

# Transfer or a Developmental Difference?

## The case of Grammatical Gender Acquisition in L3 German

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# Outline

Transfer or a  
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L3  
Grammatical  
Gender  
Transfer

Experiment 1

Procedures

Results

Key Findings

Experiment 2

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Key Findings

Larger  
Implications

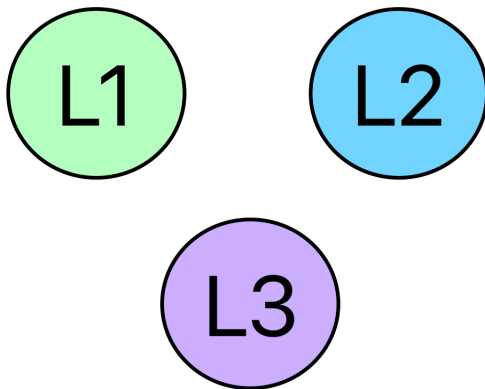
① L3 Grammatical Gender Transfer

② Experiment 1

③ Experiment 2

④ Larger Implications

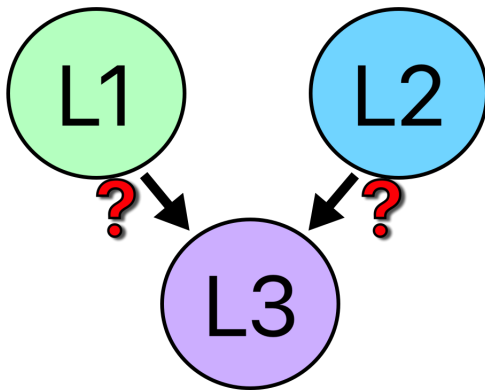
# Transfer in L3 Acquisition



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# Factors in L3 Initial Transfer

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- Naive vs. non-native status/Age of acquisition/Order of acquisition.
- Linguistic similarity between languages.
- Language dominance.
- Language status.

# Models of L3 Initial Transfer

## Whole-Transfer Models

### L1 Transfer

Hermas, 2010

### L2 Status Factor

Bardel & Falk, 2007

### Typological Primacy

Rothman, 2010

### Language of Community

Fallah et al, 2016

## Partial-Transfer Models

### Cumulative Enhancement

Flynn et al., 2004

### Linguistic Proximity

Westergaard et al., 2017

### Scalpel Model

Slabakova, 2017

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# Grammatical Gender



# Grammatical Gender

## (3) German

Ein-**e**      rot-**e**      Rose  
DET-**FEM**   red-**FEM**   rose**FEM**

'A red rose'

## (4) Spanish

Un-**a**      rosa      roj-**a**  
DET-**FEM**   rose**FEM**   red-**FEM**

'A red rose'

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# Language Triad

# Language Triad

English

Spanish

L3 German

# Language Triad

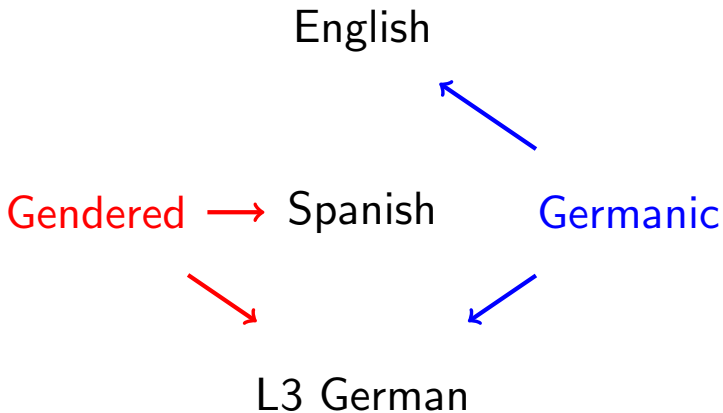
English

Gendered → Spanish



L3 German

# Language Triad



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# Experiment 1: Brown (2020a)

## Participants

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## Participants

- Sequential Spanish/English bilinguals
- “Beginner” German learners
  - <1 year (two semesters) L3 German instruction

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## Participants

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- Intermediate or higher L2 proficiency



# Experiment 1: Brown (2020a)

## Participants

- Sequential Spanish/English bilinguals
  - “Beginner” German learners
    - <1 year (two semesters) L3 German instruction
- Intermediate or higher L2 proficiency

Language Background	Number of Participants
L1 English L2 Spanish L3 German	11
L1 Spanish L2 English L3 German	10
L1 English L2 German	11

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# German Grammaticality Judgement Task

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## Gender Mismatch

\*Das Baum ist groß

The<sub>[N]</sub> tree<sub>[M]</sub> is tall

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Words reflecting biological gender were not included

Error questions were balanced in terms of:

# German Grammaticality Judgement Task

## Gender Mismatch

\*Das Baum ist groß  
The<sub>[N]</sub> tree<sub>[M]</sub> is tall

Words reflecting biological gender were not included

Error questions were balanced in terms of:

German Gender

Error Direction (M → F, M → N ect.)

