

Negative auxiliary inversion as an instance of overt quantifier raising*

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In this talk, I show that:

- Negation is able to undergo head movement and be interpreted in its moved position
- The head movement of negation has semantic effects, in support of more recent arguments that head movement can have scopal significance (Matushansky, 2006; Lechner, 2006, 2007; Roberts, 2010; Szabolcsi, 2010; Bhatt & Keine, 2013; Iatridou & Zeijlstra, 2013)
- Evidence comes from Negative Auxiliary Inversion, a phenomenon present in some varieties of North American English

Roadmap:

- Introduce Negative Auxiliary Inversion (NAI)
- Syntax of NAI constructions
- Deriving the interpretations of NAI constructions

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1 Negative Auxiliary Inversion

- (1) Don't many people like you. (WTE; Foreman, 2001)¹
'Not many people like you.'

- Clause-initial negated auxiliary
- But it is declarative; receives the falling intonation of a declarative

The corresponding non-inverted construction is often also possible:

- (2) Many people don't like you. (WTE; Foreman, 2001)

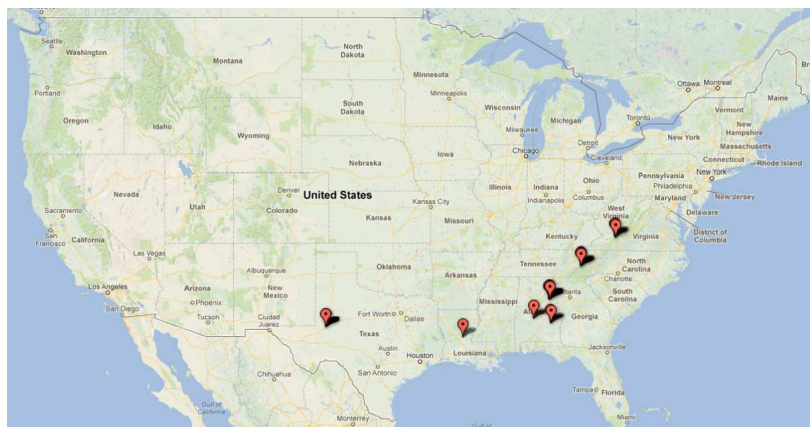
1.1 Who has it?

Attested in:

- African American English (AAE) throughout North America
- Appalachian English (AppE) in Appalachia
- West Texas English (WTE) in Texas

¹With each documented example, I cite the variety of English it is associated with and the original source of the example. In the case in which no source is provided, the examples are from original fieldwork. Abbreviations: AAE – African American English, AppE – Appalachian English, SE – Standard English, WTE – West Texas English.

Attested examples exhibiting negative inversion in varieties of white speakers:



Map credit: Yale Grammatical Diversity Project (<http://microsyntax.sites.yale.edu>)

2 Syntax of Negative Auxiliary Inversion

One way in which to analyze the construction:

- Parallel to existential expletive constructions (in line with Martin, 1992, 1993, Sells, Rickford, & Wasow, 1996, Parrott, 2000, and White-Sustaíta, 2010 for African American English)
- Subject doesn't raise as high as its canonical subject position in English (i.e. Spec TP)

(3) Potential Negative Auxiliary Inversion analysis

[TP ∅ don't many people like you]

(4) Existential expletive construction

[TP there aren't many people here yet]

- Motivation for this analysis is the apparent similarity in the subject restriction of the two constructions

- Both appear to show a definiteness effect, both disallow specific or referential subjects²

(5) a. *Didn't Jamie go to the party. (WTE)

b. *There isn't Jamie going to the party.

(6) a. *Didn't the teachers go to the party. (WTE; Foreman)

b. *There are the teachers at the party. (SE)

- Both allow certain types of quantificational subjects

(7) a. Didn't many people live there then. (WTE; Foreman)

b. There aren't many people here yet. (SE)

- Both allow indefinite subjects

(8) a. Can't a dog do that trick. (WTE)

b. There's a dog in the garden. (SE)

Problem! Assimilation is not perfect.

- Universally quantifying noun phrases are possible in negative auxiliary inversion constructions but not possible in existential expletive constructions

(9) a. Ain't every student here yet. (WTE; Foreman)

b. *There's every student here yet. (SE)

(10) a. Cain't all o' ya go at once. (WTE; Foreman)

b. *There are all of them outside. (SE)

²Specific or referential subjects appear to be possible in certain emphatic contexts. See Horn (2013) for more information.

| | Subject | Expletive | NAI |
|------------------------|-----------------|-----------|-----|
| Uniform distribution | Jamie | ✗ | ✗ |
| | the NP | ✗ | ✗ |
| | many NP a NP | ✓ | ✓ |
| Different distribution | every NP | ✗ | ✓ |
| | all of NP | ✗ | ✓ |

Figure 1: Comparing the subject distributions

We cannot straightforwardly extend the analysis of the definiteness effect of existential expletive constructions to account for negative auxiliary inversion constructions

2.1 Evidence for subject in canonical subject position

2.1.1 Subject is not elided in *vP*-ellipsis

(11) I know that won't no doctor talk like that, and that won't no lawyer, neither. (WTE; Foreman, 2001)

- *vP*-ellipsis involves the deletion of a verb phrase
- A reduced phrase can be appended to a sentence with a conjunction and the reduced phrase involves *vP*-ellipsis
- The subject in (11) is not deleted, suggesting that it does not remain in Spec-*vP* and that the structure is as in (12)

(12) I know that won't no doctor [*vP* talk like that] and that can't no lawyer [*vP* ~~talk like that~~] neither.

