

# Two types of Right Dislocation – How differences in information structure affect their prosodic realisation

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# Outline

- Background & Motivation
- Method
- Results
- Discussion



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# Peripheral structures

(1) Die Römer spinnen. (canonical)

[Die Römer]<sub>i</sub> die<sub>i</sub> spinnen. (Left Dislocation)

Die<sub>i</sub> spinnen [die Römer]<sub>i</sub> (Right Dislocation)


Die<sub>i</sub> spinnen || [die Römer]<sub>i</sub> (Afterthought)

- RDs and ATs often confused as they look similar at the surface
- RD: syntactically integrated
- AT: syntactically disconnected

# Right Dislocation (RD) vs. Afterthought (AT)

- AT:
  - Resolves ambiguous reference

(2)

 A: da hab ich mich gefragt .. äh ... bist du warst du besoffen? - B: das liegt an **meinem sekt**. äh.. s is **ne italo-schwäbische kombination** ja hier die .. äh **giovanni zarella äh kessler freundschaft** äh hat äh gestartet jetzt. und äh .. wir müssen noch n bisschen **dran** arbeiten. **an dieser sektkombi**. aber


(Fokus-DB)

# Right Dislocation (RD) vs. Afterthought (AT)

## ▪ RD:

- Creates comment-topic structure, emphasizes importance of comment
- *Establishes new discourse topic* (Averintseva-Klisch 2009)
- *Ends discourse unit* (Dewald 2011)

(3)

 A: hast du **romeo und julia** gesehen? - B: nein. ich geh in **keine filme mit leonardo di caprio**. - A: also sag mal bitte - B: das geht ja nun gar nicht.

[...]

 A: der ist geil der film!

(Fokus-DB)

# Distinctive (prosodic) criteria

	<b>RD</b>	<b>AT</b>
<b>Phrasing</b>	1 intonation phrase (IP) (usually also 1 intermediate phrase (ip))	2 IPs with clearly perceivable pause in between
<b>Accentuation</b>	unaccented, integrated into tonal contour of matrix sentence	nuclear accent, separate tonal contour
<b>Pitch range/contour</b>	steep fall towards the second phrase and then flat	unreduced pitch range

(cf. Lambrecht 2001, Averintseva-Klisch 2009, Dewald 2014)

# Diverging results – Kalbertodt & Baumann (2015)

	<b>RD</b>	<b>AT</b>
<b>Phrasing</b>	<b>predominantly</b> produced as <b>1 IP</b> (86 %)	in <b>3/4</b> produced as <b>2 IPs</b> (74.5 %)
<b>Accentuation</b>	In <b>2/3 non-strong</b> prominence (65 %)	predominantly <b>strong</b> prominences (90.9 %)
<b>Pitch range/contour</b>	reduced by 3.4 st	reduced by 4.3 st



# Diverging results – Kalbertodt, Primus & Schumacher (2015)

	<b>RD</b>	<b>AT</b>
<b>Phrasing</b>	<b>only 2/3</b> produced as <b>1 IP</b> (65.6 %)	Almost <b>restricted to 2-IP-pattern</b> (96.9 %)
<b>Accentuation</b>	in <b>almost 2/3</b> nuclear prominences (62.5 %)	Almost <b>restricted to nuclear</b> prominence (97.9 %)
<b>Pitch range/contour</b>	reduced by 4.2 st	reduced by 3.5 st

## Diverging results – Kalbertodt (2016)


	<b>RD</b>	<b>AT</b>
<b>Phrasing</b>	in <b>3/4</b> produced as 1 IP (76 %)	in <b>100 %</b> produced as 2 IPs
<b>Accentuation</b>	in <b>almost 2/3</b> nuclear prominences (60 %)	in <b>100 %</b> produced with nuclear prominences
<b>Pitch range/contour</b>	reduced by 4.3 st	reduced by 0.8 st

# Two kinds of RD: based on information structure

## ■ RD\_proto

- Antecedent already given as referent (**anaphoric use**)
- Antecedent already given as topic


(4) A: hast du **romeo und julia** gesehen?

 – B: nein ich geh in **keine filme mit leonardo di caprio**. – A: also sag mal bitte – B: das geht ja nun gar nicht! [...]

