Abstract

Semantic Effects of Head Movement:

Evidence from Negative Auxiliary Inversion

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Head movement and its status as a type of movement that is available in the syntactic component of the grammar has been under discussion in the literature in recent years. This discussion sprang up in part as a result of head movement's apparent lack of semantic effects. Some researchers have attempted to place head movement outside of the domain of syntax. More recently, evidence of semantic effects of head movement has led others to reconsider such a move. In this dissertation, I provide evidence for head movement as a movement that must be available in the syntax. I show that the phenomenon of negative auxiliary inversion provides evidence for the semantic effect of head movement. Negative auxiliary inversion is a phenomenon present in some varieties of English spoken in North America. This study focuses on a particular variety of English, West Texas English, and is informed by the larger theoretical background at the syntax-semantics interface. The theoretical issues that are highly relevant are negation, subject restrictions of certain types of constructions, scope, and principles of scope economy. The movement that derives constructions which exhibit negative auxiliary inversion is sensitive to principles of scope economy and movement which is semantically vacuous is disallowed. The types of subjects that are possible in negative auxiliary inversion behave uniformly in their scopal interaction with negation. This discovery furthers our understanding of why subject restrictions arise.

In addition to the theoretical goals, this dissertation expands the empirical domain concerning microsyntactic variation in English. Although there are many apparent differences among varieties of English, very little theoretical work has been done on varieties other than Standard English. In this dissertation, I consider the varieties of English which allow the phenomenon and propose that the availability of negative auxiliary inversion is correlated with the availability of a higher

negative projection in a variety's hierarchy of projections as well as the availability of negative concord. Additionally, I extend the analysis to account for transitive expletive constructions, another phenomenon which is present in some varieties which exhibit negative auxiliary inversion. The analysis is also extended to account for *Not*-initial constructions, a phenomenon available to speakers of many varieties of English. I propose such constructions to be derived by movement, though the movement I propose them to involve is phrasal rather than head movement. This distinction allows me to account for cross-linguistic variation because not all varieties which exhibit *Not*-initial constructions also exhibit negative auxiliary inversion constructions.

Semantic Effects of Head Movement:

Evidence from Negative Auxiliary Inversion

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by
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List of Abbreviations

AAE   African American English

AppE   Appalachian English

CNI   Canonical negative inversion

CWO   Canonical word order is respected

EPP   Extended Projection Principle

NAI   Negative auxiliary inversion

NPI   Negative polarity item

NPILic   Negative polarity items must be licensed at both LF and PF

NSE   Non-standard English

NwordLic   N-words must be licensed at LF

PPI   Positive polarity item

QL   Quantifier lowering

QR   Quantifier raising

SAE   Standard American English

SE   Standard English

ScoT   Scope Transparency

WTE   West Texas English

Acknowledgments

I've been incredibly lucky in my life as an aspiring academic to have had a lot of people root for me and generously devote their time, efforts, and intellect to help me become a better linguist. This is why I have so many people to thank here. I'd like to start out by thanking my committee of linguistic superstars, who have been invested in my success, who have graciously offered me many hours of their time, and who have been incredibly helpful in all areas of my academic life.

I knew that Bob Frank would be my advisor at Yale from my campus visit as a prospective student. Sitting in on his classes, I spent the time beaming at his passionate lecturing style and madly scribbling down notes. There's not a class I took with him or a meeting we had in which I wasn't furiously trying to record everything. And I've been lucky enough to have taken a lot of his classes in which I learned a lot about syntax, semantics, mathematical linguistics, computational linguistics, and cognitive science. I am astounded by the breadth of his knowledge and his ability to ask the hard questions in any talk in any subfield. Throughout my time at Yale, Bob has been incredibly dedicated and selfless with his time, for which I am forever grateful. He helped me dig myself out of data holes I sometimes found myself in and focus on the bigger issues. I appreciated how open and honest I could be with him about everything, whether or not it was linguistic in nature. I will miss his enthusiasm and his expressions and I will miss our marathon meetings (but not the sacrifice of trees that ensued).

This project would not exist if Raffaella Zanuttini hadn't invited me to join the Yale Grammatical Diversity Project in my first year. My interest in negative inversion arose as I entered data from papers about variation in English into the database and as I presented my findings in group talks. I

am grateful to have been a part of this project during my time at Yale. It has been fun and satisfying to learn about micro-variation and I even uncovered phenomena present in my own speech, like 'I'm done my dissertation!' I learned more about varieties of English when I TAed a class on the topic for Raffaella. She encouraged me to take on a more involved role, at times treating me more like a co-instructor than a TA, as a result of which I gained a more direct understanding of the teaching process and valuable teaching experience.

I owe an enormous amount to Raffaella for her advising throughout my time at Yale. She always made sure that there was a balance of theory and data in my work. She masterfully points out vagueness in the nicest way possible and her attention to it has helped me become more precise in my writing and in my discussions of linguistic issues.

I was maybe a little bit biased towards thinking in a certain way when I arrived at Yale. Bob and Raffaella's non-judgmental approach and curiosity towards different ways of thinking helped me become more open-minded. I am incredibly grateful for everything I have learned from my advisors about the field and, more generally, about academic life, including how to become a better writer, presenter, and colleague.

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viding me with judgments for Appalachian English.

I have greatly benefited from presenting parts of this work to audiences at Yale, UCLA, NYU, GLOW 36, 25-SCL, WCCFL 32, and NELS 46. I am thankful to the audience members for the feedback they provided me there and to the Yale Linguistics Department and Yale's Graduate Student Assembly for subsidizing my travels. I am also grateful to anyone who has ever attended one of my practice talks for helping me improve my work and its clarity.

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I remembered from my childhood and I followed you around like a documentary photographer and I wish we could have redone it again this year. You live on in my memories and your surprise visits in my dreams. I love you and I miss you so much.

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Chapter 1

Introduction

Head movement and its status as a type of movement that is available in the syntactic component of the grammar has been under discussion in the literature in recent years. This discussion sprang up in part as a result of head movement's apparent lack of semantic effects. Some researchers have attempted to place head movement outside of the domain of syntax. More recently, evidence of semantic effects of head movement has led others to reconsider such a move. In this dissertation, I provide evidence for head movement as a movement that must be available in the syntax. I show that the phenomenon of negative auxiliary inversion provides evidence for the semantic effect of head movement. Negative auxiliary inversion is a phenomenon present in some varieties of English spoken in North America. This study focuses on a particular variety of English, West Texas English, and is informed by the larger theoretical background at the syntax-semantics interface. The theoretical issues that are highly relevant are negation, subject restrictions of certain types of constructions, scope, and principles of scope economy. The movement that derives constructions which exhibit negative auxiliary inversion is sensitive to principles of scope economy and movement which is semantically vacuous is disallowed. The types of subjects that are possible in negative auxiliary inversion behave uniformly in their scopal interaction with negation. This discovery furthers our understanding of why subject restrictions arise.

In addition to the theoretical goals, this dissertation expands the empirical domain concerning microsyntactic variation in English. Although there are many apparent differences among varieties

of English, very little theoretical work has been done on varieties other than standard English. In this dissertation, I consider the varieties of English which allow the phenomenon and propose that the availability of negative auxiliary inversion is correlated with the availability of a higher negative projection in a variety's hierarchy of projections as well as the availability of negative concord. Additionally, I extend the analysis to account for transitive expletive constructions, another phenomenon which is present in some varieties which exhibit negative auxiliary inversion. The analysis is also extended to account for *Not*-initial constructions, a phenomenon available to speakers of many varieties of English. I propose such constructions to be derived by movement, though the movement I propose them to involve is phrasal rather than head movement. This distinction allows me to account for cross-linguistic variation because not all varieties which exhibit *Not*-initial constructions also exhibit negative auxiliary inversion constructions.

1.1 The status of head movement in syntactic theory

Syntactic derivations can be seen as involving two types of movements: phrasal movement and head movement. In Government and Binding theory, head movement forms a class of operations subject to certain constraints (Koopman 1983, Travis 1984, Baker 1985) and is seen as a distinct type of movement from phrasal movement. Phrasal movement involves constituents while head movement involves terminal nodes or clusters of terminal nodes. The two types of movements share some properties but also differ in some respects. These differences have led some researchers to propose that head movement need not be a distinct type of movement in the syntactic component of grammar. Instead, options explored to account for its effects treat head movement as a phonological phenomenon (Chomsky 2000, 2001, Boeckx & Stjepanović 2001, Harley 2004), as a movement that does not leave traces (Lasnik 1999, Omaki 2008), as epiphenomenal (Brody 2000), or as deriving its effects through remnant phrasal movement (Hinterhölzl 1997, Koopman & Szabolcsi 2000, Mahajan 2000, Nilsen 2003, Müller 2004). Part of the motivation for placing head movement outside of the domain of syntax for some of these authors is its satisfaction of the morphophonological needs of lexical items, such as inflection. These needs appear to be independent of syntax and in some cases require mechanisms which are not available to phrasal movement,

such as downward movement in the case of affix hopping. Another motivation for treating head movement as a phonological phenomenon is its apparent lack of effect on interpretation. An example in which this is true is verb movement. Languages can differ with respect to the position in which the verb of a clause appears but this difference does not have a semantic effect.

1.1.1 Head movement without a semantic effect

1.1.1.1 Obligatory verb movement

Head movement does not appear to interact with interpretation in the case in which a language has obligatory verb movement. Two examples of obligatory head movement are V-to-T movement in French and verb second in some Germanic languages. Consider first V-to-T movement in French. Comparing the examples in (1.1) and (1.2), the relative order of the verb with respect to the adverb tells us that the verb is in a higher position in French than it is in English (Pollock 1989). It precedes adverb *souvent* 'often' in the French example in (1.1a) and cannot follow it, as in (1.1b). On the other hand, in the English example, a verb cannot precede the equivalent adverb, as in (1.2b), and must instead follow it.

(1.1)   a.   Jean embrasse souvent Marie.   (French; Pollock 1989: 367)[1]
             John kisses   often   Mary
             'John often kisses Mary.'

        b.   * Jean souvent embrasse Marie.   (French; Pollock 1989: 367)
             John often   kisses   Mary
             'John often kisses Mary.'

(1.2)   a.   * John kisses often Mary.   (English; Pollock 1989: 367)

        b.   John often kisses Mary.   (English; Pollock 1989: 367)

The verb is assumed to stay in its base-generated position in English, as in (1.3a), and to raise from

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1. With each documented example, I cite the language or variety of English in which it is attested and the original source of the example. In the case in which no source is provided, the examples are from original fieldwork.

this position to T° in French, as in (1.3b).

(1.3) a.

```
                    TP
                   /  \
                 DP    T'
                /\    /  \
             John  T°    VP
                  /\    /   \
                      AdvP    VP
                      /\     /   \
                   often   DP     V'
                          /\     /  \
                       John    V°   DP
                             kisses /\
                                   Mary
```

b.

```
                    TP
                   /  \
                 DP    T'
                /\    /    \
             Jean    T°      VP
             John  embrasse /   \
                   kisses  AdvP    VP
                           /\     /   \
                        souvent  DP     V'
                         often  /\     /  \
                             Jean    V°    DP
                                  embrasse /\
                                         Marie
                                         Mary
```
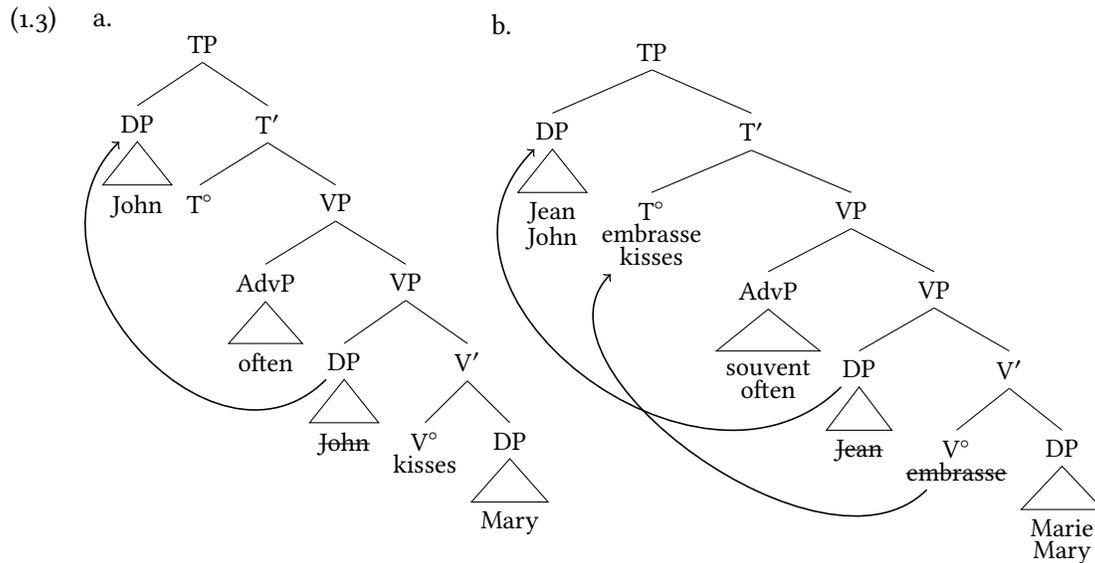
However, there is no difference in the interpretation of the sentence between the two languages. The only scope-bearing element is the adverb, and the verb is able to precede this element in French whereas the verb follows it in English.

Verb second movement in German also involves movement of the verb to a higher projection. The examples in (1.4) show that the verb precedes both adverbs and the subject. The sentence-initial constituent is in brackets and the verb is italicized for easy reference.

(1.4) a. [Ich] *las* schon letztes Jahr diesen Roman.   (German; Adger 2003: 329)
          I   read already last   year this   book
          'I read this book already last year.'

       b. [Diesen Roman] *las*   ich schon   letztes Jahr.   (German; Adger 2003: 329)
          this   book   read I   already last   year
          'I read this book already last year.'

       c. [Schon letztes Jahr] *las* ich diesen Roman.   (German; Adger 2003: 329)
          already last   year read I   this   book
          'I read this book already last year.'

Verb second in German is obligatory head movement to an even higher projection than the pro-

jection to which verbs raise in French. Under one now standard analysis, verbs move to C° in German. The structure associated with (1.4b) is given in (1.5).

(1.5)

```
                          CP
                 _____
                DP              C′
            _____      _____
        Diesen Roman       C°          TP
         this book         las      _____
                           read    DP          T′
                                    △      _____
                                   ich    T°           VP
                                    I     las     _____
                                            AdvP              VP
                                       _____       _____
                                 schon letztes Jahr   DP          V′
                                  already last year   △      _____
                                                     ich    V°          DP
                                                            las         ____
                                                                    diesen Roman
```
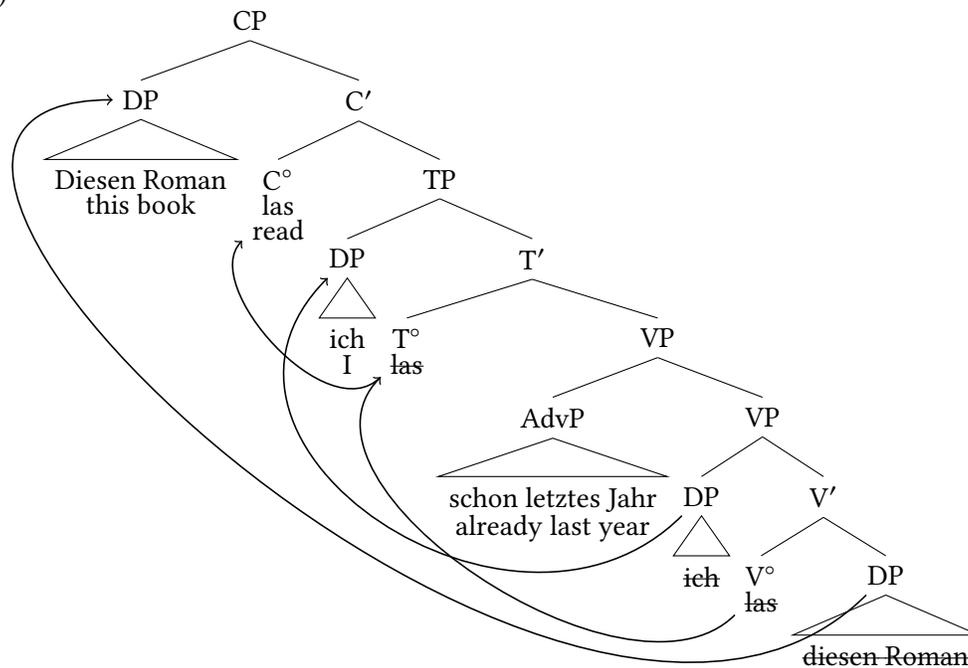
While the construction does require that a constituent be topicalized in Spec CP, the verb movement itself does not affect scopal relations in the sentence.[2] Verbs are interpreted in the same way regardless of whether they stay low, as in English, or raise to a higher projection, such as T° in French and C° in some Germanic languages.

1.1.1.2 Yes-no question formation

Another example of a movement that does not restrict scopal relations is subject-auxiliary inversion in yes-no questions in English. A yes-no question can be derived from a declarative by raising the auxiliary to a position higher than the subject. Yes-no question formation does not appear to have an effect on scopal interpretation when considering the pair in (1.6).

(1.6)   a. Everyone can come to the party.

---

2. Verb second does appear to affect scopal relations in some cases. See section 1.2.3.3 below for a brief discussion and Szabolcsi (2010) for a more in-depth discussion.

b. Can everyone come to the party?

The sentence in (1.6a) is ambiguous. What gives rise to the ambiguity is the scopal relation of the subject and the modal. In the surface scope interpretation, the subject has wide scope. Inverse scope is also available with the modal gaining wide scope over the subject. The same ambiguity is retained in (1.6b). The question can be asking whether each person is able to attend or it can be asking whether it is possible to have every person attend. The movement has no effect on the interaction between scope-bearing elements and cannot be subject to principles of scope economy.

1.1.2 Brief introduction to attested effects of head movement on interpretation

Although the head movement which forms yes-no questions does not restrict the available scopal interpretations of its declarative counterpart, it does interact with a different aspect of interpretation in some cases. When the subject of a yes-no question is a negative polarity item, the head movement of negation is able to license the NPI, which means that the moved head is interpreted in its moved position (Roberts 2010 building on observations by McCloskey 1996). Consider the contrast in acceptability between the examples in (1.7).

(1.7) a. Which one of them doesn't anybody like? (McCloskey 1996: 89)

b. *I wonder which one of them anybody doesn't like.

Roberts reports (1.7a) as an example in which head movement interacts with interpretation beyond its usual role of distinguishing a question from a declarative. The subject-auxiliary inversion of the negated auxiliary *doesn't* results in the NPI *anybody* becoming licensed in (1.7a). In comparison, when this head movement does not occur, as in an indirect question, the result is an unacceptable sentence, as in (1.7b). The unacceptability of this example is due to the NPI not being licensed.

The evidence that head movement has semantic effects that is discussed in Roberts contributes to a line of work which attributes an interaction between head movement and interpretation (Lechner 2006, 2007, Szabolcsi 2010, Hartman 2011, Bhatt & Keine 2013, Iatridou & Zeijlstra 2013). All of these researchers present phenomena which are best analyzed as involving head movement as a

syntactic operation on the basis of its interaction with semantics.[3] I return to a description of the previously proposed evidence in section 1.2.3.

In this dissertation, I follow the line of research which defends the availability of head movement in the syntactic component of grammar on the basis of its interaction with interpretation. The empirical evidence comes from the phenomenon of negative auxiliary inversion, which is attested in some varieties of English. I argue that negative auxiliary inversion involves head movement with a semantic effect. In constructions exhibiting negative auxiliary inversion, the overt movement of a head has the effect of disambiguating the scope of negation.

1.2 A semantic effect of head movement: Negative auxiliary inversion

Constructions exhibiting negative auxiliary inversion contain a clause-initial negated modal or auxiliary. This negative element is followed by a quantificational or non-specific subject, as in (1.8a). Although the auxiliary precedes the subject, a clause containing negative auxiliary inversion is a declarative and receives the falling intonation of a declarative. The corresponding non-inverted construction is also possible, as in (1.8b), though some restrictions arise.[4]

(1.8)	a.	*Don't many people like you.*	(WTE; Foreman 1999/2001: 21)
	b.	*Many people don't like you.*	(WTE; Foreman 1999/2001: 21)

Negation has unambiguous wide scope in (1.8a), an observation initially made in Foreman (1999) for the construction. On the other hand, its non-inverted counterpart in (1.8b) can be ambiguous between its surface scope interpretation and negation taking wide scope. This ambiguity for the non-inverted construction is attested for West Texas English in Foreman and confirmed by my

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3. Another line of work which argues for head movement as a syntactic operation is Minimalist work in which head movement extends the locality domain of phases (den Dikken 2007 and previous work, following an intuition from Chomsky 1993). The basis on which head movement is proposed to be syntactic is on formal properties of the grammar.

4. Restrictions on non-inverted constructions are discussed in chapter 3.

consultants.[5] Foreman (1999/2001) shows the contrast in the available readings with the pair of sentences in (1.9). In these examples, he provides a context that is compatible with negation scoping below the subject *many* and shows that it results in unacceptability when combined with a negative auxiliary inversion, as in (1.9a). In comparison, the same context results in a well-formed example when it is combined with the non-inverted counterpart, as in (1.9b).

(1.9)   a.   * Don't many people like you, but many do like you, too.

(WTE; Foreman 1999/2001: 21)

   b.   Many people don't like you, but many do like you, too.

(WTE; Foreman 1999/2001: 21)

1.2.1   Distribution of the phenomenon

Negative auxiliary inversion is attested in a restricted number of varieties of English in North America. It is attested in varieties of African American English (AAE) throughout North America (Labov et al. 1968, Labov 1972, Martin 1992, 1993, Weldon 1994, Sells et al. 1996, Parrott 2000, Green 2008, 2011, 2014, among others). It is also attested in some varieties spoken by white individuals in the South (Labov et al. 1968, Labov 1972, Martin 1992, 1993, among others). Two varieties of Southern speech for which the phenomenon is described in detail are Appalachian English (AppE) (Wolfram & Christian 1976, Feagin 1979, Shearer 1998, Montgomery & Hall 2004, Zanuttini & Bernstein 2014, Wood, Sigurðsson, et al. 2015, Blanchette 2015, among others) and West Texas English (WTE) (Foreman 1999, 1999/2001, Horn 2015, Matyiku 2016), also known as Vernacular Texas English in Salmon (2017).

The label I choose to refer to the construction, Negative Auxiliary Inversion, comes from Green's (2011)Green's (2014)'s work on the phenomenon, who labels it as Declarative Negative Auxiliary Inversion (NAI). The phenomenon is also known in the literature as 'negative inversion' in Labov et al. (1968), Labov (1972), Sells et al. (1996), Green (2008), Foreman (1999, 1999/2001), among others;

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5. Blanchette (2015) confirms the availability of inverse scope interpretations of non-inverted examples for some of her Appalachian English consultants, as well. However, some speakers of English allow only a narrow scope of negation in such constructions, as reported in Jackendoff (1969), Beghelli & Stowell (1996), and others.

Non-canonical Negative Inversion (White-Sustaíta 2010); Verb-initial Negative Inversion (V1NI) in Horn (2014a, 2015); Popular Negative Inversion in Blanchette (2015) and her earlier work; and Negative Auxiliary First in Salmon (2017). The phenomenon as described here differs from other phenomena which involve negation, phenomena that are introduced in section 1.3 and discussed in chapter 4.

A map showing the locations of examples which exhibit negative auxiliary inversion that have been attested in the literature for white speakers is given in (1.1). This map is retrieved from the Yale Grammatical Diversity Project database.[6]
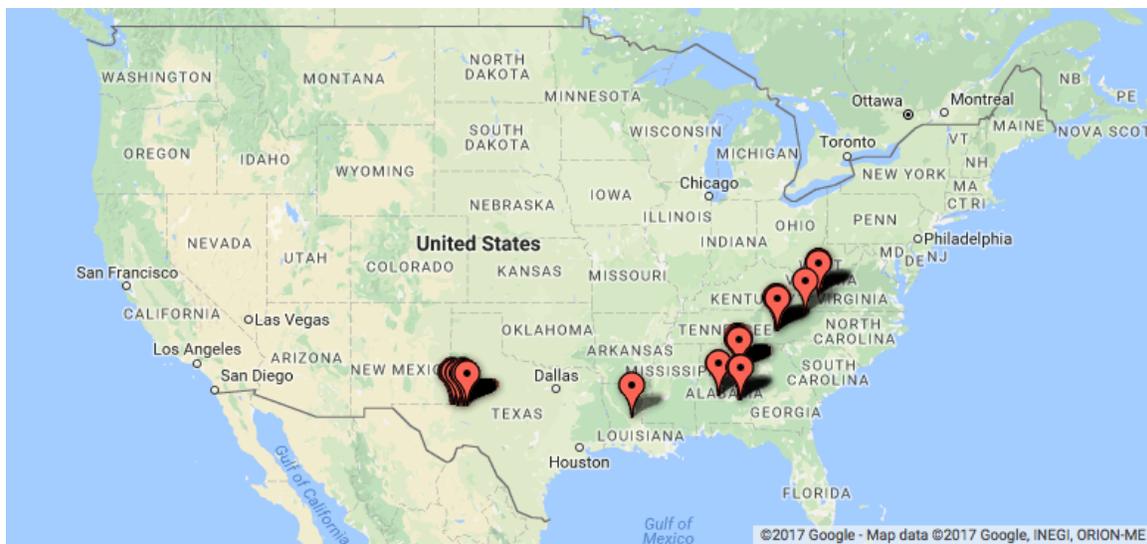
Figure 1.1: Map showing the locations of negative auxiliary inversion examples attested in the literature for white speakers

Much of the literature focuses on the construction when its subject is negative, such as the examples in (1.10).

(1.10) a. Can't nobody beat 'em.   (AAE; Labov et al. 1968: 285)

         b. Didn't nobody see it, didn't nobody hear it!   (AAE; Labov et al. 1968: 285)

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6. An interactive version of this map can be accessed at the following link: https://fusiontables.google.com/DataSource?snapid=S2004877Ftu2. A direct link to a map showing the attested examples for negative auxiliary inversion for African American English speakers can be found at the following link: https://fusiontables.google.com/DataSource?snapid=S2004878W69n. This latter map is not included here because negative auxiliary inversion is attested for African American English speakers throughout the country and this geographical distribution is not yet apparent in the database due to a lack of examples with associated locations.

	c.	Won't nobody help her.	(AppE; Feagin 1979: 241)
	d.	Didn't none of us ever learn that.	(AppE; Feagin 1979: 235)
	e.	Ain't nobody doin' nothin' wrong.	(WTE; Foreman 1999: 2)
	f.	Don't nobody live there.	(WTE; Foreman 1999: 6)

These examples exhibit both negative auxiliary inversion and negative concord. When a construction exhibits negative concord, two or more morphologically negative elements yield a reading that is equivalent to one logical negation (Giannakidou 2006 building on much previous work). The example in (1.10e) is paraphrased by Foreman as *Nobody's doing anything wrong*. In this particular example, there are three morphologically negative elements that combine to yield a reading that is equivalent to one logical negation, these elements being *ain't*, *nobody*, and *nothin'*. In the examples in (1.10), the sentence-initial negated auxiliary is one of the morphologically negative elements while the remaining negative elements are *n-words*. This terminology is introduced in Laka (1990) to refer to the nominal and adverbial elements that give rise to negative concord readings. N-word subjects are sometimes referred to as *negative indefinites* in the literature. I return to a discussion of negative concord in chapter 2 and provide my analysis for the phenomenon in section 3.4.3 of chapter 3.

My analysis focuses on the construction for West Texas English, following Foreman (1999, 1999/2001). Foreman chooses this label to refer to the variety which he describes for his group of consultants while acknowledging that his description might extend to speakers in other areas of Texas – or even in the South more generally. My work builds on his and I adopt his label in my dissertation. A recent study on negative auxiliary inversion in Texas, Salmon (2017), describes the phenomenon as Vernacular Texas English. Salmon suspects that the phenomenon is available for working class speakers and is used in informal or familiar situations. I found middle-to-upper class speakers whose speech exhibited the phenomenon in Austin, Texas. I return to a discussion of the attested differences between the varieties and the extent to which my analysis of the construction for West Texas English can account for the construction in African American English and in Appalachian English in chapter 4.

I refer to varieties which do not exhibit the phenomenon as "Standard English" (SE) or "Standard

American English" (SAE) to indicate that the phenomenon is not widespread throughout the population of English speakers. With my use of this term, I do not mean to infer that all varieties which do not exhibit the phenomenon are uniform and, more importantly, I reject any negative connotations the term "standard" might have for the varieties to which it does not refer. I do not mean to imply that any variety which does exhibit the phenomenon is substandard in any way.[7]

Similarly, I use the term African American English in this dissertation to refer predominantly to varieties of African American English which exhibit negative auxiliary inversion and a particular subject distribution. The term abstracts over a group of individual speakers whose grammars are similar in these respects. Though the label includes an ethnicity, not all African American speakers consider themselves to be speakers of African American English, not all varieties of African American English exhibit these properties and, conversely, not all speakers whose grammar exhibits the relevant properties are African American. A similar logic holds for Appalachian English and West Texas English as referred to in this dissertation. Though the labels include geographic regions, not all inhabitants of Appalachia or West Texas exhibit the relevant features and the terms are meant to refer to the groups of individuals whose grammars do exhibit the features. Given that grammars are properties of individuals, there are also discrepancies within these already narrowly defined sets. I point these discrepancies out when I am aware of ones that are relevant to the topics discussed here.

There is some evidence that constructions exhibiting negative auxiliary inversion can be understood by speakers who might not themselves use it. Evidence for this claim comes from a recent survey conducted by Jim Wood as part of the Yale Grammatical Diversity Project (Matyiku & Wood 2011/2015). In a survey conducted through Mechanical Turk, many participants rated favorably the string exhibiting negative auxiliary inversion in (1.11).

(1.11)   He won't go, and can't nobody make him.

The instructions in the survey state that the goal of the study is to find out about the language of

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7. I do not follow other researchers in using words such as "canonical" or "mainstream" to refer to a variety that lacks a restricted phenomenon because those words have their own set of potential negative connotations themselves.

the participants and the language where they grew up (Wood, Horn, et al. 2015). The participants are asked to consider whether a given example is "an acceptable sentence in informal contexts," giving the example a value from a scale of 1 to 5, where 1 is unacceptable and 5 is acceptable. Of the 361 survey participants, a large number of respondents rated the sentence as acceptable, including respondents based in areas in which negative auxiliary inversion is not attested in the literature. Jim Wood (p.c.) reports that more respondents in the South judged the example favorably than anywhere else but, surprisingly, speakers throughout the country judged the example favorably, in spite of the fact that most of the respondents were white and not all speakers of an African American English variety.

This high rate of favorability is surprising because the construction exhibits two phenomena that are not present in most varieties of English, negative auxiliary inversion and negative concord.[8] In the negative auxiliary inversion part of the example in (1.11), *can't nobody make him*, there are two morphologically negative elements, *can't* and *nobody*, but the sentence is interpreted as involving a single instance of negation. It can be paraphrased as *nobody can make him*.

However, I would hesitate to count the positive responses as being equivalent to acceptability judgments. I do not believe we can infer that the positive responses to this example are an indication that the respondents' grammars exhibit negative auxiliary inversion or negative concord. Instead, I suspect that the participants responded favorably to this examples because they were able to infer what it meant. The phenomenon of negative auxiliary inversion appears to be relatively transparent in its meaning to non-native speakers of the construction, at least on some level. How it is possible for speakers to understand constructions that their grammars do not themselves generate is a non-trivial issue but beyond the scope of this dissertation.

Wood, Horn, et al. acknowledge that their results may or may not reflect a participant's actual language use, but they do equate the ratings provided by them as acceptability judgments of the participants' own informal speech. This conclusion seems to me too strong, particularly given the

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8. Blanchette (2015) reconsiders the presence of negative concord in standard English. She equates having judgments on a certain construction with having it in one's grammar and her analysis of negative concord explains how post-verbal elements can be interpreted in varieties of English, including varieties that are not generally thought of as exhibiting negative concord, such as standard English.

instructions. The broader mention of language in the area in which the participants grew up opens up the possibility that they might answer the question on the basis of what they think others might say, which could also explain the larger than expected distribution of positive ratings. Ensuring that judgments are introspective is, of course, also a consideration when acquiring acceptability judgments in person.

My reluctance to equate the results of the survey as with acceptability judgments is due to my difficulty in finding consultants outside of the narrowly-defined areas in which the construction is attested in the literature. In my search for consultants outside of Texas, the area in which I conducted my fieldwork, I found only a subset of the African American speakers and Southern white speakers who accepted examples containing negative auxiliary inversion, and no speakers who are not African American or from the South who did. Therefore, it seems unlikely that a majority of the survey respondents were speakers of a variety that exhibits the phenomenon and all of its properties and more likely that the construction was understood in context by speakers who would not otherwise produce the example.

Negative auxiliary inversion appears to be fairly easy to understand to non-native speakers of the construction also on the basis of the fact that it is used in popular media such as songs, books, television shows, and movies – media which is generally meant to be accessible to speakers of a standard variety. Examples containing negative auxiliary inversion constructions which appear in the media are reproduced in (1.12)-(1.14). Examples from TV shows are given in (1.12).[9] A little bit of context is provided for these examples in italics. Most of the lines are attributed to African American characters, with the exception of (1.12g), whose character is white.

(1.12)   a. *You're free to make your drops, collect what need collectin',* won't nobody bother you. *You got my word on it.*

(Major Howard "Bunny" Colvin played by Robert Wisdom in *The Wire* S3 E5)

b. *I know he didn't see it coming.* Ain't none of us seen it coming.

(Russell "Stringer" Bell played by Idris Elba in *The Wire* S2 E9)

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9. The examples in (1.12c)-(1.12g) could be ambiguous between having a negative auxiliary inversion interpretation or that of a negative existential with a relative clause. Negative existentials are introduced below in section 1.3 and discussed in more detail in chapter 4.

   c. *A: Oh, it's cause they [cars] got that LoJack, man.*

      Royce: Man, we in West Texas. Ain't nobody got no LoJack.

      (Kennard Royce played by Cedric Neal in *Friday Night Lights* S4 E5)

   d. *She ain't gonna talk to you.* Ain't nobody gonna talk to you.

      (Omar Little played by Michael K. Williams in *The Wire* S3 E6)

   e. *Crosby: Just hold tight, okay?*

      Natalie: Ain't nobody holding tight. *We're at nine centimeters dilated. This baby's*

      coming right now. (Nurse Natalie played by Aloma Wright in *Parenthood* S3 E5)

   f. *Poussey: Look, why y'all trying to beat up Judy King? [...]*

      Taystee: Ain't nobody trying to beat down Judy King. *Who told you that?*

      (Taystee played by Danielle Brooks in *Orange is the New Black* S4 E8)

   g. *We could sit here for the next week concocting an elaborate plan with lots of twists and*

      turns, right? Or I could poison him today. No one would know, and death is more per-

      manent than getting fired. But ain't no one getting punished if he just drops dead.

      (Kasey Sankey played by Kelly Karbacz in *Orange is the New Black* S4 E12)

Negative auxiliary inversion examples from songs are given in (1.13).[10] The song in (1.13b) is popular in black communities and (1.13c) is sung by a white folk group from Texas in 2008.

(1.13)   a. Can't nobody take my pride. Can't nobody hold me down.

         (Line from Puff Daddy's 1997 song *Can't Nobody Hold Me Down*)

      b. Can't nobody do me like Jesus; can't nobody do me like the Lord.

         (Line from a popular church song, "Can't nobody do me like Jesus")

      c. Well, I've heard it said, won't nothing bring you down like your hometown. But won't

         nothing bring you up like getting down.

         (Line from Red Molly's 2008 song *Beaumont Rest Stop*)

Examples exhibiting negative auxiliary inversion from books are given in (1.14).[11] The lines in

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10. The example in (1.13b) is from Green (2002) and the example in (1.13c) was brought to my attention by Larry Horn.

11. The examples in (1.14a)-(1.14c) are from Green (2002).

(1.14a)-(1.14c) are written by African American authors.

(1.14) a. Then who will walk your dog for you? Don't none of your other roomers do it.

(Line from Langston Hughes' "What Can a Man Say?" story; a story from the "Best of Simple" stories written in the 1950's)

b. But don' nothin' happen and I knows then that somethin' worse than anything I ever heard 'bout is in store for me. (Line from Ralph Ellison's 1952 "Invisible Man")

c. Won't nothing surprise me... (Line from Ralph Ellison's 1952 "Invisible Man")

Most of the examples in the media which exhibit negative auxiliary inversion are attributed to African American speakers and all of the examples are from American media.

Negative auxiliary inversion is not attested in the linguistics literature for varieties of English outside of North America. Henry et al. (1997) point out that the phenomenon is unavailable in Belfast English in Northern Ireland and Bristol English in England, as in the ill-formed example in (1.15).

(1.15) * Can't nobody do that. (Belfast & Bristol; Henry et al. 1997: 270)

The reason for this example's unacceptability is not due to the presence of negative concord. Negative concord is attested in both of these varieties. The well-formed example in (1.16) exhibits the phenomenon and can be paraphrased as *I didn't do anything.*

(1.16) I didn't do nothing. (Belfast & Bristol; Henry et al. 1997: 269)

In a comparative study which builds heavily on the literature of negative concord descriptions of English, both British and American, Smith (2001) points out two other varieties of British English which exhibit negative concord but do not exhibit negative auxiliary inversion constructions. The two varieties are Buckie English, a variety from the northeast of Scotland, and Reading English, a variety from England.

There is an example exhibiting negative auxiliary inversion in the media from a British author. The example is from the first Harry Potter book written by J.K. Rowling, a British author, for Rubeus Hagrid, a British character in the book. The example was found in Horn (2015) and is reproduced below in (1.17).

(1.17) Can't nothing interfere with a broomstick except powerful Dark magic. (Line from Rubeus Hagrid in J.K. Rowling's 1997 novel *Harry Potter and the Philosopher's Stone*)

This single example is the only counterexample I have found to the claim that negative auxiliary inversion is absent from varieties of British English. Its presence indicates the possibility that negative auxiliary inversion is available to some speakers of British English as well.

1.2.2 Brief overview of the analysis of negative auxiliary inversion

Negative auxiliary inversion constitutes an example in which head movement has a semantic effect. As previously mentioned, negation in these constructions has unambiguous wide scope. In the example in (1.18), negation outscopes the quantificational subject *everybody*.

(1.18) Didn't everybody see the fight. (WTE)

'Not everybody saw the fight.' [*not » everybody*; **everybody » not*]

Additionally, the construction exhibits a subject restriction. Subjects that do not interact scopally with negation, such as proper names as in (1.19), are not licit.

(1.19) * Didn't Jamie see the fight. (WTE)

I propose that constructions exhibiting negative auxiliary inversion are derived by the movement of the negated auxiliary over the subject, as in (1.20), following previous analyses of the phenomenon.

(1.20) didn't [$_{TP}$ everybody ~~didn't~~ see the fight]

I account for the subject restriction of the construction by restricting the movement of negation. The movement cannot occur over subjects with which it does not interact scopally, in line with Fox's (2000) Principle of Scope Economy. The movement of negation is therefore subject to the Principle of Scope Economy, which I extend to apply to overt movement that is optional. Because the subject is unable to reconstruct below its canonical subject position (Lasnik 1999, Lechner 2007), negation is interpreted in its moved position. Since negation is both pronounced and interpreted in its moved position, the phenomenon of negative auxiliary inversion constitutes evidence for semantic effects of head movement.

1.2.3 Further evidence for semantic effects of head movement

In this section, I briefly summarize previous proposals in the literature in which head movement has semantic effects. As mentioned in section 1.1.2, the observation that the movement of scope-bearing heads can have a semantic effect has previously been made by McCloskey (1996), Lechner (2006, 2007), Roberts (2010), Szabolcsi (2010), Hartman (2011), Bhatt & Keine (2015), Iatridou & Zeijlstra (2013).

1.2.3.1 Evidence for semantic effects of negation

The movement of negation in particular is proposed to have a semantic effect when it licenses NPIs in *wh*-questions (McCloskey, Roberts) and in imperatives (Szabolcsi). We return to the examples introduced in section 1.1.2, which are repeated below.

(1.7) a.   Which one of them doesn't anybody like?   (McCloskey 1996: 89)

       b.   * I wonder which one of them anybody doesn't like.

Roberts, building on observations made in McCloskey, argues that the subject-auxiliary inversion of an auxiliary bearing negation licenses NPIs which are in the subject position of such questions. The question in (1.7a) differs from its indirect form in (1.7b) in exhibiting subject-auxiliary inversion.

The indirect question lacks the subject-auxiliary inversion and is ill-formed. This suggests that the subject-auxiliary inversion of the negated auxiliary is the licensor of NPI *anybody*.

Roberts assumes the derivation of (1.7a) to be as in (1.21). The negated auxiliary *doesn't* undergoes movement from T° to its landing site, C°.[12]

(1.21) Roberts' syntactic assumptions for (1.7a):

Which one of them doesn't anybody ~~doesn't~~ like...

As McCloskey points out, the presence of negation in itself is not enough to license the NPI in (1.7a). The fact that negation c-commands the NPI from its moved position is important. When negation is below C°, as in (1.22), the question is no longer well-formed.

(1.22) * Which one of them does anybody not like? (McCloskey 1996: 91)

Subject-auxiliary inversion has occurred in this question but the result is an ill-formed construction. The unacceptability of this example suggests that subject-auxiliary in itself is not enough to license the NPI in this construction. It is the movement of the negative head *-n't* that licenses the subject NPI in (1.7a).

Szabolcsi (2010) also shows that the fronting of negation has scopal significance because it is able to license NPI subjects in imperatives. NPIs are not licensed in the subject position of imperatives, as in (1.23a). The presence of negation is not enough to license them, as in (1.23b), unless negation precedes the subject, as in (1.23c).

(1.23) a. * Any one of you touch the money! (Szabolcsi 2010: 44)

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12. An alternative analysis of (1.7a) is that negation is base-generated in the higher structural position. Kayne (2000: 51) suggests that in negative questions involving *wh*-movement, the *-n't* originates above the subject. The syntactic analysis which corresponds with these assumptions is given in (i).

(i) Alternative analysis for (1.7a):
Which one of them does-n't anybody ~~does~~ like... (Compare to (1.21))
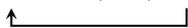
If this analysis is ultimately the right analysis for the sentence, the licensing of NPI subjects in *wh*-questions would not be an instance of head movement with a semantic effect.

     b.   * Any one of you don't touch the money!   (Szabolcsi 2010: 44)

     c.   Don't any one of you touch the money!   (Szabolcsi 2010: 44)

Szabolcsi assumes that the imperative in (1.23c) is derived by movement of the negative auxiliary *don't* from its base position below the subject, as in (1.24).

(1.24)   Szabolcsi's syntactic assumptions for (1.23c):

      Don't any of you ~~don't~~ touch the money!

The examples provided in the literature as evidence for the semantic effects of the movement of negation share with the present analysis the necessity to revise the assumptions we have about negation in order to be able to interpret it in its moved position.[13] If NPIs need to be in the scope of negation semantically, negation must have scope at LF in its moved position in both imperatives as in (1.23c) and *wh*-questions as in (1.7a). Roberts takes for granted the fact that a head can be interpreted in its moved position while Szabolcsi suggests that an analysis in which negation combines with an existential quantifier over events, in line with Krifka (1989), may be on the right path. The intuition behind the analysis is that if negation forms a complex quantifier with the existential quantifier over events, its movement allows it to bind a trace of a simpler type, an event variable, which in turn allows negation to gain scope over the subject (see Szabolcsi 2010: 44 for the discussion).

In addition to the evidence for the semantic effects of negation, other authors have made the observation that the movement of other types of heads has semantic effects. The movement of modals is shown to be scopally significant in Matushansky (2006), Lechner (2006, 2007) and Iatridou & Zeijlstra (2013) for English. Evidence for the semantic effect of raising verbs is discussed in Szabolcsi (2010) for Shupamen, Dutch, and English.

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13. If the interpretation of negation is simply logical negation, the head will necessarily reconstruct at LF. A discussion of how negation is interpreted in its moved position in negative auxiliary inversion constructions is provided in chapter 3.

1.2.3.2 Semantic effects of modals

Matushansky (2006) suggests that the head movement of modals in English has a semantic effect. She considers the scope of modals with respect to negation. Some modals scope below negation, as in (1.25a), while some modals scope above it, as in (1.25b).

(1.25)   a.   Yolanda can't leave.   (Matushansky 2006: 104)

            [*can » not*; *not » can*]

        b.   Yolanda shouldn't leave.   (Matushansky 2006: 104)

            [*should » not*; **not » should*]

Matushansky assumes that negation has a fixed position in which it is interpreted. Modals must then start out below negation in order for modal *can* to be able to be interpreted in a lower position, as in the attested interpretation in (1.25a). Modal *can* is pronounced in its moved position but obligatorily reconstructs. On the other hand, modal *should* is both pronounced and interpreted in its moved position above negation. The movement of modals which gain scope over negation occurs in the narrow syntax and has an effect on interpretation.[14]

Lechner (2006, 2007) also provides evidence for a semantic effect of the head movement which comes from the ability of modals to be interpreted in their landing sites. His evidence comes from the scopal interaction between modals and strong quantificational subjects. Consider the example in (1.26), which contains three scope-bearing elements and which has multiple available interpretations. Negation has wide scope while the source of ambiguity is the variable scope of modal *can* and the universal subject.

(1.26)   Not every boy can make the team.   (Lechner 2007: 12)

          Relevant interpretations: [*not » can » every*; *not » every » can*]

The evidence for a semantic effect of head movement comes from the split scope interpretation

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14. Matushansky also considers an alternative analysis. Since the scope of different modals with negation varies, their interpretation could instead be due to pragmatic factors.

of (1.26). When the modal is interpreted between negation and the subject, the modal is both interpreted and pronounced in its moved position. The syntax Lechner assumes is quite complex but will be briefly described here because the evidence hinges on certain assumptions he makes. The derivation in the narrow syntax of (1.26) is as in (1.27).

(1.27)   Lechner's syntactic assumptions for (1.26):

[Not every boy] Not can [~~not every boy~~] ~~can~~ [~~not every boy~~] make the team
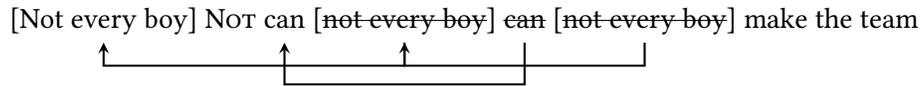
The subject starts out in Spec*v*P, moves to an intermediate position which is above the position in which modals are generated and below the position in which they land, and finally to the position in which it is pronounced. There is an abstract negation, Not, below the subject's final landing site. Lechner assumes the interpretations of negation and of strong quantificational subjects to be fixed. The semantic derivation for the split scope interpretation of (1.26) is as in (1.28).

(1.28)   Lechner's semantic assumptions for (1.26):

[~~Not every boy~~] Not can [~~not~~ every boy] ~~can~~ [~~not every boy~~] make the team
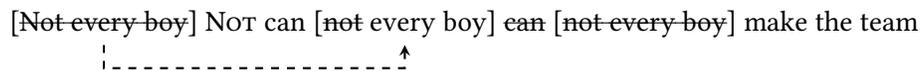
Negation is not interpreted as part of the subject. The abstract negation is interpreted instead, and is the source of wide scope negation. The subject reconstructs to its intermediate position, below the position in which the modal is interpreted. The split scope interpretation is due to the modal being interpreted in its moved position. The surface scope interpretation, on the other hand, is derived when the modal reconstructs.

Modals in Matushansky's and Lechner's works gain scopal significance when they are interpreted as generalized quantifiers over possible worlds. In order to derive scope splitting of the complex constructions discussed, the modal is interpreted in its landing site. In order to derive the surface scope of the constructions, the modal reconstructs. The ability of modals to be interpreted both in their moved position and in their base-generated position is evidence that their movement interacts with interpretation.

1.2.3.3   Semantic effects of raising verbs

Szabolcsi (2010) provides evidence for raising verbs having a semantic effect as a result of their behaving like generalized quantifiers. She shows that in Shupamem, raising verbs have the ability to outscope the subject over which they raise overtly. Raising verbs in Dutch also have this ability and, in addition, are able to reconstruct. Raising verbs in English behave like generalized quantifiers because they appear to undergo covert movement. I summarize the evidence she provides for each of these claims in turn.

Shupamem is an SVO language and verbs can be fronted for focus. In the example in (1.29), the raising verb *ka yeshe* 'began' has raised to a focus position and has unambiguous wide scope over the other scope-bearing element in the sentence, the subject *ndùù Maria* 'only Maria.'

(1.29)   A   ka   yeshe ndùù Maria inget   ndàà liʔ.   (Shupamem; Szabolcsi: 38)
focus past begin only Maria have.INF good roles
'It began to be the case that only Mary is getting good roles.' [*only » begin; begin » only]

Szabolcsi assumes the syntax of (1.29) to be as in (1.30).

(1.30)   Szabolcsi's syntactic assumptions for (1.29):

A [ka yeshe] [ndùù Maria] ~~ka yeshe ndùù Maria~~ inget ndàà liʔ?

The subject raises from its infinitival position to the matrix clause and the raising verb moves to a position which precedes the matrix subject. The interpretation of the sentence, the raising verb outscoping *only*, is derived by the raising verb being interpreted in its moved position rather than by reconstructing in its lower position. The way in which Szabolcsi gains scopal significance is with the proposal that the raising verb *yeshe* 'begin' composes with the free variable of the past tense morpheme to form a mobile complex unit.[15] Szabolcsi's support for the head being interpreted in its moved position comes from the observation that the subject does not reconstruct

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15. The past tense morpheme needs to be lifted in order to be able to combine with the raising verb (Szabolcsi 2010: 40).

in the case in which the verb movement does not happen, as in (1.31) below. As she mentions, it would be strange for the subject to reconstruct only when the verb raises.

(1.31) Ndùù Maria ka   yeshe inget   ndàà liʔ.   (Shupamem; Szabolcsi 2010: 38)
        only Maria past begin have.INF good roles
        'Only Mary is such that she began to get good roles.'   [*only* » *begin*; **begin* » *only*]

The attested scopal relations for the data in (1.29) and (1.31) suggest that the subject is interpreted only in the matrix subject position. Given this, the only way in which the raising verb can gain wide scope is if it interpreted in its moved position.

Raising verbs in Dutch also behave like generalized quantifiers because they can be interpreted in their moved position and they can also reconstruct. The Dutch data and argumentation is otherwise similar to Szabolcsi's observations about Shupamem. Consider the example in (1.32).

(1.32) In mei begon   alleen Marie goede rollen te krijgen.   (Dutch; Szabolcsi: 38)
        in May began.3SG only   Mary good roles to get.INF
        'Only Mary is such that she began to get good roles' or 'It began to be the case that only
        Mary is getting good roles'   [*only* » *begin*; *begin* » *only*]

Dutch is verb-second in declarative matrix clauses but the movement of the raising verb has a semantic effect in this example. The sentence is ambiguous. Under one interpretation, the raising verb outscopes the quantificational subject. Under the second interpretation, the subject outscopes the raising verb. The movements that are implicitly assumed to occur in the derivation of this sentence by Szabolcsi are given in (1.33).

(1.33) Syntactic assumptions for (1.32)[16]:

[CP [In mei] begon [TP [alleen Marie] [vP begon [TP alleen Marie goede rollen te krijgen in mei]]]]

The matrix subject raises from its infinitival subject position to its matrix subject position, the

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16. Please note that Szabolcsi is not specific about the site from which *in mei* 'in May' is extracted.

matrix verb raises to "second position," and the constituent that moves to sentence-initial position is the adjunct *in mei* 'in May.' The source of ambiguity in the sentence has to do with the position in which the raising verb is interpreted. The interpretation in which the raising verb has wide scope is a result of the raising verb being interpreted in its moved position while the interpretation in which the subject has wide scope is a result of the raising verb reconstructing. As with the Shupamem data, Szabolcsi assumes that the subject is interpreted in its moved position and does not reconstruct in the embedded clause. The evidence for Dutch comes from an example in which the subject itself – rather than an adjunct – is fronted as a sentence-initial constituent, as in (1.34).

(1.34)   Alleen Marie begon   goede rollen te krijgen.   (Dutch; Szabolcsi 2010: 38)

      only   Mary began.3SG good   roles   to get.INF

      'Only Mary is such that she began to get good roles.'   [*only » begin*; **begin » only*]

In this example, the only available interpretation is the subject having wide scope over the raising verb. The inverse scope interpretation could be available if the constituent were to reconstruct in either its intermediate site, the matrix subject position, or its base-generated position. However, since the inverse scope interpretation is not available, reconstruction of the subject is unavailable.

The last case of raising verbs behaving like generalized quantifiers described in Szabolcsi (2010) involves their covert movement in English. Szabolcsi reports that the sentence in (1.35) which involves the raising verb *begin* and subject *only Mary* is also ambiguous. She assumes that the subject *only Mary* raises from the embedded clause to become the subject of the matrix clause, as in (1.36).

(1.35)   Only Mary began to get good roles.   (Standard English; Szabolcsi 2010: 37)

                                                         [*only » begin*; *begin » only*]

(1.36)   Szabolcsi's syntactic assumptions for (1.35):

      [Only Mary] began ~~only Mary~~ to get good roles

The surface scope interpretation is due to the subject and raising verb being interpreted in their

surface positions, as in (1.37a). The interpretation in which the raising verb has wide scope over the subject is due to covert movement in the semantic component of grammar, as in (1.37b). In this example, the covert movement is shown with a dashed line.

(1.37) Deriving the interpretations of (1.35) according to Szabolcsi:

    a. [*only* » *begin*] interpretation of (1.35)

       ⟦Only Mary⟧ ⟦began⟧ ~~only Mary~~ to get good roles

    b. [*begin* » *only*] interpretation of (1.35)

       ⟦began⟧ ⟦Only Mary⟧ began ~~only Mary~~ to get good roles

           covert
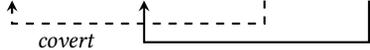
The alternate analysis for the wide scope interpretation of the raising verb could instead be due to the subject reconstructing, but Szabolcsi rules out this option following Lasnik's (1999) observation that at least some – if not all – matrix subjects are restricted in their ability to reconstruct.

Further evidence in favor of the covert movement analysis comes from the fact that subjects other than those headed by *only* can be interpreted in the scope of raising verb *begin*. Szabolcsi provides Google-search examples in which the contexts suggest that the subjects have unambiguous low scope with respect to the raising verb *begin*. One such example is reproduced in (1.38). If Lasnik is correct and subject quantifiers never lower, the raising verb is only able to outscope the subject if it moves covertly, as in (1.39).

(1.38) γEvery step began to be a struggle.   (Standard English; Szabolcsi 2010: 41)

                                     [*every* » *began*; *began* » *every*]

(1.39) Deriving the interpretation of (1.38) according to Szabolcsi:

    ⟦began⟧ ⟦Every step⟧ began ~~every step~~ to be a struggle

        covert
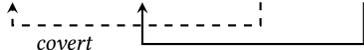
To review, the evidence Szabolcsi provides for the head movement of raising verbs having a semantic effect comes from three languages: Shupamem, Dutch, and English. In Shupamem, a raising

verb moves to a focus position, resulting in the raising verb outscoping the subject. In Dutch, a raising verb moves to "second position," also resulting in it outscoping a scope-bearing subject that is in canonical subject position. Additionally, the raising verb is able to reconstruct and be interpreted within the scope of the subject. In English, a raising verb moves covertly to a position preceding the subject and is also able to reconstruct in its overt position.

1.3 A brief introduction to similar phenomena

This dissertation distinguishes negative auxiliary inversion constructions from apparently similar ones, some of which receive a similar analysis to negative auxiliary inversion in the literature and some of which do not.

I begin with descriptions of phenomena that share with negative auxiliary inversion the presence of negation. Horn (2014a,b, 2015) treats negative auxiliary inversion constructions as an example of NegFirst, the conspiracy for negation to be signaled as early in the sentence as possible (Horn 1989/2001 building on Jespersen 1917). He proposes other NegFirst conspirators to be negative existentials, transitive expletive constructions, *Not*-initial constructions, and canonical negative inversion, examples of which are given in (1.40).[17]

(1.40)   a. Won't everybody go to the party.   (*Negative auxiliary inversion*)

           b. Ain't nobody here yet.   (*Negative existential*)

           c. They can't many people say that.   (*Transitive expletive construction*)

           d. Not everybody will go to the party.   (Not-*initial construction*)

           e. Never again will I order from there.   (*Canonical negative inversion*)

Horn points out some properties that all phenomena share. In all phenomena, the clause is negative or non-assertive, its negative force is marked as early as possible in the sentence, and negation

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17. Horn uses different terminology for some of the phenomena. Negative auxiliary inversion is Verb-initial Negative Inversion (V1NI), canonical negative inversion is Verb-second Negative Inversion (V2NI) because the raising auxiliary follows another fronted constituent, and *Not*-initial constructions are *Not*-initial subjects.

takes wide scope. In all phenomena other than canonical negative inversion, the subjects are non-referential and non-specific, scope below negation, and receive a "less/fewer than" reading, unless a contrastive or metalinguistic reading is overtly coerced. The discussion that follows briefly introduces each phenomenon and in chapter 4, I consider whether negative auxiliary inversion's fellow NegFirst conspirators should receive a parallel analysis to the one I propose for the construction.

1.3.1 Negative existential clauses

I begin the discussion with the phenomenon of negative existentials, some examples of which are given in (1.41).

(1.41)   a. Ain't nothin' you can do for 'em.   (AAE; Labov et al. 1968: 284)

               b. Wasn't nobody home.   (AAE; Labov et al. 1968: 286)

               c. Wasn't nobody gettin' hurt or nothin'.   (AAE; Labov et al. 1968: 286)

               d. Ain't nobody ever thought 'bout pickin' up nothin'.   (AAE; Labov et al. 1968: 284)

Negative existentials are sometimes confounded with negative auxiliary inversion constructions or receive a parallel analysis in the literature (Martin 1992, 1993, Sells et al. 1996, Parrott 2000). I distinguish between the two types of constructions, in line with most of the literature on negative auxiliary inversion, including Labov et al. (1968), Labov (1972), Foreman (1999, 1999/2001), Green (2008, 2011, 2014) and White-Sustaíta (2010).

Labov et al. (1968) refer to this phenomenon as *it*-deletion. They describe it in African American English, a variety in which they found *it* to be the expletive most often used by their speakers. In their analysis for the construction, they treat it as akin to existential constructions in which the expletive is omitted. The analysis for the example in (1.41b) is as in (1.42).

(1.42)   Labov et al.'s *it*-deletion derives (1.41b):

        ~~It~~ wasn't nobody home.

The example in (1.41a) is more complex and involves a relative clause. Labov et al. derive it by positing an omitted relative complementizer in addition to the deleted expletive, as in (1.43).[18]

(1.43)   Labov et al.'s *it*-deletion derives (1.41a):

~~It~~ ain't nothin' ~~that~~ you can do for 'em.

Labov et al. distinguish *it*-deletion from negative auxiliary inversion, a phenomenon to which they refer as simple 'negative inversion.' Some examples they provide of the construction are given in (1.44).

(1.44)   a. Can't nobody beat 'em.   (AAE; Labov et al. 1968: 285)

b. Won't nobody catch us.   (AAE; Labov et al. 1968: 286)

c. Don't nobody break up a fight.   (AAE; Labov et al. 1968: 285)

These constructions are derived by an inversion rule that results in negation preceding the subject. Recast in current terminology, these constructions are negative auxiliary inversion constructions which are derived by the movement of the negated auxiliary over the subject, as in (1.45), in which the position of the subject is shown as being Spec,TP.

(1.45)   can't $\left[_{\text{TP}}\right.$ nobody ~~can't~~ beat 'em$\left.\right]$

When the sentence-initial element is a modal or *do*-support, the construction is unambiguously a negative auxiliary inversion construction. When the auxiliary is a form of *be*, the construction might be compatible with either an *it*-deletion or a negative auxiliary inversion interpretation. Labov et al. point out that the examples in (1.41b)-(1.41d) are compatible with either interpretation. In the case of the examples in (1.41b) and (1.41c), they could be simple instances of *it*-deletion or negative auxiliary inversion constructions. The presence of additional tense information in (1.41d) could be an indication that the example involves embedded structure and is derived by *it*-deletion.

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18. Larry Horn points out that these examples are likely subject contact relatives. See McCoy (2016) for a description of the phenomenon and references.

The form of the verb *thought* could indicate that it is in a relative clause that has its own tense projection and that the example is derived by *it*-deletion and an omitted relative complementizer, as in (1.46a).

(1.46)   a. $\left[_{\text{TP}} \text{It ain't nobody} \left[_{\text{RC}} \text{who ever thought 'bout pickin' up nothin'}\right]\right]$

   b.   Ain't $\left[_{\text{TP}} \text{nobody ain't ever thought 'bout pickin' up nothin'}\right]$

Alternatively, the example in (1.41d) could be interpreted as a negative auxiliary inversion construction. Its structure could instead be as in (1.46b), a monoclausal structure in which *thought* is in its perfect form, *ain't* is the perfect aspectual marker, and the construction is derived by the movement of the negated auxiliary over the subject. The example in (1.41d) is therefore compatible with both of the structural analyses in (1.46).

The example in (1.41a) is unambiguously *it*-deletion for Labov et al. because its non-inverted counterpart, the example in (1.47), is not possible.

(1.47)   * Nothin' ain't (that) you can do for 'em.   (AAE; Labov et al. 1968: 284)

Besides being attested in African American English, negative existentials are also attested in other varieties of English. They are attested in all varieties in which negative auxiliary inversion constructions are attested such as West Texas English, as in (1.48a), and Appalachian English, as in (1.48b).

(1.48)   a.   Ain't no black Santa Claus, is there?   (WTE; Foreman 1999: 8)[19]

   b.   Wasn't nothin' but acorns on the ground… and wasn't nobody there.

                                                                 (AppE; Wolfram & Christian 1976: 113)

Through preliminary fieldwork, I have discovered that this construction is available more generally to speakers who do not accept examples exhibiting negative auxiliary inversion constructions. I

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19. This example is a modified version of an example provided in Sells et al. (1996) for African American English.

have also found negative existentials to be much more frequent in popular media than negative auxiliary inversion constructions. Some examples from TV shows are given in (1.49).[20]

(1.49) a. Ain't no reason to drag his name down no further.

(Preston "Bodie" Broadus played by J. D. Williams in *The Wire* S2 E7)

b. Ain't nothing nobody could do about that.

(Russell "Stringer" Bell played by Idris Elba in *The Wire* S3 E8)

c. Ain't nothing to eat.

(Queenie played by Gabourey Sidibe in *American Horror Story* S3 E6)

d. Ain't nothing we can do, huh?

(Ethel Darling played by Kathy Bates in *American Horror Story* S4 E3)

e. Ain't none of this my fault. If y'all are mad 'cause Coach is making this a running offense, go talk to him. Ain't nothing I can do about it.

(Smash Williams played by Gaius Charles in *Friday Night Lights* S2 E3)

f. Ain't no laws about missing no practice.

(*Friday Night Lights* S4 E2 Regina Howard played by Angela Rawna)

g. We'd have heard if she was dead. Ain't no secrets in this place.

(Aleida Diaz played by Elizabeth Rodriguez in *Orange is the New Black* S4 E6)

h. Ain't nothin to be in on, girl. Them ladies is crazy.

(Taystee played by Danielle Brooks in *Orange is the New Black* S4 E12)

i. And ain't nothing she could've done that called for that.

(Taystee played by Danielle Brooks in *Orange is the New Black* S4 E13)

I return to a more in-depth discussion of negative existentials in section 4.2.1 of chapter 4, in which I explain why the construction does not receive the same analysis as negative auxiliary inversion constructions in my work, either, and provide a more thorough comparison of the two phenomena.

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20. Most of the lines are from African American characters with the exception of (1.49d), which is from a Southern character, and (1.49g), which is from a Hispanic character.

1.3.2 Split subject constructions

Another phenomenon that is apparently similar to negative auxiliary inversion constructions is the phenomenon of split subjects, a label I use to refer to two types of constructions, transitive expletive constructions and partitive doubling constructions, following Zanuttini & Bernstein (2014). These phenomena share many similarities with negative auxiliary inversion constructions and are treated as synonymous to the construction in Appalachian English by Feagin (1979). Some examples of transitive expletive constructions are in (1.50) and some examples of partitive doubling constructions are in (1.51).

(1.50)   a.   There can't nobody ride him.   (AppE; Montgomery & Hall 2004: 111)

         b.   They asked four men, but there didn't anyone want to leave their church.

                                                       (AppE; Feagin 1979: 238)

         c.   They can't many people say that.   (AppE; Shearer 1998)

(1.51)   a.   We don't any of us need anything.   (AppE; Montgomery & Hall 2004: lxiv)

         b.   … and you don't none of y'all work as hard as I do.

                                           (AppE; Zanuttini & Bernstein 2014: 152)

         c.   They wouldn' none of 'em help me at all with her.   (AppE; Feagin 1979: 241)

Following the observations made in previous analyses (Feagin 1979, Foreman 1999/2001, Zanuttini & Bernstein 2014, Blanchette 2015 and Salmon 2017) that transitive expletive constructions are negative auxiliary inversion constructions that are preceded by an expletive or pronominal element, I extend the analysis I provide in this dissertation for negative auxiliary inversion constructions to transitive expletive constructions. Partitive doubling constructions, on the other hand, do not receive a parallel analysis. The two types of split subject constructions phenomena are not attested in all varieties which exhibit negative auxiliary inversion constructions, a topic to which I return. A discussion of split subject constructions is provided in section 4.2.2 of chapter 4.

1.3.3 *Not*-initial constructions

The phenomenon of *Not*-initial constructions is another one which shares similarities with negative auxiliary inversion constructions. This phenomenon is available to all speakers of English, including speakers whose grammars lack negative auxiliary inversion. Some examples are given in (1.52).

(1.52)   a.   Not many people lived there then.   (SE)

          b.   Not very many people read your book.   (SE)

          c.   Not everybody will fit in that car.   (SE)

I extend the analysis of negative auxiliary inversion constructions to account for this phenomenon, following Foreman (1999, 1999/2001). However, I argue for more differences in how *Not*-initial constructions and negative auxiliary inversion constructions are derived than previous work. I focus on describing the phenomenon for standard English in order to account for cross-linguistic difference of the availability of *Not*-initial constructions in the absence of negative auxiliary inversion constructions in this variety. I also discuss whether the analysis I propose for standard English should account for *Not*-initial constructions in varieties which exhibit both phenomena. The discussion of *Not*-initial constructions is provided in section 4.3.1 of chapter 4.

1.3.4 Canonical negative inversion

Another phenomenon which is available to all speakers of English and which is in some cases compared to negative auxiliary inversion is the phenomenon of canonical negative inversion, some examples of which are given in (1.53).

(1.53)   a.   Never would I have imagined that to be possible.   (SE)

          b.   Not in a million years will he admit his mistake.   (SE)

          c.   Hardly ever does it rain in the summer.   (SE)

Labov et al. (1968) consider this phenomenon to be the closest to negative auxiliary inversion constructions at the time of their investigation. They extend the observations made by Klima (1964) for the phenomenon to derive negative auxiliary inversion constructions. Canonical negative inversion often (but not always) involves the fronting of a negative or downward entailing adverbial and subject-auxiliary inversion. For example, in (1.53a), the negative adverbial *never* is fronted, and the modal *would* precedes the pronominal subject. Labov et al. generalize the observation that negation is fronted to account for negative auxiliary inversion constructions. The rule that fronts the adverbial in canonical negative inversion also fronts negation in negative auxiliary inversion constructions. An additional rule derives the subject-auxiliary inversion in canonical negative inversion constructions.

Although canonical negative inversion shares with negative auxiliary inversion the occurrence of negation early in the clause to mark the scope of negation, negative auxiliary inversion cannot be seen as the African American English or Southern English counterpart of canonical negative inversion, as proposed by the Labov et al. Horn treats canonical negative inversion and negative auxiliary inversion constructions as distinct operations with different origins.

There are more differences between canonical negative inversion constructions and negative auxiliary inversion constructions besides these structural difference and, as such, do not merit a parallel analysis. A discussion of canonical negative inversion is provided in section 4.3.2 of chapter 4.

1.4 Roadmap of dissertation

In this chapter, I provided an overview of head movement and its status in the grammar. I set up the proposal that head movement should be available in the narrow syntax on the basis of its interaction with semantics in negative auxiliary inversion constructions and I introduced the phenomenon. I also provided an overview of previous works which propose a semantic effect of head movement and a brief introduction of phenomena that share some similarities with the phenomenon of negative auxiliary inversion.

In chapter 2, I discuss the syntactic properties of negative auxiliary inversion constructions. I

show the structural position of the subject to be the canonical subject position rather than a lower position. In section 2.2, I propose that the negated auxiliary occupies a higher negative projection, following Foreman (1999, 1999/2001). In this section, I also account for cross-dialectal variation with the proposal that the projection is available only in the varieties of English which allow the construction.

Chapter 3 addresses the meaning of the construction. Negation in negative auxiliary inversion constructions has unambiguous wide scope and the types of subjects it allows are predominantly quantificational subjects which interact scopally with negation. In this chapter, I propose that the movement of the negated auxiliary which derives negative auxiliary inversion constructions is subject to Fox's (2000) Principle of Scope Economy, which I extend to apply to overt movement. The analysis accounts for the phenomenon's distribution of subjects fairly well. In order to exclude the principle from applying to all instances of movement, I propose that it applies only to optional movement, where I define optional movement as referring to movement that is not feature-driven. Given that negation gains wide scope in this construction, I propose that the head is able to be interpreted in its moved position by typeshifting to a higher type or by not interpreting its trace. I account for the empirical observation that negation cannot scope below the subjects of negative auxiliary inversion constructions by adopting a constraint-based system. The grammar considers competing derivations and determines how a particular interpretation is linearized on the basis of violable constraints such as scope transparency and preferences in canonical word order. Competing semantic analyses for deriving the attested interpretations of the construction are also considered throughout this chapter. In section 3.4, I address a broader range of the construction's subjects such as impossible quantificational subjects and indefinite subjects, particularly negative polarity item subjects and negative indefinite subjects.

In chapter 4, I consider whether the analysis proposed for negative auxiliary inversion in West Texas English can be extended to account for other phenomena. In section 4.1, I consider how the properties of negative auxiliary inversion in West Texas English compare to the properties of the phenomenon in other varieties of English. The phenomenon in African American English is discussed in section 4.1.1 and the phenomenon in Appalachian English is discussed in section 4.1.2. In the remaining sections, I return to the phenomena that are apparently similar to negative

auxiliary inversion. I consider first the phenomena that are similar and available only in varieties that also exhibit negative auxiliary inversion constructions in section 4.2. Negative existential constructions are considered in section 4.2.1 and determined to not receive a parallel analysis, in support of previous findings in the literature. Split subject constructions are considered in section 4.2.2 and determined to receive a parallel analysis to negative auxiliary inversion, building heavily on Zanuttini & Bernstein's (2014) work on this topic. Some consequences of adopting the analysis proposed by Zanuttini & Bernstein (2014) for split subject constructions are also discussed in this section.