- We would expect the structure in (13) if the subject did remain in Spec *vP*:

(13) ✗ I know that ∅ won't [*vP* no doctor talk like that] and that (there) can't [*vP* ~~no doctor talk like that~~] neither.

- Assuming, of course, that V raises to *v* and VP ellipsis is not possible

2.1.2 Adverbs can intervene between subject and verb phrase

(14) a. Ain't none of us ever been to Europe. (WTE; Foreman)
b. Ain't nobody really gonna be happy with that. (WTE; Foreman, 2001)

- Availability of (14) suggests the structures in (15) (Assuming that adverbs adjoin to phrases and that V raises to *v*)

(15) a. Ain't none of us ever [*vP* been to Europe]
b. Ain't nobody really [*vP* gonna be happy with that]

2.1.3 Tag questions target NAI subject

- A tag question is a reduced question which can be appended to a declarative
- Tag questions target the structural position of the canonical subject

(16) a. Subject in canonical position:
Many people were out hiking today, *weren't they?* (SE)
b. Existential expletive construction:
There were many people out hiking today, *weren't there?* (SE)

- Tag questions target the subject of negative auxiliary inversion constructions

(17) a. I guess, cain't no man live forever, *can he?* (WTE; Foreman, 2001)
b. Ain't no woman gonna cheat on a man like that, *is she?* (WTE; Foreman, 2001)

- If they did not, we might expect the tag subjects to be expletives

(18) a. *I guess, cain't no man live forever, *can there?* (WTE; Foreman, 2001)
b. *Ain't no woman gonna cheat on a man like that, *is there?* (WTE; Foreman, 2001)

2.2 Adopting a movement analysis of NAI

Given the evidence that subject of NAI is in canonical subject position:

- Its subject restriction is unlike known subject restrictions
- The subject is not elided in *vP*-ellipsis
- Adverbs can intervene between the subject and the verb phrase
- Subjects of tag questions agree with the subject of negative auxiliary inversion constructions

We adopt a movement analysis of negative auxiliary inversion

- Others who adopt such an analysis: Foreman (1999, 2001) for West Texas English and Labov, Cohen, Robins, and Lewis (1968), Labov (1972), Martin (1993), and Green (2008, 2011, 2014) for African American English
- Negation starts out in its usual position (Pollock, 1989)
- The word order of negative auxiliary inversion constructions is derived by movement of the negated auxiliary over the subject

(19) Negative Auxiliary Inversion analysis

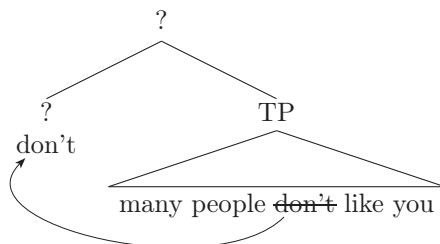
don't [TP many people ~~don't~~ like you]

(20) Negative Auxiliary Inversion analysis (assuming the subject *vP* internal hypothesis)

don't [TP many people ~~don't~~ many people like you]

2.3 What is its structural position?

(21)



2.3.1 Evidence against C°

In older analyses of negative auxiliary inversion constructions, the auxiliary is proposed to raise to C° as a result of its similarity to yes-no question formation (Labov et al., 1968; Labov, 1972)

(22) a. Simple declarative:

[TP many people don't like you]

b. T-to- C movement to form a yes-no question:

[C° don't [TP many people ~~don't~~ like you]]

(23) a. Non-inverted construction:

[TP many people don't like you]

b. Construction exhibiting negative auxiliary inversion:

[C° don't [TP many people ~~don't~~ like you]]

Negative auxiliary inversion constructions can be embedded with an overt *that* complementizer

- Embedded in a nominal

(24) She loves the fact (that) don't nobody like her. (WTE/AAE; Foreman, 1999)

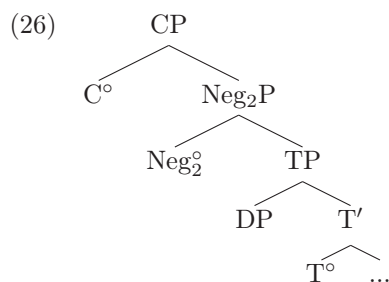
- Embedded in a relative clause

(25) I know a way that can't nobody start a fight. (AAE; Labov et al., 1968)

2.3.2 Structural position: Higher negative projection

- I follow Foreman (1999, 2001) in assuming that the position to which negation raises is a higher negative projection, Neg_2°
 - Neg_2° is a higher position for sentential negation available in all varieties that allow negative auxiliary inversion

– It is above T° and below C°



2.4 Evidence for a higher negative projection

2.4.1 Proposed for negative concord

A line of syntactic analyses of negative concord advocate for a higher structural position for negation in languages which exhibit negative concord (Zejlstra, 2004, 2008) or a higher projection that has or hosts a negative feature (Laka, 1990, Alonso Ovalle & Guerzoni, 2004)

(27) I *ain't never* gonna do *nothin'* for *nobody*. (WTE; Foreman, 2001)

- A sentence containing multiple elements which bear negative morphology is interpreted as having a single instance of logical negation
- Negative elements: sentential negation and *n-words* (Laka, 1990): nominal and adverbial elements
- In these proposals:
 - The source of logical negation is sentential negation, *n-words* are non-negative existential quantifiers with a requirement that they be licensed by an operator

(28) I *ain't*_[+neg] *never* gonna do *nothin'* for *nobody*

– However, *n-words* can appear sentence-initially in the absence of sentential negation in some negative concord languages, such as Italian (Zanuttini, 1991) and, more relevantly, West Texas English

(29) *None of em* hit the house. (WTE; Foreman, 2001)

– What is the source of negation if *n-words* are non-negative existential quantifiers?

