

Negated contrary adjectives: Disentangling negative strengthening from linguistic acceptability

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Introduction

- Negated contraries are ambiguous: e.g., *John is not tall* has a weak (medium/short) and a strong reading, i.e., negative strengthening (rather short)
- Negative strengthening is stronger for positive adjectives (Colston 1999, Fraenkel & Schul 2008)
- Asymmetry between positives and negatives increases for morphological adjectives (cf. Krifka 2014)
- Evidence from polarity scale experiments: explicit ITA
- Evidence from acceptability judgments: implicit ITA
- E.g., Ruytenbeek et al. (2017): implicit (*John is not tall. Peter is short too.*) and explicit ITA tasks

Research questions

- Ruytenbeek et al. (2017): adjective polarity determined by acceptability judgments
- Tests = negative environments (e.g., *X is not very Y*)
- Polarity tests or ITA tests?
- All these tests involve a negation; negatives less acceptable under negation (Sassoon 2012)
 - Polarity X Morphology interaction driven by linguistic acceptability?
 - Which constructions give rise to negative strengthening?

Hypotheses

- Effect of morphology more robust for acceptability than for negative strengthening
- Positive correlations between acceptability and negative strengthening judgments
- Stronger negation (e.g., *not at all ADJ*) → stronger negative strengthening

Method

- Online experiment with French data on Psytoolkit (Stoet 2017)
- 59 native speakers on Prolific (30 female, mean age 32)
- Four types of negative constructions
 - John is not tall.*
 - John is not very tall.*
 - John is not tall at all.*
 - It's surprising how John is not tall.*

Adjectival pairs	English translation	Morphology
<i>bon/mauvais</i>	good/bad	non-morphological
<i>gentil/méchant</i>	kind/nasty	non-morphological
<i>poli/grossier</i>	polite/rude	non-morphological
<i>joyeux/triste</i>	happy/sad	non-morphological
<i>utile/inutile</i>	useful/useless	morphological
<i>juste/injuste</i>	fair/unfair	morphological
<i>heureux/malheureux</i>	happy/unhappy	morphological
<i>sympathique/antipathique</i>	friendly/unfriendly	morphological