In section 4.3 of this chapter, I consider whether the analysis proposed for negative auxiliary inversion can be extended to account for phenomena that are available independently of negative auxiliary inversion. I consider *Not*-initial constructions in section 4.3.1 and, focusing on data from standard English, I determine that the analysis is extendable to varieties which lack NAI constructions, with some changes. The sentence-initial negation of *Not*-initial constructions undergoes phrasal movement, rather than head movement, and it adjoins in the structure rather than undergo movement to the higher negative projection. Also discussed are the consequences of deriving *Not*-initial constructions in the same way in varieties which do exhibit negative auxiliary inversion constructions. The alternative would be deriving them as parallel to negative auxiliary inversion constructions, as in Foreman (1999, 1999/2001). Canonical negative inversion is considered in section 4.3.2 and determined to not receive a parallel analysis to negative auxiliary inversion constructions in any variety.

Chapter 5 addresses the question of why a movement analysis of negative auxiliary inversion should be preferred over alternative analyses. I start by defending my analysis against analyses in which the subject does not occupy canonical subject position, including analyses which treat negative auxiliary inversion constructions as parallel to existentials. In section 5.2, I defend the proposed analysis against Foreman's (1999, 1999/2001) proposed analysis for negative auxiliary inversion in West Texas English, an analysis upon which this dissertation builds. An analysis in which the sentence-initial negated auxiliary of the construction is a result of negation being base-generated higher in the structure rather than undergoing movement to this projection is discussed in section 5.3. A comparison between my analysis and Green's (2011, 2014) analysis for

the construction is provided in section 5.4. The movement of negation results in a widening effect in Green's analysis for negative auxiliary inversion constructions in African American English and I consider how compatible the analysis is with the construction in West Texas English. Blanchette (2015) provides an analysis of negative auxiliary inversion that is derived by syntactic Neg-raising as proposed in Collins & Postal (2014). Subjects that are compatible with the construction are inherently negative and the negated auxiliary is formed when negation moves from its subject-internal position to adjoin to the auxiliary. I compare our analyses in section 5.5.

Chapter 6 concludes this dissertation with a summary.

Chapter 2

The syntax of negative auxiliary inversion constructions

Some examples of sentences which exhibit negative auxiliary inversion are given in (2.1).

(2.1) a. Don't many people like you.   (WTE; Foreman 1999: 21)

     b. Didn't everybody see the fight.   (WTE)

     c. Can't all of y'all win the jackpot, though, can you?   (WTE)

     d. Won't everybody fit in that car.   (WTE)

I adopt an analysis in which the auxiliary-first word order of the construction is derived by a movement of the negated auxiliary over the subject, following Foreman (1999, 1999/2001) for West Texas English and Labov et al. (1968), Labov (1972), Martin (1993), and Green (2008, 2011, 2014) for African American English, and Zanuttini & Bernstein (2014) and Blanchette (2015) for Appalachian English. In this analysis, a sentence exhibiting negative auxiliary inversion and its non-inverted counterpart are related as follows. The non-inverted counterpart has the subject in its canonical subject position, assumed here to be SpecTP, as in (2.2a).[1] A negative auxiliary inversion construc-

---

1. The subject is shown as being base-generated in this position in the tree here for simplicity and ease of comparison between the two types of analyses. Whether or not the subject moves to this position from a lower subject position is inconsequential to my analysis, as I show later in this chapter and in the following chapter.

tion involves a further movement of the negated auxiliary to a projection higher than the canonical subject, as in (2.2b).

(2.2) a.

```
              TP
        ┌─────┴─────┐
   many people     NegP
             ┌──────┴──────┐
          don't           vP
                        ┌──┴──┐
                       like you
```

b.

```
                 TP
          ┌──────┴──────┐
       don't           TP
                  ┌─────┴─────┐
             many people     NegP
                        ┌──────┴──────┐
                     don't            vP
                                   ┌──┴──┐
                                  like you
```
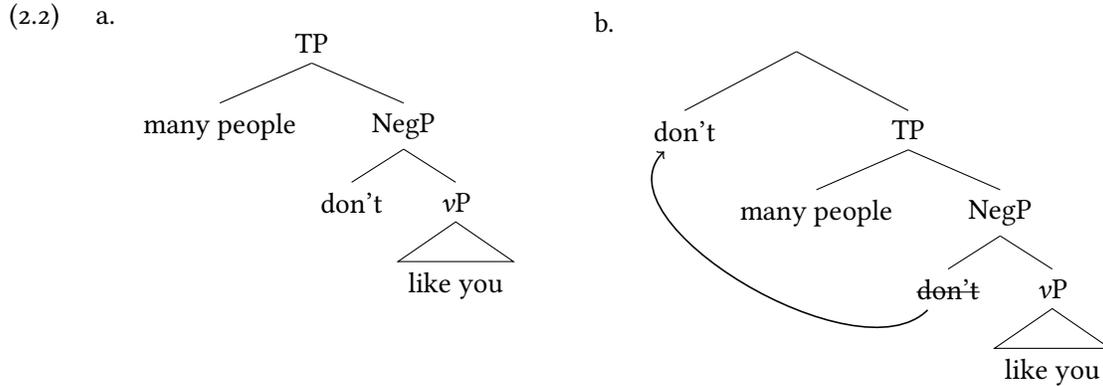
The alternative line of analyses provided in the literature derive the auxiliary-first order of negative auxiliary inversion constructions by restricting the movement of the subject from raising as far as to its canonical position (Martin 1992, 1993, Sells et al. 1996, Parrott 2000, and White-Sustaíta 2010 for African American English).[2] In these analyses, the subject is generated in a lower position than where it appears, as in (2.3a). The negative auxiliary inversion construction is derived by either a lack of movement of the subject, as shown in (2.3b), or by a movement of the subject to a position lower than its canonical subject position. The EPP, the syntactic constraint that can be satisfied with movement of the subject to canonical subject position in standard English, is either not obligatory or it is satisfied with a covert element in these analyses.

(2.3) a.

```
                 TP
          ┌──────┴──────┐
      many people       NegP
                  ┌──────┴──────┐
               don't            vP
                           ┌─────┴─────┐
                      many people      v'
                                    ┌──┴──┐
                                   like you
```

b.

```
              TP
              └──┐
               NegP
          ┌──────┴──────┐
       don't            vP
                   ┌─────┴─────┐
              many people      v'
                            ┌──┴──┐
                           like you
```

---
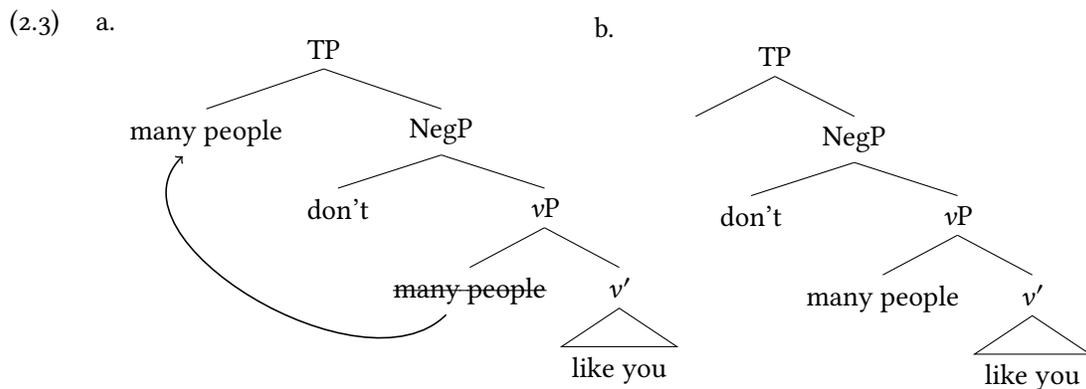
2. We will see in chapter 4 that such an analysis is required for negative existential constructions, constructions that are superficially similar to negative auxiliary inversion constructions in some ways but which I argue, following Labov et al. (1968) and many others who acknowledge the distinction between the two constructions, to be structurally different from each other.

2.1 Evidence for subject in canonical subject position

The main difference between the two types of competing analyses is the position the subjects of the construction are proposed to occupy. In the line of analyses adopted in this dissertation, the subject has raised to canonical subject position. In the line of competing analyses, the subject is below the canonical subject position, either remaining in its base-generated position or moving to an intermediate position between the two projections. In this section, I review the evidence in favor of the subject raising to canonical subject position. The evidence comes from the subject restriction of the construction being unlike the subject restriction of existentials, as discussed in section 2.1.1. The subject is not elided in vP-ellipsis, as discussed in section 2.1.2, and low adverbs can intervene between the subject and the verb, as discussed in section 2.1.3. Both of the observations involving the position of the subject would not hold if the subject of negative auxiliary inversion constructions remained in its base-generated position. Additional evidence for the subject raising comes from its behavior with respect to aspectual markers in African American English. The subject of the construction precedes aspectual markers, as discussed in section 2.1.4. Evidence that the subject of NAI constructions is in canonical subject position comes from tag-question formation, an operation that targets the structural subject. This evidence is given in section 2.1.6.

2.1.1 Subject restriction is unlike known subject restrictions

The first piece of evidence in favor of an analysis in which the subject occupies canonical subject position for negative auxiliary inversion constructions comes from its subject restriction, which differs from other known subject restrictions. Expletive constructions exhibit a subject restriction. In addition to the subject restriction, the subjects of expletive constructions are assumed to stay in a lower structural position than the canonical subject position. Were the subject restrictions of the two constructions parallel, the analysis of expletive constructions could straightforwardly be extended to the analysis of negative auxiliary inversion. In this section, I discuss the similarities and differences between the two constructions and why it is that the analysis of expletive constructions cannot be straightforwardly extended to the analysis of negative auxiliary inversion

constructions.

An example of an expletive construction in standard English is given in (2.4).

(2.4)   There are many people hiking in the canyon today.   (SE)

Such examples have been used as evidence for a structurally lower position for the subject. The subject merges with the predicate in a lower projection in order to satisfy its theta-requirement. The subject can remain in this position in existential constructions, as in (2.5). An expletive must appear in the canonical subject position because standard English requires this position to be overtly filled.

(2.5)
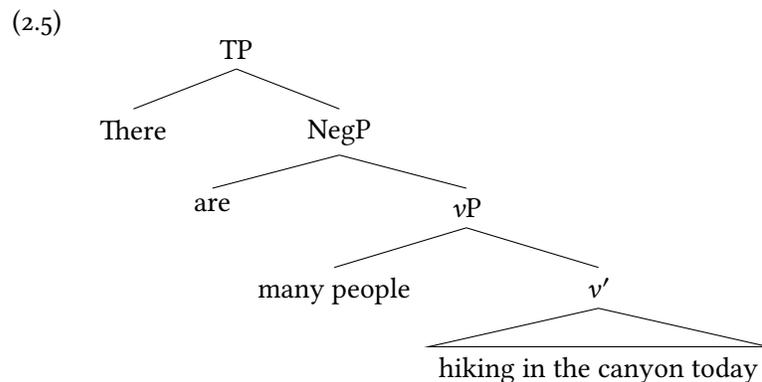
Sentences which have the subject in canonical position can be seen as counterparts of existential constructions. The example in (2.4) and one in which the subject is in canonical subject position, as in (2.6), can be seen as related, following Milsark (1974) and many more.

(2.6)   Many people are hiking in the canyon today.   (SE)

A difference between this example and the existential construction is that in this example, it is the subject itself that raises to the higher position to satisfy the subject requirement in standard English, as in (2.7).

(2.7)

```
                        TP
              ┌─────────┴─────────┐
        Many people            NegP
              ▲          ┌───────┴───────┐
              │         are              vP
              │                    ┌──────┴──────┐
              └──────────── many people          v′
                                            ┌─────┴─────┐
                                     hiking in the canyon today
```
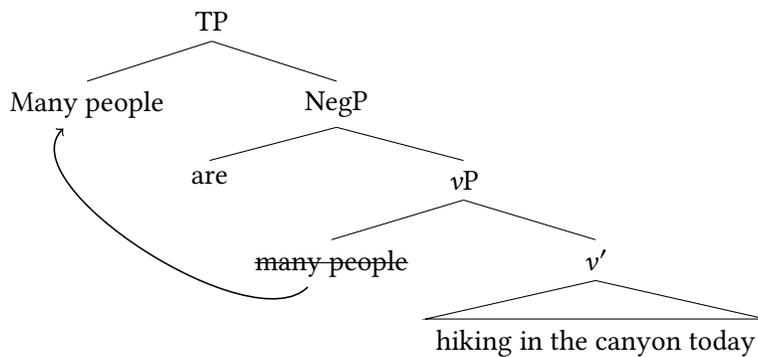
Not all canonical sentences can have expletive construction counterparts, however. It is, for example, not possible for proper name subjects to co-occur with expletives, as in (2.8a). Instead, the proper name raises to canonical subject position, as in (2.8b).

(2.8)   a.   * There isn't Jack going to the party.   (SE)

        b.   Jack isn't going to the party.   (SE)

Similarly, in varieties in which negative auxiliary inversion is possible, not all canonical constructions can have negative auxiliary inversion counterparts. As observed in the literature on negative auxiliary inversion, there is also a restriction on the types of subjects that can appear in negative auxiliary inversion constructions. Proper names are also ruled out and constructions with such subjects are unacceptable, as in (2.9a). The non-inverted counterpart in (2.9b) is acceptable.

(2.9)   a.   * Didn't Jack go to the party.   (WTE)

        b.   Jack didn't go to the party.   (WTE)

As alluded to in the beginning of this section, part of the motivation for extending the expletive construction analysis to negative auxiliary inversion in the literature involves the observation that NAI constructions appear to exhibit the definiteness effect of expletive constructions (Milsark 1974, Keenan & Stavi 1986 and many more). In addition to proper names, both types of constructions also often exclude other types of specific subjects, such as pronouns and DPs headed by definite or possessive elements, as in (2.10) and (2.11).[3] There are, however, some environments in which

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3. The examples in (2.10) are unacceptable when *there* is an expletive but both (2.10b) and (2.10c) are acceptable when

definite subjects can appear in existentials and in apparent negative auxiliary inversion construc-
tions, an issue to which I return when I discuss the complexity of the definiteness effect in more
detail in section 3.4.4.1 in chapter 3.

(2.10) a. * There's he hiking in the winter.   (SE)

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

        c. * There are their dogs licking the ice cream.   (SE)

(2.11) a. * Wouldn't I do that.   (WTE; Foreman 1999: 11)

        b. * Didn't the teachers go to the party.   (WTE; Foreman 1999: 11)

        c. * Cain't their dogs do that.   (WTE; Foreman 1999: 12)

Turning to the types of subjects that are possible, negative polarity item *any* and the negative in-
definite *no* are possible subjects in both types of constructions, as in (2.12) and (2.13). The example
in (2.13b) exhibits negative concord, a phenomenon in which a sentence with multiple morpholog-
ically negative elements is interpreted as having a single instance of logical negation.

(2.12) a.   There isn't anybody living here.   (SE)

        b.   There's nobody here yet.   (SE)

(2.13) a.   Dudn't anybody seem to understand...   (WTE; Foreman 1999: 3)

        b.   Don't nobody live there.   (WTE; Foreman 1999: 6)

Other types of subjects that are attested in both negative auxiliary inversion constructions and
existentials are counting quantifier phrases, and the indefinite *a*, as in (2.14) and (2.15).

(2.14) a.   There aren't many people here now.   (SE)

        b.   There are more than three people coming.   (SE)

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

(2.15) a.   Didn't many people live there then.   (WTE; Foreman 1999: 7)

there is interpreted as a locative. Intonation can disambiguate the constructions in question.

b. Won't more than three people be allowed in at a time. (WTE; Foreman 1999: 11)

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

The parallelism in the subject restrictions of the two phenomena presented thus far suggests that the analysis of expletive constructions can straightforwardly be extended to account for negative auxiliary inversion constructions. The definite subjects that are restricted from remaining in a lower structural position in negative auxiliary inversion constructions, as in (2.16a), are ruled out for the same reason they are restricted from remaining in a lower structural position in expletive constructions, as in (2.16b).

(2.16) Definite subjects cannot stay low in either construction

a.

TP
 NegP
 didn't   vP
       *Jamie   v′
              go...

b.

TP
 there   NegP
       isn't   vP
            *Jamie   v′
                   going...
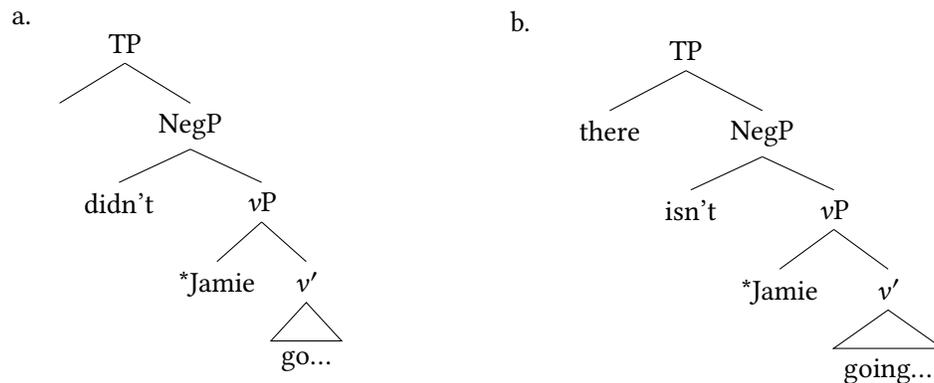
The types of subjects that remain in a lower structural position in negative auxiliary inversion constructions, as in (2.17a), are able to do so for the same reason they are able to remain in a lower structural position in expletive constructions, as in (2.17b).

(2.17) Some quantificational subjects can stay low in either construction

a.

TP
 NegP
 didn't   vP
       many people   v′
                  live...

b.

TP
 there   NegP
       aren't   vP
            many people   v′
                       living...
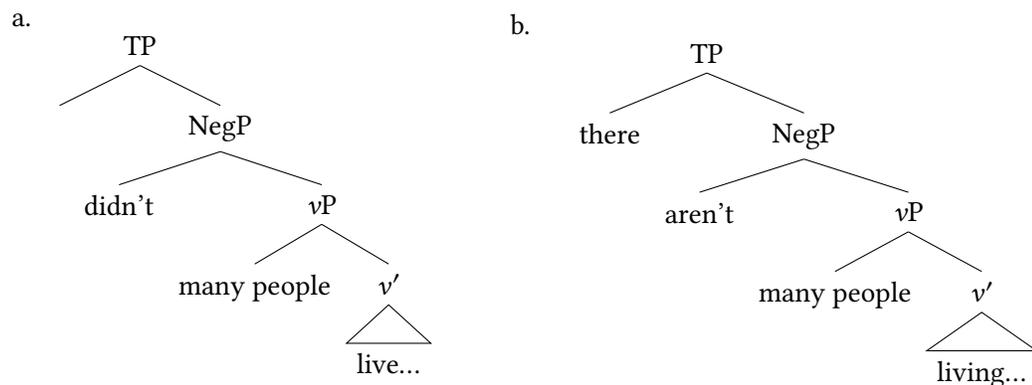
However, there are subjects that are possible in negative auxiliary inversion constructions that are not possible in expletive constructions. Expletive constructions are incompatible with universally quantifying noun phrases and other strong quantifiers. The examples in (2.18) show that subjects headed by *every* and *half* are not possible in expletive constructions while the examples in (2.19) show that these subjects are possible in negative auxiliary inversion constructions.

(2.18) a.   * There's every student here.   (SE)

        b.   * There are half the students outside.   (SE)

(2.19) a.   Didn't every student expect to pass.   (WTE; Foreman 1999/2001: 13)

        b.   Didn't half the students do their homework.   (WTE; Foreman 1999: 8)

The subjects of expletive constructions cannot be partitive phrases, either, as in (2.20), whereas partitive phrases are attested subjects of negative auxiliary inversion constructions, as in (2.21).

(2.20) a.   * There are none of the students present.   (SE)

        b.   * There are many of the students present.   (SE)

(2.21) a.   Won't none of the students go to the party.   (WTE; Foreman 1999: 6)

        b.   Don't many of them live around here.   (AAE; Labov 1972: 812)

Certain types of quantificational subjects, such as *some*, *few*, and *several*, are possible in existential constructions, as in (2.22) but incompatible with negative auxiliary inversion constructions, as in (2.23).[4]

(2.22) a.   There are few students outside.   (SE)

        b.   There's somebody in the hall.   (SE)

---

4. The *there*-existentials in (2.22) are, however, unacceptable in the presence of sentential negation, as in (i), in the absence of metalinguistic negation or contrastive focus.

(i)   a.   * There aren't few students outside.   (SE)
      b.   * There isn't somebody in the hall.   (SE)
      c.   * There aren't several students present.   (SE)

The unacceptability of these examples is not due to the construction but instead to the presence of negation. I return to this issue in section 3.4.1 of chapter 3.

c.　There are several students present.　(SE)

(2.23)　a.　* Won't few boys go to the party.　(WTE; Foreman 1999/2001: 49)

b.　* Can't somebody get in the hall.　(WTE)

c.　* Cain't several students read that book.　(WTE; Foreman 1999/2001: 48)

The chart in Figure 2.1 summarizes the types of subjects that share the same distribution in both constructions and the types of subjects whose distribution differs.[5]

	Subject	Existential	NAI construction
Uniform distribution	Jamie (*proper names*)	✗	✗
	he (*pronouns*)	✗	✗
	the NP	✗	✗
	their NP	✗	✗
	any NP	✓	✓
	no NP	✓	✓
	many NP	✓	✓
	more than # NP	✓	✓
	a NP	✓	✓
Different distribution	every NP	✗	✓
	half the NP	✗	✓
	many of (the) NP	✗	✓
	none of (the) NP	✗	✓
	some NP	✓	✗
	few NP	✓	✗
	several NP	✓	✗

Figure 2.1: The distribution of subjects in existentials and NAI constructions

The subject restriction is not the same for expletive constructions in standard English and negative auxiliary inversion constructions in varieties of English such as West Texas English. Another difference between the two constructions is that the expletive constructions have an obligatory overt expletive while negative auxiliary inversion constructions do not.

In addition to the subject restriction, there are additional restrictions on existentials that are not

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5. We return to a more in-depth discussion of the subject restriction of negative auxiliary inversion constructions in section 3.4 of chapter 3.

present for negative auxiliary inversion constructions, such as the restriction on which types of auxiliaries they are compatible with. Expletives are possible with auxiliary or copula *be*, whereas negative auxiliary inversion constructions can be formed with any element that undergoes V-to-T movement, such as modals, auxiliaries, and *do*-support.[6]

Given the differences between the two types of constructions, the analysis of expletive constructions cannot be trivially extended to account for negative auxiliary inversion constructions. That is to say, the difference between the two constructions does not simply lie in a requirement for an overt expletive in its canonical subject position in the former construction and a lack of such a requirement in the latter construction. Strict parallelism would have offered us evidence in favor of an analysis in which the subject stays low, as it does in expletive constructions. The existence of multiple differences between the two constructions does not offer us such evidence.

In addition to the distinctive subject restriction of negative auxiliary inversion constructions, more evidence for the analysis in which the subjects of the construction occupy canonical subject position comes from the result of applying different diagnostic tests. Evidence that the subject of NAI constructions does not occupy a verb-phrase internal position comes from data involving *v*P-ellipsis in section 2.1.2, data involving the position of adverbs in section 2.1.3, and data involving the position of aspectual markers in section 2.1.4.

2.1.2 Subject is not elided in *v*P-ellipsis

The operation of *v*P-ellipsis involves the deletion of the phonological content of a verb phrase.[7] A reduced phrase can be appended to a sentence with a conjunction and the reduced phrase is said to involve *v*P-ellipsis. Examples are given in (2.24), in which the reduced phrase is italicized.

(2.24) a. John won't hug Jamie, and *Lucy won't*, either. (SAE)

   b. John dislikes Jamie, and *Lucy does*, too. (SAE)

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6. Expletive constructions are also compatible with unaccusative predicates, such as *arise* and *appear* but these predicates cannot undergo V-to-T movement.

7. I assume here that V undergoes obligatory head movement to *v* and that VP-ellipsis is not possible.

In the reduced phrases of these examples, the canonical subject position is occupied by a new subject. It is followed by an auxiliary or element which carries tense information, and the content of the verb phrase is completely elided. The verb phrase appears to still be interpretable in this position despite the fact that it is not pronounced, so we assume that it is structurally present, as in (2.25). The content of the verb phrase is struck out to indicate that it is not pronounced.

(2.25)   a.   John won't hug Jamie, and Lucy can't $\left[_{v\text{P}} \text{ } \sout{\text{hug Jamie}}\right]$ either.   (SAE)

           b.   John dislikes Jamie, and Lucy does $\left[_{v\text{P}} \text{ } \sout{\text{dislike Jamie}}\right]$ too.   (SAE)

The operation of vP-ellipsis formation involves both the canonical subject position and deletion of the verb phrase. Assuming that there is obligatory V-to-v head movement and that VP-ellipsis is not possible, vP-ellipsis test results can tell us whether or not the subject is in its base-generated position. When the operation is applied to negative auxiliary inversion constructions, the different types of analyses make different predictions for the resulting construction. Consider the negative auxiliary inversion construction in (2.26).

(2.26)   Won't no doctor talk like that.   (WTE)

The canonical subject of (2.26) is *no doctor* and the verb phrase is *talk like that* in the higher subject analyses of negative auxiliary inversion, as in (2.27a). In the lower subject analyses, there is no canonical subject in (2.26) and the verb phrase is *no doctor talk like that*, as in (2.27b).

(2.27)   a. won't no doctor $\left[_{v\text{P}} \text{ talk like that}\right]$

         b. ∅ won't $\left[_{v\text{P}} \text{ no doctor talk like that}\right]$

If vP-ellipsis is possible, we expect it to look as in (2.28a) in the higher subject analyses, with a different canonical subject and deletion of the vP phrase. We expect it to look as in (2.28b) in the lower subject analyses, with no subject or a different expletive subject and deletion of the complex subject when the entire vP phrase is deleted.

(2.28)   a. I know that won't no doctor $\left[_{v\text{P}} \text{ talk like that}\right]$ and that can't *no lawyer* $\left[_{v\text{P}} \text{ } \sout{\text{talk like}} \right.$
          $\left. \sout{\text{that}}\right]$ neither.

b. I know that ∅ won't [$_{vP}$ no doctor talk like that] and that (there) can't [$_{vP}$ ~~no doctor talk like that~~] neither.

*v*P-ellipsis tests are used as a diagnostic test between the two analyses of negative auxiliary inversion in West Texas English by Foreman (1999, 1999/2001). The result of the test is given in (2.29).

(2.29)   I know that won't no doctor talk like that, and that won't no lawyer, neither.

(WTE; Foreman 1999/2001: 36)

The sentence in (2.29) is well-formed, suggesting that *no doctor* is the canonical subject of the sentence. The test result is compatible with the structure in (2.28a) and not the structure in (2.28b). Foreman also points out the presence of naturally occurring data involving *v*P-ellipsis and negative auxiliary inversion in Alabama English, another variety which exhibits negative auxiliary inversion. The data is reproduced in (2.30).

(2.30)   Lucile does 'em. Dudn't anybody else.   (AppE; Feagin 1979: 348)

This example is interesting because the reduced phrase is a negative auxiliary inversion construction. The availability of the example also suggests that the subject of negative auxiliary inversion constructions is in canonical subject position. The elided material is explicitly shown in (2.31).

(2.31)   Lucile does 'em. Dudn't anybody else [$_{vP}$ ~~do 'em~~].

The data in (2.29) and (2.30) provides us with evidence to prefer an analysis in which the subject of negative auxiliary inversion constructions occupies the canonical subject position rather than one in which the subject occupies a position within the verb phrase.

2.1.3   Adverbs can intervene between the subject and the verb

Adverbs are typically assumed to adjoin to full phrases. If this assumption is correct, analyses in which the subject raises high and analyses in which the subject stays low make different predic-

tions for where low adverbs should appear in negative auxiliary inversion constructions. Consider the examples exhibiting negative auxiliary inversion given in (2.32).

(2.32)   a. Ain't none of us been to Europe.   (WTE)

         b. Ain't nobody gonna be happy with that.   (WTE)

In the types of analyses in which the subject of negative auxiliary inversion constructions raises to canonical subject position, the verb phrase boundary is as in (2.33).

(2.33)   a. Ain't none of us $\left[_{v\text{P}}\right.$ been to Europe$\left.\right]$.

         b. Ain't nobody $\left[_{v\text{P}}\right.$ gonna be happy with that$\left.\right]$.

If the structure is as in these analyses, low adverbs would intervene between the subjects and verb phrases, as in (2.34).

(2.34)   a. Ain't none of us ever $\left[_{v\text{P}}\right.$ been to Europe$\left.\right]$.

         b. Ain't nobody really $\left[_{v\text{P}}\right.$ gonna be happy with that$\left.\right]$.

In the types of analyses in which the subject of negative auxiliary inversion constructions occupies a position within the verb phrase, the verb phrase boundary is as in (2.35).

(2.35)   a. Ain't $\left[_{v\text{P}}\right.$ none of us been to Europe$\left.\right]$.

         b. Ain't $\left[_{v\text{P}}\right.$ nobody gonna be happy with that$\left.\right]$.

If the structure is as in these analyses, low adverbs would not be able to intervene between the subjects and the verb and would instead precede the subjects, as in (2.36).

(2.36)   a. Ain't ever $\left[_{v\text{P}}\right.$ none of us been to Europe$\left.\right]$.

         b. Ain't really $\left[_{v\text{P}}\right.$ nobody gonna be happy with that$\left.\right]$.

The default placement of these adverbs in existentials is in this position, as in the examples in (2.37), in which the thematic subjects follow the adverbs.

(2.37)   a.   There aren't ever many people present.

         b.   There are really a lot of people here today.

Empirically, Foreman (1999/2001) points out that low adverbs can intervene between the subject of negative auxiliary inversion constructions and the verb, as in (2.38).

(2.38)   a.   Ain't none of us ever been to Europe.   (WTE; Foreman 1999/2001: 33)

         b.   Ain't nobody really gonna be happy with that.   (WTE; Foreman 1999/2001: 34)

The possibility for a low adverb to intervene between the subject and verb provides us with evidence that the subject raises out of the verb phrase in negative auxiliary inversion constructions.[8]

2.1.4   Aspectual markers follow the subject

African American English has aspectual markers available as functional projections. Aspectual *be* is a habitual marker that is generated below TP and above *v*P in African American English (Green 2014). It follows the subject and any auxiliaries, as in the examples in (2.39), in which the habitual marker is italicized.

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8. Foreman also provides acceptability judgments for sentences in which the adverbs precede the subject. The adverb *ever* or its negative counterpart *never* cannot precede the subject in (ia). The adverb *really* may precede the subject in (ib).

   (i)   a.   * Ain't (n)ever none of us been to Europe.   (WTE; Foreman 1999/2001: 33)
         b.   Ain't really nobody gonna be happy with that.   (WTE; Foreman 1999/2001: 34)

The acceptability of (ib) can be explained in a couple of ways. It could be that the adverb is adjoining to a higher projection, such as TP, as Foreman suggests accounting for the acceptability. It could instead be acceptable under another interpretation of the string in (2.32b) if that string is ambiguous, as can be the case when *ain't* is the sentence-initial auxiliary. Recall from section 1.3 of chapter 1 that some strings can be ambiguous between a negative auxiliary inversion construction and negative existential construction interpretation, the latter of which is more similar to an existential (see also section 4.2.1 in chapter 4). We can retain the assumption that the low adverb *really* is generated in the same projection in both cases. The adverb follows the subject, as in (2.38b), when the string is a negative auxiliary inversion construction and it precedes the subject, as in (ib), when the string is a negative existential.

Larry Horn (p.c.) points out that despite the fact that (ia) is judged as ill-formed, *never* can precede the subject in some cases, as in the examples below.

   (ii) a.   Ain't never nobody loved me like I love myself.
         b.   Aint never nothing lucky about thuh cards.

The example in (iia) is a quote from *Pic*, a work by Jack Kerouac as cited in a 2007 biography written by Paul Maher and David Amram. The sentence was retrieved online from http://tinyurl.com/peny9ge. The example in (iib) is a quote spoken by the character Lincoln from the play *Topdog/underdog* written by Suzan-Lori Parks in 1994 and it could be an existential rather than a negative auxiliary inversion construction.

(2.39) a. Bruce *be* running.   (AAE; Green 2002: 47)

        'Bruce is usually running' or 'Bruce usually runs.'

    b. [...] and he doesn't even *be* there.   (AAE; Green 2002: 48)

        '... and he isn't usually there.'

    c. It don't *be* drove hardly. It don't *be* dogged.   (AAE; Green 2002: 49)

        'It is usually the case that it is hardly driven. It isn't usually dogged.'

Given its structural position, its position in a sentence can tell us whether movement of the subject has occurred. Green (2014) provides the example in (2.40) as an example of a negative auxiliary inversion construction.

(2.40)   Don't nothing be happening.   (AAE; Green 2014: 122)

        'Usually, not a single thing is happening.'

The subject precedes aspectual *be*, indicating that the subject has undergone movement past the aspectual marker and that its structure is as in (2.41).

(2.41)   Don't nothing $\left[_{\text{HabP}} \text{ be } \left[_{v\text{P}} \text{ happening}\right]\right]$

2.1.5   Interim discussion

The evidence outlined in sections 2.1.2, 2.1.3, and 2.1.4 points in favor of an analysis in which the subject of negative auxiliary inversion constructions raises to canonical subject position, but the discussion considers just two possibilities for the position the subject could occupy: canonical subject position and its base-generated position. However, it is possible that an intermediate projection between these two positions is available for the subject. If the subject of negative auxiliary inversion constructions occupies such a position, it is possible for the canonical subject position to be empty but for the test results of vP-ellipsis and low adverbs to give rise to acceptable sentences.

(2.42)   a. I know that $\left[_{\text{TP}} \varnothing \text{ won't } \left[_{\text{XP}} \text{ no doctor } \left[_{v\text{P}} \text{ talk like that}\right]\right]\right]$ and that (there) can't no
        doctor $\left[_{v\text{P}} \text{ ~~talk like that~~}\right]$ neither

    b. $[_{TP} \varnothing$ Ain't $[_{XP}$ nobody really $[_{vP}$ gonna be happy with that$]]]$

In the possible analysis in (2.42a), the subject raises to a structural position below canonical subject position, the unindentified SpecXP position. Because the subject moved out of *v*P, the sentence is acceptable when *v*P ellipsis occurs despite the fact that the canonical subject position is empty. Similarly, the canonical subject position is empty in (2.42b), and the subject, in its intermediate position, precedes the low adverb.

Aspectual markers could also follow subjects if their position is between an intermediate subject position and the aspectual marker, as in (2.43).

(2.43) $[_{TP} \varnothing$ $[_{T'}$ Don't $[_{XP}$ nothing $[_{HabP}$ be $[_{vP}$ happening$]]]]]$

In the literature, the only proponent of an intermediate subject position of which I am aware is White-Sustaíta (2010), who proposes that the subjects in negative auxiliary inversion constructions occupy SpecNegP. White-Sustaíta's empirical domain is negative auxiliary inversion constructions in which the subjects are n-words and their movement to SpecNegP results in the two negative elements being in a local relationship, which allows her to account for negative concord. However, a broader range of subjects are attested in the construction for West Texas English, including many subjects with positive polarity such as *many* and *every*. White-Sustaíta's analysis would need to be modified to motivate the movement of non-negative subjects to the intermediate subject projection since as described in 2010, it is only the movement of subjects with a negative feature that is triggered to the negative projection.[9]

Additional positions are theoretically available even if the positive subjects are not hosted in the negative projection since I assume a split inflectional domain. The availability of an intermediate projection for the subject needs to be ruled out as an alternative analysis even if a potential host for the positive subjects has not been argued for in the literature.

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9. I return to a discussion of White-Sustaíta's analysis in section 5.1 of chapter 5.

2.1.6 Tag questions target the canonical subject position

We consider next tag-question formation, part of which targets canonical subject position and therefore provides insight into whether the subjects of negative auxiliary inversion constructions occupy canonical subject position. A tag question is a reduced question which can be appended to a declarative as a conducive question. Some examples of opposite-polarity tag questions are given in (2.44). The tag question part of the examples is italicized.

(2.44) a. Many people were out hiking today, *weren't they*? (SE)

b. There were many people out hiking today, *weren't there*? (SE)

In these examples, the declaratives contain an auxiliary and this auxiliary is repeated in the tag question. The positive polarity of the declarative is inverted to negative polarity in the tag. The subject of the tag is a pronominal that agrees in features with the structural subject of the declarative. This part of the operation of tag-question formation appears to target the canonical subject position. The structural subject in the declarative part of (2.44a) is the subject *many people* and the tag subject is a pronoun that agrees in features with this subject. The structural subject in the declarative part of (2.44b) is the expletive *there* and the tag subject is also an expletive. The tag subject cannot be a pronominal, as in (2.45).

(2.45) * There were many people out hiking today, *weren't they*? (SE)

Despite the fact that the subject *many people* is present in the declarative, the tag subject agrees with the element in canonical subject position. When this subject does occupy canonical subject position, the tag subject must agree with this subject and cannot be an expletive, as in (2.46).

(2.46) * Many people were out hiking today, *weren't there*? (SE)

The operation of tag-question formation provides us with a diagnostic for determining whether the canonical subject position is being occupied by an expletive or the thematic subject. When the operation is applied to negative auxiliary inversion, the result allows us to determine part of

the nature of the element occupying canonical subject position. If the subject of the tag-question that is appended to a negative auxiliary inversion construction is a pronoun, the canonical subject position appears to be occupied by a theta-bearing subject. If, on the other hand, the subject of the tag-question is an expletive, the canonical subject position appears to be occupied by an expletive.

Opposite-polarity tag-question formation tests are used as a diagnostic test for the nature of the subject of negative auxiliary inversion constructions in West Texas English by Foreman (1999, 1999/2001). The results of the tests are reproduced in (2.47) and (2.48).

(2.47)   a.   Ain't no man gonna cheat on a woman like that, is he?   (WTE; Foreman 1999: 8)

            b.   I guess, cain't no man live forever, can he?   (WTE; Foreman 1999/2001: 35)

In the examples in (2.47), the tag subjects are pronouns that agree in features with the theta-bearing subjects of the declaratives, *no man* in (2.47a) and (2.47b). West Texas English speakers judge these examples as well-formed. In the examples in (2.48), the tag subjects are expletives. His West Texas English speakers judge these examples as ill-formed.

(2.48)   a.   * Ain't no man gonna cheat on a woman like that, is there? (WTE; Foreman 1999: 8)

            b.   * I guess, cain't no man live forever, can there?   (WTE; Foreman 1999/2001: 35)

Salmon (2017), however, objects to these judgments and declares that an expletive is a possible tag subject in both cases. He provides the judgments for the pair of examples in (2.47a) and (2.48a) as in (2.49). In addition to allowing a subject that agrees with the thematic subject, as in (2.49a), expletive subjects are also possible, as in (2.49b).

(2.49)   a.   Ain't no man gonna cheat on a woman like that, is he?   (WTE; Salmon 2017: 23)

            b.   Ain't no man gonna cheat on a woman like that, is there? (WTE; Salmon 2017: 23)

Salmon provides additional examples, one of which is reproduced below in (2.50), in which the tag subject agrees with the thematic subject, as in (2.50a) or is an expletive, as in (2.50b).

(2.50)   a.   Didn't no man lift that rock, did he?   (WTE; Salmon 2017: 23)

b.   Didn't no man lift that rock, did there/they?   (WTE; Salmon 2017: 23)

There are a few confounding factors when using this diagnostic test which I believe are the cause of the conflicting acceptability judgments. One of the confounding factors is the fact that an example can be ambiguous between a negative auxiliary inversion reading and a negative existential reading.[10] This is certainly the case with the example in (2.48a), which Foreman (1999) must have judged as ill-formed under a NAI interpretation, because the example is compatible with a negative existential interpretation, as well. Recall from the introduction that in some cases in which the negated auxiliary is *ain't* or a form of *be*, the construction might instead be a negative existential with a relative clause or a contact subject relative. The alternative structure Labov et al. (1968) would propose for the example is as in (2.51). The matrix clause is an existential with an omitted expletive *there* and *no woman* is modified by a relative clause with a null complementizer.

(2.51)   ~~There~~ ain't no man ~~who's~~ gonna cheat on a woman like that.

Under this interpretation, the string is interpreted as a negative existential rather than as a negative auxiliary inversion construction. Given the fact that these examples are more similar to existentials, we expect the expletive to be a possible tag, as in (2.52), particularly for theories which posit the availability of null expletives to satisfy the EPP. It is therefore unsurprising that Salmon provides the acceptable judgment for this construction in (2.49a).

(2.52)   ~~There~~ ain't no man ~~who's~~ gonna cheat on a woman like that, is there?

Besides the potential ambiguity between a negative auxiliary inversion interpretation and a negative existential interpretation, there is the issue that tag-question formation is not necessarily straightforward for negative subjects. There is some variation in whether speakers allow tag-subjects to refer to the negative subject. von Fintel (1992), for instance, judges the example in (2.53a), in which the tag subject of a negative subject is *there*, as well-formed. The tag-subject seems to refer to the general statement. I find *they*, in which *they* is a third-person singular pronoun, to

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10. I return to a more in-depth discussion of negative existentials in section 4.2.1 of chapter 4.

be acceptable instead, as in (2.53b). In this case, the pronoun seems to refer to the individuals under discussion of which the clause does not hold.

(2.53) a.   No one solved the problem, did there?   (SE; von Fintel 1992: 17)

        b.   No one solved the problem, did they?   (SE)

É. Kiss (1996) claims more generally that non-specific subjects are incompatible with tag-question formation on the basis of observations from Guéron (1980), as in (2.54).

(2.54) a.   * A man arrived, didn't one/he?   (SE; Guéron 1980: 662)

        b.   * A storm occurred, didn't it?   (SE; Guéron 1980: 662)

However, this incompatibility does not seem to hold for all speakers, given the positive acceptability judgments of non-specific subjects in (2.47) and (2.50a).

Given conflicting data for tag-question formation of simple declaratives, it is not surprising that there are conflicting acceptability judgments for tag-question formation of negative auxiliary inversion constructions. I attribute these conflicting judgments to differences among speakers with respect to which types of tag-questions they allow for non-specific subjects.

In spite of the issues we encounter when we try to form opposite-polarity tags for negative auxiliary inversion constructions with negative subjects, tag-question formation does behave in the expected way when we consider strong quantificational subject headed by *all* and *every*. When the subject is *all of y'all*, the subject of the tag question agrees in second person features, as in (2.55a). An expletive cannot serve as the tag subject, as in the ill-formed example in (2.55b).

(2.55) a.   Cain't all of y'all win the jackpot, though, can you?   (WTE)

        b.   * Cain't all of y'all win the jackpot, though, can there?   (WTE)

When the subject is *everybody*, the subject of the tag question is pronominal *they*, as in (2.56a), and not expletive *there*, as in (2.56b).

(2.56)   a.   Didn't everybody see the fight, did they?   (WTE)

         b.   * Didn't everybody see the fight, did there?   (WTE)

A further issue with tag-question formation tests is that since *they* is a possible expletive in all va-
rieties which allow negative auxiliary inversion constructions, its presence in a tag-question does
not necessarily indicate agreement with a plural subject. It could instead be singular agreement
with an expletive. However, we can tell that *they* is agreeing with the subject, as we concluded
above for (2.56a), when *there* is not acceptable in the same environment, as in (2.56b).

The acceptability of pronominal subjects and unacceptability of expletive subjects when forming
tag questions of negative auxiliary inversion constructions suggest that the canonical subject posi-
tion of negative auxiliary inversion constructions is occupied by the thematic subject rather than
by an expletive. These results provide us with evidence to prefer an analysis in which the canonical
subject position of negative auxiliary inversion constructions is occupied by the thematic subject
over an analysis in which this position is empty or occupied by a null expletive.

2.2   Structural position of auxiliary

Having established that the subject of negative auxiliary inversion constructions is in canonical
subject position, we now turn to addressing the structural position of the negated auxiliary in
these constructions.

(2.57)
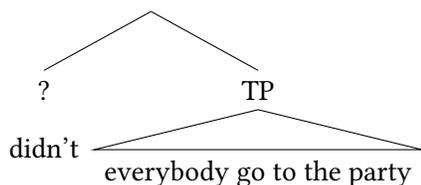
I follow Foreman (1999, 1999/2001) in assuming that the position to which the modal or auxiliary
raises is a higher negative projection, $Neg_2°$. $Neg_2°$ is a higher position for sentential negation
that I propose to be available in all varieties which allow negative auxiliary inversion. It is above

T° and below C°, as in (2.58), in which it is outlined for easy reference.

(2.58)

```
                    CP
              ┌──────┴──────┐
             C°          Neg₂P
                    ┌──────┴──────┐
                 ┌──────┐        TP
                 │ Neg₂°│   ┌─────┴─────┐
                 └──────┘  DP          T′
                                  ┌─────┴─────┐
                                 T°         Neg₁P
                                        ┌────┴────┐
                                      Neg₁°      ...
```
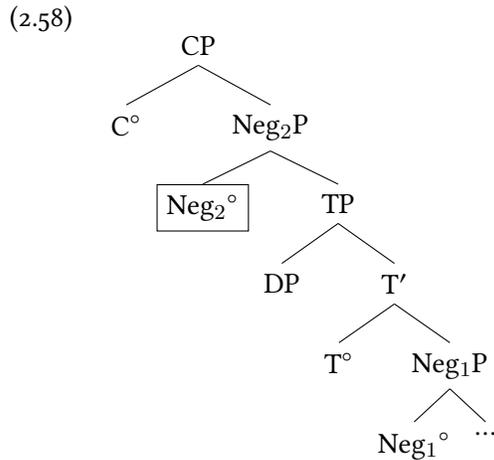
In addition to this higher negative projection, I propose that varieties of English which exhibit negative auxiliary inversion also have the lower negative projection argued by Pollock (1989) to be present in standard English. This lower negative projection is labeled in the tree in (2.58) as Neg₁°. In comparison, I propose that varieties of English which lack negative auxiliary inversion have only the lower negative projection in their inventory of functional projections. Positing this difference allows me to account for some of the differences between the two types of languages. In the sections that follow, I provide evidence for this higher negative projection. I explain why the negated auxiliary cannot raise as high as to complementizer position in section 2.2.1. In section 2.2.2.1, I provide independent arguments for the higher negative projection from the literature on negative concord and I propose a correlation between negative auxiliary inversion and negative concord. In sections (2.2.2.2)-(2.2.2.4), I show that negative auxiliary inversion is only possible when sentential negation is the negative head *-n't*. I return to explaining cross-linguistic variation and on the necessary conditions for negative auxiliary inversion in a variety in section 2.2.3.

2.2.1 Evidence against C°: Embedding under overt complementizers

In older analyses of negative auxiliary inversion constructions, the auxiliary was proposed to raise to C° as a result of its similarity to yes-no question formation, as in Sells et al.'s (1996) interpretation of Labov et al. (1968). Consider the interrogative in (2.59).

(2.59)   Didn't everybody go to the party?

Its declarative counterpart has the subject raising to canonical subject position, as in (2.60a). The yes-no question is formed by raising the auxiliary past the subject to a higher position, as in (2.60b).

(2.60)   a. Canonical subject movement in a declarative

$[_{TP}$ everybody didn't ~~everybody~~ go to the party$]$

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

didn't $[_{TP}$ everybody ~~didn't everybody~~ go to the party$]$?

Consider next the negative auxiliary inversion construction in (2.61).

(2.61)   Didn't everybody go to the party.   (WTE)

A sentence lacking negative auxiliary inversion has movement of the subject to canonical subject position, as in (2.62a). A sentence exhibiting negative auxiliary inversion is derived from its non-inverted counterpart by movement of the auxiliary over the subject, as in (2.62b).

(2.62)   a. Non-inverted construction

$[_{TP}$ everybody didn't ~~everybody~~ go to the party$]$

     b. Construction exhibiting negative auxiliary inversion

didn't $[_{TP}$ everybody ~~didn't everybody~~ go to the party$]$

Despite the fact that subject-auxiliary inversion is present in both constructions, the auxiliary in negative auxiliary inversion constructions cannot raise as high as to the complementizer position because negative auxiliary inversion constructions are licit in embedded clauses with an overt *that*

complementizer, as in (2.63).[11] Negative auxiliary inversion constructions can be clausal comple-
ments of the matrix predicate, as in (2.63c), they can be embedded in a nominal, as in (2.63a), and
they can be embedded in relative clauses, as in (2.63a).

(2.63) a. She loves the fact (that) don't nobody like her.   (WTE/AAE; Foreman 1999: 10)

        b. I know a way that can't nobody start a fight.   (AAE; Labov et al. 1968: 286)

        c. I hope that won't anybody hit us.   (AppE; Feagin 1979: 241)

Negative auxiliary inversion constructions can also be embedded under the complementizer *if*, as
in (2.64).

(2.64) a. I don't particularly care if didn't anybody like your idea. It ain't my concern. (WTE)

        b. What I'm wonderin' is if didn't anybody end up comin' at all.   (WTE)

        c. Let me know if don't nobody wanna ride the bus.   (AAE; Green 2014: 135)

        d. I don't care if can't nobody hear me.   (AAE; Green 2014: 135)

The presence of an overt complementizer is evidence that negative auxiliary inversion can still
occur when C° is filled with an overt complementizer. The auxiliary in negative auxiliary inversion
constructions cannot raise as high as C° because two heads cannot share a projection. To return
briefly to yes-no question formation, evidence that two heads cannot share a projection comes from
the incompatibility of embedded questions with overt complementizers such as *if* or *whether*, as
in (2.65).

(2.65) a. * She asked if does anybody like her.   (SE)

        b. * She asked whether does anybody like her.   (SE)

The acceptability of the examples in (2.63) and (2.64) and the compatibility of an overt complemen-
tizer with the raised auxiliary suggest the need for an intermediate head position between C° and
SpecTP.

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11. Note, however, that Sells et al. (1996) allow the negated auxiliary to occupy this position because their consultants
do not accept embedding with overt complementizers.

2.2.2 Evidence for a higher negative projection

2.2.2.1 Independent arguments for higher negative projection for negative concord

Earlier in this chapter, I proposed that while all varieties of English have the lower negative projection proposed by Pollock (1989), the higher negative projection, $Neg_2°$ is only available in varieties which exhibit negative auxiliary inversion. In this section, I discuss the motivation behind this proposal by considering the interaction of negative auxiliary inversion with negative concord, a phenomenon with which NAI can co-occur.

A number of syntactic analyses of negative concord advocate for a higher structural position for negation in languages which exhibit negative concord (Zanuttini 1991, 1997, Zeijlstra 2004, 2008) or a higher projection that has or hosts a negative feature (Laka 1990, Ladusaw 1992, Alonso Ovalle & Guerzoni 2004). This position is argued to be present between TP and CP. Furthermore, the presence of negative auxiliary inversion in a variety is a sufficient condition for negative concord. All varieties that exhibit negative auxiliary inversion also exhibit negative concord.[12]

Recall from the introduction that negative concord is a phenomenon in which sentences containing multiple elements which bear negative morphology can be interpreted as having only one instance of logical negation at LF. In other words, it need not be the case that the number of negative elements in a sentence will equal the number of instances of logical negation. Examples which exhibit negative concord readings in varieties of English are given in (2.66). The elements bearing negative morphology, sentential negation and n-words, are italicized.

(2.66) a. I *ain't never* gonna do *nothin'* for *nobody*.   (WTE; Foreman 1999/2001: 7)

'I'm never gonna do anythin' for anybody.'

---

12. Tortora (2007) independently makes the same generalization that a language with negative auxiliary inversion entails a language with negative concord. Larry Horn brings to my attention a potential counterexample to our generalizations. Wilson Gray, a speaker of African American English who self-identifies as "boojie" or middle-class, accepts NAI constructions but does not accept examples which exhibit negative concord. While these judgments might be a reflection of his grammar, judgments can be seen as a composite of a speaker's grammar and of prescriptive pressures and it is sometimes hard to tell what is the source of judgments. This is particularly true in cases involving judgments of examples which exhibit negative concord because negative concord is a socially stigmatized phenomenon.

    b. I *didn't never* have *no* problems.   (AAE; Green 2002: 77)

       'I didn't ever have any problems.'

    c. They *didn't* see *no baby*, you know, *didn't* see *none nowhere*.

                                  (AppE; Wolfram & Christian 1976: 109)

       'They didn't see a baby, you know, didn't see one anywhere.'

Analyses of negative concord vary with respect to which element or elements are the source of logical negation. In some analyses, there is a one-to-one correspondence where all elements which bear negative morphology also bear negative features (Zanuttini 1991, 1997, Haegeman & Zanuttini 1996). The multiple negative elements undergo a factorization operation whereby the multiple negations become one. In other analyses of negative concord, there is a single element which bears logical negation, which may or may not be overtly realized, and the remaining morphologically negative elements are subject to licensing constraints that give rise to the possible distribution of negative concord in a given language. The literature on negative concord is vast, so I narrow my focus here by briefly describing one analysis which accounts for negative concord with a higher negative projection (Zeijlstra 2004, 2008). In Zeijlstra's work, negative concord is a syntactic process of agreement. N-words in his theory are semantically non-negative elements which bear formally negative uninterpretable features, [uNEG]. These negative uninterpretable features of n-words need to be checked by a c-commanding negative operator. The negative operator is semantically negative and has an interpretable negative feature, [iNEG]. Sentential negation is able to check the uninterpretable features of n-words in some languages while an abstract negative operator is needed in other languages. Whether or not the element that marks sentential negation is semantically negative in a language gives rise to different distributions of negative concord. Italian is a language whose distribution of negative concord is observed to be similar to the distribution of negative concord in West Texas English (Foreman 1999, 1999/2001). In Italian, post-verbal n-words cannot occur in the absence of sentential negation, as in (2.67a). Sentential negation must also be present in order for post-verbal n-words to be licensed, as in (2.67b).

(2.67)   a.   * Gianni ha contattato *nessuno*.   (Italian; Zanuttini 1991: 110)

             Gianni has contacted nobody

'Gianni has contacted nobody/anybody.'

    b.   Mario *non* ha visto *nessuno.*   (Italian; Zanuttini 1991: 110)

          Mario NEG has seen nobody

          'Mario hasn't seen anybody.'

In comparison, pre-verbal n-words appear in the absence of sentential negation, as in (2.68a). When pre-verbal n-words and sentential negation are both present, as in (2.68b), the example is unacceptable under a negative concord reading. Instead, the example is possible under having a double negation reading, where there are two instances of logical negation.

(2.68)   a.   *Nessuno* ha visto Mario.   (Italian; Zanuttini 1991: 111)

            Nobody has seen Mario

            'Nobody has seen Mario.'

    b.   * *Nessuno non* ha visto Mario.   (Italian; Zanuttini 1991: 112)

            Nobody NEG has seen Mario

            'Nobody has seen Mario.'

Zeijlstra accounts for the distribution of n-words in Italian with the proposal that Italian has two negative operators that can license the semantically non-negative n-words. The two operators are sentential negation, which is overtly realized, and a covert negative operator that licenses pre-verbal n-words. Post-verbal n-words, as in (2.67b), are licensed by sentential negation, as in (2.69), in which the dotted line indicates the licensing relation.

(2.69)   Mario *non*$_{[i\text{NEG}]}$ ha visto *nessuno*$_{[u\text{NEG}]}$

Pre-verbal n-words, as in (2.68a), are licensed by the covert negative operator, as in (2.70).

(2.70)   *OP¬*$_{[i\text{NEG}]}$ $[_{\text{TP}}$ *Nessuno*$_{[u\text{NEG}]}$ ha visto Mario$]$

When a pre-verbal n-word and sentential negation co-occur, as in (2.68b), the double negation interpretation is a result of the presence of two negative operators, as in (2.71). The covert abstract operator provides one instance of negation and sentential negation provides the other.

(2.71) $OP\neg_{[i\text{NEG}]}$ $\left[_{\text{TP}} Nessuno_{[u\text{NEG}]}\ non_{[i\text{NEG}]}\ \text{ha visto Mario}\right]$

A negative operator can license multiple n-words. When more than one n-word is present in a sentence, as in (2.72), the negative operator licenses all of the n-words by a process of Multiple Agree, as in (2.73). A single interpretable negative feature can enter into Agree relations with multiple uninterpretable features to check them, provided all Agree relations respect proper locality conditions.[13]

(2.72)   *Non* ho   detto *niente*   a *nessuno.*   (Italian; Zanuttini 1991: 147)
          NEG have said   anything to anyone

          'I haven't said anything to anyone.'

(2.73) $Non_{[i\text{NEG}]}$ ho detto $niente_{[u\text{NEG}]}$ $a\ nessuno_{[u\text{NEG}]}$

Italian is categorized as a Non-Strict Negative Concord language (Giannakidou 2006) because n-words can appear in the absence of sentential negation. Strict Negative Concord languages, on the other hand, categorically require the presence of sentential negation. An example of a Strict Negative Concord language is Romanian. N-words cannot appear in the absence of sentential negation, as in (2.74). Instead, sentential negation is obligatory, as in (2.75).

(2.74)   * *Nimeni* a   spus *nimic.*   (Romanian)
          Nobody has said nothing

          'Nobody has said anything.'

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13. Zeijlstra is not explicit about what the proper locality conditions are, but the locality conditions must be language specific or n-word specific because languages vary with respect to the distance over which they allow this licensing to occur. For an overview of locality conditions to which n-words of different varieties of English are subject, see Smith (2001).

(2.75)   *Nimeni nu*   a   spus *nimic.*   (Romanian)

          Nobody NEG has said nothing

          'Nobody has said anything.'

Since Zeijlstra treats all n-words as semantically non-negative, he proposes that strict negative concord languages have only the abstract negative operator and that the element that marks sentential negation, *nu*, is not negative. Instead, the sentential negation marker has an uninterpretable negative feature which must be checked and is subject to the same constraints as n-words. The sentential negation marker in these types of negative concord languages is, in effect, an n-word itself. In the example in (2.75), the source of logical negation is the covert operator which licenses the n-words and sentential negation marker, as in (2.76).

(2.76) $OP\neg_{[i\text{NEG}]}$ $\left[_{\text{TP}} \textit{Nimeni}_{[u\text{NEG}]} \ \textit{nu}_{[u\text{NEG}]} \ \text{a spus} \ \textit{nimic}_{[u\text{NEG}]}\right]$

There are also other ways in which languages which exhibit negative concord can vary. For the purpose of this discussion, we focus our attention only on whether pre-verbal n-words can appear in the presence of sentential negation to give rise to a negative concord reading. In this respect, West Texas English exhibits a similar pattern to Non-Strict Negative Concord languages like Italian. Pre-verbal n-words cannot co-occur with sentential negation to give rise to a negative concord reading in West Texas English, as in (2.77).[14]

(2.77)   a.   * *Nobody didn't* like the movie.   (WTE)

               'Nobody liked the movie.'

         b.   * *Nobody won't* come to the party.   (WTE)

               'Nobody will come to the party.'

These examples are, however, acceptable under a double negation reading, as in (2.78).

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14. There are some exceptions to this observation, the acceptability of which I propose should not be derived by the grammar. I return to a discussion of such exceptions in section 3.4.3.2 of chapter 3.

(2.78) a. *Nobody didn't* like the movie. Everybody just loved it. (WTE)

   b. *Nobody won't* come to the party. Everybody will be coming. (WTE)

The inability of negative concord to arise in this configuration is a way in which West Texas English differs from the other varieties of English which exhibit negative auxiliary inversion. Examples in which pre-verbal n-words co-occur with sentential negation to give rise to a negative concord reading are attested in naturally-occurring data for speakers of both African American English (Labov et al. 1968, Labov 1972, Green 2002, and others) and Appalachian English (Wolfram & Christian 1976, Feagin 1979, and others).[15] The examples in (2.79) show the configuration in African American English and the examples in (2.80) show the configuration in Appalachian English.

(2.79) a. *No game don't* last all night. (AppE; Green 2002: 80)

     'No game lasts all night.'

   b. *Nothing don't* come to a sleeper but a dream. (AppE; Green 2002: 80)

     'Nothing comes to a sleeper but a dream.'

(2.80) a. *Nobody couldn't* handle him. (AppE; Wolfram & Christian 1976: 112)

     'Nobody could handle him.'

   b. *None of em didn't* hit the house. (AppE; Feagin 1979: 229)

     'None of em hit the house.'

In this respect, African American English and Appalachian English exhibit a pattern similar to Strict Negative Concord languages like Romanian. Setting aside differences in other configurations in which negative concord can arise in negative concord languages, for now we observe that Zeijlstra's analysis of negative concord for Non-Strict Negative Concord languages like Italian can be extended to account for negative concord in West Texas English while his analysis of negative concord for Strict Negative Concord languages like Romanian can be extended to account for

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15. Some discrepancies for varieties of African American English are, however, described in the literature. Sells et al. (1996) note that the inverted counterparts are preferred by their African American English speakers and Sistrunk (1999) labels such examples as unacceptable for the variety of African American English he describes. Based on these observations, it appears as though there are varieties of AAE which allow pre-verbal n-words to co-occur with sentential negation and that there are also varieties of AAE which, like West Texas English, are restricted in this manner.

negative concord in African American English and Appalachian English. In both classes of languages, Zeijlstra proposes a higher negative projection in order to account for negative concord. The double negation reading that arises in West Texas English is a result of the negative operator and sentential negation both providing an instance of logical negation, as in (2.81).

(2.81) $OP\neg_{[iNEG]}$ $\left[_{\text{TP}} Nobody_{[uNEG]} \; didn't_{[iNEG]} \; \text{like the movie}\right]$

The negative concord reading in African American English and Appalachian English is, on the other hand, a result of only the negative operator contributing an instance of logical negation, as in (2.82), while the sentential negation marker is not semantically negative.

(2.82) $OP\neg_{[iNEG]}$ $\left[_{\text{TP}} Nobody_{[uNEG]} \; couldn't_{[uNEG]} \; \text{handle him}\right]$

Given that all varieties of English which exhibit negative auxiliary inversion also exhibit negative concord and given that Zeijlstra (2004, 2008), among others, posit a higher negative projection for negative concord, I propose adopting the higher negative projection needed for negative concord as the host of the negated auxiliary in negative auxiliary inversion constructions. The movement of the negated auxiliary to the higher negative projection has the effect of licensing the n-words present in a negative auxiliary inversion construction in a way similar to Zeijlstra's analysis, as in (2.83).

(2.83) $didn't_{[+NEG]}$ $\left[_{\text{TP}} nobody \; \text{like the movie}\right]$

The analysis I provide for negative auxiliary inversion to account for the distribution of subjects has consequences for the nature of n-words and is compatible with only a subset of analyses of negative concord. In this section, I described Zeijlstra's (2004, 2008) analysis of negative concord, which is in part compatible with my analysis but cannot be adopted directly. I return to an explicit discussion of the nature of n-word subjects in my analysis in section 3.4.3 of chapter 3. Whether or not the covert negative operator that Zeijlstra proposes to account for the pre-verbal n-words is

also needed in West Texas English and the other varieties of English that exhibit negative auxiliary inversion is an issue I leave for future work.[16]

Additional reasons for why the higher projection should be negative are outlined in the sections that follow. In the last section of this chapter, I consider the one-way correlation between negative auxiliary inversion and negative concord in more detail and discuss how I account for cross-linguistic variation.

2.2.2.2 Negation is necessary

A previously observed characteristic of negative auxiliary inversion is that it can only occur in negated sentences. 'Positive' inversion, or inversion in affirmative sentences is not possible. The pair of sentences in (2.84) show the contrast in ill-formedness between the affirmative and negative contexts.

(2.84)   a.   * Will everybody fit in that car.   (WTE)

         b.   Won't everybody fit in that car.   (WTE)

The presence of a higher projection which is negative in negative auxiliary inversion constructions can explain why it is that the phenomenon is restricted to occurring only with negation.

2.2.2.3 Restricted to sentential negation

More specifically, the instance of negation which licenses negative auxiliary inversion is sentential negation. A subject bearing negative morphology is not enough to license negative auxiliary inversion, as we see in (2.85a). In comparison, its minimal counterpart in (2.85b) exhibits sentential negation and is acceptable.

(2.85)   a.   * Will none of the students go to the party.   (WTE; Foreman 1999: 10)

---

16. An alternative analysis is that pre-verbal n-words are ambiguous between having a negative and a non-negative interpretation (Giannakidou 2006 and others).

b.   Won't none of the students go to the party.   (WTE; Foreman 1999: 10)

2.2.2.4   Sentential negation must be *-n't*

It is not enough for a sentence to contain sentential negation, however. The sentential negation must be the negative morpheme *-n't*.[17] The negative morpheme *not* cannot license negative auxiliary inversion, as we see in (2.86a), where the subject intervenes between the auxiliary and sentential negation or in (2.86b), where sentential negation in its analytic form follows the auxiliary. The two examples can be compared to (2.86c), where sentential negation in its synthetic form inflects onto the auxiliary.

(2.86)   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)

Further evidence for the impossibility of *not* comes from a corpus study of data from Appalachian English. Blanchette (2015) points out that in *The Audio-Aligned and Parsed Corpus of Appalachian English*, all of the negative auxiliary inversion constructions had the morpheme *n't* and none contained *not*.

2.2.3   Availability of negative auxiliary inversion

Given that all varieties which exhibit negative auxiliary inversion also exhibit negative concord, negative concord appears to be a prerequisite for negative auxiliary inversion. However, having negative concord does not guarantee the availability of negative auxiliary inversion.[18] Although

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17. I assume Zwicky & Pullum's (1983) proposal that *-n't* is an inflection rather than a clitic and their terminology in this discussion.

18. Tortora (2007) independently made the same generalization. A language with negative auxiliary inversion entails a language with negative concord. However, she also stipulates that the mechanism that is responsible for negative auxiliary inversion must also be the mechanism that allows for negative concord. This claim is too strong for me, because negative auxiliary inversion can occur in the absence of negative concord. However, NAI gives rise to a configuration in which negative concord is licensed.

all varieties that exhibit negative auxiliary inversion also exhibit negative concord, not all varieties that exhibit negative concord also exhibit negative auxiliary inversion. There are varieties of North American English that exhibit negative concord but do not exhibit negative auxiliary inversion (Labov et al. 1968, Labov 1972). One example in which negative auxiliary inversion is unattested for speakers who allow negative concord is a variety of English spoken by white speakers in Inwood, New York (Labov 1972). Additionally, negative auxiliary inversion is not attested in British varieties of English while negative concord is attested in some varieties (Henry et al. 1997). Recall from section 1.2.1 of chapter 1 that Belfast English and Bristol English both exhibit negative concord but neither variety exhibits negative auxiliary inversion. Furthermore, negative auxiliary inversion is not attested in any variety of English which lacks negative concord. Standard English, for instance, lacks both phenomena.[19] I show how I derive these cross-linguistic differences in this section.

There is some variation with respect to the configurations in which negative concord is allowed cross-linguistically, but in all of the described varieties that allow negative concord, sentential negation can license a post-verbal n-word. This type of negative concord is attested, for instance, in British varieties of English in Bristol, Reading, Buckie, and Belfast (Henry et al. 1997, Smith 2001). It is also attested in African American English and varieties of white speakers in Inwood, New York and Northern New Jersey (Labov et al. 1968, Labov 1972), in Appalachian English (Feagin 1979, Wolfram & Christian 1976), and in West Texas English (Foreman 1999, 1999/2001), as in (2.87).

(2.87) a. I ain't never gonna do nothin' for nobody.   (WTE; Foreman 1999/2001: 7)

        'I'm never gonna do anythin' for anybody.'

    b. I didn't never have no problems.   (AAE; Green 2002: 77)

        'I didn't ever have any problems.'

---

19. Blanchette (2015, 2016) argues that negative concord is only absent from the construct that is Standard English because of prescriptive pressures but that it is actually present in the grammars of Standard English speakers. However, comprehension is a stronger indicator of a speaker's internal grammar than production for Blanchette. I hesitate to equate comprehension with a grammar and instead consider production to be a better indicator of one's grammar. I myself am a speaker who can understand examples which exhibit negative concord in English to some extent but cannot produce such examples natively, despite my desire to override prescriptive norms. If I did have negative concord as part of my grammar at some stage, as Blanchette (2015) assumes to be case, I must have repressed it beyond my ability to recover it in my production. How there can be a mismatch in comprehension and production is, of course, a non-trivial issue for both of us.

    c. They didn't see no baby, you know, didn't see none nowhere.

<div align="right">(AppE; Wolfram & Christian 1976: 109)</div>

    'They didn't see a baby, you know, didn't see one anywhere.'

This configuration is, in fact, the most common type of negative concord that can be available in a language (Smith 2001). Of the varieties that exhibit negative concord, only a subset of them also exhibit negative auxiliary inversion, speakers of African American English, West Texas English, and Appalachian English, as in (2.88).

(2.88)   a. Can't nobody beat 'em.   (AAE; Labov et al. 1968: 285)

        b. Won't nobody help her.   (AppE; Feagin 1979: 241)

        c. Didn't nobody like the movie.   (WTE)

However, negative auxiliary inversion can be seen as an instance of post-verbal n-word licensing when it co-occurs with negative concord. Although an n-word is in subject position, the negated auxiliary precedes it and this order results in the negated auxiliary licensing the n-word in the same configuration in which post-verbal n-words are licensed in (2.87). Negative auxiliary inversion can be seen as a subcase of this most common type of negative concord when it involves n-word subjects.[20] I account for the cross-linguistic difference between languages which allow NAI with the proposal that it is only in these varieties that the higher negative projection is able to host the negated auxiliaries. If post-verbal n-words are possible, then deriving negative auxiliary inversion constructions involves a further step: the movement of the negated auxiliary above the subject, which results in the pre-verbal n-words being licensed in the same configuration as post-verbal n-words.

In order to be able to host the negative head in a projection above the subject, a grammar must first have a higher negative projection available. Varieties that exhibit negative concord do when we follow a proposal in which n-words are uniformly semantically non-negative and a higher

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20. In some descriptions of negative auxiliary inversion which do not account for the phenomenon in the absence of negative concord, the phenomenon is considered to be a type of negative concord (Ladusaw 1991, Henry et al. 1997, Smith 2001, and others).

negative operator is responsible for licensing pre-verbal n-words, as discussed in section 2.2.2.1. One of the cross-linguistic differences I propose is that varieties which exhibit negative concord differ from varieties which do not by having the higher negative projection available for the process of negative concord.[21]

I propose that negative auxiliary inversion is unattested for standard English speakers for two reasons. They do not have a higher negative projection, as languages which exhibit negative concord do.[22] But they would need to have this higher negative projection in order to be able to realize this head overtly, such as to derive negative auxiliary inversion constructions.

I therefore attributed the availability of negative auxiliary inversion to the availability of negative concord which in turn is correlated with a higher negative projection. I account for cross-linguistic variation in the following way. The higher negative projection serves two purposes in the varieties of English which allow both negative auxiliary inversion and negative concord. It is able to account for negative concord and it is able to host negated auxiliaries which license pre-verbal n-words. In varieties which exhibit negative concord but lack negative auxiliary inversion, such as Belfast English and Bristol English, the higher negative projection does not host head movement. In varieties which lack both phenomena, such as Standard English, the higher negative projection is not available. I return to discussing negative concord and the nature of n-words in section 3.4.3 of the next chapter.

