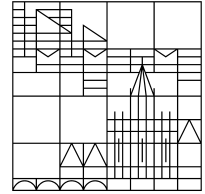




Universität
Konstanz



The acquisition of rhetorical questions in Italian-German bilingual children

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QUESTIONS AT THE INTERFACES

FOR2111

Rhetorical questions

(1) *Who likes paying taxes?!*

Asw: Nobody likes paying taxes!

Semantics and pragmatics of RQs

- Rhetorical questions are “interrogatives that signal [...] that the answer is entailed in the context of utterance” (Biezma & Rawlins, 2017, p.319)
 - have an **interrogative form**, but are not used to request information
 - the answer is considered to be **already known** or available to both Speaker and Addressee (i.e., already present in the Common Ground) (Caponigro & Sprouse, 2007; Rhode, 2006)
 - signal the **speaker’s attitude** towards the answer, used to extract commitments (Biezma & Rawlins, 2017)

Rhetorical questions

- The rhetoricity of a question needs to be **signalled** to the Addressee (Biezma & Rawlins, 2017)

Context and world knowledge

(2) Everybody knows that no one in your family likes liver.
However, your father cooks liver for dinner. You tell him:

Who eats liver?

Asw: Nobody eats liver

Adapted from Neitsch (2019)

Linguistic signals

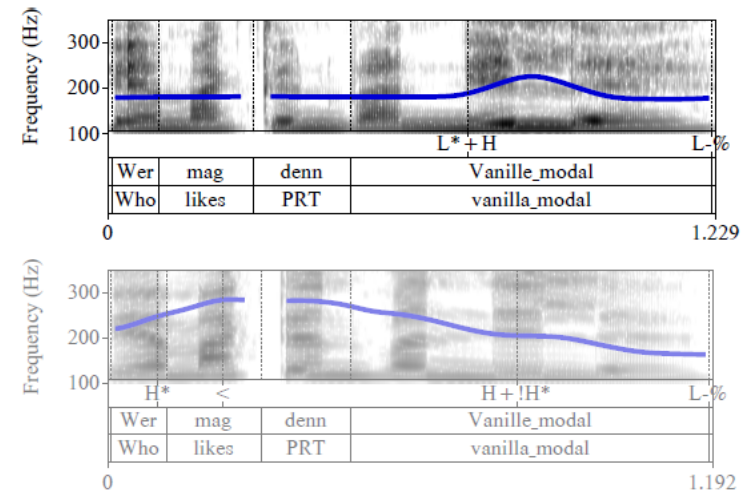
to differentiate **RQs** and information-seeking questions (**ISQs**) → vary across languages

Rhetorical questions in German

Linguistic cues in German

Prosody (wh-questions) (Braun et al. 2018)

- RQs and ISQs may be string-identical → disambiguated through prosody only (see Dehé et al. 2021 for a cross-linguistic overview)
- Characteristics:
 - Low edge tone (L-%)
 - L*+H pitch accent
 - Longer constituent duration
 - Breathy voice quality



Kharaman et al. (2019)

Rhetorical questions in German

Linguistic cues in German

Discourse Particles (DiPs)

- *schon* lit. ‘already’

Was hätte ich schon tun können?

‘What could I have done?’ (Biezma & Rawlins 2017)

- *denn schon* (Meibauer 1986)

Wer isst denn schon Bananen?

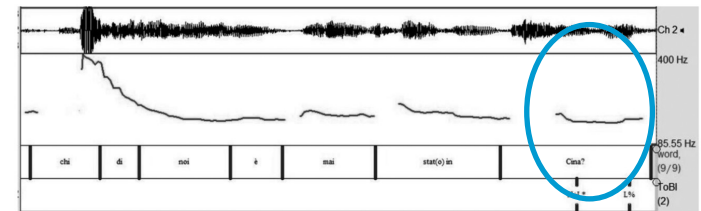
‘Who eats bananas?’

