# ACCEPTABILITY JUDGEMENTS ON CONTRASTIVE DIALOGUES INVOLVING ELLIPSIS

Master's thesis

Supervisors:

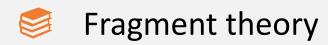
Prof. Dr. Michael Franke

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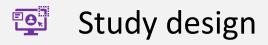
Miriam Schiele

25 September 2023

# CONTRASTIVE DIALOGUES INVOLVING ELLIPSIS



? Research question & hypotheses



**†††** Participants

Results

Conclusions

A: Mary stole the cookie.

B: No, Peter.

A: Mary stole the cookie.

B: No, Peter stole the cookie.

A: Mary stole the cookie.

B: No, Peter stole the cookie.

#### Fragment

remnant of ellipsis

A: Mary stole the cookie.

B: No, [Peter]<sub>F</sub>

#### Contrastive focus F

- given alternative element for which the predicate actually holds
- must bear pitch accent

A: Mary stole the cookie.

B: No, Peter.

assign category to remnant



find correlate in antecedent clause



A: Mary stole the cookie.

B: No, Peter<sub>DP=Remnant</sub>

assign category to remnant



find correlate in antecedent clause



A: Mary DP=Correlate stole the cookie.

B: No, Peter<sub>DP=Remnant</sub>

assign category to remnant



find correlate in antecedent clause



A: Mary<sub>DP=Correlate</sub> stole the cookie.

B: No, Peter<sub>DP=Remnant</sub> stole the cookie.

assign category to remnant

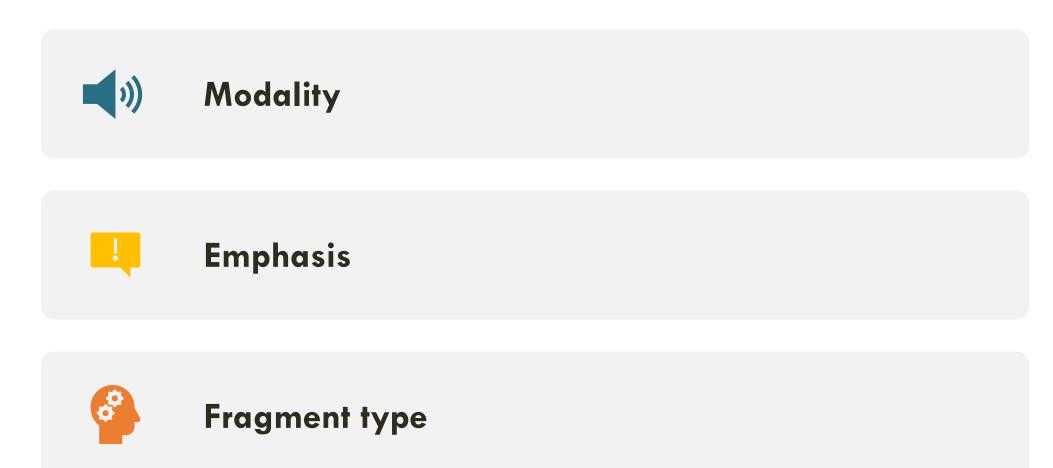


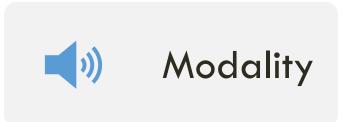
find correlate in antecedent clause



## RESEARCH QUESTION

What is the <u>most effective medium</u> for obtaining acceptability <u>judgements</u> about dialogues involving <u>contrastive focus</u>?



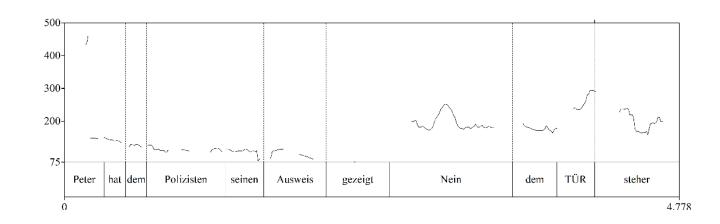


written

A: Peter showed his identity card to the police officer.

