

Response Particles

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2 Theories

Basic assumption of theories considered here:

- Response particles are / contain propositional anaphora
- Preceding clause introduces propositional discourse referents

3 Krifka 2013: Saliency account

(3) $\llbracket [Bill [\bar{p}_{DR} t_{Bill} \textit{ doesn't } [p_{DR} t_{Bill} \textit{ smoke}]]] \rrbracket = \neg \textit{smoke}(\textit{bill})$

\bar{p}_{DR} : negative propDR, anchored to $\neg \textit{smoke}(\textit{bill})$

p_{DR} : positive propDR, anchored to $\textit{smoke}(\textit{bill})$

- p_{DR} more salient by default than \bar{p}_{DR} , hence prime target for discourse particles
- reason: Negated clauses when non-negated DR in previous discourse
- but there are contexts where this is not the case:

(4) *A: Who of your friends does not smoke? B: Bill doesn't smoke.*

Interpretation of response particles:

- *ja* picks up a propDR, asserts it
- *nein* picks up a propDR, asserts its negation
- *doch* picks up p_{DR} when \bar{p}_{DR} is also salient, asserts it

In case of negated antecedent clause, default case where p_{DR} is most salient:

- *doch* for rejection (pick up p_{DR} , asserts it), blocks other expressions for rejection
- *nein* picks up salient p_{DR} , asserts its negation, preferred over *ja* for \bar{p}_{DR} .

Special case where \bar{p}_{DR} is most salient (*doch* for rejection same as before):

- *ja* picks up salient \bar{p}_{DR} , asserts it, preferred over *nein* for p_{DR} .

Particle	Targeted propDR	Meaning	*BLOCK	PRES	*NONSAL	
Salient propDR = p_{DR}						
<i>ja</i>	p _{DR}	p _{DR} = rejecting	*			
	p̄ _{DR}	p̄ _{DR} = affirming			*	
<i>nein</i>	p _{DR}	¬p _{DR} = affirming				☞
	p̄ _{DR}	¬p̄ _{DR} = rejecting			*	
<i>doch</i>	p _{DR}	p _{DR} = rejecting				☞
	p̄ _{DR}	p̄ _{DR} = affirming		*	*	
Salient propDR = p̄_{DR}						
<i>ja</i>	p _{DR}	p _{DR} = rejecting	*		*	
	p̄ _{DR}	p̄ _{DR} = affirming				☞
<i>nein</i>	p _{DR}	¬p _{DR} = affirming			*	
	p̄ _{DR}	¬p̄ _{DR} = rejecting				☞
<i>doch</i>	p _{DR}	p _{DR} = rejecting			*	
	p̄ _{DR}	p̄ _{DR} = affirming		*		

Prediction for negative antecedents, for saliency account (Krifka 2013) and feature model (Roelofson & Farkas 2013)

Response type	Context	Predicted preference patterns	
		Saliency account	Feature model
Rejecting	Positive (default)	<i>doch > nein > ja</i>	<i>doch > nein = ja</i>
	Negative	<i>nein > doch > ja</i>	
Affirming	Positive (default)	<i>nein > ja</i>	<i>nein > ja</i>
	Negative	<i>ja > nein</i>	

4 Experiments

4 acceptability judgement experiments (here: only for assertion antecedents)

- particle + full-clause responses to positive assertions
- preference patterns for *ja/nein* in affirming / rejecting particle + full clause responses to negative assertions
- particle + full clause responses to rejecting assertions, including *doch*
- bare particle responses to affirming responses to negative assertions

4.1 Experiment 1: positive antecedent, base line.

48 experimental items, 16 fillers, 48 subjects, 2x2x2 within subjects, rating 1-7

