

What's in a Grammar?

Mainstream speakers' processing of English negative concord

Cynthia Lukyanenko
George Mason University
Frances Blanchette
Penn State

discuss on twitter
@clukyanenko
#CUNY2020
join us on zoom (12p 3/21)
psu.zoom.us/j/302082911
post a question on OSF
or contact
clukyane@gmu.edu, fkb1@psu.edu

Background

Negative Concord

Negative Concord: Two or more overtly negative items contribute to a single semantic negation.

Heavily stigmatized in Mainstream American English (MAE) contexts, prescriptively interpreted as affirmative.

(1) The news anchor didn't warn **nobody** about the floods.
= no one was warned.

Negative Polarity

Negative Polarity: NPIs like *anybody* and *anything* are dependent on context (e.g., negation, conditionals, etc.).

(2) The news anchor didn't warn anybody about the floods.
= no one was warned.

(3) **If** the news anchor warns anybody about the floods...

Equivalent in Negative Contexts

In negative contexts, NPI and NC mean the same thing, and speakers of many English varieties use them variably (Childs, 2017; ex. from Tortora et al. 2017).

(4) I didn't have **no** lice and I didn't have any itch.
(AAPCAppe, SKCTC-EA-1, 63)
"I had no lice and I had no itch."

MAE uses only NPI. This has been interpreted to mean that NC is ungrammatical in MAE (e.g., Zeijlstra 2004).

Two Kinds of NPIs

In non-negative contexts, negative NPs and NPIs give opposite truth conditions: compare (3) and (5).

(5) **If** the news anchor warns **nobody** about the floods...

Postal (2005) proposes two NPI structures

(6) a. [_{DP} [_D NEG SOME] X] *negative structure*
b. [_{DP} [_D NEG [_D NEG SOME]] X] *non-negative structure*

Blanchette (2015) extends this to English NC, arguing that NC and NPI under negation have the same structure.

RQ: Are NC and NPIs under negation processed similarly in comprehension?

Acknowledgments

Many thanks to **Karen Miller** for the use of her eye-tracker, to **Kiara Smith** for help with item development, to **Olivia Barnum** for help with data collection and cleaning, to **all our participants** for their time, and **PSU Eberly College of Science** for funding.

Methods

Participants

N = 53; 41 women, 12 men, ages 18-66 (mean = 28)

Education:

13 high school, 24 college, 16 postgrad

Childhood Region:

34 PA, 14 other East Coast, 2 Midwest, 2 Northwest

15 rural, 35 suburban, 3 urban

NC use rating: *self* - 52 never or almost never

family - 47 never or almost never

Procedure

45-minute eye-tracking while reading task and questionnaire.

4 practice trials with feedback,

160 2-clause sentences

Random order, constraint: no adjacent critical trials.

Infelicitous second clause: 15%

Comprehension questions: 25%

Materials

48 critical sentences of 6 types, 6 Latin Square lists, 112 fillers of similar complexity.

	First Clause	Key Interest Area	Second Clause	Key Interest Area
negative	The news anchor didn't	warn { people anybody nobody } about the floods,	so folks are	gonna think it's safe to stay in their homes.
conditional	If the news anchor	warns { people anybody nobody } about the floods,	then folks are	gonna know it's risky to stay in their homes.

Results

mixed effects models, fixed effects of NP type and condition, random intercepts only
condition: effects contrasts, NP type: repeated contrasts (bare-any, any-no)