 A: **der** ist geil **der film!** (Fokus-DB)

## ■ RD\_pres

- Antecedent newly introduced into discourse (**cataphoric use**)
- Antecedent newly established as topic

(5) S: [zum] jahresende hat galileo-reporterin funda bei uns drei wünsche frei. sie wünscht sich: eine riesen silvesterrakete. ... für besonders viel glück: bleigießen extrem groß. ...  und sie will wissen ob es **das** gibt: ... **den unbrennbaren weihnachtsbaum.**

(Fokus-DB)

# Threeway distinction in information structure

- RD\_proto: referentially and topically given
- AT: referentially given but topically new
- RD\_pres: referentially and topically new

# Expectations / Hypotheses

- Threeway distinction in information structure will result in threeway distinction in prosodic marking
- Strength of phrasal juncture:  $RD\_proto < AT < RD\_pres$
- Degree of prominence:  $RD\_proto < AT < RD\_pres$
- Pitch range:  $RD\_proto < AT < RD\_pres$



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# Corpus Study

- Database: Fokus-DB
- Contains 53 ATs + 155 RDs
- Subdivision within RDs on the basis of information structure using the *reftop* schema
- Resulted in 99 RD\_proto + 56 RD\_pres



# Reftop system

		TOPIC		
REFERENT		New	Old	
			Same	Other
	New	NN-	---	NOO
	Old	ON-	OOS	OOO

(Cangemi & Grice)





# Reftop system

		TOPIC		
REFERENT		New	Old	
			Same	Other
	New	NN-	---	NOO
	Old	ON-	OOS	OOO

A man went shopping.

NN-

He took bananas and stood in line behind a woman.

OOS

NOO

She had ice cream.

ON-

When the woman had paid, it was finally his turn.

OOO

ON-

# Reftop system

		TOPIC		
REFERENT		New	Old	
			Same	Other
	New	NN-	---	NOO
	Old	ON-	OOS	OOO

- AT: referent given, topic new → ON- (OOO)
- RD\_proto: referent given, topic given → OOS
- RD\_pres: referent new, topic new → NN- (NOO)

# Annotation procedure & statistical testing

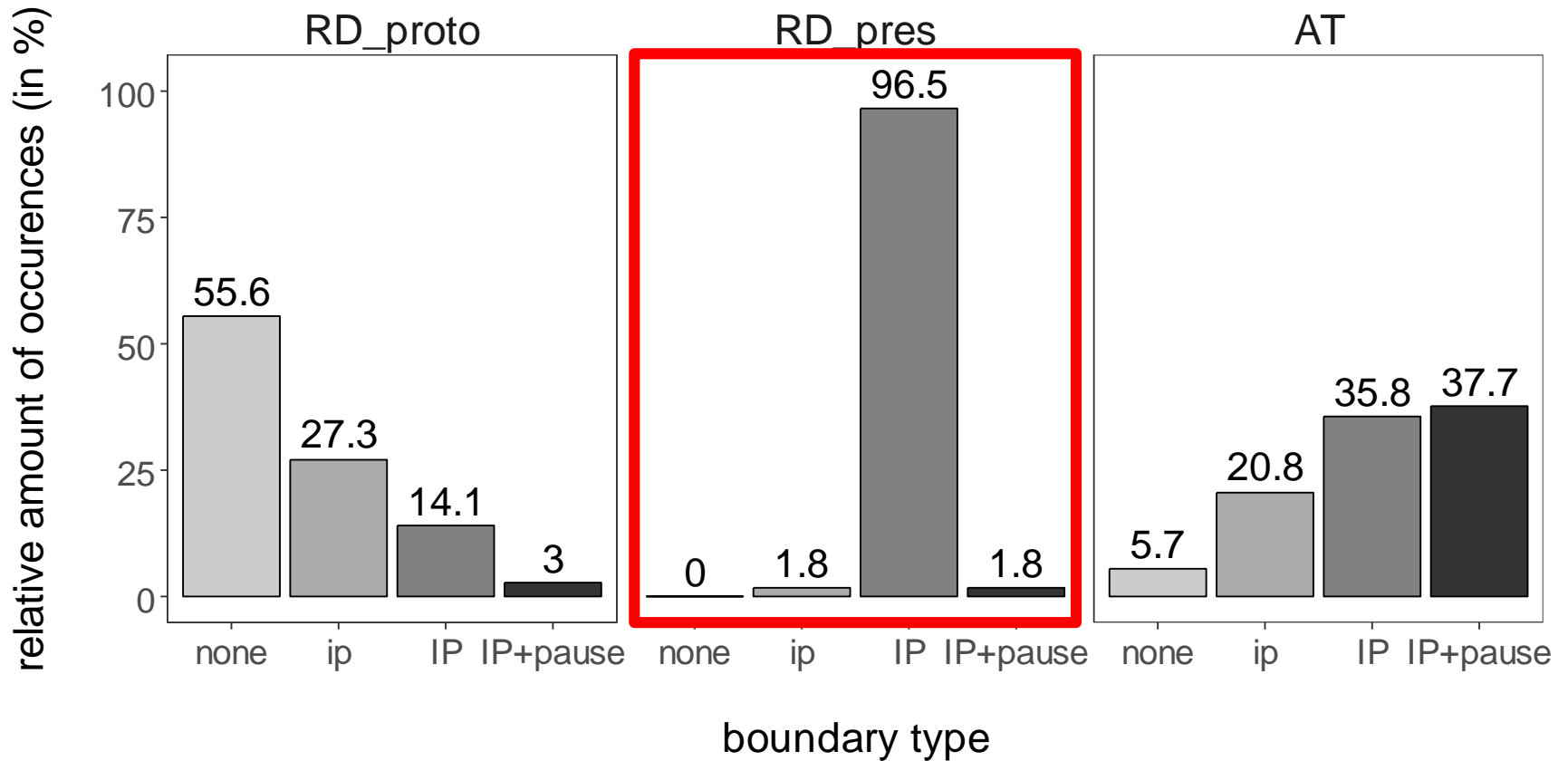
- Prosodic annotation based on the DIMA guidelines (Kügler & Baumann 2017)
  - 4 levels of boundary strength: none, ip, IP, IP + pause
  - 3 levels of perceived prominence: none, weak, strong
- Annotated by two independent annotators
  - Cases of disagreement were resolved by discussion
- Stats:
  - Loglinear modelling used for analysis of categorical outcome
  - Analysis run in R (R Core Team 2017), employing the MASS-package (Venables & Ripley 2002)