– A higher sentential negation that is phonologically null

(30) $OP_{\neg[+neg]}$ [_{TP} *none of em* hit the house]

Why is the higher projection for negative concord relevant?

- Interestingly, all varieties that exhibit negative auxiliary inversion also exhibit negative concord³

(31) a. I *ain't never* gonna do *nothin'* for *nobody*. (WTE; Foreman)
 b. I *didn't never* have *no* problems. (AAE; Green, 2002)
 c. *Nobody couldn't* handle him. (AppE; Wolfram & Christian, 1976)

2.4.2 Negation is necessary

- Negative auxiliary inversion is restricted to sentences containing negation

(32) a. *Will everybody fit in that car. (WTE)
 b. Won't everybody fit in that car. (WTE)

³Although all varieties that exhibit negative auxiliary inversion also exhibit negative concord, not all varieties that exhibit negative concord also exhibit negative auxiliary inversion. Negative auxiliary inversion is not attested in British varieties of English that allow negative concord (Henry, Maclaren, Wilson, & Finlay, 1997).

2.4.3 Restricted to sentential negation

- A negative subject cannot license negative auxiliary inversion

- (33) a. *Will none of the students go to the party. (WTE; Foreman)
 b. Won't none of the students go to the party. (WTE; Foreman, 1999)

2.4.4 Sentential negation must be the *-n't* negative auxiliary

- (34) a. *Will any of the students not go to the party. (WTE)
 b. *Will not any of the students go to the party. (WTE)
 c. Won't any of the students go to the party. (WTE)

3 Semantics of Negative Auxiliary Inversion

Interpretation

- Foreman (1999, 2001) observes that for West Texas English, sentences exhibiting negative auxiliary inversion are unambiguous; negation always has wide scope over the subject⁴

- (35) a. Don't many people like you. [\neg » *many*, **many* » \neg]
 b. Don't many people like you, (*but many do like you, too).

- The non-inverted counterpart is attested to be ambiguous

- (36) a. Many people don't like you. [\neg » *many*, *many* » \neg]
 b. Many people don't like you, (but many do like you, too).

Negation has unambiguous wide scope in negative auxiliary inversion constructions

⁴Initial cross-dialectal fieldwork suggests that these interpretations hold for other varieties as well.

Subject restriction

- ✓ Quantificational subjects
- ✓ Universal quantificational subjects

- (37) Didn't everybody go to the party. (WTE; Foreman, 1999)

- ✗ Specific or referential subjects

- (38) *Didn't Jamie go to the party. (WTE)

- ✗ Some quantificational, non-specific subjects are ruled out

- (39) a. *Didn't some people come. (WTE)
 b. *Didn't few people live there then. (WTE)

| | |
|--------------------------|---|
| Possible subjects ✓ | everybody all the NP five NP more than three NP many NP a NP |
| Impossible subjects ✗ | Jamie (proper names) you (pronouns) the NP their NP some NP few NP |

Figure 2: The subject distribution for negative auxiliary inversion in WTE

Correlation

Empirical observations concerning the interpretation of negative inversion and their non-inverted counterparts:

| | Subject | Interpretation | |
|--------------------------|----------------|-----------------|--------|
| | | Noninv. constr. | NAI |
| Possible subjects ✓ | everybody | ambiguous | ¬ high |
| | all the NP | ambiguous | ¬ high |
| | five NP | ambiguous | ¬ high |
| | more than 3 NP | ambiguous | ¬ high |
| | many NP | ambiguous | ¬ high |
| | a NP | ambiguous | ¬ high |
| Impossible subjects ✗ | Jack | unambiguous | * |
| | you | unambiguous | * |
| | the NP | unambiguous | * |
| | their NP | unambiguous | * |
| | some NP | unamb. (¬ low) | * |
| | few NP | unamb. (¬ low) | * |

Figure 3: The interpretation of subjects with available counterparts

- Correlation of negative auxiliary inversion with presence of ambiguity in non-inverted construction
 - Possible subjects give rise to ambiguity in non-inverted construction
 - Impossible subjects do not give rise to ambiguity in non-inverted construction
- NAI is only compatible with subjects with which negation interacts scopally

Intuition behind analysis

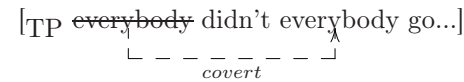
- Whatever is responsible for inverse scope in non-inverted construction is also responsible for negative auxiliary inversion

- Given our syntactic analysis of negative auxiliary inversion, the movement of negation seems to be restricted over certain subjects
- Whatever restricts the inverse scope in non-inverted construction also restricts the movement of negation in negative auxiliary inversion constructions

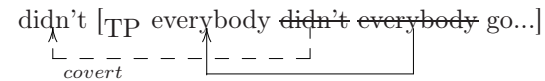
3.1 Deriving the inverse scope of non-inverted construction