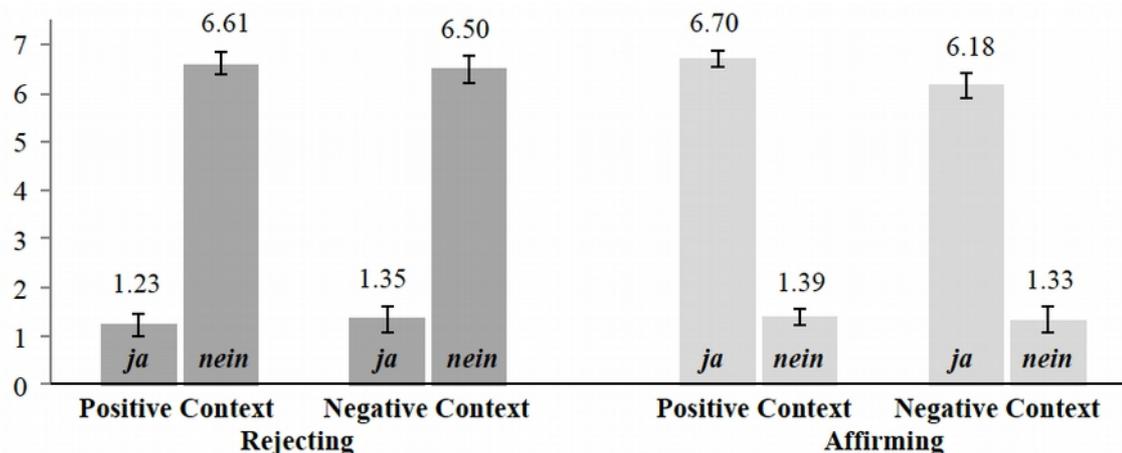
Context sentence: *Ludwig and Hildegard have their large garden redesigned.*

- Positive context: *They are talking about what the gardener has done already.*
- Negative context: *They are talking about what the gardener hasn't done yet.*

Ludwig: *The gardener has sown the lawn already.*

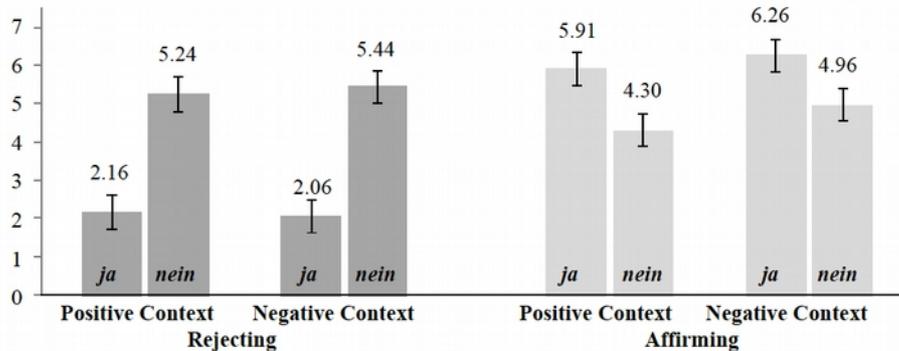
Hildegard: Affirming: *JA, he has sown the lawn already.*
NEIN, he has sown the lawn already.

Rejecting: *JA, he hasn't sown the lawn already.*
NEIN, he hasn't sown the lawn already.



4.2 Experiment 2: negative antecedent

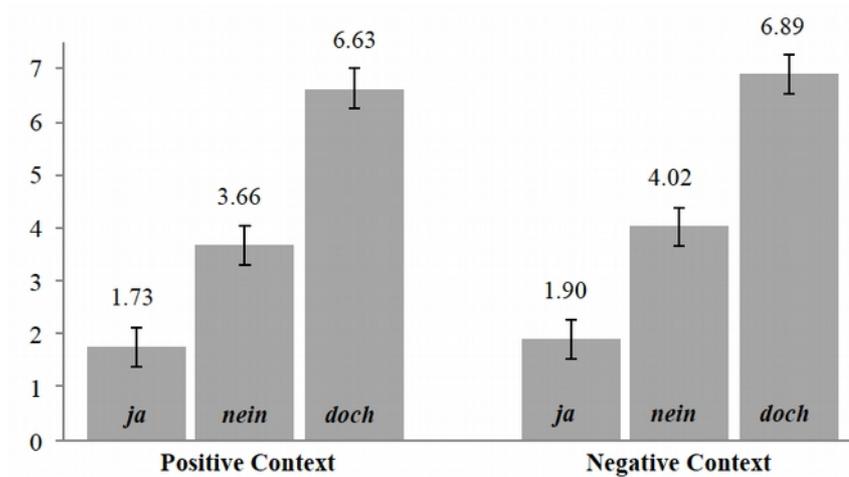
Ludwig: *The gardener hasn't sown the lawn yet.*