# Outline

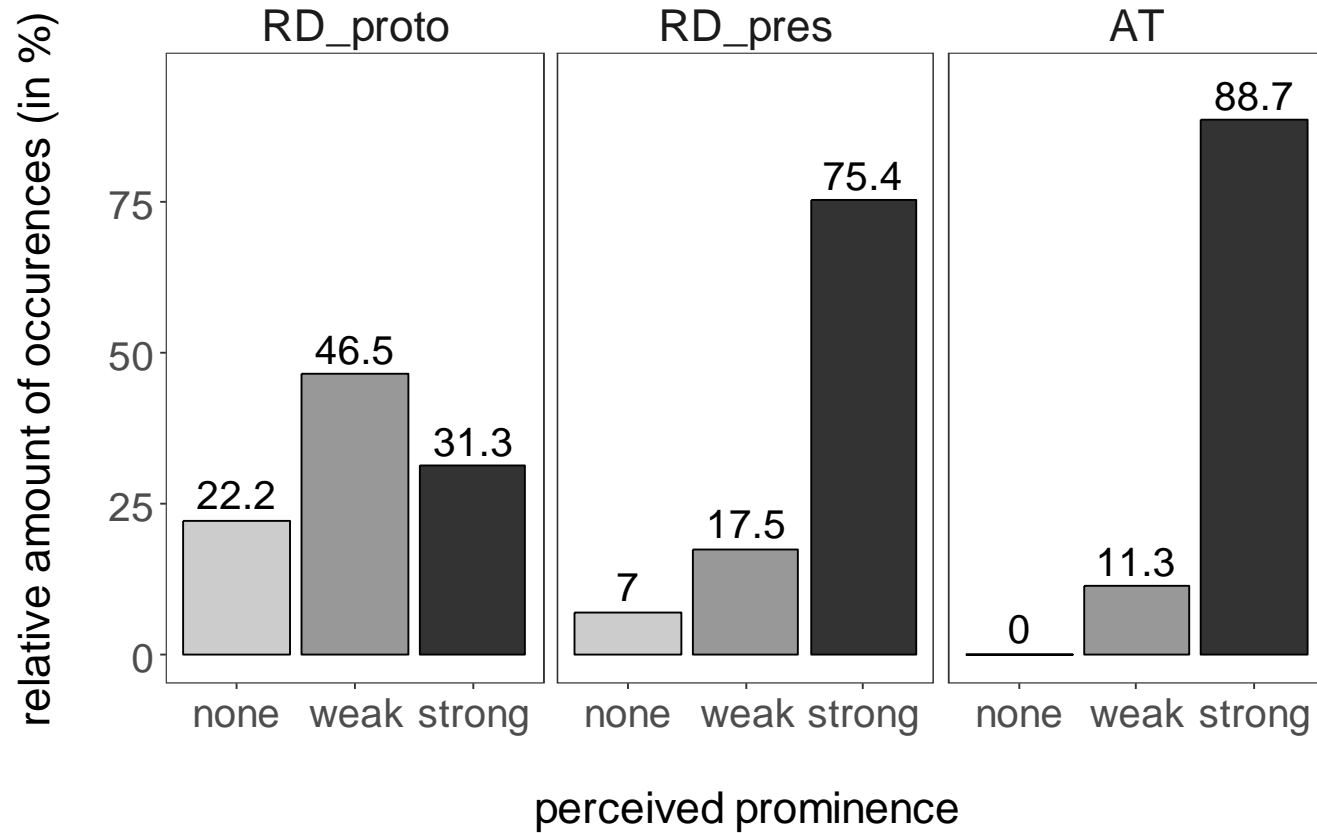
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# Strength of phrasal juncture