Rhetorical questions in Italian

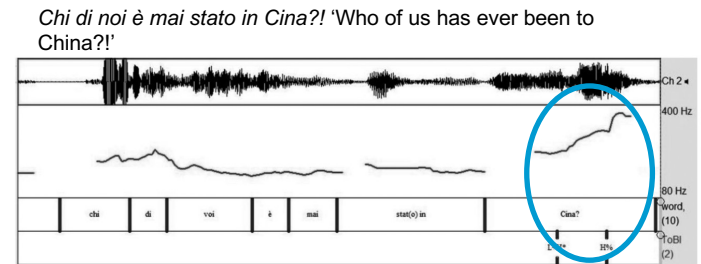
Linguistic cues in Italian

Prosody (wh-questions)

- RQs and ISQs may be string-identical → disambiguated through prosody only (see Dehé et al., 2021 for a cross-linguistic overview)
- Only two studies on Bari Italian (Sorianello (2018, 2019))
 - Boundary tones: more often low (L%) in RQs, more often high or rising (H%, LH%) in ISQs
 - Longer duration of final tonic vowel in RQs
 - Greater pitch excursion in ISQs than RQs



RQ



ISQ

Chi di voi è mai stato in Cina? 'Who of you has ever been to China?'

(Sorianello, 2018, p.59)

Rhetorical questions in Italian

Linguistic cues in Italian

Lexical and morpho-syntactic cues

- Few studies in Italian (e.g., Anzilotti 1982; Coniglio, 2008; Fava 1995; Obenauer & Poletto, 2000; Stati 1982), mainly on formal or written language

Particles:

initial *ma* 'but', *e* 'and',
adverbial particle *mai*

(3) *Ma chi mangia le bananane*
but who eats the bananas

(4) *E chi legge il giornale*
and who reads the newspaper

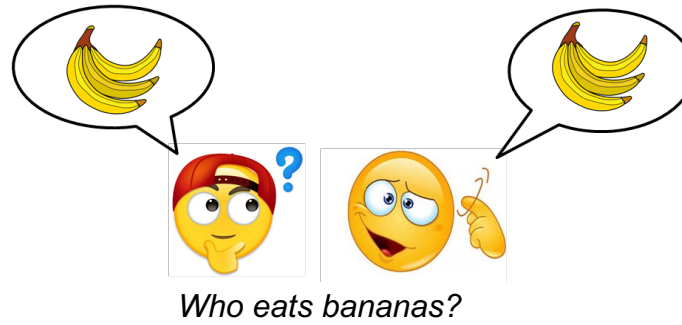
(5) *Chi mai mangia i broccoli*
Who ever eats the broccoli?

Information structure:
Clitic right dislocation,
cleft structures

(6) *Chi li mangia i broccoli*
who CL eats the broccoli?

(7) *Chi è che mangia le banane*
who is that eats the bananas

Rhetorical questions



Language-specific linguistic aspects

Prosody

Intonation, duration,
voice quality...

Syntax

particles

Develomental aspects

Interpreting non-literal
meaning

Interpretation of
context

Speaker's
**intention /
attitude**

**Integration of
aspects
(interface)**

Acquisition of rhetorical questions in bilingual children

Exploring rhetorical questions in bilingual language acquisition

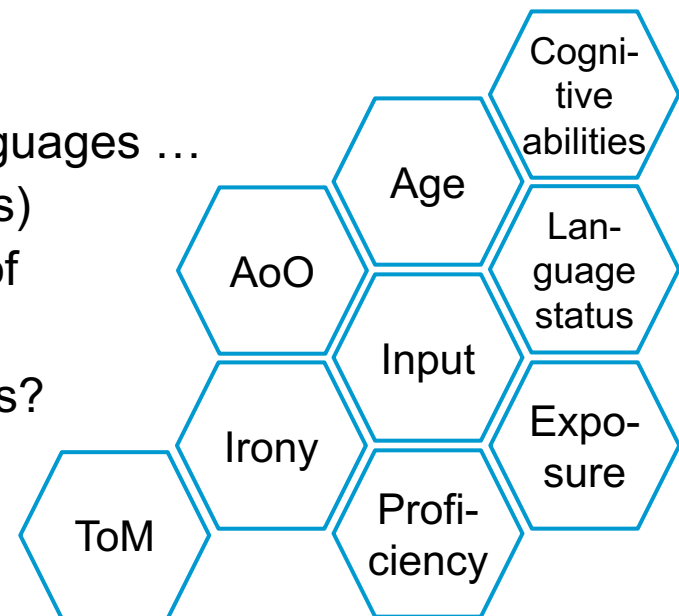
- RQs are largely unexplored in research on language acquisition
- Crossroads of syntax, phonology (**intonation**), lexicon (cues such as **particles**) and discourse context (complex interface)
- Comprehension of irony and theory of mind

