingual's language (e.g., phonological and morpho-syntactic features) are used or accepted in the other language

[van Dijk et al. 2021 for a review]

Italian

Mangia un dolce
(he) eats a sweet

Lui mangia un dolce



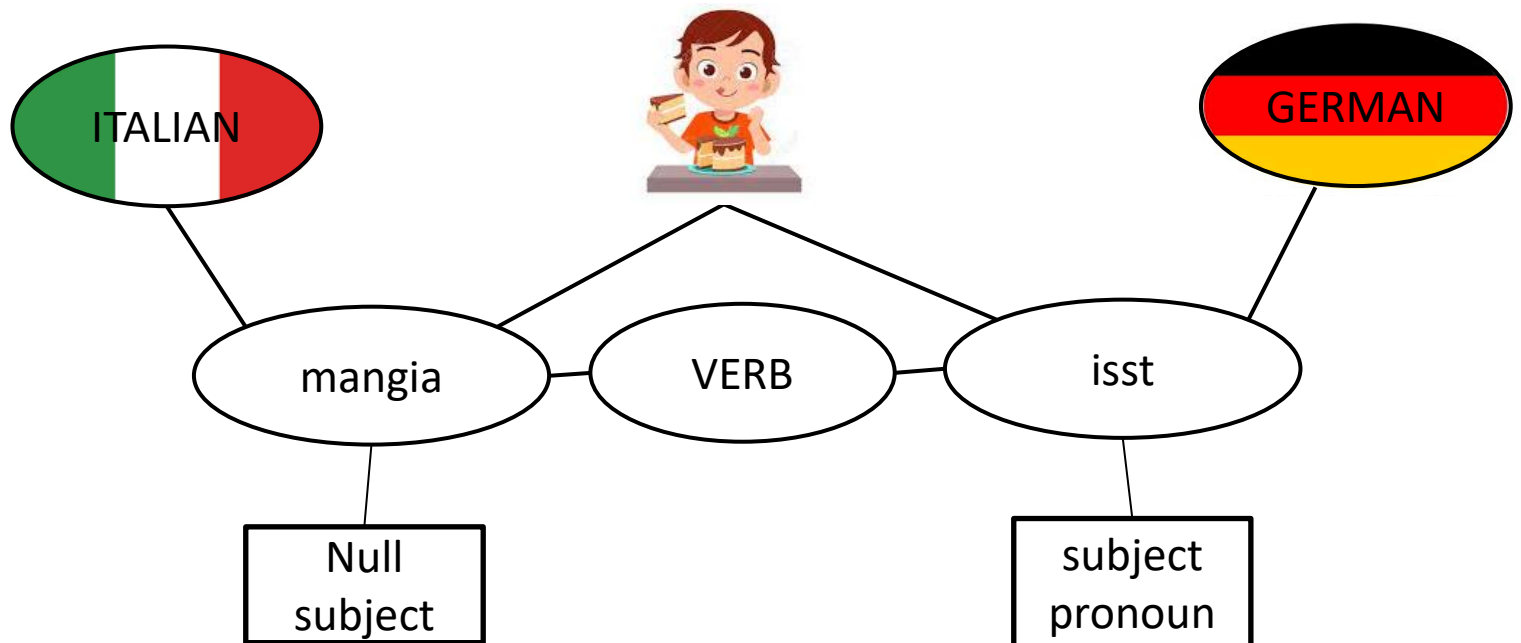
German

Er isst ein Bonbon
He eats a sweet

CLI and “Activation”

CLI depends on the activation level of certain (lexical, phonological or morpho-syntactic) structures within a bilingual’s processing system.

[Serratrice, 2016; 2022; Sharwood Smith and Truscott, 2014]

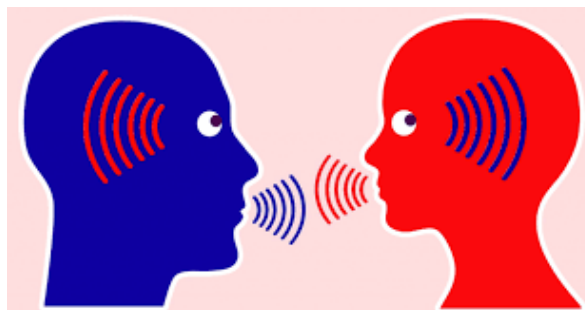


CLI, activation and structural priming

Structural priming refers to speakers' tendency to reuse a morpho-syntactic structure that they have encountered previously.

