

An Interdisciplinary Approach to Investigate Language Choices in a Trilingual Setting

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Project Launch

Research Questions

- What kind of influence do L1/2/3 have on other L2/3s?
 - Which directions of language switches happen?
 - Where in the linguistic architecture do switches occur?
 - Which linguistic patterns occur in different situations?
 - Laboratory vs. sociolinguistic interview
 - Do we see intra-speaker change over time?
- Sociolinguistic interviews & cognitive tests

Variables

Phonetics & Phonology:

- Asymmetry in phonemic inventory, processes and phonotactic constraints: tested in nonsense word test
 - Does this sound English? → reaction time (RT)

Morphology:

- Nonsense word test:
 - Prefixes vs. suffixes
 - French different stress patterns

Syntax:

- Verb placement in sentence:
 - Position of verb
 - *Il y a, there is/are, es gibt*

Participants

- Language knowledge:
 - L1 French speaker
 - L2/L3 English
 - L2/L3 German
- Living in Germany & high exposure to German
 - Good candidates: students of Licence Franco-Allemande

Example: Lexical Level

- Cognate test

Methodology

- Comparison of reaction time: *Click on the corresponding picture!*
- BASELINE = cognates in French & English & German: *elefant, elephant, Elefant*
- COGNATES IN FRENCH & ENGLISH: *voyage, voyage (GE: Reise)*
- COGNATES IN ENGLISH & GERMAN: *house, Haus (FR: maison)*
- NO COGNATES IN FRENCH & ENGLISH & GERMAN: *toit, roof, Dach*

Hypotheses

- RT longer than BASELINE in condition COGNATES IN FR & EN
 - German stronger/more present in mind than English & French
- RT longer than BASELINE in condition COGNATES IN GE & EN
 - French stronger/more present in mind than English & German
- RT longer than BASELINE in condition NO COGNATES
 - English stronger/more present in mind than German & French

