# Subject-Object Asymmetries in English Sentences with Two Negatives

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### 1 Introduction

Consider the following:

(1) a. John didn't eat nothing.

Sentence (1a) contains the negative marker -n't and the object nothing, and has two interpretations. One is the Negative Concord (NC) interpretation, in which the two negatives mark the same semantic negation. The other is a true semantic double negation (DN), logically equivalent to an affirmative statement. Both are illustrated here:

(1) b. NC: John ate nothing.

c. DN: It is not the case that John ate nothing. (= John ate something.)

These interpretations have distinct pragmatic conditions. While (1b) is felicitous out of the blue, (1c) requires a denial context in which another speaker asserts that John ate nothing. The DN in (1a, c) also involves contrastive stress on the negative elements, but the NC version does not.

Historically NC was commonplace in English (see, e.g., Shakespeare's *Twelfth Night*). However, around the time of Bishop Lowth's (1762) decree that "two negatives should equal a positive", English NC had already begun to undergo a process of social stigmatization (Horn 2010). This stigma persists today, despite the presence of NC in most American Englishes (Wolfram & Fasold 1974). Nevalainen (1998, 2006) shows that the socially motivated shift away from NC involved the diachronic replacement of negative constituents like *nothing* as in (1a, c) with negative polarity items like *anything*. In contemporary English, the acceptable or mainstream alternative to the NC version of (1b) is as follows:

(2) John didn't eat anything.

Using data from *The Audio-Aligned and Parsed Corpus of Appalachian English* (Tortora et al. In Progress), Blanchette (2015) shows that NC and NPI constructions appear in the same linguistic contexts. Applying the model of NPIs in Postal (2005) and Collins and Postal (2014) to NC, Blanchette proposes that (2) and its NC counterpart in (1a, c) have the same structure:

(3) John did-NEG eat [NEG SOME thing]



In (3), the negation is introduced by the noun phrase [NEG SOME thing], then raises and adjoins to the auxiliary. In Collins and Postal (2014), the lower NEG is unpronounced and SOME spells out as *any*. Blanchette proposes that in NC, the lower NEG spells out as a resumptive negation. (See also Collins et al.'s (2015) analysis of NPIs in Ewe.)

Consider now the following:

(4) Nobody didn't eat.

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Placing the negative constituent in subject position, as in (4), and not object position, as in (1), yields two distinctions. First, as Smith (2001) shows, the NC version of sentences like (4) (henceforth Subject NC) is much less common than the pattern in (1a, b) (Object NC). Second, for English speakers like me who do not use NC, sentences like (4) yield a DN and not an NC interpretation out of the blue, unlike (1) in which the NC interpretation is the default. Object NC and Subject NC are thus distinct in both usage and interpretation.

Note now that NPIs may be unacceptable in subject position:

#### (5) \*Anybody didn't eat.

Contrasting (5) with (2), we see that like NC, NPI constructions also have subject-object asymmetries. Under the hypothesis that some NC and NPI constructions have the structure in (3), sentence (5) is unacceptable for the same reason that speakers like me get a DN and not an NC interpretation for (4). This hypothesis thus distinguishes between Object NC/NPI grammars on the one hand, and Subject NC/Object NC/NPI grammars on the other.

This paper provides quantitative empirical support for this hypothesized distinction between Subject NC and non-Subject NC grammars. Section 2 describes the methodology for a gradient acceptability study of English sentences with two negatives. Section 3 reports and discusses the results of that study. In Section 4, I present a follow-up study on sentences with a single negative. Section 5 summarizes and discusses the implications of the overall results of both studies, and Section 6 concludes.

# 2 Methodology

#### 2.1 Research Questions

The two negatives study addresses the following questions:

- (i) Does the acceptability of sentences with two negatives pattern like NPI acceptability?
- (ii) How does context type (NC vs. DN) impact sentence acceptability?
- (iii) Does the effect of context type vary with the position of the negative constituent (subject vs. object)?

Under Blanchette's (2015) hypothesis that English NPI and NC constructions have the same structure, Subject NC is grammatical for only a subset of NC users. Concurrently, Object NC is grammatical for NC users and also for non-NC users, who use NPI constructions. Question (i) asks whether this grammatical distinction between Subject and Object NC/NPIs is reflected in acceptability judgments.

