

# Experimental evidence on the distinction between foregrounded and backgrounded meaning

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# Foregrounded vs backgrounded meaning

- Crucial distinction in investigations of what types of meanings project
- Pertains to discourse structure: foregrounded information contributes to context update and answers the QUD (Lewis, 1979; Roberts, 1996)
- Information in the focus of attention is processed more deeply, according to psycholinguistic measures (e.g. Sanford & Sturt, 2002; Sturt et al., 2004)

# Research questions

- What is the psychological validity of the distinction between foregrounded and backgrounded meaning?
- Is this partition in meaning relevant for native speakers as they use and comprehend language?
- Is information backgrounding a categorical or a gradient phenomenon?

# Distinguishing foregrounded from backgrounded meaning

- Partition encoded by various means in language:
  - Lexical (e.g. *only, stop, too*)
  - Non-lexical (e.g. cleft constructions)
- Here we focus on presuppositions as a specific case of backgrounded meaning
  - Comparing various kinds of presupposition trigger

# Overview of the talk

- Pilot study and its limitations...
- ...due to typology of presupposition triggers?
- Heterogeneity of backgrounded content?
- Follow-up study to examine this
- Results and discussion

# Pilot study - methodology

- Subjects were presented with written Q-A pairs (all Qs were yes-no Qs). The Q contained a ps trigger. A negative answer was provided, in 2 conditions:
- **FOREGROUND**: The continuation of the answer addresses the foregrounded content of the question
- **BACKGROUND**: The continuation of the answer addresses the backgrounded content of the question

# ‘Polar question’ diagnostic

- Roberts and Tonhauser (last week):
  - “In polar questions, the at-issue content determines the relevant set of alternatives, not the backgrounded/not-at-issue content”

Does Juan live in Maria’s house?

Yes, he does.

#Yes, Maria has a house.

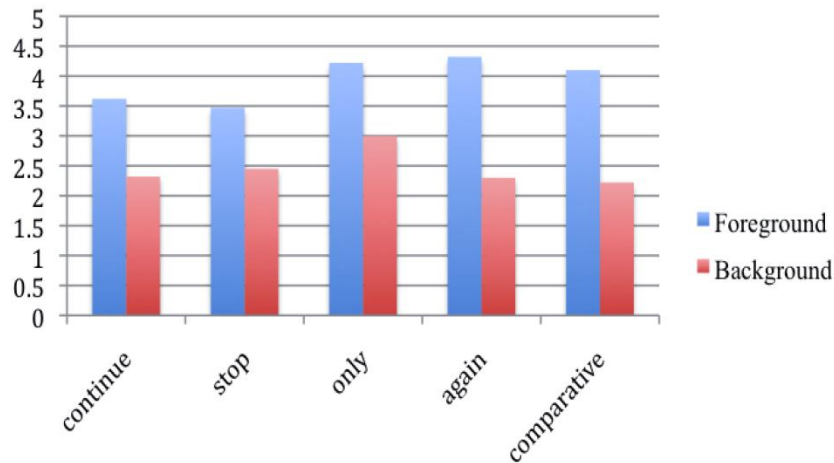
# Pilot study - critical items

Question	VERSION 1 ANSWER	VERSION 2 ANSWER
Is Jane's book <b>continuing</b> to sell well?	No, it didn't use to sell well.	No, it is not selling well.
Has Tom <b>stopped</b> watching old films?	No, he watches old films.	No, he didn't use to watch old films.
Did Tom visit <b>only</b> Chicago during the holidays?	No, he didn't visit Chicago.	No, he did visit other cities.
Did Susan kiss Dave <b>again</b> today?	No, she didn't kiss Dave today.	No, she never kissed Dave before.
Is Zoe <b>a better</b> doctor <b>than</b> Julian?	No, she isn't a doctor.	No, she isn't a better doctor.