- Bilinguals acquire two different language systems → potential for cross-linguistic influence
- Depending on language history → effects of language dominance
- German and Italian differ in the cues marking of rhetorical questions

Aims

1. Do bilingual children have access to the cues for RQs during their linguistic development?
 - Perception
 - Comprehension
 - Production

2. Given that coding-strategies differ across languages ...
 - i. ... do bilingual speakers (children and adults) have different coding strategies in each of their languages?
 - ii. ... do they differ from monolingual speakers?



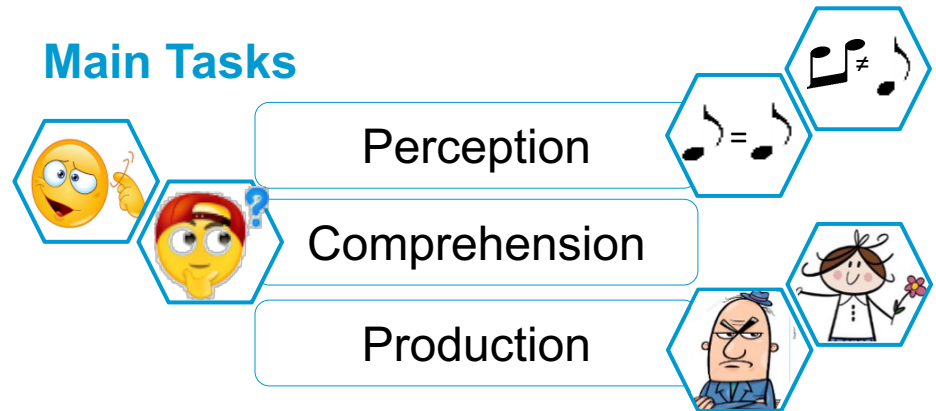
Study design

Child Study

- Bilinguals (2L1 It-Ge)
- Monolinguals
- 6- to 9-year olds

Adult Study

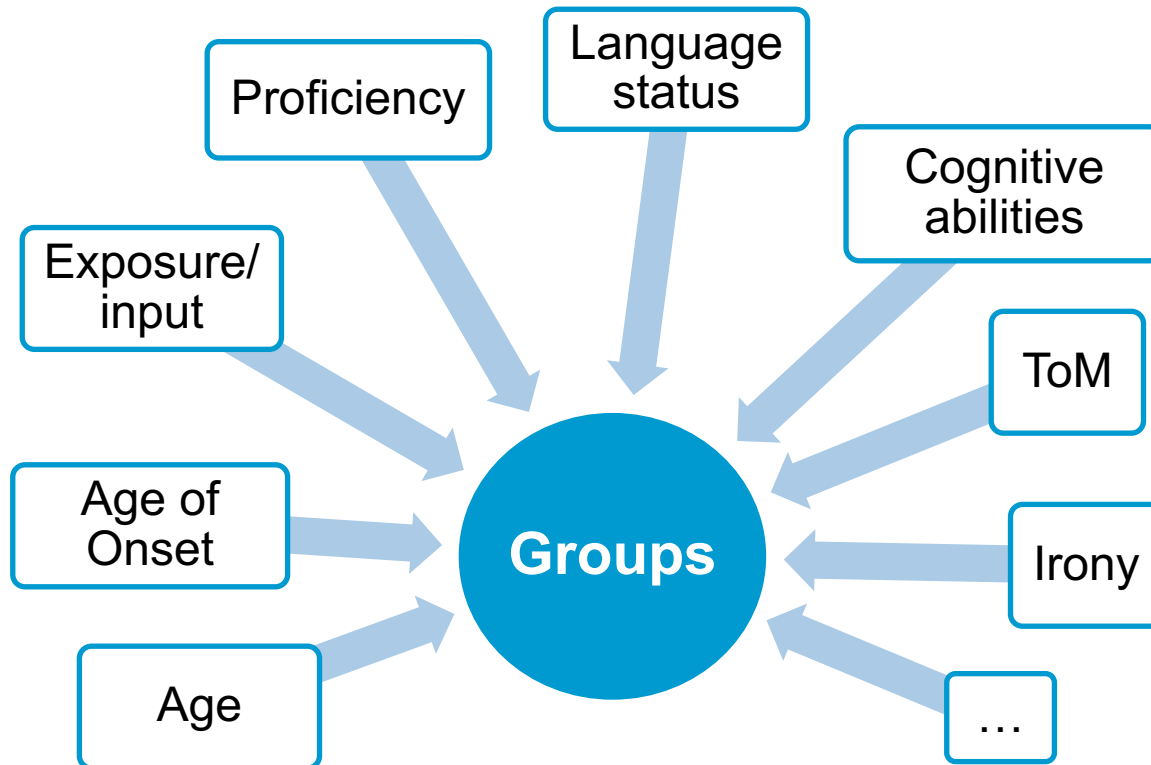
- 1st generation (L1 It - L2 Ge)
- 2nd generation (Heritage Speakers)
- Monolinguals