(40) Everybody didn't go to the party. [$\forall \gg \neg$, $\neg \gg \forall$]

(41) a. Option 1:

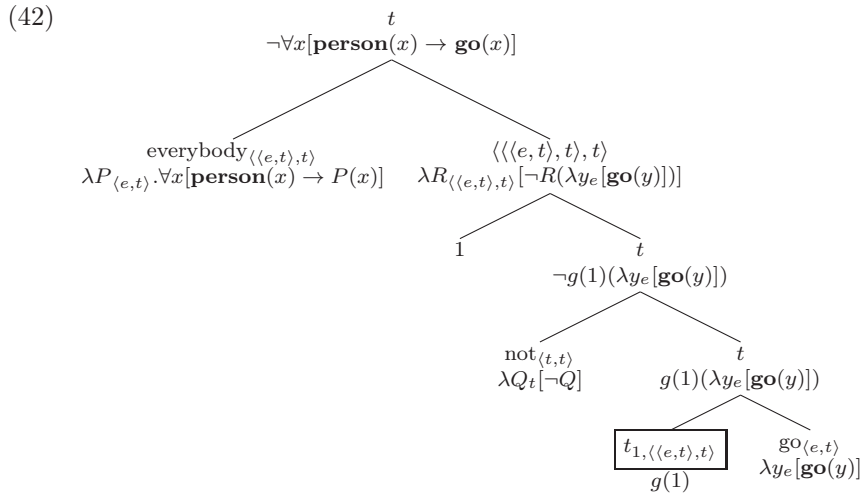


b. Option 2:



3.1.1 Against reconstruction of subject analysis

- If the subject is generated in a *v*P-internal position, it should be possible to interpret it its base-generated position
- Possible implementation:
 - The subject could reconstruct by leaving behind a trace of a higher type



Problem

- Strong quantifiers like *every* do not reconstruct as readily or possibly ever (Lasnik, 1999, Lechner, 2007, Szabolcsi, 2010)

(43) Every coin is 3% likely to land tails. (Lasnik, 1999)
 [*every coin* » *be 3% likely*, **be 3% likely* » *every coin*]

(44) ~~every coin~~ is 3% likely to every coin land tails
 [-----X-----]

- Lechner (2007) proposes a constraint on the basis of further evidence: Strong quantifiers like *every* cannot reconstruct below T^{o5}

(45) Option 1:
 [TP ~~everybody~~ didn't everybody go]
 [-----X-----]

⁵More generally, Lechner's constraint blocks strong quantifiers from reconstructing below the position in which modals are generated.

3.1.2 In favor of covert raising of negation analysis

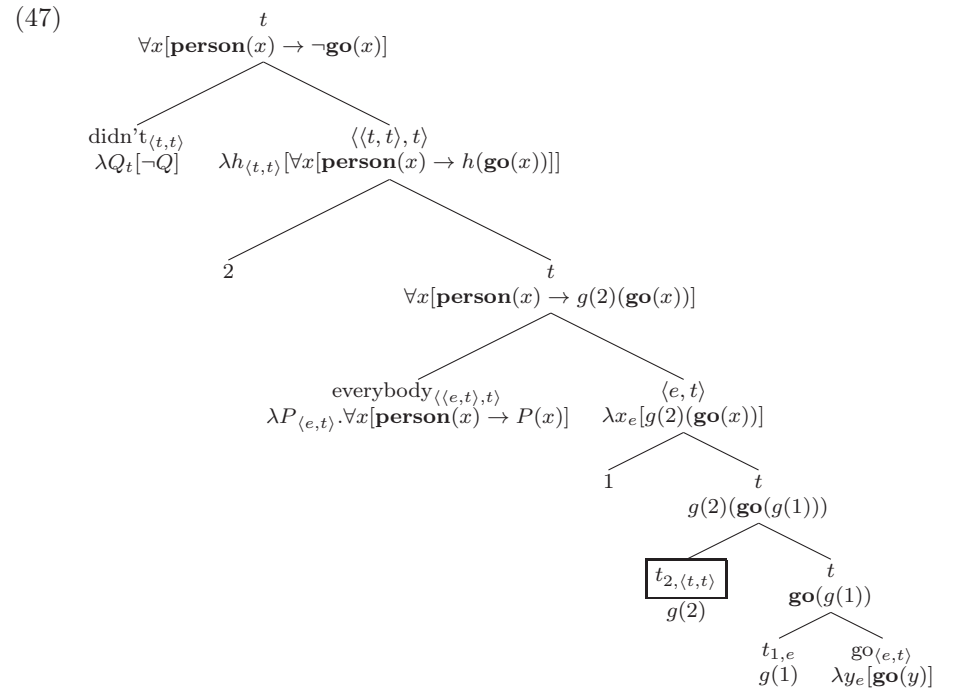
- Our analysis for deriving the inverse scope of non-inverted construction:

(46) Option 2:
 didn't [TP everybody didn't everybody go]
 [-----X-----]