- No influence of context, against prediction by saliency account
- Preference for *nein* for rejecting responses (no *doch* provided) not predicted by feature model, predicted as default by saliency account (*NO, he has sown the lawn*; recall that *doch* was not offered as option)
- Slight preference for *ja* for affirming responses against default prediction of saliency and feature model, common knowledge (e.g., Wikipedia) (*JA > NEIN, he hasn't sown the lawn yet*).

4.3 Experiment 3: negative antecedent, with *doch*

Results for rejecting answers:



- no influence of context, as before, contra saliency account
- *doch* clearly the best option, as expected
- *nein* better than *ja*, different from expectations of both accounts, as before

4.4 Bare particle responses to negated antecedents

Setting: *Ludwig and Hildegard have their large garden redesigned. This morning, Hildegard talked to the gardener, who told her that because of the weather he would sow the lawn only in a couple of days.*

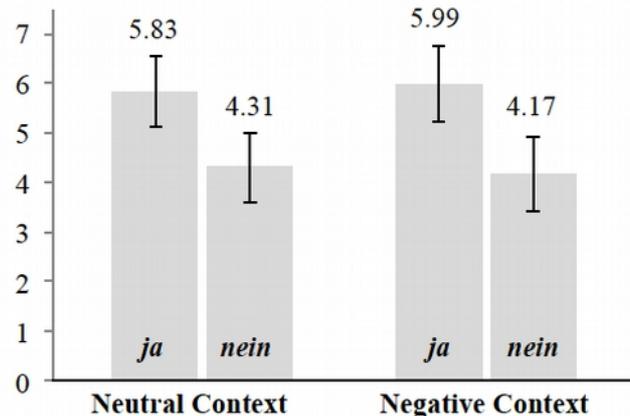
Context: Neutral: *During lunch, Hildegard and Ludwig are talking about the gardener and the redesigning of their garden.*

Negative: *During lunch, Hildegard and Ludwig are talking about what the gardener hasn't done yet.*

Dialogue: Ludwig: *The gardener hasn't sown the lawn yet.*
Hildegard: *Ja. / Nein.*

Results, again:

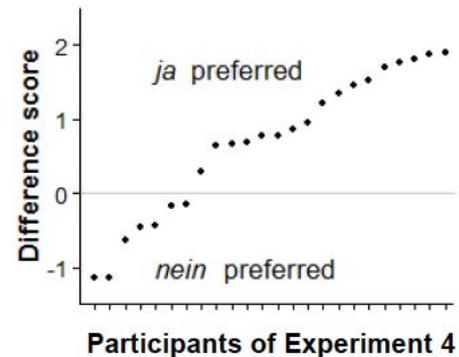
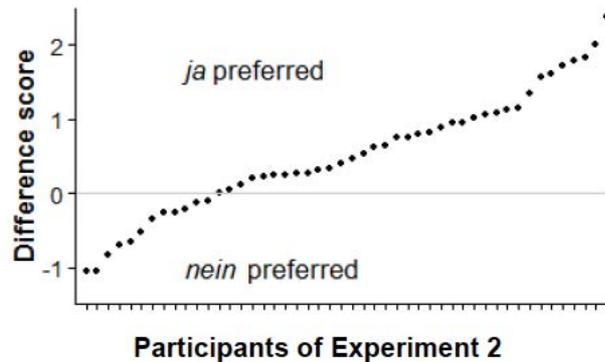
- No influence of context
- Slight preference for *ja* for confirmation