[e.g., Pickering & Branigan 1998, Branigan & Pickering, 2017]

→ This may hold also **between two languages** [Hartsuiker et al. 2004]



The study:

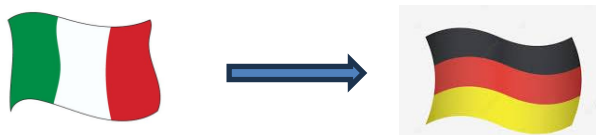
Priming across languages

1. German-to-Italian

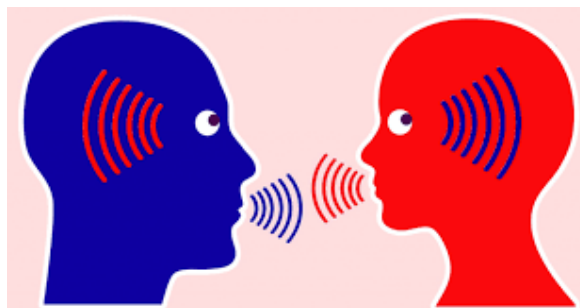


Does it lead to the over-production of subject pronouns in Italian?

2. Italian-to-German



Does it lead to the production of a null subject in German?



The study:

Priming across languages

1. Direction of the priming effect (CLI)

Language A → Language B

Language A ← Language B

2. Different levels of grammaticality:



Dispreferred vs. ungrammatical



Research questions

RQ1: Is it possible to prime null subjects and subject pronouns across languages?

RQ2: Are there any differences in the magnitude of priming between the two across-languages priming experiments?

-Does that reflect a difference between **dispreferred vs. ungrammatical structures**?

-And what can it tell us about the **direction of CLI**?

RQ3: Which **additional factors** (age, language dominance, cognitive flexibility) affect the occurrence and strength priming (CLI)?

RQ4: Is the priming effect **long-lasting**?

Procedure

Test German-Italian bilingual children (6-18 years old)

Session 1:

Pre-test (Italian)

German-to-Italian priming

Post-test (Italian)

Session 2:

Pre-test (German)

Italian-to-German priming

Post-test (German)



- + Questionnaire (for the parents)
- + Proficiency test (Italian and German)
- + Cognitive task

Next steps:

- ✓ Materials for the study
- ✓ Approval from the Ethics Committee
- Pilot the study
- Pre-registration on OSF
- Upload all the materials (tasks, questionnaires) in OSF (reproducibility)
- Share raw data and the scripts for the statistical analyses (transparency)
- Registered report



THANK YOU!

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Across-languages priming tasks

