

Abstract. We present the results of a semantic judgment task with African American English (AAE), Appalachian English (AppE) and Mainstream US English (MUSE) users. Participants read sentences such as *Nobody didn't see me* with a negative subject and negated auxiliary. Sentences were presented in contexts that biased toward double negation (= 'everybody saw me') or negative concord (= 'nobody saw me') readings, and were followed by True/False judgments on statements that revealed participants' interpretation of the sentence. The results afford novel evidence for a point of microvariation in American English negation, since AppE and AAE users more readily generate both NC and DN meanings for the sentence type under study, while MUSE users are heavily biased toward DN.

Keywords. African American English; Appalachian English; Mainstream US English; negation; negative concord; interpretation

1. Introduction. English sentences with two syntactically negative items, as in (1), are ambiguous between a NEGATIVE CONCORD (NC) reading, with a single semantic negation (1a) and a DOUBLE NEGATION (DN) reading in which each syntactic negation (here *n't* and *nothing*) contributes to the semantics (1b).

(1) She didn't answer nothing in that interview.

- | | |
|---|------------------|
| a. She answered nothing | NEGATIVE CONCORD |
| b. It is not the case that she answered nothing | DOUBLE NEGATION |

While both interpretations in (1) are possible in American English, they have distinct social and linguistic distributions. The current study explores interpretations of sentences with two negations across three varieties of American English in order to better understand the factors conditioning their use and interpretation.¹ More broadly, exploration of these sentences allows us to begin to identify areas of grammatical overlap between closely related English varieties, and delineate possible grammatical boundaries that may exist.

1.1. FACTORS SHAPING NEGATIVE CONCORD AND DOUBLE NEGATION. NC constructions such as (1/1a) are employed systematically in virtually all vernacular varieties of American English (Wolfram & Fasold 1974). Historically part of the mainstream or "standardized" variety, NC was eschewed by individuals attempting to climb in social class during the Late Modern English period (around the 18th–19th centuries, Nevalainen 2006). In contemporary English-speaking society there is a strong prescriptive bias against NC, and its use tends to be associated with groups who have been marginalized in certain societal contexts.

* Many thanks to community and student RAs India Matthews, Skyler Baker-Rasnic, Alyson DeMarco, Luciano Ragonese, Malcolm Patton and Patrick Joyce, and to all of our participants. This research was conducted as part of NSF collaborative research grant #2234039. Authors: Brittany Lee-Bey, George Mason University (blee51@gmu.edu) & Frances Blanchette, Penn State University (fkbl@psu.edu), Jessica A. Grieser, University of Michigan (jgrieser@umich.edu), Paul E. Reed, University of Alabama (pereed1@ua.edu), Cynthia Lukyanenko, George Mason University (clukyane@gmu.edu).

¹ The results reported here are drawn from the interpretation portion of an eye-tracking while reading study. Data collection is ongoing.

In contrast to the more common NC reading of (1), the DN reading of structures like this is linguistically more complex. This is because, if each negation is computed in the semantics, it becomes logically equivalent to an affirmative: if it is not the case that she answered nothing, then she must have answered something. Since simply stating the affirmative is much simpler, speakers typically need a contextual reason for using DN, such as a situation in which where they wish to deny a previous utterance (Horn 2001). An example of a facilitating context for DN is shown in (2).

- (2) a. Speaker A: I can't believe she didn't answer any of the questions!
 b. Speaker B: Actually she didn't answer nothing in that interview—I heard her answer at least one question.

The context in (2) might be paired with prosodic emphasis on one or both of the negative elements (Blanchette et al. 2018; Prieto et al. 2013). Its special prosodic patterns provide further support for the idea that, though prescriptively “correct”, DN is linguistically more complex relative to NC.