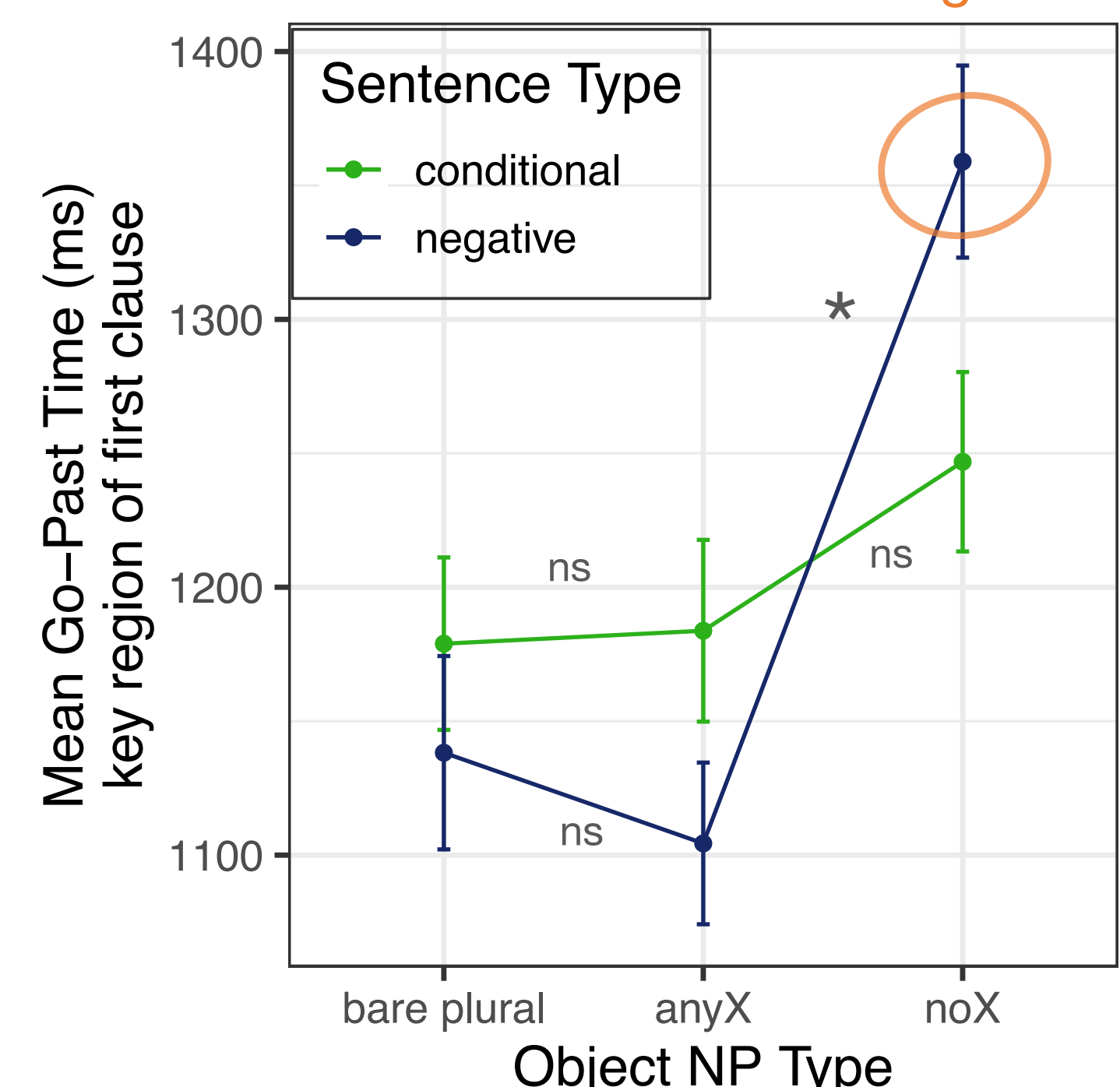
First Clause

Slow-down for stigmatized structure

(interaction any-no × condition, $p < .001$)