 INTRO

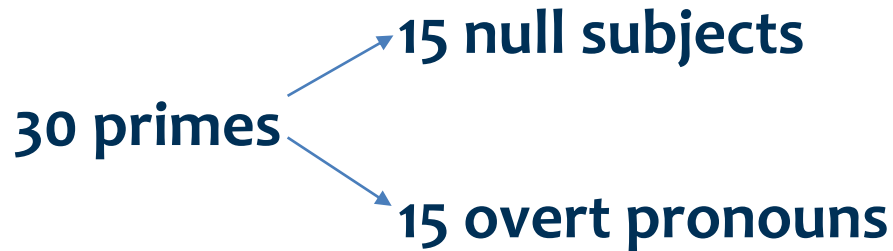
 PRIME

 TARGET

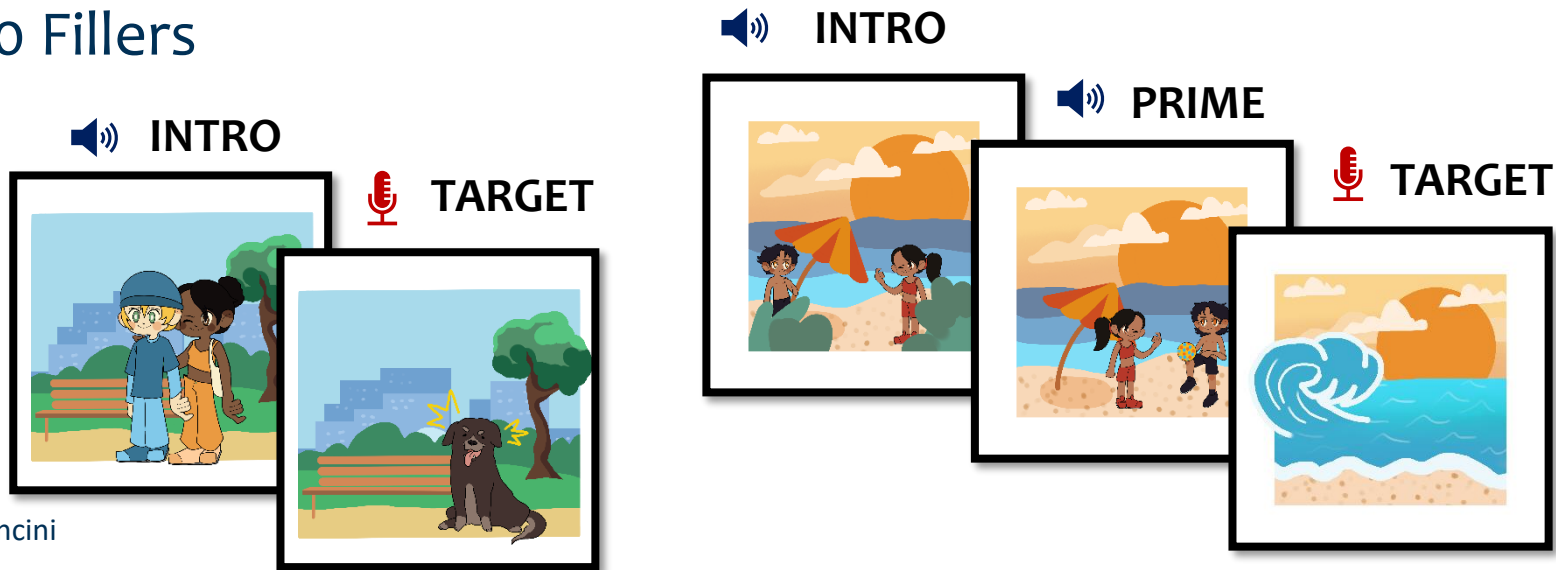


Across-languages priming tasks

- Experimental items: (two Lists)



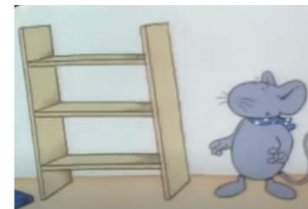
- 30 Fillers



Pre- and post-test

Short videos with no linguistic material

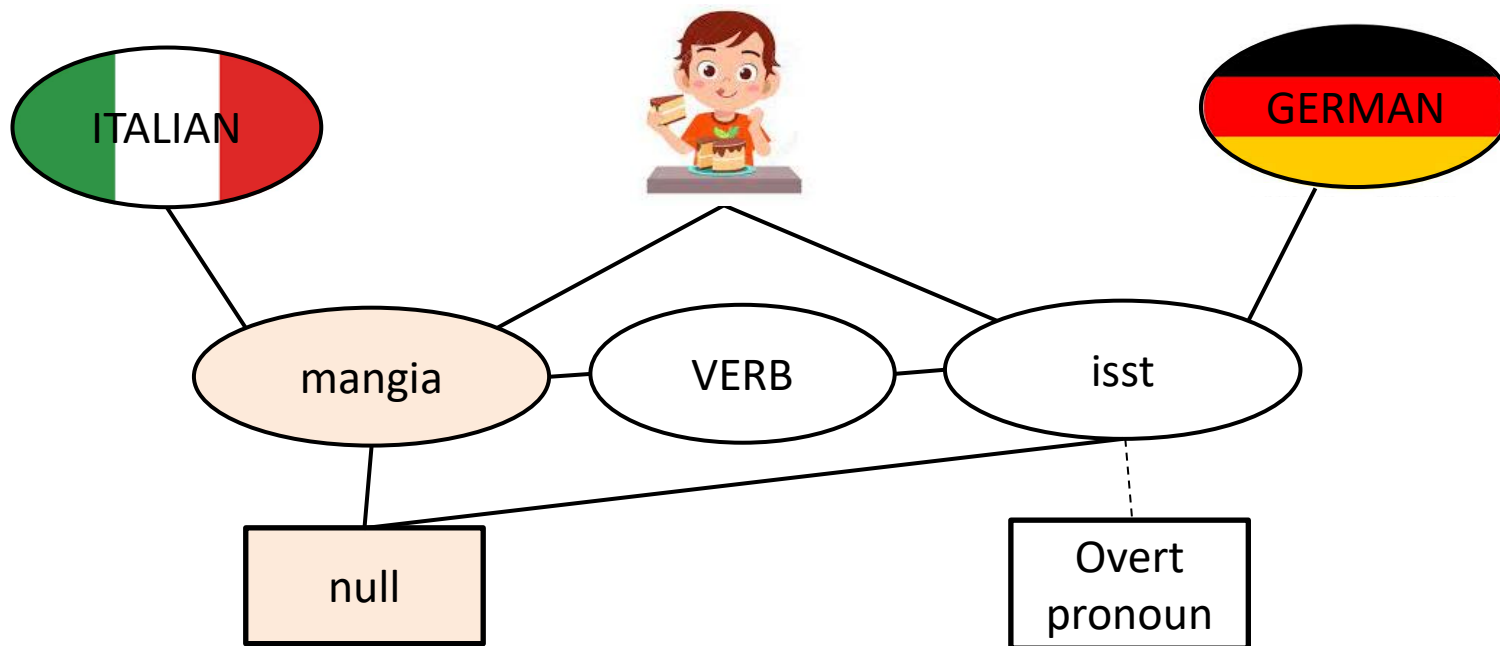
- Look at the video
- Retell the story by looking at the pictures either in Italian or in German



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