If NPI and NC constructions have the same structure, then they are generated in the same set of semantic contexts. Question (ii) asks whether NC or DN contexts are preferable overall, and (iii) refines this by asking whether preference for context type will vary depending on the syntactic position of the negative constituent.

#### 2.2 Design and Items

To answer questions (i) through (iii), I asked native English speaking adults from various parts of the United States to rate the naturalness of sentences with two negatives using a Likert scale of one to seven. The survey included two training items, sixteen test items, and thirty-two fillers. Each item had a past tense auxiliary or modal negated with -n't, and a single negative constituent. The position of the negative constituent was systematically varied: Eight test items had a negative object, and eight had a negative subject.

Following the methodology in Keller (2000), participants were divided into two groups: the No-Context Group and the Context Group (see also Cowart 1997). The No-Context Group re-

<sup>&</sup>lt;sup>1</sup>Blanchette (2015) argues that the distinction is due to a Remnant Raising Condition adapted from Collins et al. (2015). The mechanics of this condition are beyond the current scope.

ceived their test items as single sentences with no preceding context. The following examples illustrate a negative object and a negative subject test item in the No-Context Group:

- (6) He didn't take nobody on the trip.
- (7) Nobody didn't help patients on that day.

All items contained a transitive verb and a prepositional phrase adjunct. The thirty-two fillers varied in terms of their relative acceptability and grammatical complexity.

The Context Group received the same sixteen test items and thirty-two fillers as the No-Context Group. However, the Context Group also received a single context sentence preceding the test item, which elicited either an NC or a DN interpretation. Of the eight negative object items, four were preceded by an NC context and four were preceded by a DN context, and the same was the case for the negative subject items. To control for lexical effects, the Context Group was split into two subgroups. If one group received a particular item in an NC context, then the other group received that same item in a DN context. Example (8) shows an NC context provided for one item, and example (9) shows the DN context for that same item:

(8) Context Group Object NC:

Context: John went on vacation all alone. Item: He didn't take nobody on the trip.

(9) Context Group Object DN item:

Context: Mary said John went on the trip alone, but Mary's wrong.

Item: He didn't take nobody on the trip.

Context type was systematically varied for both negative object and negative subject items.

#### 2.3 Predictions

The hypothesis that some English speakers have Object NC but not Subject NC Grammars predicts that, though sentences with two negatives may be unacceptable overall due to their social stigma, gradient judgments should reveal a preference for sentences with a negative object over sentences with a negative subject. I thus predict an overall asymmetry in both the context and nocontext groups, with a preference for negative objects over negative subjects. An alternative hypothesis is that the items are unacceptable because they are ungrammatical. Under this hypothesis, there should be no difference in acceptability between sentences with a negative object and those with a negative subject.

Another prediction is that NC contexts will be preferred over DN contexts only when the negative constituent is in object position. This is because Object NC is grammatical (though unacceptable), and it is the default, out of the blue interpretation for strings with a negated auxiliary and a negative object. However, given its two semantic negations and its reliance on context, Object DN has more processing complexity than Object NC, and should therefore be degraded. An alternative hypothesis is the one in Zeijlstra (2004), which proposes that UG has NC and DN grammars. This hypothesis predicts that either NC or DN contexts should be preferred overall, and that this preference should not vary with the position of the negative constituent.

#### 2.4 Participants

Amazon's Mechanical Turk was used to recruit and compensate participants (Gibson et al. 2011). Participants linked to a survey on SurveyGizmo.com.

To participate, they had to be Native English speakers who were over 18 and had grown up in the United States.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>Following Burleigh (2013), once they were finished with the survey we provided participants with a unique verification code. When redirected to the Mechanical Turk interface, participants entered their unique code and received their payment. This, in combination with Mechanical Turk's worker ID numbering system, allowed us to ensure that each participant completed only one survey.