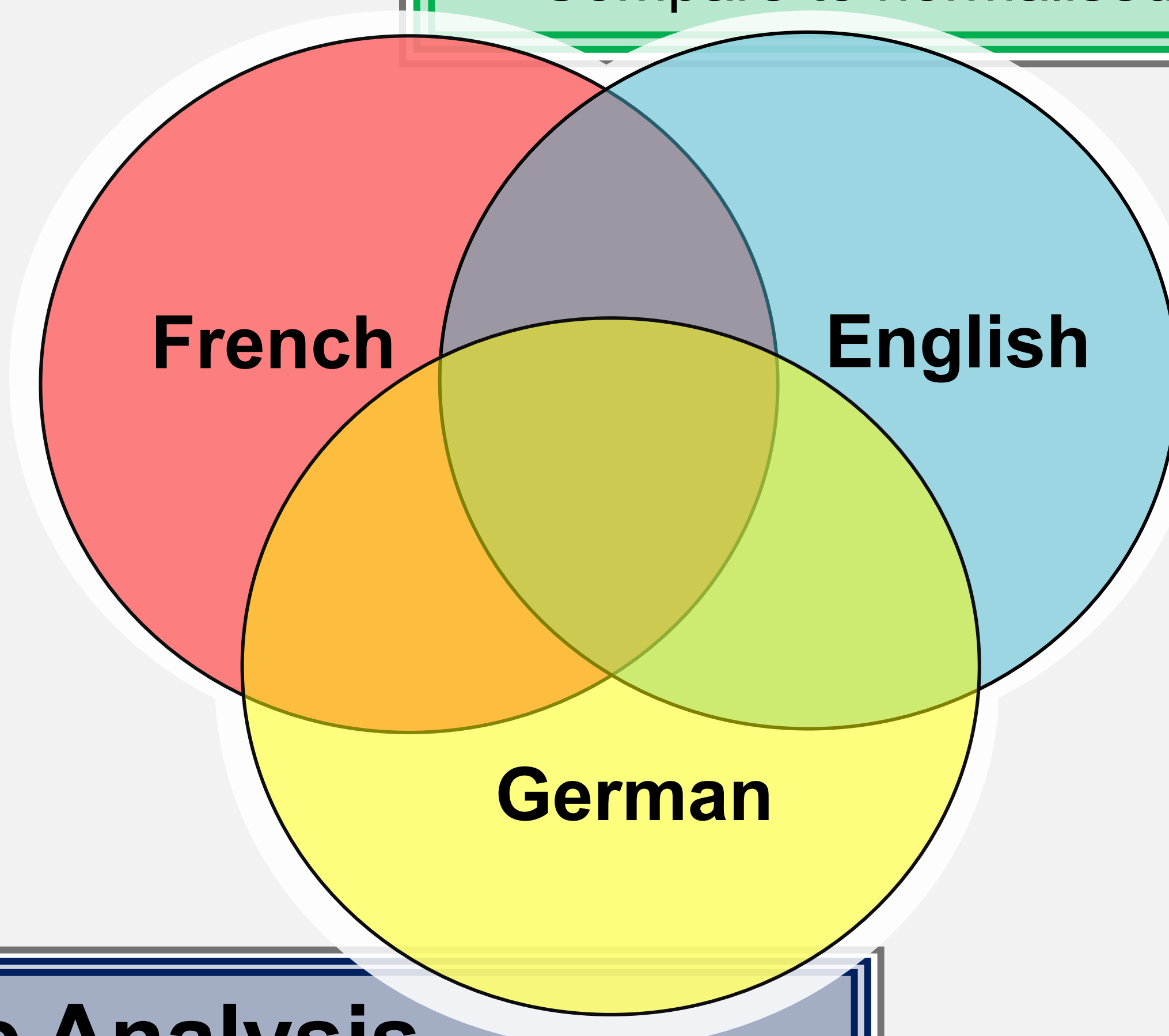
Analysis

- Test for significance with linear mixed models:
- Influence of linguistic factors: spelling, word, etymology
 - Influence of social factors: time of learning, motivation, attitudes etc.
 - Compare to normalised switches in sociolinguistic interview

Psycholinguistics

Methodology

1. Sociolinguistic interview
 2. Cognitive tests in Test IO (Test Io GmbH 2023)
 3. Questionnaire
- Analysis: cognitive tests
 - Transcriptions & analysis: interviews
 - Comparison cognitive tests & interviews on different levels
 - Conclusions on group and individual levels
 - Focus on influence of social factors (motivation & attitudes)



Questionnaire

Social Information

- Age
- Sex, gender
- Education
- Occupation
- Class

Language knowledge

- Exposure to varieties
- Onset, duration, amount
- Language attitudes
- Willingness to improve
- Motivation for learning

Audio Data

Casual Speech

- Interview 30/45 min. in English
- Semi-guided
 - E.g., text about music
 - Prompts or open questions?
 - Elicitation protocols to account for accommodation?

Controlled Speech

- Reading passage
- English
- French
- German
- Word list

References

- Boersma, P. & Weenink, D. (1992–2022): Praat: doing phonetics by computer [Computer program]. Version 6.2.06, retrieved 23 January 2022 from <https://www.praat.org>.
- ELAN (Version 6.1) [Computer software]. 2021. Nijmegen: Max Planck Institute for Psycholinguistics, The Language Archive. Retrieved from <https://archive.mpi.nl/la/elan>.
- Fromont R., & Hay, J. 2012. LABB-CAT: an Annotation Store. Conference: Australasian Language Technology Association Workshop.
- Test Io GmbH (2023): Test Io. An EPAM Company. <https://test.io/>.

Sociolinguistics

Example: Acoustic Analysis

Data Processing

- Transcription in Elan (Max Planck Institute 2021)
- Forced alignment in LaBB-CAT (Fromont & Hay 2012)
- Boundary checking in Praat (Boersma & Weenink 2021)
- Formant extraction in R & Praat (F1 & F2)

Hypothesis

- Change over time towards a (more) standard pronunciation of English
- Possible influence of German & French

Analysis

- Formants & auditory coding
- Consonants: not used in French but English
- Vowels: not used in French but English

Statistical Analysis

- Linear mixed models
- GAMMs
- include time as factor

Any Questions?

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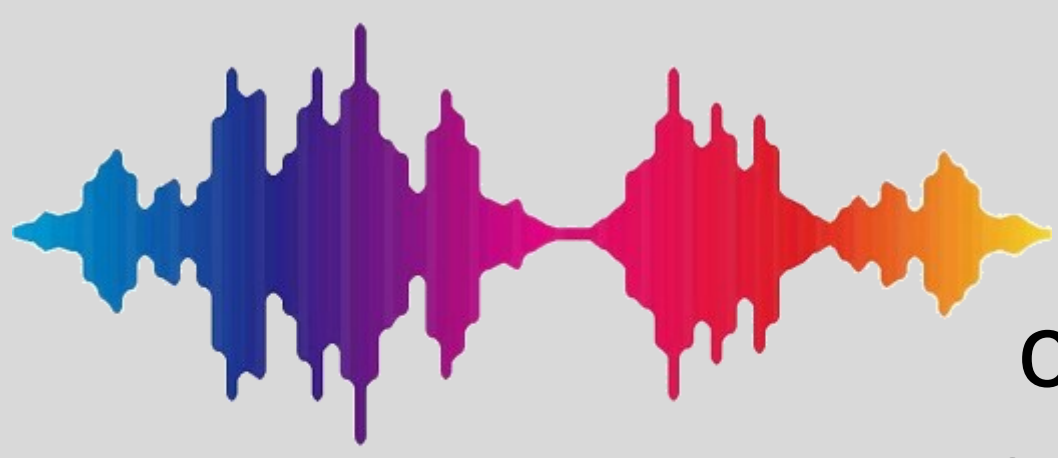


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