B: No, the bouncer.

auditory





written

fragments are <u>less common</u> in written language

auditory

fragments are <u>more common</u> in spoken language

# **HYPOTHESES**



Modality auditory > written



with emphasis A: Peter showed his identity card to the POLICE OFFICER.

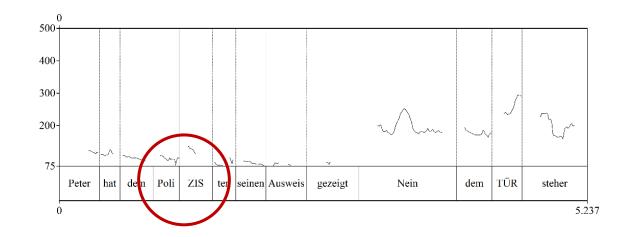
B: No, the BOUNCER.

without emphasis A: Peter showed his identity card to the police officer.

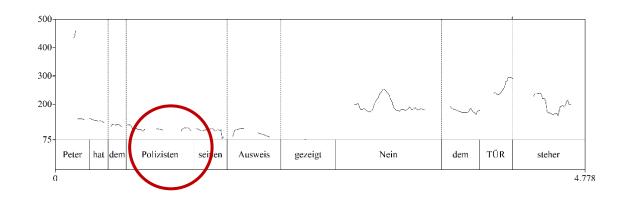
B: No, the bouncer.



with emphasis



without emphasis





with emphasis

<u>easier</u> to identify correlate-remnant pairing

without emphasis

more difficult to identity correlate-remnant pairing

## HYPOTHESES



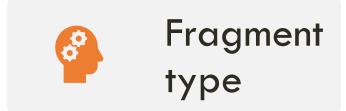
#### Modality

auditory > written



#### **Emphasis**

emphasis on contrasting words > lacking emphasis



lexical

A: Peter showed his identity card to the POLICE OFFICER.

B: No, the BOUNCER.

functional

A: Peter worked at the cinema FROM 6pm.

B: No, UNTIL 6pm.



lexical

- bear stress
- more focussed on in reading

functional

- do not bear stress
- less focussed on in reading

## HYPOTHESES



# **Modality** auditory > written



#### **Emphasis**

emphasis on contrasting words > lacking emphasis



#### Fragment type

lexical fragments > functional fragments

#### Modality

- written
- auditory

### **Emphasis**

- with
- without

# Fragment type

- lexical
- functional

Modality

- written
- auditory

**Emphasis** 

- with
- without

Fragment type

- lexical
- functional

between-subject

within-subject

# Acceptability Judgement Task

- rate naturalness of speaker B's answer
- 7-point Likert scale
- forced choice
- no time limit

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#### **Ihre Bewertung**

In der Studie werden Ihnen die Dialoge als Text präsentiert. Großbuchstaben stellen dar, welche Wörter von den Sprecher:innen betont werden. Bitte lesen Sie sich den Dialog durch.

Wie natürlich wirkt die Aussage der Sprecherin B auf Sie?

A: Peter hat BIS August Miete gezahlt.
B: Nein, AB August.

völlig unnatürlich  $\bigcirc$  1  $\bigcirc$  2  $\bigcirc$  3  $\bigcirc$  4  $\bigcirc$  5  $\bigcirc$  6  $\bigcirc$  7 völlig natürlich

Bitte geben Sie eine Bewertung ab.

# Acceptability Judgement Task

- rate naturalness of speaker B's answer
- 7-point Likert scale
- forced choice
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B: Nein, AB August.

völlig unnatürlich 0 1 0 2 0 3 0 4 0 5 0 6 0 7 völlig natürlich

WEITER

#### **PARTICIPANTS**



n = 100



crowdsourced from Prolific



German native speakers



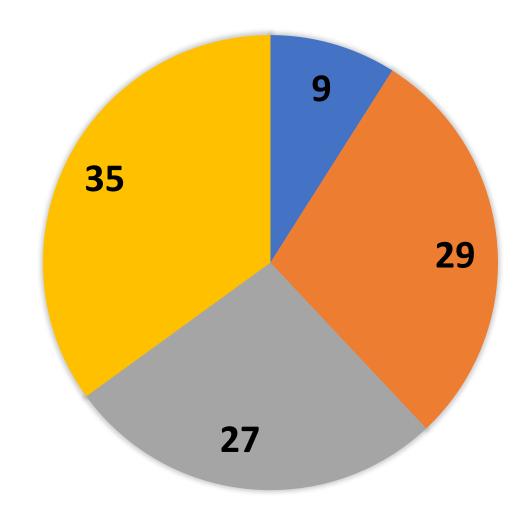
age between 19-73 years (m = 35.5)