Summary

In this chapter, I adopted a movement analysis of negative auxiliary inversion. The subject of the construction is housed in canonical subject position, the evidence for which comes from its subject restriction, vP-ellipsis, the position of adverbs, the position of aspectual markers, and tag-

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21. Recall, however, that the evidence for the higher negative projection comes from the availability of pre-verbal n-words in the absence of negation (section 2.2.2.1). When post-verbal n-words appear with the sentential negation marker, it is hard to tell without looking at the overall distribution of n-words whether the sentential negation marker is licensing the n-word or whether a covert negative operator is.

22. See, however, Horn (2009, 2010) for examples exhibiting negative concord in standard English and Blanchette's work on how negative concord is derivable in varieties of English which are not typically thought of as exhibiting negative concord, including standard English.

question formation. The construction is derived by the negated auxiliary moving above the subject to a higher negative projection. This higher negative projection is available in varieties of English which allow negative auxiliary inversion. Evidence for this higher negative projection comes from independent arguments for a higher negative projection in some syntactic analyses of negative concord and from the construction being licensed only in the presence of sentential negation morpheme *n't*. In the chapter that follows, I derive the attested interpretations of the construction and I account for the construction's distribution of subjects.

Chapter 3

Semantics of negative auxiliary inversion constructions

3.1 Correlation: subjects and ambiguity

3.1.1 Interpretation of negative auxiliary inversion constructions

Sentences exhibiting negative auxiliary inversion are unambiguously interpreted as having surface scope, as observed by Foreman (1999) and confirmed by my consultants.[1]Negation outscopes the subject, as in (3.1a).[2] The non-inverted construction, when it is available, is on the other hand ambiguous. In addition to its surface scope interpretation, the inverse scope interpretation is also available, as in (3.1b), though when spoken, intonation can help target a particular interpretation.

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1. This generalization seems to hold in most cases. However, see section 3.4.4 for apparent counterexamples.

2. In the literature on negative auxiliary inversion, subjects headed by universal quantifiers are attested to be a possible subject in West Texas English (Foreman 1999, 1999/2001, Matyiku 2016). They are discussed in the literature that describes the phenomenon in African American English (Green 2014) and Appalachian English (Blanchette 2015). However, in these descriptions, it is not clear whether speakers of the varieties they describe also allow these subjects or whether the authors are trying to account for Foreman's examples in their analyses. I have, however, found additional evidence for the acceptability of universal quantifiers in African American English and Appalachian English. I focus on describing negative auxiliary inversion for West Texas English, and I return to a discussion of whether the analysis I provide is extendable to other varieties of English. For an overview of differences between varieties exhibiting negative auxiliary inversion constructions, see section 4.1 of chapter 4.

(3.1) a. Didn't everybody go to the party. $[\neg \gg \forall; {}^*\forall \gg \neg]$

b. Everybody didn't go to the party. $[\neg \gg \forall; \forall \gg \neg]$

3.1.2 Correlation: Subjects that allow NAI are ambiguous when non-inverted

Negative auxiliary inversion is possible when its non-inverted construction is ambiguous for many types of quantificational elements. We've seen above that it holds for strong quantifier *every*. Other examples for the types of quantifiers that share this distribution are counting quantifiers, such as *many* and *more than three*, as in (3.2) and (3.3), respectively.

(3.2) a. Many people didn't go to the party. $[\neg \gg many; many \gg \neg]$

b. Didn't many people go to the party. $[\neg \gg many; {}^*many \gg \neg]$

(3.3) a. More than three people won't be allowed in at a time. $[\neg \gg {>}3; {>}3 \gg \neg]$

b. Won't more than three people be allowed in at a time. $[\neg \gg {>}3; {}^*{>}3 \gg \neg]$

It also holds for indefinite quantifiers, such as *a*, as in (3.4).[3]

(3.4) a. A dog can't do that trick. $[\neg \gg \exists; \exists \gg \neg]$

b. Can't a dog do that trick. $[\neg \gg \exists; {}^*\exists \gg \neg]$

Some quantificational subjects do not give rise to ambiguity in their non-inverted constructions, such as *few* and *some* in (3.5a) and (3.6a), respectively. These types of subjects are not possible subjects of negative auxiliary inversion constructions, as in (3.5b) and (3.6b).[4]

(3.5) a. Few people didn't live there then. $[{}^*\neg \gg few; few \gg \neg]$

b. * Didn't few people live there then.

(3.6) a. Some person didn't come. $[{}^*\neg \gg some; some \gg \neg]$

---

3. The determiner *a* can be specific. Ambiguity is possible only when *a* has a non-specific reading.

4. Examples headed by *some* when it has a partitive interpretation is sometimes possible in an apparent negative auxiliary inversion construction. I return to a discussion of *some* in section 3.4.4.2.

    b.   * Didn't some person come.

Subjects that are not scope-bearing are also not possible in negative auxiliary inversion construc-
tions. Proper names, pronouns, and definite descriptions are not possible subjects of this construc-
tion.[5]

(3.7)   a.   * Can't Jack beat them.   (WTE)

        b.   * Wouldn't I do that.   (WTE; Foreman 1999: 11)

        c.   * Can't the man get in the hall.   (WTE)

        d.   * Cain't their dogs do that.   (WTE; Foreman 1999: 12)

The empirical observations concerning the interpretation of sentences containing negative auxil-
iary inversion and their non-inverted counterparts are given in Figure 3.1. The list of subjects that
I have investigated are in the second column. The third column contains information regarding
whether a subject gives rise to ambiguity or not in non-inverted constructions. The rightmost col-
umn contains information regarding the scopal relation between negation and the subject when
the construction is possible with the respective subject. Otherwise, an asterisk indicates that the
subject is not possible.

There is a correlation of negative auxiliary inversion with the presence of ambiguity in its non-
inverted counterpart. The types of subjects that give rise to ambiguity in a non-inverted sentence
are the types of subjects that are possible in negative auxiliary inversion constructions.[6] The types
of subjects that do not give rise to ambiguity in a non-inverted sentence are incompatible with neg-
ative auxiliary inversion constructions. Besides the correlation, in sentences exhibiting negative
auxiliary inversion, negation always has wide scope. This disambiguating effect of negative aux-

---

5. There are some cases of apparent negative auxiliary inversion constructions with definite description subjects. I
return to a discussion of these construction in section 3.4.4.1.

6. Horn (2014a,b, 2015) points that some speakers of English do not allow the inverse scope of non-inverted counter-
part in the presence of some quantificational subjects, particularly *many* and *many* when it is modified by adverbs. For
these speakers, the inverse scope interpretation of the non-inverted construction is not available. This restriction on
inverse scope did not arise for any of my consultants in my fieldwork. However, my prediction for a NAI speaker who
does not allow the inverse scope of a non-inverted construction is that they will also not allow the NAI counterpart of
that construction. I return to this issue in section 3.4.1.

		Interpretation	
	Subject	Non-inverted construction	NAI
Possible subjects	everybody	ambiguous	¬ high
	all the NP	ambiguous	¬ high
	more than # NP	ambiguous	¬ high
	many NP	ambiguous	¬ high
	a NP	ambiguous	¬ high
Impossible subjects	few NP	unambiguous (¬ low)	*
	some NP	unambiguous (¬ low)	*
	several NP	unambiguous (¬ low)	*
	Jack (*proper names*)	unambiguous	*
	I (*pronouns*)	unambiguous	*
	the NP	unambiguous	*
	their NP	unambiguous	*

Figure 3.1: The interpretation of subjects in NAI constructions and their non-inverted counterparts

iliary inversion is the motivating factor behind the argument that negative auxiliary inversion is an instance of head movement that is semantically active.

In the following sections, I explore first how the inverse scope of the non-inverted constructions is computed. I propose it is by covert movement of negation rather than by reconstruction of the subject to a position below negation. I then go on to propose that negative auxiliary inversion is an overt analog of this movement. The movement of negation is ruled out in the case in which it would not have scopal significance, along the lines of Fox's (2000) Principle of Scope Economy. Extending Fox's principle to apply to overt movement allows us to account for most of the subject restrictions of negative auxiliary inversion constructions. Additional constraints are needed to account for the entire subject distribution of the phenomenon, and subjects whose movement is not restricted by principles of scope economy but is instead subject to additional constraints are discussed in the last section of this chapter. Quantificational subjects that are not attested are discussed in section 3.4.1. I extend the analysis to account for subjects headed by indefinite *any* in section 3.4.2 and for subjects headed indefinite *no*, examples that co-occur with negative concord, in section 3.4.3. Section 3.4.4 introduces some problematic data.

3.2 Accounting for inverse scope of the non-inverted construction

Assuming that the subject is base-generated in the verb phrase and raises to canonical subject position, as in (3.8a), interpreting all of the elements in the positions in which they are pronounced gives rise to the surface scope interpretation, as in (3.8b).

(3.8) Some quantificational subjects can stay low in either construction
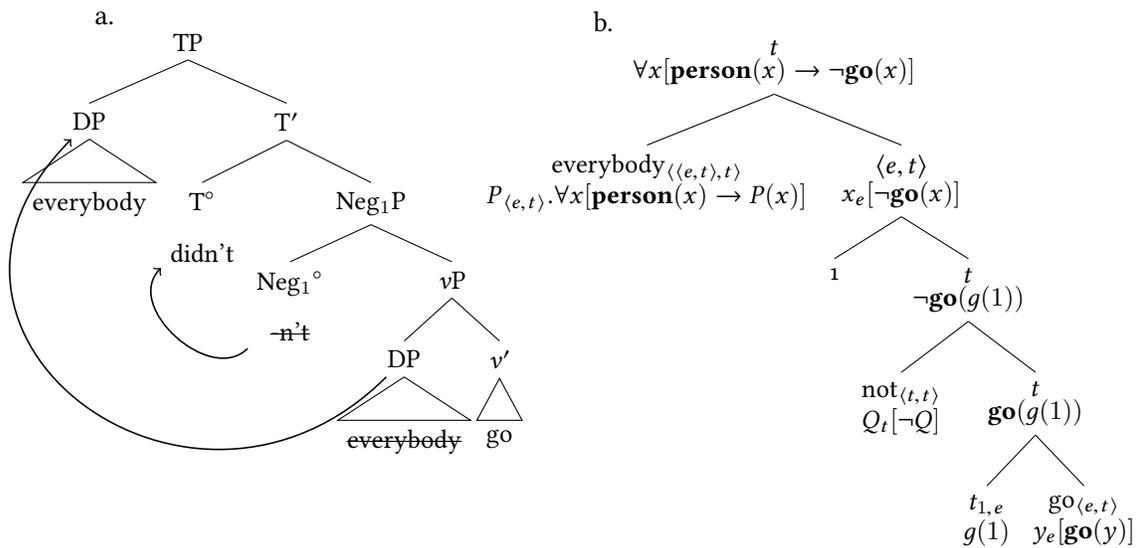
a.

$$\begin{array}{c}\text{TP}\\[1mm]\text{DP}\qquad\text{T}'\\[1mm]\text{everybody}\quad \text{T}^\circ\quad \text{Neg}_1\text{P}\\[1mm]\text{didn't}\quad \text{Neg}_1{}^\circ\quad v\text{P}\\[1mm]\text{-n't}\quad \text{DP}\quad v'\\[1mm]\text{everybody}\quad \text{go}\end{array}$$

b.

$$\begin{array}{c}\overset{t}{\forall x[\mathbf{person}(x)\to\neg\mathbf{go}(x)]}\\[2mm]\text{everybody}_{\langle\langle e,t\rangle,t\rangle}\qquad \langle e,t\rangle\\ P_{\langle e,t\rangle}.\forall x[\mathbf{person}(x)\to P(x)]\quad x_e[\neg\mathbf{go}(x)]\\[2mm]1\qquad \overset{t}{\neg\mathbf{go}(g(1))}\\[2mm]\text{not}_{\langle t,t\rangle}\qquad \overset{t}{\mathbf{go}(g(1))}\\ Q_t[\neg Q]\\[2mm]t_{1,e}\qquad \mathbf{go}_{\langle e,t\rangle}\\ g(1)\quad y_e[\mathbf{go}(y)]\end{array}$$

There are two ways in which the inverse scope interpretation of the non-inverted construction could arise. One possibility is that the subject is interpreted in its base-generated position, otherwise known as reconstructing, as in (3.9a). The other possibility is that negation raises covertly to a position above the subject to acquire wide scope, as in (3.9b). In these examples, copies are interpreted in the position in which they are not struck-out.

(3.9) a. Option 1:

$$\big[_{\text{TP}}\ \text{everybody}\ \text{didn't everybody go}\big]$$

b. Option 2:

$$\text{didn't}\ \big[_{\text{TP}}\ \text{everybody}\ \text{didn't everybody}\ \text{go}\big]$$

$$QR$$
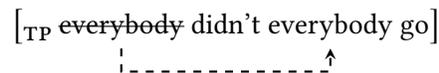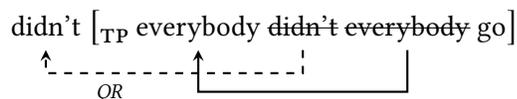
A discussion of the analysis in which the subject reconstructs is provided in section 3.2.1 and the analysis in which negation raises covertly, the analysis I pursue, is in section 3.2.2.

3.2.1 Option 1: Reconstruction of the subject

If the subject is generated in a verb-internal position, it should theoretically be possible to interpret it in its base-generated position. One way in which the subject could reconstruct is by moving back to this position at LF, as in (3.10a). Another possibility is for the subject to leave behind a trace of a higher type, as in (3.10b). I do not prefer one of these options over the other here.

(3.10)   Logical forms derived by reconstruction

a.

$$\overset{t}{\neg \forall x[\mathbf{person}(x) \to \mathbf{go}(x)]}$$

$\mathrm{not}_{\langle t,t \rangle}$
$Q_t[\neg Q]$

$$\overset{t}{\forall x[\mathbf{person}(x) \to \mathbf{go}(x)]}$$

$\mathrm{everybody}_{\langle \langle e,t \rangle, t \rangle}$
$P_{\langle e,t \rangle}.\forall x[\mathbf{person}(x) \to P(x)]$

$\mathbf{go}_{\langle e,t \rangle}$
$y_e[\mathbf{go}(y)]$

b.

$$\overset{t}{\neg \forall x[\mathbf{person}(x) \to \mathbf{go}(x)]}$$

$\mathrm{everybody}_{\langle \langle e,t \rangle, t \rangle}$
$P_{\langle e,t \rangle}.\forall x[\mathbf{person}(x) \to P(x)]$

$\langle \langle \langle e,t \rangle, t \rangle, t \rangle$
$R_{\langle \langle e,t \rangle, t \rangle}[\neg R(y_e[\mathbf{go}(y)])]$

1

$$\overset{t}{\neg g(1)(y_e[\mathbf{go}(y)])}$$

$\mathrm{not}_{\langle t,t \rangle}$
$Q_t[\neg Q]$

$$\overset{t}{g(1)(y_e[\mathbf{go}(y)])}$$

$t_{1,\langle \langle e,t \rangle, t \rangle}$
$g(1)$

$\mathbf{go}_{\langle e,t \rangle}$
$y_e[\mathbf{go}(y)]$
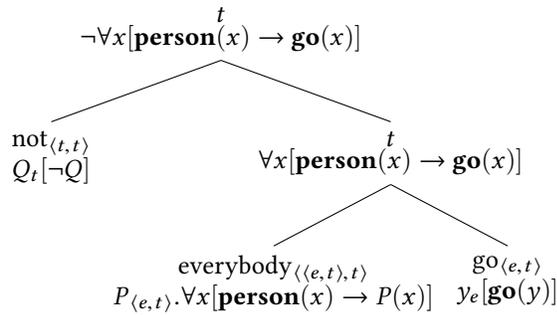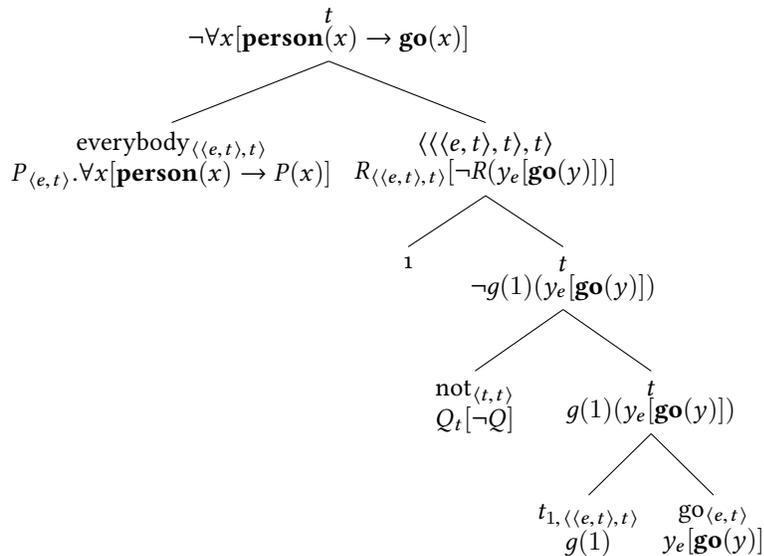
3.2.1.1 Evidence against subject reconstruction: Restriction on reconstruction of strong quantifiers

There is, however, reason to prefer the covert movement of negation analysis over the subject reconstructing analysis. The evidence comes from a restriction observed to hold for a subset of subjects that are possible in negative auxiliary inversion constructions. Lasnik (1999) observes that strong quantifiers such as *every NP* are not able to reconstruct in certain constructions. In the sentence in (3.11), it is not possible to interpret *every coin* in the scope of raising verb *be 3% likely*.

(3.11)   Every coin is 3% likely to land tails.   (Lasnik 1999: 93)

[*every coin » be 3% likely*; **be 3% likely » every coin*]

Lasnik accounts for the unavailability of inverse scope of (3.11) by suggesting that the reconstruction of *every coin* is ruled out, as in (3.12).

(3.12)   ~~every coin~~ is 3% likely to every coin lands tail

Under the assumption that strong quantifiers cannot reconstruct below raising verbs, Lasnik proposes that they may be restricted in their ability to reconstruct more generally. Lechner (2007) generalizes Lasnik's observation to all cases of strong quantifier reconstruction, positing a constraint on the reconstruction ability of strong quantifiers. This constraint is reproduced in (3.13) and states that strong nominal phrases cannot reconstruct below T°, or, more generally, below the position in which modals are generated.[7]

(3.13)   *Lechner's (2007)* Strong Constraint

An NP that is interpreted as a strong NP cannot reconstruct below T°.

In addition to the restrictions on quantificational subjects, there is also some evidence that strong

---

7. Note that Lechner assumes a higher projection to be the landing site of subjects, SpecAgrS. This projection dominates the position in which negation is interpreted. However, while subjects are pronounced in this higher projection, they are not interpreted in this projection and are instead interpreted in SpecTP.

quantificational subjects cannot be interpreted low for West Texas English speakers because these subjects cannot appear in existentials, as in (3.14).

(3.14)   a.   * There's every teacher teacher out there already.   (WTE)

   b.   * There ain't every one of 'em out here yet.   (WTE)

If certain types of subjects are restricted from reconstructing or being interpreted low in the structure, the subject reconstructing analysis, as in (3.15), is not a viable option for deriving the inverse scope of the non-inverted construction which bears these types of subjects.[8]

(3.15)   Option 1:

$$\left[_{\text{TP}} \text{ \sout{everybody} didn't everybody go}\right]$$
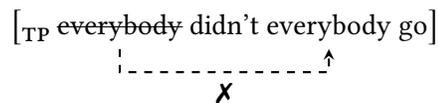
3.2.2   Option 2: QR of negative auxiliary

The alternative analysis derives the inverse scope of the non-inverted construction by covert quantifier raising of negation over the subject, as in (3.16).

(3.16)   Option 2:

$$\text{didn't } \left[_{\text{TP}} \text{ everybody \sout{didn't everybody} go}\right]$$
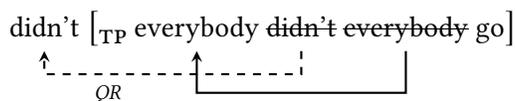
Such an analysis brings to question the semantics of quantifier raising for negation, particularly since negation is not typically thought to be an element that can undergo QR. Furthermore, negation is a head and a general observation about the interpretation of heads is that they obligatorily reconstruct, meaning that they are interpreted in the position in which they are base-generated even if they move at LF.[9] To see why this is the case, consider the derivation in (3.17).

---

8. Since the restriction against reconstruction only holds for strong quantifiers, it is possible that reconstruction occurs in cases in which the subjects of the non-inverted construction are not strong quantifiers. The availability of reconstruction in these cases would suggest that there is not a uniform method for deriving inverse scope of the non-inverted construction.

9. Recall from section 1.2.3 of chapter 1 that there is recent literature that challenges this claim. McCloskey (1996),

(3.17)   The movement of logical negation does not have scopal significance

$$\forall x[\mathbf{person}(x) \rightarrow \neg\mathbf{go}(x)] \quad {}^t$$

didn't$_{\langle t,t \rangle}$
$Q_t[\neg Q]$

$\langle\langle t,t \rangle,t \rangle$
$h_{\langle t,t \rangle}[\forall x[\mathbf{person}(x) \rightarrow h(\mathbf{go}(x))]]$

2

$\forall x[\mathbf{person}(x) \rightarrow g(2)(\mathbf{go}(x))] \quad {}^t$

everybody$_{\langle\langle e,t \rangle,t \rangle}$
$P_{\langle e,t \rangle}.\forall x[\mathbf{person}(x) \rightarrow P(x)]$

$\langle e,t \rangle$
$x_e[g(2)(\mathbf{go}(x))]$

1

$g(2)(\mathbf{go}(g(1))) \quad {}^t$

$t_{2,\langle t,t \rangle}$
$g(2)$

$\mathbf{go}(g(1)) \quad {}^t$

$t_{1,e}$
$g(1)$

$\mathbf{go}_{\langle e,t \rangle}$
$y_e[\mathbf{go}(y)]$

In this derivation, negation is logical negation of type $\langle t,t \rangle$. It merges in the derivation in its usual structural position, above the verb phrase. It then undergoes quantifier raising above the position in which the subject undergoes quantifier raising. Notice, however, that in the resulting interpretation, negation is outscoped by the subject. The movement of negation is not enough to give the head scopal significance because when negation is interpreted in its final landing site, it semantically reconstructs in the place of its trace. The movement of negation in this derivation does not give rise to the attested inverse scope interpretation of the non-inverted construction.

Furthermore, the resulting derivation is in conflict with an empirical observation made in the literature about the interpretation of negation. It has been observed that negation does not lower at LF (Horn 1989/2001, Zeijlstra 2004, Penka & von Stechow 2001, Penka 2010, Abels & Martí 2010, Iatridou & Zeijlstra 2013). Give this observation and under the assumption that strong quantifiers cannot reconstruct, negation must be interpreted above the subject in (3.17). The attested inverse scope interpretation of the non-inverted construction can therefore also be seen as evidence that

Roberts (2010) and Szabolcsi (2010) challenge it for negation while Lechner (2006, 2007), Hartman (2011), Bhatt & Keine (2015) and Iatridou & Zeijlstra (2013) challenge it for other heads.

negation does not lower at LF.

The task at hand is to explain the scopal significance of the movement of negation and prevent negation from lowering at LF. The reason we arrive at the incorrect interpretation in (3.17) even though the movement of negation occurs at LF is due to the fact that negation and its trace are of the same type. In order to derive the empirically attested interpretation, it is necessary to revise our assumptions of negation. I suggest two possible implementations here, neither of which I prefer over the other. In the first possible implementation, I treat negation like a nominal quantifier and raise its type. In the second implementation, I attribute the empirical observations to the nature of negation's trace.

Raising the type of the higher copy of negation allows negation to be interpreted in its highest structural position, as in (3.18).

(3.18)   Possibility for negation gaining scopal significance: Negation has a higher type

$$
\overset{t}{\neg\forall x[\mathbf{person}(x) \to \mathbf{go}(x)]}
$$

didn't$_{\langle\langle\langle t,t\rangle,t\rangle,t\rangle}$
$N_{\langle\langle t,t\rangle,t\rangle}[\neg N(f_t.f)]$

$\langle\langle t,t\rangle,t\rangle$
$h_{\langle t,t\rangle}[\forall x[\mathbf{person}(x) \to h(\mathbf{go}(x))]]$

2

$$
\overset{t}{\forall x[\mathbf{person}(x) \to g(2)(\mathbf{go}(x))]}
$$

everybody$_{\langle\langle e,t\rangle,t\rangle}$
$P_{\langle e,t\rangle}.\forall x[\mathbf{person}(x) \to P(x)]$

$\langle e,t\rangle$
$x_e[g(2)(\mathbf{go}(x))]$

1

$$
\overset{t}{g(2)(\mathbf{go}(g(1)))}
$$

$t_{2,\langle t,t\rangle}$
$g(2)$

$$
\overset{t}{\mathbf{go}(g(1))}
$$

$t_{1,e}$
$g(1)$

go$_{\langle e,t\rangle}$
$y_e[\mathbf{go}(y)]$
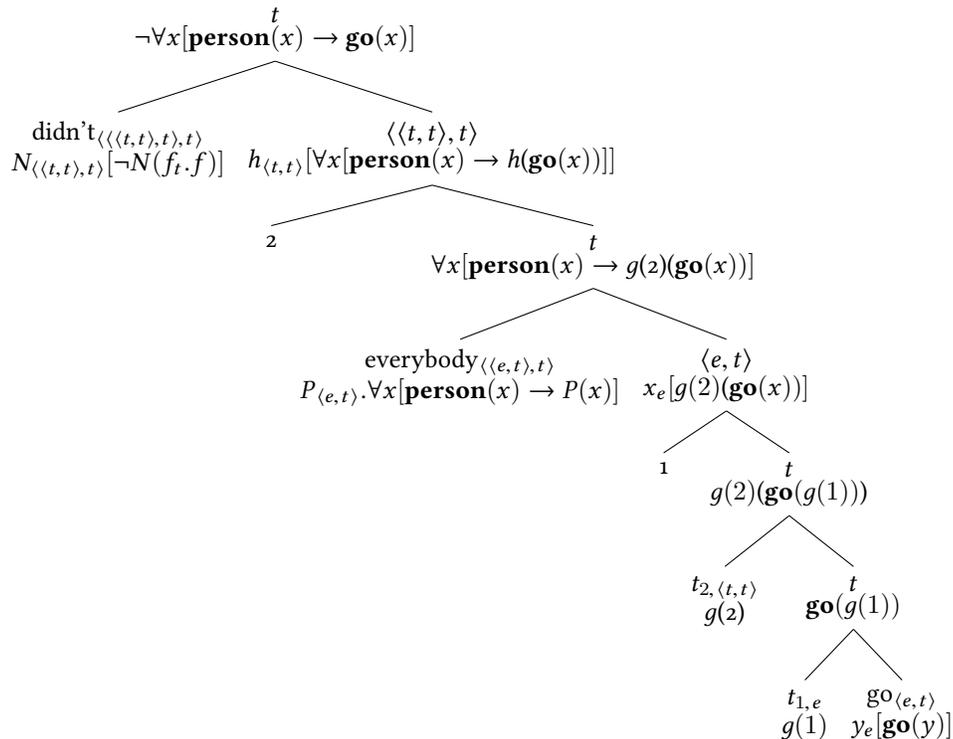
In this derivation, the trace of negation, which marks its base-generated position, is of negation's usual type, $\langle t,t\rangle$. Negation itself is of the higher type $\langle\langle\langle t,t\rangle,t\rangle,t\rangle$. The complex negation cannot be interpreted in the lower position of sentential negation because its type causes a type mismatch.

Movement is instead triggered to the higher negative projection and negation leaves behind the trace of a simpler type which can combine in this position.

The second approach to implementing a way in which the movement of negation is scopally significant involves making a stipulation about the nature of its trace.[10] Either negation does not leave behind a trace or, if it does, the trace is deleted on the way to LF, giving rise to the derivation in (3.19). This approach allows us to retain the usual type and interpretation of negation but has the disadvantage of running counter to Hartman's (2011) proposal that head movement leaves behind a bound variable.

(3.19)   Alternative possibility for negation gaining scopal significance: The trace of negation is deleted on the way to LF

$$
\begin{array}{c}
\overset{t}{\neg \forall x[\mathbf{person}(x) \to \mathbf{go}(x)]}
\end{array}
$$

didn't$_{\langle t,t \rangle}$
$Q_t[\neg Q]$

$\overset{t}{\forall x[\mathbf{person}(x) \to \mathbf{go}(x)]}$

everybody$_{\langle \langle e,t \rangle, t \rangle}$
$P_{\langle e,t \rangle}.\forall x[\mathbf{person}(x) \to P(x)]$

$\langle e,t \rangle$
$x_e[\mathbf{go}(x)]$

1

$\overset{t}{\mathbf{go}(g(1))}$

$t_{1,e}$
$g(1)$

go$_{\langle e,t \rangle}$
$y_e[\mathbf{go}(y)]$

In this section, we pursued the movement of negation as the most plausible analysis for deriving the inverse scope of the non-inverted construction. Such an analysis, however, required us to consider the nature of negation and its trace. Without additional revisions to the lexical item or its trace, the movement of negation could not gain scopal significance even if the movement occurred at LF.

---

10. A competing analysis for deriving the inverse scope of the non-inverted construction is one in which negation merges high. I compare my analysis to analyses in which negation merges high in sections 5.2 and 5.3 of chapter 5.

3.3 Accounting for the correlation

Section 3.1.2 introduced the correlation of negative auxiliary inversion with the presence of ambiguity in a non-inverted construction. The types of subjects that give rise to ambiguity in non-inverted constructions are the types of subjects we find in negative auxiliary inversion constructions. I account for the correlation with the hypothesis that negative auxiliary inversion is the overt analog of quantifier raising. Recall that negative auxiliary inversion constructions are only attested in some varieties of English, so the phenomenon is the overt analog of quantifier raising in varieties of English that have a higher negative projection, Neg_2, which can be overtly filled.

3.3.1 Hypothesis: NAI is the overt analog of QR

A construction exhibiting negative auxiliary inversion is derived when negation raises overtly above the subject, as in (3.20a). This is the way in which the construction must be derived when the subject is a universal quantifier such as *everybody*.

(3.20)   a.   Negative auxiliary inversion

didn't $[_{TP}$ everybody ~~didn't everybody~~ go$]$

b.   Non-inverted construction at LF

didn't $[_{TP}$ everybody ~~didn't everybody~~ go$]$
QR
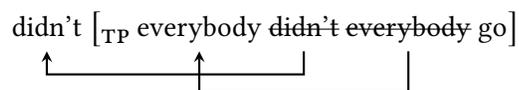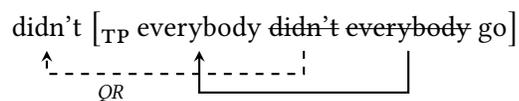
In comparison, the inverse scope of a non-inverted construction with the same subject is derived when negation raises *covertly* above the subject, as in (3.20b).

In both cases, negation gains wide scope and the interpretation is the same for both structures, the interpretation in (3.21). Negation gains scope in its moved position by having a higher type or because its trace is not interpretable at LF.

(3.21) $\neg\forall x[\mathbf{person}(x) \rightarrow \mathbf{go}(x)]$

The correlation of the impossibility of negative auxiliary inversion with the absence of ambiguity in the non-inverted construction can also be explained under the hypothesis that NAI is the overt analog of QR. The general observation is that the types of subjects that do not give rise to ambiguity in the non-inverted constructions are the types of subjects that are not possible in NAI constructions. The overt movement of negation over the subjects that are not possible in NAI constructions, as in (3.22a), is ruled out for the same reason the covert movement of negation is ruled out over subjects that do not give rise to ambiguity in the non-inverted construction, as in (3.22b).

(3.22) a. Negative auxiliary inversion

   didn't $\left[_{\text{TP}}\right.$ Jamie ~~didn't Jamie~~ go$\left.\right]$

   ✗

   b. Non-inverted construction at LF

   didn't $\left[_{\text{TP}}\right.$ Jamie ~~didn't Jamie~~ go$\left.\right]$

   ✗$_{QR}$
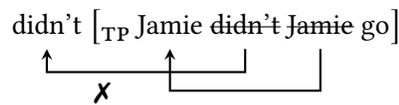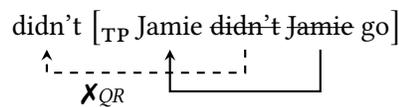
3.3.2 Observed restrictions on quantifier raising

Before explaining why the movement of negation is restricted from occurring over these subjects, it is worth discussing the evidence that the movement does not, in fact, occur. Since definite subjects such as proper names are not scope-bearing, the movement of a scope-bearing element over them would not have an effect on the resulting interpretation. The interpretation of the structure in which the scope-bearing element raises above a definite subject would be the same as the interpretation of the structure in which the scope-bearing element does not raise above it.

3.3.2.1 Scope-bearing elements cannot QR over definite subjects

Evidence that the movement does not happen comes from Fox (2000). Fox points out that scope-shifting operations such as quantifier raising are restricted from occurring in the case in which they would be semantically vacuous. Consider the contrast in the available interpretations of (3.23a) as compared to (3.23b).

(3.23) a. Some boy admires every teacher. Some girl does, too. [∃ » ∀, ∀ » ∃]

  b. Some boy admires every teacher. Mary does, too. [∃ » ∀, *∀ » ∃] (Fox 2000: 91)

The first sentence in (3.23a) contains two scope-bearing elements, *some boy* and *every teacher*. The sentence that follows it also contains two scope-bearing elements, *some girl* and the elided *every teacher*. Elided sentences force parallel structures. The two sentences can be interpreted as both having surface scope or as both having inverse scope. In the latter case, the availability of inverse scope is triggered in the elided sentence by the the elided quantifier, *every teacher*, undergoing quantifier raising above the scope-bearing subject, as in (3.24).

(3.24) Inverse scope is possible in (3.23a):

every teacher $\left[_{\text{TP}}\right.$ some girl does admire ~~every teacher~~$\left.\right]$

$\qquad\qquad$ *QR*
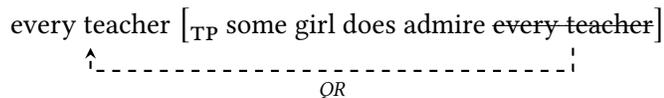
The first sentence in (3.23b) contains the two scope-bearing elements, *some boy* and *every teacher*, but the sentence that follows it contains only one, the elided *every teacher*. The two sentences can only be interpreted as both having surface scope. The unavailability of inverse scope in this set of sentences is due to the fact that inverse scope is impossible in the elided sentence. The elided sentence contains only one scope-bearing element and this scope-bearing element cannot undergo quantifier raising over the proper name *Mary* because this movement would not have a semantic effect, as in (3.25). Since elided sentences force parallel structures, the quantifier raising cannot happen in the antecedent, either.

(3.25) Inverse scope is ruled out in (3.23b):

every teacher $\left[_{\text{TP}}\right.$ Mary does admire ~~every teacher~~$\left.\right]$

$\qquad\qquad$ ✗*QR*
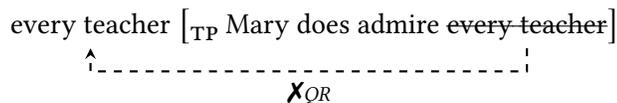
In other words, the evidence that scope-bearing elements cannot undergo quantifier raising over definite subjects such as proper names comes from the absence of inverse scope in (3.23b). The antecedent itself can be interpreted as having inverse scope on its own or in (3.23a). The absence of its inverse scope in (3.23b) must be due to the absence of inverse scope in the elided structure that follows, as in (3.25).

3.3.3 Accounting for the restrictions on quantifier raising

We saw in section 3.3.2.1 that covert scope-shifting operations such as quantifier raising did not occur in the case in which a sentence contained only one scope-bearing element. Fox accounts for this observation by proposing a restriction on scope-bearing operations. The intuition behind the analysis is that the covert movement of a quantifier is allowed when it has a semantic effect and disallowed when it does not. The way in which Fox determines the presence or absence of a semantic effect involves a comparison of a derivation exhibiting the covert movement of the quantifier with a derivation lacking the movement. If the interpretation of the post-movement structure is different from the interpretation of the pre-movement structure, the movement has a semantic effect. The restriction is named by Fox as Scope Economy and the technical definition he provides is reproduced in (3.26).

(3.26) *Fox's (2000) Scope Economy*

A scope-shifting operation can move XP_1 from a position in which it is interpretable only if the movement crosses XP_2 and $\langle XP_1, XP_2 \rangle$ is not scopally commutative. $\langle XP_1, XP_2 \rangle$ is scopally commutative (when both denote generalized quantifiers) if for every model, and for every $\phi \in D_{\langle e,et \rangle}$, $[\![XP_1]\!](x[\![XP_2]\!](\lambda y\, \phi(y)(x))) = [\![XP_2]\!](\lambda y[\![XP_1]\!](x\, \phi(y)(x)))$.

In order to better understand the technical definition, it should be noted that Fox assumes the nominal XP_2 to have a higher structural position than the nominal XP_1 and, in the case in which the nominal expressions are both quantifiers, that this higher structural position correlates with XP_2's wide scope in the pre-moved structure. The condition determines whether the movement of XP_1 to a position above XP_2 reverses the scope of the two elements.

Returning to the data provided in (3.23), we can appeal to the Principle of Scope Economy to explain the presence of inverse scope in (3.23a) and the absence of it in (3.23b). Recall that the availability of inverse scope in (3.23a) was due to the availability of inverse scope in its elided sentence, (3.24), and the unavailability of inverse scope in (3.23b) was due to the unavailability of inverse scope in its elided sentence, (3.25).

Turning first to the elided sentence from (3.24), the two derivations to be considered are given in (3.27), where the indices of the nominal expressions correlate with the indices of the XP's in the definition of Scope Economy for ease of comparison.[11]
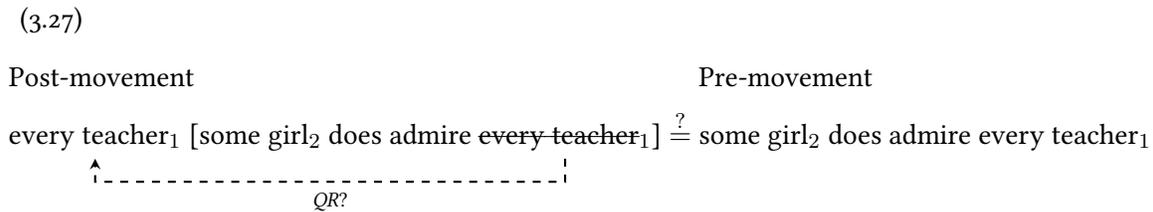
(3.27)

Post-movement   Pre-movement

every teacher$_1$ [some girl$_2$ does admire ~~every teacher~~$_1$] $\overset{?}{=}$ some girl$_2$ does admire every teacher$_1$

QR?

In order to determine whether quantifier raising of *every teacher* is possible, we need to determine whether the interpretation of the post-movement derivation is different from the interpretation of the pre-movement derivation. The interpretations are given in (3.28) as logical forms.

(3.28)

Post-movement   Pre-movement

$$\forall x[\textbf{teacher}(x) \rightarrow \exists y[\textbf{girl}(y) \wedge \textbf{admire}(y)(x)]] \neq \exists y[\textbf{girl}(y) \wedge \forall x[\textbf{teacher}(x) \rightarrow \textbf{admire}(y)(x)]]$$
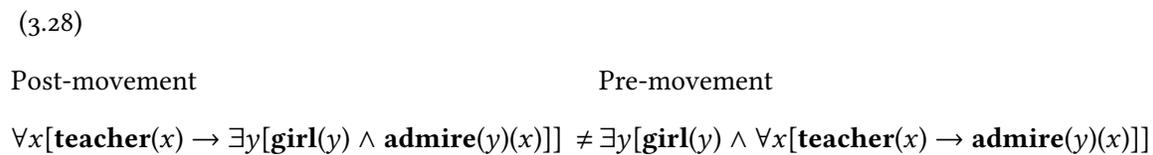
For reasons of simplicity, I conclude that the two interpretations are different when the two logical forms are different. However, determining whether two interpretations are identical or not requires a stronger comparison. Fox determines whether two interpretations are identical or not by determining whether they are truth conditionally equivalent in every model, which is a stronger comparison than the one we illustrate here. Keeping this in mind, let us turn our attention back to the example in (3.27) and the comparison in (3.28). Given our simplistic illustration of the principle, we can conclude that since the two interpretations are different, the movement of the quantifier is allowed by the Principle of Scope Economy, as in (3.29).

---

11. Since quantifiers in object position induce a type mismatch and cannot be interpreted in their base-generated positions, what we mean when we say that they are interpreted in their base position is that they undergo QR to a position below the subject or, more generally, below other quantificational elements that may be present, as in (i).

   (i)   some girl$_2$ does [every teacher$_1$] admire [~~every teacher~~$_1$]

                   QR
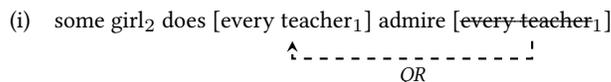
The comparison in (3.27) would then more accurately have the structure in (i) as the pre-movement structure and the post-movement structure as in (ii), with the question being whether the object can undergo QR over the subject.

   (ii)   every teacher$_1$ [some girl$_2$ does [every teacher$_1$] admire [~~every teacher~~$_1$]]

                 QR?

(3.29)

Post-movement   Pre-movement

every teacher$_1$ [some girl$_2$ does admire ~~every teacher$_1$~~] $\neq$ some girl$_2$ does admire every teacher$_1$

$\checkmark_{QR}$

Turning next to the elided sentence from (3.25), the two derivations to be considered are given in (3.30), where once again the indices of the nominal expressions correlate with the indices of the XP's in the definition of Scope Economy for ease of comparison.

(3.30) Post-movement   Pre-movement

every teacher$_1$ [Mary$_2$ does admire ~~every teacher$_1$~~] $\overset{?}{=}$ Mary$_2$ does admire every teacher$_1$

$QR?$

In order to determine whether quantifier raising of *every teacher* is possible, we need to determine whether the interpretation of the post-movement derivation is different from the interpretation of the pre-movement derivation. The interpretations are given in (3.31) and they are, indeed, identical.

(3.31)   Post-movement   Pre-movement

$\forall x[\textbf{teacher}(x) \rightarrow \textbf{admires}(m)(x)] = \forall x[\textbf{teacher}(x) \rightarrow \textbf{admires}(m)(x)]$

Given the equality of the two interpretations, the movement of the quantifier is not allowed by the Principle of Scope Economy, as in (3.32).

(3.32)   Post-movement   Pre-movement

every teacher$_1$ [Mary$_2$ does admire ~~every teacher$_1$~~] = Mary$_2$ does admire every teacher$_1$

$\textbf{✗}_{QR}$

Having established prior evidence that quantifiers do not raise over definite expressions, we next show how to account for the inverse scope of the non-inverted construction by appealing to the Principle of Scope Economy. The non-inverted constructions we've discussed thus far have involved the presence of at most two quantificational elements: negation and a generalized quantifier. Scope Economy given in (3.26) references the relation between two generalized quantifiers but

Fox observes that another version is necessary for determining the scopal relation of a generalized quantifier and other scope-bearing elements such as negation. The other version of Scope Economy he provides references an operator and a generalized quantifier and can straightforwardly be adopted here to account for the interaction between subjects and negation.[12] The principle is reproduced below in (3.33).

(3.33)   *Fox's (2000) Scope Economy for operators*[13]

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

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

Empirical evidence that the generalization applies to the interaction of negation and a quantificational subjects is given in (3.34).

(3.34)   a.   Every student didn't go the party. Every teacher didn't, either. $[\forall \gg \neg, \neg \gg \forall]$

b.   Every student didn't go the party. Jamie didn't, either. $[\forall \gg \neg, {}^* \neg \gg \forall]$

The sentence containing a quantificational subject and negation remains ambiguous when it is followed by an elided sentence whose subject is also quantificational, as in (3.34a), whereas the same sentence has fixed surface scope when it is followed by an elided sentence whose subject is a proper name, as in (3.34b).

In order to account for the empirical evidence concerning the inverse scope of the non-inverted construction, we first set up the comparison to be made between the structure lacking the covert movement of negation and the structure exhibiting the movement, as in (3.35).

---

12. This description allows any quantifier that is not of the same type to outscope another quantifier. However, some quantifiers do not interact scopally with negation, such as negation with quantifier *some* or *few*. The description overgenerates unattested meanings which I need to rule out in another way. I return to addressing this issue in section 3.4.1.

13. Fox takes scope-bearing operators to be of type $\langle \tau, \tau \rangle$, where τ is the type of a preposition $\langle s, t \rangle$ and generalized quantifiers to be of type $\langle \langle e, \tau \rangle, \tau \rangle$. For us, τ is the type of a preposition t. The definition of scopal commutativity applies when we pursue an analysis in which the trace of negation is deleted, as discussed for (3.19) in section 3.2.2, but it needs to be revised if we instead pursue the analysis in which negation has a higher type, as discussed for (3.18).

(3.35)   Post-movement   Pre-movement

didn't [everybody ~~didn't~~ go] $\overset{?}{=}$ everybody didn't go

   ⌞‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑⌝

     QR?

The interpretations of the two structures are compared in (3.36). The universal quantifier has wide scope in the pre-movement structure while negation has wide scope in the post-movement structure. The interpretation of the post-movement structure is therefore different from the interpretation of the pre-movement structure.

(3.36)   Post-movement   Pre-movement

$$\neg\forall x[\textbf{person}(x) \rightarrow \textbf{go}(x)] \;\neq\; \forall x[\textbf{person}(x) \rightarrow \neg\textbf{go}(x)]$$

Given the inequality from the comparison, the raising of negation is allowed by the Principle of Scope Economy, as in (3.37).[14]

(3.37)   Post-movement   Pre-movement

didn't [everybody ~~didn't~~ go] $\neq$ everybody didn't go

   ⌞‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑⌝

     ✓*QR*

We consider the derivation exhibiting the covert movement of negation over a definite subject and the derivation lacking this movement in (3.38).

(3.38)   Post-movement   Pre-movement

didn't [Jamie ~~didn't~~ go] $\overset{?}{=}$ Jamie didn't go

   ⌞‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑⌝

    QR?

---

14. Another scope-shifting operation for Fox is quantifier lowering, discussed in section 3.2.1 as reconstruction. Adopting the Principle of Scope Economy gives us no reason to prefer or disprefer a quantifier raising of negation analysis to a reconstruction of the subject analysis, assuming the *v*P-internal hypothesis. Reconstruction of the subject is allowed by the Principle of Scope Economy, as in (i), because it gives rise to the same LF comparisons as in (3.36).

(i) Post-movement   Pre-movement

  ~~everybody~~ didn't everybody go $\neq$ everybody didn't go

   ⌞‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑ ‑⌝

    ✓*QL*

Recall that our reasons for dispreferring a reconstruction of the subject analysis was provided in section 3.2.1.1.

Calculating the derivations' interpretations gives rise to the same logical forms, as in (3.39).

(3.39) Post-movement   Pre-movement

   $\neg\mathbf{go}(j)$ $= \neg\mathbf{go}(j)$

Since the interpretations of the two derivations are the same, the covert movement of negation is disallowed by the Principle of Scope Economy, as in (3.40). The derivation exhibiting covert movement over a definite subject is therefore ruled out.

(3.40) Post-movement   Pre-movement

   didn't [Jamie ~~didn't~~ go] = Jamie didn't go

       $\mathbf{\textit{✗}}_{QR}$

Adopting Fox's Principle of Scope Economy allows us to account for the availability of inverse scope in the case in which the subjects of non-inverted constructions are quantificational. Fox also provides us with evidence that quantificational items are restricted from undergoing covert movement over non-quantificational elements such as proper names.

3.3.3.1 Extending the Principle of Scope Economy to account for NAI

It should now be easier to understand the motivation for adopting the hypothesis that negative auxiliary inversion is the overt analog of quantifier raising. The Principle of Scope Economy modified to apply to overt movement will allow the movement of negation to occur over quantificational subjects and it will block the movement from occurring over non-quantificational elements such as proper names.[15] The only difference between the derivations we considered for the inverse scope of the non-inverted construction in (3.37) and (3.40) is that we are now considering overt movement rather than covert movement.

When we allow the Principle of Scope Economy to apply to overt movement, the movement of the negated auxiliary over a quantificational subject such as *everybody* is permitted, as in (3.41),

---

15. I return to a discussion of quantificational subjects which do not interact scopally with negation in section 3.4.1.

because the interpretations of the post-movement structure differs from the interpretation of the pre-movement structure, as in (3.42).

(3.41) Post-movement   Pre-movement

didn't [everybody ~~didn't~~ go] ≠ everybody didn't go

✓
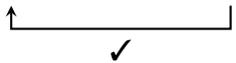
(3.42) Post-movement   Pre-movement

$\neg \forall x[\textbf{person}(x) \rightarrow \textbf{go}(x)]$ ≠ $\forall x[\textbf{person}(x) \rightarrow \neg\textbf{go}(x)]$

Under the revised Principle of Scope Economy, the movement of the negated auxiliary over a definite subject such as *Jamie* is ruled out, as in (3.43), because the interpretation of the post-movement structure is the same as the interpretation of the pre-movement structure, as in (3.44).

(3.43) Post-movement   Pre-movement

didn't [Jamie ~~didn't~~ go] = Jamie didn't go

✗
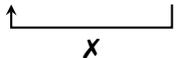
(3.44) Post-movement   Pre-movement

$\neg\textbf{go}(j)$ = $\neg\textbf{go}(j)$

While the Principle of Scope Economy should be extended to apply to overt movement in order to account for negative auxiliary inversion, the principle cannot apply across the board to any movement at any step in the derivation. There are instances of overt movement that are not scopally-significant, such as, for example, the raising of definite subjects to canonical subject position when assuming the subject-internal VP hypothesis, as in (3.45).

(3.45) $\left[_{\text{TP}}\right.$ Jamie didn't $\left[_{v\text{P}}\right.$ ~~Jamie~~ go to the party$\left.\right]\left.\right]$

Following the assumption that subjects are generated in an internal vP position, their movement to canonical subject position is not scopally-significant. If the Revised Principle of Scope Economy

were to apply to all stages of movement in a derivation, it would disallow the movement of the subject to its canonical subject position, as in (3.46), because the interpretation of the post-movement structure is the same as the interpretation of the pre-movement structure, as in (3.47).

(3.46)   Post-movement   Pre-movement

Jamie [didn't ~~Jamie~~ go to the party]   = didn't Jamie go to the party

(3.47)   Post-movement   Pre-movement

$\neg\mathbf{go}(j)$ = $\neg\mathbf{go}(j)$

However, the movement of the subject to canonical subject position is triggered by a feature, the EPP feature, and is necessary in order for the derivation to converge. A difference between this movement and the movement that occurs in negative auxiliary inversion constructions is that the former movement is obligatory while the latter movement can be seen as optional.[16] Optionality is a similarity negative auxiliary inversion shares with quantifier raising. Quantifier raising need not be movement driven by strong or EPP features. The correct characterization for the revised version of the Principle of Scope Economy is that it should apply to optional movement, whether covert or overt. The principle should allow movement if it is scopally-significant and disallow it if it is not. The revised version of the Principle of Scope Economy is given in (3.48).

(3.48)   *Revised Version of Fox (2000)'s Scope Economy for operators*   (Compare to (3.33))

Optional movement of an operator O from a position in which it is interpretable can occur only if the movement crosses XP, and $\langle O, \mathrm{XP} \rangle$ is not scopally commutative.

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

What does it mean for movement to be optional? I define optional movement as movement that is not triggered by a strong or EPP feature. Optional movement can occur to a projection that

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16. The movement of the subject to canonical subject position is not necessarily obligatory in all cases. What is obligatory is that the subject position be filled. The EPP requirement can instead be satisfied with an expletive rather than movement of the thematic subject in some cases.

is available in the derivation but that does not itself trigger movement. This is the type of optional movement that gives rise to negative auxiliary inversion constructions. Another instance of optional movement is adjunction to a higher projection, the type of movement that occurs with covert quantifier raising.

In the case of negative auxiliary inversion, the movement occurs to a projection that is available in the derivation but that does not itself trigger movement. The possible landing site is $\text{Neg}_2°$, the higher negative projection I proposed in chapter 2 to be available as a landing site in varieties of English which exhibit the phenomenon of negative auxiliary inversion, West Texas English, African American English, and Appalachian English. This $\text{Neg}_2°$ projection is part of the numeration of the non-inverted counterpart that can derive the negative auxiliary inversion construction. The projection does not have a strong or EPP feature and, as such, does not itself trigger movement. However, it is merged into the structure and can serve as a landing site for later movement. The fact that this head does not trigger movement allows the Revised Principle of Scope Economy to apply. If, instead, $\text{Neg}_2°$ were able to trigger the movement of negation, the Revised Principle of Scope Economy would not restrict the movement from occurring over non-quantificational subjects for the same reason it does not restrict the movement of non-quantificational subjects that move in order to satisfy the EPP feature of $T°$. Movement to this $\text{Neg}_2°$ projection is therefore subject to the revised Principle of Scope Economy. It will be allowed when it gives rise to a new scopal relation and it will be blocked when it does not.

In this section, I revised the Principle of Scope Economy to apply to optional overt movement in addition to covert movement. The type of movement to which the Revised Principle of Scope Economy applies is movement that is not triggered by a strong or EPP feature. Revising Scope Economy in this way allows us to motivate the movement of negation in negative auxiliary inversion. It also allows us to restrict the movement from occurring over non-quantificational subjects, therefore allowing us to account for part of the subject restriction.

3.3.4   A remaining puzzle: Why does NAI lack inverse scope?

The negated auxiliary raises above the subject, as in (3.49), and is interpreted in this moved position, giving rise to the surface scope interpretation.

(3.49) $\left[_{\mathrm{Neg_2P}}\text{ didn't }\left[_{\mathrm{TP}}\text{ everybody }\cancel{\text{didn't}}\text{ go}\right]\right]$

Empirically, the inverse scope of the negative auxiliary inversion construction is unattested. The subject cannot gain scope over negation in this construction. However, grammatically, there are two ways in which it could be derived, both of which obey the Revised Principle of Scope Economy. Negation could reconstruct or the subject could undergo QR to a position higher than negation. We discuss each possibility below.

3.3.4.1   Why can't the inverted negative auxiliary reconstruct?

After the Revised Principle of Scope Economy allows the movement of negation to give rise to the negative auxiliary inversion construction in (3.49), also shown as the pre-movement structure in (3.50), a possible strategy that would derive the inverse scope interpretation of the construction is the reconstruction of negation in its base-generated position below the subject, as in the post-movement structure in (3.50).[17]

(3.50)   Post-movement   Pre-movement

$\cancel{\text{didn't}}\left[_{\mathrm{TP}}\text{ everybody didn't go}\right]$ $\neq$ $\text{didn't}\left[_{\mathrm{TP}}\text{ everybody }\cancel{\text{didn't}}\text{ go}\right]$

$\checkmark_{QL}$

The Revised Principle of Scope Economy allows this movement because it gives rise to a distinct post-movement interpretation – one in which negation is interpreted below the subject.

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17. Recalling our discussion on the properties of the higher negation from section 3.2.2, this option is only available if we favor the analysis in which negation gains scopal significance by having a higher type. It is not available if we favor the analysis in which negation gains scopal significance by its trace deleting on the way to LF.

The lack of reconstruction is not empirically surprising. As mentioned in section 3.2.2, others have observed that negation does not reconstruct (Horn 1989/2001, Zeijlstra 2004, Penka & von Stechow 2001, Penka 2010, Abels & Martí 2010, Iatridou & Zeijlstra 2013). A way in which this observation has been implemented in the literature is as a constraint on reconstruction, as in (3.51). Lechner (2007) posits a constraint against negative phrases being able to be interpreted below their surface position.

(3.51) *Lechner's (2007) Negative Constraint*

A morphologically negative NP cannot be interpreted as a negative quantifier below its surface position.

A possible way of accounting for the lack of reconstruction in negative auxiliary inversion constructions is to revise Lechner's condition to be more general. While Lechner is concerned only with where negative nominal phrases are interpreted, we need to consider where negation itself is interpreted. A revision is proposed in (3.52).[18, 19]

(3.52) *Revised Negative Constraint*

A semantically negative element cannot be interpreted below its surface position.

3.3.4.2   Why can't the subject QR over negation?

Another possibility after the Revised Principle of Scope Economy allows the movement of negation in (3.49), repeated below as the pre-movement structure in (3.53), is for the subject to undergo a further movement above negation, as in the post-movement structure in (3.53).

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18. This constraint has consequences for some analyses of Neg-raising constructions. An example of a Neg-raising construction is *I don't think that Jamie should come.* In this sentence, negation is interpreted below the matrix verb and the sentence's meaning is equivalent to *I think that Jamie shouldn't come.* Adopting the constraint proposed in (3.52) requires us to commit to negation being interpreted in its surface position in Neg-raising constructions, and the effect of its being interpreted in a lower clause to be pragmatic. For pragmatic approaches to Neg-raising, see Horn (1989/2001), Kayne (1998), Bartsch (1973), and Gajewski (2005, 2007, 2011). The alternative approach to Neg-raising is syntactic (Collins & Postal 2014), and such an analysis is incompatible with the restriction proposed in (3.52).

19. This constraint also has consequences for analyses of negative concord which treat n-words as being semantically negative, an approach that is not adopted here. For more on negative concord, see section 3.4.3.

(3.53) Post-movement   Pre-movement

everybody didn't $\begin{bmatrix} \text{TP} \end{bmatrix}$ ~~everybody didn't~~ go] ≠ didn't $\begin{bmatrix} \text{TP} \end{bmatrix}$ everybody ~~didn't~~ go]

✓*QR*
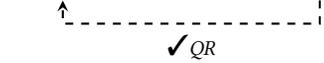
This movement would also be allowed by the Revised Principle of Scope Economy because it would give rise to an interpretation that is distinct from the interpretation of the pre-movement structure. As was the case with negation reconstructing, the post-movement interpretation is one in which negation is interpreted below the subject.

If we think back to the structure we had before we did any optional movement, the derivation for the non-inverted construction, as in (3.54a), and compare this structure to the structure following the overt movement of the negated auxiliary and the covert movement of the quantificational subject, as in (3.54b), we see that the two movements, when interpreted in their landing sites, give rise to the same scopal relations we had before doing any of the optional movements.

(3.54) a.   b.
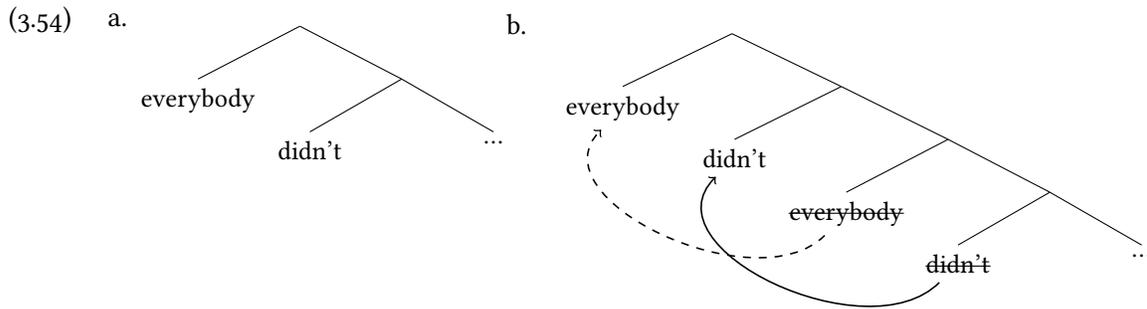
It seems likely that, since the two movements are essentially vacuous, they would be ruled out by a more general principle of economy. The principle would disallow the movement of two scope-bearing elements over one another if those movements restore the two elements' base-generated order and therefore initial scopal relations. One such principle is proposed by Fanselow (2009). Fanselow observes cases in which the scrambling of two constituents is ruled out in the case in which it would result in a previous order of the same two constituents. Generalizing over the two structures in (3.54a) and (3.54b), we get the structures in (3.55).

(3.55)   a.

b.

Fanselow rules out the possibility of (3.55b) by proposing an economy condition on derivations. (3.55b) is ruled out because it has two more traces than (3.55a). This general economy constraint is a surface structure constraint. In order to rule out (3.54b) using the economy of derivation proposed by him, we would need to extend the constraint to apply to covert movement as well as overt movement. A bigger problem, however, is Fanselow's observation that while the constraint applies to A-scrambling, it does not apply to his examples of scope-driven scrambling. His economy of derivation cannot be straightforwardly adopted here.

So far in this section, we've seen that although the inverse scope of negative auxiliary inversion constructions is unattested, the Revised Principle of Scope Economy alone cannot rule it out. Negation does not reconstruct, an observation that has been previously made in the literature for other phenomena, but quantifier lowering would give rise to a different interpretation so would be allowed by the principle. The subject also does not covertly raise to outscope the sentence-initial auxiliary, another operation which would give rise to a different interpretation and be allowed by the principle. I considered ruling out the reconstruction of negation by generalizing a constraint proposed by Lechner (2007) to all semantically negative elements and disallowing such elements from being interpreted below their surface position. I also considered ruling out the covert QR of the subject by adopting an economy constraint on traces proposed by Fanselow (2009) which I would need to revise heavily in order to be able to account for the data. Instead, I pursue an alternative to adopting these two constraints which allows me to account for the absence of inverse scope in negative auxiliary inversion constructions with the same economy constraint.

3.3.4.3   Restricting the inverse scope in an LF-first framework

We have adopted up to this point the assumption that the interpretation of a derivation is calculated from the derivation that is true to surface word order. More specifically, we start with the

assumption that the copies that are pronounced will be interpreted where they are pronounced in order to give rise to surface scope and, when available, an inverse scope is derived by covert operations. We can easily explain the puzzling unattested inverse scope if, instead, we assume that the derivations that are true to interpretation are calculated first and that the surface word order is determined from these interpretations. In this section, I adopt an LF-first framework following Bobaljik & Wurmbrand (2012) in order to account for the unattested interpretation of negative auxiliary inversion constructions.

Given a syntactic structure with movement of scope-bearing elements, Bobaljik & Wurmbrand (2012) provide a way in which to determine which copies can be interpreted and which copies can be pronounced. Suppose the overt movement of negation has occurred, as in (3.56).[20]

(3.56) $\left[_{\text{Neg}_2\text{P}} \text{didn't} \left[_{\text{TP}} \text{everybody} \; \cancel{\text{didn't}} \; \text{go}\right]\right]$

Suppose also that we choose to interpret the lower copy of negation at LF, that is, that negation reconstructs, as in (3.57).

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

The presence of two copies of the negated auxiliary at LF provides us with two ways in which the interpretation could be pronounced. Negation could be pronounced low, where it is interpreted, as in (3.58a), or it could be pronounced high, as in (3.58b).

(3.58)   a.   PF1: [~~didn't~~] everybody [didn't] go

   b.   PF2: [didn't] everybody [~~didn't~~] go

The input to the grammar in this case are the two possible scope and linear order combinations in (3.61) and (3.62), referred to as LF/PF pairs by Bobaljik & Wurmbrand.

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20. For reasons of simplicity, we initially ignore the copy of the vP internal subject, but we will later show that the grammar makes the correct predictions in its presence as well.

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

PF1: [~~didn't~~] everybody [didn't] go

(3.60)   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 at-tested. Its grammaticality judgment is appended in (3.61) below as a check.

(3.61)   ✓ 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. Its grammaticality judgment is appended as an asterisk in (3.62) below.

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

PF2: [didn't] everybody [~~didn't~~] go

Given competing derivations such as the two LF/PF pairs above, what determines the way in which an interpretation surfaces is a set of economy conditions. They apply in order to determine which LF/PF pair surfaces. Since empirically, LF1/PF1 is attested while LF1/PF2 is not attested, LF1/PF1 should be a possible output of the grammar while LF1/PF2 should be blocked. I explain how a gram-mar makes the correct predictions and blocks the inverse scope of negative auxiliary inversion by adopting an economy constraint proposed by Bobaljik & Wurmbrand, Scope Transparency.

3.3.4.3.1   Scope Transparency (ScoT) Constraint

Scope Transparency, or ScoT, requires that semantic scope and linear order be transparent. This constraint is reproduced in (3.63).

(3.63)   *Scope Transparency (ScoT)*   ([Bobaljik & Wurmbrand 2012](): 373)

   If the order of two elements at LF is A » B, the order at PF is A » B.[21]

This constraint is obeyed by an LF/PF pair when the order of the items reflects the scope of the items in the interpretation, as is the case in a derivation said to exhibit surface scope interpretation. It is violated by a pair when the order at LF and PF differs, as is the case in a derivation said to exhibit inverse scope interpretation. This constraint is violable and interacts with other constraints to allow the grammar to generate derivations which exhibit inverse scope and which therefore disobey ScoT. In the following section, I introduce ScoT and show how it accounts for some of the attested interpretations of negative auxiliary inversion and its non-inverted counterpart. I return to introducing the constraints that interact with ScoT and allow derivations which exhibit inverse scope to surface in subsequent sections.

3.3.4.3.2   ScoT at work

The way in which an interpretation is linearized by the grammar when considering the LF in which negation is interpreted low is shown in the chart in (3.64).

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

	✓?	LF/PF	ScoT
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	✗

The two LF/PF pairs are judged by the grammar with respect to a set of economy conditions, which are listed to the right of the double line. So far, only one has been introduced, Scope Transparency (ScoT). The ✓ symbol in a constraint column indicates that the LF/PF pair obeys the constraint while the ✗ symbol indicates that the LF/PF pair violates it. The leftmost column labeled with '✓?' indicates a possible winning candidate, a candidate that obeys the most constraints, with a ✓ symbol. An ✗ symbol in this column indicates a candidate which can never surface.

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21. The » symbol is used to indicate 'scopes over' in the former case and 'precedes' in the latter case.

When negation is both interpreted and pronounced low, the LF/PF pair obeys Scope Transparency. When negation is interpreted low but pronounced high, the LF/PF pair violates Scope Transparency. LF1/PF1 in row (3.64a), is the winning candidate since it obeys the constraint while LF1/PF2 in row (3.64b) violates it. The grammar's outputs correspond to the empirical observations. Recall that LF1/PF1 corresponds to the surface scope of a non-inverted construction, which is attested, while LF1/PF2 corresponds to the inverse scope of a negative auxiliary inversion construction, which is unattested. Intuitively, the latter would involve the negated auxiliary reconstructing but being pronounced in its higher position. The negated auxiliary does not reconstruct in a negative auxiliary inversion construction because reconstruction would involve a movement that is not reflected at interpretation. Instead, there is a better alternative which is scope transparent. An LF-first framework therefore allows us to provide an answer for why negation does not reconstruct in negative auxiliary inversion constructions and to explain the absence of its inverse scope. It provides an answer to part of the puzzle outlined in section 3.3.4.

The other possibility for generating the inverse scope of negative auxiliary inversion is by movement of the subject to a higher position, as in (3.65). As we discussed in section 3.3.4.2, this movement is allowed by the Revised Principle of Scope Economy because it gives rise to a scopal relation that is different from the one present in the structure which lacks this movement.

(3.65)   everybody $\left[_{\text{Neg}_2\text{P}}\right.$ didn't $\left[_{\text{TP}}\right.$ ~~everybody didn't~~ go$\left.\right]\left.\right]$

Suppose then that the movement of the subject occurs, as above. Suppose further that we choose to interpret this higher copy of the subject at LF, as well as the higher copy of negation, as in (3.66).

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

The presence of four copies at LF provides us with multiple ways in which the interpretation could be pronounced. Both of the higher copies could be pronounced, as in (3.67a). The lower copy of the subject but higher copy of negation could be pronounced, as in (3.67b). The higher copy of the subject but lower copy of negation could be pronounced, as in (3.67c). Finally, both of the lower copies could be pronounced, as in (3.67d).

(3.67) a. PF1: everybody [didn't] ~~everybody~~ [~~didn't~~] go

      b. PF2: ~~everybody~~ [didn't] everybody [~~didn't~~] go

      c. PF3: everybody [~~didn't~~] ~~everybody~~ [didn't] go

      d. PF4: ~~everybody~~ [~~didn't~~] everybody [didn't] go

The grammar's outputs for how the interpretation can be linearized given ScoT are given in the chart in (3.68).

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

	✓?	LF/PF	ScoT
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	✓

Three of the four LF/PF pairs are scope transparent, (3.68a), (3.68c), and (3.68d). Since ScoT is the only constraint we've adopted in our grammar thus far, these three pairs all obey the constraint and emerge as possible outputs. However, we know from chapter 2 that the subject of negative auxiliary inversion constructions occupies canonical subject position. We therefore want to rule out the LF/PF pairs in (3.68a) and (3.68c). We can do so by adopting another constraint, the EPP, the requirement that subjects precede any tense markers or modals in declarative sentences in English. Bobaljik & Wurmbrand (2012) posit the EPP as a hard, non-violable constraint that applies to a derivation after it has been linearized. We adopt it here as a hard constraint that is ranked above ScoT.[22] A derivation that violates the EPP will not be able to surface. We explicitly define the EPP hard constraint as in (3.69).[23]

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22. This characterization will serve our purposes here, but it is too strong. The EPP must be violable in order to allow constructions in which SpecTP is not filled with overt material, such as *wh*-question formation and raising. Any violations induced in these cases must be allowed by interacting constraints. The EPP does seem harder to violate than ScoT and other soft constraints introduced here, so perhaps there are different levels of hardness in the grammar.

23. I assume that the EPP hard constraint is an economy constraint on linearization and, additionally, that it continues

(3.69)   *Extended Projection Principle (EPP)*

SpecTP is overtly filled at PF.

We can rule out the unexpected winning LF/PF pairs in (3.68) if we implement the EPP as a constraint that checks whether SpecTP is overtly filled at PF and as a hard constraint that is ranked above ScoT, as in the ranking in (3.70).

(3.70)   *Constraint Ranking*   (To be revised)

EPP » ScoT

The chart from (3.68) is updated in (3.71) to contain this constraint. The TP boundaries are added for ease of reference.

(3.71)   LF1: everybody [didn't] $\left[_{TP}\right.$ ~~everybody~~ [~~didn't~~] go$\left.\right]$

	✓?	LF/PF	EPP	ScoT
a.	✗	LF1: everybody [didn't] $\left[_{TP}\right.$ ~~everybody~~ [~~didn't~~] go$\left.\right]$ PF1: everybody [didn't] $\left[_{TP}\right.$ ~~everybody~~ [~~didn't~~] go$\left.\right]$	✗	✓
b.	✗	LF1: everybody [didn't] $\left[_{TP}\right.$ ~~everybody~~ [~~didn't~~] go$\left.\right]$ PF2: ~~everybody~~ [didn't] $\left[_{TP}\right.$ everybody [~~didn't~~] go$\left.\right]$	✓	✗
c.	✗	LF1: everybody [didn't] $\left[_{TP}\right.$ ~~everybody~~ [~~didn't~~] go$\left.\right]$ PF3: everybody [~~didn't~~] $\left[_{TP}\right.$ ~~everybody~~ [didn't] go$\left.\right]$	✗	✓
d.	✓	LF1: everybody [didn't] $\left[_{TP}\right.$ ~~everybody~~ [~~didn't~~] go$\left.\right]$ PF4: ~~everybody~~ [~~didn't~~] $\left[_{TP}\right.$ everybody [didn't] go$\left.\right]$	✓	✓

The LF/PF pairs in (3.71a) and (3.71c) disobey the EPP because their SpecTP is not overtly filled at PF so these pairs are ruled out. Of the two pairs that obey the EPP, the pairs in (3.71b) and (3.71d), the LF/PF in (3.71d) obeys ScoT while the LF/PF pair in (3.71b) violates it. The LF/PF pair in (3.71d) emerges as the winning output.