1.2. STATUS OF NEGATIVE CONCORD IN MAINSTREAM US ENGLISH. One approach to patterns of multiple negation cross-linguistically has been to classify languages as “NC languages” or “DN languages”. Theorists who do this argue that DN and NC languages represent distinct underlying grammatical systems (Zeijlstra 2004). In DN grammars, negative elements are said to be semantically interpretable; that is, each item obligatorily contributes to the sentence’s meaning, resulting in DN interpretations of sentences like (1). In such sentences, if each negation (*n’t* and *nothing*) is interpretable, their combination will result in an affirmative reading, as in (1b). In NC grammars, on the other hand, not all negative elements encode negative meaning; some function as markers of syntactic agreement. Under theories that delineate a grammatical boundary between NC and DN languages, NC languages have a phonologically null negative operator that contributes the semantic negation, and syntactic negations such as *n’t* and *nothing* simply signal agreement with that operator. On this theory, NC should not be generated in DN languages, and while NC languages may generate DN, its underlying structure would be distinct from that of a true DN language.

Mainstream US English (MUSE) is the spoken or written English that is taught in schools and is used in the workplace, in newspapers, on news broadcasts, and by politicians. MUSE is largely defined by the absence of socially stigmatized constructions, including NC. Because of the lack of NC in usage in this variety, it has typically been considered a DN language. However, NC is attested in most, perhaps all non-mainstream English varieties (Wolfram & Fasold 1974). This has led researchers to question whether NC is in fact a grammatical boundary between MUSE and other English varieties. If it is, then MUSE would be a DN language, but vernacular English varieties would be NC languages. If it is not, then it presents a strong challenge to theories that propose NC and DN syntactic mechanisms to be mutually exclusive.

Recent experimental work has explored whether, despite the prescriptive prohibition on NC and its absence from MUSE users’ production, they might nevertheless readily understand NC in context. Perhaps the strongest evidence that they do is provided in Blanchette & Lukyanenko (2019). These authors employed eye-tracking while reading and a metalinguistic judgment task to examine how MUSE users process and interpret sentences with two negations. The study con-

trasted sentences with a negative phrase in direct object position with sentences in which the negative phrase was in preverbal subject position, as in example (3).

(3) Blanchette & Lukyanenko (2019) Structure Types

- | | |
|--------------------------|------------------|
| a. I didn't see nobody. | NEGATIVE OBJECT |
| b. Nobody didn't see me. | NEGATIVE SUBJECT |

Stimuli such as those in (3) were preceded by a context sentence biasing participants toward a DN or and NC reading, and were followed by true or false statements probing participants' interpretation.

In their responses to true or false statements following the stimuli, MUSE users demonstrated higher accuracy in NC contexts for negative object sentences (3a) compared to negative subject sentences (3b). In other words, when a negative phrase occurred in object position following a negated auxiliary, MUSE users were more likely to interpret the sentence as NC rather than DN. The reverse was true for negative subject sentences, since despite the pragmatic complexity of DN, MUSE users had higher accuracy in DN contexts for these. These findings, paired with evidence from participants' eye movements, suggest that MUSE users readily generate NC interpretations of sentences such as (3a), despite the apparent absence of NC from their usage. The authors suggest that object NC structures therefore represent an area of grammatical overlap between MUSE users and users of varieties in which NC is attested. Since negative subject sentences such as (3b) were more readily interpreted as DN and not NC, they further suggest that these structures may represent a grammatical boundary between varieties that do and do not employ NC in usage.

1.3. NEGATIVE CONCORD ACROSS AMERICAN ENGLISHES. Interestingly, among vernacular Englishes, patterns of NC vary. The two varieties of American English most relevant for the current study are African American English and Appalachian English.

African American English is an English variety primarily spoken by many African Americans. Common grammatical features include the null copula (as in *he at the store* meaning 'he is at the store') and NC, the focus of this research study. This research study specifically looks at African American English spoken in DC, given that there is regional variation within dialect.

Appalachian English is spoken across a broad region stretching from southwestern New York to northeastern Mississippi, including the majority of the Appalachian mountain range and many adjacent areas in between. It is characterized by features such as double modals (e.g., *might could*). This study focuses specifically on the variety spoken in Sneedville, Tennessee.