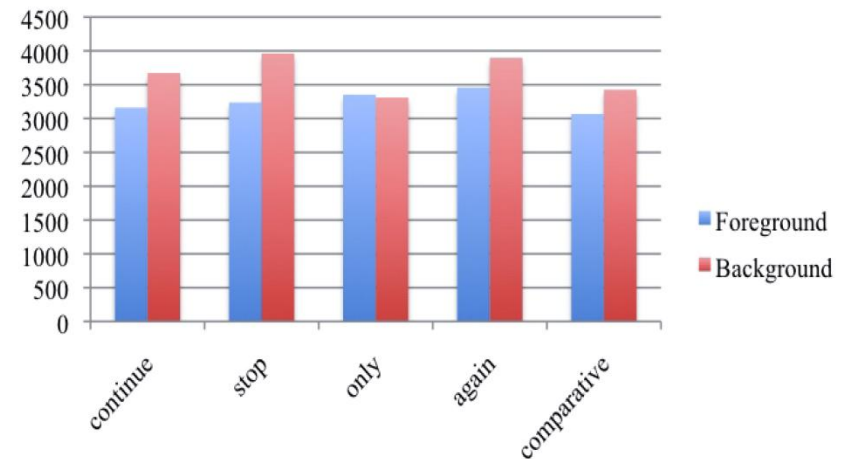


# Pilot study - results

## Felicity rating means



## Response latencies means



- **Refutations in the foreground condition are preferred to those in the background condition** for all presupposition triggers (Mann-Whitney U tests, all  $p < 0.01$ ).
- Numerically faster RTs to foreground corrections, but not statistically significant.

# Results

- Native speakers are sensitive to the distinction between foregrounded and backgrounded content, as shown both by ratings and RTs
- Acceptability ratings: continuations that elaborate on foregrounded content are rated higher than those that elaborate on backgrounded content, for all items

# Pilot study

- Great variability of judgments in the Foreground condition (item effects; critical items were not naturalistic)
- We cannot test the acceptability of refutations without taking into account the relation between foregrounded and backgrounded content
  - “Did Susan kiss Dave again today?”  
“No, she didn’t kiss Dave today” vs.  
“No, she never kissed Dave before” – **both artificial**
- Only negative answers (refutations) were tested

# Presupposition triggers

- Zeevat (1992) distinguishes *resolution* and *lexical* triggers:
  - Resolution triggers: anaphoric (involve retrieval of entity or eventuality from common ground), e.g. *again, too*
  - Lexical triggers: directly encode “preconditions” of their asserted content, e.g. *stop, regret*
- Do these categories differ in the way they cause information backgrounding?
  - Do triggers differ in this way within categories?

# Backgrounded content as a heterogeneous phenomenon?

- Zeevat's proposal suggests that presuppositions encoded by different triggers are backgrounded to a different extent
  - e.g. “John quit smoking” vs. “John won the race again”
- Assuming that we can measure ‘foreground-ness’ or ‘at-issue-ness’ in terms of refutability, differences ensue:
  - Lexical triggers: ps. required for their felicitous use in declaratives. Revising ps. makes sentence false
  - Anaphoric triggers: ps. additional information. Revising ps. allows main proposition to stand (possibly pragmatically infelicitous)

## Further hypotheses arising

- (i) You cannot felicitously deny the presupposition while agreeing with the assertion in the case of LEXICAL TRIGGERS ("Yes, although it is not the case that (ps)") whereas you can do this for ANAPHORIC TRIGGERS.
- (ii) You cannot felicitously deny the assertion on the grounds of presupposition failure with ANAPHORIC TRIGGERS ("No, because it is not the case that (presupposition)") to the same extent that you can with LEXICAL TRIGGERS.

# Our 2<sup>nd</sup> study

- Subjects were presented with written Q-A pairs. The Q contained a ps trigger. Either a positive or a negative answer was provided, in a 2\*2 design:

(I) FOREGROUND VS BACKGROUND

(II) PS ENDORSING VS PS DENYING

# PRESUPP-ENDORSING CONTROLS

Q: Did Brian lose his wallet again?

Positive +presupp

A: Yes, he did lose his wallet again.

Negative +presupp

A: No, he didn't lose his wallet this time.



## PRESUPP-DENYING

Q: Did Brian lose his wallet again?

Positive -presupp

A: Yes, although he didn't lose his wallet before.

Negative -presupp

A: No, because he didn't lose his wallet before.