Data analysis

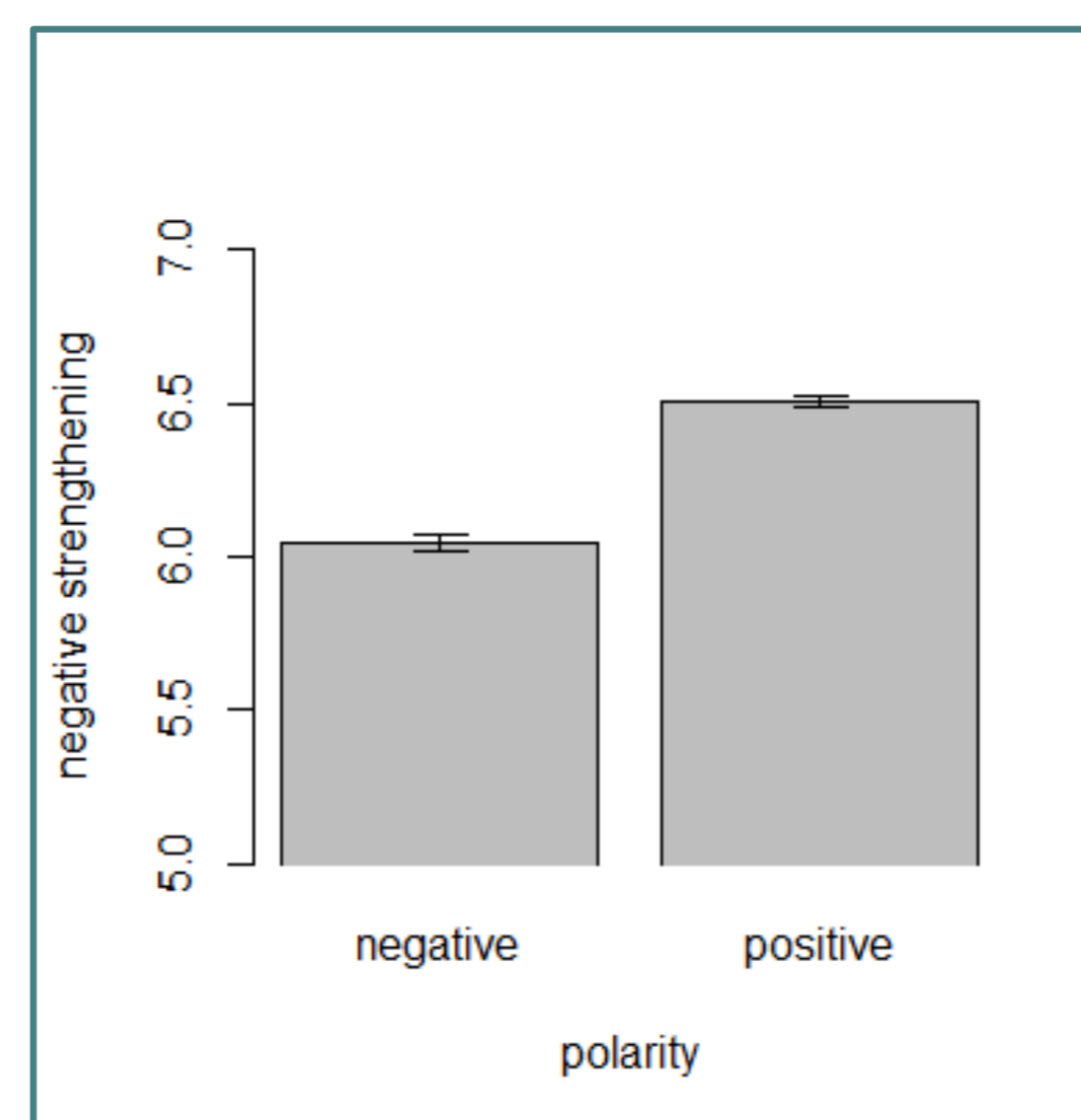
Cumulative link mixed models (Christensen 2018) in R

Results

Negative strengthening (all items)