An in-progress analysis of two corpora, the DC sub-corpora of the *Corpus of Regional African American Language* (CORAAL: Kendall & Farrington 2023) and the *Audio-Aligned and Parsed Corpus of Appalachian English* (AAPCApPE: Tortora et al. 2017) suggests that patterns of NC differ somewhat between the two varieties.² In particular, while NC is attested and common in both varieties, they show different structural preferences for subject NC.

The examples in (4-5) illustrate two different patterns for NC with a negative subject, each of which is attested in each corpus.

² See Blanchette & Lukyanenko (2026), this volume, for preliminary results of the comparative corpus analysis.

- (4) Preverbal Subject NC in CORAAL and AAPCAppE
- a. *Nobody didn't wanna help me.* (CORAAL-DCB_SE1_AG4_F_01)
 - b. *Nobody didn't have water in the house.* (AAPCAppE-ALC-RN-1.83)
- (5) Postverbal Subject NC in CORAAL and AAPCAppE
- a. *Don't nobody even call it Chocolate City anymore.* (CORAAL-DCB_SE1_AG2_F_01)
 - b. *Didn't nobody beat them.* (AAPCAppE-ALC-377-1.77)

As the examples in (4) and (5) show, NC sentences in African American and Appalachian English may have a negative subject preceding or following a negated auxiliary (*don't*, *didn't*). Sentences in which the negative subject precedes the auxiliary, such as (4a) and (4b), are ambiguous between a DN and an NC reading. In contrast, only the NC reading is possible for sentences like (5a) and (5b), in which the auxiliary appears before the negative subject—a pattern known as NEGATIVE AUXILIARY INVERSION (Green 2014).

In CORAAL-DC, sentences with a negative subject occur as single negation (e.g., *nobody wanted to help me*) in 57% of the tokens, and as NC in 39% of tokens. Of those 39%, postverbal subject (negative auxiliary inversion) sentences make up 29% and preverbal subject NC sentences make up 10%. In the AAPCAppE, sentences with a negative subject occur as single negation 57% of the time, a rate similar to CORAAL-DC. However, the structural patterns across corpora differ when there are two negations: of the 43% of tokens that show subject NC in the AAPCAppE, 35% are preverbal and only 8% are postverbal, essentially the reverse of the pattern found in CORAAL. This may be a surface-level difference in these two varieties in which NC is used, or it may reflect an underlying grammatical difference—a possibility that this study aims to investigate.

1.4. THE CURRENT STUDY. Previous research implicates a grammatical boundary between mainstream and vernacular varieties of English with respect to NC (e.g., Zeijlstra 2004). However, experimental evidence suggests that, at least for sentences with negative objects, as in (3a), MUSE speakers find NC interpretations to be easier to access than DN interpretations (Blanchette & Lukyanenko 2019), contrary to the predictions of such theories. Sentences with preverbal negative subjects, such as (3b), on the other hand, appear to present a greater challenge for MUSE users, who find the NC interpretation of these harder to access. Negative subject NC sentences also present an interesting point of variation in Appalachian and African American Language, since these appear more frequently as preverbal subject NC in AAPCAppE and in postverbal, negative auxiliary inversion constructions in CORAAL. Previous work thus paints a complex picture with regard to the status of subject NC across American English varieties, which is yet to be fully understood. Since the data from MUSE users are from experimental work and the data from Appalachian and African American Language users are from naturalistic production, the lack of a directly comparable data set presents a barrier to our understanding, which this study aims to address.

The current study examines how mainstream US English overlaps with vernacular American Englishes and investigates the grammatical boundaries between three US English varieties. We use experimental methods to compare how MUSE, AAE and AppE speakers interpret sentences

with two negations, one of which is in preverbal subject position. We focus specifically on participants' interpretations of such sentences when presented in contexts that bias them toward an NC or a DN reading. These interpretations were measured as part of a larger study that also recorded real-time eye-tracking measures as participants read the sentences.