69 males, 29 females, 2 diverse

#### PARTICIPANTS' HIGHEST DEGREE

- without high school diploma
- completed high school
- with bachelor's degree
- with higher degree



#### Modality

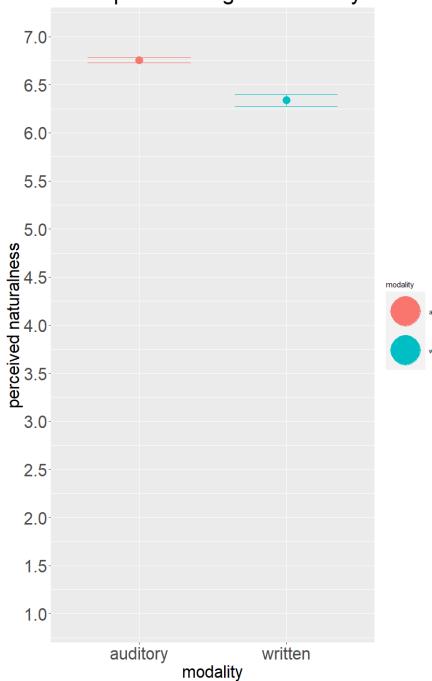
• auditory:

$$m = 6.76$$
,  $sd = 0.53$ 

written:

$$m = 6.34$$
,  $sd = 1.11$ 

#### Participants' ratings of modality

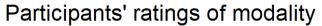


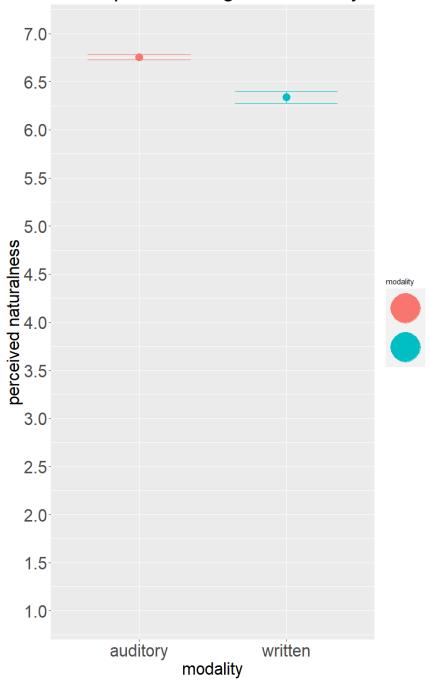
#### Modality

written:

$$\beta_1 = -1.99$$

- as hypothesised
- significant effect:p = 0.016





#### **Emphasis**

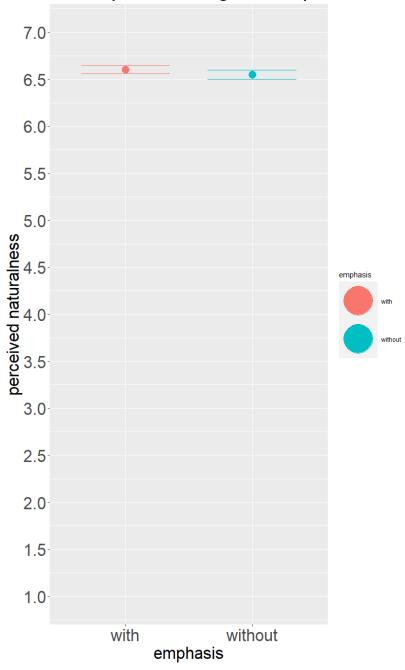
• with emphasis:

$$m = 6.60$$
,  $sd = 0.80$ 

without emphasis:

$$m = 6.55$$
,  $sd = 0.91$ 

#### Participants' ratings of emphasis



#### **Emphasis**

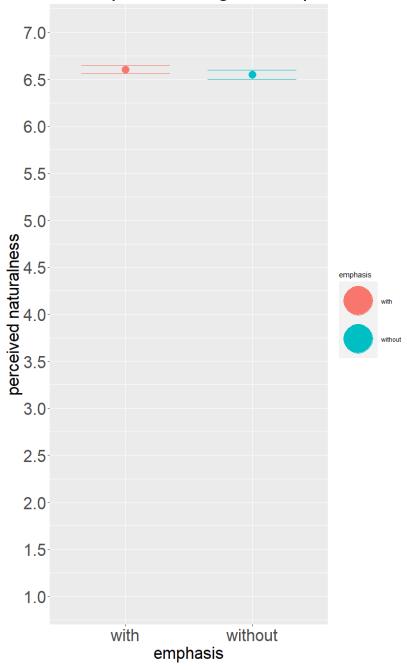
• without:

$$\beta_1 = -0.25$$

- as hypothesised
- significant effect:

$$p = 0.027$$

#### Participants' ratings of emphasis



#### Fragment type

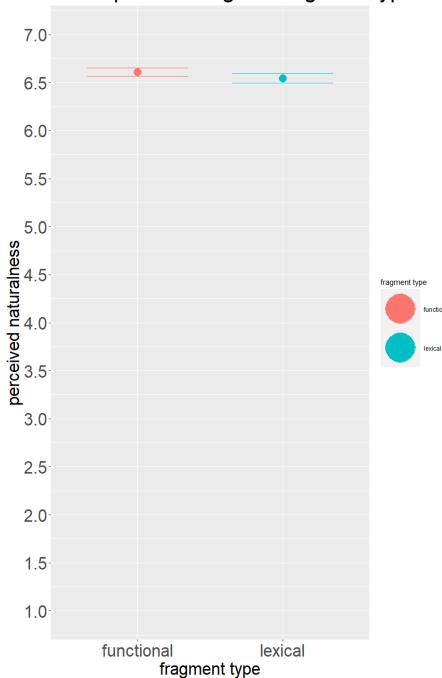
functional:

$$m = 6.61$$
,  $sd = 0.82$ 

lexical:

$$m = 6.55$$
,  $sd = 0.90$ 

#### Participants' ratings of fragment types



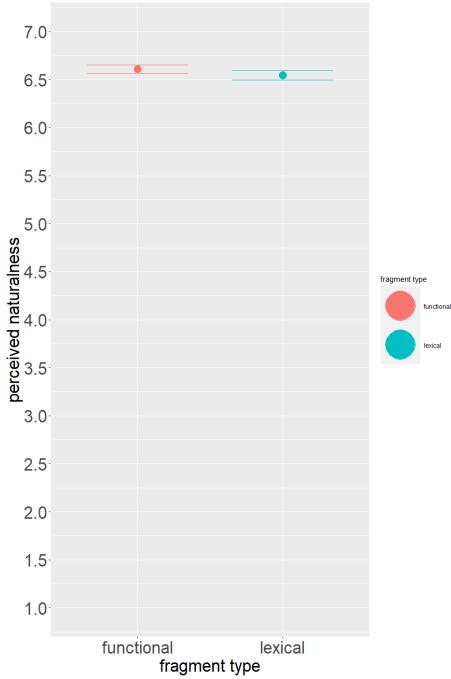
#### Fragment type

• lexical:

$$\beta_1 = -0.49$$

- inverse to hypothesis
- significantly effect:p < 0.01</li>

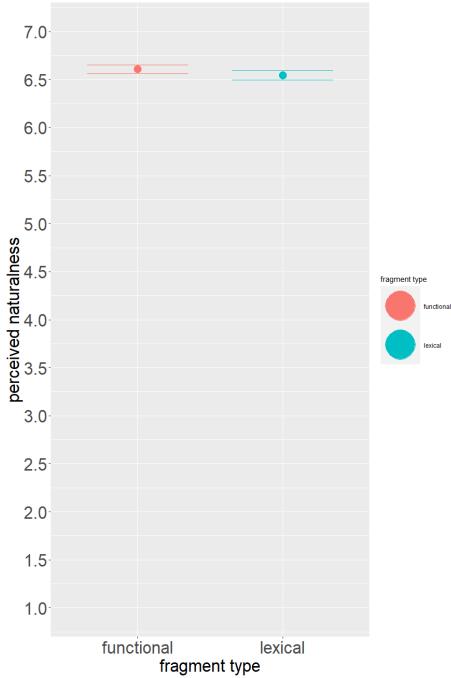
#### Participants' ratings of fragment types



## Fragment type

Potential explanation for inverse trend?