Spanish Gender

## Gender Assignment vs. Gender Concord

## Gender Assignment vs. Gender Concord

### Grammatical Gender Task



## Gender Assignment vs. Gender Concord

### Grammatical Gender Task

# Tür (Door<sub>F</sub>)

## Gender Assignment vs. Gender Concord

### Grammatical Gender Task

#### **Tür (Door<sub>F</sub>)**

Der<sub>M</sub>

Die<sub>F</sub>

Das<sub>N</sub>

## Gender Assignment vs. Gender Concord

### Grammatical Gender Task

#### **Tür (Door<sub>F</sub>)**

Der<sub>M</sub>

Die<sub>F</sub>

Das<sub>N</sub>

Grammaticality judgment tasks were graded based on participants' perceived gender of individual lexical items.

# Experiment 1: Scoring

## Gender Assignment vs. Gender Concord

### Grammatical Gender Task

#### Tür (Door<sub>F</sub>)

Der<sub>M</sub>

**Die<sub>F</sub>**

Das<sub>N</sub>

Grammaticality judgment tasks were graded based on participants' perceived gender of individual lexical items.

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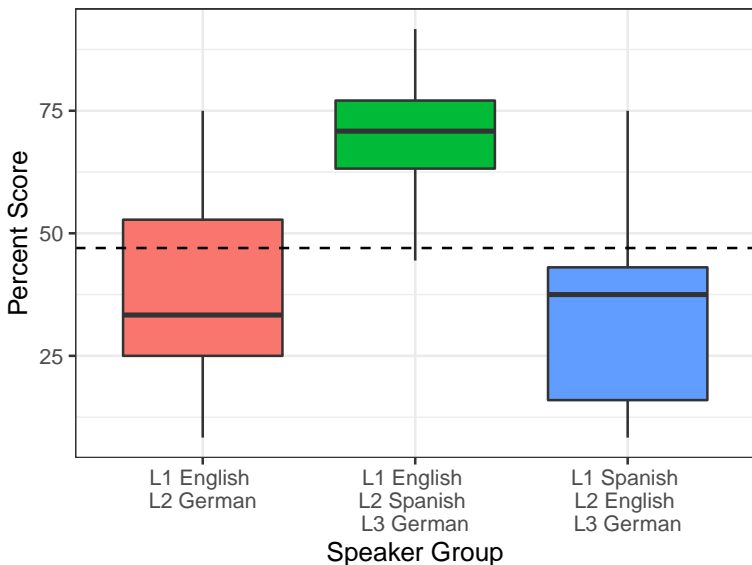
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# Experiment 1 Results

Brown (2020)

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Brown (2020)



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# Experiment 1: Key Findings

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- Beginner L3 German learners with **L2 Spanish** were better at identifying gender errors in L3 German.



# Experiment 1: Key Findings

- Beginner L3 German learners with **L2 Spanish** were better at identifying gender errors in L3 German.
  - L2 Status Factor Model
  - Scalpel Model

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Experiment 2

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# Experiment 1: Key Findings

**BUT...**

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## BUT...

- No interference was found from nouns with different Spanish genders.

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- No interference was found from nouns with different Spanish genders.
- These participants were **beginners** but **not initial state** learners.

# Experiment 1: Key Findings

## BUT...

- No interference was found from nouns with different Spanish genders.
- These participants were **beginners** but **not initial state** learners.
- **Are these results from initial transfer or some sort of learning advantage!?**

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# Experiment 2

Brown (2020b)

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- True initial state L3 learners

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- True initial state L3 learners
- Artificial Germanic Language



## Experiment 2

Brown (2020b)

- True initial state L3 learners
- Artificial Germanic Language
  - Avoids intertwinement of German DP features
    - (i.e. gender, number, case, and definiteness)

## Experiment 2

Brown (2020b)

- True initial state L3 learners
- Artificial Germanic Language
  - Avoids intertwinement of German DP features
    - (i.e. gender, number, case, and definiteness)
  - Precedent in the L2 acquisition literature
    - Brooks et al. (1993), Siegelman & Arnon (2015)  
Wonnacott, Brown & Nation (2017), Culbertson,  
Gagliardi & Smith (2017)

# Artificial Language

- 9 nouns
  - 3 masculine, 3 feminine, 3 neuter

# Artificial Language

- 9 nouns
  - 3 masculine, 3 feminine, 3 neuter
- 4 determiners
  - 1 masculine, 1 feminine, 1 neuter, 1 plural
- 5 adjectives
  - suffixes: 1 masculine, 1 feminine, 1 neuter, 1 plural
- 1 carrier phrase

# Artificial Language

(5) Erblicken ern-e rot-e Tür.  
Behold Det<sub>[Fem/Sing]</sub> red<sub>[Fem/Sing]</sub> door<sub>[Fem/Sing]</sub>  
'Behold a red door'