- Covert movement of negation over the subject

Problem

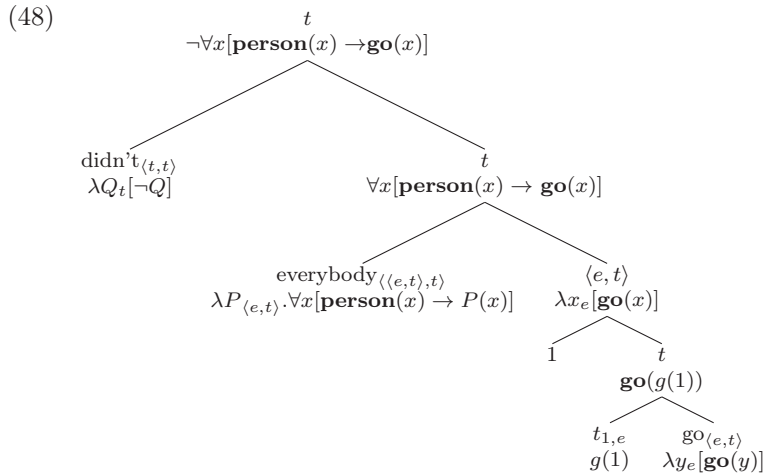
- The movement of logical negation does not have scopal significance



- Raising negation does not result in attested inverse scope interpretation (49)
- It has been observed in the literature that negation does not lower at LF (for references, see Iatridou & Zeijlstra, 2013)

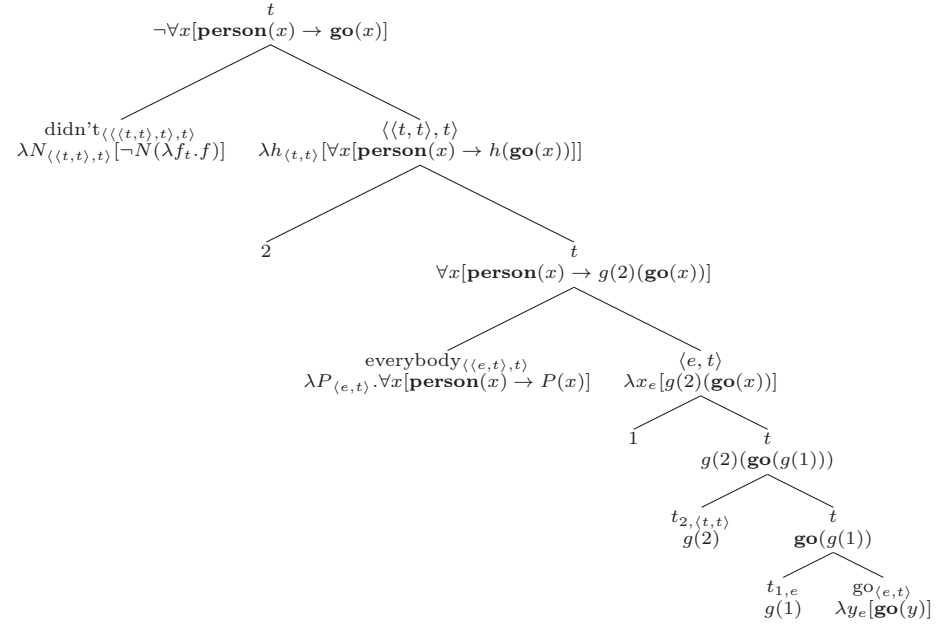
Implementation: Option 1

- Delete the trace of negation on the way to LF



Implementation: Option 2

- Raise the type of negation to allow it to be interpreted in higher position



- We derived the inverse scope of non-inverted construction by covert movement of negation:

(50) Everybody didn't go to the party. $[\forall \gg \neg, \boxed{\neg \gg \forall}]$

(51) didn't [TP everybody ~~didn't everybody~~ go]

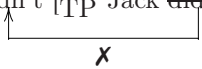
3.2 Deriving the surface scope of NAI constructions

- Proposal: The surface scope of negative auxiliary inversion is due to **overt** movement of negation:

(52) Didn't everybody go to the party. $[\boxed{\neg \gg \forall}, * \forall \gg \neg]$

(53) didn't [TP everybody ~~didn't everybody~~ go]

- The movement of negation generates negative auxiliary inversion constructions and is the source of ambiguity in the non-inverted construction
- Our proposal accounts for part of the correlation between the two structures: the availability of NAI whenever the non-inverted construction is ambiguous
- We still need to restrict the movement of negation from occurring over the impossible subjects

(54) didn't [TP Jack ~~didn't Jack~~ go]


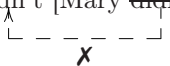
4 Accounting for the subject restriction

4.1 Observed restriction on covert movement

- Covert movement is restricted from occurring when the movement is not scopally informative (Fox, 2000)
- Evidence that covert movement of operators like negation is blocked over definite subjects

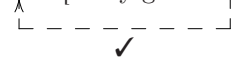
(55) Many boys didn't come to my party. Mary didn't, either.
 [*many* » \neg , * \neg » *many*]

- Elided sentences force parallel structures
- When elided sentences are unambiguous, their antecedent is also unambiguous
- Only surface scope interpretation is available

(56) Many boys didn't come to my party.
 didn't [Mary ~~didn't Mary~~ come to my party]


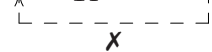
- A definite subject like 'Mary' is not a quantificational element and does not interact scopally with negation
- In comparison, when the subjects of the elided sentences are quantificational and interact scopally with negation, the antecedent is also ambiguous

(57) Many boys didn't come to my party. Many girls didn't, either.
 [*many* » \neg , \neg » *many*]

(58) Many boys didn't come to my party.
 didn't [many girls ~~didn't many girls~~ come to my party]


4.2 Accounting for the observed restriction on covert movement

- Fox proposes a principle of Scope Economy⁶
 - allows covert movement if it gives rise to a different interpretation than the one we had prior to movement
 - blocks covert movement if it is semantically vacuous
- We adopt the principle of Scope Economy because it blocks covert movement of negation over definite subjects

(59) didn't [TP Jack ~~didn't Jack~~ go]


- Scope Economy concerns only covert movement
- Negative auxiliary inversion is an instance of overt movement

⁶ Fox (2000)'s *Scope Economy for operators*

A scope-shifting operation can move O from a position in which it is interpretable only if the movement crosses XP and $\langle O, XP \rangle$ is not scopally commutative.