# Degree of prominence



# Summary of results

- Strength of phrasal juncture:  $RD\_proto < AT < RD\_pres$   
→ **only partially confirmed**:  $RD\_proto < RD\_pres \leq AT$
- Accentuation:  $RD\_proto < AT < RD\_pres$   
→ **only partially confirmed**:  $RD\_proto < RD\_pres < AT$



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# Discussion

- RD\_pres **rather resembles AT** than RD\_proto
  - Favours 2-IP realisation (98.3 %)
  - Rather uses strong prominences (75.4 %)
- RD\_pres and AT add **new information** to the discourse while RD\_proto does not
- **BUT: competing syntactic demands** lead to a not as clear-cut picture as expected

# Discussion

- Conflating the different subtypes of RD on the sole basis of syntax
  - Diverging assumptions concerning the function of RD (cf. Averintseva-Klisch 2009 + Dewald 2011)
  - Blurred picture of its prosodic realisation
- If we want to correctly discriminate RD against AT, we need to take information structure into account.

Thank you!

# References

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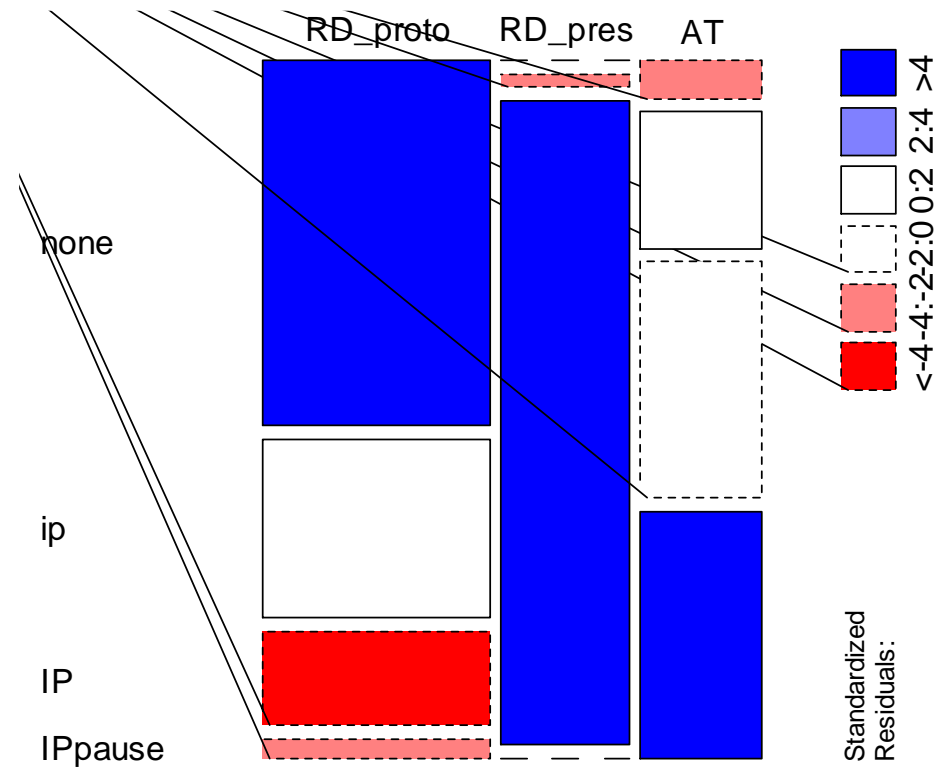
# Different boundary types in RD