Baseline Tasks

- Proficiency test (MAIN, DIALANG)
- Raven's IQ task (Raven et al., 1998)
- ToM Task Battery (Hutchins et al., 2014)
- Irony Task (Giustolisi et al., 2017)

Individual variability



Research Questions

1. Are 6- to 9-year old children able to comprehend ISQs and RQs?
2. What role do linguistic (prosody, syntax) and extra-linguistic factors (age, dominance) play in the interpretation of RQs?
3. Are there differences between German and Italian?

Participants

- 84 Italian-German **bilingual children**
 - 6-year old: 23 children, $M = 6.5$ years
 - 7-year old: 21 children, $M = 7.5$ years
 - 8-year old: 18 children, $M = 8.7$ years
 - 9-year old: 22 children, $M = 9.5$ years

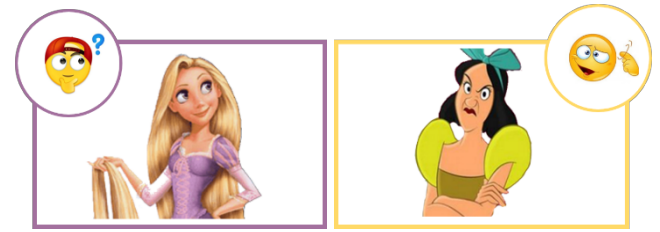
Detective Game



soSci
ONLINE PROGRAM



Comprehension task



Cinderella vs. Drizella
ISQs RQs

Experiment

- Forced-Choice experiment in SoSci Survey
- 30 Wh-questions, e.g. *Wer isst Bananen?* = *Who eats bananas?*
- Audio recording without context
- Task in both languages (order pseudorandomised)

		Prosody	
		ISQ	RQ
Syntax	neutral	✓	✓
	ambiguous	✓	✓
	rhetorical		✓

German cues

	ISQ prosody	RQ prosody
neutral		
ambiguous		
rhetorical		

Stimuli

- **Prosodic manipulation** (based on Kharaman et al. 2019)
 - ISQ prosody: early-peak accent (H+!H*), modal voice quality throughout; shorter duration
 - RQ prosody: late-peak accent (L*+H), breathy voice quality at the beginning; longer duration

- **Syntactic manipulation** (based on Bayer 2009; Meibauer 1986)
 - Neutral: no cue, e.g., *Wer isst Bananen?*
 - Ambiguous cue: particle *denn*, e.g. *Wer isst denn Bananen?*
 - Rhetorical cue: particle *denn schon*, e.g., *Wer isst denn schon Bananen?*

Italian cues

	ISQ prosody	RQ prosody
neutral		
ambiguous		
rhetorical		

Stimuli

Prosodic manipulation

- ISQ prosody: **rising** boundary tone (LH%); shorter duration; wider pitch range
- RQ prosody: **low** boundary tone (L%); longer duration; smaller pitch range