$\langle O, XP \rangle$ is scopally commutative ($\llbracket O \rrbracket \in D_{\langle \tau, \tau \rangle}$ and $\llbracket XP \rrbracket \in D_{\langle \langle e, \tau \rangle, \tau \rangle}$) if for every model, and for every $\phi \in D_{\langle e, \tau \rangle}$, $\llbracket O \rrbracket(\llbracket XP \rrbracket(\lambda x \phi(x))) = \llbracket XP \rrbracket(\lambda x \llbracket O \rrbracket(\phi(x)))$.

- Need to revise Scope Economy and make it more general in order to account for the lack of definite subjects in negative auxiliary inversion constructions

4.3 Proposal: Revise Scope Economy

- Revised principle of Scope Economy:
 - allows optional movement if it gives rise to a different interpretation than the one we had prior to movement
 - blocks optional movement if it is semantically vacuous

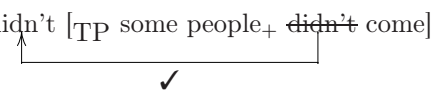
(60) *Revised Version of Fox's (2000) Scope Economy for operators*
 Optional movement of an operator O from a position in which it is interpretable can occur only if the movement crosses XP, and $\langle O, XP \rangle$ is not scopally commutative.
 $\langle O, XP \rangle$ is scopally commutative ($\llbracket O \rrbracket \in D_{\langle \tau, \tau \rangle}$ and $\llbracket XP \rrbracket$ in $\in D_{\langle \langle e, \tau \rangle, \tau \rangle}$) if for every model, and for every $\phi \in D_{\langle e, \tau \rangle}$, $\llbracket O \rrbracket(\llbracket XP \rrbracket(\lambda x \phi(x))) = \llbracket XP \rrbracket(\lambda x \llbracket O \rrbracket(\phi(x)))$.

4.4 Impossible quantificational subjects

4.4.1 ✗ some

(61) *Didn't some people come. (WTE)

- As a PPI, *some* cannot be in the immediate scope of negation

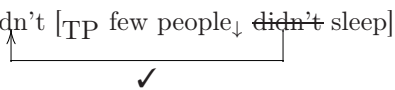
(62) ✗ didn't [TP some people₊ didn't come]


- The Revised principle of Scope Economy allows the derivation but the derivation does not surface because it induces a more general violation by trapping a PPI in its scope

4.4.2 ✗ few

(63) *Didn't few people live there then. (WTE)

- As a downward entailing element itself, *few* cannot be in the immediate scope of negation

(64) ✗ didn't [TP few people_↓ didn't sleep]


- The derivations containing these subjects are ruled out due to incompatibility of negation with these polarity-sensitive subjects

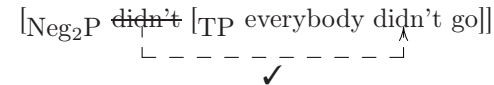
5 Puzzle: NAI's lack of inverse scope

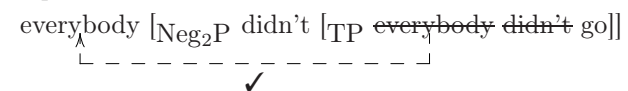
Empirically, the inverse scope of NAI constructions is unattested

(65) Didn't everybody go to the party. $[\neg \gg \forall, \boxed{* \forall \gg \neg}]$

However, given our syntactic analysis and the Revised version of Scope Economy, there are two ways in which it could be derived

(66) [Neg₂P didn't [TP everybody ~~didn't~~ go]]


(67) a. Option 1:
 [Neg₂P ~~didn't~~ [TP everybody didn't go]]


b. Option 2:
 everybody [Neg₂P didn't [TP everybody ~~didn't~~ go]]


5.1 Restricting the inverse scope of NAI: LF-first

- Given an interpretation containing movement, Bobaljik and Wurmbrand (2012) provide a way in which to determine which copies to pronounce

- Suppose the movement of negation has occurred and suppose we interpret the lower copy of negation

(68) LF1: [~~didn't~~] everybody [didn't] go

- Considering the different possibilities

(69) a. PF1: [~~didn't~~] everybody [didn't] go
 b. PF2: [didn't] everybody [~~didn't~~] go

- Economy conditions will determine which LF/PF pair will surface

(70) LF1: [~~didn't~~] everybody [didn't] go
 PF1: [~~didn't~~] everybody [didn't] go

(71) LF1: [~~didn't~~] everybody [didn't] go
 PF2: [didn't] everybody [~~didn't~~] go

- LF1/PF1 corresponds to the surface scope of the non-inverted construction and is empirically attested

(72) ✓ LF1: [~~didn't~~] everybody [didn't] go
 PF1: [~~didn't~~] everybody [didn't] go

- LF1/PF2 corresponds to the inverse scope of a construction exhibiting negative auxiliary inversion and is empirically unattested

(73) * LF1: [~~didn't~~] everybody [didn't] go
 PF2: [didn't] everybody [~~didn't~~] go

- We block LF1/PF2 (restrict the higher copy of negation from being pronounced high) with two constraints the authors propose, one of which we modify

- We allow LF1/PF1 with the same constraints

5.1.1 Constraints

(74) *Scope Transparency (ScoT)*

If the order of two elements at LF is $A \gg B$, the order at PF is $A \gg B$.⁷ (Bobaljik & Wurmbrand, 2012).