Slower for negative NPs than NPIs

(main effect of any-no, $p < .001$) **stigmatized**



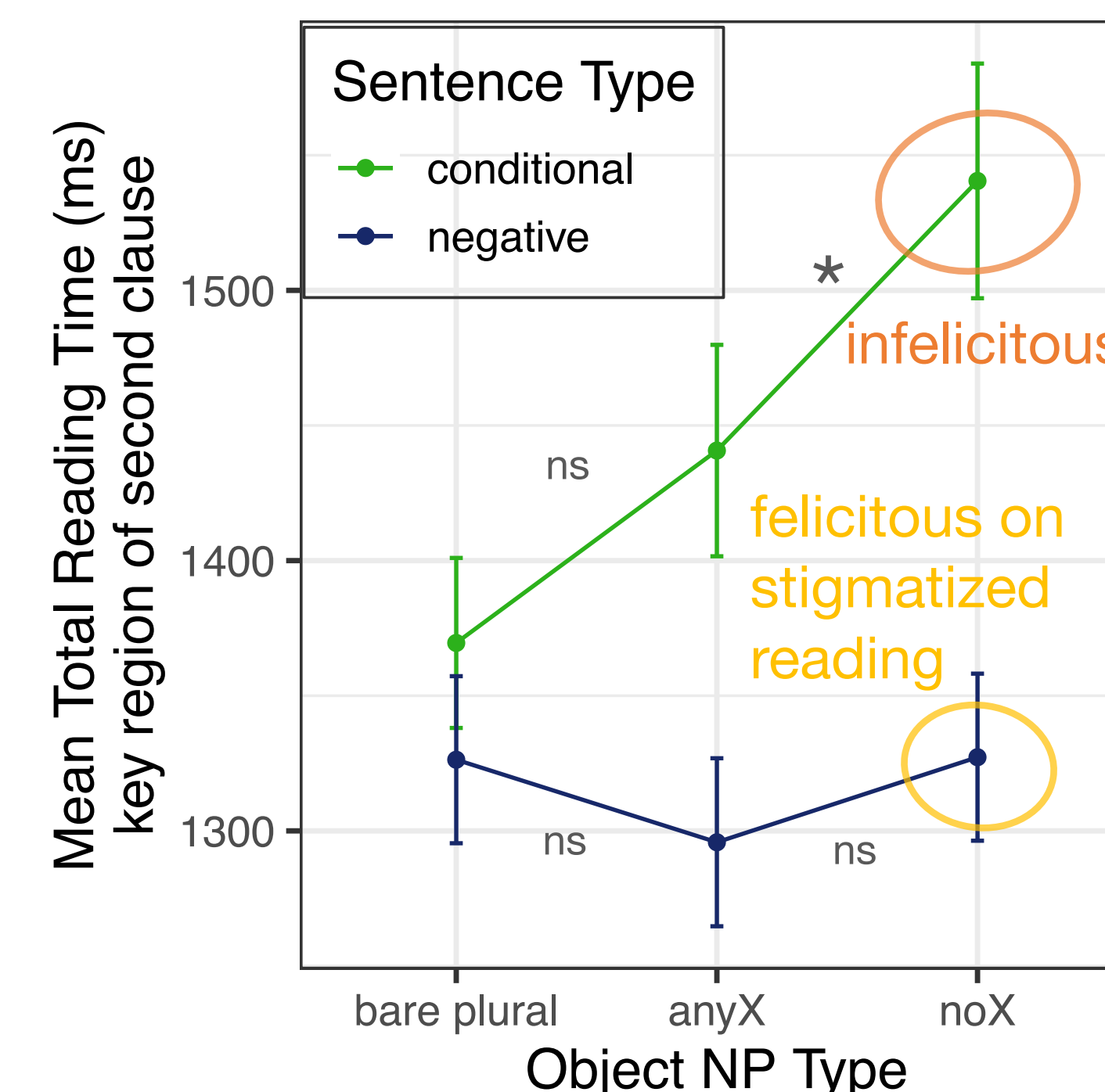
Second Clause

Slower for negative NPs than NPIs

(main effect of any-no, $p = .01$)

Conditional slower than negative

(main effect of condition, $p < .001$)



Conclusions

Further evidence that MAE speakers readily, accurately interpret object NC (cf. Blanchette & Lukyanenko 2019)

Similar second clause results for NC, NPI under negation give new evidence for Blanchette's (2015) analysis.

MAE speakers don't treat neg-NPs as equivalent to NPIs in all contexts: They're not using a short-cut.

Reanalysis?

Q: Could participants have analyzed two-neg sentences as affirmative, then reanalyzed during slowdown or later?

A: Unlikely. No second clause slowdown for NC, which would have been evidence of reanalysis or lingering effects of an earlier parse (cf. Christianson et al. 2001).

Future Directions

Corpus work using COCA, CORAAL, AAPCAppe

- Explore variation: In American English varieties that use both, do neg-NPs and NPIs appear in the same constructions? What influence speakers' choices?

Eye-tracking

- Compare processing in all three groups: MAE, African American (AAL) and Appalachian speakers.

References

Blanchette (2015) *English Negative Concord, Negative Polarity, and Double Negation*. Dissertation. | Blanchette & Lukyanenko (2019) Unacceptable grammars? An eye-tracking study of English negative concord. *Language and Cognition* | Childs (2017) *Variation and change in English negation: A cross-dialectal perspective*. Dissertation. | Christianson, Hollingworth, Halliwell & Ferreira (2001) Thematic roles assigned along the garden path linger. *Cognitive Psychology*. | Postal (2005) Suppose (if only for an hour) that Negative Polarity Items are negation-containing phrases. *Workshop on Polarity from Different Perspectives*. | Tortora, Santorini, Blanchette, & Diertani (2017) *The Audio-Aligned and Parsed Corpus of Appalachian English (AAPCAppe)*. <http://csivc.csi.cuny.edu/aapcappe/>. | Zeijlstra. (2004) *Sentential negation and negative concord*. Dissertation.