Positives > negatives

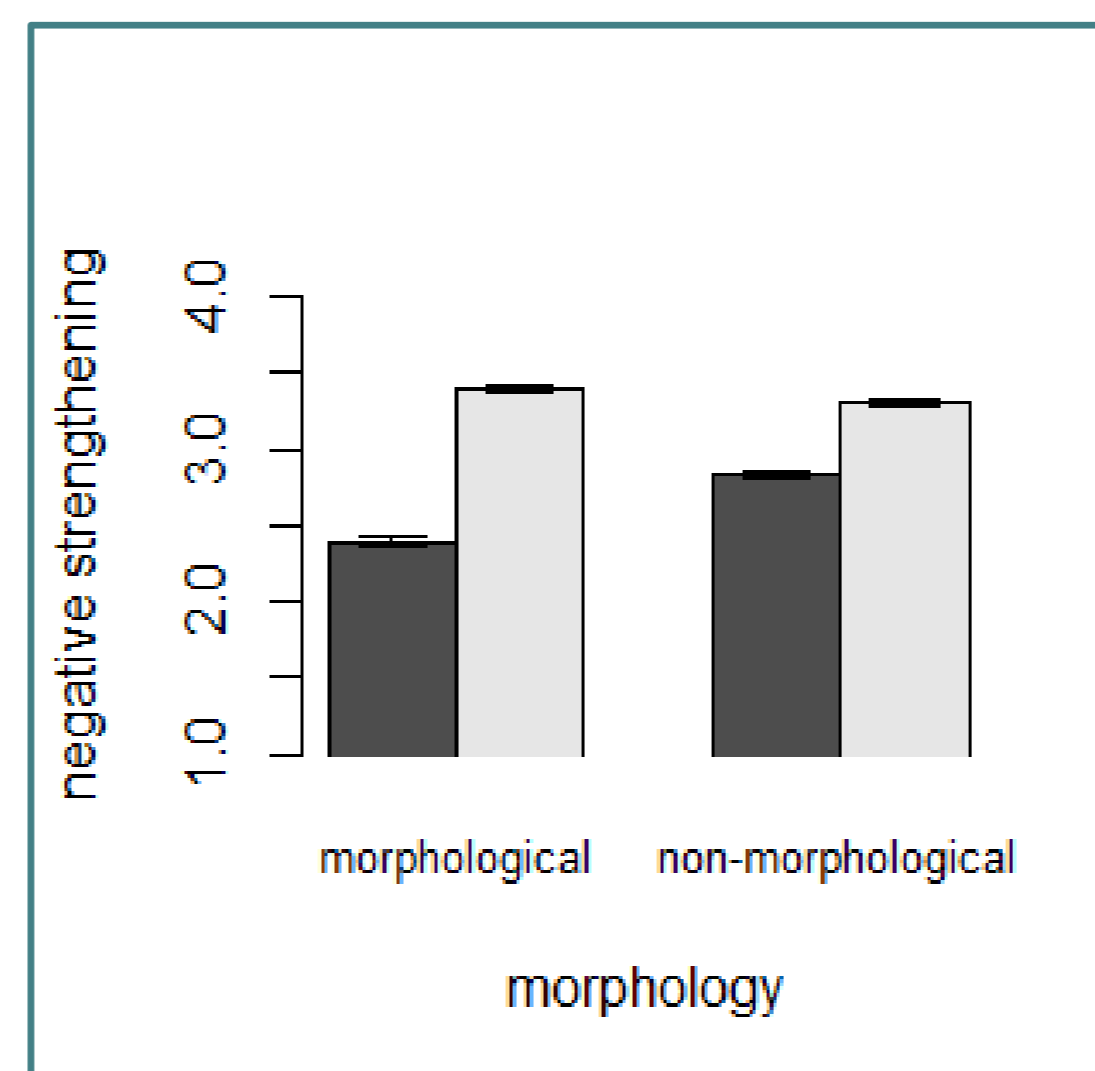
- Main effect of Polarity ($B = 1.18$, $SE = .22$, $z = 5.24$, $p < .001$)
 - No main effect of Morphology ($B = -0.19$, $SE = .24$, $z = -0.79$, $p = .43$)
 - No Polarity X Morphology interaction ($B = -0.42$, $SE = .31$, $z = -1.37$, $p = .17$)
- Not at all ADJ > how not ADJ > not very ADJ > not ADJ*



Acceptability ratings (all items)