(75) *CWO*

Canonical word order is respected.

- This constraint is a more general version of Bobaljik and Wurmbrand's CCO constraint, 'canonical complement order is respected'

5.1.2 Constraints at work

(76) LF1: [~~didn't~~] everybody [didn't] go

| ✓? | LF/PF | ScoT | CWO |
|------|--|------|-----|
| a. ✓ | LF1: [didn't] everybody [didn't] go PF1: [didn't] everybody [didn't] go | ✓ | ✓ |
| b. ✗ | LF1: [didn't] everybody [didn't] go PF2: [didn't] everybody [didn't] go | ✗ | ✗ |

- Soft constraints (violable)

5.1.3 Deriving the remaining interpretations

- Suppose that after the movement of negation has occurred, we interpret instead the higher copy

(77) LF2: [didn't] everybody [~~didn't~~] go

| ✓? | LF/PF | ScoT | CWO |
|------|--|------|-----|
| a. ✓ | LF2: [didn't] everybody [didn't] go PF1: [didn't] everybody [didn't] go | ✗ | ✓ |
| b. ✓ | LF2: [didn't] everybody [didn't] go PF2: [didn't] everybody [didn't] go | ✓ | ✗ |

⁷The \gg symbol is used to indicate 'scopes over' in the former case and 'precedes' in the latter case.

5.1.4 Further movement of subject

(78) everybody [_{Neg₂P} didn't [_{TP} everybody didn't go]]
└──┬──────────┘

(79) LF1: everybody [didn't] everybody [didn't] go

| ✓? | LF/PF | ScoT | CWO |
|------|--|------|-----|
| a. ✗ | LF1: everybody [didn't] everybody [didn't] go PF1: everybody [didn't] everybody [didn't] go | ✓ | ✗ |
| b. ✗ | LF1: everybody [didn't] everybody [didn't] go PF2: everybody [didn't] everybody [didn't] go | ✗ | ✗ |
| c. ✗ | LF1: everybody [didn't] everybody [didn't] go PF3: everybody [didn't] everybody [didn't] go | ✓ | ✗ |
| d. ✓ | LF1: everybody [didn't] everybody [didn't] go PF4: everybody [didn't] everybody [didn't] go | ✓ | ✓ |

- If the subject were to be interpreted higher than negation, the interpretation would not be pronounced with negation preceding the subject

5.1.5 Reconstruction assuming *vP*-internal hypothesis

(80) [_{Neg₂P} ~~didn't~~ [_{TP} everybody didn't everybody go]]
└──┬──────────┘

(81) LF1: [~~didn't~~] everybody [didn't] ~~everybody~~ go

| ✓? | LF/PF | EPP | ScoT | CWO |
|------|--|-----|------|-----|
| a. ✓ | LF1: [didn't] everybody [didn't] everybody go PF1: [didn't] everybody [didn't] everybody go | ✓ | ✓ | ✓ |
| b. ✗ | LF1: [didn't] everybody [didn't] everybody go PF2: [didn't] everybody [didn't] everybody go | ✗ | ✗ | ✗ |
| c. ✗ | LF1: [didn't] everybody [didn't] everybody go PF3: [didn't] everybody [didn't] everybody go | ✓ | ✗ | ✗ |
| d. ✗ | LF1: [didn't] everybody [didn't] everybody go PF4: [didn't] everybody [didn't] everybody go | ✗ | ✗ | ✗ |

- EPP is a hard constraint (non-violable)
- Same prediction about which LF/PF can surface (compare to (76))

Summary of analysis

- A syntactic derivation is formed

(82) [TP everybody didn't go]

- Optional movement is possible but subject to the Revised principle of Scope Economy

(83) didn't [TP everybody ~~didn't~~ go]

- Derivations containing optional movement over definite phrases is ruled out

(84) didn't [TP Jamie ~~didn't~~ go]

- Derivations allowed by the Revised principle of Scope Economy may still be ruled out at a later stage if they induce violations
- Such is the case with certain polarity-sensitive elements

(85) ~~X~~ didn't [TP some people₊ ~~didn't~~ come]

(86) ~~X~~ didn't [TP few people_↓ ~~didn't~~ sleep]

- The way in which the derivation continues depends on which copy is interpreted
- If we interpret the moved copy of negation, there are two ways in which we can pronounce the interpretation
 - Pronounce the higher copy of negation to get NAI

- Pronounce the lower copy of negation to get canonical word order (corresponding to the inverse scope of the non-inverted construction)
- If we interpret the lower copy of negation, we can only pronounce the lower copy to get canonical word order (corresponding to the surface scope of the non-inverted construction)