#### Participants' ratings of fragment types



## **functional**

A: Peter worked at the cinema FROM 6pm.

B: No, UNTIL 6pm.

## lexical

A: Peter showed his identity card to the POLICE OFFICER.

B: No, the BOUNCER.

## **functional**

A: Peter worked at the cinema FROM 6pm.

B: No, UNTIL 6pm.

prepositions have opposing meaning: binary contrast

## lexical

A: Peter showed his identity card to the POLICE OFFICER.

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#### **functional**

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#### lexical

A: Peter showed his identity card to the POLICE OFFICER.

B: No, the BOUNCER.

nouns denote alternative referents: non-binary contrast

prepositions have opposing meaning: binary contrast

nouns denote alternative referents: non-binary contrast

The <u>clearer</u> the contrast, the <u>more natural</u> the dialogue?

# CONCLUSIONS

accepted hypotheses
emphasis and
modality affect
judgements on contrastive fragments

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### inverse trend

- functional fragments rated more natural
- perhaps due to clearer contrast?

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- functional fragments rated more natural
- perhaps due to clearer contrast?

### further research

- influence of clarity of contrast
- compare phrasal answers to oneword answers

# Thank you for listening!

# DISCUSSION



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# FRAGMENT THEORY

A: Mary stole the cookie.

B: No, Peter stole the cookie.

## Licensing condition

only given material can be omitted



## **Parallelism**

A: Marie stellt ihrem Vater ihren Freund vor.

Mary introduces her.SG.DAT father.SG.DAT her friend PART

'Mary introduces her friend to her father.'

B: Nein, ihrem Bruder.

no her.**SG.DAT** brother.**SG.DAT** 

'No, her brother.'

- category
- case
- number
- thematic role
- prosodic weight



## Locality

H1

Local contrasts (B) are preferred over nonlocal contrasts (B')

stimuli

A: John took the poodle to the park.

B: No, the zoo. (local contrast with the park)

B': No, the pug. (nonlocal contrast with the poodle)

result

processors rate local contrasts as more natural



## **Emphasis:**

Pitch accent

**H1** 

Does pitch accent influence the interpretation of ambiguous replacives?

stimuli

- (1) ROGER insisted that Alice was reliable, not ANDREW
- (2) Roger insisted that ALICE was reliable, not ANDREW

result

Pitch accent significantly affects the choice of the correlate



# **Emphasis:** Orthography

capitalisation

- nouns are capitalised in German
- L1 and L2 speakers use orthography to process word-class information

colour highlighting

- input enhancement for second language learning
- orthographic marking facilitates noticing and understanding of L2 patterns



## **Modality**

H1

"Spoken constructions" receive higher ratings in an auditory questionnaire

stimuli

Their being unaware of the situation annoyed Rob

result

modality had no significant effect



## **Modality**

**H1** 

Do orthographic cues influence subject-verb agreement?

stimuli

chanson 'song'/chansons 'songs' vs. refus 'refusal-S,P'

result

- less errors if number is marked orthographically
- orthographic marking is irrelevant in speaking
- suggests modality-specific effects of orthography



## Meaning

types

lexical vs. functional words

spoken

stress is usually placed on lexical words

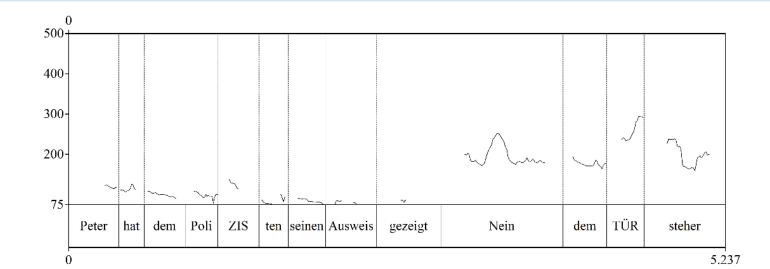
textual

- functional words are more likely to be eluded
- functional words are fixated less often and with shorter gaze durations

A: Peter showed his ID to the POLICE OFFICER.