Notice that even before ruling out the LF/PF pairs which generated spurious ambiguity in our grammar, the possible outputs all share with each other the fact that the subject precedes negation. The relevant LF/PF pair we expect to be ruled out given empirical evidence is the LF/PF pair

to be a principle (or feature) that drives movement in the syntactic derivations that serve as input to the linearization mechanism.

in (3.68b), the pair in which the subject is interpreted high but pronounced below negation, or, in other words, the LF/PF pair which represents the inverse scope of a construction exhibiting negative auxiliary inversion. This LF/PF pair is not a potential candidate in either (3.68) or (3.71) because it disobeys Scope Transparency.

If the subject has wide scope with respect to negation in a given interpretation, Scope Transparency ensures that negation will never precede the subject linearly. So, if the subject undergoes a further movement over the moved negated auxiliary in negative auxiliary inversion constructions, the possible outputs considering the economy conditions would be derivations in which the movement would be overt. Of these derivations, the only possible outputs are the ones in which the EPP is satisfied. An LF-first framework therefore does not require us to restrict further movement from occurring in order to explain the lack of inverse scope of negative auxiliary inversion constructions. The absence of the inverse scope is due to ScoT. Adopting this economy constraint ensures that the winning candidate will be only the empirically attested LF/PF pairs even when reconstruction of negation occurs in the input to the grammar or when what we think of as further covert raising of the subject in a PF-first framework occurs.

We have thus far ignored the vP-internal trace of the subject, but the grammar makes the correct predictions even when we do consider it. Let us return to the syntactic derivation of a negative auxiliary inversion construction which contains the vP-internal trace of the subject, as in (3.72).

(3.72) $[_{\text{Neg}_2\text{P}}$ didn't $[_{\text{TP}}$ everybody ~~didn't~~ $[_{v\text{P}}$ ~~everybody~~ go$]]]$
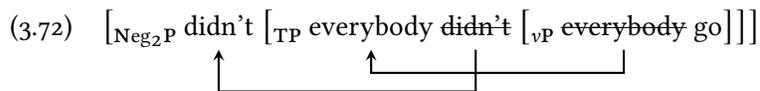
Let us further consider the interpretation in which the subject outscopes negation, the LF in (3.73), to show how this interpretation can surface.

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

Since there are two sets of traces present, there will be four ways in which the interpretation can be linearized. These LF/PF pairs are given in the chart in (3.74).

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

	✓?	LF/PF	EPP	ScoT
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	✗	✗

Of the LF/PF pairs, two obey the EPP, the pairs in (3.74a) and (3.74c). Of these pairs, only one obeys ScoT, the pair in (3.74a). The LF/PF in (3.74a) obeys both constraints while the remaining LF/PF pairs all violate at least one constraint. The only possible output given an interpretation in which the subject outscopes negation is once again a linearization in which the subject precedes negation.

The same is true in the case in which this scopal relation is due to further movement of the subject above the higher negative projection, as in (3.75).

(3.75)   everybody $[_{\text{Neg}_2\text{P}}$ didn't $[_{\text{TP}}$ ~~everybody didn't~~ $[_{v\text{P}}$ ~~everybody~~ go$]]]$

Of the six possible linearizations for this interpretation, the only LF/PF pair that emerges is the one in which the subject is in canonical subject position and the subject precedes negation, the LF/PF pair in (3.76e).

(3.76)   LF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$

	✓?	LF/PF	EPP	ScoT
a.	✗	LF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$ PF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$	✗	✓
b.	✗	LF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$ PF2: ~~everybody~~ [didn't] $\big[_{\text{TP}}$ everybody [~~didn't~~] ~~everybody~~ go$\big]$	✓	✗
c.	✗	LF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$ PF3: ~~everybody~~ [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] everybody go$\big]$	✗	✗
d.	✗	LF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$ PF4: everybody [~~didn't~~] $\big[_{\text{TP}}$ ~~everybody~~ [didn't] ~~everybody~~ go$\big]$	✗	✓
e.	✓	LF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$ PF5: ~~everybody~~ [~~didn't~~] $\big[_{\text{TP}}$ everybody [didn't] ~~everybody~~ go$\big]$	✓	✓
f.	✗	LF1: everybody [didn't] $\big[_{\text{TP}}$ ~~everybody~~ [~~didn't~~] ~~everybody~~ go$\big]$ PF6: ~~everybody~~ [~~didn't~~] $\big[_{\text{TP}}$ ~~everybody~~ [didn't] everybody go$\big]$	✗	✗

I have so far shown how, given an interpretation in which the subject outscopes negation, only a construction exhibiting canonical word order can surface. I've accounted for the surface scope of the non-inverted construction and for the lack of inverse scope of the negative auxiliary inversion construction. I now turn to showing how I can derive the remaining interpretations from the paradigm involving negative auxiliary inversion and its non-inverted counterpart in an LF-first framework.

3.3.4.4   Accounting for the remaining interpretations

Recall the attested interpretations for a construction exhibiting negative auxiliary inversion and its non-inverted counterpart, repeated below in (3.77).

(3.77)   a. Didn't everybody go to the party. [¬ » ∀; *∀ » ¬]

         b. Everybody didn't go to the party. [∀ » ¬; ¬ » ∀]

We can recast the paradigm in (3.77) as a set of LF/PF pairs. We start first with the syntactic derivation in which the negated auxiliary raises past the subject, as in (3.78), the structure which gives rise to the surface scope of negative auxiliary inversion and the inverse scope of the non-inverted counterpart.

(3.78) $\left[_{\text{Neg}_2\text{P}} \text{ didn't } \left[_{\text{TP}} \text{ everybody } \text{d̶i̶d̶n̶'̶t̶} \text{ go}\right]\right]$

Given this syntactic derivation and the presence of two copies of negation, the paradigm recast as a set of LF/PF pairs is as in (3.79). Recall that the check indicates an attested pair while the asterisk indicates an unattested pair.

(3.79) a. ✓ LF1: [d̶i̶d̶n̶'̶t̶] everybody [didn't] go

PF1: [d̶i̶d̶n̶'̶t̶] everybody [didn't] go

b. * LF1: [d̶i̶d̶n̶'̶t̶] everybody [didn't] go

PF2: [didn't] everybody [d̶i̶d̶n̶'̶t̶] go

c. ✓ LF2: [didn't] everybody [d̶i̶d̶n̶'̶t̶] go

PF2: [didn't] everybody [d̶i̶d̶n̶'̶t̶] go

d. ✓ LF2: [didn't] everybody [d̶i̶d̶n̶'̶t̶] go

PF1: [d̶i̶d̶n̶'̶t̶] everybody [didn't] go

In section 3.3.4.3, we accounted for the LF/PF pairs in (3.79a) and (3.79b) by showing what happened when the lower copy of negation was interpreted in the interpretation LF1. We can account for the remaining LF/PF pairs in (3.79c) and (3.79d) when we interpret the higher copy of negation, as in the interpretation LF2. However, we can already determine that ScoT will give us as the winning candidate only one of the LF/PF pairs, the one in which the LF and PF matches, (3.79c). The LF/PF in (3.79d) is attested despite the fact that it violates ScoT.

The emergence of three attested LF/PF pairs out of the four possible LF/PF pairs is what Bobaljik & Wurmbrand refer to as the 3/4 signature. Varieties of English which exhibit negative auxiliary inversion appear to exhibit the 3/4 signature pattern. One way in which Bobaljik & Wurmbrand account for the LF/PF pair which is unexpected given ScoT is by positing a constraint that interacts with ScoT. This second constraint is also a soft, violable constraint and is not ranked with respect to ScoT. An LF/PF pair which violates ScoT will be ruled in if it obeys a soft constraint which the scope-transparent LF/PF pair violates. The grammar involves optimization. The LF/PF pairs that obey the highest number of soft constraints are allowed to surface. In the case in which there is

a tie in the number of constraints obeyed, there are multiple winners. An LF can therefore have multiple ways in which it can be pronounced when the competing LF/PF pairs violate the same number of constraints. I pursue this strategy to account for the attested LF/PF pair that does not obey ScoT.

3.3.4.4.1 Canonical word order is respected (CWO)

Negative auxiliary inversion and its non-inverted counterpart exhibit the 3/4 signature because they are a pair of structures which differ with respect to a single movement and the inverse scope interpretation is attested only for the non-inverted construction. The condition proposed here to account for the inverse scope interpretation of the non-inverted counterpart is a soft constraint which restricts optional movement. I propose this constraint to be CWO, which stands for 'canonical word order.'

(3.80)   *CWO*

  Canonical word order is respected.

The CWO constraint concerns the PF of an LF/PF pair. A pair that obeys CWO is true to canonical word order. This constraint is based on Bobaljik & Wurmbrand's CCO constraint, which stands for 'canonical complement order' and which requires that canonical complement order be respected. Bobaljik & Wurmbrand provide CCO as a way to restrict optional movement as well. It builds on Chomsky's (1995) idea of movement as a last resort and the Williams' (2003) idea that a structure lacking movement is privileged over a structure containing optional movement. Bobaljik & Wurmbrand's constraint concerns the relationship between a verb and its complement and cannot be adopted as is because the attested LF/PF pair that needs to be ruled in by the grammar involves the relationship between a subject, which is in a specifier position, and negation, which is a functional projection. A discussion on how CWO can be implemented in the grammar is provided in section 3.3.4.6 while a way in which CWO could be implemented as a more general version of CCO is discussed in footnote 28.

Given the introduction of the CWO constraint, the revised constraint ranking for the syntax is as

in (3.81).

(3.81)   *Constraint Ranking*   (To be revised)

   EPP » ScoT, CWO

The EPP is ranked above ScoT and CWO because it is non-violable and a derivation which disobeys it can never emerge. ScoT and CWO are violable and are not ranked with respect to each other.

The grammar's outputs when considering the competing LF/PF pairs for an LF in which negation is interpreted high is given in the chart in (3.82).

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

	✓?	LF/PF	EPP	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	✓	✓	✗

When negation is interpreted high and pronounced low, as in (3.82a), there is a violation of Scope Transparency. However, pronouncing negation low allows the subject to be pronounced first, obeying CWO. LF2/PF1 violates one constraint but obeys the other. When negation is both interpreted and pronounced high, as in (3.82b), the pair obeys Scope Transparency but it violates CWO. LF2/PF2 also violates one soft constraint but obeys the other. Both LF/PF pairs obey the hard constraint, the EPP, and since both pairs obey the same numbers of violable constraints, the result is a tie and two winning candidates emerge.[24] Both pairs are then possible outputs. Recall that the ambiguity derived corresponds to the empirical observations. LF2/PF1 corresponds to the inverse scope of a non-inverted construction, which is attested. LF2/PF2 corresponds to the surface scope of a negative auxiliary inversion construction, which is also attested.

It is worth returning briefly to the other two LF/PF pairs under consideration when negation is interpreted low to show that the introduction of CWO does not overgenerate. When we return to

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24. If NAI-speakers prefer one of the two ways in which the meaning is conveyed, the analysis cannot account for their preference.

this LF, the grammar's outputs taking into consideration the two soft constraints are given in the chart in (3.83).

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

	✓?	LF/PF	EPP	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	✓	✗	✗

The winning pair in (3.64) was LF1/PF1. This pair obeys CWO and it continues to emerge as the winning candidate in (3.83). The losing pair in (3.64) was LF1/PF2. This pair disobeys the new constraint and continues to be a losing candidate in (3.83). A summary of the steps taken to derive the paradigm of negative auxiliary inversion and its non-inverted counterpart in this framework is provided below, and a discussion section follows.

3.3.4.5   Summary of steps taken to derive the paradigm of negative auxiliary inversion

A syntactic derivation is formed from a numeration. A syntactic derivation that derives the paradigm of negative auxiliary inversion is as in (3.84).

(3.84) $\text{Neg}_2{}^\circ$ $\left[_{\text{TP}} \text{ everybody didn't go}\right]$

A numeration has to include the higher negative projection, $\text{Neg}_2{}^\circ$, in order for negative auxiliary inversion to be derivable by the grammar. Optional movement to this projection is possible but subject to the Revised Principle of Scope Economy. The principle allows the movement of negation in the case in which it gives rise to a new scopal relation. The movement of the negated auxiliary is allowed to occur over a strong quantifier like *everybody*, as in (3.85), because it gives rise to a new scopal relation.

(3.85) $\left[_{\text{Neg}_2\text{P}} \text{ didn't } \left[_{\text{TP}} \text{ everybody } \text{~~didn't~~ go}\right]\right]$

✓

The movement of the negated auxiliary is disallowed from occurring over proper names, as in (3.86), because this movement would be semantically vacuous.

(3.86)　$\left[_{\text{Neg}_2\text{P}} \text{didn't} \left[_{\text{TP}} \text{Jamie } \cancel{\text{didn't}} \text{ go}\right]\right]$

In the case in which multiple copies of an element are present in a syntactic derivation, there are multiple ways in which the derivation can proceed. The position in which a copy is pronounced at PF depends on where the copy is interpreted at LF. Interpreting the higher copy of negation gives rise to two ways in which the interpretation can be linearized, as in (3.87) and (3.88).

(3.87)　✓ LF2: [didn't] everybody [~~didn't~~] go　　✓ScoT　✗CWO
　　　　　PF2: [didn't] everybody [~~didn't~~] go

(3.88)　✓ LF2: [didn't] everybody [~~didn't~~] go　　✗ScoT　✓CWO
　　　　　PF1: [~~didn't~~] everybody [didn't] go

(3.87), an LF/PF pair that is scope-transparent but exhibits a non-canonical word order, corresponds to the surface scope interpretation of negative auxiliary inversion. (3.88), an LF/PF pair that exhibits canonical word order but is not scope-transparent, corresponds to the inverse scope of the non-inverted construction.

Interpreting the lower copy of negation gives rise to one way in which the interpretation can be linearized, as in (3.89).

(3.89)　✓ LF1: [~~didn't~~] everybody [didn't] go　　✓ScoT　✓CWO
　　　　　PF1: [~~didn't~~] everybody [didn't] go

This LF/PF pair is both scope-transparent and exhibits canonical word order. The other possible linearization in which the negated auxiliary is pronounced sentence-initially while being interpreted low, as in (3.90), is not derivable because it both violates canonical word order and is not scope-transparent. This LF/PF pair corresponds to the inverse scope of negative auxiliary inversion constructions.

(3.90)   ✗ LF1: [~~didn't~~] everybody [didn't] go   ✗ScoT   ✗CWO

PF2: [didn't] everybody [~~didn't~~] go

The interaction of the two violable constraints, ScoT and CWO, ensures that negative auxiliary inversion constructions emerge only in the case in which negation is interpreted high. Whenever the subject is interpreted above negation, a winning derivation will necessarily have the subject pronounced before negation, exhibiting canonical word order.

Derivations that are allowed by the Revised Principle of Scope Economy may still be ruled out for independent reasons. Linearization rules may rule out certain PFs. For example, derivations in which the EPP is not satisfied, as in the PFs in (3.91), are ruled out.

(3.91)   a.   PF1: $\left[_{\text{Neg}_2\text{P}}\right.$ didn't $\left[_{\text{TP}}\right.$ ~~everybody didn't~~ $\left[_{v\text{P}}\right.$ everybody go$\left.\right]\left.\right]\left.\right]$

   ✗
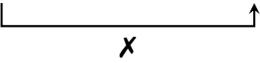
b.   PF2: $\left[_{\text{Neg}_2\text{P}}\right.$ ~~didn't~~ $\left[_{\text{TP}}\right.$ ~~everybody~~ didn't $\left[_{v\text{P}}\right.$ everybody go$\left.\right]\left.\right]\left.\right]$

   ✗
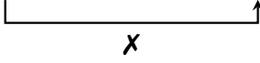
Independent constraints may also rule out certain LFs. Derivations in which strong quantifiers reconstruct below canonical subject position, as in the LFs in (3.92), are also ruled out for other reasons.

(3.92)   a.   LF1: $\left[_{\text{Neg}_2\text{P}}\right.$ ~~didn't~~ $\left[_{\text{TP}}\right.$ ~~everybody~~ didn't $\left[_{v\text{P}}\right.$ everybody go$\left.\right]\left.\right]\left.\right]$

   ✗
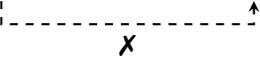
b.   LF2: $\left[_{\text{Neg}_2\text{P}}\right.$ didn't $\left[_{\text{TP}}\right.$ ~~everybody didn't~~ $\left[_{v\text{P}}\right.$ everybody go$\left.\right]\left.\right]\left.\right]$

   ✗
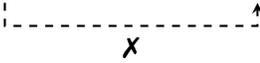
3.3.4.6   Discussion on adopting an LF-first framework

Cross-linguistic differences

In Bobaljik & Wurmbrand (2012), cross-linguistic differences are tied to the types of scrambling different languages allow. If we were to extend such a line of thinking to the present data, the

reason negative auxiliary inversion constructions can surface in certain varieties would be due to the fact that these varieties allow a special kind of scrambling that involves the scrambling of negation. The varieties that do not exhibit negative auxiliary inversion do not allow the scrambling of negation. One problem with extending this line of reasoning here is that scrambling is generally thought to involve phrases rather than heads. However, we do not need to extend this line of thinking to the present data because I attribute the availability of negative auxiliary inversion constructions in certain varieties to the availability of the higher negative projection, Neg_2, in chapter 2.

How we can implement CWO

When I introduced the CWO constraint, I relied on intuitive knowledge of what canonical word order means. Here I suggest formal ways in which it can be implemented in the grammar. The grammar could determine whether a PF obeys or disobeys CWO by checking whether the obligatory projections of a construction are filled. The least CWO needs to check in order to account for the 3/4 signature in our particular example is whether the projection $T°$, an obligatory projection for a simple declarative, is filled at PF. Given this criterion, CWO is obeyed in the PF in (3.93), the non-inverted construction, and disobeyed in the PF in (3.94), the construction exhibiting negative auxiliary inversion.

(3.93) $\left[_{\text{Neg}_2}° \; \text{d̶i̶d̶n̶'̶t̶} \; \left[_{\text{TP}} \text{everybody} \left[_{\text{T}}° \; \textbf{didn't} \; \left[_{\text{Neg}_1}° \; \text{-̶n̶'̶t̶} \; \left[_{v}° \; \text{go} \; \left[_{\text{V}}° \; \text{g̶o̶}\right]\right]\right]\right]\right]\right]$ ✓ CWO

(3.94) $\left[_{\text{Neg}_2}° \; \text{didn't} \; \left[_{\text{TP}} \text{everybody} \left[_{\text{T}}° \; \textbf{d̶i̶d̶n̶'̶t̶} \; \left[_{\text{Neg}_1}° \; \text{-̶n̶'̶t̶} \; \left[_{v}° \; \text{go} \; \left[_{\text{V}}° \; \text{g̶o̶}\right]\right]\right]\right]\right]\right]$ ✗ CWO

More generally, if the CWO constraint is sensitive to structural positions, the grammar would check whether all of the obligatory projections of a simple declarative are filled, as in (3.95), the CWO-obeying structure, and as in (3.96), the CWO-disobeying structure.[25]

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25. Note that $V°$ could not count as an obligatory projection in this case because if it did, the absence of overt material in this projection would count as a violation of CWO for the same reason (3.94) does. In a way, $V°$ is privileged since it is the first building block of a syntactic derivation and, as such, does not need to be specified as being obligatory. Otherwise, if $V°$ were to also be counted as an obligatory projection, a reason its trace does not induce a CWO violation might be due to the fact that no material intervenes between $v°$ and $V°$.

(3.95) $\left[_{\text{Neg}_2}\circ \text{ } \sout{\text{didn't}} \text{ } \left[_{\text{TP}} \text{ everybody} \left[_{\text{T}}\circ \textbf{didn't} \left[_{\text{Neg}_1}\circ \text{ } \sout{\text{-n't}} \left[_{v}\circ \textbf{go} \left[_{\text{V}}\circ \sout{\text{go}}\right]\right]\right]\right]\right]\right]$ ✓ CWO

(3.96) $\left[_{\text{Neg}_2}\circ \text{ didn't} \left[_{\text{TP}} \text{ everybody} \left[_{\text{T}}\circ \textbf{didn't} \left[_{\text{Neg}_1}\circ \text{ } \sout{\text{-n't}} \left[_{v}\circ \textbf{go} \left[_{\text{V}}\circ \sout{\text{go}}\right]\right]\right]\right]\right]\right]$ ✗ CWO

How does the grammar know which projections are obligatory? This information is encoded in the hierarchy of projections, the guide that determines in which order different projections can merge (Adger 2003).[26] The hierarchy of projections proposed in Adger already distinguished between obligatory projections and optional projections. In the case in which an obligatory projection is missing from a numeration but calls to be merged by the hierarchy of projections, the derivation will crash. There are no such consequences in the absence of optional projections from the numeration. The hierarchy of projections determines where an optional projection is merged in relation to obligatory projections but a derivation does not crash in its absence.

The hierarchy of projections of a variety which exhibits negative auxiliary inversion is given in (3.97).[27] Optional projections are in parentheses.

(3.97) $(\text{Neg}_2\circ) \gg \text{T}\circ \gg (\text{Neg}_1\circ) \gg v\circ \gg \text{V}\circ$

If a little $v\circ$ has just been merged into a structure, the next element to merge would be $\text{Neg}_1\circ$ if one is present in the numeration. If this negative element is not present in the numeration, the next element to merge must be $\text{T}\circ$. If $\text{T}\circ$ is not present in the numeration, the derivation will crash. This is an example of how the hierarchy of projections guides the formation of syntactic derivations.

The CWO constraint determines of the projections that are used, which are obligatory and which are filled. The reason it matters which projections are obligatory in the grammar rather than just which projections are filled with overt material in a particular derivation is because if it was a matter of which projections were present in a given derivation, (3.96) would obey CWO while (3.95) would disobey it, an undesired result.[28]

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26. The hierarchy of projections builds on Cinque's (1999) intuition that the grammar has encoded the order of all possible projections.

27. This hierarchy is simplified for ease of reference to include only the projections under discussion in this chapter.

28. An alternative way in which the grammar could determine whether a PF obeys or disobeys the CWO constraint while not being sensitive to the hierarchical structural position might instead concern whether the order of the elements at PF matches canonical word order. We would still define canonical word order with reference to the hierarchy of

Another way to derive the 3/4 signature: Revisiting the analysis of subject reconstruction

It is worth pointing out that while adopting Bobaljik & Wurmbrand's (2012) LF-first framework allows us to easily account for the lack of inverse scope of negative auxiliary inversion constructions, it does not in and of itself provide us with a reason to favor the syntactic analysis adopted for the construction. I adopted an analysis of negative auxiliary inversion in which negation raises to a higher projection and not an analysis in which the subject instead reconstructs. However, carrying over some of the previously made observations about the grammar allows us to rule out the subject reconstruction analysis in this framework as well. In this section, I show how the subject reconstruction analysis could account for the 3/4 signature of negative auxiliary inversion and which assumptions we need to retain in order to rule it out.

Consider first the structure in (3.98). In this structure, the subject moves from its base-generated position to its canonical subject position.

(3.98) $\left[_{\text{TP}}\text{ everybody didn't }\left[_{v\text{P}}\text{ \sout{everybody} go}\right]\right]$
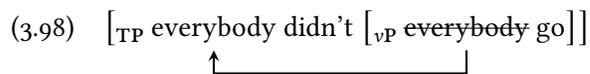
Interpreting the trace of *everybody* high would give us the surface scope interpretation of the non-

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projections, which would still need to encode which projections are optional, regardless of whether they are merged in a given derivation or not. Additionally, the hierarchy of projections would also need to encode the way in which *phrases* are linearized with respect to the heads. For example, the hierarchy of projections for a simple unergative declarative would be as in (i).

(i) $(\text{Neg}_2{}^\circ) \gg \text{DP} \gg \text{T}^\circ \gg (\text{Neg}_1{}^\circ) \gg v^\circ \gg \text{V}^\circ$

The CWO-obeying order would be as in (ii), which matches the order of obligatory projections in (i). The CWO-disobeying order would be as in (iii), which does not match the order of obligatory projections.

(ii)   *everybody » didn't » go*   ✓ CWO

(iii)   *didn't » everybody » go*   ✗ CWO

Such an analysis is a more general version of the CCO constraint proposed by Bobaljik & Wurmbrand (2012). Recall that CCO concerns the relationship between a head and a phrase. For Bobaljik & Wurmbrand, it is obeyed if a verb precedes its complement.

However, this version of the CWO constraint would requires us to have multiple hierarchies of projection, one for each predicate with a specific argument structure. It requires us to have a hierarchy of projections for intransitive declaratives, one for transitive declaratives, and so on, while the present proposal requires just one hierarchy for any declarative. It also gives rise to more spurious ambiguity, because the actual structural position of the elements does not matter. We do not need this version of CWO in order to account for the data involving negative auxiliary inversion because I've already restricted the position of the subject with respect to other elements with the EPP economy constraint.

inverted construction, as in (3.99a), and allow us to account for the absence of the inverse scope of negative auxiliary inversion, as in (3.99b).

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

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

Interpreting the trace of *everybody* low would allow us to derive the inverse scope of the non-inverted construction, as in (3.100a), and it would also allow us to derive the surface scope interpretation of the negative auxiliary inversion construction, as in (3.100b). However, there are several issues with these derivations surviving.

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

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

One of the issues is that one of the pairs, (3.100b), violates the EPP. If the EPP constraint is present in varieties that exhibit negative auxiliary inversion, (3.100b) would be ruled out because it would violate this hard constraint, as in (3.101).

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

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

Rather than ruling out the EPP constraint in the varieties of English that allow negative auxiliary inversion, an alternative that would allow the derivation to survive is a modification to the con-

straint. If the EPP constraint in these varieties is a soft, violable constraint rather than a hard one, the derivation could survive with the existence of another soft constraint. I won't speculate about what this constraint may be here but let's call it C4 for exemplary reasons. Given the existence of another soft constraint which (3.100b) obeys and (3.100a) violates, both candidates can emerge as possible outputs, as in (3.102).[29]

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

	✓?	LF/PF	EPP	C4	ScoT	CWO
a.	✓	LF2: [~~everybody~~] didn't [everybody] go PF1: [everybody] didn't [~~everybody~~] go	✓	✗	✗	✓
b.	✓	LF2: [~~everybody~~] didn't [everybody] go PF2: [~~everybody~~] didn't [everybody] go	✗	✓	✓	✗

An additional related issue with the PF of (3.100b) – or (3.102b) if the EPP constraint is modified – is that the subject stays low in these examples and there is no overt material in the canonical subject position. Recall from section 2.1 in chapter 2 that the subjects of negative auxiliary inversion constructions are in canonical subject position.

Another issue with the two derivations surviving in (3.100) – or (3.102) if the EPP constraint is modified – involves their interpretation. LF2 is an LF that is incompatible with our findings in section 3.2.1.1. The subject is interpreted low in the interpretation, but we've seen that strong subjects cannot reconstruct below canonical subject position.

Adopting an LF-first framework doesn't give us a reason to prefer an analysis of negative auxiliary inversion in which negation raises to a higher projection as opposed to an analysis in which the subject reconstructs. The subject reconstruction analysis could also account for the 3/4 signature of negative auxiliary inversion. However, in this section, we relied on previous findings to rule it out. The subject reconstruction analysis is not compatible with our findings that the subject of negative auxiliary inversion constructions is both pronounced and interpreted in canonical subject

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29. Treating the requirement for a subject in canonical subject position as a violable constraint has a precedent in Sells et al. (1996), who provide an Optimality Theory analysis of negative auxiliary inversion, and so also consider the outputs of a grammar to be subject to constraints. A violable EPP constraint also has the advantage of making negative existential constructions easier to account for in the grammar, since these constructions appear to lack an overt subject in canonical subject position (see section 4.2.1 of chapter 4 for a discussion of negative existentials).

position.

3.4   Accounting for the broader range of subjects

The analysis provided for negative auxiliary inversion constructions focuses on deriving the construction when its subject is a strong quantifier headed by *every* and ruling out the construction in the case in which the subject is a proper name. In this section, I consider the subject distribution of negative auxiliary inversion constructions in more detail. The analysis is easily extendable to allow many types of quantificational subjects and disallow many types of definite, specific subjects that are not scope-bearing. As long as a nominal phrase is scope-bearing, it should be a possible subject of the construction. This characterization holds for the quantifiers that appear in the subject position of the negative auxiliary inversion constructions in (3.103).

(3.103) a.   Didn't everybody see the fight.   (WTE)

      b.   Can't all of y'all win the jackpot.   (WTE)

      c.   Didn't half the students do their homework.   (WTE; Foreman 1999: 8)

      d.   Don't many people like you.   (WTE; Foreman 1999: 21)

      e.   Won't more than 5 people fit in that car.   (WTE; Foreman 1999: 7)

      f.   Can't a dog do that trick.   (WTE)[30]

When a subject is not scope-bearing, it should not a possible subject. This characterization holds for the subjects of the negative auxiliary inversion constructions in (3.104).[31]

(3.104) a.   * Didn't Jamie see the fight.   (WTE)

      b.   * Won't the students answer the question.   (WTE; Foreman 1999/2001: 41)

      c.   * Cain't their dogs bite me.   (WTE; Foreman 1999/2001: 42)

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30. The indefinites in NAI constructions cannot be specific and are not derivable by my analysis when they are because they do not give rise to ambiguity in their non-inverted counterparts.

31. I return to a discussion of definites that appear in apparent negative auxiliary inversion constructions in section 3.4.4.1.

     d.   * Wouldn't I do that.   (WTE; Foreman 1999: 11)

However, there are a few types of subjects whose distribution is not predicted by this characterization. Certain types of scope-bearing subjects are ruled out. In section 3.4.1, I point out that the subjects that are not attested are subjects whose scope is fixed with respect to negation in the non-inverted counterpart. A better characterization for the types of nominal phrases that are possible subjects of negative auxiliary inversion constructions is scope-bearing elements that interact scopally with negation. A subject that interacts scopally with negation is a subject that gives rise to ambiguity in a non-inverted construction. The scope-bearing elements that are not attested subjects of negative auxiliary inversion constructions are incompatible with the construction because they are more generally not able to be in the direct scope of negation.

Subjects headed by negative polarity items and n-words do not obviously interact scopally with negation and, furthermore, their non-inverted counterparts are not licit in West Texas English. I account for their availability in negative auxiliary inversion constructions with the proposal that they are existential quantifiers that do interact with negation and I rule out the unavailability of their non-inverted counterparts at a later stage in the derivation. Negative auxiliary inversion subjects are discussed in section 3.4.2. I discuss n-word subjects and account for negative concord in section 3.4.3. In section 3.4.4, I introduce some apparent counterexamples to my analysis and discuss whether they are problematic.

3.4.1 Impossible quantificational subjects

Scope-bearing subjects that are ruled out in negative auxiliary inversion constructions are *some*, *several*, and *few*, as in (3.105).[32]

(3.105)   a.   * Didn't some people come.   (WTE)

         b.   * Cain't several students read that book.   (WTE; Foreman 1999/2001: 48)

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32. It has recently come to my attention that some speakers allow PPI *some* with partitive interpretations to appear as the subject of apparent negative auxiliary inversion constructions and that in these constructions, the PPI is able to outscope negation. I return to a discussion of this new data in section 3.4.4.2 below.

     c.   * Won't few boys go to the party.   (WTE; Foreman 1999/2001: 49)

In the case of the subject headed by *some*, the subject is unavailable not because it is ruled out by the Revised Principle of Scope Economy, which would allow negation to outscope the existential quantifier, but because *some* has a restricted scope with respect to negation. The incompatibility of *some* in certain negative environments has been known since Klima (1964) and discussed in other works, including Baker (1970) and Szabolcsi (2004). *Some* is a positive polarity item and as a PPI, it cannot be interpreted in the immediate scope of negation. The non-inverted counterpart of (3.105a) is unambiguous, as in (3.106). While the surface scope interpretation is available, the inverse scope is unavailable due to the fact that the PPI is trapped in the scope of negation.

(3.106)   Some people didn't come. $\left[\exists_{[+\text{PPI}]} \gg \neg; \text{}^{*}\neg \gg \exists_{[+\text{PPI}]} \right]$

LFs in which PPIs are trapped in the scope of negation are ruled out more generally empirically. Although the grammar might allow the structure corresponding to (3.105a) at some stage of a derivation, the derivation is ultimately ruled out before it can surface. It is ruled out for the same reason quantifier raising in the non-inverted construction is ruled out: because it results in a PPI being trapped in the scope of negation.

(3.107)   ✗ $\neg \exists x [\textbf{person}_{[+\text{PPI}]}(x) \rightarrow \textbf{come}(x)]$

Several is also ruled out as a subject of negative auxiliary inversion constructions, as in (3.105b), because it is a positive polarity item. An interpretation in which negation has scope over a PPI is not possible and the interpretation in which the PPI has scope over negation will never be pronounced as a negative auxiliary inversion construction because it is not scope transparent and because it does not exhibit canonical word order.

We can rule out derivations in which PPIs are trapped in the scope of negation with a constraint on LFs. This constraint would look like the NPILicLF constraint but require that PPIs be free at LF. LF/PF pairs in which PPIs are trapped in the scope of negation, as in the LF in (3.107), would not be allowed to surface.[33]

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33. I leave the specifics of such a constraint for future work.

Turning next to the unattested quantificational subject *few*, the reason (3.105c) is ruled out is less clear. Perhaps *few* is a positive polarity item and is ruled out for the same reason other PPIs, like *some* and *several*, are ruled out. Perhaps the reason it is incompatible with the construction is due to the fact that it is downward entailing, like negation, a speculation made by Foreman (1999/2001) to account for its unavailability. The interpretation of *few* has been observed to be restricted with respect to negation in other environments (Beghelli & Stowell 1997). Its interpretation is restricted even in the non-inverted counterpart, which is unambiguous, as in (3.108). The surface scope interpretation is available while the inverse scope interpretation is ruled out.

(3.108)   Few people didn't live there then.   [*few* » ¬; *¬ » *few*]

It seems as though *few* cannot be trapped in the scope of negation, either. In both cases of unattested quantificational subjects, the movement of negation is restricted from occurring and this restriction correlates with the inverse scope interpretation of the non-inverted construction being unavailable. Negative auxiliary inversion is restricted for the same reason inverse scope interpretation is blocked, as expected given the proposal that negative auxiliary inversion constructions are an overt analog of quantifier raising.

Horn (2014a,b, 2015) points out that *many* can only take wide scope with respect to negation for some speakers of English. For these speakers, *many* has the same scope availabilities as *few*, as in (3.109).

(3.109)   Many people didn't live there then.   [*many* » ¬; *¬ » *many*]

Many is attested as a possible subject of negative auxiliary inversion constructions in all varieties of English which exhibit the phenomenon, as in (3.110).

(3.110)   a. Didn't many people go to the party.   (WTE; Foreman 1999: 11)

          b. Don't many of them live around here.   (AAE; Labov et al. 1968: 286)

          c. Didn't many boys in town like to hunt.   (AppE; Feagin 1979: 348)

There appear to be no issues with interpreting *many* in the scope of negation for speakers of varieties which allow the types of examples we see in (3.110). The question that remains to be answered is whether there are speakers of varieties of negative auxiliary inversion who allow examples such as the one in (3.110), in which *many* is the subject, but for whom *many* does not give rise to ambiguity in the their non-inverted counterparts, as in (3.109). I have not come across such speakers in my fieldwork. I would expect that speakers of a NAI variety for whom *many* does not interact scopally with negation, as in (3.109), would not generate NAI constructions with *many* subjects, the types of examples in (3.110).

Horn also considers *many* when it is modified by adverbs such as *very, so*, and *that*. *Many* subjects modified by these types of adverbs are attested in negative auxiliary inversion constructions, as in (3.111).

(3.111) a. Ain't very many people read your book.   (WTE; Foreman 1999: 5)

b. Wudn't very many people allowed to see the President.

(WTE; Foreman 1999/2001: 38)

c. It's against the law; that's why don't so many people do it.

(AAE; Labov et al. 1968: 287)

Since these types of subjects do not generally give rise to ambiguity in non-inverted constructions, Horn suspects that these types of subjects do not give rise to ambiguity in their non-inverted counterparts for speakers of (3.111), either. My preliminary findings on subjects *so many* and *that many* indicate that these subjects can give rise to scopal ambiguity in their non-inverted constructions, as in (3.112). The WTE speaker I consulted allows both examples but prefers *that* to *so* as the modifier of *many*, the latter of which he found to sound archaic. Given that these non-inverted constructions are ambiguous, the presence of these types of subjects in negative auxiliary inversion constructions, as in (3.111c), is unsurprising.

(3.112) a. That many folks didn't come to my party.   [*that many* » ¬; ¬ » *that many*]

b. ? So many folks didn't come to my party.   [*so many* » ¬; ¬ » *so many*]

The attested examples in which the subjects is *very many*, examples (3.111a) and (3.111b), are less problematic because they both involve a form of *be*. The example in (3.111a) has *ain't* as the negated auxiliary while the example in (3.111b) has *wudn't*, which is equivalent to 'weren't.' Examples with *be* can be ambiguous between a negative auxiliary inversion construction and a negative existential. Recall from previous chapters that I distinguish between the two constructions. I propose that negative auxiliary inversion constructions are derived by movement that is sensitive to scope economy. I do not extend my analysis to negative existentials, as we will see in chapter 4. For speakers of variety which exhibits negative auxiliary inversion, if *very many* does not give rise to ambiguity in its non-inverted counterpart, I expect the examples in (3.111a) and (3.111b) to be unambiguous negative existentials. Future work should investigate whether *very many* are possible subjects of unambiguous negative auxiliary inversion constructions.[34]

Suppose, however, that there are speakers of a NAI-exhibiting variety who can generate NAI constructions with subjects that do not give rise to ambiguity in the non-inverted construction. For such speakers, the movement of negation would not be the overt analog of quantifier raising. The derivations that correspond to the available interpretations could still be derived, however, with a small change. The movement that derives negative auxiliary inversion construction is still allowed by the Revised Principle of Scope Economy because it results in a new scopal relation. The analysis as proposed overgenerates to allow the inverse scope interpretation of the non-inverted counterpart because the grammar allows this derivation whenever it allows the negative auxiliary inversion construction as a result of the interaction between scope transparency and canonical word order. However, the inverse scope interpretation of the non-inverted counterpart can be ruled out with the addition of a new soft constraint for such speakers. This new constraint – call it C3 – is one that the derivation which corresponds to the unattested interpretation violates, as in (3.113). The violation of this third soft constraint breaks the tie, so only the derivation which corresponds to the negative auxiliary inversion constructions emerges as the winner, as in (3.114).

(3.113) ✗ LF2: [didn't] many people [~~didn't~~] live there   ✗ScoT   ✓CWO   ✗C3

        PF1: [~~didn't~~] many people [didn't] live there

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34. I return to providing diagnostic tests that can be applied to help distinguish between negative auxiliary inversion constructions and negative existentials in section 4.2.1 of chapter 4.

(3.114) ✓ LF2: [didn't] many people [~~didn't~~] live there   ✓ScoT   ✗CWO   ✓C3

        PF2: [didn't] many people [~~didn't~~] live there

Pending the discovery of speakers who can generate NAI constructions with subjects that do not give rise to ambiguity in the non-inverted construction, I retain in my analysis just ScoT and CWO as the soft constraints. My analysis therefore predicts that for a speaker of a negative auxiliary inversion construction, the distribution of subjects possible in negative auxiliary inversion constructions is parallel to the distribution of subjects that give rise to ambiguity in the non-inverted constructions.

In this section, I proposed that a better characterization of negative auxiliary inversion's subject restriction depends on the availability of scopal interaction between the subject and negation in the non-inverted counterpart. The types of quantificational subjects that are not possible are all subjects whose interpretation in the context of negation is restricted.

3.4.2 Compatibility with negative polarity items

Negative polarity items are possible subjects in negative auxiliary inversion constructions, as in (3.115a), in which the NPI subject is *anybody*. There are several ways in which they differ from the types of attested quantificational subjects we have seen thus far. One way in which they differ is that their non-inverted counterparts are not well-formed, as in (3.115b).

(3.115) a. Didn't anybody go to the party.   (WTE)

           'Nobody went to the party.'

     b. * Anybody didn't go to the party.   (WTE)

I propose that, in spite of apparent differences between NPIs and strong quantificational elements, the analysis provided for quantificational subjects is easily extendable to these cases. I follow others in assuming that NPI *any* is an existential quantifier with a licensing requirement.I assume that the interpretation of (3.115a) is as in (3.116). The surface scope interpretation is available and

the NPI is in the scope of negation. The inverse scope interpretation is not available. The NPI would need to outscope negation at LF in order for the inverse scope interpretation to be available.

(3.116)   Didn't anybody go to the party. $\left[\neg \gg \exists_{[+\text{NPI}]}; {}^{*}\exists_{[+\text{NPI}]} \gg \neg\right]$

In order to derive these results, I propose that the derivation of a negative auxiliary inversion construction with an NPI subject such as *anybody* is derived from the same structure as other quantificational subjects – that is, a structure in which the NPI is in canonical subject position – and that the NPIs are further subject to a licensing requirement. The derivation of a construction exhibiting negative auxiliary inversion starts out with the structure in (3.117).

(3.117) $\text{Neg}_2{}^{\circ}$ $\left[_{\text{TP}} \text{anybody didn't go}\right]$

The higher negative projection, $\text{Neg}_2{}^{\circ}$, is part of the numeration and merges high in the structure. Optional movement to this higher negative projection is allowed by the Revised Principle of Scope Economy, as in (3.118), because there are two quantificational elements, negation and the existential NPI, and the movement of negation over the NPI gives rise to a new interpretation in which negation gains wide scope.

(3.118) $\left[_{\text{Neg}_2\text{P}} \text{didn't} \left[_{\text{TP}} \text{anybody} \cancel{\text{didn't}} \text{go}\right]\right]$
              ✓
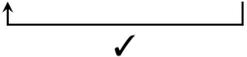
Negation is interpreted in its moved position and this derivation is a possible output because the NPI *anybody* is licensed by negation. When the movement of negation does not occur, the derivation is ruled out because the NPI remains unlicensed. The non-inverted counterparts of negative auxiliary inversion constructions with NPI subjects, as in (3.115b), cannot surface for this reason. I encode the licensing of NPI requirement as a hard constraint which requires that NPIs be licensed at both LF and PF, as in (3.119), though I do not expand on what this licensing condition entails here.

(3.119)   *NPILic*

        Negative polarity items must be licensed at both LF and PF.

This constraint is also a hard constraint, which means that an LF/PF pair that violates it will not be able to surface. I propose the ranking of constraints in our grammar to be as in (3.120).

(3.120)   *Constraint Ranking*

        EPP, NPILic » ScoT, CWO

The EPP and NPILic are both hard constraints. Since no LF/PF pair that violates either the EPP or NPILic can ever surface, it is not possible to rank the two constraints with respect to each other. Scope Transparency (ScoT) and the principle requiring that canonical word order be respected (CWO) are both soft constraints that are not ranked with respect to each other.

To see how the NPILic constraint allows us to rule out the unattested example, consider first the syntactic derivation in (3.118). When the higher copy of negation is interpreted, there is only one emerging candidate, (3.121a) in (3.121). Recall that the competition between our soft constraints, ScoT and CWO, gives us both negative auxiliary inversion and the inverse scope interpretation of the non-inverted counterpart when their subjects are quantificational subjects that interact scopally with negation. The competition that results in a tie in those cases is no longer relevant when we consider NPIs. Given the fact that NPILic is a strong constraint, an LF/PF pair with an unlicensed NPI is ruled out regardless of the number of other constraints it obeys.

(3.121)   LF1: [didn't] anybody [~~didn't~~] go

	✓?	LF/PF	EPP	NPILic	ScoT	CWO
b.	✓	LF1: [didn't] anybody [~~didn't~~] go PF1: [didn't] anybody [~~didn't~~] go	✓	✓	✓	✗
a.	✗	LF1: [didn't] anybody [~~didn't~~] go PF2: [~~didn't~~] anybody [didn't] go	✓	✗	✗	✓

Given the movement in (3.118), it is also possible for the lower copy of negation to be interpreted, as in (3.122). Such an interpretation can never be linearized as a result of the fact that it contains an unlicensed NPI.

(3.122) LF2: [d̶i̶d̶n̶'̶t̶] anybody [didn't] go

	✓?	LF/PF	EPP	NPILic	ScoT	CWO
b.	✗	LF2: [d̶i̶d̶n̶'̶t̶] anybody [didn't] go PF2: [d̶i̶d̶n̶'̶t̶] anybody [didn't] go	✓	✗	✓	✓
a.	✗	LF2: [d̶i̶d̶n̶'̶t̶] anybody [didn't] go PF1: [didn't] anybody [d̶i̶d̶n̶'̶t̶] go	✓	✗	✗	✗

Along these lines, although it might seem that the movement we generally think of as being optional in (3.118) is obligatory in the case of NPIs, the apparent obligatoriness is simply due to the fact that any construction in which the movement does not happen cannot surface, as in (3.123).

(3.123) LF: anybody didn't go

	✓?	LF/PF	EPP	NPILic	ScoT	CWO
a.	✗	LF: anybody didn't go PF: anybody didn't go	✓	✗	✓	✓

Note that a consequence of encoding the licensing requirement of NPIs as an economy constraint rather than as a more general constraint means that derivations are subject to these constraints even when there is no competition in how a derivation should be linearized, as is the case in the above example.

This analysis of NPI *any* differs from analyses in which the NPI is a spell-out of *some* in the scope of negation, as they are treated in Klima (1964) and Collins & Postal (2014).[35]

3.4.2.1 Evidence that NPILic must apply to both LF and PF

It is uncontroversial that negative polarity items must be licensed. But does the licensing requirement hold at both LF and PF? In this section, we explore the consequences of the requirement holding at either LF or PF and conclude that, based on empirical evidence, it does indeed need to hold at both levels.

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35. The nature of negative polarity items is one of the ways in which my analysis differs from the analysis Blanchette (2015) proposes for negative auxiliary inversion constructions. I return to a comparison of my analysis with previous analyses of the construction in chapter 4.

If the licensing requirement were to hold only at LF, the absence of (3.115b), repeated below as (3.124), would be surprising, particularly assuming the vP-internal hypothesis.

(3.124)   * Anybody didn't go to the party.   (WTE)

Unlike strong quantifiers such as universal *everybody*, it is less clear that weak quantifiers like existentials are restricted from reconstructing. If the NPI could reconstruct, as in (3.125), and the NPI licensing requirement held only at LF, then (3.124) should be able to surface so long as subjects, more generally, are able to reconstruct.

(3.125) $[_{TP}$ anybody didn't $[_{vP}$ ~~anybody~~ go$]]$

The NPI licensing that applies only to LF is given as 'NPILicLF' in (3.126), which shows the LF/PF pair with the copy of the NPI interpreted low but pronounced high as the winning candidate.

(3.126)   LF1: [~~anybody~~] didn't [anybody] go

	✓?	LF/PF	EPP	NPILicLF	ScoT	CWO
a.	✗	LF1: [~~anybody~~] didn't [anybody] go PF1: [~~anybody~~] didn't [anybody] go	✗	✓	✓	✗
b.	✓	LF1: [~~anybody~~] didn't [anybody] go PF2: [anybody] didn't [~~anybody~~] go	✓	✓	✗	✓

The LF/PF pair cannot surface, so the empirical evidence points to the licensing needing to occur at PF.

If, on the other hand, the licensing requirement were to hold only at PF, we would expect (3.115a), repeated below as (3.127), to be ambiguous.

(3.127)   Didn't anybody go to the party.   (WTE)

            'Nobody went to the party.'

In addition to its surface scope interpretation, its inverse scope interpretation would also be available. The sentence could then be used in the case in which a particular individual did not go to

the party, an interpretation which is empirically unavailable. Consider, for example, the data in (3.128).

(3.128)   Lucile does 'em. Dudn't anybody else.   (AppE; Feagin 1979: 348)

It is clear from the context that *dudn't anybody else* means that nobody other than Lucile does whatever is under discussion, which is compatible with the LF in (3.129), in which negation outscopes an existential quantifier.

(3.129) $\neg\exists x[\mathbf{person}_{[+\text{NPI}]}(x) \wedge \mathbf{do\text{-}em}(x)]$

In our grammar, the source of ambiguity would be the LF/PF pair in which negation is interpreted low but pronounced high as in (3.130). 'NPILicPF' refers to the NPI licensing requirement which holds only at PF.

(3.130)   LF2: [~~didn't~~] anybody [didn't] go

	✓?	LF/PF	EPP	NPILicPF	ScoT	CWO
b.	✗	LF2: [~~didn't~~] anybody [didn't] go PF2: [~~didn't~~] anybody [didn't] go	✓	✗	✓	✓
a.	✓	LF2: [~~didn't~~] anybody [didn't] go PF1: [didn't] anybody [~~didn't~~] go	✓	✓	✗	✗

We have just seen empirical evidence that the licensing requirement applies at both LF and PF in varieties of English which exhibit negative auxiliary inversion. We had also encountered empirical evidence that the licensing requirement applies at both LF and PF in standard English in the introductory chapter in section 1.2.3. Recall the minimal pair in (3.131), originally from McCloskey (1996). Roberts (2010) argues that the licensing of the NPI in (3.131a) as compared to (3.131b) is due not only to the presence of negation at PF but also to negation being interpreted in this position at LF.

(3.131)   a.   Which one of them doesn't anybody like?   (SE; McCloskey 1996: 89)

           b.   * Which one of them does anybody not like?   (SE; McCloskey 1996: 91)

Roberts assumes that the auxiliary precedes negation as a result of movement and uses this example as evidence for head movement having semantic effects.

3.4.2.2 Evidence that NPIs are in subject position

We briefly revisit the evidence that NPIs are in canonical subject position, in part because some analyses of negative auxiliary inversion constructions suggest that the phenomenon is due either to a lack of EPP requirement in varieties of English which exhibit it or to the requirement being satisfied by a null element. If West Texas English did not have an EPP requirement, the structure of a construction bearing negative auxiliary inversion might be as in (3.132).

(3.132) $\left[_{TP} \left[_{T'} \text{didn't} \left[_{vP} \text{anybody go}\right]\right]\right]$

The subject would remain in its base-generated position in Spec vP or, at least, not raise as high as canonical subject position. Economy principles would determine the linearization and allow the structure to surface, as in (3.133), because there is no competition and the NPI is licensed.

(3.133) LF: didn't anybody go

✓?		LF/PF	NPILic	ScoT	CWO
a.	✓	LF: didn't anybody go PF: didn't anybody go	✓	✓	✗

Evidence that the EPP requirement is present and that the structure cannot surface, as predicted by the economy principles in (3.134), comes from the data in (3.135).

(3.134) LF: didn't anybody go

✓?		LF/PF	EPP	NPILic	ScoT	CWO
a.	✗	LF: didn't anybody go PF: didn't anybody go	✗	✓	✓	✗

In (3.135), tag-question formation targets the NPI *anybody*, suggesting that the NPI is in canonical subject position and that the canonical subject position is not empty or filled with a null element.

(3.135)　　Didn't anybody go last year, did they?　　　　　　　　(AppE; Feagin 1979: 235)

The grammar makes the right predictions about which LF/PF pair surfaces when we assume the vP-internal subject hypothesis, as in (3.136) and (3.137).

(3.136)　$\left[_{Neg_2P}\right.$ didn't $\left[_{TP}\right.$ anybody ~~didn't~~ $\left[_{vP}\right.$ ~~anybody~~ go$]]]$

　　　　　　↑_____|

　　　　　　　　　　✓

(3.137)　LF1: [didn't] [anybody] [~~didn't~~] [~~anybody~~] go

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

The only LF/PF pair which surfaces is the one in (3.137a) because it is the only one in which the EPP is satisfied and the NPI is licensed at both LF and PF.

This analysis can easily account for a broader range of attested negative polarity item subjects for the construction.

In this section, I explained how the analysis provided for negative auxiliary inversion can account for the construction when its subjects are negative polarity items. The assumption needed was that negative polarity items are quantifiers that are subject to an additional licensing requirement. This requirement is checked at a later stage in the derivation, allowing the Revised Principle of Scope Economy to apply in order to give rise to the negative auxiliary inversion construction in spite of the fact that its non-inverted counterpart is unattested.

3.4.3 Compatibility with negative concord and n-word subjects

In chapter 2, I established that almost all varieties of English which exhibit negative auxiliary inversion also exhibit negative concord. I suggested that the higher negative projection proposed in the literature for some syntactic analyses of negative concord (Zanuttini 1991, 1997, Zeijlstra 2004, 2008) is the same position which houses the negated auxiliary in negative auxiliary inversion constructions. I now turn to providing an analysis for constructions which exhibit both negative auxiliary inversion and negative concord, as in (3.138). In this example, there are two elements which bear negative morphology, the negated auxiliary *don't* and the n-word subject *nobody*.

(3.138) Don't nobody like you. (WTE; Foreman 1999/2001: 21)

'Nobody likes you.'

In spite of the presence of two elements with negative morphology, the example is interpreted as bearing a single instance of logical negation. Given that multiple morphologically negative elements give rise to a single logical negation in negative concord examples, some analyses of the phenomenon posit a single source of logical negation in a construction bearing negative concord (Laka 1990, 1994, Ladusaw 1992, Martin 1992, Alonso Ovalle & Guerzoni 2004, Zeijlstra 2004, 2008). I assume, following these authors, that the source of logical negation in negative concord constructions is sentential negation. Since there is only one instance of logical negation but multiple elements which are apparently negative, a way in which n-words are analyzed is as semantically non-negative elements. N-words can be seen as non-negative existential quantifiers with a requirement that they be licensed (Laka 1994, Giannakidou 2006), in line with the proposal adopted for NPIs above. Extending this analysis, n-words are treated as negative polarity items with negative morphology and with a more restricted distribution than NPIs: they can only be licensed in the context of negation (Ladusaw 1992). Following this line of thinking, in the example in (3.138), the source of logical negation is the negated auxiliary *don't*. The subject *nobody* is a non-negative existential that must be licensed. The example in (3.139) shows the source of the logical negation with the NEG feature, the dotted arrow indicates the licensing relation, and the NPI feature references the licensing need of the n-word.

(3.139) $\left[_{\text{Neg}_2\text{P}} \text{ don't}_{\text{[+NEG]}} \left[_{\text{TP}} \text{ nobody}_{\text{[+NPI]}} \text{ like you}\right]\right]$

The LF of the structure presented in (3.139) is as in (3.140).

(3.140) $\neg\exists x[\textbf{person}_{\text{[+NPI]}} (x) \wedge \textbf{like-you}(x)]$

Similarly to NPIs, the non-inverted counterpart of a negative auxiliary inversion construction ex-hibiting negative concord is judged as ill-formed or marginally acceptable, as in (3.161b). Foreman, Foreman points out that in West Texas English, this example is either completely ill-formed or only very marginally acceptable while its inverted counterpart in (3.138) is strongly preferred instead.

(3.141) ?* Nobody don't like you. (WTE; Foreman 1999/2001: 21)

My West Texas English consultants generally disprefer non-inverted constructions with n-word subjects, though there are some environments in which the acceptability of such examples improve, a topic to which I return in section 3.4.3.2. In this later section, I also consider the cross-linguistic implications of my analysis for the varieties of English which exhibit negative auxiliary inversion constructions but categorically allow pre-verbal n-words to co-occur with sentential negation, va-rieties in which examples such as (3.161b) are possible. Setting these two issues aside temporarily and focusing on the data for West Texas English, we interpret the unacceptability of (3.161b) as an indication that the non-inverted counterpart of negative auxiliary inversion constructions with n-word subjects is ill-formed, just as it is when its subject is an NPI.

Given the proposed nature of n-words, the way in which a construction with an n-word subject is generated in the grammar is in the same way as it is when the subject is any other quantifier, but the licensing condition of n-words must additionally be satisfied at a later stage. A syntactic derivation is formed from a numeration, as in (3.142). The higher negative projection, $\text{Neg}_2°$, is the last item from the numeration to be merged.

(3.142) $\text{Neg}_2° \left[_{\text{TP}} \text{ nobody don't like you}\right]$

Optional movement to the higher negative projection is possible if it has an effect on interpretation. Because n-words are existential quantifiers, the movement of negation over the existentials gives rise to a new scopal relation, so the movement is allowed by the Revised Principle of Scope Economy, as in (3.143).

(3.143) $[_{\text{Neg}_2\text{P}}$ don't $[_{\text{TP}}$ nobody ~~don't~~ like you$]]$

Interpreting the higher copy of negation results in the competition in (3.144). Since n-words are NPIs with a more restricted requirement, and since the more restricted requirement is satisfied in the context of negation, we use the constraint NPILic, the constraint we proposed to hold for NPIs, in this chart.

(3.144)   LF2: [don't] nobody [~~don't~~] like you

	✓?	LF/PF	EPP	NPILic	ScoT	CWO
a.	✗	LF2: [don't] nobody [~~don't~~] like you PF1: [~~don't~~] nobody [don't] like you	✓	✗	✗	✓
b.	✓	LF2: [don't] nobody [~~don't~~] like you PF2: [don't] nobody [~~don't~~] like you	✓	✓	✓	✗

The winning LF/PF pair is (3.144b) because it is the pair that satisfies both non-violable constraints, the EPP and NPILic. This LF/PF pair surfaces even though it does not exhibit canonical word order and it corresponds to the attested negative auxiliary inversion example in (3.138). Its competitor, the LF/PF pair in (3.144a), is ruled out because it disobeys the hard constraint NPILic. The n-word is not licensed at PF in the LF/PF pair, accounting for the unacceptability of the non-inverted construction in (3.161b).

The NPILic constraint takes for granted what it means for a negative polarity item to be licensed. Since it is not specific about the licensing requirement, it is compatible with different NPIs which have different licensing requirements. The difference between n-words and other types of NPIs, such as those headed by *any*, does need to be encoded elsewhere in the grammar. I consider some parallels in the distribution of n-words and *any*-headed NPIs before returning to a discussion of some limitations of extending the licensing constraints of NPIs to n-words.

3.4.3.1 Parallelism between n-words and negative polarity items

N-words and negative polarity items headed by an indefinite receive an almost identical analysis here. We've seen above that the non-inverted counterparts of negative auxiliary inversion constructions with either subject are not well-formed. Another reason for positing the same analysis to account for NPI and n-word subjects is the observation that in some varieties of English which exhibit negative concord, licensed n-words seem to be interchangeable with their NPI counterparts without affecting meaning. Feagin (1979) makes this observation for Appalachian English and this observation also holds true in West Texas English, as confirmed by Foreman (1999, 1999/2001), Salmon (2017), and my own findings. NPIs and n-words are, however, not interchangeable in African American English.[36] For West Texas English, the minimal pairs in (3.145) and (3.146) are truth-conditionally equivalent.

(3.145)   a. Cain't nothing jump in this game.   (WTE)

           b. Cain't anything jump in this game.   (WTE)

(3.146)   a. Don't nobody live there.   (WTE; Foreman 1999/2001: 10)

           b. Don't anybody live there.   (WTE)

Looking beyond the subject, it is also possible for additional n-words and NPIs to occur in a sentence. In the examples in (3.147), the subjects and the objects are both n-words. The examples in (3.148) are the NPI counterparts of the examples in (3.147). The NPI alternative of *nobody* is *anybody* and the alternative of *nothing* is *anything*.

(3.147)   a. Cain't nobody do nothin' right round here.   (WTE)

           b. Didn't nobody get nothing right.   (WTE)

(3.148)   a. Cain't anybody do anythin' right round here.   (WTE)

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36. Licensed n-words cannot be interchanged with their NPI counterparts in African American English. Labov et al. (1968) and Labov (1972) observe that *any*-headed negative polarity items are unattested as subjects of negative auxiliary inversion constructions and rarely attested overall. Labov and his collaborators propose an operation that converts *any* NPIs to into their respective n-words in order to account for their limited distribution, a proposal to which I return in chapter 4.

b. Didn't anybody get anything right. (WTE)

Less frequently discussed – and perhaps less frequently occurring – are cases in which both n-words and NPIs are present in the same sentence, as in the examples from West Texas English in (3.149), the examples from Appalachian English in (3.150), and the examples from Non-standard English (NSE) in (3.151).[37]

(3.149) a. Cain't nobody ever do anythin' right round here. (WTE)

b. Didn't nobody get anything right. (WTE)

c. Don't anybody live there no more. (WTE)

(3.150) a. Way back yonder didn't anybody have nothin' then. (AppE; Feagin 1979: 235)

b. Didn't none of us ever learn that. (AppE; Feagin 1979: 235)

c. An' wouldn't nobody have anything to do with her. (AppE; Feagin 1979: 347)

d. Hain't nobody never set [the trap] for any bears since.

(AppE; Montgomery & Hall 2004: lv)

(3.151) a. Don't nobody say that dealers sellin drugs in the school yard any more.

(NSE; Martin 1992: 64)

b. Can't nobody get a straight answer out of the mayor anymore.

(NSE; Martin 1993: 50)

c. Won't nobody take any help from a man like him. (NSE; Martin 1993: 50)

Whether or not a language that allows negative concord also allows 'mixing' of NPIs and n-words, as above, is one of the ways in which languages can differ more generally cross-linguistically. For instance, Henry et al. (1997) compare two varieties of British English which exhibit negative concord, Bristol English and Belfast English. They find that Bristol English allows the mixing of

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37. Martin (1992, 1993) uses the term Non-standard English to refer to both varieties of Southern White English Vernacular and African American English (which he labels Black English Vernacular in his works). Martin acknowledges that there are differences between the two varieties, but is not specific when providing his examples whether the judgments hold for both varieties. It is likely that, given Labov et al.'s observation concerning *any* NPIs being rare in varieties of African American English, that the examples given here as Nonstandard English are only possible for the Southern White English Vernacular speakers.

NPIs and n-words while Belfast English does not. It is possible to have multiple n-words in a clause in both varieties, as in (3.152), and it is possible to have multiple NPIs in a clause, as in (3.153).[38]

(3.152)   a. He hasn't no tickets no more.   (Bristol English)

          b. She doesn't go nowhere or nothing.   (Belfast English; Henry et al. 1997: 270)

(3.153)   a. He hasn't any tickets anymore.   (Bristol English)

          b. She doesn't go anywhere or anything.   (Belfast English; Henry et al. 1997: 270)

However, only Bristol English allows the co-occurrence of NPIs and n-words in the same clause, as in (3.154). Belfast English disallows the mixing of NPIs and n-words, as in (3.155).

(3.154)   He hasn't any tickets no more.   (Bristol English; Henry et al. 1997: 271)

(3.155)   * She doesn't go anywhere no more.   (Belfast English; Henry et al. 1997: 270)

Henry et al. account for this cross-linguistic difference with the proposal that the nature of n-words and NPIs differ in the two varieties. In Belfast English, n-words are semantically negative while NPIs are not. Because the two elements are different in this way, they are subject to different licensing requirements. The licensing requirements of the elements can be satisfied independently of each other, such as when there are multiple n-words, as in (3.152b), or such as when there are multiple NPIs, as in (3.153b). However, both n-words and NPIs cannot appear in a single clause together, as in (3.155), because the licensing requirements of both types of elements are incompatible with each other. In Bristol English, on the other hand, n-words and NPIs are both semantically non-negative and subject to the same licensing constraints and, as such, can be licensed in the same clause, as in (3.154).

Given the apparently parallel distribution of licensed n-words and NPIs, they seem to be roughly interchangeable in many varieties of English. Their distribution suggests that n-words and NPIs

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38. I inferred the Bristol examples in (3.152a) and (3.153a) from Henry et al.'s discussion of the distribution of n-words and NPIs in this variety. The only example with multiple n-words or NPIs they provide from Bristol English is the example in (3.154).

in the context of negation are subject to the same constraints in West Texas English, Appalachian English, and Bristol English.[39]

3.4.3.2 An issue with n-words

In this section, I consider some differences between the distribution of n-words and NPIs in West Texas English, including double negation interpretations, which arise in the presence of n-words but not in the presence of NPIs. I also discuss how to account for cross-linguistic variation for varieties in which the distribution of n-words is not the same as in West Texas English.

The only difference between n-words and NPIs in West Texas English that we have discussed so far is that NPIs can be licensed in environments which lack negation whereas n-words cannot. We observed that both elements cannot appear as subjects of the non-inverted constructions and that they are apparently interchangeable with each other in the environments in which they are licensed. There is, however, an issue with extending the licensing of negative polarity items to account for negative concord. Unlike as we saw with NPIs, the non-inverted counterparts of examples which exhibit n-word subjects are sometimes possible. Foreman (1999) points out that while non-inverted constructions are ill-formed when negative morphology is present on just the subject and auxiliary, they are well-formed in the presence of additional morphologically negative elements. The example in (3.161a) is well-formed in spite of the fact that the n-word subject is sentence initial. Foreman attributes the unexpected well-formedness to the presence of the additional n-word *nothin'*.

(3.156)   Nobody ain't doin' nothin' wrong.   (WTE; Foreman 1999: 3)
            'Nobody is doin' anythin' wrong.'

Its inverted counterpart is also possible, as in (3.157).

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39. It is possible that n-words and NPIs are subject to the same constraints in African American English, as well, and that Labov et al.'s (1968) rule that accounts for the limited distribution of NPIs (footnote 36) in this variety applies at a later stage in the grammar. I return to considering cross-linguistic differences in chapter 4.

(3.157) Ain't nobody doin' nothin' wrong.   (WTE; Foreman 1999: 2)

       'Nobody is doin' anythin' wrong.'

My own consultants generally dispreferred examples with sentence-initial n-words under a negative concord interpretation, regardless of whether there were additional n-words present or not. However, my consultants were more likely to judge such examples as acceptable when they occurred with auxiliary *ain't*, as in (3.158a) and as Foreman's examples do. Examples with other auxiliaries, such as *cain't* or *didn't*, were generally judged as ill-formed, as in (3.158b)-(3.158d). The presence of an additional n-word had a slight effect for my consultants as well. The example in (3.158c) is slightly better than the example in (3.158d), but still only very marginally acceptable.

(3.158) a. Nobody ain't getting nothing right.   (WTE)

       b. ?* Nobody can't get nothing right.   (WTE)

       c. ?* Nobody didn't get nothing right.   (WTE)

       d. * Nobody didn't get anything right.   (WTE)

In comparison, the inverted counterparts of the examples in (3.158) are all perfectly well-formed, as in (3.159).

(3.159) a. Ain't nobody getting nothing right.   (WTE)

       b. Can't nobody get nothing right.   (WTE)

       c. Didn't nobody get nothing right.   (WTE)

       d. Didn't nobody get anything right.   (WTE)

The acceptability of a sentence-initial n-word in the presence of sentential negation for West Texas English seems to depend on the presence of additional n-words, as Foreman observed, and, additionally, on the presence of auxiliary *ain't*.

Recall from the previous chapter that languages which exhibit negative concord can vary with respect to whether they allow pre-verbal n-words to co-occur with sentential negation. West Texas English appears to do so in extremely limited contexts, but this is a way in which this variety

diverges from other varieties of English that exhibit negative auxiliary inversion. Constructions of the type in (3.161b) are attested in naturally-occurring data for speakers of both African American English (Labov et al. 1968, Labov 1972, Green 2002, and others) and Appalachian English (Wolfram & Christian 1976, Feagin 1979, and others).

(3.160) a. Nothing don't come to a sleeper but a dream.   (AppE; Green 2002: 80)

'Nothing comes to a sleeper but a dream.'

b. Nobody couldn't handle him.   (AppE; Wolfram & Christian 1976: 112)

'Nobody could handle him.'

c. * Nobody didn't like the movie.   (WTE)

'Nobody liked the movie.'

In West Texas English, on the other hand, they are only possible under a double negation reading, giving rise to the contrast in (3.161), in which the non-inverted counterpart of a construction is allowed in some cases but disallowed in others.

(3.161) a. Nobody ain't doin' nothin' wrong.   (WTE; Foreman 1999: 2)

b. ?* None of 'em didn't hit the house.   (WTE; Foreman 1999/2001: 7)

While it is possible for languages which exhibit negative concord to vary with respect to whether they allow n-words to precede sentential negation, it is unusual for discrepancies in whether n-words in this position are allowed to arise in a single grammar, as they do in West Texas English as reported by Foreman. It is difficult for the same analysis to allow the non-inverted example in (3.161a) and disallow the similar one in (3.161b).

Given the discrepancy, one of the cases is the outlier. In the current grammar, it is possible to derive examples such as those in (3.161b) and the outliers are examples such as those in (3.161a), which seems to be correct for West Texas English given the extremely limited distribution of non-inverted counterparts with n-word subjects. The grammar rules out the possibility of an n-word preceding sentential negation in order to account for the ill-formed example in (3.161b), so it rules out the possibility of (3.161a) surfacing. The chart for the example in (3.161a) is given in (3.162). The

NPILic is a non-violable constraint and since the subject n-word is not licensed at PF in (3.162a), the output is not able to surface.

(3.162) LF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong

✓?		LF/PF	EPP	NPILic	ScoT	CWO
a.	✗	LF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong PF1: [a̶i̶n̶'̶t̶] nobody [ain't] doin' nothin' wrong	✓	✗	✗	✓
b.	✓	LF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong PF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong	✓	✓	✓	✗

In order to allow examples similar to the one in (3.161a), as we need to do in order to account for negative concord in African American English and Appalachian English, the licensing of n-words must be different from the licensing of NPIs beyond just being restricted to negation for the varieties of English which allow n-words to precede sentential negation. If (3.161b) is instead the outlier, we can account for the distribution with a constraint that requires that n-words to be licensed just at LF, as the n-word specific constraint in (3.163), which is similar to the NPILicLF constraint we saw in the previous section on NPIs.

(3.163) *NwordLic*

N-words must be licensed at LF.

This analysis is in the spirit of Zeijlstra (2008), who accounts for languages which allow n-words to precede sentential negation by positing as their licensor a null negative operator. In this analysis, the covert movement of negation to the higher negative projection has the same effect.

The NwordLic constraint is not ordered with respect to the other hard constraints, and the new constraint ranking is given in (3.164).

(3.164) *Constraint Ranking*

EPP, NPILic, NwordLic » ScoT, CWO

Given this revised constraint, the grammar's predictions for the derivation of the example in (3.157), the negative auxiliary inversion construction with multiple n-words, are as in the chart in (3.165).

(3.165) LF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong

✓?	LF/PF	EPP	NPILic	NwordLic	ScoT	CWO
a. ✓	LF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong PF1: [a̶i̶n̶'̶t̶] nobody [ain't] doin' nothin' wrong	✓	✓	✓	✗	✓
b. ✓	LF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong PF2: [ain't] nobody [a̶i̶n̶'̶t̶] doin' nothin' wrong	✓	✓	✓	✓	✗

Both the inverted and non-inverted counterparts can surface. None of the hard constraints are violated and each of the derivations obeys exactly one soft constraint, resulting in a tie. Note that the NPILic constraint does not induce any violations here because n-words form a class that is distinct from NPIs under this analysis. The inverted example surfaces because it is scope transparent while the non-inverted example surfaces because it exhibits canonical word order.

This particular licensing constraint for n-words accounts for the varieties which allow n-words to precede sentential negation categorically, such as Appalachian English and African American English.

Given the extremely limited availability of pre-verbal n-words in West Texas English, I interpret the acceptability of the examples in (3.161a) and (3.158) as a sign that the speakers can deduce what these non-inverted constructions might mean for a speaker who generates them rather than interpreting these judgments as a reflection of the consultants' underlying grammar.