- no boundary: der ist doch vom fach der mann
- ip-boundary: und der is sehr fit | der junge
- IP-boundary: der ist fünf meter groß || der junge
- IP+pause: sind sie hoch motiviert || unsere türken



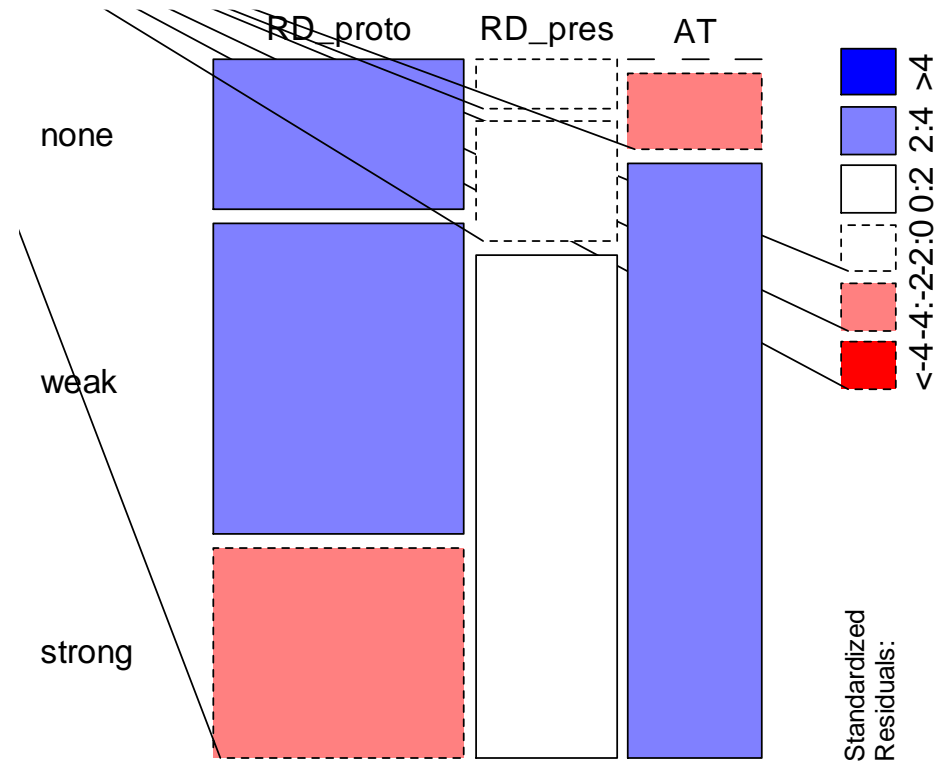
# Further Discussion

- Construction type has impact on phrasing with  $\chi^2(6) = 181.02$ ,  $p < .0001$
- Confirms three-way distinction in phrasing