Syntactic cues

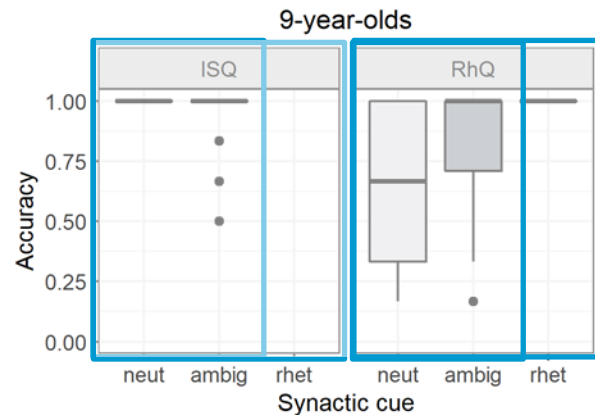
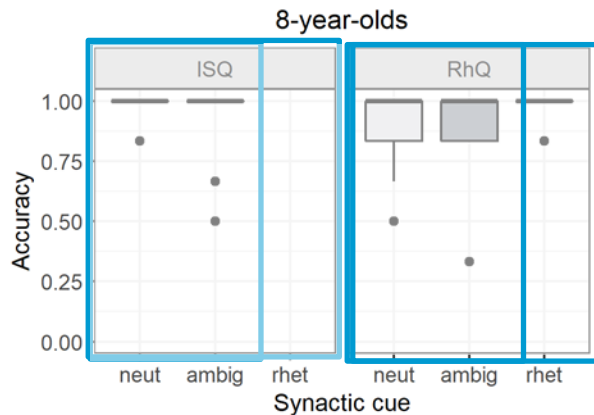
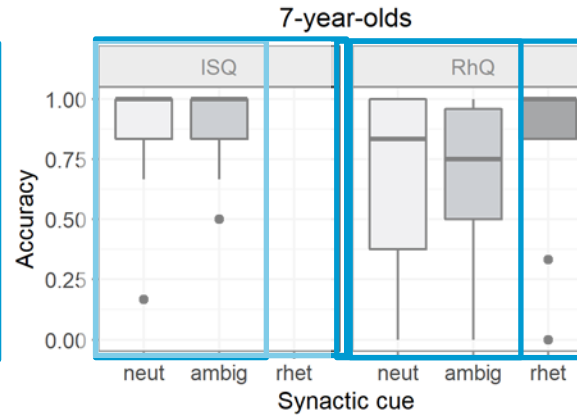
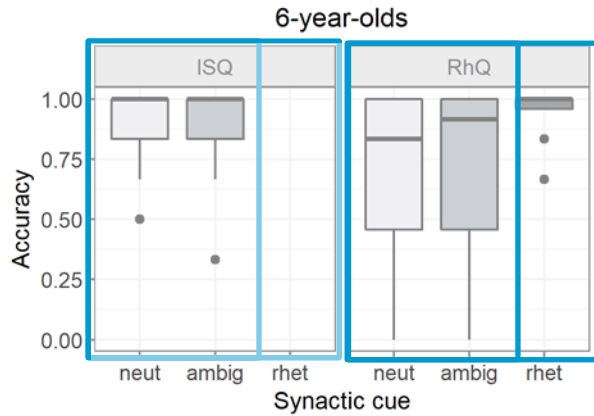
- Neutral: no cue
- Ambiguous: clitic right dislocation
- Rhetorical cue: *ma* + right dislocation

(8) Chi mangia il melone?
Who eats the melon?

(9) Chi **lo** mangia il melone?
Who **it.CL** eats the melon?