In this section, I accounted for the availability of n-word subjects with an analysis similar to the one provided for negative polarity items. In the case in which negative concord is present, n-words are semantically non-negative existentials which must be in the scope of negation in order to be licensed. Unlike as we saw with negative polarity items, n-words can be licensed covertly in some varieties. I also accounted for a cross-linguistic difference between West Texas English and the other two varieties of English with the proposal that n-words and NPIs have different licensing constraints. Unlike NPIs, which must be licensed at both LF and PF, n-words in these varieties can be licensed solely at LF.

3.4.4 Apparent counterexamples

In accounting for the distribution of subjects available in negative auxiliary inversion construc-
tions, I arrived at the following characterization. Quantificational subjects are generally possible
while non-quantificational subjects are not. The types of quantificational subjects that are unavail-
able are subjects that cannot appear in the scope of negation more generally and are ruled out for
independent reasons. Indefinite subjects, such as subjects headed by *any* and *no*, are quantifica-
tional subjects with additional licensing requirements.

In this section, I provide apparent instances of negative auxiliary inversion constructions which
are problematic for the present analysis because the analysis cannot account for them.

3.4.4.1 The complexity of the definiteness effect

In a recent manuscript, Salmon (2017) rejects previous analyses of negative auxiliary inversion's
attested restriction on subjects, particularly with respect to the definiteness effect. Building on
work which contests the definiteness effect for *there*-existentials, he shows that the same types
of examples are also possible in negative auxiliary inversion constructions, as in (3.166). These
particular examples involve specific subjects, with the exception of (3.166e), which may or may
not be specific.

(3.166) a. Couldn't the guy I was with be bothered to pay for anything.   (WTE; Salmon 2017)

b. Well, won't Jimmy's drunk ass be goin' anywhere else tonight! (WTE; Salmon 2017)

c. Didn't that oil heater ever end up comin' on either.   (WTE; Salmon 2017)

d. Couldn't Tommy, Darin, or little Mikey come out, but we still had us a pretty good
   time.   (WTE; Salmon 2017)

e. Couldn't the usual crowd get in there 'cause of the cover charge, so there was plenty
   of room.   (WTE; Salmon 2017)

Salmon proposes scraping the definiteness effect and proposes instead that the types of subjects

that are possible in negative auxiliary inversion constructions are subjects that can be construed as being hearer-new. Pending further study, I interpret his data as evidence that the definiteness effect is more complex. In either case, these types of examples cannot be generated by my analysis as negative auxiliary inversion constructions because they are not scope-bearing, so I would not expect the movement of negation to occur. Salmon does show that these subjects are also possible in *there*-existentials, so it is possible that the examples in (3.166) are derived by a mechanism that is subject to some of the same types of constraints as *there*-existentials.

However, there is still an issue with relying on a parallelism between the subject distributions of *there*-existentials and NAI constructions. In this dissertation, I have shown that while strong quantificational subjects are possible subjects of NAI constructions, they are not possible subjects of *there*-existentials in West Texas English, as in (3.167).

(3.167)   a.   * There's every teacher teacher out there already.   (WTE)

b.   * There ain't every one of 'em out here yet.   (WTE)

Definite non-specific subjects are also possible in apparent negative auxiliary inversion constructions but, unlike the examples in (3.166), the examples in (3.168) require emotive contexts.

(3.168)   a.   Cain't the littlest mouse get his ass up in there anymore!   (WTE)

b.   Wouldn't the loudest noise in the world wake her up.   (WTE)

These examples are strongly emotive. The presence of information structure affects whether or not the Revised Principle of Scope Economy can apply and the types of derivation that can compete. The analysis I provide cannot account for definite or specific subjects, and these examples must be derived by a different mechanism. I therefore consider these types of examples to be only apparent negative auxiliary inversion constructions and retain my analysis in order to account for a broad range of attested and unattested subjects, including the availability of strong quantificational subjects.

3.4.4.2 Variation with *some*

Foreman (1999/2001) and Green (2014) observe that subjects headed by *some* are not possible in negative auxiliary inversion constructions and provide examples such as the ones in (3.169) as evidence.

(3.169)   a.   * Didn't some students leave.   (WTE; Foreman 1999/2001: 48)[40]

        b.   * Didn't some (of the students) show up.   (AAE; Green 2014: 131)

It has, however, recently come to my attention that there is some variation in how negative auxiliary inversion constructions with subjects headed by negative polarity item *some* are judged. In a recent working manuscript, Salmon (2017) states that he and his consultants judge them favorably. Some examples from Salmon's paper and our personal communication are given below in (3.170), all of which involve partitive readings.

(3.170)   a.   Teacher A: What's wrong? Why you lookin' so glum?

           Teacher B: Well, didn't some of the students show back up from the field trip.

                                            (WTE; Salmon 2017)

        b.   A: How was the service last night? Y'all have a good turnout?

           B: Yeah, pretty good. Couldn't some folks make it, but there was a good crowd anyway.

                                        (WTE; William Salmon p.c.)

        c.   You should've seen 'em coming out of the bar last night. Couldn't some of 'em stand

           up straight they were so drunk.   (WTE & AppE; William Salmon p.c.)

For these speakers, negative auxiliary inversion constructions are compatible with positive polarity item *some* and, furthermore, *some* outscopes negation in these examples. These examples cannot be generated by my analysis as presented or by any analysis for which generating the con-

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40. This example is not provided by Foreman but is instead inferred from his discussion. He states that subjects headed by *some* are not possible in either NAI constructions or *Not*-initial constructions but provides only the *Not*-initial construction **Not some students left* as evidence.

struction relies on negation marking its scope overtly, such as Horn (2014b, 2015).[41] They are also problematic because they are derived from unambiguous examples. *Some* has wide scope in its non-inverted counterparts, also.

In this dissertation, I advocate for adopting an LF-first framework in order to account for the observation that negative auxiliary inversion constructions lack an inverse scope interpretation. Finding a way in which to linearize an interpretation will restrict the ways in which an interpretation can surface, a desired result considering the NAI data discussed up until this point. However, in the varieties in which PPI *some* is a possible subject of a negative auxiliary inversion construction, the only available interpretation of the construction is the inverse scope interpretation, as in (3.171).

(3.171)   Didn't some of the students show back up...   [*not » some; some » not*]

In an LF-first framework, the interpretation that gives rise to this example cannot be the attested interpretation. I explained in section 3.4.1 that interpretations in which PPIs are trapped in the scope of negation, such as the interpretation in (3.172) below, are ruled out before they can be linearized.

(3.172)   ✗ $\neg\exists x[\textbf{person}_{[+\text{PPI}]}(x) \rightarrow \textbf{show-up}(x)]$

Since an interpretation in which the PPI is interpreted in the scope of negation is not a possible LF, the interpretation that gives rise to (3.171) must instead be one in which the PPI is interpreted above negation. An interpretation in which the PPI is interpreted above negation will, however, never be linearized in such a way that the PPI will be pronounced below negation as a result of

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41. An additional case in which a subject may be taking wide scope with respect to negation are cases in which the subjects are modified by *even*, as in the examples in (i).

(i)   a. Cain't even John do that.   (WTE; Foreman 1999/2001: 48)
      b. Didn't even a few soldiers survive.   (WTE; Foreman 1999/2001: 48)
      c. Ain't even a few of the students done their homework.   (WTE; Foreman 1999/2001: 41)

Whether or not these examples are problematic for my analysis will depend on the nature of *even* and the scopal possibilities that arise in their non-inverted counterparts. As Larry Horn (p.c.) points out, if *even* is an NPI, then negation has wide scope and these examples are not problematic. If, on the other hand, *even* outscopes negation, these types of examples are underivable as negative auxiliary inversion constructions in my analysis.

it violating both scope transparency and the preference for canonical word order. Such an LF/PF would instead lose out to its non-inverted counterpart. Therefore, NAI constructions which have PPI *some* as their subjects cannot be generated in the same way in my analysis as the types of negative auxiliary inversion constructions which have other types of quantificational subjects.

Future work on the topic needs to ensure that these examples have the same properties as negative auxiliary inversion constructions. For example, these constructions should only be possible with sentential negation marker *-n't* and should not licensed in contexts of positive polarity. The result of opposite-polarity tag-question formation needs to be a pronoun and should not be an expletive to show that *some* is in canonical subject position. If these types of examples fail the diagnostic tests, the results would give us reason to suspect that constructions whose subjects are headed by PPI *some* are only apparent negative auxiliary inversion constructions and not derived by the mechanism described in this dissertation. If it turns out that these types of examples do, however, share all of the properties that hold of negative auxiliary inversion constructions with other quantificational subjects, there are additional ways in which unexpected LF/PF pairs, such as the ones whose subjects are headed by PPI *some*, can surface.

In chapter 4, I discuss split subject constructions, a term I use to refer to both transitive expletive constructions and partitive doubling constructions but later determine that they are better analyzed as different phenomena. In this chapter, I extend my analysis to transitive expletive constructions and conclude that partitive doubling constructions receive a different analysis. I also raise the question of whether there are two ways in which negative auxiliary inversion constructions can be derived. More specifically, I wondered whether partitive doubling constructions can also an expletive-less counterpart. The *some* data and the fact that it involves a partitive interpretation appears to be evidence in favor of positing a distinction between these two types of constructions.

Summary

In this chapter, I introduced the correlation of negative auxiliary inversion constructions with the presence of ambiguity in its non-inverted counterpart. I accounted for the correlation with the

hypothesis that negative auxiliary inversion is the overt counterpart of quantifier raising for the varieties that exhibit the construction. I explained that non-inverted constructions with strong quantificational subjects must be interpreted by quantifier raising because the subjects cannot reconstruct. Negation can gain scopal significance in its moved position by type-shifting or because its trace is not interpretable at LF.

Adopting Fox's Principle of Scope Economy and revising it to apply to overt movement allowed me to account for part of the attested subject distribution of negative auxiliary inversion constructions. The movement of the negated auxiliary can happen when it is semantically significant and it is blocked from happening when it is semantically vacuous. Like quantifier raising, the movement of the negated auxiliary is not feature-driven. Instead, it is optional. It can only occur when the higher negative projection is part of the numeration and is allowed by the Revised Principle of Scope Economy.

The Revised Principle of Scope Economy derives the unattested inverse scope interpretation of negative auxiliary inversion constructions and I consider multiple ways in which the inverse scope interpretation could be ruled out. I observe that negative auxiliary inversion constructions and their non-inverted counterparts exhibit the 3/4 signature, a widely-seen pattern in the world's language (Bobaljik & Wurmbrand 2012). In a pair of sentences which differ minimally by one movement, the surface scope interpretation is available for both sentences while the inverse scope interpretation is available for one of the sentences but unavailable for the other. Negative auxiliary inversion constructions differ by a single movement from their non-inverted counterparts and lack the inverse scope that is often attested in the non-inverted counterpart. One way in which the 3/4 signature arises for Bobaljik & Wurmbrand is when scope transparency interacts with another economy constraint. I propose that negative auxiliary inversion constructions arise when scope transparency interacts with a constraint in which canonical word order is respected. When negation is interpreted above the subject, it can be pronounced high to give rise to a negative auxiliary inversion construction, or it can be pronounced low to give rise to the non-inverted counterpart. When negation is interpreted below the subject, it can only be pronounced below the subject because in this position is obeys both scope transparency and the constraint on canonical word order.

The quantificational subjects that are not attested for the construction are quantifiers whose scope is restricted with respect to negation. These types of subjects are ruled for independent reasons. Indefinite subjects, such as subjects headed by PPI *any* and n-word *no*, are derived in my analysis in the same way as indefinite *a*. All three elements are existential quantifiers that interact scopally with negation at some level in the derivation. PPIs and n-words have additional licensing requirements which must be checked at a later stage in the derivation, which is why they are unable to be the subjects of non-inverted counterparts. A few counterexamples to the analysis I adopt are also provided in this chapter.

In the following chapter, I consider whether the analysis can be extended to account for the phenomenon in other varieties of English which exhibit them, African American English and Appalachian English. I also consider whether the analysis can be extended to account for other phenomena. I investigate whether other phenomena are derived by movement that is sensitive to principles of scope economy.

Chapter 4

Extending the analysis

In the previous chapters, I provided an analysis for negative auxiliary inversion construction and showed how it is an instance of overt movement that is constrained by scope economy principles. In this chapter, I consider whether movement constrained by scope economy principles is available elsewhere in the grammars of speakers.

In the first section, I investigate whether the analysis provided in this dissertation can be extended to other varieties of English which exhibit negative auxiliary inversion constructions. Not much data is available, but preliminary findings point to the analysis being extendable to at least some speakers of African American English and Appalachian English who allow the construction.

Continuing the investigation into whether the type of movement that derives negative auxiliary inversion constructions derives any other phenomena for the speakers who allow the construction leads us to a discussion of negative existential constructions, constructions which are superficially similar to negative auxiliary inversion constructions. I conclude, supporting the distinction first introduced in 1968 by Labov et al. and supported in later work by other authors, that negative existential constructions are not derived by the same mechanism as negative auxiliary inversion constructions. I propose that negative existentials are not derived by movement at all, let alone movement that is constrained by principles of scope economy. Another phenomenon present in the grammars of some speakers who allow negative auxiliary inversion constructions is split sub-

ject constructions. These constructions can be further divided into two types: transitive expletive constructions and partitive doubling constructions. On the basis of the evidence available, I conclude, following Zanuttini & Bernstein (2014), that transitive expletive constructions are derived by movement that has scopal effects. There is less evidence to support partitive doubling constructions being derived by the same movement, but the lack of evidence is predominantly due to a lack of data. It is possible, on the basis of the data available, to derive these constructions by movement that is constrained by scope economy principles. The consequences of extending the analysis to these constructions are also discussed in this section.

Finally, the investigation turns to whether the type of movement that derives negative auxiliary inversion constructions is available cross-linguistically in varieties which lack the phenomenon. In section 4.3, I first consider whether it is available in standard English, a variety which lacks negative auxiliary inversion. The first phenomenon I consider is *Not*-initial constructions, constructions for which Foreman (1999, 1999/2001) provides an analysis parallel to his analysis for negative auxiliary inversion constructions. I concur with his proposal that the phenomenon should receive a similar analysis to NAI and extend my analysis to account for it. I conclude in this section that *Not*-initial constructions are also derived by movement that is subject to principles of scope economy, but that they are derived by phrasal movement rather than by head movement. Another phenomenon available in varieties of English in the absence of NAI is canonical negative inversion, a construction that is derived by the movement of a typically negative or downward entailing phrase and subject-auxiliary inversion. I conclude that canonical negative inversion should not be derived by optional movement that is subject to principles of scope economy, but should instead be derived by feature-driven movement.

4.1 Negative auxiliary inversion in other varieties

The analysis presented in this dissertation has been developed predominantly on the basis of data from West Texas English speakers. As mentioned earlier, negative auxiliary inversion is also attested in varieties of African American English (Labov et al. 1968 and many others) and Appalachian English (Wolfram & Christian 1976, Feagin 1979, among others). While this dissertation

focuses on data from varieties spoken in Texas, there is evidence that the analysis is extendable to the grammar of (at least some) speakers of the other two varieties as well. I discuss this evidence in this section.

4.1.1 NAI in African American English

Negative auxiliary inversion was first described in Labov et al. (1968) and Labov (1972), works which are based predominantly on naturally-occurring data from interviews with black speakers in the Bronx in New York, in Chicago, Illinois; in Cleveland, Ohio; and in West Philadelphia, Pennsylvania. Additional data come from other cities in North America as well as from white and Puerto Rican speakers. The authors point out some differences in the speech of white speakers and specifically note that the speech of black individuals is uniform with respect to certain properties, such as negative concord. The authors do not specifically note whether the speech of their speakers was uniform with respect to negative auxiliary inversion but we can deduce that they did not find significant differences by virtue of the fact that they offer just one analysis for the construction.

4.1.1.1 Subject restriction

The predominant examples containing negative auxiliary inversion in these works also exhibit negative concord with the subject, as in (4.1).

(4.1) a.   Can't nobody beat 'em.   (AAE; Labov et al. 1968: 285)

b.   Didn't nobody see it; didn't nobody hear it.   (AAE; Labov et al. 1968: 267)

c.   Ain't nobody know about no club.   (AAE; Labov 1972: 812)

d.   Ain't no cop never beat me in my head.   (AAE; Labov et al. 1968: 285)

Traditionally, accounts of negative auxiliary inversion focused on accounting for these types of constructions and, in fact, some authors (Sells et al. 1996, White-Sustaíta 2010, Green 2011) provide analyses for negative auxiliary inversion which only account for negative subjects. Green (2014)

refers to the construction bearing these negative subjects as canonical negative auxiliary inversion because these subjects appear to be the most frequently used subjects in all varieties which exhibit the construction. In this section, I discuss the subjects attested for African American English speakers as they were described in the literature in chronological order. The descriptions vary and reasons for these discrepancies are considered in a section following the descriptions along with a discussion on whether the analysis provided in this dissertation is extendable to speakers of African American English that allow negative auxiliary inversion constructions.

In addition to the negative subjects, the presence of quantifiers in subject position is also attested in the works of Labov and his collaborators for African American English. Both examples involve the quantifier *many* and are reproduced in (4.2). The subject in (4.2a) is *many of them* and the subject in (4.2b) is *so many people.*

(4.2) a. Don't many of them live around here. (AAE; Labov et al. 1968: 286)

   b. It's against the law – that's why don't so many people do it.

   (AAE; Labov et al. 1968: 287)

Unlike in other varieties of English in which negative auxiliary inversion is attested, negative polarity item *any* is not an attested subject in negative auxiliary inversion constructions in African American English. Moreover, the authors observe that overall, indefinites headed by *any* are uncommon in their data. They account for this observation with the proposal that such indefinites undergo a phonological process by which the indefinite *any* becomes *no.* This process is fairly regular and while the author does note a few environments in which he does not expect it to occur (see Labov 1972: 784-785), none of these expectations would rule out the conversion from happening in the types of negative auxiliary inversion constructions that are attested.

Sells et al. (1996) investigate a variety of African American English spoken in East Palo Alto, California in 1992 using both naturally-occurring data and judgment-based tasks. They find that negative auxiliary inversion in this variety is similar to the variety described by Labov and his collaborators.[1]

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1. One exception is that their speakers did not allow the construction embedded under an overt complementizer. The constructions in (i) are judged as unacceptable by these speakers.

   (i) a. * I know a way that won't nobody fight. (AAE; Sells et al. 1996: 618)

In this work, the acceptability of quantifier *many* in subject position is confirmed for the speakers consulted by a judgment-task of the sentence observed by Labov et al., which is reproduced with this judgment in example (4.3). Additionally, the authors discovered that polarity sensitive subject *few* is disallowed, as in (4.4).

(4.3)   Don't many of them live around here.   (AAE; Sells et al. 1996: 610)

(4.4)   * Don't few of them live around here.   (AAE; Sells et al. 1996: 610)

Non-negative indefinites headed by *a* were observed to hold for African American English by Martin (1992, 1993) and Martin & Wolfram (1998), whose data comes from southern United States.

(4.5)   a.   Can't a man in this place say he happy bout a damn thing. (AAE; Martin 1992: 64)

         b.   Don't a man in this county want to hurt his own chances.   (AAE; Martin 1993: 50)

Non-negative indefinites headed by *a* are also confirmed to be possible for African American English by Parrott (2000), whose data is judged by Na'im Tyson, a native speaker of AAE. The construction with a negative polarity subject headed by *a*, as in (4.6a), is judged as acceptable whereas constructions with quantificational subjects, such as *many* and *three* in (4.6b) and (4.6c), respectively, are judged as marginally acceptable by the speaker.

(4.6)   a.   Ain't a damn thing changed.   (AAE; Parrott 2000: 417)

         b.   ? Don't many people go in there.   (AAE; Parrott 2000: 426)

         c.   ? Can't three people in the world solve those equations.   (AAE; Parrott 2000: 426)

The most comprehensive description of the subject restriction of negative auxiliary inversion constructions for African American English to date is provided in Green (2014). The author focuses predominantly on accounting for n-word subjects, as well as additional properties she observes to hold for the variety. Turning to the distribution of quantifiers in the variety, she confirms that quantifier *many* is possible, as in (4.7).

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    b.   * I believe that ain't nobody leavin'.   (AAE; Sells et al. 1996: 618)

(4.7)   Wouldn't many people sign up.   (AAE; Green 2014: 118)

Additionally, she expands the empirical landscape by providing examples in which strong quantifier *all*, either by itself or heading a subject, is possible, as in (4.8).

(4.8)   Didn't all (the students) show up.   (AAE; Green 2014: 130)

Subjects headed by polarity-sensitive *some* are not possible, as in (4.10).

(4.9)   * Didn't some (of the students) show up.   (AAE; Green 2014: 131)

The author points out that not all negative subjects are possible. Subject *not all* is not acceptable, as in (4.10).

(4.10)   * Didn't not all the people show up.   (AAE; Green 2014: 130)

Negative polarity item subject *one red cent* is attested, as in (4.11).

(4.11)   Didn't one red cent make it back to the community.   (AAE; Green 2014: 118)

Negative auxiliary inversion constructions with subjects headed by quantifiers *every*, *most*, *half*, and *very many* are derivable with the analysis the author provides but example sentences confirming their attestations are not provided.

The availability of strong quantifiers headed by *every* as subjects in negative auxiliary inversion constructions for speakers of African American English is also confirmed in the variety of African American English spoken by one of my consultants, Alysia Harris, who is from Alexandria, Virginia.[2] The data is provided in (4.12)-(4.14).

(4.12)   Don't start. Ain't everybody here yet.   (AAE)

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2. Additional evidence that non-negative subjects are accepted by speakers of African American English was brought to my attention by Larry Horn (p.c.). Wilson Gray, a speaker of a variety of African American English which lacks negative concord, accepts a large variety of quantificational subjects, including strong quantifier subjects.

(4.13)   Everyone was at the fight but didn't everyone see it.   (AAE)

(4.14)   Didn't everyone see the fight but they be acting like they was there.   (AAE)

Evidence that the subject of the construction is in canonical subject position comes from the possible tag in (4.15a), which agrees with the subject *everyone*. Were the construction to involve a negative existential instead of a negative auxiliary inversion construction, an expletive would be possible in the tag but it is not, as in (4.15b).

(4.15)   a.   Everyone was at the fight but didn't everyone see it, did they?   (AAE)

          b.   * Everyone was at the fight but didn't everyone see it, did it?   (AAE)

The descriptions of the subject restrictions in this section have been chronological.[3] The types of subjects that were initially attested were negative indefinites headed by *no* and weak quantifier *many*, followed by indefinites headed by *a*, and, finally, a larger variety of negative polarity items and quantificational subjects, including strong quantifiers.[4] At this point, we consider how to interpret the discrepancies between the attested subject descriptions. The descriptions are based on speakers from different geographical locations so one hypothesis is that the subject restrictions vary geographically. Another possible hypothesis is that subjects other than n-word subjects occur infrequently enough to not have surfaced in the interviews or be considered in the judgment-based tasks until later. A further possibility is that the subject distribution of this construction has

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3. Negative auxiliary inversion in African American English is discussed in other works which do not change the empirical landscape with respect to the subject restriction of negative auxiliary inversion but which instead expand the theoretical landscape by refining the analysis. Some of these works are Tortora & den Dikken (2010), White-Sustaíta (2010), and Green (2011), among others.

4. Green (2014) also discusses two additional types of subjects. One type are subjects headed by *but*, as in (i).

(i)   Didn't but a few people show up.   (AAE; Green 2014: 130)

These types of subjects seem to be compositional in a way in which the types of quantifiers that characterize the subject restriction are not. See section 4.3.1.4.2 for a discussion on these types of subjects.

The other types of subjects discussed are ones in which *no* can be used as a determiner to negate a definite noun phrase, as in (iiB). In this context, the negated noun phrase serves as a strategy of correcting a previous utterance or assumption.

(ii)   A.   Many old fraternity guys showed up for homecoming. I think even Vince Jackson was there.

        B.   No, didn't no Vince Jackson show up!   (AAE; Green 2014: 131)
              reading 1: No one by the name of Vince Jackson showed up.
              reading 2: The one-and-only Vince Jackson did not show up.

changed over time. Further research needs to be conducted in order to determine how uniform the subject restriction is for African American speakers. However, the analysis provided for negative auxiliary inversion in West Texas English can be extended to account for the phenomenon in African American English at least for some speakers. If AAE speakers allow strong quantifier subjects in the construction, in line with the descriptions provided in Green (2014) and confirmed by my consultant, the analysis is almost trivially extendable. The main difference is in the absence of negative polarity item *any* in AAE, which is surprising given the presence of n-words and other NPIs in the variety. If, on the other hand, AAE speakers allow only indefinites and weak quantifiers, in line with the older descriptions (Labov et al. 1968, Labov 1972, Martin 1992, 1993, Martin & Wolfram 1998, Sells et al. 1996, Parrott 2000), the analysis is extendable but there is no evidence for preferring a movement analysis of the auxiliary over the reconstruction of the subject analysis. Tag-question constructions provide us with evidence that the subjects are syntactically in canonical subject position, but, given the fact that they are not strong quantifiers, the subjects could be interpreted by reconstructing in their base-generated position.

4.1.1.2 Affective or widening property

One of the properties associated with negative auxiliary inversion in some works is emphasis. In their introduction of negative auxiliary inversion from 1968, Labov et al. state that the phenomenon has a strong affective character in African American English. The authors categorize negative auxiliary inversion as an instance of emphatic negation and, given the observation that the construction is optional, imply that it arose as a result of negative concord losing the affective nature it has in some other varieties of English. The authors propose that negative auxiliary inversion is a strategy for emphasis. This affective property of negative auxiliary inversion is retained in some recent analyses of negative auxiliary inversion for African American English (Green 2011) and later recast as negation widening its scope from a weak negation to a stronger negation in later work (Green 2014). Consider the negative auxiliary inversion construction in (4.16a) and its non-inverted counterpart in (4.16b).

(4.16) a. Nobody wouldn't ride that bus.   (Green 2014: 117)

b.   Wouldn't nobody ride that bus.   (Green 2014: 117)

Negation is gradeable and it can be both absolute and slightly weaker. The non-inverted construction is ambiguous between a strong interpretation of negation that allows no exceptions and a weak interpretation of negation that allows some exceptions to hold. In comparison, in the negative auxiliary inversion construction, the interpretation of negation is necessarily absolute.

In other varieties exhibiting negative auxiliary inversion, the phenomenon does not seem to correlate with an affective property or a widening effect. Foreman (1999, 1999/2001) observes that it is does not in West Texas English and Zanuttini & Bernstein (2014), Blanchette (2015) also observe that it does not for their Appalachian English consultants. Given the apparent absence of emphasis or widening effect in some NAI-exhibiting varieties, the earlier chapters of this dissertation do not incorporate it into the analysis.

Green (2014) associates the widening effect of negation with the presence of a negative focus feature on the projection to which the negated auxiliary raises. She used the same strategy to account for the emphatic nature she proposed to hold in her earlier analyses. I return to a more in-depth discussion of the author's analysis for negative auxiliary inversion constructions in section 5.4 of chapter 5. In this section, I consider whether my analysis of negative auxiliary inversion constructions can be extended to account for her observations in African American English.

In order to account for the effects observed to hold for African American English, I could follow Green (2014) in positing the presence of a focus feature on the projection to which the negated auxiliary raises in my analysis, $\text{Neg}_2{}°$. The presence of additional information structure, however, has consequences for the given analysis. If a derivation exhibiting negative auxiliary inversion has a focus feature, then its non-inverted counterpart would also need to have a focus feature in order for the two derivations to compete. Otherwise, if the non-inverted counterpart does not have this focus feature, the linearization of the grammar could be blind to this feature and still consider the pair of derivations as being in competition with each other. Both of these options would give rise to the three attested sets of derivations, the 3/4 signature, and rule out the reconstruction of negation below the subject in order to account for the unattested inverse scope of negative

auxiliary inversion constructions.

4.1.2 NAI in Appalachian English

I turn in this section to another variety of English in which the phenomenon of negative auxiliary inversion is attested, Appalachian English, in order to determine whether the analysis provided in this dissertation for the phenomenon is extendable to this variety. The section begins with an overview of the types of subjects discussed in the literature and follows with evidence that strong quantifiers are available subjects for some speakers of Appalachian English.

Negative auxiliary inversion was first attested in the literature for Appalachian English in Wolfram & Christian (1976), a collection of naturally occurring data from interviews with speakers from Mercer and Monroe Counties, West Virginia. The construction co-occurs with negative concord in all of the examples provided in this work, and the types of subjects attested are all n-words, as in (4.17).

(4.17)   a. Didn't nobody get hurt or nothin'.   (AppE; Wolfram & Christian 1976: 113)

         b. It had this room that wouldn't nobody stay in. (AppE; Wolfram & Christian 1976: 113)

         c. Hain't nobody hardly believed it.   (AppE; Wolfram & Christian 1976: 113)

Another work which focuses on a variety of Appalachian English is Montgomery & Hall (2004). Their speakers are from the Great Smoky Mountains at the border of eastern Tennessee and western North Carolina. In this work, examples which exhibit negative auxiliary inversion also exhibit n-word subjects, as in (4.18).

(4.18)   a. There's an old house up here but don't nobody live in it, not noway.

                                         (AppE; Montgomery & Hall 2004: liv)

         b. The house is so far up in the hills that when me and my old woman fuss, can't nobody

           hear us.   (AppE; Montgomery & Hall 2004: lv)

         c. Ain't nary one of 'em married.   (AppE; Montgomery & Hall 2004: lv)

In addition to the n-word subjects headed by *no*, subjects headed by *nary* are also attested, as in (4.18c). According to the authors, the meaning of *nary* is roughly equivalent to 'not a one' or 'not any.'[5]

The description of negative auxiliary inversion in Appalachian English with the largest variety of subjects to date is Feagin (1979). The examples provided by Feagin are naturally occurring data from interviews. The interviewed speakers are from Anniston, Alabama. N-word subjects are also attested in this work, as in (4.19).

(4.19)   a.   Won't nobody help her.   (AppE; Feagin 1979: 241)

     b.   Didn't none of us ever learn that.   (AppE; Feagin 1979: 235)

     c.   Well, ain't no man a-gon come in here and buy me no curtains and stuff, 'cause I wouldn't have it if he did!   (AppE; Feagin 1979: 346)

In addition to the n-word subjects, the types of subjects attested for the construction in this work are indefinite subjects headed by *any*, as in (4.20), and quantificational subjects headed by *many*, as in (4.21).[6]

(4.20)   a.   Dudn't anybody seem to understand...   (AppE; Feagin 1979: 235)

     b.   Didn't anybody go last year, did they?   (AppE; Feagin 1979: 235)

     c.   And won't anybody know who you are until I tell 'em.   (AppE; Feagin 1979: 235)

(4.21)   Didn't many boys in town like to hunt.   (AppE; Feagin 1979: 348)

The only types of subjects for which there is evidence for negative auxiliary inversion of Appalachian speakers are indefinites *no* and *any* and quantificational element *many*. The fact that

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5. I return to a discussion of *nary* in section 4.3.1.4.2.

6. Also attested in this variety are subjects headed by *but*, as in (i). For a discussion of these types of subjects, see section 4.3.1.4.2.

  (i)   a.   Can't but two people sit in back.   (AppE; Feagin 1979: 242)

      b.   Well, Walt said he told him, says, ain't but two mean fellers here, an' I'm both of em.
                                              (AppE; Feagin 1979: 346)

      c.   Didn't but three people sign up for the trip.   (AppE; Feagin 1979: 348)

strong quantifiers are not attested in the literature could be due to different factors. It could be due to their not being acceptable by the speakers or it could be due to their being uncommon enough to not have occurred in the interviews. The analysis presented in this dissertation can be extended to account for the construction for Appalachian English speakers who allow it. There is evidence that the subject of this construction is in canonical subject position in this variety as well from tag-questions, as in (4.22).

(4.22) a. Didn't anybody go last year, did they?   (AppE; Feagin 1979: 235)

        b. Back in them days, didn nobody live there but just a little while, did they?

                                                                    (AppE; Feagin 1979: 238)

The subjects appear to be in canonical subject position syntactically and negation appears to have raised to a higher position. However, although the analysis proposed for West Texas English can account for the phenomenon in this variety, it is not the only plausible analysis because strong quantifier subjects are unattested. Since the attested subjects are all weak quantifiers or indefinites, they need not be interpreted in their syntactic position semantically; they might reconstruct in their base-generated position.

4.1.2.1 Expanding the empirical domain

Strong quantifiers can occur in at least some varieties of Appalachian English, as confirmed by Gregory Johnson II, a white speaker from Jonancy, Kentucky. The embedded construction in (4.23) contains the strong quantifier *everybody* and is judged as acceptable.

(4.23)   Everybody was at the fight but didn't everybody see it.   (AppE)

Another construction bearing the same subject, as in (4.24a), is also acceptable. Notice that this example has an appended tag question, the subject of which is *they* and appears to agree with the thematic subject.

(4.24) a.   Can't everybody win the jackpot, can they?   (AppE)

b. * Can't everybody win the jackpot, can there? (AppE)

In comparison, *there* cannot be a tag subject in the minimally different (4.24b). The unacceptability of this example suggests that the tag subject in (4.24a) agrees with the thematic subject rather than with expletive *they*, which is also available in Appalachian English and with which the pronoun is homophonous.

Preliminary investigations suggest that the reason strong subjects are unattested in the literature for negative auxiliary inversion constructions is not due to their being unacceptable but might instead be due to their being more infrequent than others.

For the speakers of Appalachian English that allow strong quantifier subjects as subjects of negative auxiliary inversion constructions, the analysis presented in this dissertation for the construction is the most plausible analysis.

In this section, I summarized the reports in the literature concerning the subject restriction of negative auxiliary inversion constructions in varieties of English other than West Texas English. Data is lacking so no categorical conclusions can be drawn but on the basis of evidence attested in the literature along with additional preliminary investigations, I conclude that the analysis provided in the previous chapters for negative auxiliary inversion can be extended to account for the phenomenon in African American English and Appalachian English for at least some speakers.

4.2 Extending the analysis to other phenomena in NAI varieties

In the previous section, I showed that the analysis proposed for negative auxiliary inversion constructions in West Texas English can be extended to account for the phenomenon cross-dialectally. In this section, I discuss how the analysis can be extended to account for other phenomena in the varieties of English which allow negative auxiliary inversion constructions.

The phenomena that appear to be related to negative auxiliary inversion are negative existential constructions, as in (4.25b), transitive expletive constructions, as in (4.25c), and partitive doubling

constructions, as in (4.25d).

(4.25) a. Won't everybody go to the party. (*Negative auxiliary inversion*)

b. Ain't nobody here yet. (*Negative existential construction*)

c. There didn't nobody like him. (*Transitive expletive construction*)

d. They can't any of them do that. (*Partitive doubling construction*)

Some or all of these phenomena are attested in varieties which exhibit negative auxiliary inversion. Negative existential constructions, as in (4.25b), are attested in the speech of all individuals who allow negative auxiliary inversion (Labov et al. 1968, Feagin 1979, Foreman 1999, 1999/2001). All constructions are attested in the speech of individuals characterized as Appalachian English speakers (Wolfram & Christian 1976, Feagin 1979, Montgomery & Hall 2004, Zanuttini & Bernstein 2014, Wood, Sigurðsson, et al. 2015). Similarly, all constructions are available to West Texas English speakers.[7] Partitive doubling constructions are not attested in the literature for African American English speakers and transitive expletive constructions are attested historically but they are reportedly judged as unacceptable by younger contemporary speakers (Green 2002, 2014, White-Sustaíta 2010).

In this section, I investigate the properties of each phenomena and determine whether the analysis I provide for negative auxiliary inversion can be extended to account for it.

4.2.1 Negative existential constructions

All varieties which exhibit negative auxiliary inversion also exhibit existential negative inversion, a phenomenon which shares superficial similarities with negative auxiliary inversion but which structurally appears to be more similar to existential constructions which lack an expletive. Some negative existential constructions are provided in (4.26).

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7. While only the presence of negative existential constructions is attested in the literature (Foreman 1999, 1999/2001), my consultants accept both transitive expletive constructions and partitive doubling constructions, though they seem to be more common for older speakers, as they are in African American English.

(4.26) a. Ain't nobody home.   (AppE; Feagin 1979: 346)

        b. Ain't nothin' you can do for 'em.   (AAE; Labov et al. 1968: 284)

        c. Wasn't nothin' but acorns on the groun… and wasn't nobody there.

                                                (AppE; Wolfram & Christian 1976: 113)

        d. Ain't many people you like.   (WTE; Foreman 1999/2001: 22)

The phenomenon of negative existential constructions can, however, be present in the grammars of speakers who lack negative auxiliary inversion constructions. In my fieldwork, I have found white speakers from Southern states who accepted negative existential constructions but found examples exhibiting negative auxiliary inversion to be ill-formed.

The analysis that has been given for negative existential constructions since they were first described in Labov et al. (1968) is as in (4.27) for the sentence in (4.26a). The thematic subject stays in a lower position, the negated auxiliary is in its usual position, and a null expletive satisfies the EPP requirement in canonical subject position, which I assume here to be TP.

(4.27) $\left[_{\text{TP}} \varnothing \text{ ain't nobody home}\right]$

This analysis contrasts with the analysis proposed for negative auxiliary inversion constructions in the same work, in which the thematic subject is in canonical subject position and the auxiliary moves to a higher position, as in (4.28).

(4.28) Won't $\left[_{\text{TP}} \text{ nobody } \text{won't} \text{ go to the party}\right]$

Recall from the introduction that some of the distinctions between two types of constructions have been known since Labov et al. (1968). The authors observe that certain strings can be assigned either of the two structures. Such an ambiguous string is reproduced in (4.29).

(4.29) Ain't nobody know about no club.   (AAE; Labov 1972: 812)

The sentence is compatible with a negative existential reading and a negative auxiliary inversion reading and both interpretations are semantically equivalent. In the former case, the paraphrase

would be 'There isn't anybody that knows about any club' while in the latter case, it would be 'Nobody knows about any club.' Labov proposes the structure of the negative existential to be a sentence without any overt material in subject position and to involve a relative clause with a null relative pronoun, as in (4.30a). On the other hand, negative auxiliary inversion involves a simple clause. The subject is in canonical subject position and the auxiliary has moved to a higher projection, as in (4.30b). These two properties of his analysis for negative auxiliary inversion constructions are retained in the analysis presented in this dissertation, as well as in many other analyses of the phenomenon in the literature.

(4.30) a. $[_{TP}$ It ain't nobody $[_{RC}$ ~~that~~ know about no club$]]$

　　　　b. Ain't $[_{TP}$ nobody ~~ain't~~ know about no club$]$

The negative existential construction shares with negative auxiliary inversion the presence of a sentence-initial negated auxiliary and of a subject restriction. These two properties in negative existential constructions are, however, both more restricted than they are in negative auxiliary inversion constructions. The sentence-initial negated auxiliary can only be a negative form of the copula. Attested auxiliaries are the third person past form of *be*. Most examples occur with negative copula *ain't*, as in (4.31a), but also attested are *wasn't* and *wadn't*, as in (4.31b) and (4.31c), and the third person present form, *isn't* or *idn't*, as in (4.31d).

(4.31) a. Ain't no doubt about it.　　　　　　　　　　(WTE; Foreman 1999/2001: 18)

　　　　b. Wasn't nobody home.　　　　　　　　　　(AAVE; Labov et al. 1968: 286)

　　　　c. Wadn't no problem for her, was it!　　　　　　(AppE; Feagin 1979: 347)

　　　　d. Idn't anybody gon' pay that much attention.　　(AppE; Feagin 1979: 240)

Despite the limited number of auxiliaries that can occur in negative existentials, structural ambiguity between the structures is possible, as we've seen with the example from Labov. Part of what allows for two structural analyses for some of the strings is the fact that, in addition to its function as the negative copula, the auxiliary *ain't* is homophonous with the negative past tense corresponding to *didn't* and with the negative perfect auxiliary corresponding to *haven't*.

In terms of the subject restriction, strong quantifiers are restricted from occurring in negative existentials whereas they are not in negative auxiliary inversion constructions. Before providing the evidence for this claim, we first introduce a diagnostic test which helps us distinguish between the two constructions. As previously mentioned, a difference between them involves the structural position their subjects occupy. The subjects of negative auxiliary inversion constructions occupy the canonical subject position while the subjects of negative existentials occupy a position lower than the canonical subject position. We can confirm that this is true by applying a tag-question formation diagnostic test.[8]

Tag-questions target the element that is syntactically in the subject position, the subject position typically assumed to be SpecTP. When questioning negative existential constructions, the subject in the tags are expletives rather than pronouns that refer to the thematic subject. The tag subjects of the negative existential constructions in (4.32) are expletive *there*.

(4.32)   a.   Ain't many people you like, are there?   (WTE; Foreman 1999/2001: 22)

         b.   Ain't nothin' you can do for 'em, is there?   (WTE; Foreman 1999/2001: 19)

         c.   Ain't no doubt about it, is there?   (WTE; Foreman 1999/2001: 19)

Tag-question formation of examples which are unambiguously negative auxiliary inversion constructions shows the opposite pattern. The tag subject is a pronoun that agrees with the thematic subject and it cannot be an expletive. In (4.33a), the tag subject is *you*, a pronoun that agrees with the thematic subject *all of y'all*. The minimal counterpart in (4.33b), in which the tag subject is an expletive, is unacceptable.

(4.33)   a.   Cain't all of y'all win the jackpot, though, can you?   (WTE)

         b.   *Cain't all of y'all win the jackpot, though, can there?   (WTE)

There are, however, some issues that arise when using this diagnostic test. One issue is that *they* and *it*, despite apparently being pronouns, are homophonous with expletives in the varieties of

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8. The use of this test for the purpose of distinguishing these two constructions comes from Foreman (1999, 1999/2001).

English that allow negative auxiliary inversion. Some of the counterparts of the examples in (4.32) given below in (4.34) are judged as acceptable by my consultants. I expect that the acceptability of (4.34a) and (4.34c) is due to the subject of the tag question being interpreted as an expletive rather than as a pronoun.

(4.34)   a.   Ain't many people you like, are they?   (WTE)

         b.   * Ain't nothin' you can do for 'em, is it?   (WTE)

         c.   Ain't no doubt about that, is it?   (WTE)

A further confounding factor with this diagnostic test is that strings that are ambiguous between a negative auxiliary inversion and a negative existential construction interpretation allow either a pronominal or an expletive as the subject of a tag question. The pronoun is correlated with a negative auxiliary inversion interpretation while the expletive is correlated with a negative existential but the possibility of homophony of expletives and pronouns in some cases makes the diagnostic test results harder to interpret.

There are further diagnostic tests we can apply which help us distinguish the two constructions. For varieties which do not allow transitive expletive constructions, a diagnostic test is whether the string is compatible with expletive insertion.[9] Labov et al. (1968) point out that negative existential constructions are compatible with expletive insertion in African American English, and this observation is adopted as a diagnostic test in later literature. An expletive can be inserted in front of a negative existential construction and result in acceptability, as in (4.35).[10]

(4.35)   a.   It ain't nothin' you can do for 'em.   (AAE; Labov et al. 1968: 284)

         b.   It ain't no trouble to make another trip.   (SWEV & BEV; Martin 1993: 51)

The counterparts which lack the expletive are provided in (4.36) for comparison.

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9. A discussion of transitive expletive constructions in varieties of English follows in section 4.2.2.

10. The expletive *it* is commonly used in African American English and is attested in other existential sentences, as in the embedded sentence in (i).

   (i)   Doesn't nobody really know that it's a God, you know.   (African American English; Labov 1972: 811)

(4.36) a. Ain't nothin' you can do for 'em.   (AAE; Labov et al. 1968: 284)

        b. Ain't no trouble to make another trip.   (SWEV & BEV; Martin 1993: 51)

In contrast, an expletive cannot be inserted in front of a negative auxiliary inversion construction in many varieties of African American English. Doing so results in unacceptability, as shown in the examples in (4.37). The sentence lacking an expletive is attested, as in (4.38).

(4.37) a. * It can't nobody tag you then.   (AAE; Weldon 1994: 12)

        b. * There can't nobody tag you then.   (AAE; Weldon 1994: 12)

(4.38)   Can't nobody tag you then.   (AAE; Labov et al. 1968: 285)

This diagnostic test is robust in varieties which do not allow transitive expletive constructions. However, it does not provide the same contrast in acceptability judgments for the two constructions in varieties of English which do allow transitive expletive constructions, such as West Texas English, Appalachian English, and some varieties of African American English. In these varieties, expletives can be inserted before both negative existential constructions and negative auxiliary inversion constructions. In these cases, tag-question formation can help us determine whether a string is interpreted as a negative existential, as in (4.39a), or as a negative auxiliary inversion construction, as in (4.39b).[11]

(4.39) a. There ain't many people you like, are there?   (WTE; Foreman 1999/2001: 22)

        b. There don't many people like you, do they?   (WTE)

Another test that can be used to diagnose between the two constructions for African American English is the placement of aspectual markers. Recall from section 2.1.4 of chapter 2 that aspectual

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11. The expletive *there* is used in these sentences because it is more commonly used in West Texas English in the context of existentials. Expletives *there, they* and *it* are all attested in West Texas English, as in (i), in which the expletives are italicized.

(i) a. *There* ain't no doubt about it.   (WTE; Foreman 1999/2001: 18)
     b. We can reuse it [paper]. *They* ain't nothin' on it.   (WTE; Foreman 1999/2001: 5)
     c. *It* ain't no doubt in my mind that that little car would've made it.   (WTE; Foreman 1999/2001: 4)

Although expletive *it* is attested and acceptable to my consultants, my consultants prefer examples containing the expletives *there* and *they*.

markers, in varieties in which they are available as functional projections, can tell us whether the subject has undergone movement. Aspectual *be*, a habitual marker, is generated below TP and above *v*P in AAE and its position in a sentence tells us whether the subject has raised. Consider the minimal pair in (4.40). Green (2014) points out that the example in (4.40a) is a negative existential because aspectual *be* precedes the subject. On the other hand, the example in (4.40b) is a negative auxiliary inversion construction because aspectual *be* follows the subject. In this example, the subject has undergone movement past the aspectual marker.

(4.40) a.   Don't be nothing happening.   (AAE; Green 2014: 121)

             'Usually, there is nothing happening.'

        b.   Don't nothing be happening.   (AAE; Green 2014: 122)

             'Usually, not a single thing is happening.'

Applying the expletive test in this variety provides further evidence in favor of the author's categorization of (4.40a) as a negative existential and (4.40b) as a negative auxiliary inversion construction. Adding an expletive to the example in (4.40a), as in (4.41a), results in an acceptable construction because negative existentials are compatible with expletives. On the other hand, adding an expletive to the example in (4.40b), as in (4.41b), results in unacceptability because negative auxiliary inversion constructions do not co-occur with expletives.

(4.41) a.   It don't be nothing happening.   (AAE; Green 2014: 121)

        b.   * It don't nothing be happening.   (AAE; Green 2014: 122)

Another diagnostic test which allows us to distinguish the two constructions involves the inversion of the sentence-initial auxiliary and the subject. When it is not possible to invert these two elements, the construction is a negative existential.[12] In other words, there are cases in which negative existential constructions do not have an acceptable non-inverted counterpart. Consider the examples in (4.42) in contrast to their acceptable negative existential counterparts in (4.43).

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12. The only exception to this claim is that negative auxiliary inversion constructions cannot undergo this inversion is in the case in which the subject is a negative polarity item and, in some varieties, an n-word.

(4.42) a. * Nothin' ain't you can do for 'em.   (AAE; Labov et al. 1968: 284)

      b. * No trouble ain't to make another trip.   (AAE; Martin 1993: 52)

(4.43) a. Ain't nothin' you can do for 'em.   (AAE; Labov et al. 1968: 284)

      b. Ain't no trouble to make another trip.   (AAE; Martin 1993: 52)

However, it is possible to invert the auxiliary and subject in some negative existentials, as in (4.44a), with its non-inverted example given in (4.44b).[13]

(4.44) a. Ain't nobody that's happy rich.   (AAE; Weldon 1994: 16)

      b. Nobody that's happy ain't rich.   (AAE; Weldon 1994: 16)

In comparison, it is possible to invert the negated auxiliary and subject in negative auxiliary inversion constructions. The idea here is that in these examples, the inversion of the negated auxiliary is undone. The subject occupying canonical subject position precedes the auxiliary before the movement that derives negative auxiliary inversion constructions occurs. The sentences in (4.45) are non-inverted counterparts of the negative auxiliary inversion constructions in (4.46). Recall from chapter 3, however, that while examples exhibiting negative auxiliary inversion are interpreted with negation having wide scope, the non-inverted counterparts have more interpretations available.

(4.45) a. Everybody didn't see the fight.   (WTE)

      b. Many people didn't go to the party.   (WTE)

      c. Everybody couldn't solve that problem.   (WTE)

(4.46) a. Didn't everybody see the fight.   (WTE)

      b. Didn't many people go to the party.   (WTE)

      c. Couldn't everybody solve that problem.   (WTE)

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13. The extent to which the existence of the non-inverted example is an issue for the robustness of the diagnostic, particularly for this example, is debatable. The string in (4.44a) could also be interpreted as a negative auxiliary inversion construction, so the availability of its non-inverted counterpart could be tied to this alternative interpretation. See also below about the acceptability of examples like (4.44b) in West Texas English.

This diagnostic test has some limitations with negative auxiliary inversion constructions when the subjects are certain types of indefinites. It fails in all varieties when the subject is a negative polarity item, such as one headed by *any*, as in (4.47a). In comparison, its inverted counterpart in (4.47b) is well-formed.

(4.47) a. * Anybody won't believe what I'm about to say. (WTE; Foreman 1999/2001: 21)

     b. Won't anybody believe what I'm about to say. (WTE; Foreman 1999/2001: 21)

This diagnostic test also fails for some varieties when the subject of the negative auxiliary inversion construction is an n-word. Recall from section 3.4.3 in the previous chapter that there is some variation with respect to whether non-inverted counterparts can surface when their subjects are n-words. In West Texas English, Foreman (1999, 1999/2001) observed that in the case in which the only negative elements in a sentence are an n-word subject and a negated auxiliary, as in (4.48a), the sentence is only marginally acceptable. Instead, the inverted counterpart in (4.48b) is strongly preferred.[14]

(4.48) a. ?* Nobody don't like you. (WTE; Foreman 1999/2001: 21)

     b. Don't nobody like you. (WTE; Foreman 1999/2001: 21)

This diagnostic test fails in certain cases in which the subject is an indefinite because its result is a construction in which a requirement of the subject is no longer being met. In the case of negative polarity items for all varieties and n-words for some varieties, the subject is no longer in the scope of its licensor when the test is conducted.

4.2.1.1 Summary

Distinguishing negative existentials from negative auxiliary inversion constructions can be easily done when the auxiliary is not ambiguous in its interpretation. The copula appears in negative existentials while other auxiliaries appear in negative auxiliary inversion constructions. In the

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14. Some varieties of African American English also disallow n-words to precede negated auxiliary (Sistrunk 1999).

presence of auxiliary *ain't*, which is ambiguous between the negative copula, the negative past tense marker corresponding to *didn't*, and the negative perfect auxiliary corresponding to *haven't*, there are three diagnostic tests we can apply to help us assign a structure. The most robust diagnostic is tag-question formation; the tag subject which follows negative existentials is an expletive while the tag subject which follows negative auxiliary inversion constructions is a pronoun that agrees with the thematic subject. Additional diagnostic tests that can be used but are less reliable for some varieties depending on whether an expletive can be inserted sentence-initially and whether the sentence-initial auxiliary can be inverted with the subject.

Given the structural differences between the two constructions and given the fact that there are speakers who exhibit the phenomenon of negative existentials in their grammars but lack negative auxiliary inversion, the analysis provided for negative auxiliary inversion constructions should not be extended to account for negative existential constructions. The existence of negative existentials does have a consequence for the analysis, however. Their availability in all varieties which exhibit negative auxiliary inversion requires us to posit a further difference between these varieties and varieties which do not exhibit either phenomenon, such as standard English. Varieties which do not exhibit either phenomenon require the canonical subject position to be filled with an overt expletive, and the EPP constraint is a strong constraint. Varieties which exhibit at least negative existentials must allow the EPP to be satisfied with a null expletive.[15]

4.2.2 Split subject constructions

Split subject constructions resemble negative auxiliary inversion constructions but have an additional element sentence-initially. The presence of this element in conjunction with the thematic subject is the reason these constructions are labelled as split subject constructions.[16] In the absence

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15. Alternative analyses are that these varieties are not subject to the EPP constraint or, if they are, the constraint is a soft constraint which interacts with another constraint to allow the constructions to surface. Both of these alternative analyses require us to reconsider the linearization options that give rise to the scopal interpretations which are empirically available for negative auxiliary inversion constructions and their inverted counterparts and which we derived in the semantics chapter.

16. I use the term "split subject construction" to refer to both transitive expletive constructions and partitive doubling constructions. In section 4.2.2.5.3, I discuss whether the two types of constructions should receive different analyses and the consequence such a split has for my analysis in section 4.2.2.5.4.

of this difference, the construction appears to be a negative auxiliary inversion construction, with a negated auxiliary and a quantificational or indefinite subject (Feagin 1979, Foreman 1999/2001, Zanuttini & Bernstein 2014). The additional element could be either an expletive or a pronominal element. It appears to be an expletive in examples in which it is *there* or *it*, as in (4.49). The sentence-initial element and the thematic subject are italicized in the following examples for easy reference.

(4.49) a. *There* can't *nobody* ride him.   (AppE; Montgomery & Hall 2004: 111)

      b. *There* didn' *no girl* go to the door with a boy.   (AppE; Feagin 1979: 241)

      c. They asked four men, but *there* didn't *anyone* want to leave their church.

                                                                             (AppE; Feagin 1979: 238)

      d. *It* ain't–*there* ain't *many* at the church–one church.   (AppE; Feagin 1979: 239)

The sentence-initial element appears to be a pronoun when it is *we* or *you*, as in (4.50). The pronominal element in these cases agrees with the thematic subject.

(4.50) a. *We* don't *any of us* need anything.   (AppE; Montgomery & Hall 2004: lxiv)

      b. … and *you* don't *none of y'all* work as hard as I do.

                                                                     (AppE; Zanuttini & Bernstein 2014: 152)

It is unclear whether the sentence-initial element is a pronoun or expletive when it is *they*, as in (4.51), since *they* is ambiguous between an expletive and a pronoun in all varieties which allow negative auxiliary inversion (Feagin 1979).

(4.51) a. … *they* didn' *nobody* live up there.   (AppE; Zanuttini & Bernstein 2014: 144)

      b. *They* didn't *nobody* like him.   (AppE; Feagin 1979: 238)

      c. *They* can't *many people* say that.   (AppE; Shearer 1998)

      d. *They* wouldn' *none of 'em* help me at all with her.   (AppE; Feagin 1979: 241)

      e. *They* didn't *any of them* want to go out.   (AppE; Montgomery & Hall 2004: 18)

      f. *They* wouldn't *nary one of them* go.   (AppE; Montgomery & Hall 2004: lxiv)

There are a few instances in which the sentence-initial element appears to be a pronoun but does not agree with the thematic subject, as in (4.52), in which *they* does not agree with the thematic subject *none of us*. In these cases, *they* is likely an expletive.[17]

(4.52) a. *They* didn't *none of us* ever get snakebit, but their work animal did.

(AppE; Montgomery & Hall 2004: lxiv)

  b. So *dey* didn't *none uv us* git no money.   (AAE; Twain's 1885 novel)

Similarly, in (4.53), the sentence-initial *it*, which agrees in person with the thematic subject *very many of 'em*, does not agree in number, suggesting that it is an expletive.

(4.53) No'm, *it* didn' *very many of 'em* dip snuff back then.   (AppE; Feagin 1979: 241)

While in the cases in (4.52) and (4.53), the discrepancy between the features of the sentence-initial element and canonical subject seemed to point to the sentence-initial element being an expletive, there is an example in which the sentence-initial element is a pronoun which is not homophonous with an expletive, the pronoun *we*, and which does not agree with the thematic subject. In (4.54), the first person plural pronoun does not agree with the thematic subject *nobody*.

(4.54) *We* don't *nobody* know how long we have.   (AppE; Montgomery & Hall 2004: lxiv)

Given the observation that they sometimes resemble expletives, sometimes pronouns, the sentence initial element has received different analyses in the literature. They are assumed to be dummy pronouns in Feagin (1979), expletives in Foreman (1999/2001) and Zanuttini & Bernstein (2014), and pronominal elements in Montgomery & Hall (2004), who label the construction as 'interposed pronouns.' I adopt Zanuttini & Bernstein's more theory-neutral label of 'split subject' construction to refer to the phenomenon.

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17. Notice, however, in the example in (4.52a), that the pronoun heading the nominal phrase in the appended sentence, *their*, is in plural third person form. The only element in the preceding clause that can be assigned plural third person features is the sentence-initial element if it were a pronoun. If the sentence-initial element is a pronoun rather than an expletive, the mismatch between its features and the thematic subject's is harder to account for.

Setting temporarily aside the issue of how to analyze this sentence-initial element, as a pronominal element or as an expletive, the discussion that follows presents the empirical landscape attested in the literature for the three varieties of English under discussion in this dissertation, West Texas English, African American English, and Appalachian English. I then turn to the evidence in favor of extending my analysis to split subject constructions and then to potential issues with extending the analysis. Finally, I return to a discussion on the nature of the sentence-initial element.

4.2.2.1 Split subjects in the literature

Split subject constructions are attested in Appalachian English and in older varieties of African American English in the literature. Their presence is not discussed in the literature for West Texas English. For Appalachian English, they are attested for some speakers in Feagin (1979), Shearer (1998), Montgomery & Hall (2004), Zanuttini & Bernstein (2014), Wood, Sigurðsson, et al. (2015). Split subject constructions are attested in the literature for African American English in the speech of older generations, such as in the Ex-Slave Recordings discussed in Bailey et al. (1991). Some of this data is reproduced in (4.55). Once again, emphasis on the expletive and the thematic subject is added for ease of reference.

(4.55)   a. But they'd give me a note so *there* wouldn' *nobody* interfere with me […]

(AAE; Bailey et al. 1991: 33)

  b. […] *there* couldn' *many of them* go to school […]   (AAE; Bailey et al. 1991: 34)

Split subject constructions are also present in some works of literature which try to represent the speech of their African American characters authentically by choosing constructions and orthography meant to be faithful to the features of their variety. Some examples are provided in (4.56).[18]

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18. The example in (4.56a) was first discussed in White-Sustaíta (2010). It is from Charles W. Chesnutt's story 'Mars Jeems's Nightmare,' published in a collection of stories, *The Conjure Woman*, in 1899. The example is spoken by Julius, a former slave.

The example in (4.56a) comes from another work by the same author, his novel 'House Behind the Cedars,' published in 1900, set in North and South Carolina a few years following the Civil War. The example is uttered by the character Plato, a young African American boy. This example was first discussed in Green (2002).

The third example, (4.56c), is from Mark Twain's novel *The Adventures of Huckleberry Finn*, published in 1885, set in the 1850's. The sentence in (4.56c) is spoken by Jim, the title character's African American companion. Additionally, more instances of split subject constructions can be found in the narrative in the voice of the titular character, who is

(4.56)   a.   *… dey* did n' *nobody* hab ter stan' ober 'em wid a rawhide er a hick'ry.

(AAE; Chesnutt's 1899 short story)

   b.   *Dey* don' *nobody* know whar, suh.   (AAE; Chesnutt's 1990 novel)

   c.   So *dey* didn't *none uv us* git no money.   (AAE; Twain's 1885 novel)

Split subjects are not attested in the speech of contemporary African American English speakers in the literature.[19] Some split subject constructions which were judged as unacceptable in these works are provided in (4.57). More unacceptable examples of this kind are available in Weldon (1994), Martin & Wolfram (1998), Parrott (2000), Green (2008), White-Sustaíta (2010).

(4.57)   a.   * *It* don't *nobody* like me.   (AAE; Weldon 1994: 11)

   b.   * *There* can't *nobody* tag you then.   (AAE; Weldon 1994: 12)

   c.   * *It* don't *nobody* be drinking tea.   (AAE; Green 2008)

   d.   * *There* can't *no man round here* get enough money to buy they own farm.

(AAE; Martin & Wolfram 1998: 27)

   e.   * They told me that *dey* didn't *none of the children* see anything…

(AAE; White-Sustaíta 2010: 439)

Given the observation that split subject constructions are most robustly attested in Appalachian English, the comparison between the construction and negative auxiliary inversion that follows is predominantly based on data from this variety.

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white. The examples are reproduced in (i), with the split subjects italicized for easy reference.

   (i)   a.   When he turned into a cloudbank it was awful dark for half a minute, and that was enough; *there* wouldn't *nothing* go wrong again for a week.   (Twain's 1885 novel)
   b.   Tom said we was right behind Jim's bed now, and we'd dig in under it, and when we got through *there* couldn't *nobody in the cabin* know there was any hole there, because Jim's counterpane hung down most to the ground, and you'd have to raise it up and look under to see the hole.   (Twain's 1885 novel)

   I thank Larry Horn for bringing the examples from *The Adventures of Huckleberry Finn* to my attention.

   19. I have, however, come across speakers who accept examples exhibiting split subjects as well-formed, so the presence of split subject constructions in the speech of African American English speakers does not appear to be altogether absent.

4.2.2.2 Similarities to negative auxiliary inversion constructions

The parallelism between split subject constructions and negative auxiliary inversion constructions is proposed to hold in Feagin (1979), Foreman (1999/2001), and, most explicitly, in Zanuttini & Bernstein (2014). In this section, I provide the motivation for this proposed parallelism.

The split subject construction shares many similarities with negative auxiliary inversion constructions. One of the first observations made is that either can be used to describe the same situation. Feagin (1979) points out that one of her interviewees used the negative auxiliary inversion construction in (4.58a) and, shortly afterwards, its split subject construction counterpart in (4.58b).

(4.58)   a.   Back in them days, didn nobody live there but just a little while, did they?

           (AppE; Feagin 1979: 238)

      b.   I mean, though, back in them days, they didn' nobody live up there.

           (AppE; Feagin 1979: 238)

Another one of the similarities split subject constructions share with negative auxiliary inversion constructions is that they are not restricted to occurring solely with the copula *be*. Different types of negated auxiliaries can occur in between the split subject. For instance, the negated auxiliaries *can't, didn't, don't, wouldn't*, and *won't* are present in the examples in (4.59).

(4.59)   a.   There can't nobody ride him.   (AppE; Montgomery & Hall 2004: 111)

      b.   There didn' no girl go to the door with a boy.   (AppE; Feagin 1979: 241)

      c.   We don't any of us need anything.   (AppE; Montgomery & Hall 2004: lxiv)

      d.   They wouldn' none of 'em help me at all with her.   (AppE; Feagin 1979: 241)

      e.   But they won't any of them fight us square.   (AppE; Montgomery & Hall 2004: 18)

As Zanuttini & Bernstein (2014) point out, the constructions are not licit in the absence of a negated auxiliary, as in (4.60). The ill-formed examples in (4.60a) and (4.60b) lack an auxiliary or modal.

(4.60)   a.   * They nobody like him.   (AppE; Zanuttini & Bernstein 2014: 149)

  b.   * They nobody know you're gone.   (AppE; Zanuttini & Bernstein 2014: 149)

A thorough study on the types of subjects that are possible in split subject constructions has yet to be reported in the literature, but the types of subjects that are attested in these constructions are also attested in negative auxiliary inversion constructions. Some examples are given in (4.61). Indefinite subjects such as n-words headed by *no*, as in (4.61a) and (4.61b), and negative polarity items headed by *any* are attested for split subject constructions, as in (4.61c). Quantificational subjects headed by *many* are also attested, as in (4.61d).

(4.61)   a. They didn't nobody like him.   (AppE; Feagin 1979: 238)

         b. There didn' no girl go to the door with a boy.   (AppE; Feagin 1979: 241)

         c. They asked four men, but there didn't anyone want to leave their church.

                                                                  (AppE; Feagin 1979: 238)

         d. They can't many people say that.   (AppE; Shearer 1998)

These same types of subjects are also attested in negative auxiliary inversion constructions, as in (4.62).

(4.62)   a. Back in them days, didn nobody live there but just a little while, did they?

                                                                  (AppE; Feagin 1979: 238)

         b. Wouldn't no gentleman act like that.   (WTE; Foreman 1999: 6)

         c. And won't anybody know who you are until I tell 'em. (AppE; Feagin 1979: 235)

         d. Didn't many boys in town like to hunt.   (AppE; Feagin 1979: 348)

Additionally, Zanuttini & Bernstein (2014) point out that, as in negative auxiliary inversion constructions, split subject constructions are unambiguously interpreted with negation having wide scope, as in (4.63).

(4.63)   They can't many people say that.   [¬ » *many*; **many* » ¬*]

In comparison, the non-inverted construction, (4.64), is ambiguous when intonation or a particular context does not serve to disambiguate the utterance. The wide scope interpretation of negation is still available, but the subject can also be interpreted as having wide scope.

(4.64) Many people can't say that.   [¬ » *many*; *many* » ¬]

The data provided in this section constitutes strong evidence in favor of treating split subject constructions in parallel with negative auxiliary inversion constructions. The analysis provided for negative auxiliary inversion in this dissertation, however, relies on a few properties which are not attested in the literature for split subject constructions. An investigation on whether all of the properties described in chapter 2 for negative auxiliary inversion also hold for split subject constructions needs to be conducted in order to ensure that extending the analysis provided here is justified. I discuss what further evidence is needed in the following section.

4.2.2.3 Additional evidence needed

The availability of strong quantificational subjects and of definite subjects in split subject constructions is not attested in the literature for any of the varieties of English which exhibit negative auxiliary inversion, Appalachian English, African American English, and West Texas English. On the basis of the data that *is* attested, Zanuttini & Bernstein (2014) characterize the subject restriction of split subject constructions as involving weak quantifiers or indefinites. If the parallel between the two constructions is to hold, however, and if the analysis of negative auxiliary inversion is to be extendable to split subjects, we expect strong quantifiers to also be possible. Additionally, we expect definite subjects to be ruled out and tag-question formation to target the canonical subject position. In the following section, I provide the judgments that would count as additional evidence in favor of extending the analysis of negative auxiliary inversion proposed in this dissertation to split subject constructions.[20]

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20. The focus in my dissertation is on describing negative auxiliary inversion in West Texas English and, as such, I did not conduct much fieldwork with speakers of other varieties of English. I therefore cannot provide definite answers to these questions here. Instead, I leave these issues as future work and hope that description of what we expect also inspires others to investigate these issues.

Strong quantifiers are expected to be possible subjects in split subject constructions, as in (4.65).

(4.65)   a. There didn't everybody see the fight.   (*expected judgment*)

         b. We can't every one of us beat him at chess.   (*expected judgment*)

         c. There won't all the students finish their work on time.   (*expected judgment*)

         d. They can't all of 'em get the answer right.   (*expected judgment*)

A preliminary investigation suggests that they are. Gregory Johnson II, the forementioned white speaker from Jonancy, Kentucky, judges the example in (4.66) as acceptable.

(4.66)   They won't all the kids eat their vegetables.   (AppE)

Definite subjects, as in (4.67), are expected to be unacceptable unless they involve emphasis.

(4.67)   a. * There didn't my friends see the fight.   (*expected judgment*)

         b. * There can't Jamie beat her at chess.   (*expected judgment*)

         c. * There won't the students finish their work on time.   (*expected judgment*)

Recall that tag-question formation targets the canonical subject position along with the polarity of the sentence. If split subject constructions are negative auxiliary inversion constructions with an additional sentence-initial element, the thematic subject should be in canonical subject position while the sentence-initial element should be in a higher position. We therefore expect the tag subject of an appended tag-question to agree in features with the thematic subject, as in (4.68), not with the sentence-initial element, as in (4.69).

(4.68)   a. There didn't no girl need extra help, did she?   (*expected judgment*)

         b. There can't many of them see the screen, can they?   (*expected judgment*)

         c. There won't all my friends help me move, will they?   (*expected judgment*)

(4.69)   a. * There didn't no girl need extra help, did there?   (*expected judgment*)

         b. * There can't many of them see the screen, can there?   (*expected judgment*)

    c.   * There won't all my friends help me move, will there?   (*expected judgment*)

The examples have unambiguous expletive *there* because it is, of course, difficult to tell whether the tag subject is agreeing with the thematic subject or the sentence-initial element when the two elements agree themselves, as in (4.70).

(4.70)   a.   We don't any of us need anything, do we?   (*expected judgment*)

        b.   You don't none of y'all work as hard as I do, do you?   (*expected judgment*)

        c.   They wouldn' none of 'em help me at all with her, would they?(*expected judgment*)

The only tag-question judgment I have collected thus far, (4.71a), is of this type. The tag-subject of the appended tag question in this example is *they*. The only evidence in favor of this element being a pronominal element which agrees with the thematic subject rather than an expletive is the observation that, in the negative auxiliary inversion counterpart of (4.71a), the tag-subject cannot be *there*, as in (4.71b), but can be *they*, as in (4.71c). This observation counts as evidence because expletives *there* and *they* are generally interchangeable when the tag-subject agrees with an expletive.

(4.71)   a.   They can't everybody win the jackpot, can they?   (AppE)

        b.   * Can't everybody win the jackpot, can there?   (AppE)

        c.   Can't everybody win the jackpot, can they?   (AppE)

In the case in which there is a mismatch in the agreement between the sentence-initial element and the thematic subject, we expect the tag-subject to agree with the thematic subject, as in (4.72).

(4.72)   a.   They didn't none of us ever get snakebit, did we?   (*expected judgment*)

        b.   They didn't none of us get no money, did we?   (*expected judgment*)

        c.   It didn't very many of them dip snuff back then, did they?   (*expected judgment*)

There is evidence that an auxiliary needs to intervene between the split subject, as we saw in (4.60), but we need additional evidence that negation is necessary and, furthermore, that negation

must be the morpheme *-n't*. In other words, we expect the construction to be unacceptable when negation is not present, as in (4.73).

(4.73)　a.　* There would nobody need no help.　　　　　　　(*expected judgment*)

　　　　b.　* There can many of them see the screen.　　　　　(*expected judgment*)

　　　　c.　* There will all my friends help me move.　　　　　(*expected judgment*)

We also expect split subject constructions to be unacceptable when negation is present but when it is not inflected *-n't*, assumed here to be a head, as in (4.74) and (4.75).

(4.74)　a.　* There would not nobody need no help.　　　　　(*expected judgment*)

　　　　b.　* There cannot many of them see the screen.　　　　(*expected judgment*)

　　　　c.　* There will not all my friends help me move.　　　（*expected judgment*)

(4.75)　a.　* There would nobody not need no help.　　　　　(*expected judgment*)

　　　　b.　* There can many of them not see the screen.　　　　(*expected judgment*)

　　　　c.　* There will all my friends not help me move.　　　(*expected judgment*)

4.2.2.4　Extending the analysis to split subject constructions

Assuming that these predictions are borne out and that we find adequate evidence in favor of extending the analysis of negative auxiliary inversion constructions to split subject constructions, the syntactic structure of a split subject construction would be as in (4.76), in which we temporarily abstract over the labels of the topmost projections.[21]

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21. We will see later that the modal *can* is generated lower. This simplified tree suffices for the purposes of the discussion at hand.