# Further Discussion

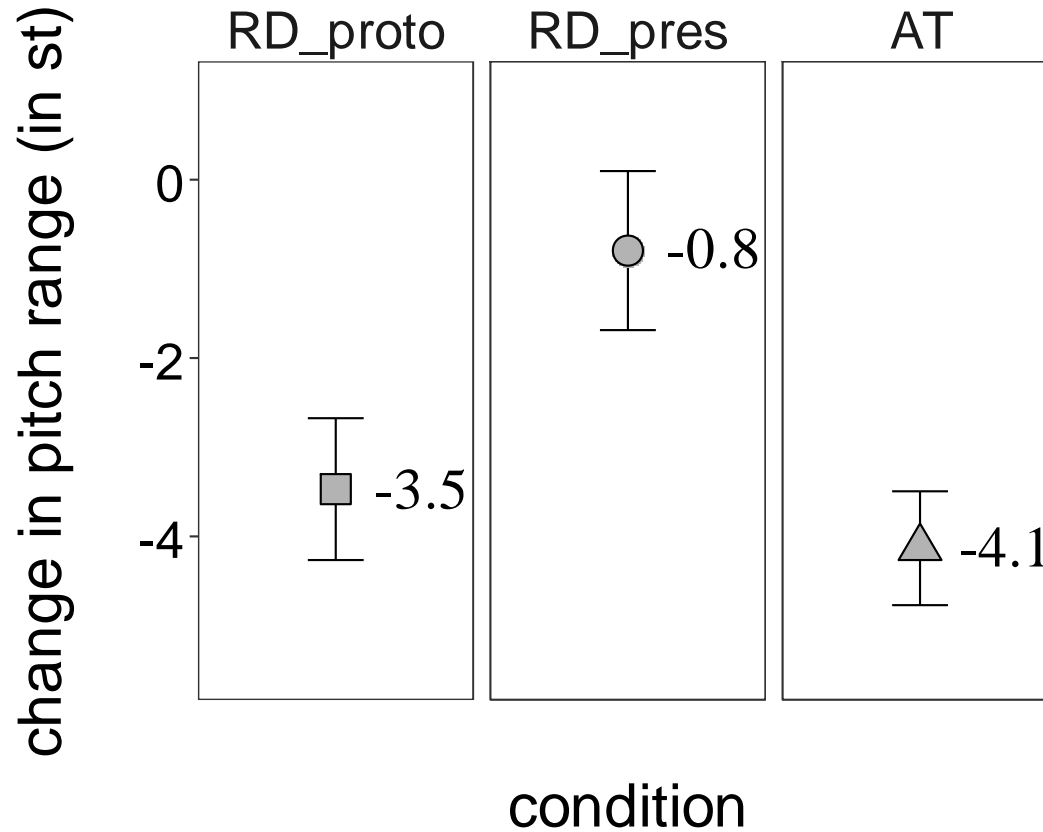
- Construction type has impact on accent strength with  $\chi^2(4) = 64.38$ ,  $p = 3.48e^{-13}$
- BUT: no effect on RD\_pres





# Further Discussion

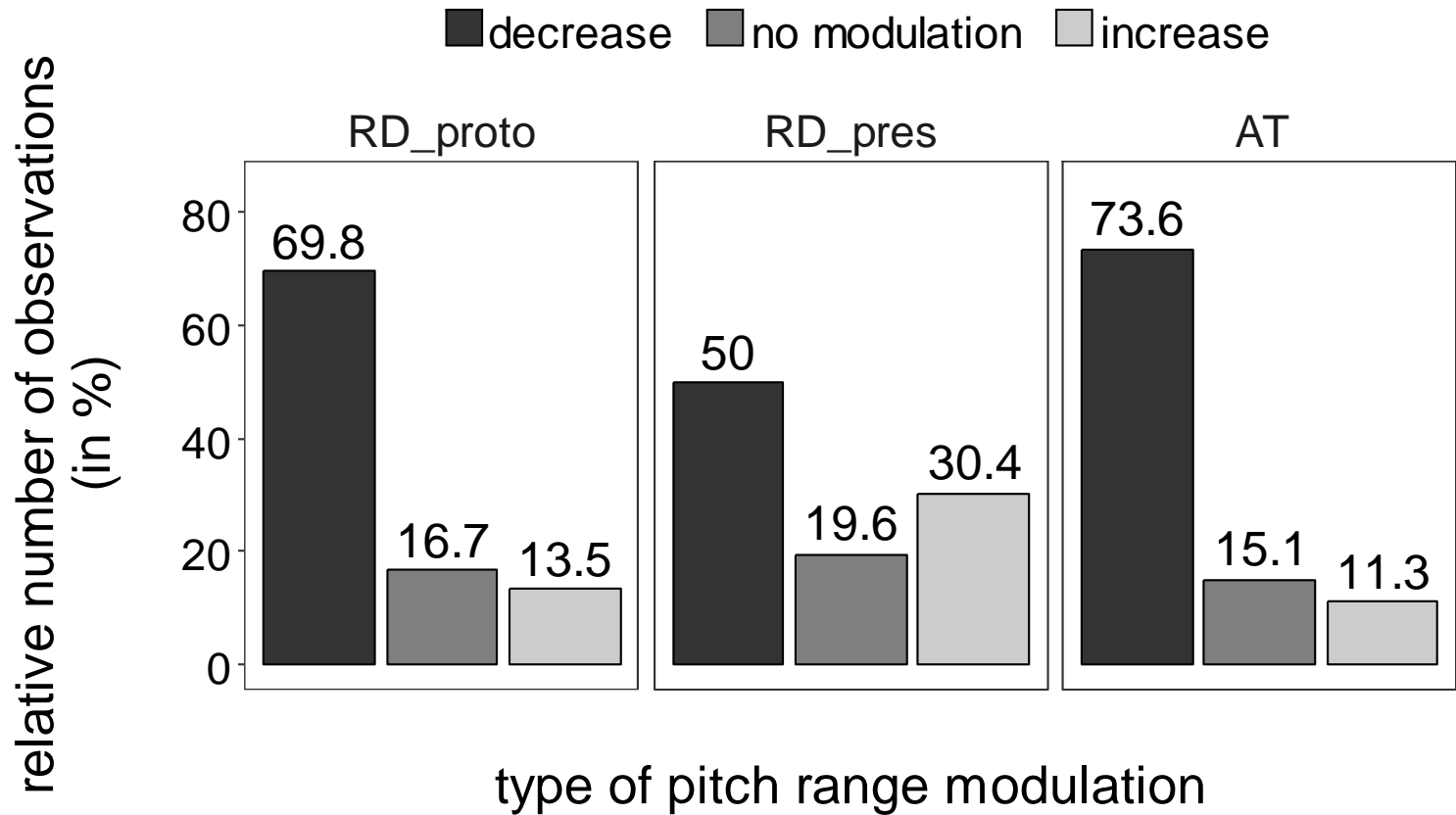
Pitch (Kalbertodt & Baumann 2017)