References

- Alonso Ovalle, L., & Guerzoni, E. (2004). Double negatives, negative concord and metalinguistic negation. In M. Andronis, E. Debenport, A. Pycha, & K. Yoshimura (Eds.), *Proceedings of the Chicago Linguistics Society Meeting* (Vol. 28, p. 15-31). Chicago: CLS Publications.
- Bhatt, R., & Keine, S. (2013). *Verb clusters and the semantics of head movement*. (Paper presented at Generative Linguistics in the Old World 36)
- Bobaljik, J. D., & Wurmbrand, S. (2012). Word order and scope: Transparent interfaces and the 3/4 signature. *Linguistic Inquiry*, 43(3), 371-421.
- Foreman, J. (1999). Syntax of negative inversion in non-standard English. In K. Shahin, S. Blake, & E.-S. Kim (Eds.), *Proceedings of the Seventeenth West Coast Conference on Formal Linguistics*. Stanford: CSLI.
- Foreman, J. (2001). *Syntax of negative inversion*. Unpublished master's thesis, UCLA.
- Fox, D. (2000). *Economy and semantic interpretation*. Cambridge, Massachusetts: MIT Press.
- Green, L. (2002). *African American English: A linguistic introduction*. New York: Cambridge University Press.
- Green, L. (2008, April). *Negative inversion and negative focus*. (Paper presented at Georgetown University)
- Green, L. (2011). *Force, focus, and negation in African American English*. (Paper presented at the 2011 Annual Meeting of the Linguistic Society of America)
- Green, L. (2014). Force, focus, and negation in African American English. In R. Zanuttini & L. R. Horn (Eds.), *Micro-Syntactic variation in North American English*. New York: Oxford University Press.
- Henry, A., Maclaren, R., Wilson, J., & Finlay, C. (1997). The acquisition of negative concord in non-standard English. In E. Hughes, M. Hughes, & A. Greenhill (Eds.), *Proceedings of the 21st Annual Boston University Conference on Language Development* (Vol. 1, p. 269-280). Somerville, MA: Cascadilla Press.
- Horn, L. R. (2013). *Negative inversion(s) and conspiracy theory*. (Paper presented at Yale University)
- Iatridou, S., & Zeijlstra, H. (2013). Negation, polarity and deontic modals. *Linguistic Inquiry*, 44(4), 529-568.
- Labov, W. (1972). Negative attraction and negative concord in English grammar. *Language*, 48(4), 773-818.
- Labov, W., Cohen, P., Robins, C., & Lewis, J. (1968). *A study of non-standard English of Negro and Puerto Rican speakers in New York City*. Philadelphia: US Regional Survey.
- Laka, I. (1990). *Negation in syntax: On the nature of functional categories and projections*. Unpublished doctoral dissertation, Massachusetts Institute of Technology.
- Lasnik, H. (1999). Chains of arguments. In S. Epstein & N. Hornstein (Eds.), *Working Minimalism* (p. 189-217). Cambridge, Massachusetts: The MIT Press.
- Lechner, W. (2006). An interpretive effect of head movement. In M. Frascarelli (Ed.), *Phases of interpretation* (p. 45-69). Berlin: Mouton de Gruyter.
- Lechner, W. (2007). *Interpretive effects of head movement*. <http://ling.auf.net/lingBuzz/000178>.
- Martin, S. E. (1992). *Topics in the syntax of nonstandard English*. Unpublished doctoral dissertation, University of Maryland, College Park.
- Martin, S. E. (1993). "Negative Inversion" sentences in Southern White English Vernacular and Black English Vernacular. In C. A. Mason, S. M. Powers, & C. Schmitt (Eds.), *University of Maryland Working Papers in Linguistics* (Vol. 1, p. 49-56).
- Matushansky, O. (2006). Head movement in linguistic theory. *Linguistic Inquiry*, 37(1), 69-109.
- Parrott, J. (2000). Negative inversion in African American Vernacular English: A case of optional movement? In N. M. Antrim, G. Goodall, M. Schulte-Nafeh, & V. Samiian (Eds.), *Proceedings of the 28th Western Conference on Linguistics (WECOL)* (Vol. 11, p. 414-427). Department of Linguistics, Fresno: California State University.
- Pollock, J.-Y. (1989). Verb movement, UG, and the structure of IP. *Linguistic Inquiry*, 20, 365-424.
- Roberts, I. (2010). *Agreement and Head Movement: Clitics, incorporation, and defective goals*. Cambridge, Massachusetts: MIT Press.
- Sells, P., Rickford, J., & Wasow, T. (1996). An optimality theoretic approach to variation in negative inversion in AAVE. *Natural Language and Linguistic Theory*, 14, 591-627.

- Szabolcsi, A. (2010). *Quantification*. Cambridge: Cambridge University Press.
- White-Sustaíta, J. (2010). Reconsidering the syntax of non-canonical negative inversion. *English Language and Linguistics*, 14, 429-455.
- Wolfram, W., & Christian, D. (1976). *Appalachian speech*. Arlington, VA: Center for Applied Linguistics.
- Zanutini, R. (1991). *Syntactic properties of sentential negation*. Unpublished doctoral dissertation, University of Pennsylvania.
- Zeijlstra, H. (2004). *Sentential negation and negative concord*. Unpublished doctoral dissertation, University of Amsterdam.
- Zeijlstra, H. (2008). *Negative concord is syntactic agreement*. University of Amsterdam. (Manuscript)