

Pronouns at the Right Frontier: Discourse Structure Affects Accessibility of Final Appositives

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Summary

- We tested the availability of sentence-final relative clauses for two types of anaphora
- We compared two accounts: a speech act account and a discourse structure account
- We varied the type of relative clause and its discourse relation to the matrix clause

- We found evidence in support of both accounts
- Both relative clause type and discourse relation affected the accessibility of the relative clause
- Moreover, propositional anaphors behaved differently from individual anaphors

Medial vs Final Appositives

- Sentence-final appositive relative clauses (ARCs) (1a) have been reported to be more available for a following anaphoric expression than their sentence-medial counterpart (1b) (SYRETT & KOEV 2015)

- (1) a. The nanny reprimanded the children, who the housemaid was calling to bed.
b. The children, who the nanny reprimanded, were called to bed by the housemaid.

Two accounts have been proposed to capture these data:

- (2) **Speech Act Account** (FRAZIER ET AL. 2017)
Final ARCs contribute the most recent speech act and are therefore available for discourse continuations.
- (3) **Discourse Structure Account** (JASINSKAJA 2016, HUNTER & ASHER 2016)
Final ARCs contribute discourse segments that are available for continuations at the right frontier of the discourse structure.

Predictions & Design

Factor #1: DISCOURSE RELATION (*subordinating vs coordinating*)

Discourse Structure Account:
coord. more accessible than *subord.*

Speech Act Account:
agnostic

Factor #2: RELATIVE CLAUSE TYPE (*restrictive vs appositive*)

Discourse Structure Account:
restrictive = *appositive*

Speech Act Account:
app. more accessible than *rest.*

Factor #3: PRONOUN TYPE (*personal vs propositional*)

Discourse Structure Account:
DISCOURSE RELATION effect for both

Speech Act Account:
RC-TYPE effect for *prop.* only

- manipulated via tense-aspect (imperfective vs perfective) and +/- temporal adverb like *then* to indicate temporal progression
- manipulated via choice of relative pronoun (*that* vs *who*) and +/- comma to indicate intonational break for app.
- manipulated via choice of pronoun in target sentence (*s/he* vs *that*)

Sample Item (N = 24):

Subordinating/Coordinating + Restrictive/Appositive + Personal/Propositional

In the evening, [the nanny reprimanded the children(.)] ϕ_1
[*that/who*] the housemaid { **was calling / then called** } to bed.] ϕ_2

TARGET: [*She/That*] was moticious.] ϕ_3

- the TARGET used nonce words to control for plausibility of continuation
- the antecedents for the personal pronoun were both subjects of their respective clauses
- participants (N=48, MTurk) indicated their interpretation by answering a question (*Who/What was moticious?*)

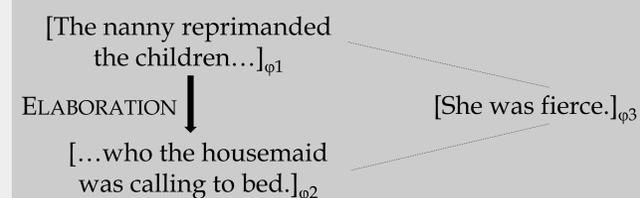
Discussion

- The results provide evidence for both accounts under consideration:
 - coordinating relations make RCs more accessible than subordinating relations
 - ARCs more accessible than RRCs
- In contrast, the increased RC-choice for propositional anaphors is surprising, given that it occurred in the absence of an interaction with RC-Type, as predicted by the Speech Act Account
- Rather, the propositional preference seems to be due to a numerical but not significant increase in coordinating relations
- Post-hoc item-analyses suggested that the potential interaction might have been obscured by the possibility of causal inferences in some of the items:

	app-coo-per	app-coo-prop	app-sub-per	app-sub-prop	res-coo-per	res-coo-prop	res-sub-per	res-sub-prop
Explanation (4)	46%	42%	29%	33%	25%	12%	37%	17%
Result (8)	44%	46%	27%	29%	33%	44%	21%	29%
Non-Causal (12)	47%	65%	34%	32%	24%	43%	21%	26%

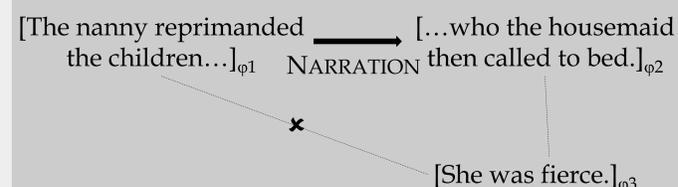
Background on Discourse Structure

DISCOURSE SUBORDINATION



- *subordinating* relations allow access to both units

DISCOURSE COORDINATION



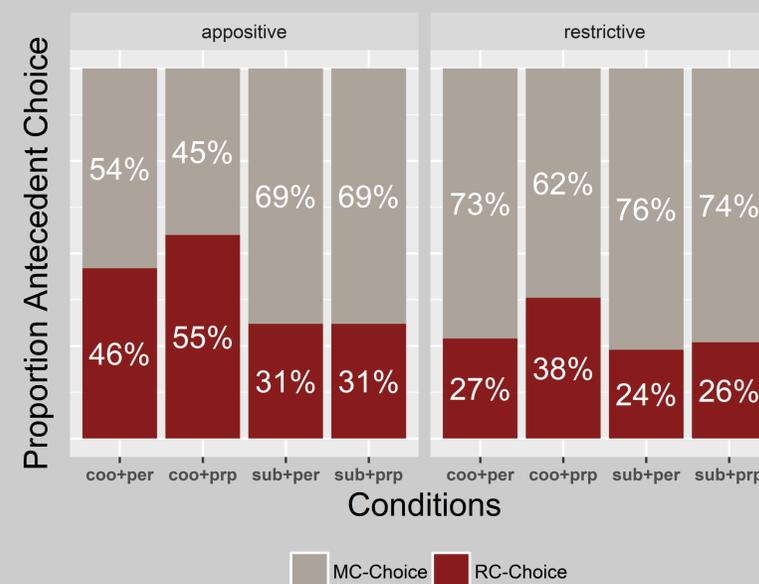
- *coordinating* relations block access to first unit

Results

- we fitted a logistic mixed-effects model with deviation coding to analyze the results:

	β	SE	z	p
(Intercept)	0.84	0.19	4.51	>.001***
Discourse Structure	0.75	0.18	4.21	>.001***
RC-Type	0.66	0.15	4.34	>.001***
PN-Type	-0.32	0.15	2.06	.0393*
DS x RC	-0.56	0.28	1.98	.0473*
RC x PN	-0.16	0.28	0.55	.581
DS x PN	0.45	0.28	1.60	.1086
DS x RC x PN	0.02	0.68	0.03	.9770

- more RC-choices for coordinating than subordinating
- more RC-choices for appositives than restrictives
- higher increase of RC-choices of coordinating for appositives
- more RC-choices for propositional than personal



Future Directions: How Anaphors Differ

- Propositional anaphors might be different in that they make reference to the syntactic structure, similar to ellipsis
- Differentiating anaphors along these lines might also shed light on the results from Syrett & Koev (2015), who found that *Why*-questions preferred the final ARC over the matrix clause (67%)

References

FRAZIER, DILLON & CLIFTON 2017. *Language and Speech* • HUNTER & ASHER 2016. *SALT 26* • JASINSKAJA 2016. Manuscript • SYRETT & KOEV 2015. *Journal of Semantics*

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