Demographic surveys revealed that participants were from various regions of the U.S., and had varying levels of education (high school through graduate studies). It was also relevant whether participants were NC users. Informal observations show that NC users frequently do not report themselves as such, possibly because they are unaware of their NC use. Self-reporting is therefore not a reliable source for determining NC usage. Nevertheless, after they completed the survey, participants were asked the following questions:

### (10) Object NC usage question:

Imagine a situation in which you have finished dinner, and you want to tell someone that dessert was not a part of your meal. Which of the following would you be more likely to say:

- (a) I didn't have no dessert.
- (b) I didn't have any dessert.
- (c) either (a) or (b)

#### (11) Subject NC usage question:

Imagine a situation in which you threw a party, but all the people you invited decided to do something else instead of attending your party. In that situation, would it be natural for you to say "Nobody didn't come to my party"?

- (a) Yes
- (b) No

The next section reports the results of the two negatives study. Each subsection begins with a reporting of participant responses to questions (10) and (11).

# 3 Results

# 3.1 No-Context Group (n=60) Results

One out of sixty participants in the No-Context Group reported to being an Object NC user (i.e. chose option (b) in question (10)), and four out of sixty responded "yes" to question (11), indicating that they were Subject NC users. The participant who reported to using Object NC was also one of the four reported Subject NC users. Our participants were thus primarily non-NC users, according to their reports.

The following table contains Mean acceptability ratings for the No-Context Group:

	Negative Object	Negative Subject
Mean (s.d.)	3.53 (1.38)	2.90 (1.33)

Table 1: Mean (s.d.) acceptability scores for No-Context Group (n=60).

Recall that participants scored sentences on the basis of their naturalness on a scale of one to seven. The acceptability scores in Table 1 reflect average scores for each construction type. We see that mean acceptability for all item types was below the median, illustrating that in general, participants did not accept sentences with two negatives. Table 1 also shows that sentences with a negative object were more acceptable than sentences with a negative subject. A paired samples t-test revealed that this difference was significant (t(59) = 4.59, p < .001).

#### 3.2 Context Group (n=101) Results

Only one participant in the Context Group reported being an optional Object NC user (option (c) in question (10)), and one out of 101 participants responded "yes" to question (11), indicating Subject NC use. The Object NC user and the Subject NC user were not the same participant. Thus, as in the No-Context Group, almost all participants in the Context Group reported that they were non-NC users.

The following table includes the mean acceptability ratings for the Context Group:

	Negative Object	Negative Subject
NC context	3.12 (1.27)	2.47 (1.13)
DN context	2.68 (1.14)	2.66 (1.15)
Overall	2.85 (1.28)	2.48 (1.13)

Table 2: Mean acceptability scores for Context Group (n=101).

As in the No-Context group, items were unacceptable overall, with the mean acceptability rating below four for all types. A two (subject vs. object) by two (NC vs. DN) ANOVA revealed a significant effect of the position of the negative constituent (object vs. subject) on acceptability (F(1, 100) = 20.03, p = .001). There was no significant effect of context (NC vs. DN) on acceptability (F(1, 101) = 1.85, n.s.). This result indicates that neither NC nor DN contexts had an independent effect on acceptability.

The following figure illustrates an interaction between the position of the negative constituent (object vs. subject) and context type (NC vs. DN):

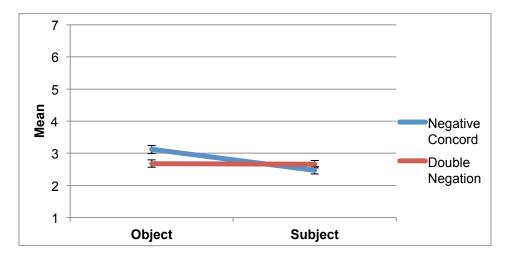


Figure 1: Interaction between the position of the negative constituent and context.

This interaction was highly significant (F(1, 101) = 14.74, p < .001). Figure 1 shows that context had an asymmetric effect on acceptability. NC contexts were preferred for items with a negative object, but not for items with a negative subject. This was not the case for DN contexts, which were equally unacceptable across syntactic types.