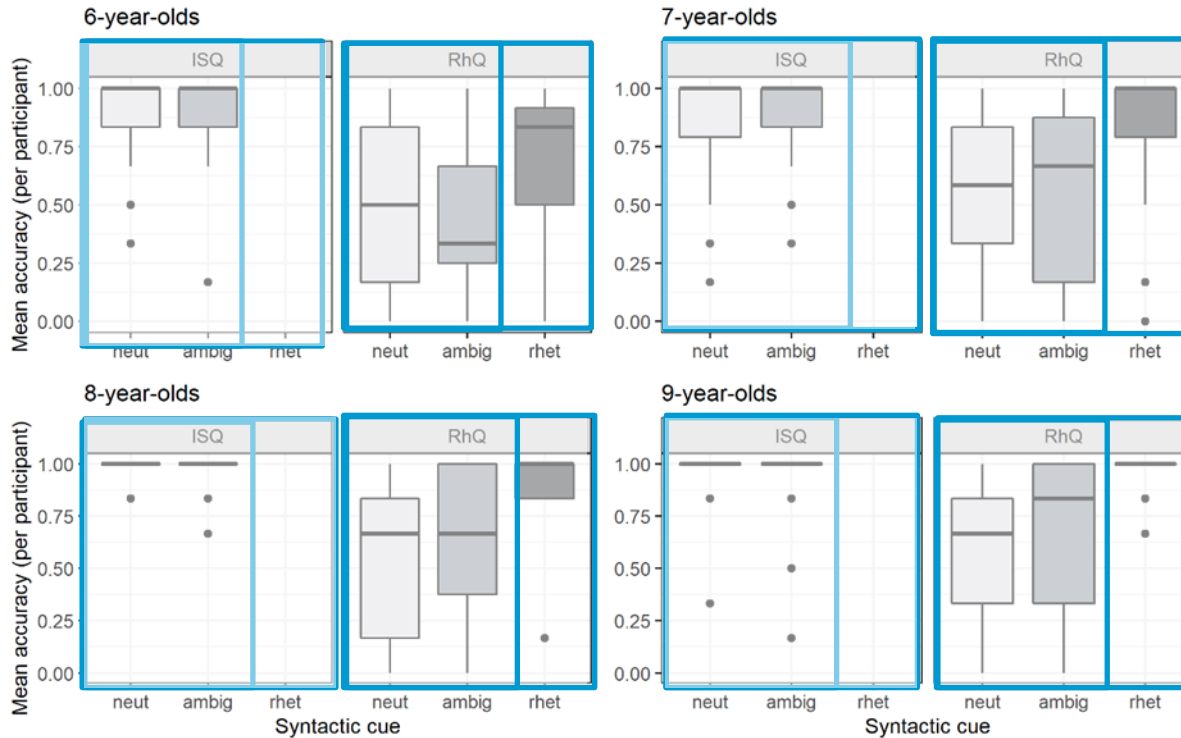
(10) **Ma** chi **lo** mangia il melone?
But who **it.CL** eats the melon?

German data



- Comprehension of ISQs: very good
- Comprehension of RQs: worse than ISQs
- Syntactic cue: rhet > ambig > neut
- No effect of language dominance

Italian data



- Comprehension of ISQs: very good
- Comprehension of RQs: worse than ISQs
- Syntactic cue: rhet > neut~ambig

- Effect of dominance and age

Comparison German-Italian



Prosody

Intonation, duration,
voice quality...

- **ISQs**: German ~ Italian
- **RQs**: German > Italian



Syntax

Particals (*aber / ma*)

- German : rhet > ambig > neut
- Italian : rhet > neut ~ ambig

Summary

1. Are 6- to 9-year old children able to comprehend ISQs and RQs?

- **ISQs**: both languages → **YES**
- **RQs**: German → YES, Italian → not always

2. What role do linguistic (prosody, syntax) and extra-linguistic factors (age, dominance) play in the interpretation of RQs?

- **Prosodic and syntactic cues combine together**
- Italian: effects of age and dominance

3. Are there differences between German and Italian?

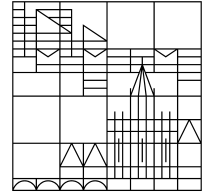
- **German – majority > Italian – heritage**, but this may also be language specific → comparison with monolingual children necessary

Take home message

Bilingual primary school children are able to make use of prosodic and syntactic cues to interpret rhetorical questions

Next steps

- **Finish data collection of monolingual children & comparison**
- **Comparison between children and adults – especially for heritage language**
- **Comparison between heritage adults and L2 learners**
- **Effects of proficiency, cognitive abilities, theory of mind**
- **Analysis of production data**



Vielen Dank!
Grazie mille!

Theo Marinis, Tanja Kupisch,
Maria Francesca Ferin, Miriam Geiß