We expected AAE and AppE speakers to generate more NC interpretations than MUSE speakers, given corpus patterns and prior experimental results. While double negation readings are expected to be available to all varieties, subject NC may only be available in AAE and AppE. Our focus in this study is on sentences with a preverbal negative subject, since these are ambiguous between NC and DN, and since subject NC appears more likely than object NC to represent a boundary between American English grammars.³ Further, exploring patterns of responses among AAE and AppE users will allow us to explore how the frequency of an available structure influences interpretation. If frequency matters, we would expect AAE users to produce fewer NC interpretations than AppE users. If it does not matter, at least for constructions that are already low frequency, like subject NC, then we might expect similar rates of NC interpretations in the AppE and AAE groups.

2. Methods.

2.1. PARTICIPANTS. To date, 102 people have participated in this study, 30 from the AppE speaker community, 22 from the AAE speaker community in and around Washington, DC, and 50 MUSE speakers from the Penn State University community. An additional two participants (one from the AAE community and one from the AppE community) were excluded because they did not contribute enough eye-tracking data, likely due to poor track: their eye-tracking records included fixations in fewer than half of the interest areas for more than half of critical trials of each type. Data collection is ongoing for the AAE and AppE groups.

To participate, speakers confirmed they were 18 years old or older and native English speakers. Research and community assistants recruited participants through flyers distributed in community spaces and at community events, as well as researchers and assistants' connections with members of the three speaker communities.

The experiment, including consent, calibration of the equipment, the reading task itself, and a post-task survey, was completed in approximately 30-60 minutes. Participants were compensated \$20 per hour for their time.

2.1.1. APPALACHIAN ENGLISH (APPE) GROUP. The Appalachian English group thus far comprises 30 participants with an average age of 42.9 years (range 18-78 years), and includes 23 women, 6 men and one person who preferred not to be grouped by gender. Twenty-nine self-reported their ethnicity/race as white, and one as African-American and white. Highest level of education completed ranged from high school ($n=8$), through graduate degrees (master's or other professional degree $n=6$; doctorate $n=2$), with most participants having completed at least some college education (associate's degree $n=4$; some college $n=5$; bachelor's degree $n=5$). All but two participants reported that they hear negative concord 'sometimes' or 'frequently'.

2.1.2. AFRICAN AMERICAN ENGLISH (AAE) GROUP. The African American English group thus far comprises 22 participants, with an average age of 44.5 years (range 19-69 years), and includes 11 women, 7 men and 4 people who preferred not to be grouped by gender. Eighteen

³ In other work we are exploring differences in processing and comprehension of sentences with postverbal negative objects, with the same participant groups under study here.

self-reported their ethnicity/race as African-American, 3 as African-American and Hispanic, and one as African-American, Native American and white. Highest level of education completed ranged from high school (n=2), through graduate degrees (master's or other professional degree n=7), with most participants having completed at least some college education (some college n=7; bachelor's degree n=6). All but two participants reported that they hear negative concord 'sometimes' or 'frequently'.

2.1.3. MAINSTREAM US ENGLISH (MUSE) GROUP. The Mainstream US English group comprises 50 participants, with an average age of 32.4 years (range 19-74 years), and includes 34 women, 12 men and 4 non-binary participants. Forty-one self-reported their ethnicity/race as white, 4 as Asian, 2 as white and Hispanic, one as Asian and white, one as Hispanic, and one as African-American. Highest level of education completed ranged from some college (n = 21), to a bachelor's degree (n = 12), to graduate degrees (master's or other professional degree n = 15; doctorate n = 2). Only two participants reported that they hear negative concord 'frequently', and 24 reported that they never hear negative concord.

2.2. STIMULI. Each trial in the main portion of the study consisted of two sentences, a context sentence and a target sentence, displayed on the same screen. Text was displayed in black font on a white background. Each sentence fit on a single line, and sentences were presented with a vertical gap between them. This screen was followed by a second screen containing a statement about the content of the previous sentences that participants judged as true or false.

Critical sentences contained a negative subject that preceded a negative auxiliary, as shown in (7), and were paired with context sentences that biased participants toward a double negation or a negative concord interpretation as in (6):

- | | | | |
|-----|----|---|------------|
| (6) | a. | Carol published her famous recipe in the church newsletter. | DN CONTEXT |
| | b. | Carol published her awful recipe in the church newsletter. | NC CONTEXT |

(7) Nobody didn't try the new recipe.