# 3.3 Summary of the Two Negatives Results

The two negatives study revealed two findings. First, there was an overall preference for the negative object items over the negative subject items in both the No-Context and the Context Groups. Second, the Context Group preferred NC contexts only for items with a negative object. In Section 5, I discuss the implications of these results for the hypothesis that participants have Object NC but not Subject NC grammars. First, I present the results of a follow-up study on the acceptability of sentences with a single negative.

# 4 Single Negative Study

The results of the two negatives study revealed a preference for negative objects over negative subjects. This result supports the hypothesis that NC and NPI constructions have the same syntax and semantics. However, negation carries a heavy processing load (Kluender and Gieselman 2013), and it is possible that participants preferred negative objects because items with a sentence-initial

negative were more difficult to process. This section reports the results of a follow-up study aimed at testing the hypothesis that participants in the two negatives study preferred object negatives to subject negatives because negatives are harder to process in sentence-initial position.

#### 4.1 Single Negative Methodology

As in the two negatives study, AMT was used to recruit and pay participants, and Survey Gizmo for survey design and administration. The same criteria for participation applied: Participants had to be adult native English speakers raised in the United States. The single negative items were nearly identical to the two negatives items. The only difference is that the negated auxiliary was removed. The following is a sample item from the No-Context Group:

(12) He took nobody on the trip. (cf. He didn't take nobody on the trip.)

Like in the two negatives study, a Context Group judged the same items as a No-Context Group, but with a single sentence preceding the item:

(13) John went on vacation all alone. He took nobody on the trip.

Unlike the Context Group in the two negatives study, context types did not vary between NC and DN. This is because the items had only a single negative, so DN contexts did not apply.

#### 4.2 Single Negative Results

Two participants reported to being Subject NC users, one participant reported optional use of Object NC, and one reported to being a Subject NC and optional Object NC user. Participant reports for the single negative study were thus similar to the two negatives participants.

The following table shows the mean acceptability scores for both the Context and No-Context Groups in the single negative study:

	Negative Object	Negative Subject
No-context	5.29 (.97)	5.93 (.85)
Context	5.76 (.95)	6.06 (.72)
Overall	5.52 (.98)	5.99 (.78)

Table 3: Mean (s.d.) acceptability scores for No-Context (n=101) and Context (n=101) Groups.

The means in Table 3 reflect the fact that, unlike our two negatives items, participants found single negative items to be acceptable overall: Mean scores were greater than five for all item types. This result shows that removal of one negative (the negative marker) made the items acceptable.

A 2 (no-context vs. context) by 2 (subject vs. object) ANOVA revealed a significant effect of position of negative constituent (object vs. subject) on acceptability  $(F(1, 200) = 100.65, p < .001, partial eta^2 = .34)$ . Overall, participants found negative subjects to be more natural than negative objects (see Table 3). This pattern directly opposes the one found for two negatives. There was also a significant effect of context (no-context vs. context) on acceptability  $(F(1, 200) = 7.03, p < .01, partial eta^2 = .03)$ : Overall participants found items with a single negative more natural when presented with a context than without a context. This pattern is also the opposite of the one found in the two negatives study.

Lastly, the single negative results revealed a significant interaction between the position of the negative constituent (object vs. subject) and context (no-context vs. context) (F(1, 200) = 12.85, p < .001; partial eta<sup>2</sup> = .06). Context had an asymmetric effect on acceptability with respect to the syntactic position of the negative constituent: It increased the acceptability of negative object items significantly more than negative subject items.

#### 4.3 Summary of Single Negative Results

In sum, the results of the single negative study revealed three main findings. First, sentences with a single negative were acceptable overall, both with and without a context. Second, there was an overall preference for negative subjects over negative objects. Third, context increased acceptability for negative objects significantly more than negative subjects.