(4.76)
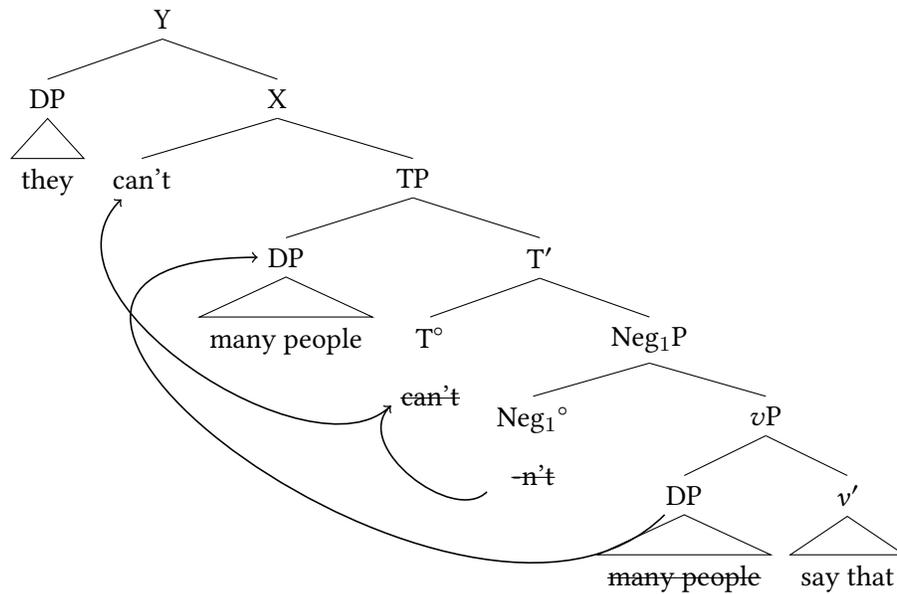
As in negative auxiliary inversion constructions, the subject occupies canonical subject position, SpecTP, and negation moves to the Neg_2 projection, a movement that is allowed by the Revised Principle of Scope Economy because it results in negation changing the order of operators in the structure. Unlike in negative auxiliary inversion constructions, a sentence-initial element is also inserted in a higher projection.

Previous analyses differ with respect to which position hosts the sentence-initial element. In Foreman (1999/2001), it is hosted in a higher position available for certain types of subjects while in Zanuttini & Bernstein (2014), it is hosted in the specifier position of the higher negative projection. I adopt Zanuttini & Bernstein's proposal that the sentence-initial element is inserted in the specifier position of Neg_2P, as in (4.77).

(4.77)
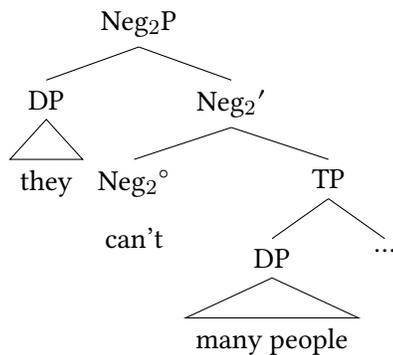
The higher negative projection, then, can project a specifier position which can host the sentence-initial element.[22]

Previous analyses also differ with respect to the relation they posit between the split subject components. In Foreman (1999/2001), the sentence-initial element is an expletive that has no relation to the thematic subject. In Zanuttini & Bernstein (2014), the sentence-initial element is also an expletive, but it is derived by the movement of part of the feature bundle of the thematic subject. A subset of the features of the thematic subject raise to the higher projection and are spelled out as the sentence-initial element. A similar proposal is adopted in Wood, Sigurðsson, et al. (2015), where the sentence-initial element is a bundle of the features of the canonical subject. Part of the motivation for proposing a relationship between the two elements involves the observation that the two elements are always in a local relationship. The sentence-initial element and the thematic subject cannot be separated by a clause boundary, as in the unattested example in (4.78).

(4.78)   * They won't seem nobody's in the garden.   (AppE; Zanuttini & Bernstein 2014: 170)

---

22. The alternative analysis hosts the sentence-initial element in another structural position available for referential subjects (Foreman 1999/2001). There are two structural positions available for subjects and the sentence-initial element makes use of the higher projection while the thematic subject is in canonical subject position.

(i)
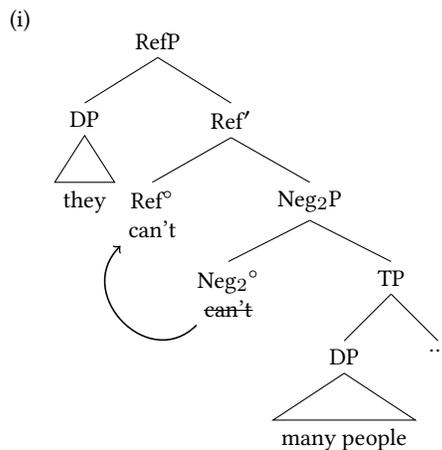
The higher referential subject projection is used to explain the subject restriction in negative auxiliary inversion constructions in Foreman's analysis. It hosts the types of subjects that cannot appear in negative auxiliary inversion constructions, such as definite subjects. These subjects are not possible subjects in the construction because they must move to the higher subject projection. The relevant property of these subjects is their referentiality. As the author himself points out, a consequence of using this projection as the host for the sentence-initial element of split subject constructions is a commitment that the expletives *they, there,* and *it* are referential, or at least bear a formal referential feature, a fairly unintuitive proposal given the nature of expletives. A comparison of Foreman's analysis to the analysis presented in this dissertation is provided in chapter 5.

Empirically, the sentence-initial element does not affect scope because negation has unambiguous wide scope in split subject constructions. The feature bundle that is spelled out sentence-initially must not have quantificational force. This is not problematic for any previous theoretical proposal of split subject constructions, including the one that posits a movement relationship between the sentence-initial element and the canonical subject. As just mentioned, the features which compose the sentence-initial element are theta-features and such features do not have quantificational force. However, the presence of the sentence-initial element needs to be addressed in a discussion of the parallel of split subject constructions to negative auxiliary inversion constructions because it does have an effect on linearization. Recall scope transparency, the constraint which, in order to be satisfied, requires that the order of elements interpreted at LF match the order in which these elements are spelled out at PF. This constraint accounts for the lack of inverse scope of negative auxiliary inversion constructions and, together with a few other constraints, accounts for the paradigm of available and unavailable interpretations of negative auxiliary inversion constructions and their non-inverted counterparts.

Bobaljik & Wurmbrand's (2012) discussion of expletives can be straightforwardly adapted to account for the sentence-initial element in split subject constructions. The authors' first assumption is that expletives are not part of syntactic structure and therefore not part of the logical form which is to be linearized. Instead, expletives are inserted at PF and do not, in and of themselves, disrupt ScoT with their presence. The LF/PF pair corresponding to a split subject construction is provided in (4.79).

(4.79) LF: [didn't] everybody [d̶i̶d̶n̶'̶t̶] go
         PF: they [didn't] everybody [d̶i̶d̶n̶'̶t̶] go

This LF/PF pair shows the assumed movement of the negated auxiliary, the higher copy being interpreted, and, additionally, the presence of an expletive at PF. Despite the fact that the presence of the expletive does not incur a ScoT violation, there is a cost associated with it. The constraint this LF/PF pair violates is DEP, as in (4.80).

(4.80)   *DEP*   (Bobaljik & Wurmbrand 2012: 388)

      Don't insert expletive pronoun.

The interpretation in (4.79) is the same interpretation that gives rise to the negative auxiliary inversion construction and to the inverse scope of its non-inverted counterpart. Before showing how the LF/PF in (4.79) becomes a winning candidate for an additional possible linearization, let us review the candidates with which it competes and the constraints already at work in our grammar.

The LF/PF pair corresponding to the NAI construction is in (4.81a).[23] This pair satisfies the EPP – *everybody* is in the SpecTP position – and it is scope transparent, but it does not exhibit canonical word order. Its competing candidate in (4.81b) also obeys the EPP and while it is not scope transparent, it does exhibit canonical word order. Both competitors obey the non-violable EPP constraint and each obeys one of the soft constraints while violating the other. Both LF/PF pairs emerge as winning candidates, so both PFs are possible linearizations of the interpretation.

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

✓?		LF/PF	EPP	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			

Adding the constraint DEP to the set of soft constraints results in yet another possible linearization – that which corresponds to the split subject construction, as in (4.82c).

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23. NPILic, the non-violable constraint which requires that NPIs are licensed, is excluded from these charts for reasons of simplicity.

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

	✓?		LF/PF	EPP	ScoT	CWO	DEP
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				
c.	✓	LF1:	[didn't] everybody [~~didn't~~] go	✓	✓	✓	✗
		PF3: they [didn't] everybody [~~didn't~~] go					

This LF/PF pair violates one soft constraint, DEP, because an expletive is inserted at PF, while obeying both scope transparency and canonical word order.[24] The other two candidates obey this new constraint since no expletive is present in their PFs. Since all LF/PF pairs in (4.82) induce exactly one violation of a soft constraint, all three pairs emerge as winning candidates and there are three ways to linearize the LF in which negation is interpreted first.

The fourth possible LF/PF pair, one in which negation is pronounced low but an expletive is inserted, as in (4.83d), is not a possible linearization because in addition to violating DEP, it is also

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24. I assume that the LF/PF pair in (4.82c) obeys CWO, the constraint requiring that canonical word order be obeyed. Recall from the previous chapter that when we tried to define the CWO constraint more rigorously, we discussed several possibilities: requiring that the sentence-initial element be a phrase rather than a head, requiring that all of the obligatory projections are filled, or requiring that the order of elements at PF matches the order of obligatory projections. It did not matter which of these implementations we pursued in the previous chapter, but there are consequences here. The LF/PF pair in (c) may or may not obey CWO depending on which implementation is pursued. CWO is obeyed by the split subject construction LF/PF pair when the constraint requires that a sentence begin with a phrase and when the constraint requires that the order at PF matches the order of obligatory projections. CWO is disobeyed when the constraint requires that all of the obligatory projections be filled because T° is empty. However, even if this third option were discovered to be the right implementation and the LF/PF pair disobeyed CWO, its emergence as a possible output could instead to be due to interaction with another soft constraint. A possibility for another constraint to add would be a violable EPP constraint on the higher negative projection, EPP_{Neg_2}. Even though the LF/PF pair would now induce two violations, as in (ic) below, the other competing pairs would also induce the same number since they both disobey the new constraint. All three LF/PF pairs would continue to be possible outputs because they would continue to be tied in the number of soft constraints they obey.

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

	✓?		LF/PF	EPP	ScoT	CWO	DEP	EPP_{Neg_2}
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					
c.	✓	LF1:	[didn't] everybody [~~didn't~~] go	✓	✓	✗	✗	✓
		PF3: they [didn't] everybody [~~didn't~~] go						

Adding this new constraint has the welcome consequence that it would make the cross-dialectal difference easier to explain for varieties which allow negative auxiliary inversion constructions but do not allow split subject constructions. These varieties would not have an EPP_{Neg_2} constraint, so the LF/PF pair in which an expletive is present is never a winning candidate.

not scope transparent.

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

	✓?		LF/PF	EPP	ScoT	CWO	DEP
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				
c.	✓	LF1:	[didn't] everybody [~~didn't~~] go	✓	✓	✓	✗
		PF3: they [didn't] everybody [~~didn't~~] go					
d.	✗	LF1:	[didn't] everybody [~~didn't~~] go	✓	✗	✗	✗
		PF4: they [~~didn't~~] everybody [didn't] go					

4.2.2.5   Additional considerations

#### 4.2.2.5.1   A consequence of adopting Zanuttini and Bernstein's analysis

In the previous sections, I accounted for split subject constructions by extending the analysis provided for negative auxiliary inversion to this construction and, additionally, I accounted for the additional sentence-initial element by adopting Zanuttini & Bernstein's proposal that it is derived by movement of a feature bundle of the thematic subject. Zanuttini & Bernstein's proposal interacts with the assumptions I have made for negative auxiliary inversion and in this section, I turn to discussing some consequences. The main issue is tied to the fact that in their analysis, the movement that results in the sentence-initial element is triggered by the higher negative projection. Since the movement is feature-driven, it is not subject to the Revised Principle of Scope Economy. Recall the assumption that the principle applies only to optional movement, where optional movement is defined as movement that is not feature-driven. The movement of the negated auxiliary is subject to the Revised Principle of Scope Economy because it is not triggered to the higher projection. Making the movement of the negated auxiliary optional was the strategy used to rule it out from happening over definite subjects.

Since the movement of the negated auxiliary is optional, it is, without further consideration, pos-

sible to derive unattested sentences. The examples in (4.84) can be derived when Neg$_2$ is present, head movement does not occur, but a sentence-initial element is nonetheless inserted. Part of the structural representation of (4.84) is given in (4.85).

(4.84)   a.   * There many people can't say that.

   b.   * There Jamie can't say that.

(4.85)
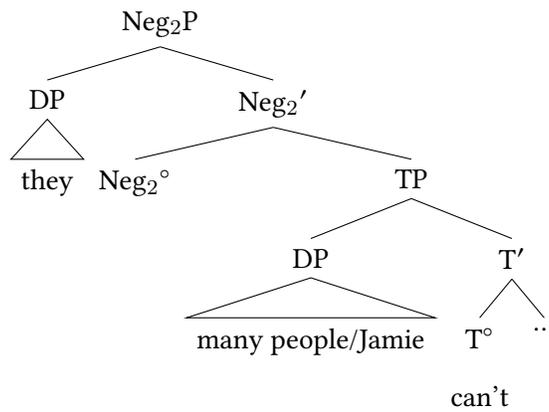
Since these examples are not attested, the availability of the sentence-initial element appears to be contingent on the movement of the negated auxiliary, an observation initially made in Zanuttini & Bernstein (2014). The specifier position seems to only be available in the case in which Neg$_2$° is filled. This apparent case of overgeneration can actually be explained without further stipulation when considering the interaction of economy constraints in order to linearize logical forms in our grammar. As just discussed, the sentence in (4.84a) is not a possible output in the case in which negation is interpreted high, as in the LF/PF pair in (4.86).

(4.86)   LF: [can't] many people [~~can't~~] say that
         PF: they [~~can't~~] many people [can't] say that

This derivation violates both DEP and ScoT so its other competitors, the ones that obey one or both of these constraints, will instead win out as the three possible outputs.[25]

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25. The PF also likely violates CWO and, if EPP$_{Neg_2}$ is also part of our grammar, the PF must violate CWO, as in (ib) below, in order to be a losing candidate.

(4.84a) is also not a possible linearization of an interpretation in which negation is interpreted low, as in the LF/PF pair in (4.87).

(4.87) LF: [~~can't~~] many people [can't] say that

  PF: they [~~can't~~] many people [can't] say that

Even though this LF/PF pair obeys ScoT, it violates DEP, so the LF/PF pair lacking the expletive will instead win out.[26]

4.2.2.5.2 Positive instances of split subject constructions?

There are some instances of apparent split subject constructions which lack negation. Some involve the verb *be*, as in (4.88a)-(4.88b). Some involve the future tense marker *will* in its inflected form, as in (4.88c) and (4.88d). Some involve modals such as *can, may,* the inflected form of *would*, and the inflected form of the perfect aspect marker *had*. The examples containing modals are reproduced in (4.88e)-(4.88i).

(4.88) a. *They* were *both of them* in the first religious organization that was ever held in Cades Cove.   (AppE; Montgomery & Hall 2004: lxiv)

  b. *They* was *some of them* higher than others.   (AppE; Montgomery & Hall 2004: lxiv)

  c. *We*'ll *ever one* have a big time.   (AppE; Zanuttini & Bernstein 2014: 149)

(i) LF1: [can't] many people [~~can't~~] say that

✓?		LF/PF	EPP	ScoT	CWO	DEP	EPP$_{Neg2}$
a. ✓	LF1:	[can't] many people [~~can't~~] say that	✓	✗	✓	✓	✗
	PF2:	[~~can't~~] many people [can't] say that					
b. ✗	LF1:	[can't] many people [~~can't~~] say that	✓	✗	✗	✗	✓
	PF3: they [~~can't~~] many people [can't] say that						

26. As mentioned in the previous footnote, the PF also likely violates CWO and, if EPP$_{Neg2}$ is part of the grammar, must violate CWO in order to be ruled out, as in (ib) below.

(i) LF2: [~~can't~~] many people [can't] say that

✓?		LF/PF	EPP	ScoT	CWO	DEP	EPP$_{Neg2}$
a. ✓	LF2:	[~~can't~~] many people [can't] say that	✓	✓	✓	✓	✗
	PF2:	[~~can't~~] many people [can't] say that					
b. ✗	LF2:	[~~can't~~] many people [can't] say that	✓	✓	✗	✗	✓
	PF3: they [~~can't~~] many people [can't] say that						

    d. *You*'ll *ever one* have a big time.   (AppE; Zanuttini & Bernstein 2014: 149)

    e. *They* can *every one* sing.   (AppE; Montgomery & Hall 2004: lxiv)

    f. *They* may *ever' one of them* be down up there. (AppE; Montgomery & Hall 2004: lxiv)

    g. *They*'d *some* go to the stands, you know, and generally two of us drove all the time.

                                                                 (AppE; Montgomery & Hall 2004: lxiv)

    h. *There*'d *somebody* come around with a truck once in a while.

                                                                   (AppE; Montgomery & Hall 2004: lxiv)

    i. As far as I'm concerned, *there*'s *nobody* never been on the moon. I don't believe they

      have.   (AppE; Feagin 1979: 239)

The presence of this data is surprising because positive counterparts of negative auxiliary inversion constructions are unattested and because, on the basis of the parallel proposed to hold between the two constructions, we hypothesized in section 4.2.2.3 that positive split subject constructions should be unacceptable in the unjudged examples provided in (4.73).

The last example attested in (4.88), sentence (4.88i), is particularly interesting because the sentence that follows the construction has an embedded elided sentence which refers to the split subject construction. In this elided sentence, *they have*, the aspectual marker shows plural agreement, which indicates that the speaker is using *they* to refer to the subject *nobody*. Were the split subject construction to be more similar to an existential construction, involving a copula, we would have expected the elided sentence to have been *there has*, as in the unattested (4.89). The subject would instead have been an expletive and the perfect aspect marker would have agreed in number with the expletive.

(4.89)   As far as I'm concerned, there's nobody never been on the moon. I don't believe there

        has.   (*unattested*)

The agreement between the thematic subject and the subject of the elided sentence in (4.88i) suggests that *nobody* and not *there* is in canonical subject position.

Another observation to be made about the examples in (4.88) is that many of the thematic subjects

in the sentences are strong quantifiers. Strong quantifier *both of them* is in (4.88a) and subjects headed by *every* are in (4.88c)-(4.88f). Recall that strong quantifiers cannot appear in existential constructions, suggesting that they cannot remain in a lower projection.[27] Further evidence that these subjects, as well as the indefinites, are in canonical subject position could be garnered with tag-question formation. If they are in this structural position, we expect the examples in (4.90) to be acceptable.

(4.90)   a.   There can everybody sing, can't they?   (*expected judgment*)

         b.   There can every girl dance, can't she?   (*expected judgment*)

         c.   There'd some man come around with a truck, wouldn't he?   (*expected judgment*)

However, if these subjects are in canonical subject position, extending the analysis provided for negative auxiliary inversion to these constructions brings up a few issues. Considering just the Revised Principle of Scope Economy, it would not be surprising that positive modals interact scopally with the types of subjects that are attested in the positive examples in (4.88). Modals are scope-bearing elements that should be able to interact with quantificational subjects. Similarly, depending on the semantics of the future tense marker, it could also interact with quantificational subjects. But the copula and comparative verb *be* are not obviously scope-bearing and yet they are possible, as in (4.88a) and (4.88b), respectively. Furthermore, we already observed that a scope-bearing auxiliary cannot surface sentence-initially in the absence of negation, as in (4.91b).

(4.91)   a.   They can every one sing.   (AppE; Montgomery & Hall 2004: lxiv)

         b.   * Can everyone beat 'em.   (WTE)

Given the limited data we currently have access to, there are multiple possible analyses we can consider:

(i) The apparent positive split subject constructions in (4.88) are positive counterparts of negative auxiliary inversion constructions but, unlike negative auxiliary inversion constructions,

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27. Note, however, that *both* can head the subject of an existential sentence for some speakers. This is not the case for *every*, a quantifier which cannot head the subject of an existential sentence.

they obligatorily co-occur with expletives. Under this analysis, the projection that hosts the negated auxiliary in negative auxiliary inversion constructions, proposed to be $Neg_2°$, does not need to be inherently negative but would instead be able to host non-negative heads as well. Laka (1990, 1994) provides an analysis of negative concord which involves a higher projection for the negative element and extends this projection to allow positive elements, such as empathic *do*. However, despite this prior work setting a precedent for a projection accounting for elements with negative and positive polarity, split subject constructions are not associated with the presence of emphasis so it is unclear which property of the auxiliary would allow it to raise to the higher projection. An advantage of adopting an analysis in which auxiliaries raise to the same projection to account for the attested sentences is that split subject constructions would be more similar to transitive expletive constructions in Icelandic and other Germanic languages. Transitive expletive constructions in these languages are not restricted to negative sentences.

(ii) The apparent positive split subject constructions in (4.88) are derived by a different mechanism and are in fact not positive split subject constructions. One possibility we discuss is that they are appositives, extending Feagin's (1979) suggestion. Another possibility we discuss is that some of these positive examples are more similar to floating quantifiers, following Zanuttini & Bernstein (2014).

a. The appositive option:

When Feagin (1979) introduces the negative split subject constructions we've seen, she suggests two analyses for them. They could be negative auxiliary inversion constructions with an expletive, as we've treated them, or they could be appositives. Appositives would have intonational breaks surrounding the apposed subject, which in writing would be indicated with commas as the author does in (4.92b).

(4.92) a. They didn't nobody like him.   (AppE; Feagin 1979: 238)

      b. They didn't, nobody, like him.   (AppE; Feagin 1979: 238)

Extending this suggestion to the positive sentences in (4.88), it is possible that these ex-

amples are appositives and would be better represented in writing as in (4.93).

(4.93)   They can, every one, sing.

However, since all of the examples from (4.88) are provided in writing, we would have expected the transcribers to indicate these intonational breaks with commas.

b. The floating quantifier option:

Zanuttini & Bernstein (2014) address most of the examples in (4.88) and, on the basis of some of their properties, conclude that they should not receive the same analysis as split subject constructions. The authors focus their discussion of split subject constructions on cases in which the lexical verb is transitive, the subject has a nominal element rather than a partitive one, and negation is present. Some examples of the constructions they discuss are reproduced in (4.94).

(4.94)   a. They can't nobody say I don't do for momma.

(AppE; Zanuttini & Bernstein 2014: 151)

b. There didn't no woman dig a grave in the garden.

(AppE; Zanuttini & Bernstein 2014: 153)

The authors discuss examples containing the subject *ever one*, *ever' one*, and *every one*, examples (4.88c)-(4.88e), and point out that in addition to their being attested in positive sentences, they have two other properties which make them more similar to floating quantifier constructions. One property is that the sentence-initial element and subject can be adjacent, as in (4.95). An intervening modal or auxiliary is not necessary in these examples.

(4.95)   They every one rallied.   (AppE; Montgomery & Hall 2004)

Another property is that these two elements can be adjacent in object positions, as well, as in (4.96).[28]

_____

28. While it could be that *everyone* in (4.96) is in object position, another possible interpretation for the string is that

(4.96)   I knew them everyone.   (AppE; Montgomery & Hall 2004)

On the basis of their properties, the authors suggest that these constructions are more similar to floating quantifiers than they are to split subject constructions and conclude that they should receive a different analysis.

In terms of the examples containing subjects with partitive phrases, examples (4.88a), (4.88b), and (4.88f), the authors point out that not only are sentences of this type possible in the absence of negation, but they are available to a greater number of speakers than split subject constructions are.[29] There are speakers who accept examples in which the subject has a partitive phrase but who do not accept split subject constructions or negative auxiliary inversion constructions. The possibility of this distinction is evidence that constructions with partitive subjects are derived by a different mechanism.

Another observation the authors make is that the majority of the lexical predicates in the positive examples are intransitive. This distinction is relevant for them, since they focus on split subject constructions that have transitive predicates and that therefore bear a closer resemblance to transitive expletive constructions in other languages. In our case, the distinction is less relevant because negative auxiliary inversion constructions do not always involve a transitive verb. The examples in (4.97) involve intransitive predicates rather than transitive ones. If split subject constructions are negative auxiliary inversion constructions with a sentence-initial expletive, we expect split subject constructions to be able to involve intransitive verbs as well.

(4.97)   a. Don't nobody live there.   (WTE; Foreman 1999: 6)

         b. I guess, cain't no man live forever, can he?   (WTE; Foreman 1999: 9)

---

everyone is an appositive used in a similar way as the famous Tiny Tim quote from Charles Dickens' *A Christmas Carol*, given in (i). I thank Larry Horn for suggesting this parallel interpretation.

(i)   God bless us, every one.

29. Their proposal to divide split subject constructions into different types of constructions which receive different analyses is discussed shortly in section 4.2.2.5.3.

c. Didn't no more than three people come to the party.

(WTE; Foreman 1999: 14)

4.2.2.5.3 Evidence for two types of split subject constructions

Zanuttini and her collaborators propose dividing split subject constructions into two types of constructions. Examples whose thematic subjects are nominal, as in (4.98), are transitive expletive constructions (Zanuttini & Bernstein 2014).

(4.98) a. There can't nobody ride him. (AppE; Montgomery & Hall 2004: 111)

  b. They didn't nobody like him. (AppE; Feagin 1979: 238)

  c. There didn' no girl go to the door with a boy. (AppE; Feagin 1979: 241)

  d. They asked four men, but there didn't anyone want to leave their church.

(AppE; Feagin 1979: 238)

  e. They can't many people say that. (AppE; Shearer 1998)

Examples whose thematic subjects include a partitive *of*, as in (4.99), are partitive doubling constructions (Zanuttini & Bernstein 2014, Wood, Sigurðsson, et al. 2015).

(4.99) a. We don't any of us need anything. (AppE; Montgomery & Hall 2004: lxiv)

  b. … and you don't none of y'all work as hard as I do.

(AppE; Zanuttini & Bernstein 2014: 152)

  c. They wouldn' none of 'em help me at all with her. (AppE; Feagin 1979: 241)

  d. They didn't any of them want to go out. (AppE; Montgomery & Hall 2004: 18)

  e. They wouldn't nary one of them go. (AppE; Montgomery & Hall 2004: lxiv)

Recall Zanuttini & Bernstein's (2014) proposal that split subject constructions are negative auxiliary inversion constructions with a sentence-initial expletive, a proposal on which we've built in this chapter. At this point, we can be more specific about their assumptions. The authors argue

for only the transitive expletive constructions of Appalachian English being derived in this way. The partitive doubling constructions receive a different analysis.

Motivation for positing two analyses

Besides the components of the subject – whether it contains a nominal component or a partitive phrase – the authors outline a few other differences between the two constructions, some of which are discussed here. The authors state that partitive doubling constructions are available to speakers who do not have transitive expletive constructions and that, unlike transitive expletive constructions, they are not restricted to negative contexts. These two differences support the authors' proposal that transitive expletive constructions are, for Appalachian English as they are for other languages which allow them, correlated with V-to-T movement. More specifically, the availability of transitive expletive constructions is tied to the existence of a split inflectional domain in the languages which allow it and the movement of the tense-bearing element through at least two head positions within the split inflectional domain.[30]

Analysis of transitive expletive constructions

The authors propose that the derivation of transitive expletive constructions involve the same movement of the negated auxiliary which derive negative auxiliary inversion constructions, along with an additional movement which accounts for the presence of the pronominal element. The sentence-initial element is an expletive that is derived by movement of part of the theta-features of the subject. As mentioned above, the movement of the negated auxiliary is successive head movement through multiple head positions in a split inflectional domain.

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30. Another interesting difference between transitive expletive constructions and partitive doubling constructions discussed in Zanuttini & Bernstein is that the latter allows only a specific interpretation for the sentence-initial element while the former does not. In partitive doubling constructions, the sentence-initial element ranges only over the set of people under discussion. For example, in (i) below, the sentence is true for a specific set of people that is salient in the context. Out of these people, none of them can say that the speaker doesn't do anything for her mother.

(i)   They can't none of them say I don't do for momma.   (AppE; Zanuttini & Bernstein 2014: 151)

In contrast, the minimal counterpart with nominal subject *nobody*, given in (ii), could also be interpreted more generally. In addition to the interpretation available above, it can also be interpreted as referring to anybody at all. Nobody at all, not just the set of people under consideration, can say that the speaker doesn't do anything for her mother.

(ii)   They can't nobody say I don't do for momma.   (AppE; Zanuttini & Bernstein 2014: 151)

Analysis of partitive doubling constructions

In comparison, the authors do not assume partitive doubling constructions to be derived by movement of the negated auxiliary. Another difference is in the nature of the sentence-initial element. In Wood, Sigurðsson, et al. (2015), work which builds on the two types of split subject constructions in Appalachian English, the authors propose the sentence-initial element to be a copy of the pronominal DP that is contained within the partitive subject. The element is still derived by movement, but it is movement of the whole DP rather than of a feature bundle. The two copies of the DP are valued with case along the course of the derivation and when the case assigned to these two copies differs, as it does in our Appalachian English examples, both copies are pronounced.[31]

4.2.2.5.4 Consequence of the two analyses for negative auxiliary inversion

This distinction of split subject constructions into two phenomena calls into question our treatment of negative auxiliary inversion constructions. In previous chapters, we did not distinguish between nominal subjects and partitive subjects, both of which are possible in negative auxiliary inversion constructions. Examples containing nominal subjects similar to the ones we find in transitive expletive constructions are given in (4.100) while examples containing partitive subjects similar to the ones we find in partitive doubling constructions are given in (4.101).

(4.100)   a. Didn't nobody get hurt or nothin'.   (AppE; Wolfram & Christian 1976: 113)

b. Didn't many people live there then.   (WTE; Foreman 1999: 7)

c. Didn't all the students show up.   (AAE; Green 2014: 130)

(4.101)   a. Didn't none of us ever learn that.   (AppE; Feagin 1979: 235)

b. Don't many of them live around here.   (AAE; Labov et al. 1968: 286)

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31. The authors assumes that the tense projection, T, has features which need to be valued in the course of the derivation. Another difference for them between the two constructions has to do with a difference in which of the unvalued features on T probes first. Transitive expletive constructions are derived when the person feature of T probes first whereas partitive doubling constructions are derived when the number feature of T probes first. In either case, whether the person feature or the number feature probes, there remains the option of moving the entire thematic subject and spelling out just one copy in its moved position rather than spelling out multiple copies. In this work, the authors do not assume, as Zanuttini & Bernstein (2014) do, that transitive expletive constructions involve movement past TP.

    c. Cain't all o' ya go at once.   (WTE; Foreman 1999: 7)

Both types of constructions receive the same analysis in this dissertation. The movement of the negated auxiliary is subject to the Revised Principle of Scope Economy; it happens only when the movement has an effect on interpretation.

Given the existence of two types of split subject constructions, it is possible that we've mistakenly conflated two types of negative auxiliary inversion constructions. Future studies should determine whether a distinction exists for negative auxiliary inversion constructions. Since some speakers of English allow partitive doubling constructions but do not allow transitive expletive constructions or negative auxiliary inversion constructions, we expect to find speakers of English who allow negative auxiliary inversion constructions with partitive subjects but not with nominal subjects. Such a finding could also lead to an investigation of which of the two possible parallel analyses for split subject constructions should be extended to examples in which the subject of negative auxiliary inversion constructions contains both a nominal and a partitive *of*, as in (4.102).[32]

(4.102)   a. Ain't none of the students done their homework.   (WTE; Foreman 1999: 3)

           b. Won't none of the students go to the party.   (WTE; Foreman 1999: 6)

In this section, I considered whether the analysis provided for negative auxiliary inversion in the previous chapters can be extended to account for other phenomena that are attested in varieties of English which allow negative auxiliary inversion. I discussed negative existential constructions first and concluded that this phenomenon does not involve movement that is subject to principles of scope economy. Next, I investigated split subject constructions and, building heavily on Zanuttini & Bernstein's (2014) work, determined that the analysis of negative auxiliary inversion can be extended to account for this phenomenon. I also discussed some issues with extending the analysis, including the possible division of split subjects into two types, transitive expletive constructions and partitive doubling constructions.

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32. In Zanuttini & Bernstein, the authors focus on sentences which contain a partitive phrase but which lack a nominal element. The subjects in the examples in (4.102) contain both a partitive phrase and a nominal element *the students*.

4.3 Extending the analysis crosslinguistically

Next, I turn to exploring whether the analysis provided for negative auxiliary inversion in this dissertation can be extended to account for phenomena in varieties of English in which negative auxiliary inversion is not attested, particularly because the phenomena I discuss, *Not*-initial constructions and canonical negative inversion, are both present in varieties of English which exhibit NAI. I discuss *Not*-initial constructions in section 4.3.1 and canonical negative inversion in section 4.3.2.

4.3.1 *Not*-initial constructions in standard English

While negative auxiliary inversion is not present in standard English, a construction which has received an analogous analysis in Foreman (1999, 1999/2001) is the *Not*-initial construction, which is available in all varieties of English.[33] There is a lot of literature on the topic. I focus here on investigating the properties that it could share with negative auxiliary inversion and exploring the extent to which my analysis should be extended to account for this phenomenon. An example of this construction is given in (4.103) and a similar sentence exhibiting negative auxiliary inversion is given in (4.104).

(4.103)   Not very many people read your book.   (SAE)

(4.104)   Ain't very many people read your book.   (WTE; Foreman 1999: 5)

Descriptively, both constructions begin with a negative element that is followed by a quantificational or non-specific subject. In this section, I discuss some of the properties *Not*-initial constructions share with negative auxiliary inversion constructions. I start out by showing how the subject distributions of the two constructions are similar. I then show that both constructions can be embedded under an overt complementizer and that negation has sentential scope.

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33. In the literature, it has been referred to as *Not*-initial DPs (Foreman 1999, 1999/2001), *Not*-initial subjects, *not*-introducing subject (Horn 2014b, 2015). In order to avoid a label which implicitly assumes the *not* to be a part of the subject, I refer to the sentences exhibiting this phenomenon as *Not*-initial constructions.

In terms of the subject restriction, quantificational subjects are possible in *Not*-initial constructions, including strong quantifiers, as in (4.105).[34]

(4.105) a. Not many people lived there then. (SAE)

b. Not five people slept. (SAE)

c. Not everybody will fit in that car. (SAE)

d. Not half the students did their homework. (SAE)

Similarly, these types of subjects are also possible in negative auxiliary inversion constructions, as in (4.106).

(4.106) a. Didn't many people live there then. (WTE; Foreman 1999: 7)

b. Didn't five people sleep. (WTE)

c. Won't everybody fit in that car. (WTE)

d. Didn't half the students do their homework. (WTE; Foreman 1999: 8)

Definite or specific subjects are not possible in *Not*-initial constructions, as in (4.107), except when they involve emphasis, as in (4.107d).

(4.107) a. * Not I would do that. (SAE)

b. * Not the student knows the answer. (SAE)

c. * Not their dogs can do that. (SAE)

d. Not the tiniest mouse will be able to get in now. (SAE)

Definite or specific subjects are also not possible in negative auxiliary inversion constructions, as in (4.108), under the same conditions.

(4.108) a. * Wouldn't I do that. (WTE; Foreman 1999: 11)

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34. Recall from chapter 2 and section 4.2.1 above that strong quantifiers are not possible subjects in existential constructions but are possible subjects in negative auxiliary inversion constructions.

  b. * Didn't the teachers go to the party.   (WTE; Foreman 1999: 11)

  c. * Cain't their dogs do that.   (WTE; Foreman 1999: 12)

  d. Cain't the littlest mouse get his ass up in there anymore!   (WTE)

On the other hand, indefinites are attested in both *Not*-initial constructions, as in (4.109), and negative auxiliary inversion constructions, as in (4.110), though we will see in section 4.3.1.4.1 that there is some variation in the distribution of indefinites in the two constructions.

(4.109) a. Not a damn thing has changed.   (SAE)

    b. Not a single man in this place can say he's happy about it.   (SAE)

(4.110) a. Ain't a damn thing changed.   (AAE; Parrott 2000: 417)

    b. Can't a man in this place say he happy bout a damn thing. (AAE; Martin 1992: 64)

Polarity-sensitive subjects are not possible in *Not*-initial constructions, as in (4.111).

(4.111) a. * Not few people lived there then.   (SAE)

    b. * Not some people came to my party.   (SAE)

    c. * Not several students saw the fight.   (SAE)

Similarly, polarity-sensitive subjects are not possible in negative auxiliary inversion constructions, as in (4.112).

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

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

    c. * Cain't several students read that book. (WTE; Foreman 1999/2001: 48)

There are additional similarities between *Not*-initial constructions and negative auxiliary inversion constructions besides the subject distribution. Recall that constructions exhibiting negative auxiliary inversion can be embedded under an overt complementizer, as in (4.113). *Not*-initial constructions can also be embedded under an overt complementizer, as in (4.114). In both cases, this

possibility is evidence that the negated auxiliaries and negation do not occupy the complementizer position.

(4.113) a. She loves the fact that don't nobody like her.   (WTE/AAE; Foreman 1999: 10)

  b. I know a way that can't nobody start a fight.   (AAE; Labov et al. 1968: 286)

(4.114) a. Jamie knows that not everybody eats meat.   (SAE)

  b. The instructor believes that not many students will complete the bonus question.

  (SAE)

Opposite-polarity tag-question formation in *Not*-initial constructions is similar to tag-question formation in negative auxiliary inversion constructions. Recall that in negative auxiliary inversion constructions, the tag subject agrees with the thematic subject of the NAI construction and the tag question has positive polarity, which indicates that the NAI construction has negative polarity. Examples of negative auxiliary inversion constructions followed by tag-questions are given in (4.115).

(4.115) a. Didn't everybody see the fight, did they?   (WTE)

  b. Cain't all of y'all win the jackpot, though, can you?   (WTE)

  c. Ain't no man gonna cheat on a woman like that, is he?   (WTE; Salmon 2017)

The tag subjects of the tag questions which follow *Not*-initial constructions also agree with the thematic subject, as in (4.116). The tag questions have positive polarity.

(4.116) a. Not many people write letters nowadays, do they?   (SAE)

  b. Not a damn thing has changed, has it?   (SAE)

  c. Not a single man in this place can say he's happy, can he?   (SAE)

The fact that the appended tag questions have positive polarity indicates that the negative element in *Not*-initial constructions scopes over the entire clause. *Not* behaves like sentential negation. If the negative element were to instead only have scope over the subject, we would expect the polarity

of the tag-question to be negative. However, a tag question with negative polarity, as in (4.117), is unacceptable.

(4.117)   * Not many people write letters nowadays, don't they?   (SAE)

In comparison, the tag-question appended to a question which contains negative auxiliary *don't* is positive, as in (4.118a). On the other hand, the tag-question appended to a question which does not contain any negation is negative, as in (4.118b).

(4.118)   a.   Many people don't write letters nowadays, do they?   (SAE)

          b.   Many people write letters nowadays, don't they?   (SAE)

As observed in Klima (1964), it is the polarity of the main clause that determines the polarity of the tag-question in opposite-polarity tag-formation. Even when negation is present, the negation has to have sentential scope for the polarity of the tag-question to be positive. Consider the example in (4.119a), which are variants of examples discussed Klima (1964) and in which *not* is constituent negation that has scope only over the verb phrase. This example can be understood as Taylor having permission to not attend. The polarity of the tag-question is negative because *not* does not have sentential scope.

(4.119)   a.   Taylor can not attend, can't she?   (SAE)

          b.   Taylor cannot attend, can she?   (SAE)

          c.   * Taylor cannot attend, can't she?   (SAE)

In comparison, *cannot* involves sentential negation, and the minimally different example in (4.119c) has a positive tag and cannot have a negative tag, as in (4.119c).

Additional evidence that the negative element in *Not*-initial constructions has sentential scope comes from licensing of negative polarity items in the sentence. The negative element is able to license NPIs that are not enclosed within the subject, as in (4.120).[35]

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35. Certain conditions must be met in order for NPIs to be licensed. These conditions are met in these examples but

(4.120) a. Not many people write letters anymore.   (SAE)

b. Not more than three people ever arrive on time.   (SAE)

The polarity of tag-questions appended to *Not*-initial constructions and negation's ability to license negative polarity items outside of its immediate scope both indicate that the negative element in the constructions has sentential scope.

4.3.1.1 Syntax of *Not*-initial constructions

The construction has been assigned two syntactic analyses in the literature. Unlike in the case of negative auxiliary inversion constructions, in which the sentence-initial negative element is unanimously assumed to be an instance of sentential negation in the literature, the negative element in the *Not*-initial construction is generally believed to be structurally a part of the subject, as in (4.121), which I refer to as the Complex DP Analysis (see Collins & Postal 2014 and references therein).[36] Alternatively, in Kayne (1998) and Foreman (1999, 1999/2001), negation is assumed to be in a higher structural position, as in (4.122), which I refer to as the Clausal Negation Analysis.

(4.121) Complex DP Analysis
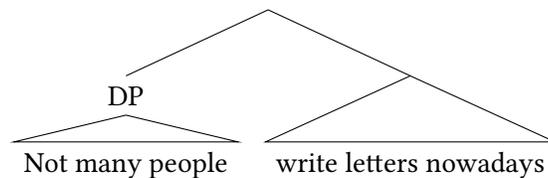
it is possible to find *Not*-initial constructions in which NPIs are not licensed. This is because NPIs vary with respect to the environments in which they can be licensed and because certain operators can intervene between a licensor and a licensee.

36. I have only recently become aware of work by Collins & Postal (2014, 2016) on this topic. The authors advocate for a Complex DP Analysis, as well, but distinguish the structure with different quantifiers. The implication of their arguments and proposals for my work is an issue I set aside for future work.

(4.122)   Clausal Negation Analysis
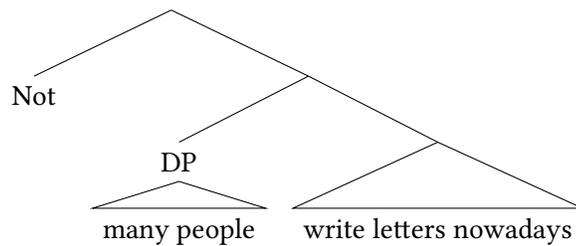
In the structure in (4.121), the negative element *not* is contained within the subject whereas in the structure in (4.122), it does not form a constituent with the subject and is instead structurally similar to the structure of negative auxiliary inversion constructions, provided in (4.123).

(4.123)   Schematic Representation of a Negative Auxiliary Inversion Construction
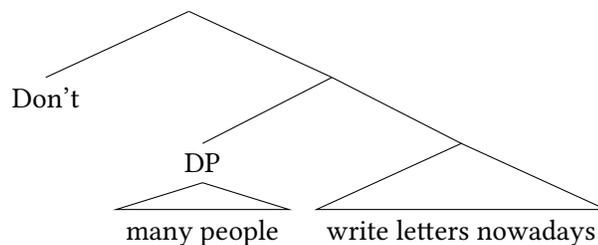
A further property of *Not*-initial constructions is Klima's (1964) observation that *not* precedes subjects but does not precede objects. Examples in which *not* precedes a constituent in subject position but cannot precede the same constituent when it is in post-verbal position are provided in (4.124) and (4.125)[37] The *a* examples involve the *not* in subject position while the *b* and *c* examples involve the *not* in object position.

(4.124)   a.   Not all his friends came to the party.   (SAE; Kayne 1998: 157)

          b.   * John invited not all his friends to the party.   (SAE; Kayne 1998: 157)

          c.   * John sent invitations to not all his friends.   (SAE)

(4.125)   a.   Not many people were interviewed today.   (SAE)

---

37. Judgments for examples similar to (4.124b) and (4.124c) are variable, with some speakers accepting them as marginally acceptable. This acceptability could be due to the possibility for the *not* to be constituent negation rather than sentential negation. In either case, examples in which the negation precedes the subject, as in (4.124a) and (4.125a), are often preferred to examples in which the negation precedes the object.

> b. * She interviewed not many people today. (SAE)
>
> c. * She gave interviews to not many people today. (SAE)

The empirical evidence described for *Not*-initial constructions thus far does not give us any reason to prefer one syntactic analysis in (4.121) and (4.122) over another. Both the Complex DP Analysis and the Clausal Negation Analysis can account for these properties fairly straightforwardly. Negation's ability to have sentential scope, the evidence from tag-question formation and licensing of NPIs, may appear to point to a Sentential Negation Analysis for the construction since in this analysis, negation c-commands everything it linearly precedes. However, the fact that negation gains sentential scope does not seem to be specific to this particular construction but instead a more general property of negation. Negation is able gain scope outside of a node that dominates it. Consider the following examples, in which negation is able to scope out of the phrase in which it is contained when it is clearly a determiner, as in (4.126), or when it is embedded as a possessor, as in (4.127).

(4.126) a. No children send letters to their parents, do they? (SAE)

         b. * No children send letters to their parents, don't they? (SAE)

(4.127) Nobody's children send them letters anymore. (SAE)

In the case in which negation is a determiner, the compatibility of the positive tag in (4.126a) and the incompatibility of the negative tag in (4.126b) indicate that negation has sentential scope and that it is able to scope outside of the node that dominates it. In the case in which negation is embedded as a possessor, the licensed NPI in (4.127) also indicates that negation has sentential scope because the NPI is not in the immediate scope of the negative possessor.

The sentential scope of these sentences and of *Not*-initial constructions assuming the syntactic analysis in (4.121) can be attributed to the negative feature of *not* being able to project to the node that dominates it, as in (4.128). Such feature projection allows the negative feature to have scope outside of the DP in which it is contained.

(4.128)   Complex DP analysis with feature projection

DP [NEG]

Not

[NEG]   many people

write letters nowadays
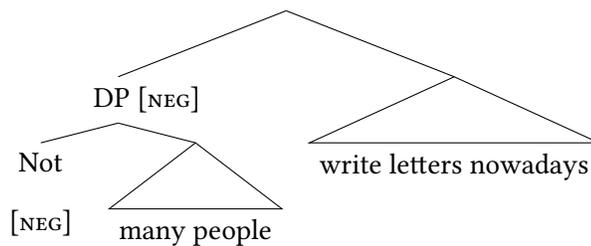
Given this feature projection, which is needed in the grammar more generally, the Complex DP Analysis can also account for the sentential scope negation gains in *Not*-initial constructions.

Turning next to the subject/object asymmetry this constructions exhibits, both analyses allow us to straightforwardly account for it if *Not*-initial constructions are derived by movement, as in (4.129) and (4.130). This example schematically shows the construction derived by movement for the Complex DP Analysis in (4.129) and for the Clausal Negation Analysis in (4.130).[38]

(4.129)   Complex DP Analysis with Movement

TP

DP

Not many people   not

write letters nowadays
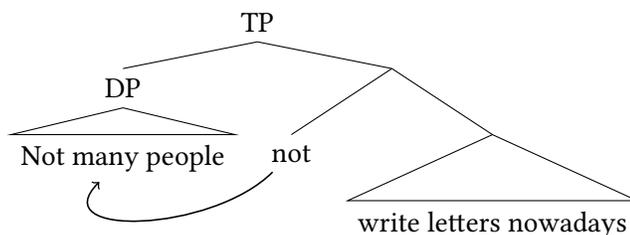
(4.130)   Clausal Negation Analysis with Movement

Not

TP

DP

many people   not

write letters nowadays

---
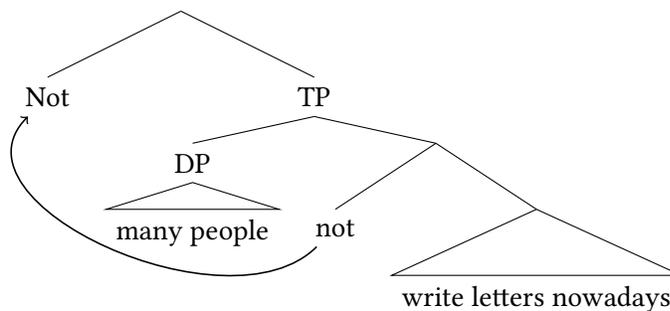
38. The Clausal Negation Analysis derived by movement analysis is also an analysis considered in Foreman (1999, 1999/2001) for *Not*-initial constructions.

In both analyses, the sentence-initial *not* is sentential negation which has undergone movement from its base-generated structural position following Pollock (1989). The movement in the Complex DP Analysis results in negation forming a constituent with the subject, whereas in the Clausal Negation Analysis, the movement is to a higher structural position.

A movement analysis for negation allows a simple account for the subject/object asymmetry. When *not* precedes the subject, there is upward movement, as in (4.131).

(4.131)   Not all his friends ~~not~~ came to the party
          $\underset{\checkmark}{\underline{\qquad\qquad\qquad}}$
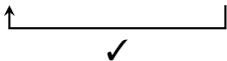
In order to derive constructions in which *not* is postverbal, movement would need to occur downwards to a lower structural position below the lexical verb, as in (4.132).

(4.132)   a. John ~~not~~ invited not all his friends to the party
              $\underset{\text{✗}}{\underline{\qquad\qquad}}$
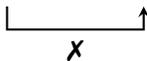
          b. John ~~not~~ sent invitations to not all his friends
              $\underset{\text{✗}}{\underline{\qquad\qquad\qquad}}$
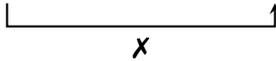
Since *not* constructions are derived by movement and one of the assumed properties of movement in the present theory is that it can only occur to a c-commanding position (Kayne 1994, Chomsky 1995), the derivation in which negation would lower, as in (4.132), is ruled out. A ban on downward movement gives us the subject/object asymmetry regardless of which analysis we choose, the Complex DP Analysis or the Clausal Negation Analysis.

It should be noted that alternative analyses which do not involve movement of negation make accounting for the subject/object asymmetry assuming the Complex DP Analysis trickier. If *not* is a negative determiner just like *no*, followers of the Complex DP Analysis need to explain why it is that *not* can only appear in preverbal DPs and not in postverbal DPs. If *not* is instead an adverb, followers of the Complex DP Analysis need to explain its restrictions in the clause. The movement analysis allows a simpler explanation for the subject/object asymmetry assuming a Complex DP Analysis because the asymmetry can be explained with a ban on downward movement. A

non-movement analysis assuming the Clausal Negation Analysis is, however, still fairly straight-forward. The subject/object asymmetry can be explained with the assumption that negation has a projection in its usual preverbal position (Pollock 1989) and in a higher position, but not in a postverbal position.

On the other hand, a non-movement analysis that appeals to competition among which forms of negation can be used can account for the asymmetry regardless of which analysis is adopted for *Not*-initial constructions. Horn's (1989/2001) (citing Jespersen 1917) proposes *Nexal Not*, a constraint which prefers canonical negation and does not allow non-canonical negation to surface in its place. Canonical negation is *nexal* in Jespersen's sense by being the negation that forms a unit with the auxiliary or modal. If the grammar is subject to *Nexal Not*, the principle is obeyed when canonical negation is preferred to non-canonical negation.In other words, non-canonical negation will not surface when canonical negation could. Postverbal negation *not*, as in (4.124b) and (4.124c), repeated below, will always be dispreferred to its canonical alternative, as in (4.133a) and (4.133b), respectively.

(4.124b)   * John invited not all his friends to the party.   (SAE; Kayne 1998: 157)

(4.124c)   * John sent invitations to not all his friends.   (SAE)

(4.133)   a. John didn't invite all of his friends to the party.

　　　　　b. John didn't send invitations to all his friends.

Not-initial constructions, as in (4.124a) and (4.125a), repeated below, are not ruled out despite the fact that they involve non-canonical negation. One reason they are not ruled out is because this instance of non-canonical negation is preferred by a competing principle, NegFirst (Horn 1989/2001). This competing principle requires that wide-scope negation be marked as early as possible in a sentence. NegFirst can be understood as a more specific instantiation of the more general scope transparency principle we adopted in chapter 3.

(4.124a) Not all his friends came to the party.   (SAE)

(4.125a) Not many people were interviewed today.   (SAE)

A remaining issue is how to interpret a construction which exhibits both a sentence-initial *Not* and a negated auxiliary, as in (4.134).

(4.134)   Not many arrows didn't hit the target.   (SAE)

Could the two negative elements both be sentential negation? The answer appears to be negative. If the example involved two instances of sentential negation, the two instances of negation should cancel each other out, and, pragmatic inferences aside, should logically be interpreted as a positive sentence. Instead, the construction seems to involve a single instance of sentential negation. Evidence that only one instance of negation is involved in (4.134) comes from tag-question formation. The tag-question appended has positive polarity, as in (4.135a), which indicates that there is only one instance of sentential negation in the clause to which the tag is appended. When the tag-question has negative polarity, as in (4.135b), the result is unacceptable.

(4.135)   a.   Not many arrows didn't hit the target, did they?   (SAE)

         b.   * Not many arrows didn't hit the target, didn't they?   (SAE)

The negated auxiliary is likely contributing the sentential negation while the sentence-initial *not* appears to be constituent negation rather than sentential negation. The sentence-initial *Not* in this construction might then be an adverb that is base-generated as an adjunct to the subject and that negates only the subject. It is likely not derived by movement of a phrasal sentential negation to this position. It might in principle be possible to generate both in Neg°, *-n't* as the head and *not* as a phrase in its specifier. The phrase could then undergo movement to adjoin to the subject but because there is only one functional projection for negation, as I propose, only one instance of sentential negation is possible.

It is surprising that negation does not seem to be able to scope outside of the node which dominates it in this case, unlike in the types of examples we have seen. Perhaps this is because the phrase is not derived by movement. In either case, this difference in interpretation leads me to consider examples such as (4.134) as involving adverbial negation and as therefore being different from the constructions to which I refer as *Not*-initial constructions. I leave exploring the implications of

this conclusion as future work.

An advantage of my proposal that the higher negative projection is not available in standard English allows me to correctly predict that these examples involve a single instance of sentential negation. Either sentential negation is a head and so phrasal movement cannot arise and the sentence-initial not is adverbial. Or, both negative elements are generated by the same projection, in which case there can only be one instance of sentential negation.

In the following section, I further argue in favor of adopting an analysis for *Not*-initial constructions in which sentential negation moves to a position within the subject as an adjunct. Furthermore, I explain how the movement is subject to principles of scope economy and discuss why the analysis proposed for negative auxiliary inversion constructions should be extended to account for *Not*-initial constructions.

4.3.1.1.1 Preferring a movement analysis

I extend the analysis of negative auxiliary inversion proposed in chapter 2 to account for *Not*-initial constructions, similarly to Foreman (1999, 1999/2001), who noticed the parallelism in the subject restriction of *Not*-initial constructions and negative auxiliary inversion constructions and accounted for both constructions with a parallel analysis. More specifically, I propose deriving the construction by movement of negation that is subject to principles of scope economy.

For easy reference, the syntactic structure of sentences exhibiting negative auxiliary inversion is provided in (4.136).

(4.136)

```
                      Neg₂P
              _____|_____
            Neg₂°              TP
            don't      _____|_____
                     DP                 T'
                  ___|___         _____|_____
              many people  T°            NegP
                           do       _____|_____
                                  Neg°             vP
                                  -n't     _____|_____
                                         write letters nowadays
```
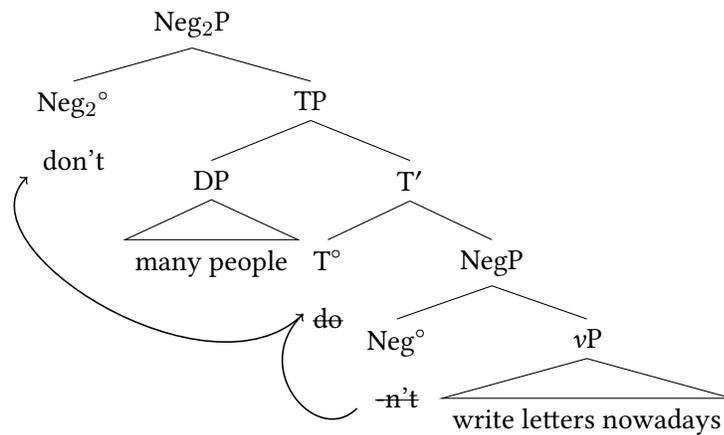
Recall that the negative element is generated in Neg°, the fixed structural position of negation present in all varieties of English following Pollock (1989). Negative auxiliary inversion constructions are derived by movement of negation from this position to a higher negative structural position, Neg₂°. This movement is optional but subject to the Revised Principle Scope Economy, which I revised to apply to overt movement that is optional in addition to the covert movement restricted by Fox's (2000) Principle of Scope Economy.

Unlike varieties of English which allow negative auxiliary inversion, varieties which do not exhibit either negative auxiliary inversion or negative concord have just one structural position for negation available. I propose that in *Not*-initial constructions, the negative element is base-generated in the specifier position of this projection, Neg°, as a phrase.[39] The pre-movement structure of the construction is as in (4.137).

---

39. The idea that negation in its unbound form, *not*, is a phrase rather than a head is discussed below.

(4.137) Pre-movement structure of a *Not*-initial construction

```
                    TP
            ┌────────┴────────┐
           DP                T′
        ┌───┴───┐       ┌─────┴─────┐
   many people  T°              NegP
                          ┌───────┴───────┐
                        NegP            Neg′
                         △          ┌────┴────┐
                        not       Neg°        vP
                                          ┌────┴────┐
                                      write letters nowadays
```
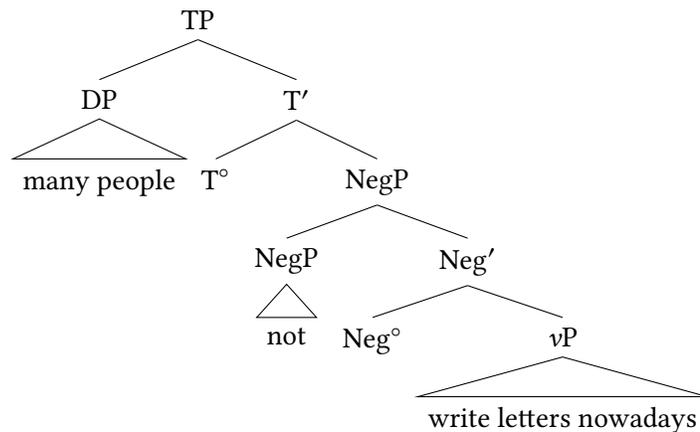
Similarly to negative auxiliary inversion, the construction is derived by movement of negation from this projection. The motivation for adopting a movement analysis for these constructions is their parallel subject distribution to negative auxiliary inversion constructions. Recall that in both constructions, quantificational subjects which are not polarity sensitive are possible while definite subjects are not. The subject distribution of *Not*-constructions can also be accounted for with the proposal that these constructions are derived by movement of negation and that the movement is also subject to the Revised Principle of Scope Economy. Extending the analysis provides us with an understanding of why only certain kinds of quantifiers are compatible with *not*. Otherwise, if the construction is not derived by movement, the mechanism by which *not* forms a unit with only certain types of quantifiers would need to have independent explanation, which, given the parallelism of the two constructions' subject restrictions, seems to miss a generalization.[40]

Unlike in negative auxiliary inversion constructions, however, I do not assume the negative element in *Not*-initial constructions to have a fixed landing site. Instead, I assume it to adjoin to a higher structure. There are two possibilities for where it could adjoin, each possibility being compatible with either a Clausal Negation Analysis or a Complex DP Analysis. The analysis that is in line with Clausal Negation Analysis is most similar to the movement subject to the originally-proposed Principle of Scope Economy. In such an analysis, the negative element does not form a unit with the subject, as in (4.138). Given such an analysis, the adjunction site would be the clause.

---

40. Additionally, recall that a movement analysis allows us to account for the subject/object asymmetry of *Not*-initial constructions straightforwardly.

(4.138)   Clausal Negation Analysis of a *Not*-initial construction

```
                              TP
                   ┌──────────┴──────────┐
                 NegP                    TP
                  △              ┌───────┴───────┐
                 not            DP               T′
                           ┌────┴────┐      ┌────┴────┐
                      many people   T°             NegP
                                          ┌─────────┴─────────┐
                                        NegP               Neg′
                                         △           ┌──────┴──────┐
                                        ̶n̶o̶t̶        Neg°          vP
                                                              △
                                                      write letters nowadays
```
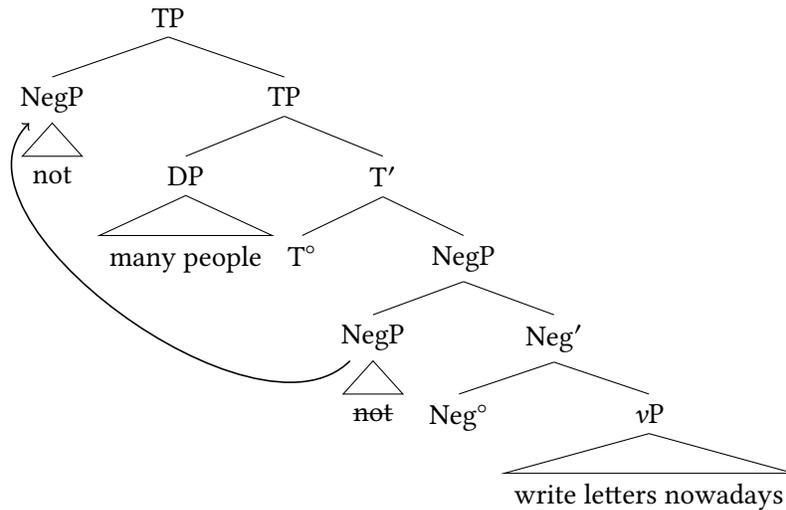
In the alternative Complex DP Analysis, the negative element does form a unit with the subject post-movement, as in (4.139), so the adjunction site is the subject DP.

(4.139)   Complex DP Analysis of a *Not*-initial construction

```
                              TP
                   ┌──────────┴──────────┐
                  DP                     T′
           ┌──────┴──────┐        ┌──────┴──────┐
         NegP           DP       T°            NegP
          △             △              ┌───────┴───────┐
         not       many people       NegP            Neg′
                                       △        ┌──────┴──────┐
                                      ̶n̶o̶t̶     Neg°          vP
                                                          △
                                                  write letters nowadays
```
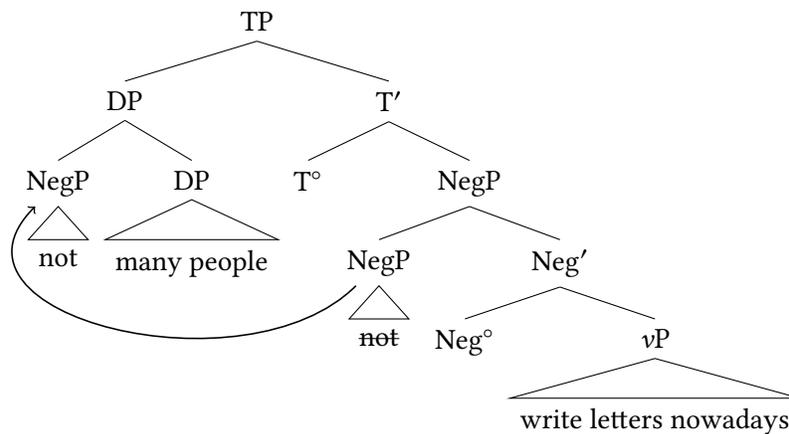
4.3.1.2   Semantics of *Not*-initial constructions

The movement that derives the *Not*-initial constructions is allowed when it has a semantic effect and disallowed when it is semantically-vacuous, accounting for the fact that the subject distribution of this construction is parallel to the subject restriction of negative auxiliary inversion. The

Revised Principle of Scope Economy allows the movement over the attested quantificational elements, ruling in these subjects, and it disallows the movement over definite elements, ruling out these subjects. Additionally, like negative auxiliary inversion constructions, *Not*-initial constructions are semantically unambiguous. They can only be interpreted with negation having wide scope. The sentence-initial negative element in *Not*-initial constructions has scope over the entire clause and the inverse scope interpretation is absent, as in (4.140).

(4.140) a. Not every student did the assigned reading. [¬ » *every*, **every » ¬*]

  b. Not many people lived there then. [¬ » *many*, **many » ¬*]

Deriving the surface scope interpretation is straightforward. Scope Transparency allows a derivation in which negation is interpreted high at LF and pronounced high at PF, as in (4.141), line a.

(4.141) LF1: [not] every student [~~not~~] did the assigned reading

	✓?	LF/PF	EPP	ScoT	CWO
a.	✓	LF1: [not] every student [~~not~~] did ... PF1: [not] every student [~~not~~] did ...	✓	✓	✗
b.	✓	LF1: [not] every student [~~not~~] did ... PF2: [~~not~~] every student [not] did ...	✓	✗	✓

The competing derivation, in which negation is interpreted high but pronounced low, as in (4.141) line b, is also allowed because although it disobeys Scope Transparency, it obeys the Canonical Word Order constraint.

The inverse scope interpretation of *Not*-initial constructions is unattested but there are two ways in which it could be derived. Negation could reconstruct, as in (4.142), or the quantificational subject could undergo quantifier raising above negation, as in (4.143).

(4.142) ~~Not~~ every student not did the assigned reading

(4.143) every student not ~~every student not~~ did the assigned reading

In both cases, inverse scope is ruled out because whenever the subject is interpreted higher, it will surface higher as a result of both Scope Transparency and the Canonical Word Order constraint. Consider first the option in which negation reconstructs. Both soft constraints are violated in a derivation in which negation is interpreted low at LF but pronounced high at PF, as in (4.144), line b. Instead, the derivation in which the subject is interpreted and pronounced high wins out, line a.

(4.144) LF2: [~~not~~] every student [not] did the assigned reading

✓?		LF/PF	EPP	ScoT	CWO
a.	✓	LF2: [~~not~~] every student [not] did the assigned reading	✓	✓	✓
		PF2: [~~not~~] every student [not] did the assigned reading			
b.	✗	LF2: [~~not~~] every student [not] did the assigned reading	✓	✗	✗
		PF1: [not] every student [~~not~~] did the assigned reading			

Next consider the option in which the quantificational subject undergoes further movement. When the subject is interpreted in this high position, there are four possible linearizations for the interpretation, as in (4.145). The derivation in which the subject is interpreted as scoping over negation but negation is pronounced higher, line b, cannot surface because it disobeys both Scope Transparency and the Canonical Word Order constraint.

(4.145) LF2: every student [not] ~~every student~~ [~~not~~] did the assigned reading

✓?		LF/PF	EPP	ScoT	CWO
a.	✗	LF2: every student [not] ~~every student~~ [~~not~~] did ...	✓	✓	✗
		PF2: every student [not] ~~every student~~ [~~not~~] did ...			
b.	✗	LF2: every student [not] ~~every student~~ [~~not~~] did ...	✓	✗	✗
		PF1: ~~every student~~ [not] every student [~~not~~] did ...			
c.	✗	LF2: every student [not] ~~every student~~ [~~not~~] did ...	✓	✓	✗
		PF3: every student [~~not~~] ~~every student~~ [not] did ...			
d.	✓	LF2: every student [not] ~~every student~~ [~~not~~] did ...	✓	✓	✓
		PF4: ~~every student~~ [~~not~~] every student [not] did ...			

Instead, the winning derivation has the subject both interpreted high and pronounced high, as in line d in (4.145).

4.3.1.3 Preferring the Complex DP analysis

Both types of syntactic analyses, the Complex DP Analysis and Sentential Negation Analysis, are able to account for the properties of *Not*-initial constructions described thus far. Under an analysis in which *Not*-initial constructions are derived by movement of sentential negation, neither the subject/object asymmetry nor the existential constructions with expletives help determine whether negation forms a constituent with the determiner phrase it precedes. However, failing to adopt a Complex DP Analysis for the construction allows for a simple cross-linguistic explanation of why negative auxiliary inversion is not available in all varieties of English. The construction is possible in the varieties of English which have the higher negative projection available and, because standard English does not have this higher projection, it is not possible in this variety.[41] In the following section, I discuss some empirical evidence in favor of a Complex DP Analysis. The evidence that negation forms a constituent with the DP comes from constituency tests and the behavior of *Not*-initial constructions when they are embedded.

First consider some evidence from constituency test results. It is possible to coordinate a subject modified by *not* with a subject that is not modified by it, as in (4.146). The acceptable result counts as evidence for *not many people* forming a constituent.

(4.146)   Coordination constituency test result:

   [Not many people] and [no animals] lived there then.   (SAE)

Further evidence for constituency of the complex subject comes from a stand-alone test, as in (4.147). Because the complex subject *not many people* can serve as a stand-alone answer to the question asked in A, we have evidence that it is a constituent.

---

41. Recall from chapter 2 that I tied the possibility of negative auxiliary inversion to the availability of the higher negation in part because all varieties which exhibit negative auxiliary inversion also exhibit negative concord. However, having the higher negative projection is a necessary but not sufficient property of varieties which exhibit negative auxiliary inversion. As previously discussed, there are varieties of English which exhibit negative concord but which do not exhibit negative auxiliary inversion.

(4.147)   STAND-ALONE constituency test result:

    A: Who lived there then?

    B: Not many people.   (SAE)

Similarly, the complex subject can be pseudo-clefted, as in (4.148). The acceptable result counts as evidence for the complex subject being a constituent.[42]

(4.148)   PSEUDO-CLEFT constituency test result:

    Who lived there then were not many people.   (SAE)

Embedded *Not*-initial constructions behave differently when they are embedded under a raising-to-object predicate or a control predicate. Consider first the behavior when the construction is embedded under a raising-to-object predicate as compared to when it is embedded under an object control predicate. In (4.149a), a *Not*-initial construction is embedded under a raising-to-object predicate, *expect*, otherwise known as an Exceptional Case Marking (ECM) predicate.

(4.149)   a.   John expected not many people to come.

    b.   John believes not many people to have left.

Under the assumption that constructions containing ECM verbs involve movement of the subject from the embedded clause to an object position in the matrix clause, most adamantly argued for

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42. However, stand-alone and pseudo-cleft tests do not help us distinguish between *Not*-initial constructions and similar examples which involve constituent rather than sentential negation. Consider the *Not*-initial construction on which we applied the constituency tests, (ia) below, and an example which does not involve sentential negation and which is unacceptable, (ib). The latter example can become acceptable if an alternative to the definite subject *Jamie* is offered, as in (ic).

(i)   a.   Not many people lived there then.   (SAE)
    b.   * Not Jamie lived there then.   (SAE)
    c.   Not Jamie but Alex lived there then.   (SAE)

However, *Not Jamie* is acceptable as both a response, as in (ii), and in a pseudo-cleft, as in (iii).

(ii)   STAND-ALONE constituency test result:
    A: Who lived there then?
   B: Not Jamie.   (SAE)

(iii)   PSEUDO-CLEFT constituency test result:
    Who lived there then was not Jamie.   (SAE)

in Postal (1974), the acceptability of the sentence suggests that *not* and the DP form a constituent. The structure of the embedded clause would be as in (4.150), with negation adjoining to the subject.