Participants were presented with 32 critical sentences, half in an NC-biasing context and the other half in a DN-biasing context, and 64 filler trials of similar structure and complexity, for a total of 96 trials. Critical sentences were presented in a Latin square design so that each critical sentence was paired with both a negative concord and a double negation context sentence across participants, but each participant only saw the critical sentence in one context type. Trials were pseudo-randomized for each participant such that no more than two trials of the same type appeared in a row.

2.3. PROCEDURE. Participants eye-movements were tracked as they read sentence pairs presented to them on a computer screen. After reading each context and target sentence pair, participants proceeded to the next screen and responded to a true or false statement. For the crucial trials in which target sentences contained two negations, the true-false judgment probed their interpretation of the critical sentence, as shown in (8).

- (8) The churchgoers tried the recipe.
True or False?

Critical sentences, as in (7), can have either an NC or DN interpretation, and are presented following context sentences designed to elicit one of these interpretations. The true or false statement in (8) probes the participants' reading of the critical sentence. For this example, the target response to (8) when the critical sentence is presented with a DN-biasing context sentence is true, while the target response for the NC-biasing context is false. True and false answers were counterbalanced across context types: half of the expected responses were true and half were false for both DN- and NC-biasing contexts.

The eye-tracking portion of the experiment was completed in 20-40 minutes, including time for calibration, instructions being read and the completion of 4 practice trials with feedback. Participants were offered a break at the midpoint of the experiment. Following the reading task, participants completed a survey to gather background information, including age, education level, place of upbringing, and ratings on how likely the participant or their family and friends are to use constructions attested in AAE and AppE.

3. Results. This study aimed to examine whether preverbal subject negative concord represents a grammatical boundary between mainstream and vernacular English varieties. The results suggest that speakers' English variety affects their interpretation of sentences with a negative subject and auxiliary, and that subject negative concord may represent such a boundary.

The proportion of NC-consistent responses participants gave to the true/false questions is shown in Figure 1, divided by context and speaker group. All three speaker groups gave more NC-consistent responses in NC-biasing contexts (blue bars) than in DN-biasing contexts (green bars). Appalachian English and African American English groups were more likely to give NC responses overall, but interestingly, the size of the difference between the NC responses in the DN contexts compared to the NC contexts is similar for all three groups. This suggests that while NC readings were more accessible for participants whose variety employs this structure as NC, all three groups were influenced by the context manipulation to a similar degree.

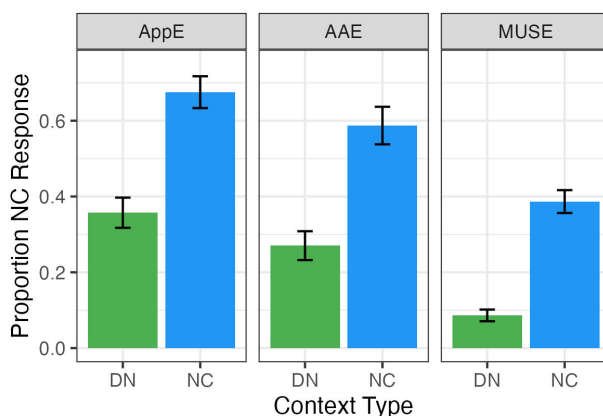


Figure 1. Proportion of NC responses by context type and group, showing mean and standard error.

These patterns were supported by the results of a mixed-effects logistic regression model with NC interpretation as the dependent variable. The model had fixed effects of context type

(effects coded: NC = 0.5, DN = -0.5), variety (Helmert-coded: AAE-AppE, MUSE-others), and all interactions. The model also included random intercepts for participant and sentence, and the random slope of context type by participant. Models were fit using the *lme4* package version 2.0-1 (Bates et al. 2015), in R version 4.5.2 (R Core Team 2025).

As shown in Table 1, the model revealed a significant effect of context such that NC-biasing contexts received more NC responses, and a significant effect of the MUSE-others variety comparison such that MUSE users provided reliably fewer NC responses than the other groups, but no reliable effects of the AAE-AppE contrast or either of the interactions.