B: No, the BOUNCER.

written



auditory

A: Peter showed his identity card to the POLICE

OFFICER.

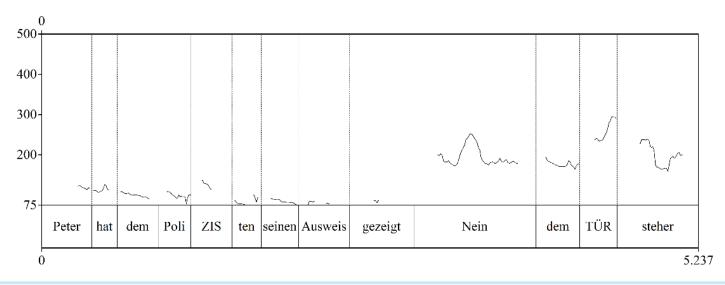
B: No, the BOUNCER.

with emphasis

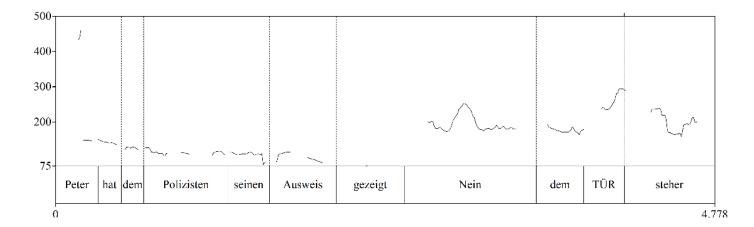
A: Peter showed his identity card to the police officer.

B: No, the bouncer.

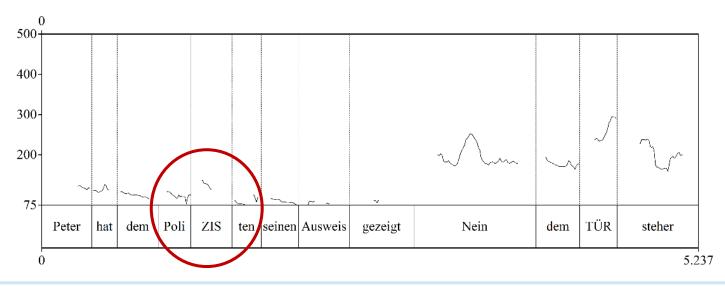
without emphasis



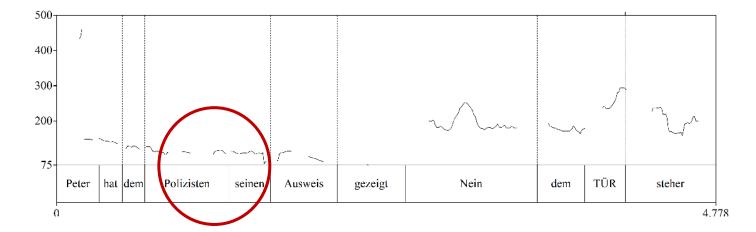
with emphasis



without emphasis



with emphasis



without emphasis

A: Peter showed his identity card to the POLICE

OFFICER.

B: No, the BOUNCER.

**lexical** 

A: Peter worked at the cinema FROM 6pm.

B: No, UNTIL 6pm.

**functional** 

## ANALYSIS

## z-score

- X = individual data point
- $\mu$  = mean
- $\sigma$  = standard deviation

$$Z = rac{X - \mu}{\sigma}$$

## **CLMM**

- Emphasis: without  $\beta 1 = -0.25$ , p = 0.03
- Modality: written  $\beta 1 = -1.99$ , p = 0.02
- Fragment type: lexical  $\beta 1 = -0.4486$ , p < 0.01