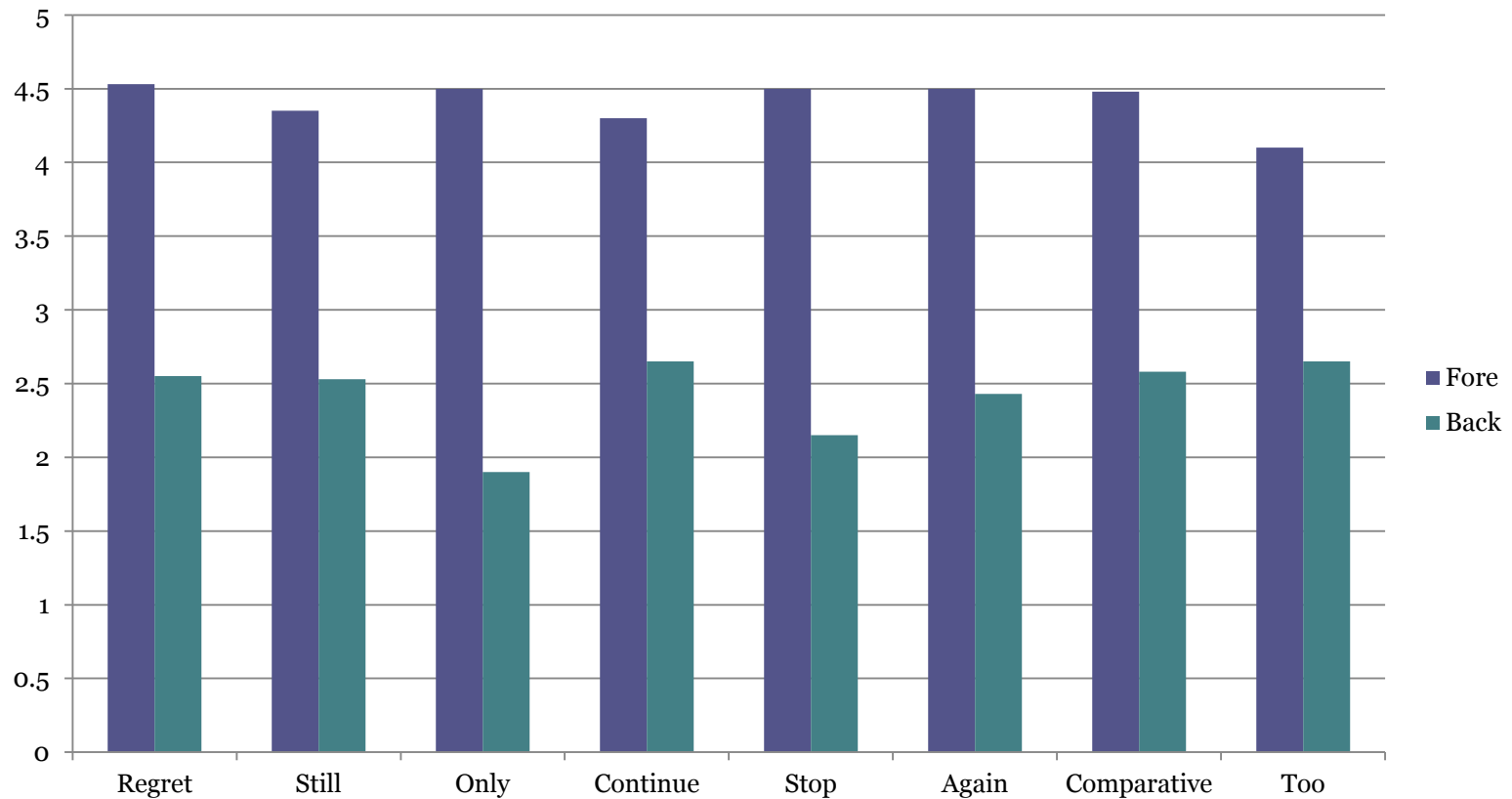
# Predictions

- Refuting asserted content *because not ps* should be better for LEXICAL TRIGGERS than for ANAPHORIC TRIGGERS
  - i.e. lexical triggers license **Negative -presupp**
- Agreeing with asserted content *although not ps* should be better for ANAPHORIC TRIGGERS than for LEXICAL TRIGGERS
  - i.e. anaphoric triggers license **Positive -presupp**