Fixed Effect	Estimate	St. Err.	z-value	p-value
Intercept	-0.744	0.20	-3.65	< .001
variety: AAE-AppE	-0.611	0.47	-1.31	.19
variety: MUSE-others	-1.815	0.34	-5.34	< .001
context	2.261	0.17	13.62	< .001
variety: AAE-AppE $\times$ context	-0.167	0.41	-0.41	.68
variety: MUSE-otherx $\times$ context	0.425	0.32	1.32	.19

Table 1. Summary of generalized linear mixed-effects model results.

These results suggest that speakers of varieties that regularly employ negative concord find negative concord meanings easier to access than speakers of varieties that do not employ negative concord. Interestingly, in the current sample it does not appear that the frequency of preverbal subject negative concord in participants' variety has a strong effect on their ability to reach NC interpretations: Though AppE users provide numerically more NC responses than AAE users, this was not a reliable difference at this point.

4. Discussion and Conclusions. In the current paper, we report partial results of a study exploring participants' interpretations of sentences with a preverbal negative subject and negative auxiliary across three groups of speakers: Appalachian English users, African American English users and Mainstream US English users. Results suggest that all three groups were influenced by biasing contexts to similar degrees, but that AppE and AAE users reached more NC interpretations than MUSE users. These results suggest that the presence or absence of NC in a variety matters for speakers' ability to generate NC interpretations, but that the frequency of a particular structure may be less important.

The current findings are consistent with those from Blanchette & Lukyanenko (2019), which shows that MUSE speakers prefer DN interpretations of sentences with a negative subject and a negative auxiliary: they have lower accuracy scores and slower reading times for these sentences when presented in an NC biasing-context compared to a DN-biasing context. Thus, the current results together with prior studies suggest that preverbal negative subject sentences are primarily DN constructions in MUSE grammars. The current study goes further by showing that this differs from the grammar of AAE and AppE speakers, who produce preverbal negative subject NC sentences and reach more NC readings for these structures than MUSE users.

Preliminary analysis of the eye-tracking data are consistent with the interpretation data, and add an additional dimension. To help quantify the ease or difficulty of interpretation, participants' total reading time on the critical sentence and the amount of time they spent revisiting the context sentence after the critical sentence had first been fixated were measured and compared. Faster

reading and less rereading suggest easier processing and slower times suggest difficulty. Total times and rereading times for trials in which participants arrived at the target interpretation were similar in NC- and DN-biasing contexts for both AppE and AAE users, but were much longer in NC-biasing contexts than in DN-biasing contexts for MUSE users. This suggests that, in addition to providing fewer NC responses overall, MUSE users found those NC responses they did provide much harder to arrive at.

The current findings demonstrate that MUSE speakers exhibit much lower readiness to access an NC reading than AppE and AAE speakers, in sentences where a negative subject precedes a negated auxiliary. The preliminary results of this study therefore suggest that NC does not have a uniform representation in American English, and that preverbal subject NC may represent a grammatical boundary between American Englishes. In the context of previous experimental results (Blanchette & Lukyanenko 2019), the results therefore point toward an important distinction between object and preverbal subject negative concord in American English, and an important gap in MUSE users' grammars.

Further, while it is not statistically significant in the current sample, the numerical difference between AAE and AppE responses is in the direction expected, given that the preverbal negative subject construction occurs more commonly in AppE than in AAE, where postverbal negative subjects (negative auxiliary inversion structures) are more common. There are two possibilities for what will happen in the full dataset. The numerical difference may stabilize or grow and become statistically reliable, or it may remain unreliable. If it becomes reliable, it would align with other work suggesting that the higher frequency a structure is in participants' experience, the easier it will be for them to process it (*e.g.*, Luka & Barsalou 2005; Trueswell 1996). If it remains small and statistically unreliable, it would suggest that, at least for this low-frequency structure, the difference in frequency between the two varieties is not large enough to make a difference in processing, and that the key ingredient is the availability of the structure in the variety at all.