## **ANALYSIS**

AIC

- difference: -28
- Lower AIC for null model

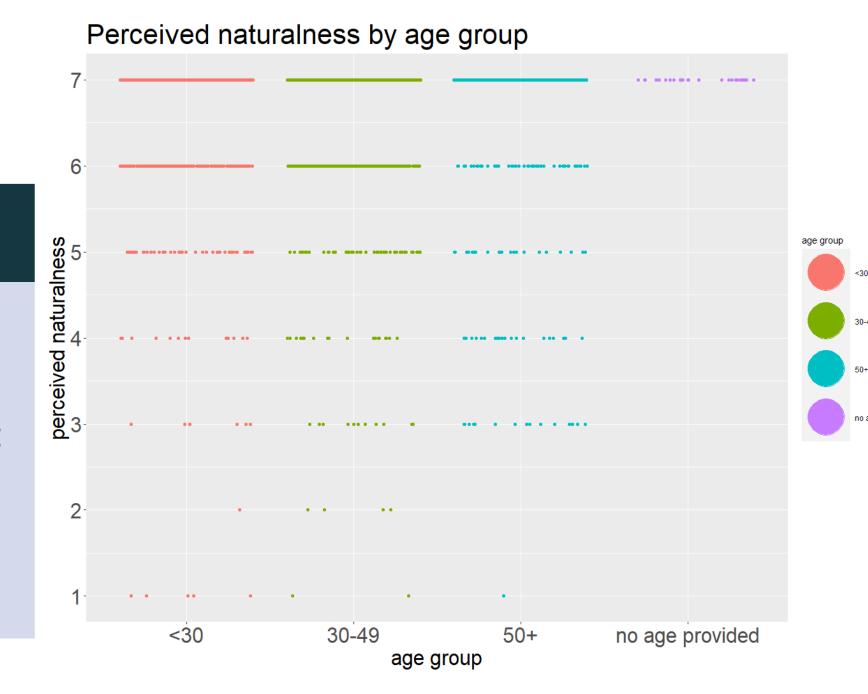
ANOVA

- p < 0.01
- significantly better model fit

## age

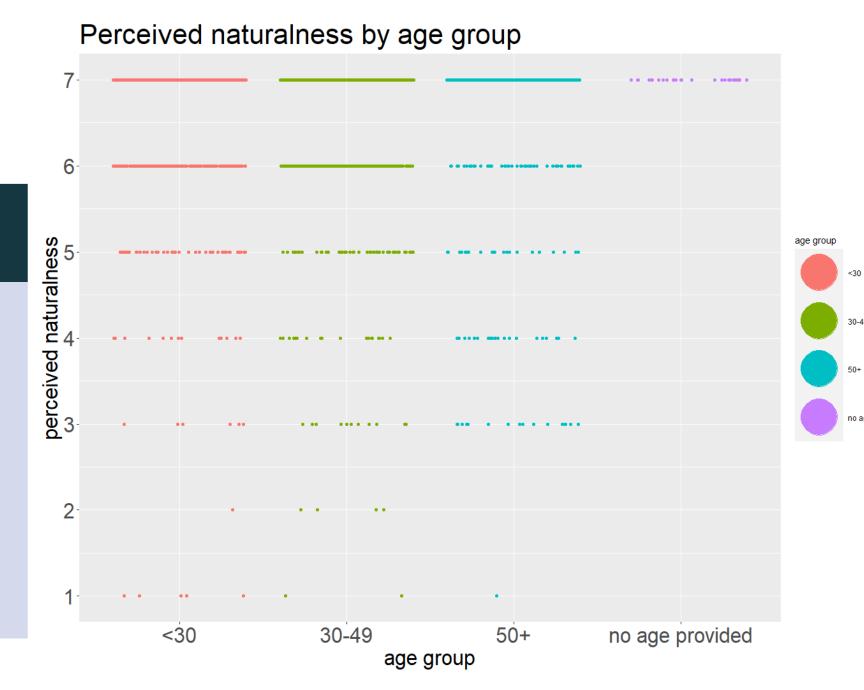
- <30 years:
  - m = 6.66
- 30-49 years:
  - m = 6.54
- 50+ years:

m = 6.43



## age

- <30 years:</li>42 pps
- 30-49 years:41 pps
- 50+ years:16 pps



## linguistic profile

bilingual:

$$m = 6.43,$$

$$sd = 1.29$$

monolingual:

$$m = 6.59,$$

$$sd = 0.80$$

#### Perceived naturalness by linguistic profile



## linguistic profile

- 9 bilinguals
- 91 monolinguals