(4.150)
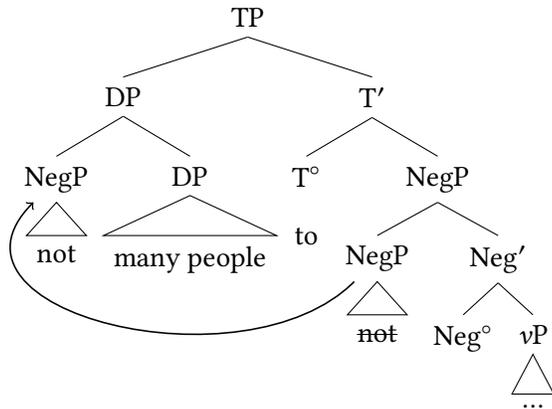
Merging the matrix clause would result in a structure as in (4.151).[43] Once *not* has adjoined to the subject, the newly formed constituent raises together as a unit from the subject position of the embedded clause. It raises to the object position of the matrix clause. Part of the motivation behind the movement analysis of these constructions is the observation that despite its thematic relation to the embedded clause, the constituent behaves as though it is in the matrix clause.

---

43. This structure builds on the assumptions presented in Sportiche et al. (2014). Whether the embedded clause projects a CP layer in raising constructions is an open question; I do not show it in this structure.

(4.151)

TP
- DP
  - John
- T′
  - T°
  - vP
    - DP
      - ~~John~~
    - v′
      - v°
        - expected
      - VP
        - DP
          - not many people
        - V′
          - V°
            - ~~expected~~
          - TP
            - DP
              - NegP
                - ~~not~~
              - DP
                - ~~many people~~
            - T′
              - T°
                - to
              - NegP
                - NegP
                  - ~~not~~
                - Neg′
                  - Neg°
                  - vP
                    - …
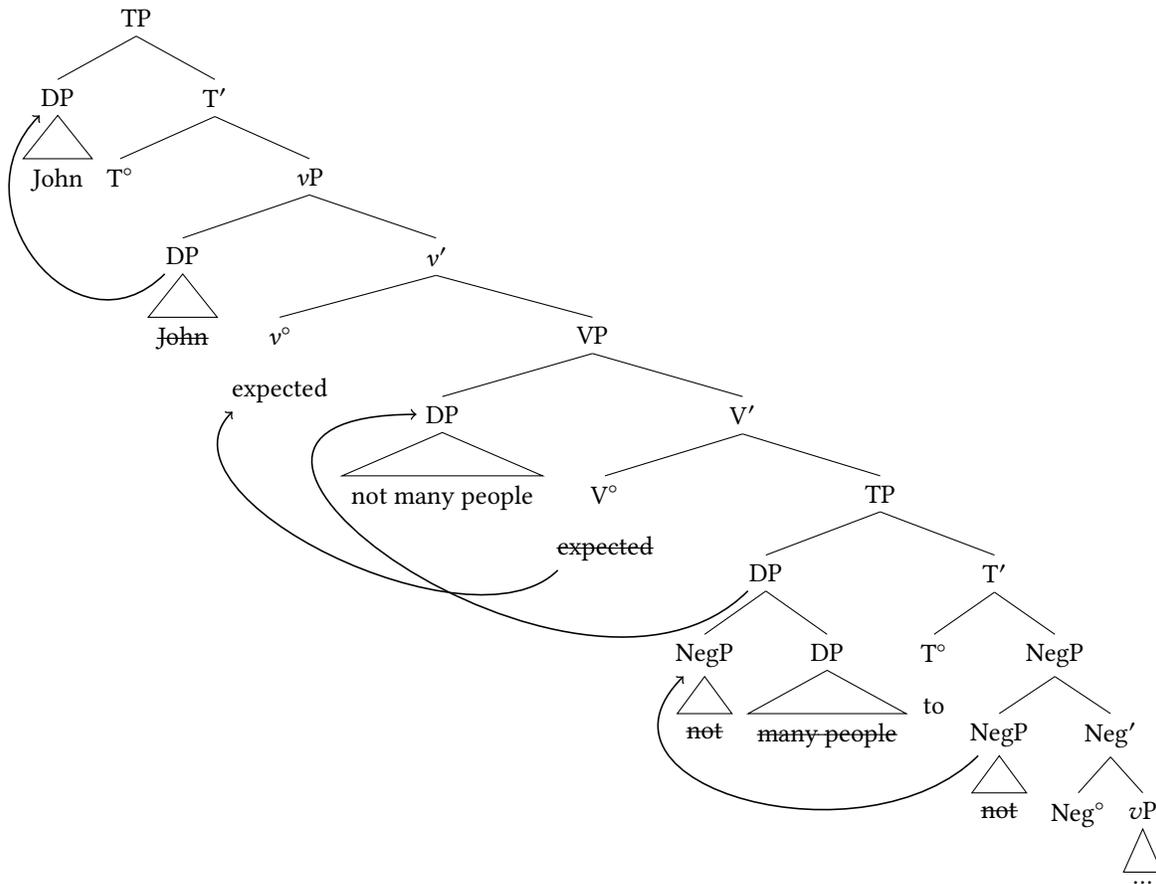
The availability of *not* constituents in such a construction indicates that there is not a ban on *not* from being able to precede objects. Instead, *not* DP objects are uncommon because they would generally need to be derived by downward movement. They are possible when they can be derived by upward movement. Additionally, the *not* constituent appears to move as a single unit in movement analysis of raising-to-object constructions, providing evidence in favor of *not* forming a constituent with the DP it precedes.[44]

In comparison, a *Not*-initial construction embedded under an object-control predicate, such as *tell* as in (4.152a), is unacceptable.

---

44. The alternative analysis that is in line with a Clausal Negation Analysis of *Not*-initial constructions is not entirely incompatible, however. The raising-to-object construction could still be derived by movement of the TP argument to the object position of the matrix clause rather than of the complex DP. A schematic structure is provided in (i) below. The element in the object position of the matrix clause is a TP which contains the sentence-initial *not*, the subject in its canonical position, and a remnant trace of the remaining clause, which must have subextracted before the TP moved to its final landing site.

(4.152)   a.   * John told not many people to come.

The way in which this structure would be derived given the current assumptions is by movement of
sentential negation from the embedded clause to adjoin, across the clause boundary, to the object
of the matrix clause. Such long-distance movement appears to be blocked. Optional movement
appears to be clause-bounded.

(i)
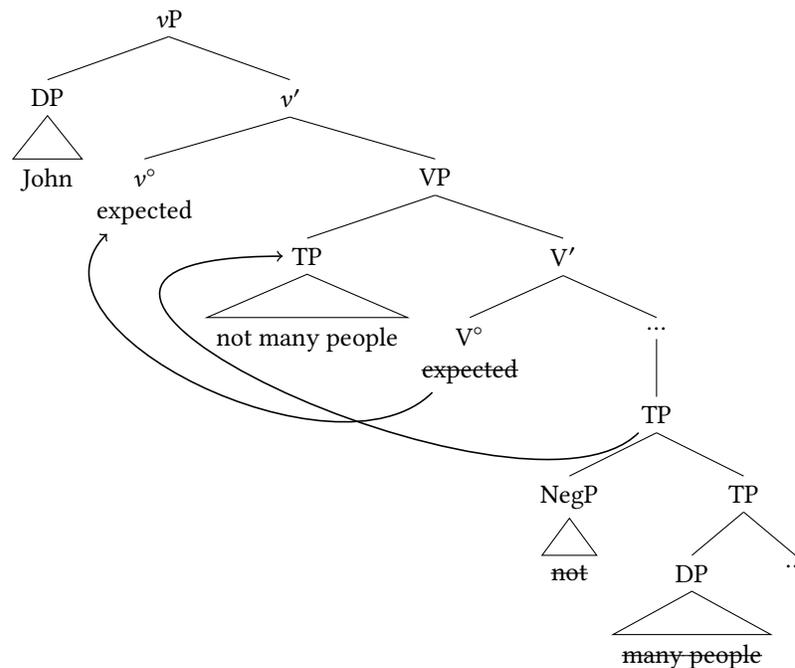
Adopting such an analysis would require us to make revisions to some of our assumptions, such as revise the sub-
categorization properties of the matrix verb to allow it to select a second TP argument. We would also need to explain
how the embedded subject DP counts as being local for case assignment purposes in its moved position given that it is
embedded in the TP structure.

(4.153)

```
                    TP
             ┌──────┴──────┐
            DP             T′
            △        ┌─────┴─────┐
          John  T°              vP
                          ┌──────┴──────┐
                         DP             v′
                         △       ┌──────┴──────┐
                       John    v°            VP
                               told    ┌──────┴──────┐
                                      DP             V′
                                ┌─────┴─────┐   ┌─────┴─────┐
                             NegP        DP_i  V°          CP
                              △          △    told    ┌────┴────┐
                             not    many people      C°        TP
                                                         ┌──────┴──────┐
                                                       DP_i           T′
                                                        △       ┌──────┴──────┐
                                                      PRO      T°           NegP
                                                               to      ┌─────┴─────┐
                                                                     NegP        Neg′
                                                                      △      ┌────┴────┐
                                                                     not   Neg°       vP
                                                                                       △
                                                                                      …
```

Consider, also, an example of a *Not*-initial construction embedded under a raising-to-subject predicate such as *likely* and in which the embedded subject moves to the matrix clause, as in (4.154).

(4.154)   Not many people are likely to win the lottery.   (*not many » likely, likely » not many*)

I assume the tree structure of the sentence to be as in (4.155). The sentential negation of the embedded clause moves to adjoin to the subject of the embedded clause, and this complex subject then moves to the subject position of the matrix clause.

(4.155)

There are two ways in which this construction can be interpreted. The surface scope interpretation is available, in which *not many people* scopes over *likely*. Additionally, an interpretation in which *likely* scopes over *not many people* is also available. This inverse scope interpretation is likely due of reconstruction of the complex subject in the embedded clause. Unavailable is an interpretation in which *many* outscopes *not*. The lack of such an interpretation suggests that *not many people* form a constituent. If they did not, we would expect *many people* to be able to outscope negation.

Consider a similar example to (4.154) in which *not* does not form a constituent with a DP.

(4.156)   I don't think that many people are likely to win the lottery.

$$[\textit{not} \gg \textit{likely} \gg \textit{many possible}]$$

More readings are available in this sentence, which counts as evidence that negation and the subject form a unit in the *Not*-initial construction.

4.3.1.4   Accounting for the differences from Negative Auxiliary Inversion

Before accounting for the differences between *Not*-initial constructions and negative auxiliary inversion constructions, it is worth summarizing the similarities. Both constructions are proposed to be derived by movement of negation. Both movements are optional, non-feature driven movements that are subject to the Revised Principle of Scope Economy. The interpretation of both is unambiguous, with negation exhibiting wide scope. This interpretation can be accounted for given Scope Transparency since negation is both pronounced and interpreted in the same position. The interaction of ScoT with a preference for canonical word order gives rise to the 3/4 signature of the constructions and their minimally similar non-inverted counterparts.

There are, however, differences between how the two structures are derived. One of the differences posited in section 4.3.1.1 was in the nature of the landing site. In *Not*-initial constructions, the movement of negation is to an adjunction site whereas in negative auxiliary inversion constructions, the movement of negation is to a fixed higher negative projection. I propose tying the absence of negative auxiliary inversion in standard American English, despite its similarities to *Not*-initial constructions, to the absence of this higher negative projection, Neg_2. This projection can host the movement of negation to give rise to negative auxiliary inversion constructions in the varieties which exhibit the phenomenon. In varieties of English which lack this projection, including standard American English, negative auxiliary inversion is not present because the moving head does not have a landing site available.

Another difference between the constructions involves the interaction of negation with tense and its adjacency requirement. In *Not*-initial constructions, the movement occurs before the adjacency requirement of tense to the next closest verbal element is checked. As a result, *do*-support does not arise in this construction. An example of the construction and an unacceptable counterpart containing *do*-support are provided in (4.157).

(4.157)   a.   Not many people write letters.

              b.   *Not many people do write letters.[45]

---

45. The sentence is unacceptable unless *do* is emphatic.

In negative auxiliary inversion constructions, *do*-support does arise in the case in which no other auxiliary is present. I link these differences between the constructions to the nature of negation in the constructions. While *Not*-initial constructions involve phrasal movement, negative auxiliary inversion constructions involve head movement. Negation forms a unit with the auxiliary and raises with it to give rise to subject-auxiliary inversion. The auxiliary in *Not*-initial constructions does not raise and there is no subject-auxiliary inversion. Negation as a phrase does not interact with tense's adjacency requirement in the same way as it does when it is a head.[46]

Evidence that *not* is phrasal as opposed to a head comes from the observation that *not* does not intervene between the tense position and the auxiliary closest to this position.

As Chomsky (1957) observed, when there is no overt material in the tense projection, an auxiliary verb moves to fill this position. But only the closest verbal element moves and, since head movement is strictly local, the auxiliary cannot skip over other heads. If *not* were a head, we would not expect an auxiliary to be able to raise past it, but, as evidenced by the word order in (4.158), an auxiliary can move past it.

(4.158)   Every girl has not eaten her sandwich.   [*every » not*; *not » every*]

I assume the structure of (4.158) to be as in (4.159).

---

46. Phrasal *not* in its base-generated position can interact with tense in the case in which no other auxiliary is present. When *not* does not move, as in (i), *do*-support is required, as in (ii).

(i)   * Many people not write letters.

(ii)   Many people do not write letters.

As mentioned above in text, the movement to form the *Not*-initial construction must occur before *do*-support arises in order to account for the contrast in (4.157).

(4.159)

```
                        TP
             ┌──────────┴──────────┐
            DP                     T′
          ╱────╲          ┌────────┴────────┐
        every girl       T°               NegP
                        has        ┌────────┴────────┐
                                 NegP              Neg′
                                  △         ┌────────┴────────┐
                                 not       Neg°             PerfP
                                           has      ┌────────┴────────┐
                                                  Perf°               vP
                                                  has          ╱────────────╲
                                                          eaten her sandwich
```
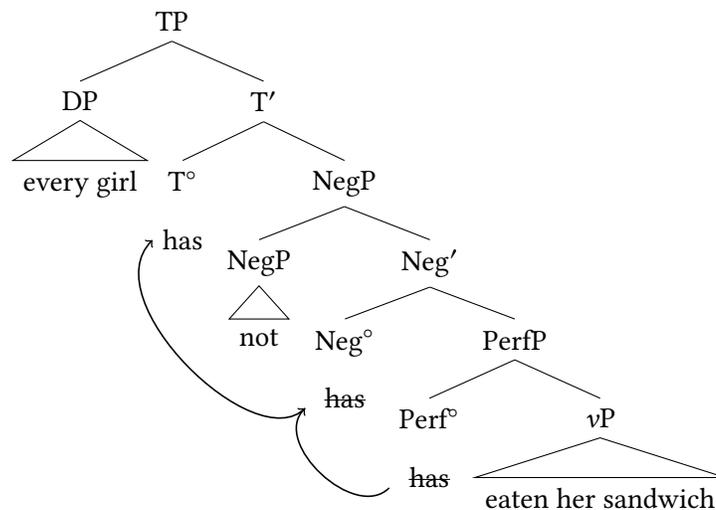
The perfect aspect projection, Perf, is below negation in order to capture the apparent adjacency requirement between an auxiliary and the morphology that appears on the verbal element that follows the auxiliary. In this case, the lexical verb that follows the perfect aspect is, as expected, in its participle form. Locality between these two elements is relevant regardless of how this adjacency is enforced in the system, by affix-hopping or an Agree operation.

Since the closest head must raise to the tense projection and perfect aspect appears before negation, the perfect aspect must have raised past Neg. The fact that negation does not block perfect aspect from raising is evidence that it is not a head. Negation is not picked up when the auxiliary moves to the tense position because adverbs can intervene between the two elements, as in (4.160).

(4.160) Every girl has often not eaten her sandwich.   [*every » not*; *not » every*]

In comparison, when there is overt material in the tense projection, as in (4.161), the closest auxiliary remains in its lower position, following negation.

(4.161) Every girl will not have eaten her sandwich.   [*every » not*; *not » every*]

The assumed structure of (4.161) is as in (4.162), in which the perfect aspect is adjacent to the verbal element whose morphology it affects (or agrees with).

(4.162)

```
                    TP
              ┌──────┴──────┐
             DP             T′
           ┌──┴──┐      ┌────┴────┐
       every girl      T°        NegP
                      will    ┌───┴────┐
                            NegP      Neg′
                            △     ┌────┴────┐
                           not   Neg°      PerfP
                                        ┌───┴───┐
                                      Perf°     vP
                                      have  ┌───┴───┐
                                        eaten her sandwich
```
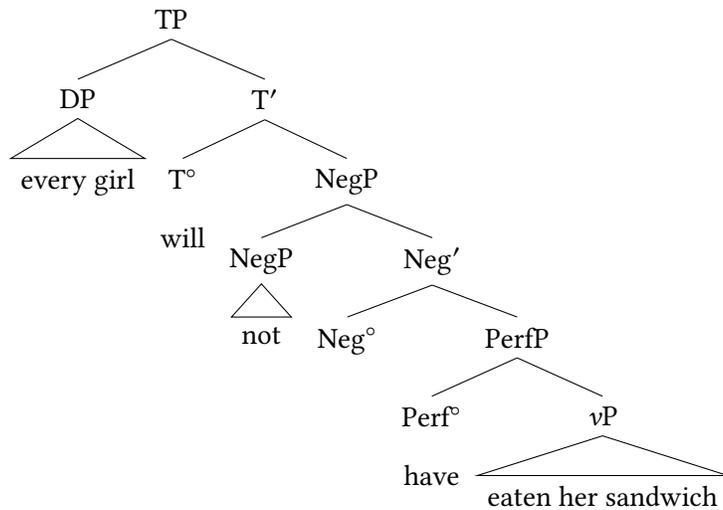
Given a movement analysis of negation to form *Not*-constructions, it is also more likely that *not* is
a phrase rather than a head because it is able to skip over intervening head positions, as in (4.163).[47]

(4.163)

```
                         TP
                  ┌───────┴───────┐
                 DP               T′
             ┌────┴────┐      ┌────┴────┐
           NegP       DP     T°        NegP
            △        △      has    ┌────┴────┐
           not   every girl      NegP       Neg′
                                  △      ┌────┴────┐
                                 not    Neg°      PerfP
                                        has    ┌───┴───┐
                                             Perf°     vP
                                             has   ┌───┴───┐
                                                eaten her sandwich
```
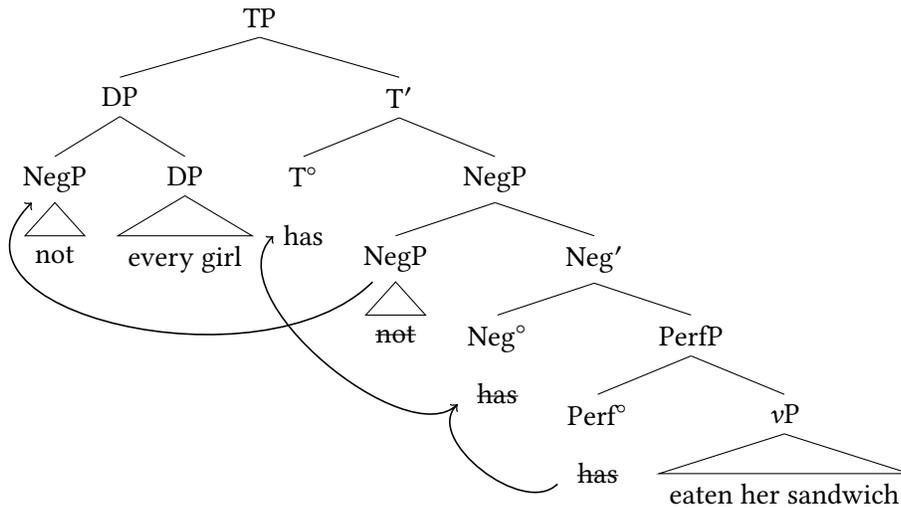
Not is able to skip over modals and tense markers, as well, as in (4.164). In comparison, in the nega-
tive auxiliary inversion construction in (4.165a), the modal and morphologically deficient negation
(or the inherently negative modal) raise together, as does the tense marker and *n't* in (4.165b).

(4.164)   a.   Not every man can do what you just did.   (SAE; Foreman 1999/2001: 2)

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47. Rivero might allow *not* to retain its status as a head in spite of this property because in her analysis, she allows
for different types of head movement.

	b.	Not just anybody will be allowed in.	(SAE; Foreman 1999/2001: 41)
(4.165)	a.	Cain't every man do what you just did.	(WTE; Foreman 1999/2001: 2)
	b.	Won't just anybody be allowed in.	(WTE; Foreman 1999/2001: 41)

4.3.1.4.1 An issue with indefinite subjects

There are additional differences between the two constructions which cannot be due to the nature of negation or its landing site and which extending the analysis of negative auxiliary inversion to *Not*-initial constructions does not capture. These differences involve the subject distributions of the two constructions. The subject distributions are not completely parallel.

The behavior of indefinites is one of the differences between the subject restrictions of *Not*-constructions and negative auxiliary inversion constructions. The availability of indefinites is restricted in *Not*-constructions in a way in which it is not in negative auxiliary inversion constructions. When the indefinite is headed by determiner *a*, it has to either be a negative polarity item, as in (4.166a), or to have a scalar minimization effect, as in (4.166b), in order to be acceptable. When neither of these two properties hold, as in (4.166c), the construction is ill-formed.

(4.166)	a.	Not a soul I talked to has seen Harry since October.	(SAE)
	b.	Not a creature was stirring, not even a mouse.	(SAE)
	c.	* Not a dog can do that trick.	(SAE)

The difference between the unacceptable example in (4.166c) and the similar acceptable example in (4.166b) seems to be that the latter involves scalar minimization. The latter example can be paraphrased as involving 'not even one creature' while the former cannot be understood as meaning 'not even one dog.'

In comparison, indefinites headed by *a* are possible in negative auxiliary inversion constructions, even when the subject does not behave like an NPI and when it lacks the scalar minimization effect, as in the similar examples in (4.167).

(4.167) a. Ain't a soul I talked to seen Harry since October. (AAE; Martin 1993: 50)

b. Wudn't a creature stirring. (WTE)

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

The relevant contrast is between the unacceptable *Not*-initial construction in (4.166c) and its acceptable negative auxiliary inversion counterpart in (4.167c). This contrast is surprising. If *a* is an existential quantifier, as we proposed in chapter 3, the movement of *not* in (4.166c) should be allowed, in the same way the movement of *can't* is allowed in (4.167c), because it is not semantically-vacuous.

The ill-formed example is likely out because it is missing the scalar minimization effect. When scalar minimization is forced with *even* as a modifier, as in (4.168), the example is acceptable.

(4.168) Not even a dog can do that trick. (SAE)

At first glance, it appears as though the scalar minimization effect is available in general statements. However, the scalar minimization effect is possible with the same DP, *a dog*, in different contexts, as in the acceptable sentences in (4.169).[48]

(4.169) a. Not a dog was barking.

b. Not a dog was in sight.

Scalar minimization is also compatible with negative auxiliary inversion constructions, as in (4.170), which is acceptable.

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

The difference between the distribution of indefinites headed by *a* seems to be that, unless they are negative polarity items, they need scalar minimization in order to behave like negative polarity items and be acceptable in *Not*-initial constructions. Scalar minimization is not necessary

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48. The contexts in which scalar minimization effects are available is a topic for future work.

in negative auxiliary inversion constructions. *Not*-initial constructions therefore appear to have an additional constraint at work in the context of indefinite subjects when they are headed by determiner *a*.

Both constructions allow compositional negative polarity items headed by determiner *a*. For instance, *single*, in its *only* sense, not the *unmarried* sense, can modify a noun phrase and result in it behaving like a negative polarity item. *A single man* is an acceptable subject in a *Not*-initial construction, as in (4.171a), and in a negative auxiliary inversion construction, as in (4.171b).

(4.171)	a.	Not a single man in this place can say he's happy about it.	(SAE)
	b.	Can't a single man in this place say he's happy bout a damn thing.	(WTE)

When it is not preceded by negation, the subject is unacceptable, as in (4.172a) and (4.172b).

(4.172)	a.	* A single man in this place can't say he's happy about it.	(SAE)
	b.	* A single man in this place can say he's happy about it.	(SAE)

Similarly, the subject becomes a negative polarity item when its noun phrase is modified by *damn*. The subject *a damn thing* is acceptable in a *Not*-initial construction, as in (4.173a), and in a negative auxiliary inversion construction, as in (4.173b).

(4.173)	a.	Not a damn thing has changed.	(SAE)
	b.	Ain't a damn thing changed.	(AAE; Parrott 2000: 417)

The incompatibility with *Not*-initial constructions could be due to competition with alternative forms. When *not* forms a constituent with the determiner *a* and this determiner is not an NPI or a scalar minimizer, the two elements surface as *no*. Under such a hypothesis, the ill-formed sentence in (4.166c), repeated below, would instead surface as (4.174).

(4.166c)	* Not a dog can do that trick.	(SAE)

(4.174)	No dog can do that trick.	(SAE)

If such a line of reasoning were pursued in order to rule out examples which lack the negative polarity or the scalar minimization, the competition could be resolved with a phonological process which would convert the unattested elements, *not* and *a*, into *no* in the relevant contexts. The nature of this process and its limitations is beyond the scope of this dissertation but relevant is the difference between the negative element in *Not*-initial constructions as compared to the one in negative auxiliary inversion constructions. I hypothesize that the competition with alternative forms suggested for *Not*-initial constructions is not available with negative auxiliary inversion constructions because negation is a head that combines with another head in the latter case. In this case, negation forms a unit with tense information and, in some cases, auxiliaries and modals.

Indefinites headed by determiner *a* therefore have a broader distribution in negative auxiliary inversion constructions than they do in *Not*-initial constructions. In the latter construction, subjects headed by *a* are either negative polarity items or they obligatorily have a scalar minimization effect.

Another difference in the distribution of indefinites is the availability of negative polarity items headed by *any* in negative auxiliary inversion constructions, as in (4.176a), and their restricted availability in *Not*-initial constructions, as in (4.176b).[49]

(4.175) a. Cain't anything jump in this game. (WTE)

  b. * Not anything can jump in this game. (SAE)

(4.176) a. Don't anybody live there anymore. (WTE)

  b. * Not anybody lives there anymore. (SAE)

The unavailability of (4.175b) and (4.176b) is again surprising. If *anybody* is an existential quantifier with a licensing requirement, the movement of *not* should be allowed because it is not semantically-vacuous, in the same way the movement of the complex head is allowed in (4.175a) and (4.176a), and because it would result in the NPI being licensed.

The observation that *not* and *anybody* are rarely adjacent to each other in standard English was

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49. This difference was initially observed in Foreman (1999).

initially recorded in Klima (1964). He proposes that when *not* and *anybody* are adjacent, a phonological process applies to convert the two words to *nobody*, the analysis that is adopted in Foreman to account for the difference between the two constructions. The unacceptable sentence in (4.175b) would then surface as (4.177).

(4.177)   Nobody can read your book.   (SAE)

The unavailability of *any* in *Not*-initial constructions has therefore been proposed to be due to competition with alternative forms.

Anybody can follow negation in some contexts, such as, for example, when it is emphasized, as in the examples in (4.178).

(4.178)   a. Nobody's holding me back. Not you, not anybody.[50]

       b. I don't trust anybody. Not anybody.[51]

       c. Not time, distance, obstacles. Not anything can keep us apart.[52]

In these examples, *not anybody* and *not anything* are interpreted as emphatic versions of *nobody* and *nothing*, respectively, and likely need prosodic emphasis on the negative polarity item.

However, only negative polarity item *any* is in competition with *no*. In the case in which *any* has a free-choice interpretation, it is not in competition and the result is acceptable, as would be expected. *Any* with a free-choice interpretation is available in *Not*-initial constructions when the free-choice interpretation is made clear with a *just* modifier, as in (4.179a), with prosodic emphasis on *any*, as in (4.179b), or contextually, as in the examples in (4.180).

(4.179)   a. Not just ANYbody can read your book.   (SAE)

       b. Not ANYbody can read your book.   (SAE)

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50. This example is spoken by the character Brian "Smash" Williams from the TV show Friday Night Lights played by Gaius Charles.

51. This example is an excerpt from Rainbow Rowell's (2013) book *Fangirl*.

52. This example was found on the internet but is not attributed to anyone in particular.

(4.180) a. Anybody can be a rapper but not anybody can be a classical rapper.[53]

 b. Anybody can talk. Not anybody can be tough.[54]

 c. Not anything can happen in language contact.[55]

Free-choice *any* is possible in both *Not*-initial constructions, as in (4.181a), and in negative auxiliary inversion constructions, as in (4.181b).

(4.181) a. Not just anybody will be allowed in.　　　　(SAE; Foreman 1999/2001: 41)

 b. Won't just anybody be allowed in.　　　　(WTE; Foreman 1999/2001: 41)

Determiner *any* is more restricted in its distribution in *Not*-initial constructions than in its distribution in negative auxiliary inversion constructions. Once again, the restriction seems to be due to competition with an alternate form and it can be overturned in certain contexts, such as when it is emphatic.

Another difference in the subject distribution of the two constructions is the availability of negative indefinites in negative auxiliary inversion constructions, as in (4.182a), and their unavailability in *Not*-initial constructions, as in (4.182b).

(4.182) a. Won't nobody come to the party.　　　　　　(WTE)

 b. * Not nobody watches this show.　　　　　　(SAE)

The negative auxiliary inversion example in (4.182a) involves negative concord. There is only one instance of logical negation in the sentence despite the presence of multiple elements which bear negative morphology. The negative indefinite *nobody* is an n-word. N-words in chapter 3 were proposed to be existential quantifiers with an additional licensing requirement which results in the quantifiers behaving like negative polarity items.

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53. Quote is attributed to rapper Nas on the internet.

54. Quote is attributed to basketball analyst Jay Bilas on the internet.

55. Quote is attributed to linguist Carol Myers-Scotton on the internet.

The same analysis cannot be extended to (4.182b). The *Not*-initial construction in (4.182b) cannot involve negative concord because standard American English does not exhibit negative concord and it lacks n-words. The reason negative concord may be absent in standard English but present in varieties of English which exhibit negative auxiliary inversion can also be tied to the absence of the higher negative projection in standard American English.

The *Not*-initial construction in (4.182b) is not possible under a double negation reading, either. The two negative elements cannot be interpreted as each bearing an instance of negation. The Revised Principle of Scope Economy can account for why the derivation involving double negation is ruled out. The movement of *not* over the negative indefinite would not be licensed because it would not give rise to a new interpretation, so (4.182b) under a double negation interpretation is ruled out.

In this section, I discussed some differences between the subject distribution of *Not*-initial constructions and negative auxiliary inversion constructions. *Not*-initial constructions are more restricted in the types of indefinites they allow. Indefinites headed by *a* are possible only if they have a scalar minimization interpretation or are negative polarity items whereas negative auxiliary inversion constructions do not have these restrictions. Negative polarity items are generally possible in both constructions, but ones headed by *any* are generally ruled out in *Not*-initial constructions. Indefinites headed by *no* are also not possible. These indefinites cannot be negative polarity items because standard English lacks negative concord and they are not otherwise licensed because the movement of negation that would form the construction would be ruled out by the Revised Principles of Scope Economy.

Given the relatively few differences between the subject distributions of the two constructions, I propose that *Not*-initial constructions are derived by the same mechanism as negative auxiliary inversion constructions but are also subject to additional constraints which disallow structures that would otherwise be allowed by the Revised Principle of Scope Economy.

4.3.1.4.2 Some unproblematic discrepancies

I turn next to discussing some apparent discrepancies between the subject distributions of the two constructions which I propose are not problematic. One such discrepancy involves the constructions in (4.183).

(4.183)   a.   Can't but two people sit in the back.   (AppE; Feagin 1979: 242)

         b.   Didn't but three people sign up for the trip.   (AppE; Feagin 1979: 346)

         c.   Well, Walt said he told him, says, ain't but two mean fellers here, an' I'm both of

               em.   (AppE; Feagin 1979: 348)

The word order in these constructions is similar to the word order seen in negative auxiliary inversion constructions but they are unlikely to involve scope. The example in (4.183a) means something equivalent to 'Only two people can sit in the back.' These complex subjects seem to lack a compositional interpretation and seem to behave like negative polarity items. Horn (2014b) observes that their non-inverted counterparts are completely uninterpretable, as in (4.184).

(4.184)   a.   * But two people can't sit in the back.

         b.   * But three people didn't sign up for the trip.

         c.   * But two mean fellers ain't here, an' I'm both of em.

The *Not*-initial minimal pairs are not acceptable in standard English, as in (4.185).

(4.185)   a.   * Not but two people can sit in the back.   (SAE)

         b.   * Not but three people signed up for the trip.   (SAE)

         c.   * Not but two mean fellas are here.   (SAE)

The reason the examples in (4.185) are not possible is due to the absence of these complex phrases in standard English. However, they should be acceptable to speakers of varieties who allow these complex phrases, provided these same speakers also allow *Not*-initial constructions.

The issue we encounter with the availability of the examples in (4.183) does not relate to a difference between the two constructions but instead to a property of negative auxiliary inversion. If the complex phrases have a fixed interpretation and do not involve scope, we cannot account for their availability with the Revised Principle of Scope Economy.Recall that in our discussion in chapter 3, negative polarity items were interpreted as quantifiers and the movement of negation past them was subject to the Revised Principle of Scope Economy. Derivations in which the movement did not occur were ruled out due to the additional constraints of negative polarity items. The availability of (4.183) raises the question of whether negative auxiliary inversion can occur solely in order to license negative polarity items.

Another alternative form which may be in competition with *not* when it precedes indefinite *a* in the speech of some individuals is *nary*. *Nary* is attested in the Southeast United States in the speech of European Americans and less frequently in the speech of African Americans (Wolfram 2008). An acceptable counterpart of (4.166c), repeated below, is a construction which, instead of *Not* sentence-initially, has *Nary*, as in (4.186).

(4.166c)   * Not a dog can do that trick.

(4.186)   Nary a dog can do that trick.

Nary is glossed as meaning 'not a one, not any' in Montgomery & Hall (2004) for Smoky Mountain English, a variety of English spoken in Appalachia. The authors state that *nary* and its morphologically positive counterpart, *ary*, are originally derived from 'ne'ver a' and 'e'er a,' respectively, that they are more emphatic versions of *any*, and that they are more often used to refer to singular entities rather than plural ones.

Recall that in the previous section, I proposed that the reason (4.166c) is unattested is because negative *not* followed by indefinite *a* are in competition with negative indefinite *no*. An alternative process could apply instead and *not* could be in competition with *nary* in the varieties which exhibit this lexical item. If *nary* is an alternative form that is in competition with *not* when it precedes *a*, we expect *nary* to behave like a nominal modifier in the same way negation does in *Not*-initial constructions. There is, in fact, evidence that *nary* behaves like a nominal modifier.

Nary is generally followed by the indefinite determiner *a* (Feagin 1979), as it does in (4.186).

However, *nary* might be an alternative to *not* more generally in varieties which exhibit it.[56] Consider the acceptable example in (4.187a) and its unacceptable minimally different counterpart in (4.187b). These constructions exhibit canonical negative inversion, which involves the fronting of a downward entailing adverbial and subject-auxiliary inversion.

(4.187)   a.   The Academy Award nominations were announced on Tuesday and nary was a car movie to be found.[57]

           b.   * Not was a car movie to be found.

           c.   A car movie was not to be found.

The example containing sentence-initial *nary* is acceptable while the example containing sentence-initial *not* is not. The acceptable example in (4.187a) might be derived from the example in (4.187c). Canonical negative inversion could occur, as in (4.187b), and *not* could surface as *nary* to give rise to the example in (4.187a).

Nary might therefore be an alternative to negation *not* both when it is nominal modifier, as in *Not*-initial constructions, and when it is a verbal modifier, as the example in (4.187a) suggests. However, *nary* cannot just be an alternative to negation and must be able to be an independent modifier. Consider the examples in (4.188), in which *nary* appears postverbally.

(4.188)   a. We saw nary a soul.[58]   (SE)

           b. I don't feel nary a bit older.   (Appalachian English; Feagin 1979: 227)

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56. The discussion on the distribution of *nary* is based on a preliminary corpus study in which I found that *nary* behaves like a nominal modifier, a verbal modifier, and the determiner of a nominal phrase. More research should be done in order to determine whether its distribution is as described in a single dialect or whether the variation in its distribution is due to dialectal differences.

57. This example is from Darren McGee's (2011) article in the Globe and Mail, available at the following website http://www.theglobeandmail.com/globe-drive/reviews/classics/10-classic-car-movies-to-set-your-heart-racing/article563741/.

58. This example is from the dictionary definition of *nary* from the Cambridge Advanced Learners Dictionary & Thesaurus, available at http://dictionary.cambridge.org/us/dictionary/english/nary.

    c. Hit didn't scare me nary a speck nor a spark.

                      (Smoky Mountain English; Montgomery & Hall 2004: liv)

    d. I didn't catch nary a fish last night.

                      (Southeastern American English; Wolfram 2008: 87)

    e. It's nary a fish.   (Southeastern American English; Wolfram 2008: 91)

    f. We never seed nary another wolf.

                      (Smoky Mountain English; Montgomery & Hall 2004: xlii)

In these examples, *nary* is unlikely to be sentential negation *not* because if it was, these examples would need to be derived by downwards movement rather than upwards movement to a c-commanding position. The availability of postverbal instances of *nary* suggests that *nary* cannot exist as solely an alternative to negation *not* but that it is also an independent modifier.

Additionally, there are examples in which *nary*'s distribution is more similar to one of a determiner like *any*. Consider the examples in (4.189).

(4.189)   a. Ain't nary one of 'em married.

                      (Smoky Mountain English; Montgomery & Hall 2004: lv)

    b. They wouldn't nary one of them go.

                      (Smoky Mountain English; Montgomery & Hall 2004: lxiv)

    c. Jack is an old hand to coon-hunt, but he never catches nary'un.

                      (Smoky Mountain English; Montgomery & Hall 2004: xli)

    d. I never seed a deer nor saw nary'un's tracks.[59]

                      (Smoky Mountain English; Montgomery & Hall 2004: xlii)

Nary can be followed by *one* or its enclitic form, spelled as *'un*, as in the examples in (4.189). In these examples, the distribution of *nary* is more similar to that of *any*.

Interestingly, the example in (4.189a) appears to involve negative auxiliary inversion and the example in (4.189b) is a split subject construction. Unlike the example in (4.186), which is in competition

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59. The word *seed* in this example is the past tense form of the verb 'saw.'

with *Not*-initial constructions, *nary* in the examples in (4.189a) and (4.189b) are part of the subject of the sentence which follows a negated auxiliary. Examples in which *nary* is followed by indefinite *a* and is part of the subject of negative auxiliary inversion constructions are also attested. In the example in (4.190), *nary* precedes negative polarity item *a soul* in a negative auxiliary inversion construction.

(4.190)   Hadn't nary a soul set foot in that house, 'til Dave moved in.

(WTE; Foreman 1999/2001: 10)

In all examples in which *nary* co-occurs with negative auxiliary inversion and in the presence of a split subject, *nary* follows the negated auxiliary and it appears to be part of the canonical subject.

Furthermore, consider the example in (4.191), in which the speaker starts out by producing a negative auxiliary inversion construction or negative existential construction but then produces a complete sentence which begins with *nary* instead.

(4.191)   Ain't none–Nary a one of em didn't turn out to be a drunkard.[60]

(Appalachian English; Feagin 1979: 216)

Feagin (1979) speculates that the correction is due to the initial use of *ain't*, a stigmatized word, and the corrected *Nary*-initial construction can be interpreted as an alternative way to state the same idea that would have been stated with the use of a negative auxiliary inversion construction or negative existential (see pages 216 and 236).

Nary is interesting in the context of this dissertation because it can appear sentence-initially in the place where we expect *not* to appear in *Not*-initial constructions. We can derive these examples by extending the analysis I provided for *Not*-initial constructions to them. Under such an analysis, the *Nary*-initial constructions are formed by scope-sensitive movement of sentential negation to an adjunct position of the subject and *nary* is in competition with *not*. However, *nary* cannot just

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60. In this example, *nary* precedes *a*, but, given that this element is followed by *one*, the *a* is more likely due to a phenomenon known as a-prefixing rather than a determiner. For a brief overview of a-prefixing and references, see Matyiku (2011) on the Yale Grammatical Diversity website. The sentence can be understood as meaning 'not (even) one of them turned out to be a drunkard.'

be an alternative to negation *not* and must be an independent lexical item as well. *Nary* can modify the subjects of negative auxiliary inversion constructions and split subject constructions and when they do, they follow the negated auxiliary. This distribution, along with *nary*'s distribution postverbally and as a determiner, cannot trivially be derived by extending the analysis I provided for *Not*-initial constructions to them and must instead by derived by an independent process.

4.3.1.4.3   A consequence for split subject counterparts

A welcome consequence of adopting an adjunction analysis for *Not*-initial constructions is that it makes the right prediction about whether *Not*-initial constructions in standard English could allow split subject construction counterparts. Recall that split subject counterparts of negative auxiliary inversion constructions are possible in some varieties of English. The split subject construction in (4.192a) is the split subject counterpart of the negative auxiliary inversion construction in (4.192b).

(4.192)   a.   They can't everybody win the jackpot.   (WTE)

          b.   Cain't everybody win the jackpot.   (WTE)

The question that arises is, given the parallelism between negative auxiliary inversion and *Not*-initial constructions and the availability of split subject counterparts of negative auxiliary inversion constructions in some varieties, whether there could be split subject counterparts of *Not*-initial constructions. Split subject counterparts of *Not*-initial constructions would involve the presence of a sentence-initial element, as in (4.193a), which would be the split subject counterpart of (5.45). To the best of my knowledge, such examples are unattested for speakers that allow *Not*-initial constructions.

(4.193)   a.   * There not many people can say that.   (SAE; *unattested*)

          b.   Not many people can say that.   (SAE)

The absence of split subject counterparts of *Not*-initial constructions can be tied to the absence of an available specifier position and to the absence of a split inflectional domain. Recall that negative auxiliary inversion constructions involve movement of a negative head to a higher negative

projection, as in (4.194). As discussed in section 4.2.2.4, the sentence-initial element in split subject constructions is housed in the specifier projection of this head.

(4.194)
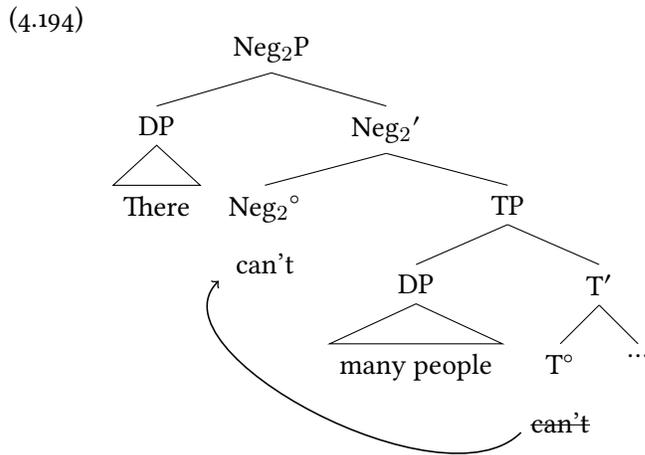
Given an adjunction analysis for *Not*-initial constructions, there is no specifier which could house the sentence-initial element of a split subject counterpart. The subject with the adjoined negation is in canonical subject position and a higher projection is not available, as in (4.195). In other words, there is no possible host for another sentence-initial phrase. Additionally, split subject constructions are not licensed in the absence of a split inflectional domain through which a tensed auxiliary can raise, one of Zanuttini & Bernstein's (2014) criteria for deriving split subject constructions.

(4.195)
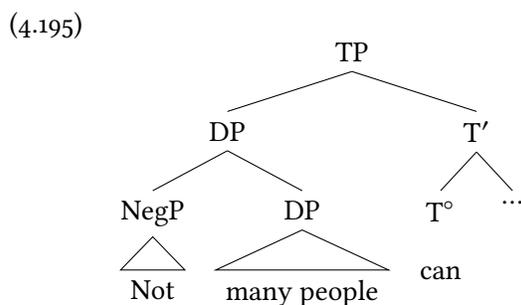
In section 4.3.1.3, I argued in favor of the Complex DP analysis for *Not*-initial constructions over the Sentential Negation analysis. However, the same line of reasoning can explain why *Not*-initial constructions do not have split subject counterparts if the alternative Sentential Negation Analysis turns out to be the correct analysis for the construction. Under such an analysis, (4.196), there is no possible host for the sentence-initial element, either, and no movement of the tensed auxiliary.

(4.196)

TP
NegP — TP
Not
DP — T′
many people
T° ...
can
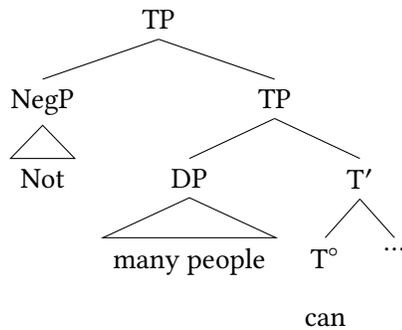
Regardless of which syntactic analysis is correct for *Not*-initial constructions, an adjunction anal-ysis allows a simple explanation for why the construction cannot have a split subject counterpart. Unlike negative auxiliary inversion constructions, it lacks an available specifier position which could house the sentence-initial element and the movement through multiple heads in the inflec-tional domain.

4.3.1.4.4 *Not*-initial constructions in NAI-exhibiting varieties

Not-initial constructions in varieties which exhibit negative auxiliary inversion constructions should be derived in the same way in which they are in standard English.

4.3.1.5 Concluding remarks

Part of the analysis provided for negative auxiliary inversion can be extended to account for *Not*-initial constructions in standard English. Both are derived by the movement of negation which is subject to the Revised Principle of Scope Economy. In both cases, Scope Transparency is respon-sible for their missing inverse scope interpretation. While both constructions involve optional movement – optional in the sense that it is not feature-driven – its landing site differs. The land-ing site of negation in *Not*-initial constructions is an adjunct position within the subject DP. The landing site of negation in negative auxiliary inversion constructions is $\text{Neg}_2°$, a higher projection available in the hierarchy of projections. An important distinction between the analyses provided for the constructions involves the main proposal of this dissertation. *Not*-initial constructions do

not provide further evidence that head movement can have semantic effects. These constructions are derived by phrasal movement rather than head movement.

4.3.2 Canonical negative inversion

Canonical negative inversion somewhat resembles negative auxiliary inversion. This construction involves the fronting of a phrase that is typically (though not always) negative or downward entailing and subject-auxiliary inversion (Klima 1964, Liberman 1974, Haegeman 2000, Sobin 2003, Büring 2004, and many others). Some examples of canonical negative inversion are given in (4.197).

(4.197)   a.   Never would I have imagined that to be possible. (SE)

      b.   With no one's help will Jamie finish her homework. (SE)

      c.   Not in a million years will he admit his mistake. (SE)

      d.   Hardly ever does it rain in the summer. (SE)

      e.   Barely anywhere have I travelled. (SE)

      f.   Only after a nap will I be able to focus again. (SE)

The sentence-initial phrase is followed by an auxiliary which is in turn followed by the thematic subject. There are quite a few differences between canonical negative inversion (CNI) and negative auxiliary inversion (NAI) constructions. The sentence-initial element in CNI constructions is a phrase, rather than a head, as it is in NAI constructions. CNI constructions can occur in the absence of sentential negation, unlike NAI constructions. All of the auxiliaries in the CNI examples in (4.197) have positive polarity. Unlike with NAI constructions, there is no restriction on the types of thematic subjects that can occur in CNI constructions. The subjects in (4.197) are predominantly definite, specific subjects with the exception of (4.197d), which is weather expletive *it*. Some examples of the types of sentence-initial phrases that can occur in CNI constructions are negative phrases, as in (4.197a) and (4.197c), phrases in which negation is embedded, as in (4.197b), phrases which show no overt negation but are downward entailing, as in (4.197d) and (4.197e), and phrases headed by *only*, as in (4.197f).[61] Whether or not canonical negative inversion can occur depends

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61. See Collins & Postal (2014) for an analysis of the different types of phrases that can be fronted.

on a property of this sentence-initial phrase. The examples in (4.198) are similar to examples from (4.197), but the sentence-initial phrases in these examples give rise to unacceptability.

(4.198) a. * With someone's help will Jamie finish her homework. (SE)

       b. * In a million years will he admit his mistake. (SE)

       c. * Many places have I travelled. (SE)

Canonical negative inversion and negative auxiliary inversion share some structural similarities. CNI constructions can also be embedded under overt complementizers in some cases, as in (4.199), though not categorically, as in (4.200).[62]

(4.199) a. I swear that never again will I order from this place. (SE)

       b. Jamie promises that on no account will he work overtime. (SE)

(4.200) a. * Taylor suspects that with no one's help will her son finish his homework. (SE)

       b. * Jo admitted that barely anywhere had he travelled. (SE)

Canonical negative inversion, similarly to negative auxiliary inversion, is an optional construction that can be seen as being derived from a non-inverted counterpart by movement. The non-inverted counterparts of (4.197a)-(4.197c) are as in (4.201a)-(4.201c).[63]

(4.201) a. I would never have imagined that to be possible. (SE)

       b. Jamie will finish her homework with no one's help. (SE)

       c. He will not admit to his mistake in a million years. (SE)

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62. The fact that they can ever be embedded is evidence enough for Sobin (2003) to propose that canonical negative inversion is not a root phenomenon, as typically assumed to be the case, but involve instead a different clausal type.

63. Note that I assume the fronted element in (4.197c) to be compositional in order to derived the example from the non-inverted counterpart in (4.201c). I assume that *in a million years* moves first and then *not* moves up to adjoin to it from its usual canonical negation. The non-inverted counterpart in which the fronted element is not compositional is ill-formed, as in (i).

(i) * He will admit to his mistake not in a million years. (SE)

Subject-auxiliary inversion is apparently not always obligatory. Some CNI constructions are possible in the absence of subject-auxiliary, examples (4.202b) and (4.202f), while the rest of the examples in (4.202) are not.

(4.202) a. * Never I would have imagined that to be possible.   (SE)

   b.   With no one's help Jamie will finish her homework.   (SE)

   c. * Not in a million years he will admit his mistake.   (SE)

   d. * Hardly ever it rains in the summer.   (SE)

   e. * Barely anywhere I have travelled.   (SE)

   f.   Only after a nap I will be able to focus again.   (SE)

In cases in which the subject-auxiliary inversion appears to be optional, it apparently correlates with different scopal relations. Under the assumption that the subject of the sentence is in canonical subject position and the construction is derived by further movements, following in particular the work of Haegeman (2000), the movements of both the sentence-initial phrase and the auxiliary appear to have a disambiguating effect in some examples, as observed in Klima (1964). Consider the examples in (4.203) and (4.204), which are variants of examples provided in Liberman (1974). The example in (4.203) is ambiguous. One of the interpretations, the one equivalent to *There is no job that would make Mary happy*, is only available in (4.204a) while the other interpretation, the one equivalent to *If she had no job, Mary would be happy*, is only available in (4.204b).

(4.203)   Mary would be happy with no job.   (SE)

(4.204)   a. With no job would Mary be happy.   (SE)

          b. With no job, Mary would be happy.   (SE)

In the canonical negative inversion example in (4.204a), the downward entailing phrase *with no job* scopes outside of the modal *would* and there is subject-auxiliary inversion. In the example in (4.204b), the phrase is interpreted within the scope of the modal. However, Klima concludes that examples such as the ones in (4.204a) and (4.204b) are two structurally-different sentences, despite the superficial similarities. The example in (4.204a) is a canonical negative inversion construction

while the example in (4.204b) involves topicalization. Summarizing previous literature, Büring (2004) observes that in (4.204b), there is an intonational break following *with no job*, there is no subject-auxiliary inversion, and the constituent is interpreted propositionally. An additional difference between the CNI example in (4.204a) and the topicalization example in (4.204b) involves the scope of negation. Negation in the CNI construction in (4.204a) is able to scope outside of the prepositional phrase that contains it. It is able to license negative polarity items outside of its phrase, as in (4.205a). Negation in the topicalization construction in (4.204b) does not scope outside of the prepositional phrase that contains it and is unable to license NPIs outside of its phrase, as in (4.205b).[64]

(4.205)   a.   With no job would Mary ever be happy.   (SE)

          b.   * With no job, Mary would ever be happy.   (SE)

Given the conclusion that the two apparently disambiguating examples in (4.204a) and (4.204b) have different structures, we can conclude that these examples are not in competition with each other. Topicalization does not result in the topicalized element gaining sentential scope, but the movement of the fronted element in the canonical negative inversion construction does gain sentential scope as well as scope over the modal. It is therefore theoretically possible that the movement of the fronted phrase in CNI constructions is subject to the Revised Principle of Scope Economy. In such a case, the CNI example in (4.204a) would be in competition with the non-inverted example in (4.203). They could both be possible linearizations (PFs) of the same interpretation (LF) in which the phrase has wide scope. The canonical negative inversion construction, which does not exhibit canonical word order, is able to surface because it is more scopally transparent. However, it is not just the downward entailing phrase that moves in canonical negative inversion constructions. The modal or auxiliary also moves and it is both movements in combination that result in the sentence-initial phrase gaining sentential scope. The subject-auxiliary inversion is problematic because it is obligatory despite the fact that it is not scopally significant. In (4.204a), the modal moves over a definite subject, so this movement needs to be motivated in another way,

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64. See Büring (2004: 5) for further evidence that CNI examples behave as though they have sentential scope whereas the topicalization examples have scope only within the fronted element.

such as with features or a criterion. Accounting for this obligatory movement in the syntax could affect whether the two derivations are in competition with each other or not. Additionally, CNI constructions are possible with auxiliaries that are not obviously scope-bearing, such as *do* and *be*, as in (4.206).

(4.206)   a.   Hardly ever does it rain in the summer.   (SE)

   b.   Never again is he going on a date with you.   (SE)

The fact that negation gains sentential scope does not seem to be enough in order for scope economy to be the mechanism driving how these constructions are derived. These structures are likely feature-driven instead. I turn next to providing a sketch of what I assume to be the structural analysis of CNI constructions, following which I explain why I do not derive CNI constructions with the higher negative projection I use to derive negative auxiliary inversion constructions.

I assume that the way in which CNI is derived from its non-inverted counterpart is by the movement of the fronted phrase and the auxiliary to projections in the left periphery. The movement of these elements occurs above the subject, which is in the canonical subject position. I follow in particular Haegeman's (2000) analysis for the construction. The structure of the example in (4.207) is as in (4.208).

(4.207)   Never will I order dessert.

(4.208) $[_{\text{FocP}}$ Never $[_{\text{Foc'}}$ will $[_{\text{TP}}$ I $[_{\text{T'}}$ ~~will~~ $[_{v\text{P}}$ ~~never~~ $[_{v\text{P}}$ ~~I~~ order dessert$]]]]]]$

The subject raises to canonical subject position, there is T°-to-Foc° head movement, and the adverb moves up to SpecFocP. The structure is deliberately similar to the structure of *wh*-movement as proposed in Rizzi (1997) because CNI and *wh*-movement share some similarities. CNI appears to involve the same phrasal movement and subject-auxiliary inversion we find in *wh*-questions. These movements are feature-driven and involve negative features that Agree in a Spec-Head configuration in their landing sites. Sobin (2003) provides some evidence against treating CNI constructions and *wh*-movement similarly, pointing out that they have different distributional

properties with respect to long-distance extraction and where adverbs can adjoin. Rather than deriving CNI constructions by movement to the left periphery or deriving these construction by movement from their non-inverted counterpart, he proposes instead that they involve a different clausal type and have a structure as in (4.209).

(4.209) $[_{\text{NegP}}$ Never $[_{\text{Neg}'}$ ~~not~~ $[_{\text{TP}}$ $[_{\text{T}°}$ will $[_{v\text{P}}$ I order dessert$]]]]]$

The fronted phrase is in SpecNegP and the head of this projection is filled with a null negative element which blocks head movement above this position. The auxiliary is in its usual position in the inflectional domain and the subject-auxiliary inversion is a result of the subject staying low in Spec$v$P.[65] I do not adopt his analysis here because it is incompatible with the observations I have made about subjects, how they behave when combined with tag-questions, and where they can be interpreted. The tag subject of an opposite-polarity tag-question agrees with the thematic subject of a CNI construction, as in (4.210). Subjects in these constructions can also be strong quantificational subjects, as in (4.210b), which I've argued cannot remain in Spec$v$P.

(4.210) a. Never do I order dessert, do I?

b. Hardly ever does everyone order drinks, do they?

Haegeman proposes a negative feature to be involved in CNI formation while Sobin uses a negative projection to account for the construction. Since the phrases that front in CNI constructions are negative-ish and since they acquire sentential scope as a result of their movement, we might instead entertain the hypothesis that the landing site of the fronted phrase is the higher negative projection I proposed for NAI constructions in CNI constructions, as well, as in (4.211).

(4.211) $[_{\text{Neg}_2\text{P}}$ Never $[_{\text{Neg}_2'}$ will $[_{\text{TP}}$ I $[_{\text{T}'}$ ~~will~~ $[_{v\text{P}}$ ~~never~~ $[_{v\text{P}}$ ~~I~~ order dessert$]]]]]]]$

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65. Given that the subject precedes any additional aspectual markers beyond the first auxiliary, such as when the perfect aspectual marker is present in (4.197a), *Never would I have imagined...*, Sobin would still need to allow movement of the subject, but only as high as to the specifier of the projection in which these additional aspectual markers are generated. Since the subject does not occupy canonical subject position in these cases, the issues regarding where subjects surface remain.

There would be movement of the subject to canonical subject position, T°-to-Neg_2° movement of the auxiliary, and the movement of the adverbial phrase to $SpecNeg_2P$. Recall, however, that in chapter 2, I tied the availability of the Neg_2 projection to the availability of negative concord and negative auxiliary inversion. I proposed that varieties which lack the two phenomena, including standard English, also lack the higher negative projection. Varieties which exhibit negative concord, on the other hand, have the higher negative projection and varieties which exhibit NAI are able to license head movement to this projection. CNI formation behaves uniformly in all varieties of English, so it is likely derived by the same mechanism. If the Neg_2 were to be the projection involved in deriving CNI constructions, this projection would need to have different properties from the projection that derives NAI constructions in order to account for the differences between the constructions. The projection that derives CNIs is feature-driven and cannot involve optional movement that is subject to the Revised Principles of Scope Economy because it can occur in the absence of other scope-bearing elements. Furthermore, the projection used in CNI formation allows the movement of positive auxiliaries, which NAI formation does not allow. Since canonical negative inversion can occur in the absence of negative auxiliary inversion, as it does in standard English, allowing the Neg_2 projection to derive CNI constructions also makes it harder to account for the observed cross-linguistic differences. I conclude that the higher negative projection is not involved in CNI formation in any variety of English, not even varieties which do have the higher negative projection can use it for CNI.

In this preliminary investigation of canonical negative inversion, I briefly showed that there can be scopal interaction between the sentence-initial phrase and auxiliary and that the fronted element can gain sentential scope. Both of these observations suggest the possibility of extending the analysis I provide in this dissertation to account for negative auxiliary inversion to NAI constructions. The movement that derives them could be subject to the Revised Principles of Scope Economy. However, I also pointed out that the subject-auxiliary inversion that correlates with the fronting of the downward entailing phrase is scopally-vacuous and that CNI constructions can occur in the absence of additional scope-bearing elements. For these reasons, along with the many differences between canonical negative inversion and negative auxiliary inversion, I conclude that the two constructions should not receive a parallel analysis. Instead, CNI constructions in all varieties in-

volve feature-driven movement to a functional projection in the left periphery. NAI constructions, on the other hand, are derived by optional movement that is sensitive to scope economy in varieties of English which have the higher negative projection and which allow this projection to be filled overtly by head movement.

Summary

Overall, in this chapter, I showed that the analysis provided for negative auxiliary inversion constructions for West Texas English is extendable to the construction when exhibited in other varieties of North American English. It is also extendable to split subject constructions in varieties of North American English. Expanding the empirical domain further, I show that the analysis is extendable to *Not*-initial constructions and discuss why it should not be extended to account for canonical negative inversion. In the following chapter, I turn to comparing my analysis to other analyses that have been proposed for negative auxiliary inversion constructions.

Chapter 5

Competing analyses of negative auxiliary inversion

In this chapter, I defend the analysis provided for negative auxiliary inversion in this dissertation against competing analyses for the construction. Broadly speaking, the analyses provided for the construction can be categorized into two types, the categorizing feature being whether or not the subject of the construction is in canonical subject position. When the subject is in canonical subject position, the difference in competing analyses involves the way in which negation gains scope over the attested subjects and how the unattested subjects are able to escape its scope. When the subject is not in canonical subject position, it may stay in the projection which houses the subjects of existentials or it may raise, but if it raises, it does not raise as high as to canonical subject position. I also consider how well analyses that were proposed to hold for varieties of English can account for the empirical landscape in West Texas English.

Considering first the competing analysis in which the subject of the construction does not occupy canonical subject position, it is worth noting upfront that these types of analyses are not likely competitors to the analysis presented in this dissertation. The reason for why they are unlikely competitors is because these older analyses account predominantly for the construction in African American English or for the construction when the subject is a negative indefinite, so when the

construction co-occurs with negative concord. However, these analyses served as the foundation for the contemporary analyses of the construction and, as such, are briefly considered in this chapter in section 5.1. These analyses can be categorized in terms of whether they treat the construction as a type of existential construction or not. Analyses which do not treat the construction as an existential account solely for negative auxiliary inversion constructions when it co-occurs with negative concord. The resulting structure resembles one of an existential in a grammar that is subject to constraints in Sells et al. (1996). The resemblance is due to these structures inducing the fewest number of violations. In White-Sustaíta (2010), the subject of the construction is housed in a lower subject position, the specifier of canonical negative projection, in order to be licensed by a constraint on how negative elements are interpreted and to account for negative concord. Analyses which treat the construction as an existential are considered in more detail in section 5.1.1. Treating the construction as an existential accounts for the definiteness restriction of the construction, which accounts for part of the attested subject distribution of negative auxiliary inversion constructions. But, as we saw in section 4.2.1 of chapter 4, negative existential constructions do exist in varieties which also exhibit negative auxiliary inversion constructions, but these two types of constructions have different properties.

Turning next to the types of constructions in which the subject occupies canonical subject position, these analyses are more likely competitors given the evidence discussed in section 2.1 of chapter 2 for the subject occupying canonical subject position in West Texas English. The analyses of all potential competitors have roots in Labov et al.'s (1968) analysis of the construction. Labov et al. propose inversion of the negated auxiliary to precede the subject and relate the construction with emphasis. Given Labov et al.'s (1968) observation that NAI constructions can be embedded below overt complementizers, most analyses of the construction house the negated auxiliary in a projection in a split left periphery. The projection in Foreman (1999, 1999/2001) is a higher negative projection, the projection adopted in this analysis and my previous work (Matyiku 2016), the projection in Green (2011, 2014) is a focus position with a negative focus feature, and the projection in Blanchette (2015) is a finiteness position. Foreman makes the observation that negation scopes over the subject in negative auxiliary inversion constructions in West Texas English and proposes that inversion is driven not by an affective trigger, as proposed in Labov et al., but instead that the

inversion is driven for scope reasons. Green, on the other hand, recharacterizes the emphatic nature of the construction for African American English as a more absolute negation. In her analysis, negation is gradeable, exhibiting both a weaker interpretation that allows for the context to not hold of a few individuals, and a stronger interpretation that allows no outliers. Negative auxiliary inversion constructions widen the domain of negation to disallow the weaker reading. Blanchette also does not associate the construction with emphasis in Appalachian English and derives the construction by Neg-raising.

The most prominent contender for a competing analysis for the construction to the analysis provided here is Foreman's (1999, 1999/2001) work on the construction. The analysis provided in this dissertation builds heavily on this author's observations for West Texas English and on his analyses. I adopt the Neg_2P projection he proposes as the projection that houses the higher negation. While my analysis provides a more refined analysis of the author's intuition that the movement of negation happens for reasons related to scope, the syntactic structure of negative auxiliary inversion constructions is essentially the same. The syntactic structure of non-inverted counterparts of the construction is also very similar in some cases, but Foreman allows for an additional syntactic structure for the class of subjects that are not attested in negative auxiliary inversion constructions. The defining difference between the analysis proposed in this dissertation and the analysis provided by Foreman is in how we account for the subject restriction of the construction. The impossible subjects are able to raise higher than Neg_2 for Foreman in order to escape the construction while I do not allow negation to raise to Neg_2 past these subjects. In section 5.2, I outline the differences between our analyses, I describe how we account for the subject distribution, and I compare our analyses on the basis of the predictions they make for negative auxiliary inversion constructions and related phenomena.

An alternative analysis that shares properties with both Foreman's (1999/2001) analysis and my own is one in which negation base-generates in the higher negative projection and subjects do not have a higher projection to which they can escape. The restriction on the types of subjects that are attested in the construction is a result of a restriction on when negation can merge in the higher projection. An analysis along these lines has not been proposed in the literature for the construction but it is a competing analysis to the one I adopt. I consider this type of analysis in

more detail in section 5.3, as well as the reasons I disprefer this analysis to the one I adopted here.

Another contender for a competing analysis to the one provided in this dissertation is Green's (2014) work on the construction. The author's analysis accounts for negative auxiliary inversion constructions in African American English and it focuses on accounting for the construction when its subjects are negative and it correlates with negative concord. In her analysis, negative auxiliary inversion constructions are correlated with a pragmatic operation which widens the domain of negation. Building on Horn's (1989/2001) scales of quantifier strength, Green's hypothesis is that the strongest quantifiers are compatible with the widening effect of the construction while the weakest quantifiers are not. I describe her analysis in detail in section 5.4 and I consider how successful it is at accounting for the construction's properties in West Texas English.

Another competing analysis of negative auxiliary inversion is provided in Blanchette (2015), whose work focuses on accounting for negative concord and who extends her analysis of negative concord to apply to negative auxiliary inversion constructions in Appalachian English. The author extends Collins & Postal (2014) syntactic analysis of Neg-Raising to the account for the two phenomena and makes a different prediction about the nature of indefinites from me. A description of her analysis and the differences between our analyses is provided in section 5.5.

5.1 Against a low position for the subject

In analyses of negative auxiliary inversion in which the subject stays low, the subject-auxiliary inversion is derived not by movement of the auxiliary over the subject. Instead, the auxiliary is in its normal position and the subject fails to raise as high as to canonical subject position or it does not raise at all. These analyses can be further categorized in terms of whether they treat the construction as a type of existential construction or not.

White-Sustaíta (2010) provides an analysis for the construction in which the subject raises to an intermediate position, below the canonical subject position. In her analysis, the position in which the subject of negative auxiliary inversion constructions lands is the specifier of the negative projection, NegP, as in (5.1a). The subject raises from its vP internal position to the NegP projection

and in this projection, the locality between the negative indefinite subject and sentential negation accounts for negative concord. The author adopts an account of negative concord in which each morphologically negative element is interpreted as semantically negative and multiple semantically negative elements combine to give rise to the attested presence of a single instance of logical negation, following Haegeman & Zanuttini (1996).

(5.1)   White-Sustaíta's (2010) syntactic assumptions

    a.   The syntax of a negative auxiliary inversion construction

$$[_{TP} [_{T'} \text{can't} [_{NegP} \text{nobody} [_{Neg'} \text{not} [_{vP} \text{nobody tag you then}]]]]]$$
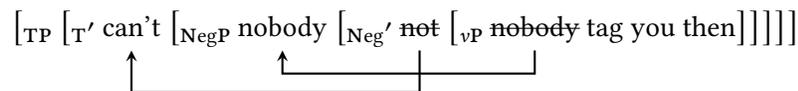
    b.   The syntax of its non-inverted counterpart

$$[_{TP} \text{nobody} [_{T'} \text{can't} [_{NegP} \text{nobody} [_{Neg'} \text{not} [_{vP} \text{nobody tag you then}]]]]]$$
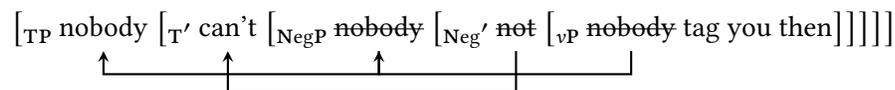
The non-inverted counterpart, on the other hand, is derived by movement of the negative indefinite to canonical subject position, as in (5.1b). The author explains the absence of an overt subject in the negative auxiliary inversion construction as being due to the fact that African American English lacks agreement morphology on the verb. Unlike some construction which exhibit more agreement and some varieties of English with richer morphology, the canonical subject position of this construction is incompatible with expletive subjects in African American English. Non-expletive subjects are, however, possible. The overt movement of the subject occurs to this position to give rise to the non-inverted counterpart, as in (5.1b).

By disallowing an expletive subject to be inserted in (5.1a), the author also accounts for an observed cross-linguistic variation. Some varieties of English which allow negative auxiliary inversion constructions allow these constructions to co-occur with expletives, giving rise to split subject constructions. Split subject constructions are not attested in contemporary varieties of African American English but they were in the past and they are in other varieties. The author proposes that the varieties which do exhibit the phenomenon have more morphological agreement on the verb than African American English.

There are a few reasons the author's analysis cannot be extended to account for negative auxiliary inversion constructions in West Texas English. White-Sustaíta's analysis accounts only for negative indefinite subjects. It would need to be revised in order to account for the broader range of subjects. The construction's subjects with negative polarity are housed in SpecNegP. The author might propose an additional subject position below the canonical subject position which could house subjects with positive polarity in order to account for their availability. Given the very limited subjects the analysis accounts for as proposed, this analysis is not a true contender as a competitor to my analysis for the construction in West Texas English.

Another analysis of negative auxiliary inversion constructions in which the subject stays low is provided in Sells et al. (1996) to account for a variety of African American English. I briefly review some of the problems of extending Sells et al.'s analysis to account for the West Texas English data and I refer the reader to Foreman (1999/2001) for a more in-depth consideration of the problems that arise when adopting this analysis.

Sells et al. (1996) propose a constraint-based grammar to account for the phenomenon of negative auxiliary inversion. The competition between different constraints allows the subjects to stay low in the presence of negation and disobey the EPP, the requirement that a subject fill the canonical subject position, to give rise to the construction. The winning derivation for these authors is as in (5.2).[1]

(5.2)   Sells et al.'s (1996) syntax of a negative auxiliary inversion construction

$[_{TP} [_{T'} \text{ain't} [_{vP} \text{nothin' happenin'}]]]$

The authors also consider a structure in which the movement of the negated auxiliary occurs, as in (5.3), but rule it out because the competing candidate, the structure in (5.2), violates more of their constraints.[2]

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1. The authors assume the position to which the auxiliary raises to be I° instead of T° and the internal position of the subject to be VP rather than vP.

2. The authors do not consider a lower structural position than C° for the raised negated auxiliary because their consultants did not accept the embedding of negative auxiliary inversion constructions under overt complementizers.

(5.3)   A losing derivation considered by Sells et al.

$$[_{CP} [_{C'} \text{ ain't } [_{TP} \text{ nothin' } [_{T'} \text{ ain't } [_{vP} \text{ nothin' happenin'}]]]]]$$
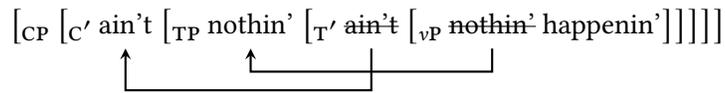
Negative auxiliary inversion constructions receive the same structural analysis for the authors as existentials. Providing parallel structures for the two constructions is incompatible with later findings of differences between them. We will soon see that the attested differences are best captured with the two phenomena receiving different structural analyses. Furthermore, Sells et al.'s analysis only accounts for negative auxiliary inversion in the case in which its subject is a negative indefinite. Negative auxiliary inversion in the absence of negative concord, such as when its subjects have positive polarity, cannot be derived without the addition of other constraints which interact with negation. As Foreman (1999/2001) observes, another problem with the analysis is that the constraints proposed overgenerate to allow negative auxiliary inversion to occur in the case in which the auxiliary has positive polarity.