In sum, these results demonstrate that MUSE users find the negative concord reading of sentences with a preverbal negative subject and negative auxiliary harder to access than AppE and AAE users do. Together with the preliminary eye-tracking results, findings suggest that even when MUSE users arrive at the NC interpretation, the way they do this may be different from participants' whose variety includes the structure, suggesting a grammatical boundary between American Englishes. In future work, in addition to completing data collection for the project reported here, we will explore the status of object negative concord in the same three varieties, as well as the sociolinguistic knowledge associated with speakers' representations of these structures.

References

- Bates, Douglas, Martin Mächler, Ben Bolker & Steve Walker. 2015. Fitting linear mixed-effects models using lme4. *Journal of Statistical Software* 67(1). 1–48.
<https://doi.org/10.18637/jss.v067.i01>.
- Blanchette, Frances & Cynthia Lukyanenko. 2019. Unacceptable grammars? an eye-tracking study of english negative concord. *Language and Cognition* 11(1). 1–40.
- Blanchette, Frances & Cynthia Lukyanenko. 2026. Microvariation in american english negative concord: A comparative corpus study. In *Proceedings of the linguistic society of america annual meeting*, New Orleans, LA. Presented at the Annual Meeting of the Linguistic Society of America, January 8–11, 2026.

- Blanchette, Frances, Jeremy Yeaton, Marianna Nadeu & Viviane Déprez. 2018. English negative concord and double negation: The division of labor between syntax and pragmatics. In *Proceedings of the linguistic society of america annual meeting*, vol. 3 1, Washington, DC: Linguistic Society of America.
- Green, Lisa. 2014. Force, focus, and negation in african american english. In *In raffaella zanutini and laurence r. horn (eds.), micro-syntactic variation in north american english*, 115–142. Oxford: Oxford University Press.
- Horn, Laurence R. 2001. *A natural history of negation*. Stanford, CA: CSLI Publications. Originally published 1989 by University of Chicago Press.
- Kendall, Tyler & Charlie Farrington. 2023. The Corpus of Regional African American Language (CORAAL). <https://oraal.github.io/coraal>. <https://doi.org/10.7264/1ad5-6t35>. Version 2023.06, The Online Resources for African American Language Project, Eugene, OR. Accessed: 2026-03-04.
- Luka, Barbara J & Lawrence W Barsalou. 2005. Structural facilitation: Mere exposure effects for grammatical acceptability as evidence for syntactic priming in comprehension. *Journal of Memory and Language* 52(3). 436–459.
- Nevalainen, Terttu. 2006. Negative concord as an english vernacular universal. In Ans van Kemenade & Bettelou Los (eds.), *The handbook of the history of english*, 257–278. Oxford: Blackwell.
- Prieto, Pilar, Joaquim Comes Borràs & Joaquim Comes. 2013. Prosody and gesture constrain the interpretation of double negation. In *Proceedings of the lsa annual meeting*, 334–348. Linguistic Society of America. https://www.researchgate.net/publication/256806514_Prosody_and_gesture_constrain_the_interpretation_of_double_negation. Held at the LSA Annual Meeting, Boston, MA, January 3-6.
- R Core Team. 2025. *R: A language and environment for statistical computing*. R Foundation for Statistical Computing Vienna, Austria. <https://www.R-project.org/>.
- Tortora, Christina, Beatrice Santorini, Frances Blanchette & C.E.A. Diertani. 2017. The audio-aligned and parsed corpus of appalachian english (aapcappe), version 0.1. <https://aapcappe.commons.gc.cuny.edu/citing-the-aapcappe/>. Accessed: 2026-03-04.
- Trueswell, John C. 1996. The role of lexical frequency in syntactic ambiguity resolution. *Journal of memory and language* 35(4). 566–585.
- Wolfram, Walt & Ralph W. Fasold. 1974. *The study of social dialects in american english*. Englewood Cliffs, NJ: Prentice-Hall.
- Zeijlstra, Hedde. 2004. *Sentential negation and negative concord*. Utrecht: University of Amsterdam dissertation.