4.5 Group differences

Evidence for different behavior of participants

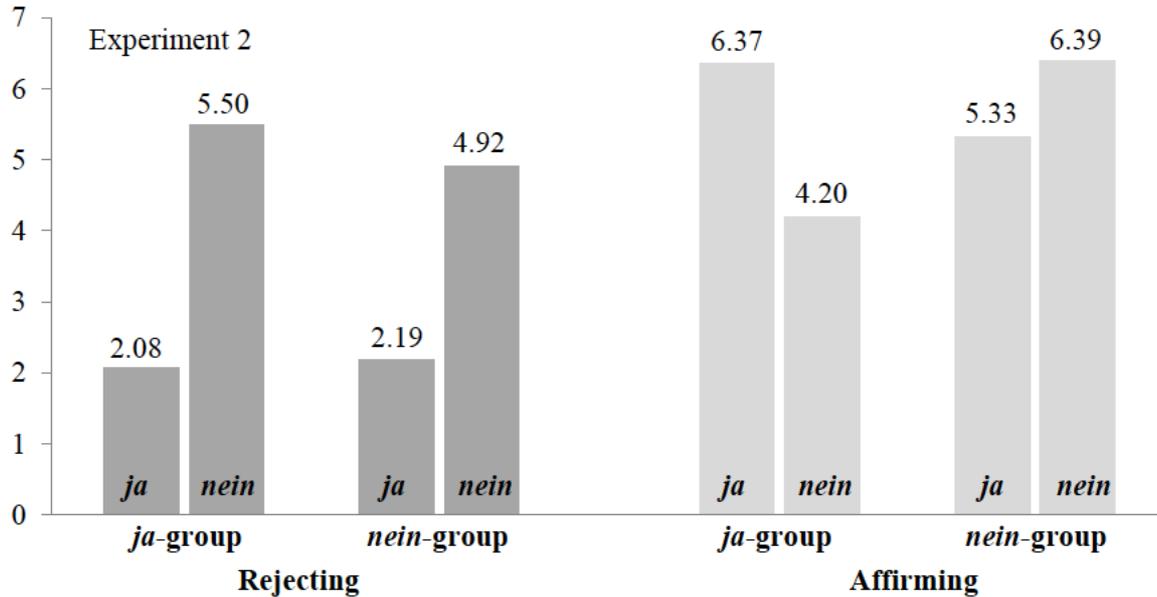
- Difference scores for each participant: Mean rating of *nein* – mean rating of *ja*
- z-value transformation



Two groups:

- *ja*-group (majority) prefers *ja* as affirming particle to negative antecedent
- *nein*-group (minority) prefers *nein* as affirming particle to negative antecedent

Acceptability judgements by groups, here: Experiment 2



5 Revised saliency account

For negated antecedents:

(5) $[[[Bill [\bar{p}_{DR} t_{Bill} \text{ doesn't } [p_{DR} t_{Bill} \text{ smoke}]]]]] = \neg \text{smoke}(\text{bill})$

ja-group:

- The negated DR \bar{p}_{DR} is more salient
- Reason: It is introduced by the major constituent vs. a subconstituent
cf. Gordon, Hendrick, Ledoux & Yang (1999) on nominal anaphora:
Mary's aunt owns a lake house where she likes to go swimming.
- Result: *ja* preferred for affirming responses, as it picks out \bar{p}_{DR}

nein-group:

- No saliency differences between the two groups
- The use of *ja* is penalized, as the result is ambiguous (creates a tie)
between p_{DR} and \bar{p}_{DR}
- With *nein*, picking up \bar{p}_{DR} would result in a double negation: $\neg \bar{p}_{DR}$, to be avoided,
hence *nein* picks up p_{DR} and negates it: $\neg p_{DR}$
- *doch* can only pick up a negated DRs and negates it: $\neg \bar{p}_{DR}$

6 No saliency differences

ja-group:

- Always picks up the propositional discourse referent that was asserted
- With negative antecedents, this is \bar{p}_{DR}
- *doch* expresses negation of negated DR: $\neg \bar{p}_{DR}$

nein-group:

- *ja/nein* always pick up the TP discourse referent of the antecedent
- With negative antecedents, this is p_{DR}
- *nein* picks up p_{DR} and negates it: $\neg p_{DR}$
- *doch* is like *ja* but requires presence of a negated propDR, \bar{p}_{DR}
picks up p_{DR} and affirms it: p_{DR}

7 Question antecedents

Low negation questions:

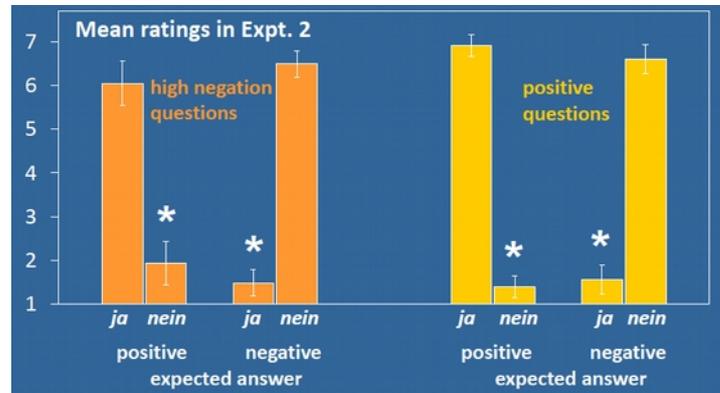
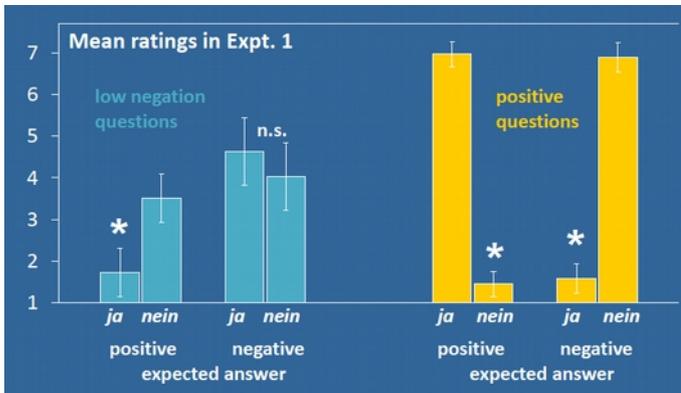
- Example: *Has the gardener not sown the lawn yet?*
- Two propositional discourse referents, ρ_{DR} and $\bar{\rho}_{DR}$

High negation question:

- Example: *Hasn't the gardener sown the lawn already?*
- High negation is not propositional, hence only one propDR: ρ_{DR}

Two experiments:

- Low negation questions similar to negated assertions as antecedents
- High negation questions similar to non-negated assertions as antecedents



8 Other Responses

Conventional gestures:

- Nodding / Head shake

“Paralinguistic” gestures:

- English: *uh-huh*, *uh-uh*
- German: *m-hm*, *m-m*

Expressing agreement / disagreement with assertions, biased (!) questions.

- English: *Right.* / *Wrong.*
- German: *Richtig.* / *Falsch.* / *Stimmt.* / *Stimmt nicht.*

9 Jein



Use of *jein*:

- Typically used after questions, not after assertions.
- Agreeing response, but signals that usual stereotypical inferences (I-Implicatures, Levinson; R-Implicatures, Horn) should not be drawn.

(6) A: *Have you ever been to Bremen?*

B: *Jein, ich bin nur mal durchgefahren.*
'Jein, I just drove through once.'

B: *Nein, ich bin nur mal durchgefahren.*
'No, I just drove through once.'

B: *Ja, aber ich bin nur mal durchgefahren.*
'Yes, but I just drove through.'

- Agreeing response for one aspect of a question.

(7) A: *Would John be a good for the job?*

B: *Jein. Er bringt die nötige Qualifikationen mit, aber er ist unzuverlässig.*
'Jein. He has the necessary qualifications, but he is not reliable.'