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Experiment 1

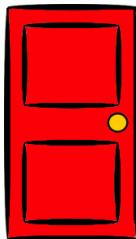
Procedures  
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Experiment 2

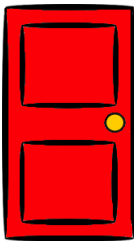
Background  
**Procedures**  
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## Experiment 2

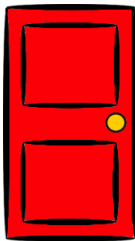


## Experiment 2



“Erblicken ern-e rot-e Tür”

## Experiment 2



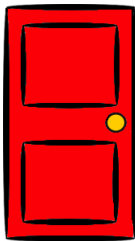
“Erblicken ern rot-e Tür”



## Experiment 2



A



Choose

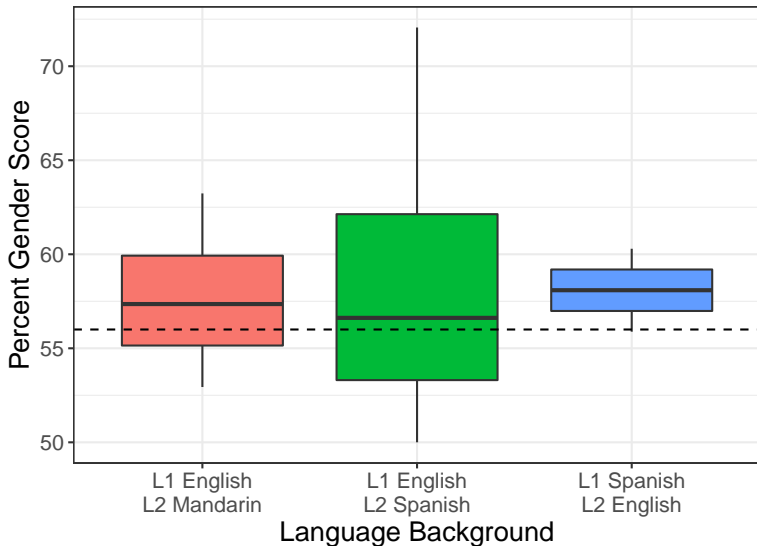


L

## Experiment 2: Participants

Language Background	Number of Participants
L1 English L2 Spanish	7
L1 Spanish L2 English	4
L1 English L2 Mandarin	4

## Experiment 2 Results



## Experiment 2: Results

- No group differences for grammatical gender

## Experiment 2: Results

- No group differences for grammatical gender
- Overall poor performance across all groups on grammatical questions

# Overall Findings

- Experiment 1:
  - **Beginner** L3 German learners (< 1 year)
  - L2 Spanish advantage in L3 German gender

## Overall Findings

- Experiment 1:
  - **Beginner** L3 German learners (< 1 year)
  - L2 Spanish advantage in L3 German gender
- Experiment 2:
  - **Initial State** L3 German learners
  - **No** L2 Spanish advantage in L3 German gender

## Overall Findings

- Experiment 1:
  - **Beginner** L3 German learners (< 1 year)
  - L2 Spanish advantage in L3 German gender
- Experiment 2:
  - **Initial State** L3 German learners
  - **No** L2 Spanish advantage in L3 German gender
- Perhaps an L3 **developmental** difference?



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# Experimental Notes

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# Experimental Notes

- Small participant numbers

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- Differences in modality between experiments.

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- Small participant numbers
- Differences in modality between experiments.
- Artificial language

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# Transfer vs. Development

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- What exactly is the “initial state”?

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- What exactly is the “initial state”?
- How might post-initial state cross-linguistic influence/development differ?

# Transfer vs. Development

- What exactly is the “initial state”?
- How might post-initial state cross-linguistic influence/development differ?
- When might this “L2 Spanish Advantage” found in Experiment 1 emerge?



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# Future Directions

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# Future Directions

- Current Project:

# Future Directions

- Current Project:
  - L3 German gender development across the first year of learning

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- Current Project:
  - L3 German gender development across the first year of learning
  - Interaction with other DP features (number, case, definiteness)

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  - L3 German gender development across the first year of learning
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  - Both online and offline measures of gender acquisition

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- Current Project:
  - L3 German gender development across the first year of learning
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  - Both online and offline measures of gender acquisition
- Additional Future Directions:

## Future Directions

- Current Project:
  - L3 German gender development across the first year of learning
  - Interaction with other DP features (number, case, definiteness)
  - Both online and offline measures of gender acquisition
- Additional Future Directions:
  - More diverse language combinations

## Future Directions

- Current Project:
  - L3 German gender development across the first year of learning
  - Interaction with other DP features (number, case, definiteness)
  - Both online and offline measures of gender acquisition
- Additional Future Directions:
  - More diverse language combinations
  - Additional factors such as language dominance or cognitive/social factors.



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# Questions?

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# Thank You!

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Department!

# References

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