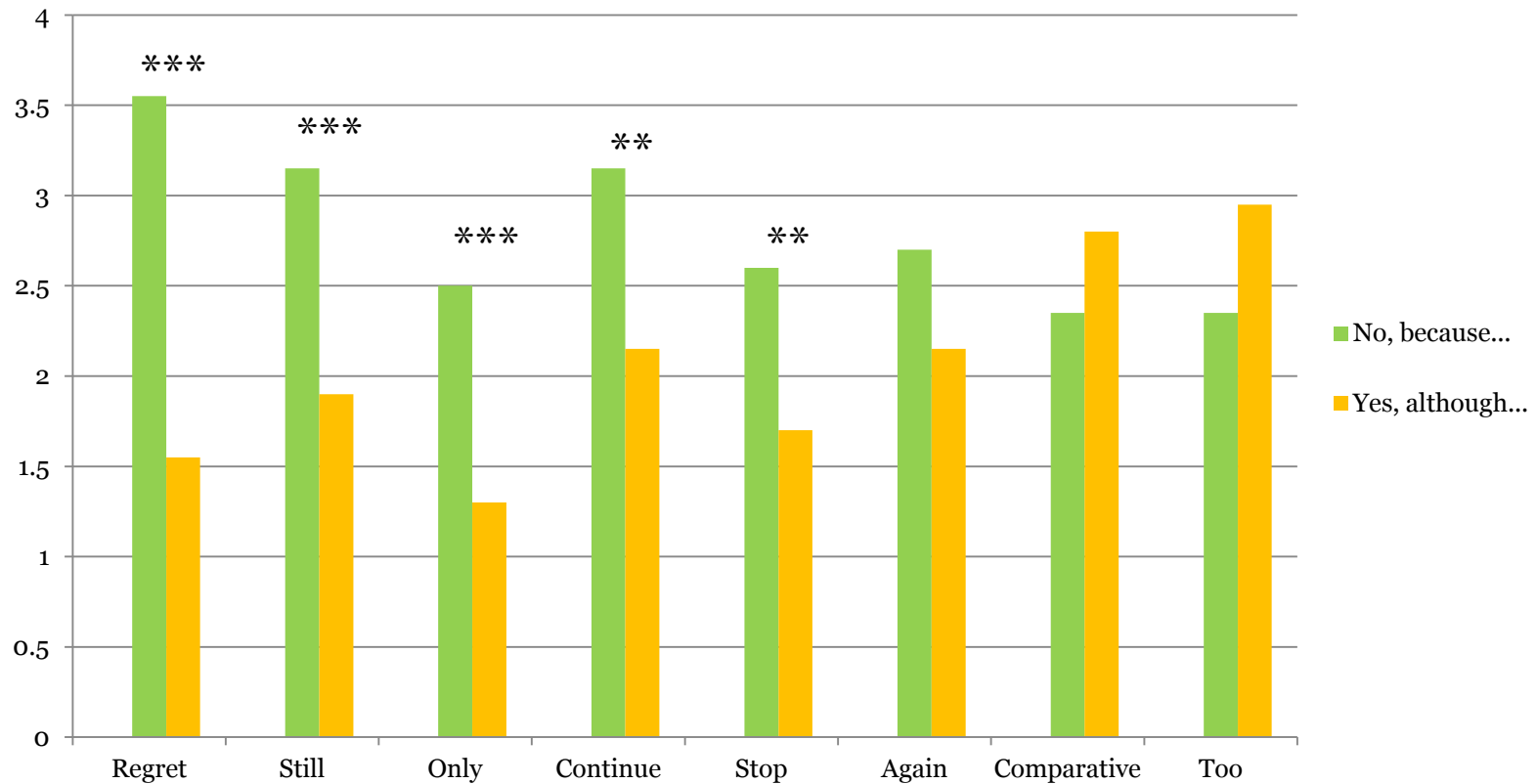
# Methodology

- Subjects were asked to rate “how natural” the answer was, on a scale of 1-5 (1: least natural, 5: most natural)
- Four versions of the experiment
- 32 critical items (4 per trigger), 24 fillers
- Response latencies were also collected (E-Prime)
- Participants (n=20) were native English speakers, students at the University of Cambridge

# Ratings: foreground vs background



# Ratings: backgrounded only



# Summary

- Preference for foreground-referring statements remains robust in all conditions
- In background case, highly significant preference for **Negative –presupp** for all lexical triggers
- Suggests that backgrounded material remains at issue for lexical but not (or less so) for resolution triggers
- *Only* seems to behave like lexical triggers wrt this test
- Supports hypotheses
- Further analysis required to determine whether apparent variability within groups is robust

# Conclusion

- This study may contribute to the project of establishing an experimentally supported typology of presuppositions (and ps triggers)
- Ultimate goal: to have a better understanding of the psychological status of non-asserted content.