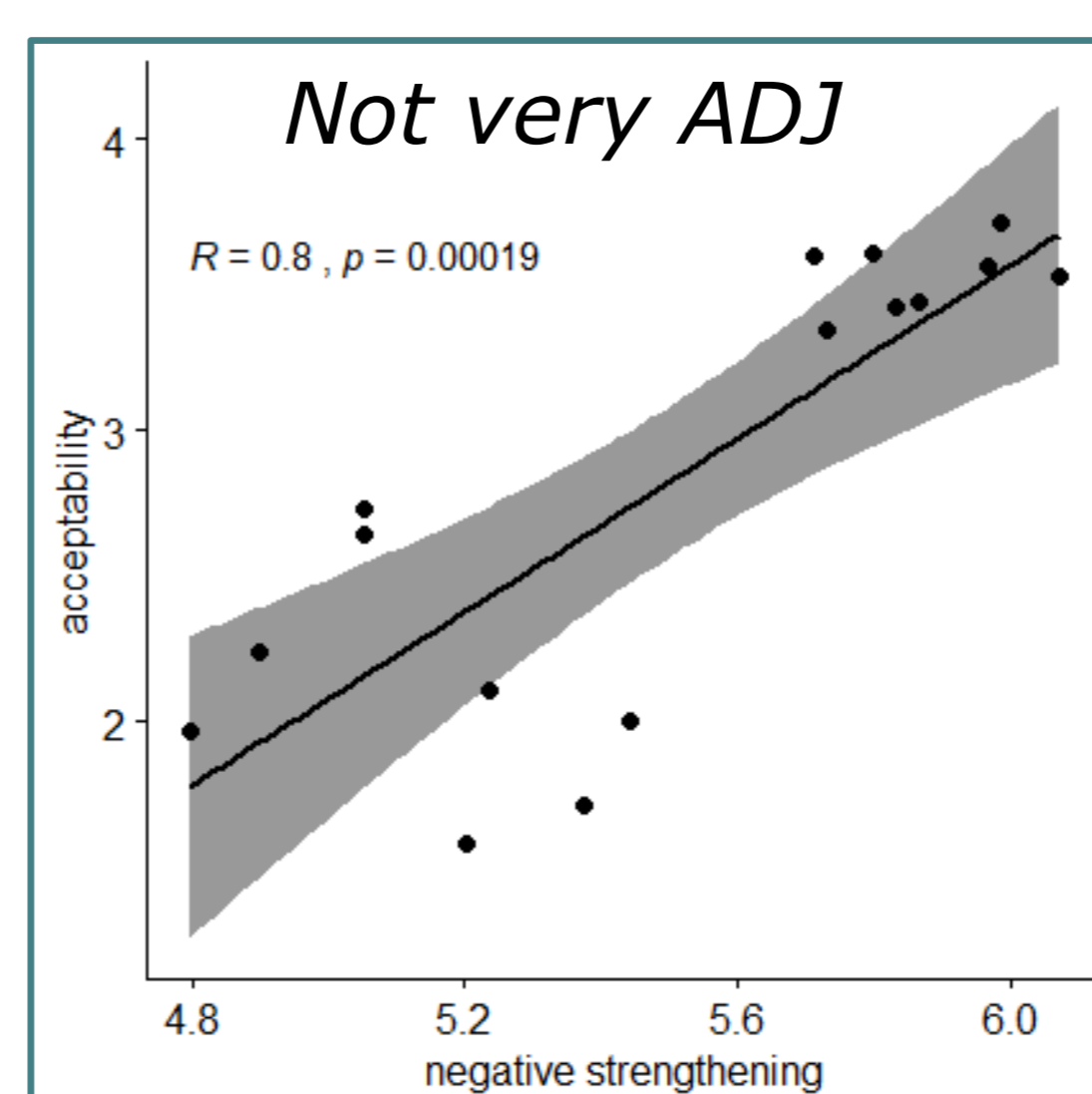
Positives > negatives

- Main effect of Polarity ($B = 2.52$, $SE = .18$, $z = 13.62$, $p < .001$)
- Morphological > non-morphological adjectives
- Main effect of Morphology ($B = 1.09$, $SE = .25$, $z = 4.27$, $p < .001$)
 - Polarity X Morphology interaction ($B = -1.49$, $SE = .25$, $z = -5.90$, $p < .001$)
- Not ADJ > not at all ADJ > not very ADJ > how not ADJ*



Correlations (averaged by adjective)

- .58 for *not ADJ* ($t(14) = 2.70$; $p = .017$)
- .80 for *not very ADJ* ($t(14) = 5.01$; $p < .001$)
- .75 for *how not ADJ* ($t(14) = 4.30$; $p < .001$)
- .64 for *not at all ADJ* ($t(14) = 3.13$; $p < .01$).



Discussion

- Morphology impacts acceptability, not negative strengthening
- Different constructions → different response patterns
- Negative strengthening strongest for *not at all ADJ*
- Possible confound variables
 - Mixed presentation of judgments, not in blocks
 - Stimuli used as fillers (e.g., *X is ADJ*)

Conclusions

- Acceptability & negative strengthening: positively correlated
- Polarity effects more robust than morphology effects
- Future research: other designs and negative constructions

References

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