# Further Discussion

Pitch (Kalbertodt & Baumann 2017)

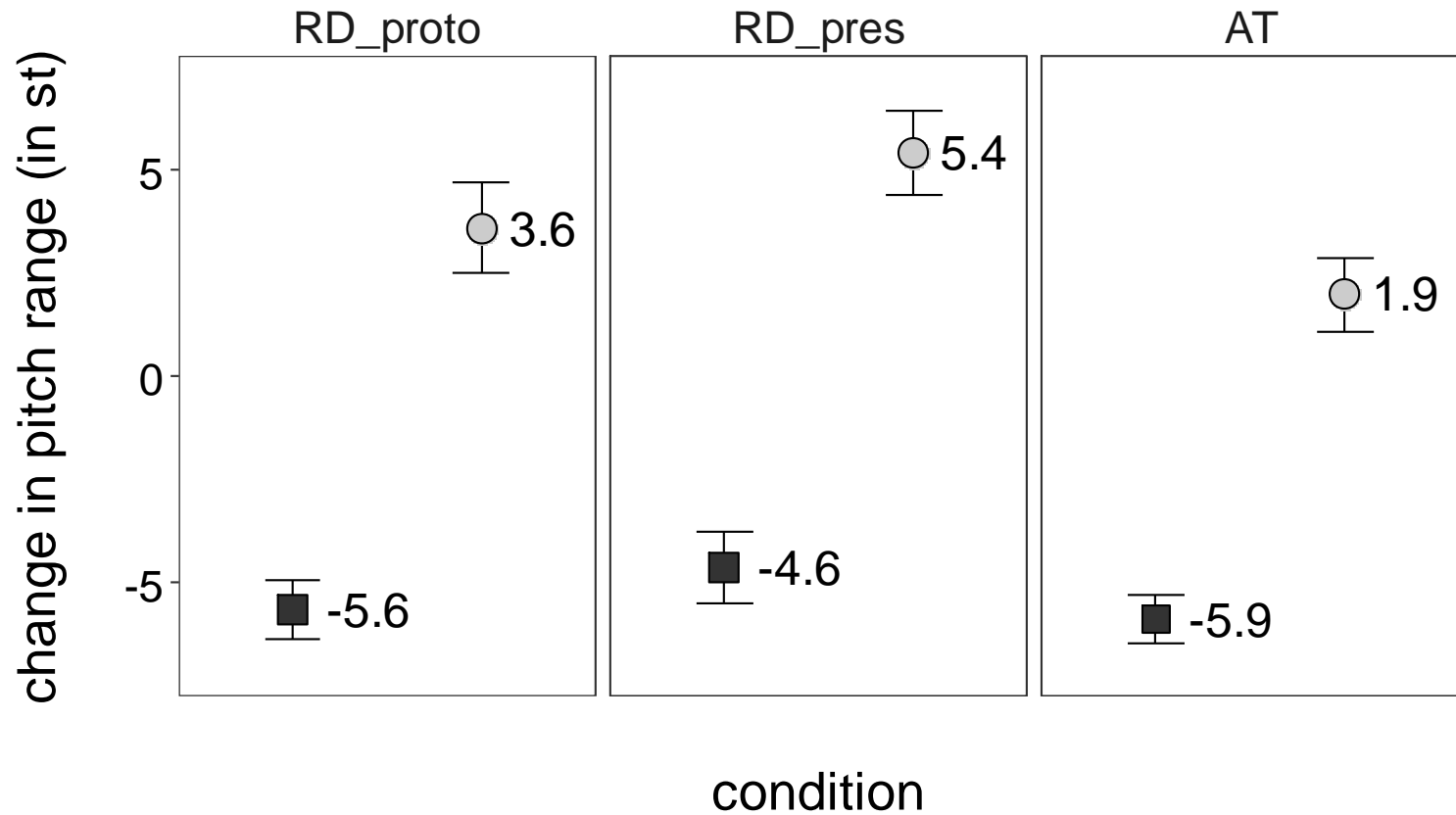






# Further Discussion

Pitch (Kalbertodt & Baumann 2017)



# Further Discussion

Pitch (Kalbertodt & Baumann 2017)

- Merging RD\_pres and RD\_proto would result in a significant difference in pitch range between RD and AT
- However, RD\_proto and AT behave similarly, pointing towards a discourse structuring mechanism rather than a distinctive feature
- In RD\_pres competing demands from information structure and syntax

# Further Discussion

RE: *reftop* annotation scheme

		TOPIC		
REFERENT		New	Old	
			Same	Other
	New	NN-	---	NOO
	Old	ON-	OOS	OOO

- AT: referent given, topic new → ON- (OOO)
- RD\_proto: referent given, topic given → OOS
- RD\_pres: referent new, topic new → NN- (NOO)

# Further Discussion

- Categorising AT + RD-subtypes via *reftop*

AT:

**felix** jetzt mit der sechsten kiste. **thomas** sitzt auf der zehnten. noch eine minute. siebte kiste jetzt bei **sturm**. jetzt kommt **er**. wann reagiert **der chirurg**? ja **der** is ja kalt wie ne hundeschнауze da links. ah **er** sitzt auf der elf seh ich grade. ja ja **er** sitzt auf der elf. da is äh die zehn zu sehen aber **er** sitzt auf der elf. **sturm** mit einem wahnsinns finish jetzt. kommt **er** da noch mal ran? noch vierundreißig sekunden. also das wär natürlich der oberknaller wenn **er** hier zu lange gewartet hätte. **der thomas**.

- ON- (old referent: Sekt / new topic, since topic change)

# Further Discussion

- Categorising AT + RD-subtypes via *reftop*

AT:

A: „Sie sehen Ihrem Vater sehr ähnlich.“ – „Ja, das hat man mir schon gesagt“, erwiderte Harry. – „Mit Ausnahme der Augen. Sie haben –“ – „Die Augen meiner **Mutter**, jaah.“ Harry hatte das so häufig gehört, dass er es ein wenig ermüdend fand. – „Umpff. Nun ja. Man sollte als Lehrer natürlich keine **Lieblingsschüler** haben, aber sie war eine von **meinen** Ø. **Ihre Mutter**.“

- OOO (old referent: Mutter/ old but other topic: Lieblingsschüler)
- „indirectly“ adds info to the topic

# Further Discussion

- Categorising AT + RD-subtypes via *reftop*

RD\_proto:

A: hast du **romeo und julia** gesehen? – B: nein ich geh in **keine filme mit leonardo di caprio**. – A: also sag mal bitte – B: das geht ja nun gar nicht! [...] A: der ist geil der film!

- OOS (old referent: romeo & juliet-movie, same old topic)

## Further Discussion

- Categorising AT + RD-subtypes via *reftop*

RD\_pres:

S: [zum] jahresende hat galileo-reporterin funda bei uns drei wünsche frei. sie wünscht sich: eine riesen silvesterrakete. ... für besonders viel glück: bleigießen extrem groß. ... und sie will wissen ob es **das** gibt: ... **den unbrennbaren weihnachtsbaum.**

- NN- (new referent: unbrennbaren Weihnachtsbaum, new topic as well)

# Further Discussion

- Categorising AT + RD-subtypes via *reftop*

RD\_pres:

„**Mundungus!**“, sagte Hermine. „Wozu bringt **er** all die Kessel mit?“ – „Sucht wahrscheinlich nach einem sicheren Platz zum Aufbewahren“, sagte Harry.  
„Hat **er das** nicht an dem Abend gemacht, als **er** mich beschatten sollte?  
Kessel auf dem Schwarzmarkt besorgt?“

- NOO (new referent: Kessel auf dem Schwarzmarkt besorgt, old other topic: Mundungus)