# 5 Summary and Discussion

#### 5.1 Two Negatives vs. One

The simplest observation one can make regarding the data reported above is that, for our reportedly (and primarily) non-NC using participants, sentences with two negatives are unacceptable (with overall means below the median of 4), and sentences with a single negative are acceptable (overall means above 5). Let us now consider this observation in the context of the sociolinguistic stigma associated with NC. Zeijlstra (2004) asserts that languages are either DN or NC. Under Zeijlstra's (2004) theory, DN languages generate DN interpretations for sentences with two negatives, and NC languages generate NC interpretations for those same sentences. Assuming this theory, one might assume that the degraded acceptability of English NC reflects its grammatical status. Let us entertain the hypothesis that our participants, under Zeijlstra's theory, have DN grammars in which two negatives must equal an affirmative. Under this hypothesis, we would expect DN contexts to increase overall acceptability for sentences with two negatives. However, this was not the case. In fact our data showed the reverse pattern: For some items, the NC context was preferred over the DN context. Theories such as the one in Zeijlstra (2004) therefore do not predict the interaction between syntactic position of the negative constituent and context type found in the two negatives study.

Why, then, did our participants find sentences with two negatives to be so unacceptable, and why did the removal of the negative marker improve overall acceptability? To answer these questions, there are two factors to consider. The first is the heavy sociolinguistic stigma associated with English NC. The subtext of Lowth's (1762) edict that two negatives should equal a positive is that NC is socially unacceptable. This is of course not true in many social contexts in contemporary English speaking society, in which NC use is the norm. Nevertheless, the social stigma associated with English NC clearly impacts acceptability judgments, even for speakers who use NC.

The second factor to consider is pragmatics. While English NC is sociolinguistically unacceptable, English DN is heavily pragmatically constrained. In order to be interpreted as DN, the two negatives items require a very particular denial context. In general, the use of DN in an out of the blue context induces violations of two Gricean maxims: that of quantity and that of manner (Grice 1975). Even when presented in DN contexts such as those provided for the Context Group, the fact that the alternative, a simple affirmative declarative, exists may degrade the acceptability of the DN construction. To illustrate, consider again the following test item (previously (9)):

(14) Context: Mary said John went on the trip alone, but Mary's wrong. Item: He didn't take nobody on the trip.

The context in (14) makes the DN interpretation felicitous, but there are many other sentences that would also be felicitous in this context, including, for example: 'he took his mom with him'. This sentence involves no negation, and it is clearer and more informative than the DN in (14). The degraded acceptability of two negatives sentences in DN contexts may thus be attributable to pragmatic constraints.

For the single negative sentences, which were acceptable overall, neither the sociolinguistic status of NC nor the pragmatic status of DN applies. It is thus reasonable to attribute the asymmetry in overall acceptability across our two negatives and single negative experiments to sociolinguistic and pragmatic factors. Note that neither sociolinguistic nor pragmatic factors such as quantity and manner are grammatical in nature. Barbiers (2005, 2009) reminds us that sentence acceptability is subject to sociolinguistic and other influences that may or may not reflect grammatical phenomena. It seems therefore that English sentences with two negatives represent a clear case in which binary acceptability (i.e. acceptable vs. unacceptable), or even ternary acceptability (adding the category 'marginal') is not a useful measure. However, this does not mean that accept-

ability data cannot inform grammatical theories of such sentences. While binary (or ternary) acceptability may not be useful for this purpose, the results in this chapter study show that gradient acceptability data reveal differences in subtypes of unacceptable English sentences with two negatives, and these differences are clearly syntactic in nature.

### 5.2 The Syntactic Position of the Negative Constituent

Both the two negatives and single negative studies revealed an effect of the syntactic position of the negative constituent. In the two negatives study, participants in both the No-Context and Context groups found negative object items significantly more acceptable than items with a negative subject. This result is in direct opposition to the single negative study, in which both groups preferred negative subjects to negative objects. Setting aside the effect of context, consider how these patterns bear on the hypothesis that Object NC constructions are structurally equivalent to Collins and Postal's (2014) NPI constructions. Under this theory, the only difference between NPI and Object NC constructions pertains to the spell out (or lack thereof) of a resumptive negation. This is not the case for Subject NC constructions, which Blanchette (2015) hypothesizes are ungrammatical for a subset of English speakers, for the same reason that sentences like 'anybody didn't eat' are not allowed. This hypothesis predicts a preference for sentences with a negative object over sentences with a negative subject, a prediction that is borne out in the two negatives results. These results thus support the hypothesis that Object NC and Subject NC have distinct grammatical statuses for our participants.

