# PRODUCTION OF DEACCENTING UNDER REPETITION, ENTAILMENT, AND BRIDGING: PHONETIC AND PERCEPTUAL COMPARISONS 

JEFFREY GEIGER \& MING XIANG UNIVERSITY OF CHICAGO

ICPhS 2019
MELBOURNE, AUSTRALIA
6 AUGUST 2019


THE UNIVERSITY OF
CHICAGO

## ANAPHORIC DEACCENTING - IDENTITY

She thought I played the viola, but I don't like the viola.

## ANAPHORIC DEACCENTING - NONIDENTITY

She thought I played the viola, but
I don't like string instruments.

## LICENSING DEACCENTING UNDER NONIDENTITY

## Semantic antecedence:

(Rochemont 1986, Rooth 1992, Schwarzschild 1999, Sauerland 2005, Büring 2016)

She thought I played the viola.


I don't like string instruments.

## Accommodation:

(Tancredi 1992, Fox 2000, Wagner 2012)

She thought I played the viola.
(She thought I played a string instrument.)

I don't like string instruments.

## WHICH ACCOUNT IS CORRECT?

Move beyond binary un/acceptable judgment to assess felicitousness of deaccenting under nonidentity.

Collecting naturalistic stimuli for a perception study is also an opportunity to study production.

## EXPERIMENT 1 - PRODUCTION

10 native American English speakers (5 female)
Read aloud critical sentences embedded in threesentence carrier

Constant number of syllables before critical clause onset
Instructed to read entire paragraph and plan how to say it before speaking

## CRITICAL SENTENCES

SVO and SVO

S2: monosyllable, discourse-new
O2: trochee, discourse-old

V2: iamb, variable discourse status

## CRITICAL VERB DISCOURSE STATUS

New: Second verb is fully discourse-new Elijah rebuffed Laura, and Ron embraced Laura.

Inferable: First and second verb linked by inferencing relation Veronica hugged Laura, and Ron embraced Laura.

Repeated: First and second verb identical
Christina embraced Laura, and Ron embraced Laura.

## PREDICTIONS AND QUESTION

Canonical discourse-new pattern: Elijah rebuffed Laura, and Ron embraced Laura.

Canonical discourse-old pattern:
Christina embraced Laura, and Ron embraced Laura.

Do inferable verb sentences act like new or old?

## DATA PROCESSING

Absolute phonetic correlates extracted from V2 stressed nucleus using ProsodyPro: (xu 2013)
mean intensity, mean $f_{0}$, duration

Values relativized to S2 nucleus:
relative intensity, relative $f_{0}$, relative duration

## RESULTS



Significant effect of verb status ( ${ }^{\prime}$ 's<.05)
Inferable-Repeated significant ( $p$ 's<.001)
(except rel. dur., p>.2)
Inferable-New n.s. (p’s>.2)

## EXPERIMENT 2 - PERCEPTION OF ACCENT

Does listeners' perception of accent correspond to the phonetic measurements?

Elijah rebuffed Laura, and Ron embraced Laura.

Was "embraced" emphasized or not emphasized?
200 Amazon Mechanical Turk users

## RESULTS



Significant effect of verb status ( $\mathrm{p}<.001$ )
Inferable-Repeated significant ( ${ }^{\prime}$ 's<.001)
Inferable-New n.s. (p>.2)

## DISCUSSION

New verbs: high phonetic values, perceived as emphasized

Repeated verbs: low phonetic values, perceived as not emphasized

Inferable verbs pattern with new verbs to the exclusion of repeated verbs

## DISCUSSION

Preliminary indication that anaphoric deaccenting doesn't come "for free" with semantic antecedent

Supports a licensing account with a higher cost associated with anaphoric deaccenting (accommodation)

Caveat: Participants did not plan utterances and inferencing relation may not have been obvious

## FOLLOW-UP WORK

Assessment of felicitousness of anaphorically deaccented constituents in perception

Exploration of individual differences in production and perception preferences

## THANKS TO...

National Science Foundation DDRIG \#BCS-1827404

## SELECTED REFERENCES

Büring, D. (2016). Intonation and Meaning. Oxford: Oxford University Press.
Fox, D. (2000). Economy and Semantic Interpretation. Cambridge, MA: MIT Press.
Rochemont, M. (1986). Focus in Generative Grammar. Amsterdam: John Benjamins.
Rooth, M. (1992). Ellipsis redundancy and reduction redundancy. Proceedings of the Stuttgart Ellipsis Workshop.
Sauerland, U. (2005). Don't interpret focus! Why a presuppositional account of focus fails and how a presuppositional account of givenness works. Proceedings of Sinn und Bedeutung 9. 370-384.

Schwarzschild, R. (1999). GIVENness, AvoidF and other constraints on the placement of accent. Natural Language Semantics 7(2). 141-177.

Tancredi, C. (1992). Deletion, deaccenting, and presupposition. MIT doctoral thesis.
Wagner, M. (2015). Focus and givenness: A unified approach. In I. Kučerová and A. Neeleman, eds., Contrasts and Positions in Information Structure. Cambridge: Cambridge University Press. 102-147.

Xu, Y. (2013). ProsodyPro - A tool for large-scale systematic prosody analysis. Proceedings of Tools and Resources for the Analysis of Speech Prosody. 7-10.