The fact that participants in the single negative study preferred negative subjects to negative objects also bears on the hypothesis that participants have Object NC grammars but not Subject NC grammars. Setting aside context, I synthesize participant preferences across experiment groups as follows:

- (15) **Preferred** Construction Types:
  - a. He didn't take **nobody** on the trip.
  - b. No one was going to that party alone.
- (16) **Dispreferred** Construction Types:
  - a. He took **nobody** on the trip.
  - b. No one wasn't going to that party alone.

Under the theory in Blanchette (2015), the negative constituent in (15a) and (16a) has the form [NEG SOME body]. In (15a) the marker -n't spells out the higher occurrence of the negation raised from the DP object, but in (16a) there is no raising. I propose that speakers prefer (15a) and but not (16a) because they prefer a NEG raised structure.

The hypothesis that participants have Object NC but not Subject NC grammars predicts that only the DN interpretation should be available for (15b). The DN interpretation of (15b) involves a structure with two distinct syntactic and semantic negations. Such DN structures are subject to pragmatic constraints, which explains why the structure would be dispreferred, and also why participants would prefer only a single negative in subject position. In sum, when the negative constituent appears in object position, participants prefer NEG raising. But when the negative constituent appears in subject position, NEG raising is ungrammatical, and participants prefer the string with a single negative.

#### 5.3 The Effect of Negative Concord Contexts

The results of the two negatives study revealed a preference for NC contexts over DN contexts for sentences with a negative object, but not for those with a negative subject. This result is surprising under a theory like the one in Zeijlstra (2004), which asserts that languages generate either NC or DN, and unsurprising under the hypothesis that Object NC constructions involve the same syntax and semantics as NPI constructions. If reportedly non-NC using participants generated DN structures for sentences with negative objects and negative subjects, then there would be no difference

in acceptability across these construction types, and participants would dislike them both equally. The fact that participants prefer NC contexts over DN contexts only when the negative constituent is in object position thus presents further support for the hypothesis that Object NC constructions are generated in the same way that NPI constructions are.

# 6 Conclusion

This paper presented the results of an experimental study designed to test the hypothesis that NC and NPI constructions have the same structure, and relatedly, that there is a grammatical distinction between Subject and Object NC. Synthesizing acceptability patterns across NPI and NC constructions, we have the following groupings:

- (17) More Acceptable:
  - a. John didn't eat nothing for lunch. (NC)
  - b. John didn't eat anything for lunch.
- (18) Less Acceptable:
  - a. \*Nobody didn't eat lunch. (NC)
  - b. \*Anybody didn't eat lunch.

Examples (17) and (18) illustrate that the NC acceptability patterns reported in this paper (i.e. (17a) and (18a)) are identical to NPI acceptability patterns.<sup>3</sup> The results of this study thus represent empirical support for the proposal in Blanchette (2015), in which NC and NPI constructions have the same underlying structure.

This study also showed how gradient acceptability judgments of English sentences with two negatives are informative despite the sociolinguistic and pragmatic influences that make them unacceptable overall, adding to the body of literature that employs gradient acceptability to detect differences between closely related unacceptable or stigmatized sentence types (Staum and Sag 2008, Squires 2014, a.o.). I argue that these findings support the hypothesis that English NC, and Object NC in particular, is grammatical but unacceptable for sociolinguistic reasons. (See also Blanchette 2013.)

It remains to be seen how inverted NC structures like 'didn't nobody eat' (Green 2002) fit into the acceptability patterns in the two studies reported here. These constructions present an additional problem in that they are string identical to otherwise acceptable interrogative yes/no questions (e.g. 'Didn't nobody eat?'). Furthermore, unlike Object NC and Subject NC, these inverted structures do not appear to have a string-equivalent DN interpretation. Given these two confounding factors, applying the methodologies employed in this study to inverted structures will likely not yield similarly reliable data. The question of how the acceptability of inverted structures patterns in relation to Object NC and Subject NC thus remains open.

# References

Barbiers, Sjef. 2005. Word-order variation in three-verb clusters. In *Syntax and Variation: Reconciling the Biological and the Social*, ed. Leonie Cornips and Karen Corrigan, 233–64. Philadelphia, PA: John Benjamins.

Barbiers, Sief. 2009. Locus and limits of microsyntactic variation. Lingua 119:1607–1623.

Blanchette, Frances. 2013. Negative Concord in English. Linguistic Variation 43: 1–47.

Blanchette, Frances. 2015. English Negative Concord, Negative Polarity, and Double Negation. Doctoral dissertation, CUNY Graduate Center.

Collins, Chris, Paul Postal, and Elvis Yeduvey. 2015. Negative Polarity Items in Ewe. Ms., New York University. URL http://ling.auf.net/lingbuzz/002651.

Collins, Chris, and Paul Postal. 2014. Classical NEG Raising: An Essay on the Syntax of Negation. New York: Harper and Row.

<sup>&</sup>lt;sup>3</sup>This observation is not true for Belfast English, in which (18b) is acceptable (Henry 1995).

- Cowart, Wayne. 1997. Experimental Syntax: Applying Objective Methods to Sentence Judgments. Thousand Oaks, CA: Sage Publications.
- Gibson, Edward, Steve Piantadosi, and Kristina Fedorenko. 2011. Using Mechanical Turk to obtain and analyze English acceptability judgments. *Language and Linguistics Compass* 5: 509–524.
- Green, Lisa. 2002. African American English: A Linguistic Introduction. Cambridge: Cambridge University Press
- Grice, Paul. 1975. Logic and conversation. In Speech Acts, ed. P. Cole and J. L. Morgan, 41–58. New York: Academic Press.
- Henry, Alison. 1995. *Belfast English and Standard English: Dialect Variation and Parameter Setting*. Berlin: Mouton de Gruyter.
- Horn, Laurence R. 2010. Multiple negation in English and other languages. In *The Expression of Cognitive Categories: Expression of Negation*, ed. L. Horn, 117–48. Berlin, DEU: Walter de Gruyter.
- Keller, Frank. 2000. Gradience in Grammar: Experimental and Computational Aspects of Degrees of Grammaticality. Doctoral dissertation, University of Edinburgh.
- Kluender, Robert and Simone Gieselman. 2013. What's negative about negative islands? A re-evaluation of extraction from weak island contexts. In *Experimental Syntax and Island Effects*, ed. J. Sprouse and N. Hornstein. New York: Cambridge University Press.
- Lowth, (Bishop) Robert. 1762. A Short Introduction to English Grammar. London: J. Hughs.
- Nevalainen, Terttu. 1998. Social mobility and the decline of multiple negation in Early Modern English. In *Advances in English Historical Linguistics (1996)*, ed. J. Fisiak and M. Krygier, 263–91. Berlin: Mouton de Gruyter.
- Nevalainen, Terttu. 2006. Negative Concord as an English "Vernacular Universal": Social history and linguistic typology. *Journal of English Linguistics* 34: 257–78.
- Postal, Paul. 2005. Suppose (if only for an hour) that Negative Polarity Items are negation-containing phrases. Paper presented at The Workshop on Polarity from Different Perspectives, New York University.
- Smith, Jennifer. 2001. Negative concord in the Old and New World: Evidence from Scotland. *Language Variation and Change* 13: 109–34.
- Squires, Lauren. 2014. Processing, evaluation, and knowledge: Testing the perception of English subject-verb agreement variation. *Journal of English Linguistics* 42:144–72.
- Staum, Laura Casasanto and Ivan A. Sag. 2008. The advantage of the ungrammatical. In *Proceedings of the* 30<sup>th</sup> Meeting of the Cognitive Science Society, ed. B.C. Love, K. McRae, and V.M. Sloutsky, 601–606.
- Tortora, Christina, Beatrice Santorini, and Frances Blanchette. In Progress. The Audio-Aligned and Parsed Corpus of Appalachian English (AAPCAppE). URL http://csivc.csi.cuny.edu/aapcappe/.
- Wolfram, Walt and Ralph Fasold. 1974. The Study of Social Dialects in American English. New Jersey: Prentice Hall
- Zeijlstra, Hedde. 2004. Sentential negation and negative concord. Doctoral dissertation, University of Amsterdam.

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