The problems with this analysis of the construction are that it only accounts for examples in which the subject is negative and the resulting structure shares the same structure as existentials.

In a recent manuscript, Salmon (2017) treats negative auxiliary inversion constructions as parallel to transitive expletive constructions, but, unlike in this dissertation, he does not derive the two types of constructions by movement of the subject to canonical subject position and further movement of the negated auxiliary to a higher projection. Instead, he treats them as formal idioms. The formal idioms have a compositional structure in which some of the elements are fixed and some of which are variable. For example, one of the fixed elements is negation as the morpheme *-n't* in order to account for the fact that negative auxiliary inversion constructions are restricted to negation in this form. Work on which he builds recasts the definiteness effect of existentials on the basis of the fact that definite subjects are sometimes possible in existentials, as we saw in section 3.4.4.1. Salmon shows that definite subjects can be licensed in negative auxiliary inversion constructions in some of the case contexts in which existentials are. Building on previous work, he proposes that the types of subjects that are possible in NAI constructions are subjects that can be construed as being hearer-new. It is harder to capture restrictions on which types of subjects

are possible in this analysis. Additionally, strong quantificational subjects are not addressed in the manuscript and since strong quantificational subjects are not possible subjects of existentials and cannot be interpreted low, Salmon might need to account for them in another way.

We turn next to considering analyses of negative auxiliary inversion constructions that receive an analysis parallel to that of existentials and touch upon evidence of the differences between the properties of the two types of constructions that call for different structural analyses, an issue which I previously discussed in section 4.2.1 of chapter 4.

5.1.1   Against treating the construction as parallel to existentials

Many of the competing analyses in which the subject does not raise to canonical subject position involve treating the construction as a type of existential (Martin 1992, 1993, Sistrunk 1999, Parrott 2000). A sentence exhibiting negative auxiliary inversion is derived by failing to raise the subject to canonical subject position and the negated auxiliary occupying canonical negative position. The analyses differ with respect to whether the canonical subject position must be filled. In the case in which it does, proposals generally posit a null expletive (Martin 1992, 1993, Parrott 2000), as in (5.4a). The non-inverted counterpart of (5.4a) is a simple declarative with movement of the subject to canonical subject position, as in (5.4b).

(5.4)   a.   Construction exhibiting negative auxiliary inversion

$\begin{bmatrix}_{TP} \varnothing$ ain't nobody doin' nothin' wrong$\end{bmatrix}$

b.   Non-inverted construction

$\begin{bmatrix}_{TP}$ nobody ain't ~~nobody~~ doin' nothin' wrong$\end{bmatrix}$

These types of analyses parallel the analysis of existential expletive constructions. An existential expletive construction is formed by failing to raise the subject and instead inserting an expletive in the canonical subject position, as in (5.5a). A simple declarative, on the other hand, involves the subject being base-generated in the specifier of vP and then raised to canonical subject position, the specifier of TP, as in (5.5b).

(5.5) a. Existential expletive construction:

$[_{TP}$ there is nobody doin' anythin' wrong$]$

b. Canonical subject movement:

$[_{TP}$ nobody is ~~nobody~~ doin' anythin' wrong$]$

Recall from chapter 2 that the main motivation for following such an approach is the existence of an apparent definiteness effect in both constructions. Existential expletive constructions allow indefinite subjects, as in (5.6a) and (5.6b), and disallow definite subjects, as in (5.6c).

(5.6) a.   There are five people/many people in the hall.   (SE)

b.   There's a person/nobody in the hall.   (SE)

c.   * There's the man/Jack in the hall.   (SE)

The distribution of these subjects is uniform in constructions exhibiting negative auxiliary inversion, as in (5.7).

(5.7) a.   Can't five people/many people get in the hall.   (WTE)

b.   Can't a person/nobody get in the hall.   (WTE)

c.   * Can't the man/Jack get in the hall.   (WTE)

However, while the definiteness effect accounts for part of the subject distribution of negative auxiliary inversion constructions, it falls short when it comes to a few types of subjects, including strong quantificational subjects. Recall that these types of subjects are possible in negative auxiliary inversion constructions but are not possible in existential constructions. Existential constructions whose subjects are universally quantifying, as in (5.8a), or otherwise strong, as in (5.8b), are illformed.

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

b.   * There are half the students outside.   (SE)

In comparison, these types of subjects are possible in negative auxiliary inversion constructions, as in (5.9).

(5.9) a. Ain't every student here yet. (WTE; Foreman 1999: 8)

b. Didn't half the students do their homework. (WTE; Foreman 1999: 8)

Figure 5.1, reproduced from chapter 2, reviews the types of subjects that share the same distribution in both constructions and the types of subjects that do not share the same distribution.

	Subject	Existential	NAI construction
	Jamie (*proper names*)	✗	✗
	he (*pronouns*)	✗	✗
	the NP	✗	✗
	their NP	✗	✗
Uniform distribution	any NP	✓	✓
	no NP	✓	✓
	many NP	✓	✓
	more than # NP	✓	✓
	a NP	✓	✓
	every NP	✗	✓
	half the NP	✗	✓
Different distribution	many of (the) NP	✗	✓
	none of (the) NP	✗	✓
	some NP	✓	✗
	few NP	✓	✗
	several NP	✓	✗

Figure 5.1: The distribution of subjects in existentials and NAI constructions

Proposals in which the analysis of negative auxiliary inversion constructions parallels the analysis of existential expletive constructions are unsuccessful at accounting for the subject restriction of negative auxiliary inversion constructions as attested for West Texas English.

Recall also from the discussion in section 4.2.1 of chapter 4 that the properties of negative existentials differ from the properties of negative auxiliary inversion constructions and that these differences strongly suggest that the two constructions are structurally different. In addition to

not being able to account for some of the quantificational subjects, these types of analyses also cannot account for test results that suggest the subject of negative auxiliary inversion constructions are in canonical subject position. One diagnostic test was opposite-polarity tag-question formation. When negative auxiliary inversion constructions are followed by a tag-question, the subjects of the tag-questions agree with the subject and are not expletives. In comparison, when tag-questions follow existentials, their subjects are expletives. Another problem these types of analyses encounter is difficulty in restricting negative auxiliary inversion constructions to the presence of sentential negation *-n't*. Parrott (2000) circumvents this issue by positing that the null expletive has a negative feature and is not licensed in positive contexts.

5.2   Against raising impossible subjects higher

My analysis of negative auxiliary inversion builds heavily on Foreman's (1999, 1999/2001) analyses of the construction. In this section, I highlight the differences between our analyses and defend my analysis against his. I adopt the syntax he proposes for the construction. The subject of a negative auxiliary inversion construction is in canonical subject position and the negated auxiliary is in the higher negative projection, Neg_2. While the resulting syntactic structure of a negative auxiliary inversion construction is essentially the same, the biggest difference between the analyses is in the way in which they rule out the unattested subjects in order to account for the subject restriction. The strategy employed by Foreman to account for the subject restriction is by motivating the movement of the impossible subjects to a higher subject position, which serves the purpose of allowing the impossible subjects to escape the scope of negation. The impossible subjects can never stay low in the structure so they can never appear as the subjects of negative auxiliary inversion constructions. In comparison, the way in which the impossible subjects are ruled out in my analysis is by disallowing the movement of the negated auxiliary over these subjects.

We have different criteria for which features of the subjects are relevant to describing the subject restriction. Definite or specific subjects are ruled out for Foreman whereas other types of subjects are not. In my analysis, quantificational subjects are possible subjects of the construction so long as they interact scopally with negation whereas subjects that are not scope-bearing are not possible

subjects.

This section begins with a description of the syntax of negative auxiliary inversion constructions, highlighting the technical differences in the analyses. Section 5.2.1 also addresses the syntactic assumptions we make in order to rule out the impossible subjects. A more in-depth discussion of how Foreman accounts for the subject distribution of negative auxiliary inversion constructions follows in section 5.2.2. Phenomena that receive a parallel analysis to negative auxiliary inversion constructions in both Foreman's analyses and mine are discussed in section 5.2.3. Section 5.2.4 compares the two types of analyses and highlights the advantage of my analysis over his.

5.2.1 Syntactic assumptions

The syntactic structure of a negative auxiliary inversion construction in both Foreman's analyses and the analysis presented in this dissertation is roughly as in (5.10), abstracting over some movements and hierarchical projections in the structure.

(5.10) $\left[_{\text{Neg}_2\text{P}} \text{ didn't } \left[_{\text{TP}} \text{ everybody } \text{d\underline{idn't}} \text{ go to the party}\right]\right]$
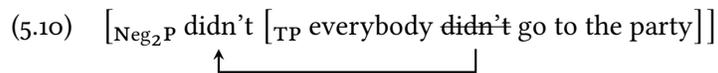
The subject is in canonical subject position and the negated auxiliary is in a higher negative projection, $\text{Neg}_2°$.[3] Foreman considers two possibilities for how negation ends up in this position. Canonical negation raises from its lower structural position to the higher negative projection, successive cyclically moving through any heads in between, as in (5.11). This is the possibility adopted in Foreman (1999) and in my analysis as well.

---

3. Foreman (1999, 1999/2001) assumes a split inflectional domain which includes AgrS and AgrO. The canonical subject position is AgrSP, a projection present above TP and below Neg_2P, but the author states the inclusion of the case positions has little impact on his analysis. Given this statement and the fact that the absence of the projection is inconsequential to the differences between Foreman's analyses and my own, I do not include the projection in this discussion and show the canonical subject position as SpecTP.

(5.11)

```
                    Neg₂P
              ╱────────────╲
          Neg₂°              TP
          didn't       ╱──────────╲
                     DP              T′
                  ╱──────╲      ╱────────╲
                everybody   T°          Neg₁P
                           d̶i̶d̶n̶'̶t̶   ╱──────────╲
                                  Neg₁°          vP
                                  -̶n̶'̶t̶      ╱──────────╲
                                         go to the party
```
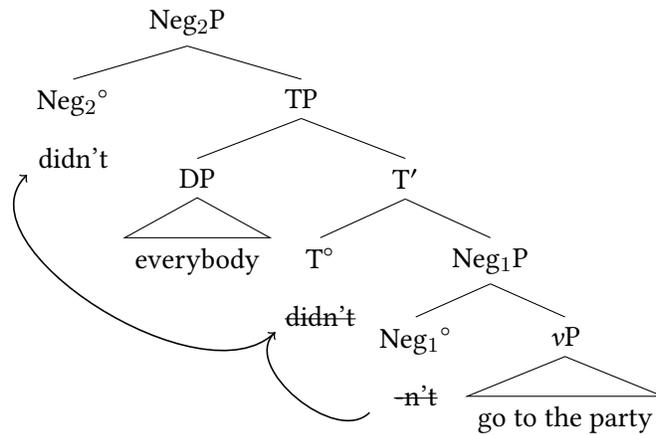
The other possibility relies on negation having two options for where in the structure it can merge. It can merge in the canonical position for sentential negation, the position of Neg₁ above, or it can merge higher in the position of Neg₂. In the case of negative auxiliary inversion, the negative projection is base-generated in the higher position and the movement that derives the construction is of the auxiliary undergoing movement to this higher negative projection, as in (5.12). Deriving the structure in this way is discussed in both Foreman (1999, 1999/2001) but adopted only in Foreman (1999/2001).[4,5]

(5.12)

```
                    Neg₂P
              ╱────────────╲
          Neg₂°              TP
          did-n't      ╱──────────╲
                     DP              T′
                  ╱──────╲      ╱────────╲
                everybody   T°          vP
                           d̶i̶d̶     ╱──────────╲
                                  go to the party
```
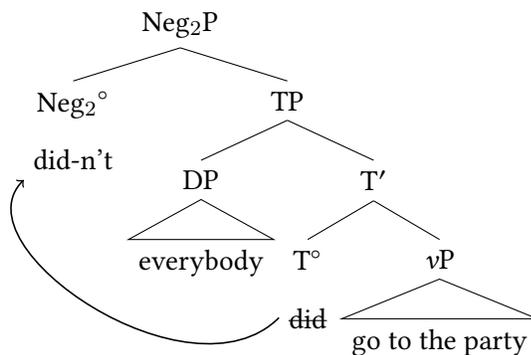
Foreman provides evidence for the presence of two negative projections by showing that both

4. Note, however, that Foreman does not assume auxiliary formation to be compositional in 1999/2001. In his later analysis, a negated auxiliary enters the derivation as a lexical item with a negative feature that must get checked.

5. For the purposes of this discussion, I focus on structures in which both negative projections are present and the negated auxiliaries are compositional. I return to a discussion of the structures in which negation merges high in section 5.3.

projections can be overtly filled, as in (5.13).

(5.13)   Ain't everybody not goin' to the party. I'm goin'!   (WTE; Foreman 1999/2001: 31)

'Not everybody is not going to the party. I'm going'

His proposal for this example is that it involves two instances of sentential negation. Both the higher and lower negative projections are filled, each sentential negation provides an instance of logical negation, and the resulting interpretation is one of double negation. The author also provides this example as evidence that a single negative projection merges into the structure at a time in negative auxiliary inversion constructions. If two negative projections were present, he expects that they would result in double negation. However, it is possible to see the example in (5.13) as involving, rather than two instances of sentential negation, an instance of sentential negation and the *not* as an instance of constituent negation.

Besides the variations in how the structure of a negative auxiliary inversion construction is generated, the biggest difference between Foreman's analyses and my work is, as previously mentioned, in the way in which we account for the construction's unattested subjects. I rule out most of the impossible subjects by ruling out the movement of the negated auxiliary from occurring when the subject is not scope-bearing, such as when it is a proper name, as in (5.14). The movement of negation is subject to the Revised Principle of Scope Economy and the overt movement of negation over a non-quantificational subject is ruled out because it is semantically vacuous.

(5.14)   Neg$_2$° $\begin{bmatrix} \text{Jamie didn't go to the party} \end{bmatrix}$
         $_{\text{TP}}$
         ✗
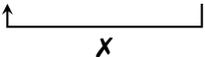
Foreman, on the other hand, allows for the possibility of negation to occupy the higher negative position and accounts for the construction's subject restriction with the proposal that most impossible subjects move higher in the structure than either negative position. The higher projection which houses the impossible subjects is a higher subject position to which specific subjects raise in order to be interpreted. This projection is a referential projection (RefP) which is based on RefP projections previously discussed in the literature (Beghelli & Stowell 1996, 1997, É. Kiss 1996).[6] In

6. RefP is initially proposed in Beghelli & Stowell (1996, 1997) as an LF projection that houses subjects and objects

the case in which the subject is definite, such as when it is a proper name, it moves to this RefP projection and cannot stay in the lower subject position. The derivation in (5.15) is ruled out for him because the definite subject has a referential feature which must be checked and since the subject has not raise to the higher subject position for interpretation.[7]

(5.15) $[_{\text{Neg}_2\text{P}}$ didn't $[_{\text{TP}}$ Jamie ~~didn't~~ go to the party$]]$

However, the derivation converges if the subject is able to raise to the referential subject position, as in (5.16).

(5.16) $[_{\text{RefP}}$ Jamie $[_{\text{Neg}_2\text{P}}$ didn't $[_{\text{TP}}$ ~~Jamie didn't~~ go to the party$]]]$

Since RefP is structurally higher than both negative positions, Neg_1 and Neg_2, definite subjects surface above negation regardless of which of the two negative positions negation occupies. Given the two structural positions available for subjects, the analysis allows for spurious ambiguity with respect to which negative projection is filled when a subject is definite. The alternative derivation for the declarative that surfaces in (5.16) which does not make use of the higher negative projection is the derivation in (5.17).[8]

(5.17) $[_{\text{RefP}}$ Jamie $[_{\text{Neg}_2'}$ $[_{\text{TP}}$ ~~Jamie~~ didn't go to the party$]]]$

that are referentially independent above all other possible elements, including *wh*-elements. É. Kiss (1996) adopts this projection and revises it to be an overt position below CP that houses specific subjects in order to account for asymmetries between specific and non-specific subjects. She proposes that specific subjects are housed in the higher subject position while non-specific subjects remain in canonical subject position. Foreman's RefP projection shares properties with both of its predecessors. I return to how the author uses the projection to account for the subject distribution in section 5.2.2.

7. Note that the structure assumed in this discussion is in line with the analyses in which two negative projections are present, as adopted in Foreman (1999) and in this dissertation. Recall that in the competing analysis Foreman adopts in 1999/2001, negation is base-generated high and only one negative projection is present. In the competing analysis, the lower negation is not present and the movement to Neg_2 is of just the auxiliary.

8. In this case, the spurious ambiguity is not necessarily problematic, but we will soon see some cases in which negation is incompatible with the higher negation.

Foreman adopts multiple projections in his analyses in order to account for the attested distributions of negative auxiliary inversion constructions. He has two projections available to negation and two projections available to subjects outside of the lexical domain. The defining characteristic of the subject that determines if it is compatible with negative auxiliary inversion is definiteness and, in some cases, specificity. Definite subjects raise high, outside the scope of negation, and are incompatible with the construction whereas other types of subjects are housed in the lower subject position and are compatible with the construction. In comparison, the analysis adopted in this dissertation makes use of a subset of the projections Foreman assumes, the two negative projections and one projection for the subject. The defining characteristic of the subject that determines if it is compatible with negative auxiliary inversion constructions is quantification. Quantificational subjects are compatible on the basis of their interaction with negation whereas non-quantificational subjects are not. In both my analysis and Foreman's analyses, the defining characteristic of the subject is not enough to capture the full distribution of subjects; there are exceptions which both authors have to address.

5.2.2   Accounting for the subject distribution

The types of subjects that are problematic for Foreman (1999, 1999/2001) are subjects that are possible in the construction despite the fact that they are not definite. On the other hand, the types of subjects that are problematic for me are the subjects that are impossible despite the fact that they are quantificational. Our strategies for dealing with the unexpected subjects follow the same logic. We both rely heavily on the empirical observations others have made about their scope relative to negation. The unexpected subjects have a restricted scope with respect to negation and the restrictions that have been observed to hold in other phenomena also hold here to account for the subject distribution of negative auxiliary inversion constructions. The way in which we implement the previously-made observations differs. Foreman (1999, 1999/2001) accounts for most of the unattested subjects that his analyses predict to be possible by raising them to a higher subject position. Movement to the higher subject position allows the subjects to escape the scope of negation. In comparison, I account for the unattested subjects that my analysis predicts to be possible by disallowing the movement of negation to occur above these subjects and trap them

into its scope.

Foreman (1999/2001) accounts for the unattested subjects by building on observations made in Beghelli & Stowell (1997) with regards to where the scope of different quantifiers is realized. Beghelli & Stowell categorize quantifiers into different sets and provide hierarchical projections in which the scope of different quantifier sets is realized, building on the observation that the behavior of the set members is mostly uniform. The hierarchical projections are LF positions for the authors, some of which house both subjects and objects. RefP is an LF projection that houses both subjects and objects. Foreman (1999, 1999/2001) follows É. Kiss' 1996 proposal that RefP is an overt subject position but also relies on some of the projection's properties as described by Beghelli & Stowell to account for the unexpected subjects. The set of quantifiers that makes use of the RefP projection in Beghelli & Stowell (1997) is group-denoting quantifiers that are referentially independent, which they characterize as encompassing indefinites, such as *a, some, several*, quantifiers headed by bare-numerals, such as *two students, five dogs*, and definite phrases, such as *the students*. Group-denoting quantifiers have an additional lower projection in which they can be interpreted as well, but Beghelli & Stowell note that some of these quantifiers, such as *some* and *several*, are sometimes unable to be interpreted in the lower projection. In the case in which the respective quantifiers are in subject position and negation is present, these quantifiers have their scope realized above negation. Foreman extends the observation that subjects headed by these quantifiers cannot be interpreted below negation to account for the impossibility of these subjects in negative auxiliary inversion constructions, such as in (5.18).[9]

(5.18)　a.　* Didn't some people come.　　　　　　　　　　　　　　(WTE)

　　　　b.　* Cain't several students read that book.　　　　(WTE; Foreman 1999/2001: 48)

The author assumes that *most* is also a group-denoting quantifier that behaves in the same way as *some* and *several* to account for its impossibility in the construction, as in (5.19).

---

9. Beghelli & Stowell (1997) block these particular subjects from reconstructing in the lower position in which these quantifiers can be interpreted. Foreman does not adopt the lower projection in which group-denoting quantifiers are interpreted and instead uses the canonical subject position for this purpose. He forces the overt movement of these quantifiers from their lower subject position to RefP to derive the same result.

(5.19)   * Won't most people believe that.   (WTE; Foreman 1999/2001: 48)

According to Beghelli & Stowell (1997), the other types of group-denoting quantifiers, such as indefinite *a*, can take scope either in RefP or they can be interpreted in their case positions. These types of quantifiers are therefore licit in negative auxiliary inversion constructions, as in (5.20).

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

Foreman (1999/2001) accounts for the distribution of this class of subjects in negative auxiliary inversion constructions on the basis of independent observations of how they interact scopally with negation, which I also do in this dissertation.

Adopting Beghelli & Stowell (1997)'s classification for these quantifiers predicts that definite subjects that are not specific should be licit in negative auxiliary inversion constructions. Recall that definite subjects are possible, as in (5.21), but only in strongly emotive contexts.

(5.21)   a. Cain't the littlest mouse get his ass up in there anymore!   (WTE)

          b. Wouldn't the loudest noise in the world wake her up.   (WTE)

If it were not for their emotive requirements, their presence would follow naturally for Foreman (1999/2001) since the defining property that triggers the movement of subjects to the higher subject position is their specific feature. Since these subjects are not specific, they do not need to raise to RefP and can remain in the lower subject position. Recall that I proposed that these types of examples are derived by a different mechanism than negative auxiliary inversion constructions in section 3.4.4.1 of chapter 3 because the revised Principle of Scope Economy is not able to derive these types of sentences.

Another unattested subject in negative auxiliary inversion constructions which is problematic for both my analysis and Foreman's is a subject headed by quantifier *few*, as in (5.22).

(5.22)   * Won't few boys go to the party.   (WTE; Foreman 1999/2001: 49)

Beghelli & Stowell (1997) categorize *few* as a counting quantifier phrase. When they occur in subject position, counting QPs are interpreted in Spec AgrS, the position I equate with the canonical subject position in this dissertation. Other counting quantifiers, such as *more than five*, are possible subjects of negative auxiliary inversion constructions, as in (5.23).

(5.23)   Won't more than five people be allowed in at a time.   (WTE; Foreman 1999/2001: 13)

Since *few* is a counting quantifier phrase, it should also be possible in canonical subject position and (5.22) should be licit. Its categorization as a counting QP does not allow Foreman to rule it out as a potential subject. Additionally, *few* resists a specific interpretation so it cannot move up to RefP in order to escape out of the scope of negation. The explanation Foreman (1999/2001) suggests for why *few* is not a possible subject is that there is a semantic conflict between the monotone decreasing property of *few* and the negative environment of negative auxiliary inversion construction. The derivation is ruled out for independent reasons having to do with the quantifier's scopal interaction with negation. I adopted his explanation in this dissertation as well. Notice that unlike with the other impossible subjects, which Foreman (1999/2001) rules out by forcing their movement higher than negation, he accounts for the absence of this subject by ruling out the derivation in which negation is high in the structure. He is in effect disallowing negation from moving or merging in the higher negative projection in this case, which is the strategy I employ to account for all of the impossible subjects of negative auxiliary inversion constructions.

Another set of quantifiers that are grouped together for Beghelli & Stowell (1997) are distributive universal quantifier phrases *each* and *every*. As the authors point out, while they behave uniformly in some respects, there are also some contexts in which their distribution differs. *Each* must not be trapped in the scope of negation whereas this is not true for *every*. This observation also holds true in negative auxiliary inversion constructions, as Foreman (1999/2001) points out. Subjects headed by *every* are possible in this construction, as in (5.24a), whereas subjects headed by *each* are not, as in (5.24b).

(5.24)   a.   Won't every boy get a prize.   (WTE)

  b. * Won't each person get a prize.   (WTE; Foreman 1999/2001)[10]

Beghelli & Stowell (1997) account for the distributional difference by forcing the movement of *each* to a projection that is above sentential negation, Neg_1, and below RefP in order to explain why negation cannot be interpreted above it. They also posit a dependence between *each* and the RefP projection. The authors adopt an analysis in which these two quantifiers have a covert distributive element associated with them and the requirement that this variable be bound externally. The variable of *each* is more restricted in the elements that can bind it whereas the variable of *every* can be bound by a larger range of operators. Both quantifiers can be bound by an existential quantifier over situation-times that is housed in RefP. *Each* has a syntactic distributive feature which triggers its movement to DistP, a functional projection close to RefP and above sentential negation, Neg_1, ensuring that the variable of *each* will be bound by the operator. In the case in which an operator is present below DistP, such as negation, *every* does not need to move to DistP and its variable can instead be bound by negation. What allows *every* to remain lower in the structure syntactically is the fact that its syntactic distributive feature is underspecified in value.

The general observations of the distributional differences between the two quantifiers is easily extendable to negative auxiliary inversion constructions. *Each* is not a possible subject because it cannot be trapped in the scope of negation whereas *every* is a possible subject because it can be outscoped by negation. In order to explain these differences, Foreman (1999/2001) adopts the DistP projection, a third subject projection which houses distributive universal quantifiers. He places this projection below Neg_2, so its structural position is not what rules out the construction in (5.24b). Instead, it is the fact that negation intervenes between *each* and its variable binder, the existential quantifier over situation times that's in RefP, as shown in (5.25). Since negation is not a licit licensor, the variable of *each* cannot be bound and the derivation crashes.

(5.25) $[_{\text{RefP}} \exists\text{-OP} [_{\text{Neg}_2}'$ won't $[_{\text{DistP}}$ each person ~~won't~~ get a prize$]]]$

---
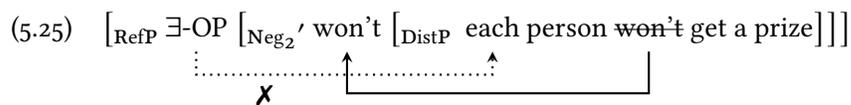
10. Foreman does not provide this example but the example along with its acceptability judgment can be inferred from the context of his discussion. Foreman states that *each* is not a possible subject of negative auxiliary inversion constructions and provides a parallel example from a *Not*-initial construction, a construction which he argues has an almost parallel distribution of subjects (Foreman 1999/2001: 48).

Note that this analysis has consequences for the structure of the non-inverted counterpart of (5.24b). The only way in which it can be derived is if the higher negative projection, Neg_2, does not project, as in (5.26). Otherwise, the higher negative projection would disrupt the licensing relation between the existential quantifier in RefP and the variable of *each*.

(5.26) $[_{RefP}$ ∃-OP $[_{DistP}$ Each person won't get a prize$]]$

As we saw above with *few*, Foreman (1999/2001) is again not faithful to his strategy of accounting for the impossible subjects of the construction by allowing them to escape the scope of negation by moving to a higher subject position. In this case, the subject must stay low in the structure and the higher negative projection, Neg_2, cannot be a part of a converging derivation. This is in effect disallowing negation to appear before the subject, which is consistent with the strategy I use to block the impossible subjects from arising in negative auxiliary inversion constructions.

Another class of subjects that are unattested in negative auxiliary inversion constructions are expletives, as in (5.27).

(5.27)   * Didn't it rain again last night.   (WTE)

It is easy to exclude these subjects on the basis of whether they are quantificational, the strategy I use. Since these subjects do not interact scopally with negation, they cannot surface in negative auxiliary inversion constructions. The movement of negation to a position that precedes them is ruled out by the Revised Principle of Scope Economy. Foreman (1999/2001), on the other hand, must explain their exclusion on the basis of whether they are definite since it is their referential feature that triggers the movement of the unattested subjects to the higher subject projection, out of the scope of negation. He refers to É. Kiss (1996), who posited an overt RefP projection but for whom the relevant feature for occupying this position is specificity. For her, specific subjects raise to RefP while non-specific subjects remain in canonical subject position. É. Kiss observes that expletives share some distributional similarities with specific or definite subjects. To explain their distribution, she proposes that expletives raise to RefP as well. Expletive *it* can be housed there because it is homophonous with a definite pronoun. Expletive *there* is, as the author admits, a little

harder to account for, but she posits an abstract [+specific] feature which refers to the point in space and time that *there* constructions predicate over. Foreman (1999/2001) adopts É. Kiss's proposal that expletives must move to the RefP projection on the basis of this abstract feature in spite of the fact that this proposal is somewhat counterintuitive to Beghelli & Stowell's description of RefP as a projection that houses referentially independent quantifiers. The authors do not consider expletive *they*, an expletive available in varieties in which negative auxiliary inversion is attested, but in parallel to É. Kiss's explanation for *it*, I expect neither author would object to endowing expletive *they* with a [+specific] feature as well.

More generally, Foreman (1999/2001) accounts for the distribution of most of the unexpected subjects in negative auxiliary inversion constructions on the basis of independent observations of how they interact scopally with negation, which I also do in this dissertation. He builds on observations made in Beghelli & Stowell (1996, 1997) and É. Kiss (1996) about their behavior. A divergence in the assumptions we make is in how we treat expletives. He proposes that expletives have a formal [+specific] feature that triggers their movement to the higher subject position in spite of the fact that they are not semantically specific in order to account for their absence from negative auxiliary inversion constructions. This analysis is somewhat counterintuitive to Beghelli & Stowell's (1997) description of RefP as the projection that houses referentially independent quantifiers, but it is consistent with É. Kiss revised description of RefP as an overt projection that does house expletives. I do not need to make any special assumptions about the nature of expletives in order to exclude them. They are not scope-bearing so the movement of negation over these subjects will not be licensed.

Another class of subjects for which there is a divergence in the assumptions we make are negative polarity items such as *any* and n-words. Recall that these types of subjects are possible in negative auxiliary inversion constructions. (5.28) is an example of a negative auxiliary inversion construction in which the subject is headed by negative polarity item *any*. The example in (5.29) is a negative auxiliary inversion construction which also exhibits negative concord. The subject is headed by n-word *none*.

(5.28)   Won't anybody believe what I'm about to say.   (WTE; Foreman 1999/2001: 21)

(5.29)   Won't none of the students go to the party.   (WTE; Foreman 1999/2001: 10)

'None of the students will go to the party.'

The availability of these subjects falls out naturally in Foreman's analysis on the basis of the fact that they are not definite or specific and so can remain in canonical subject position. I, on the other hand, commit to them being existential quantifiers that interact scopally with negation during the course of the derivation in order to allow negation to raise past them.

We both need to make special assumptions about a class of subjects in order to account for their distribution. There is a further disadvantage to the strategy Foreman pursues when accounting for the unexpected subjects. Some subjects whose scope is restricted with respect to negation, *few* and *each*, cannot escape the scope of negation by raising to the higher subject position. In order to rule out these subjects, the author must block the derivations in which negation has merged high.

5.2.3   Accounting for similar phenomena

The analysis presented in this dissertation also builds on Foreman's observations of phenomena that are similar to negative auxiliary inversion and that receive a parallel analysis. Foreman extends his analysis of negative auxiliary inversion constructions to account for the presence of *Not*-initial constructions both in standard English and in varieties of which exhibit negative auxiliary inversion constructions. Another phenomenon to which Foreman extends his analysis is the split subject construction. In this section, I describe Foreman's analyses for these two phenomena and I compare his analyses to the ones I provided for the phenomena previously.

5.2.3.1   *Not*-initial constructions

Foreman (1999, 1999/2001) observes that the subject distribution of both negative auxiliary inversion constructions and *Not*-initial constructions are almost identical. The way in which he characterizes the distribution is in terms of definiteness. He observes that definite subjects, such as *Jamie* and phrases headed by possessives, are not possible subjects in negative auxiliary inver-

sion constructions, as in (5.30a) and (5.31a), and they are also not possible subjects in *Not*-initial constructions, as in (5.30b) and (5.31b).

(5.30) a. * Won't Jack answer this question.   (WTE)

       b. * Not Jack will answer this question.   (WTE & SE; Foreman 1999/2001: 47)

(5.31) a. * Cain't their dogs bite me.   (WTE; Foreman 1999/2001: 42)

       b. * Not their dogs can bite me.   (WTE & SE; Foreman 1999/2001: 42)

Other types of subjects, such *everybody* and counting quantifiers, are possible in both negative auxiliary inversion constructions, as in (5.32a) and (5.33a), and in *Not*-initial constructions, as in (5.32b) and (5.33b).[11]

(5.32) a. Won't every boy get a prize.   (WTE)

       b. Not every boy will get a prize.   (WTE & SE)

(5.33) a. Can't more than three people fit in the car.   (WTE; Foreman 1999/2001: 41)

       b. Not more than three people can fit in the car. (WTE & SE; Foreman 1999/2001: 41)

On the basis of their similar subject distributions, Foreman (1999, 1999/2001) provides a parallel analysis for the two constructions. In 1999/2001, the author proposes that negation can merge in either canonical negation position, Neg_1, or the higher negative position, Neg_2. *Not*-initial constructions are derived when negation is merged in the higher negative position, as in (5.34a).

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11. The author also considers n-word subjects such as *no* and NPI subjects such as *any*, whose distribution in the two phenomena differs. I adopt his explanations in sections 3.4.2 and 3.4.3 of chapter 3 and, as such, I do not repeat them here.

(5.34) Foreman's (1999/2001) analyses

    a. *Not*-initial construction   b. NAI construction
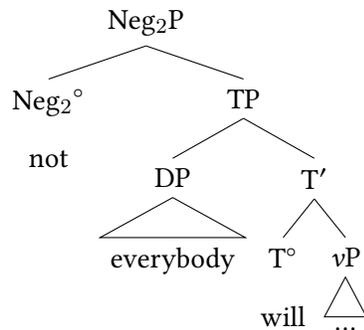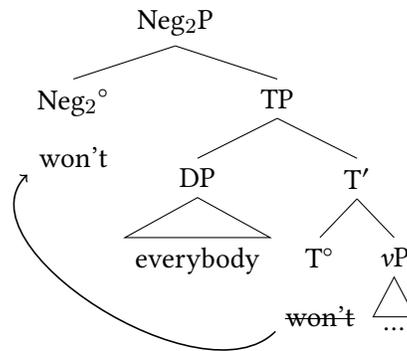
Neg$_2$P
    Neg$_2$°   TP
    not
        DP   T′
        everybody   T°   *v*P
             will   ...

Neg$_2$P
    Neg$_2$°   TP
    won't
        DP   T′
        everybody   T°   *v*P
             ~~won't~~   ...

Recall that negative auxiliary inversion constructions are derived when negation is merged in the higher negative position and the negated auxiliary, which enters the derivation as a unit, raises to this position to have its negative feature checked, as in (5.34b).

Using the higher projection helps him account for the limited distribution of *not*, such as, for instance, why it cannot appear in the vicinity of objects. The way in which I account for its limited distribution is with the proposal that *not* is sentential negation that can only raise higher than the projection in which it starts out, Neg$_1$.

Foreman accounts for the presence of *Not*-initial constructions in standard English by allowing the higher negative projection, Neg$_2$, to be possible in this variety. However, unlike West Texas English and other varieties which exhibit negative auxiliary inversion constructions, the phenomenon of negative auxiliary inversion is not available in standard English. This cross-linguistic variation is problematic for him because he proposes both phenomena make use of the same projection. The author does posit a difference between the two types of varieties, but it involves the attested forms of the negated auxiliaries. Foreman proposes that in varieties in which negative auxiliary inversion is attested, the negated auxiliaries enter the derivation as a single unit and lack agreement features. This proposal is based on his observation that there is no agreement between the negated auxiliaries and the subject. In comparison, in varieties which lack the phenomenon and in which the negated auxiliaries agree in features with the subject, the negated auxiliaries

enter the derivation as morphemes that are combined in the syntax. The negated auxiliaries in these varieties do have agreement features. standard English, a variety which shows agreement with the subject, forms its negated auxiliaries syntactically in the course of the derivation while NAI-exhibiting varieties do not.

However, this difference in the nature of the varieties' negated auxiliaries does not account for the absence of negative auxiliary inversion constructions in varieties which do not exhibit it. Allowing negation to merge in either structural position has unintended consequences for Foreman (1999/2001). One of these consequences is that a variety which has access to the Neg_2 projection is predicted to have negative auxiliary inversion constructions, regardless of whether the negated auxiliaries agree with the subject or not.

(5.35)   Overgenerating NAI to varieties of English which lack it
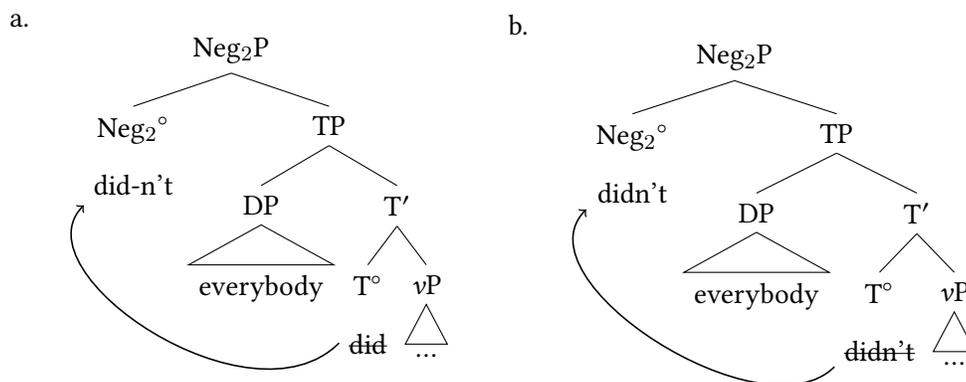
In varieties in which auxiliaries are formed compositionally in the syntax, as in standard English, nothing the author proposes prevents negation -*n't* from merging in the higher negative position, Neg_2, as in (5.35a). When -*n't* merges in this position, the auxiliary raises to combine with it and gives rise to a negative auxiliary inversion construction. In the case in which the negated auxiliaries of the variety are single lexical units and they enter the derivation in $T°$, as in (5.35b), the negative projection merges high in the derivation and the negated auxiliary undergoes movement to this projection, checking the auxiliary's negative feature. The author does not consider varieties of English which lack agreement with the subject and which do not exhibit negative auxiliary inversion constructions, but recall that they are attested. Allowing negation to merge high predicts

that any variety which has *Not*-initial constructions would also have negative auxiliary inversion constructions, a prediction that is not borne out. The author could rule out negative auxiliary inversion constructions in standard English and other varieties with compositional auxiliaries by disallowing *-n't* from merging in the higher negative projection. In varieties with negated auxiliaries which lack agreement features and also lack NAI, the author could rule out the phenomenon by disallowing null negation from merging in the higher negative projection. In the varieties which lack negative auxiliary inversion constructions, *not* can merge in either negative projection in the hierarchy of projections, but all other instances of sentential negation are restricted to merging only in the lower negative projection. Varieties which exhibit the phenomenon do not have any such restrictions on the other instances of sentential negation. Whether sentential negation is *not*, *-n't* or null, it can start out in either of the two hierarchical projections. While Foreman (1999/2001) does not address why varieties with Neg_2 projections can lack negative auxiliary inversion constructions, the proposal I provide is a way in which his analysis could address the issue.

Another way in which allowing negation to merge in either structural position is problematic for Foreman (1999/2001) is in overgenerating structures such as the ones (5.36). These unacceptable examples are predicted to be possible in both standard English and varieties that exhibit negative auxiliary inversion constructions.

(5.36)   * Jamie not will get a prize.

In this example, negation merges high in the structure. The subject is definite so it must move to RefP, the high subject position, in order to be interpreted, as in (5.37). Since the auxiliary is positive and it does not interact with negation, it is able to surface below negation.

(5.37) $\left[_{\text{RefP}}\right.$ Jamie $\left[_{\text{Neg}_2}'\right.$ not $\left[_{\text{TP}}\right.$ ~~Jamie~~ will get a prize$\left.\right]\left.\right]\left.\right]$

Foreman addresses this type of overgeneration by restricting when Ref° can project in a structure. It is not enough for a referential subject to be present in the structure in order for the projection to be licensed. There must also be an auxiliary that projects and then licenses the projection. Consider how these requirements are met for the example in (5.38).

(5.38)
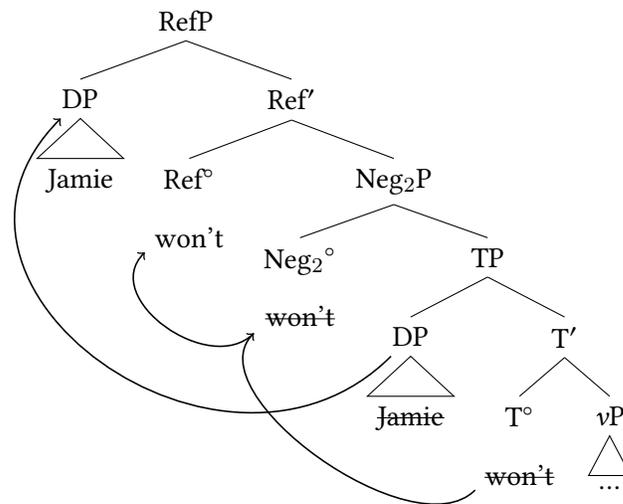
The negated auxiliary *won't* enters the derivation in T°. Negation merges above this projection and the negated auxiliary moves to this projection to have its negative feature checked. In this position, the negated auxiliary is able to project Ref°, which must happen or the referential feature on the subject will go unchecked and the derivation will crash. The negated auxiliary undergoes movement to Ref° in order to license it. Finally, the subject moves to SpecRefP for interpretation.[12]

Foreman rules out unacceptable examples such as the one in (5.36) with the proposal that negation *not* acts as an intervener between the auxiliary and where Ref° projects. *Not* is not a head that can project and license Ref°, so Ref° cannot project. Since Ref° does not project, the referential feature on the subject cannot be checked and the derivation crashes.

His earlier 1999 analysis, the one on which I build mine, similarly does not evade these issues. In the earlier analysis, both negative projections merge into the structures. Negative auxiliary inversion is derived by the movement of the negated auxiliary to the higher projection, as in (5.39b). I adopt this structural analysis for the construction in my work. The author suggests that the movement may be driven for scope reasons but does not elaborate as it is moving the unattested subjects higher in the structure that allows him to account for the subject distribution of the construction. I, on the other hand, account for the subject distribution by disallowing the movement of negation

---

12. Since negation can merge in either structural position, the negated auxiliary could have alternatively entered the derivation in Neg$_1$ and then moved up to T° before proceeding to Ref°. This order of derivations does not derive unacceptable examples such as the one in (5.36).

from occurring over the unattested subjects.

(5.39)   Foreman's (1999) analyses

a. *Not*-initial construction
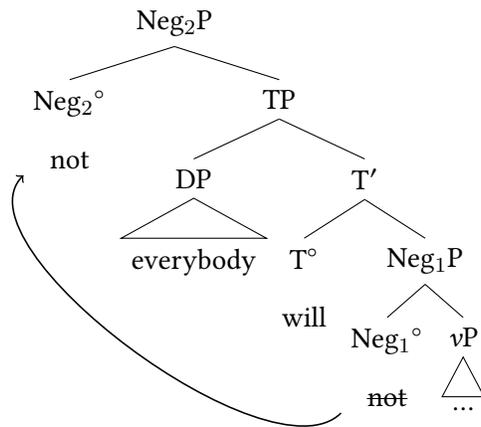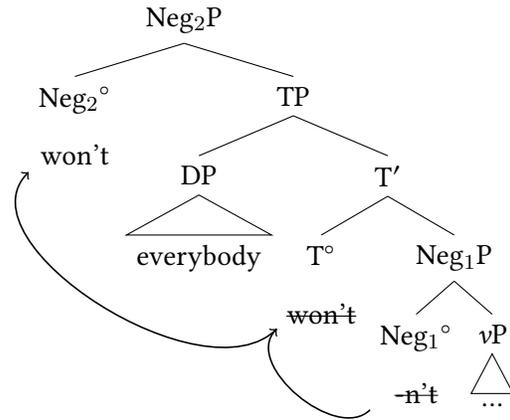
b. NAI construction

Turning our attention back to the *Not*-initial construction, the movement of sentential negation *not* from the lower negative projection to the higher negative projection gives rise to the construction, as in (5.39a).[13] The author does not posit any restrictions on when the movement of negation can occur and, as such, would need to rule out examples such as the unattested example in (5.36) with a restriction on when Ref can merge, as he does in his later analysis. Additionally, he does not account for why negative auxiliary inversion is absent in certain varieties which have the higher negative projection, Neg$_2$. A further issue is that he does not explain why *not*, as a head, is able to skip an intermediate head projection, T°, in (5.39a).

I avoid this issue with the proposal that *not* is phrasal rather than a head. Additionally, the way in which I disallow negative auxiliary inversion in varieties in which it is not attested is with the proposal that those varieties lack the Neg$_2$ projection. I associate the higher negative projection with the availability of both negative auxiliary inversion and negative concord.[14] Rather than *Not*-initial constructions being derived by movement of *not* to Neg$_2$, I derive the constructions by

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13. Foreman (1999) does not provide a structural analysis for *Not*-initial structures, but I infer to be as in (5.39a) on the basis of his statements that *not* is housed in Neg$_2$ and that it raises there for reasons of scope.

14. I do, however, run into the same issue as him with varieties which exhibit negative concord but do not exhibit negative auxiliary inversion constructions.

adjunction. Sentential negation *not* raises from its canonical position to adjoin to the subject, as in (5.40).

(5.40) Complex DP Analysis of a *Not*-initial construction

```
                        TP
              ┌──────────┴──────────┐
             DP                     T′
        ┌─────┴─────┐          ┌─────┴─────┐
      NegP         DP         T°          NegP
       △           △         will     ┌────┴────┐
      not       everybody            NegP       Neg′
                                      △       ┌──┴──┐
                                     n̶o̶t̶    Neg°    vP
                                                     △
                                                     …
```
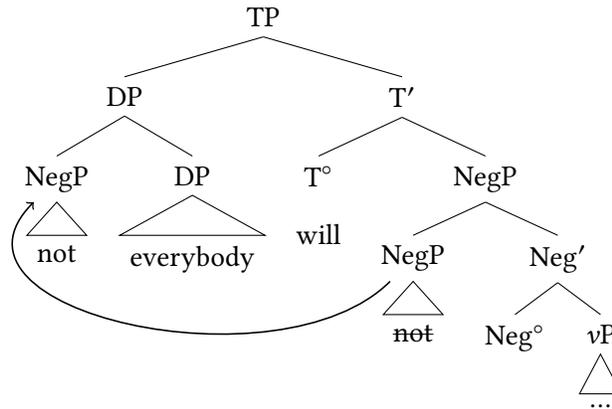
I ultimately settle on the structure of *Not*-initial constructions involving a complex DP analysis, as above, but I also provide a structural analysis for the construction in which negation is adjoined higher, as in (5.41), which is more in line with the structural analysis Foreman adopts.

(5.41) Clausal Negation Analysis of a *Not*-initial construction

```
                     TP
            ┌─────────┴─────────┐
          NegP                  TP
           △             ┌──────┴──────┐
          not           DP             T′
                         △         ┌───┴───┐
                      everybody    T°      NegP
                                  will  ┌────┴────┐
                                      NegP        Neg′
                                       △        ┌──┴──┐
                                      n̶o̶t̶     Neg°    vP
                                                       △
                                                       …
```
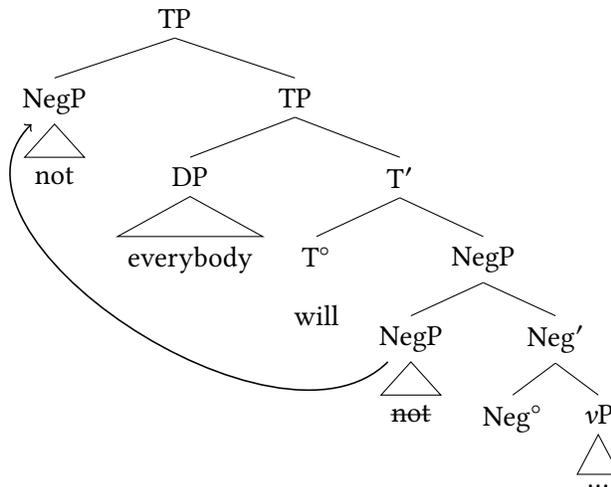
Foreman (1999/2001) emphasizes the benefit of accounting for the subject distribution with parallel syntactic structures. Since what gives rise to the subject restriction for me is whether the movement of negation is allowed over a particular subject, I can still account for the parallelism

in the two phenomena with alternative structural analyses.

### 5.2.3.2 Split subject constructions

Split subject constructions also receive a parallel analysis to negative auxiliary inversion construc-
tions in this dissertation, following Foreman (1999/2001).[15] Split subject constructions are not
attested in all varieties which also exhibit negative auxiliary inversion constructions so some ex-
amples of the construction from Appalachian English are provided in (5.42). Recall from our dis-
cussion in the previous chapter that these constructions are often considered in the literature to
be negative auxiliary inversion constructions with a preceding expletive or pronominal element.

(5.42) a.   … it didn' very many of 'em dip snuff back then.   (AppE; Feagin 1979: 241)

        b.   They won't nobody know you're gone.   (AppE; Feagin 1979: 241)

        c.   … there wouldn't nobody second it.   (AppE; Feagin 1979: 241)

The author derives these constructions with the use of his Ref° projection. He considers the
sentence-initial element to be an expletive. As you may recall, expletives for him are housed
in SpecRefP. He moves expletives to this position, following É. Kiss (1996), and by doing so, he
is able to explain why expletives cannot surface as the subjects of negative auxiliary inversion
constructions. In split subject constructions, the expletives are base-generated in SpecRefP, as in
(5.43).

---

15. Foreman (1999/2001) does not distinguish between transitive expletive constructions and partitive doubling con-
structions. He refers to examples of both types as transitive expletive constructions and provides a single analysis for
both.

(5.43)
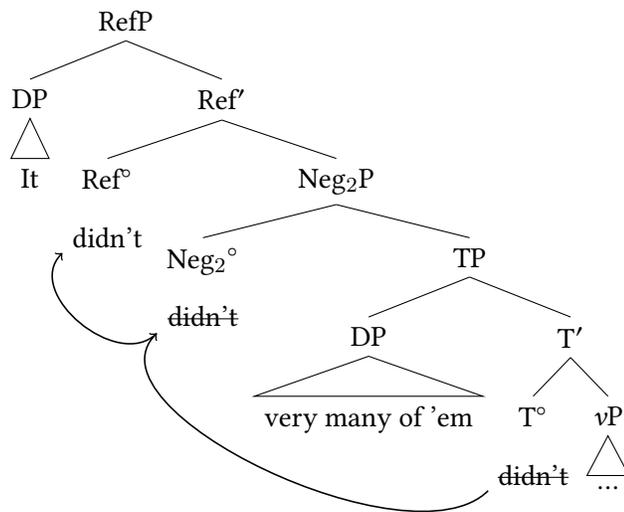
Split subject constructions occur when the negated auxiliary projects Ref°. The negated auxiliary undergoes movement to Ref° in order to license it. In addition to the head's projection and licensing requirements, Foreman (1999/2001) posits a further restriction on Ref° in order to account for the possibility of split subject constructions. He proposes that the projection must have its specifier filled. In the cases we've encountered thus far, the specifier has been filled by movement of a subject with a licensing requirement. This requirement has been encoded in the grammar as a triggering feature. Definite subjects move to SpecRefP to check their referential feature while expletives move to this projection to check their specific feature. Split subject constructions already have thematic subjects in their canonical subject positions and these subjects are not definite so they cannot move to SpecRefP. In the absence of an element it can attract, the head's requirement for a filled specifier is satisfied with the insertion of an expletive.

The Ref° can be licensed by any auxiliary, so he can derive split subject constructions even when negation merges low in the structure. This spurious ambiguity makes the prediction the phenomenon of split subjects can exist independently of negative auxiliary inversion constructions. It would be possible for a variety to exhibit split subject constructions but not negative auxiliary inversion constructions if it lacked the higher Neg_2 projection.

An issue with allowing Ref° to be projected by any auxiliary, however, overgenerates. Positive auxiliaries can license it, as they must in declaratives with definite subjects. The subjects of positive-

polarity clauses, such as in *Jamie will get a prize*, need to be licensed in SpecRefP. The unintended consequence is that the grammar allows split subject constructions can occur with positive auxiliaries, such as in unattested example in (5.44).

(5.44)   It will very many of 'em dip snuff in the future.   (*unattested*)

This issue does not arise in my analysis of split subject constructions because they are only licensed in the presence of the higher negative projection. In my analysis, the expletive or pronominal element is housed in SpecNeg$_2$P. A split subject construction therefore arises when an expletive or pronominal element co-occurs with a negative auxiliary inversion construction.

Foreman (1999/2001) can easily account for the lack of split subject constructions in the presence of *not* and rule out examples such as the one in (5.45).

(5.45)   * There not very many of 'em will dip snuff.

The author explains that these examples cannot be derived because Ref° cannot project in these examples. The presence of *not* blocks the auxiliary from projecting and licensing the Ref° projection. Since there is no Ref° projection and since Neg$_2$ does not have a requirement to fill its specifier, nothing motivates the insertion of an expletive. I can also account for the absence of these examples easily. Since *Not*-initial constructions are formed by adjunction of phrasal *not*, there is no specifier available in which the expletives could surface.

Split subject constructions in both analyses are treated as negative auxiliary inversion constructions which are preceded by an expletive or pronominal. In Foreman's analysis, the expletive is base-generated in SpecRefP. In my analysis, the expletive or pronominal element is a feature bundle of part of the subject's features which moves to SpecNeg$_2$P. Foreman's (1999/2001) analysis overgenerates to allow split subject constructions in the absence of negation, but if he can restrict this overgeneration from occurring, his analysis might allow an easier explanation for some observed cross-linguistic variation. The absence of split subject constructions in which an expletive co-occurs with *Not*-initial constructions falls out naturally in both analyses.

5.2.4 Comparing the analyses

Foreman (1999, 1999/2001) and my analysis of negative auxiliary inversion constructions are very similar but they also differ in some respects. I build my analysis on Foreman's observation that scope is involved in deriving the construction. In 1999, he makes the observation that negation has scope over the subject and suggests that the inversion may be driven for scope reasons. In his (1999/2001) paper, he again suggests that the inversion may be driven for reasons having to do with scope or licensing of negative polarity items. It is not these observations that drive his analysis, however. In his revised analysis, he motivates the movement of the negated auxiliary with a syntactic trigger, a negative feature on the auxiliary that needs to be checked in the higher negative projection. However, negative auxiliary inversion does not necessarily arise when negation is in its higher structural position. Rather than ruling out the movement from occurring when the subject is not scope-bearing, as I do, the author allows negation to merge high and the way in which he rules out almost all of the unattested subjects of the construction is by raising them to a higher subject position. The property of the subject that allows them to escape the scope of negation is definiteness and, in some cases, specificity. Foreman (1999/2001) explains the subject restriction in terms of which elements are disallowed. In my analysis, both negative projections are active, and the movement to the higher negative projection is not feature-driven. Instead, it is subject to the Revised Principle of Scope Economy, which allows the movement to happen only if it would have a semantic effect. I consider a different property of the subject to be relevant, whether or not it is scope-bearing. The types of subjects that are possible are the types of subjects that interact scopally with negation and that allow negation to raise past them.

There are a few unattested subjects that do not follow naturally from our categorizations. In both analyses, the impossible subjects are ruled out for independent reasons. We both rule them out by relying on observations other authors have made in the literature about their interaction with negation. There are some subjects for which either I or Foreman have to adopt a special analysis. In order to account for the unacceptability of expletive subjects in negative auxiliary inversion constructions, he posits an abstract specific feature which triggers their movement to the higher subject position. I, on the other hand, rule these subjects out solely on the basis that they are not

quantificational. I do, however, need a special analysis for negative polarity items, such as subjects headed by *any* and n-words. These elements have to interact scopally with negation at some stage in the derivation in order to fall naturally from my analysis. Foreman, on the other hand, does not need to be specific about their properties since they are not definite or specific and can remain in canonical subject position.

The author generally explains the subject distribution with his strategy of forcing the impossible subjects to escape the scope of negation with movement to the higher subject position. There is, however, an exception. There are certain polarity-sensitive subjects, such as *few* and *each*, for which he accounts by ruling out the structure in which negation is high. This is the strategy I employ to account for all of the unattested subjects.

Another difference between our analyses involves the ability of negation in its higher position to gain scopal significance. In his 1999 analysis, negative auxiliary inversion constructions are derived by the movement of negation from the lower negative projection in the hierarchy to the higher negative projection. The author does not address how negation, as a head, can gain scopal significance through movement. I adopt the movement he proposes and I account for negation's ability to gain scopal significance by treating it as a complex quantifier in line with other generalized quantifiers. How negation gains scope in a higher position does not arise in 1999/2001 as the author assumes in his revised analysis that negation is generated directly in its higher projection.

Another way in which my analysis differs from Foreman (1999/2001) is in the fact that I account for why negative auxiliary inversion constructions are available in only some varieties of English. Negative auxiliary inversion constructions are almost exclusively available to varieties which allow negative concord, an observation that I tie to the existence of the higher negative projection. Foreman (1999/2001), on the other hand, does not explain this cross-linguistic difference and allows for the existence of the higher negative projection in varieties which lack negative auxiliary inversion. If a variety has access to the Neg$_2$ projection, however, it allows negative auxiliary inversion constructions to be derived. The author observes that there is no auxiliary raising in standard English, but nothing he says prevents *-n't* from merging in the higher structure and for the auxiliary to raise to this projection to derive a negative auxiliary inversion construction. I do,

however, propose a way in which his analysis could address this issue. He does posit a difference in the nature of the negated auxiliaries. In NAI-exhibiting constructions, the negated auxiliaries enter the derivation as a single syntactic unit while in varieties which lack negative auxiliary inversion, negated auxiliaries are made up of morphemes that are derived in the syntax compositionally. This difference accounts for the fact that negated auxiliaries in the former varieties lack agreement with the subject while negated auxiliaries in the latter varieties exhibit it, an issue I do not address.

The benefit of my analysis over Foreman's is that it is extending a known movement to account for the subject restriction. It also is more economical structurally because it restricts movement to the higher negative projection. Negative auxiliary inversion can only occur when negation is housed in the higher position in Foreman's analysis as well. However, negative auxiliary inversion does not necessarily arise when negation is in this higher structural position. There is the possibility for a definite or specific subject to escape the scope of this higher negation and to precede it, giving rise to more spurious structural ambiguity. On the other hand, in my analysis, the higher negative projection is only active in the case in which a negative auxiliary inversion construction is possible.

5.3   Against base-generating negation high

In my analysis, I derive negative auxiliary inversion constructions by moving sentential negation to a higher negative projection. I account for the construction's subject distribution with a restriction on the movement of negation. Extending Fox's (2000) Principle of Scope Economy to overt movement explains why the movement of negation can occur only over subjects with which it interacts scopally. An advantage of this analysis is that it extends a known restriction on movement to account for the phenomenon. A disadvantage of this analysis is that it requires a revision of the nature of negation. In order to allow negation, a head, to gain scopal significance in its moved position, I propose that negation behaves like a generalized quantifier.

Foreman (1999/2001), on the other hand, allows negation to base-generate in the higher projection when deriving the structure of negative auxiliary inversion. This avoids the issue of how negation gains scope when it is structurally high because negation is interpreted in the position in which

it enters the derivation. However, he does not provide a basis for deciding when negation merges in the higher position or the lower one. He accounts for the construction's subject distribution predominantly by moving the unattested subjects to a higher subject position but there are a few cases in which he rules out derivations in which negation has merged high.

An alternative competing analysis which seems plausible but has not been proposed for the construction is a minimally revised version of the analysis presented in this dissertation that addresses the problems of Foreman's analysis. In this hypothetical analysis, negation can merge in either of the two negative projections, as in Foreman (1999/2001), but there is a restriction on when negation can merge high. The structure of negative auxiliary inversion would look as in (5.46), with negation base-generating in the higher negative projection and the element in T°, be it auxiliary, modal, or *do*-support, raises to this projection to satisfy negation's morphological need.[16]

(5.46)

$$
\begin{array}{c}
\text{Neg}_2\text{P} \\
\diagup \quad \diagdown \\
\text{Neg}_2° \qquad \text{TP} \\
\text{Did-n't} \qquad \diagup \quad \diagdown \\
\qquad\qquad \text{DP} \qquad \text{T}' \\
\qquad\qquad \triangle \qquad \diagup\ \diagdown \\
\qquad\quad \text{everybody} \quad \text{T}° \quad v\text{P} \\
\qquad\qquad\qquad\qquad \text{did} \quad \triangle \\
\qquad\qquad\qquad\qquad\qquad\ \ldots
\end{array}
$$
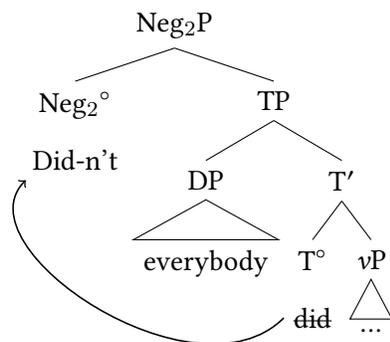
Rather than having a restriction on the movement of negation, as I do, this analysis has a restriction on when negation can merge high in order to account for the subject distribution. The insertion of negation in the higher projection could be subject to Principles of Scope Economy. Because negation is base-generated high, it does not require a revision of the nature of negation. Another problem which does not arise is why negation cannot reconstruct. Negation appears in only one structural position. However, an issue that does arise, as it does in my analysis, is why the subject is not able to outscope negation. This issue can be addressed with the constraint-based system I discuss in detail in chapter 3. I did not pursue this type of analysis in this dissertation because

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16. I show the auxiliaries as being syntactically derived in this structure, as I assume them to be in my analysis.

it has the disadvantage of missing the already observed restriction on the behavior of movement. Additionally, there is supporting evidence in the literature that heads can gain scope in their moved positions and proposing that negation behaves in this way builds on previously made observations.

In this section, I considered an analysis similar to the one I adopt. Instead of the revised Principles of Scope Economy restricting the movement of negation, it instead restricts the position in the derivation in which negation can merge. This analysis has the advantage of not requiring a reanalysis of negation but the disadvantage of missing the generalization that movement is subject to the principles in other cases.

5.4   Against movement that widens the domain of negation

An alternative analysis for negative auxiliary inversion constructions has been proposed in Green (2011, 2014). The analysis in this work relies predominantly on data from African American English and we will consider shortly whether it is preferable to my analysis at accounting for the West Texas English data. The author focuses on accounting for negative auxiliary inversion constructions in which the subject is negative and for the pragmatic differences between negative auxiliary inversion constructions and their non-inverted counterparts. There are many parallels between the structure she adopts for negative auxiliary inversion constructions and mine. The subject of negative auxiliary inversion constructions is in canonical subject position and negation raises high in a projection in a split left periphery. The position to which the negated auxiliary raises is, however, different. The negated auxiliary in Green raises to a focus head with a negative focus feature. The syntactic structure of a negative auxiliary inversion construction for Green is as in (5.47).

(5.47)

```
                              FocusP
                     _____
                    /                        \
          Focus° [NEGFOC]                      TP
                    |                  _____
                  don't              /                 \
                                    DP                  T'
                                   /  \            _____
                                  /____\          /                \
                                 nobody          T°                NegP
                                                 |            _____
                                              don't          /            \
                                                          Neg°            vP
                                                           |         _____
                                                         don't      /           \
                                                                   DP           v'
                                                                  /  \         /  \
                                                                 /____\       /____\
                                                               nobody     ride that bus
```
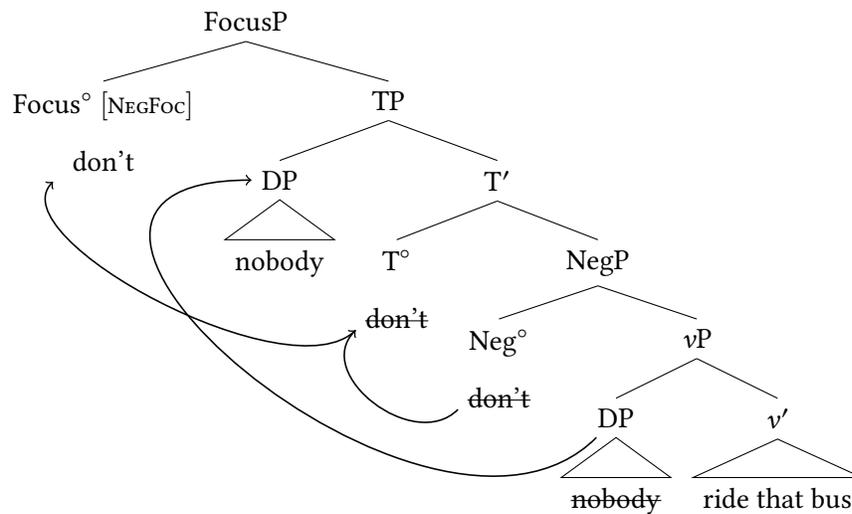
Recall that the negated auxiliary in my analysis raises to a higher negative projection, Neg$_2$, building on Foreman (1999). Since Green's focus position does not house positive auxiliaries on account of the negative focus feature, it can be seen as being parallel to the higher negative projection on some level. The projection in her analysis is, however, correlated with an absolute negation reading or a widening effect. The author allows for negation to be gradeable. It can have a strong, absolute interpretation and it can also have a weak interpretation that allows for some outliers. She proposes that negative auxiliary inversion constructions are correlated with an absolute negation that allows no exceptions. The negative auxiliary inversion construction in (5.48), the structure of which I provide in (5.47), is infelicitous in a context in which exceptions are considered, as in (5.49).

(5.48)   Don't nobody ride that bus.   (AAE; Green 2014: 128)

(5.49)   # Don't nobody ride bus number 201 – just the three people who live in the country. Most of the students in this class ride bus number 99.   (AAE; Green 2014: 127)

The construction is compatible with the given context because it requires allowance for some exceptions but negative auxiliary inversion is only compatible with an absolute negation that does not allow exceptions. In comparison, the non-inverted counterpart of (5.48) is possible, as in (5.50), and this construction is felicitous in a context in which there are exceptions, as in (5.51).

(5.50)   Nobody don't ride that bus.   (AAE; Green 2014: 127)

(5.51)   Nobody don't ride Bus # 201 – just the three people who live in the country. Most of
           the students in this class ride Bus # 99.   (AAE; Green 2014: 127)

The non-inverted counterparts of negative auxiliary inversion constructions are compatible with
the weaker interpretation of negation that allows for a few exceptions, which is why the counter-
part of (5.48) is felicitous in this context. The non-inverted counterparts also allow an absolute
reading of negation when the subject is focused. Negative auxiliary inversion for Green (2014)
has the effect of disambiguating between the weak and strong interpretations of negation that are
present in the non-inverted counterpart.

5.4.1   Accounting for the subject distribution

Green (2014) focuses her analysis on accounting for negative auxiliary inversion constructions in
which the subject is negative and the construction also exhibits negative concord. She refers to
constructions of this type as canonical negative auxiliary inversion. She also considers construc-
tions which have non-negative subjects, what she refers to as noncanonical negative auxiliary
inversion, and provides a path towards accounting for the subject distribution of both negative
and positive subjects. To account for the subject distribution of negative auxiliary inversion con-
structions, she suggests adopting an analysis in which the strength of quantifiers is considered,
in line with Horn (1989/2001). The subjects that are possible in negative auxiliary inversion con-
structions are the quantifiers that have the strongest values and the subjects that are not possible
in the construction are the quantifiers that have the weakest values. Horn considers the strength
of quantifiers on both positive and negative scales. The strongest quantifiers on the positive scale
are *every* and *all*, both of which are licit subjects in NAI constructions in West Texas English, as
in (5.52).

(5.52)   a.   Didn't everybody finish their homework.   (WTE; Foreman 1999/2001: 41)

         b.   Don't all of my friends like you.   (WTE; Foreman 1999/2001: 55)

The strongest quantifiers on the negative scale are *no* and *none*, both of which are also licit subjects in NAI constructions, as in (5.53).

(5.53) a.   Wouldn't no gentleman act like that.   (WTE; Foreman 1999: 6)

        b.   Won't none of the students go to the party.   (WTE; Foreman 1999/2001: 10)

Having shown that the strongest quantifiers on both the positive and the negative scale are attested subjects of negative auxiliary inversion constructions, we turn next to considering the weakest quantifiers on the two scales. The weakest quantifiers on the positive scale are *some* and *several*, both of which are not licit subjects in NAI constructions, as in (5.54).

(5.54) a.   * Didn't some people come.   (WTE)

        b.   * Cain't several students read that book.   (WTE; Foreman 1999/2001: 48)

The weakest quantifier on the negative scale is *not all*, a quantifier that is not licit in NAI constructions, as in (5.55).

(5.55)   * Don't not all of my friends like you.   (WTE; Foreman 1999/2001: 55)

The hypothesis that the strength of quantifiers determines whether they are licit subjects of negative auxiliary inversion constructions is borne out for the members at the extreme ends of the scales. The analysis provides an elegant account for some of the subjects that are problematic in my analysis, subjects such as *some* and *several*, which are scope-bearing but unattested. Recall that I rule these quantifiers out on the basis of independently-made observations about their interpretation being restricted in the presence of negation.

However, problems arise for Green's analysis when we consider quantifiers that are not at the extreme ends of their respective scales. There are some problematic subjects for this analysis because the strength scale does not correctly predict their availability. Consider first the positive scale in (5.56) as adapted from Horn (1989/2001).

(5.56) Positive quantifier scale   (Adapted from Horn 1989/2001: 237)

every/all » most/a majority » half » very many » many » quite a few » several » some

For the positive quantifier strength scale, *every* and *all* are predicted to be possible because they are the strongest quantifiers and *some* and *several* are predicted to be impossible because they are the weakest quantifiers. These predictions are borne out, as we've just seen in (5.52) and (5.54), respectively. The quantifiers in the middle of the positive strength scale, *half* and *very many*, are also licit subjects in NAI constructions in West Texas English, as in (5.57).

(5.57)   a.   Didn't half the students do their homework.   (WTE; Foreman 1999: 8)

         b.   Ain't very many people read your book.   (WTE; Foreman 1999: 5)

In between the strongest quantifiers and *half* on the scale is quantifier *most*. Quantifier *most* is predicted to be possible because it is stronger than *half*, which is a possible quantifier. However, quantifier *most* is unacceptable in negative auxiliary inversion constructions, as in (5.58).

(5.58)   * Won't most people believe that.   (WTE; Foreman 1999/2001: 48)

Adopting the scale to account for the subject distribution makes an incorrect prediction about a strong quantifier on the positive scale. It also makes an incorrect prediction about a weak quantifier. Quantifier *many* is predicted to be impossible because it is almost at the end of the weakness scale. It is slightly stronger than *several*, yet it is attested, as in (5.59).[17]

(5.59)   Didn't many people live there then.   (WTE; Foreman 1999: 7)

The availability of *many* is less problematic than the unavailability of *most*. *Many* can be included by a scale analysis with a proposal on where to draw the line of acceptability. Rather than allowing only the strongest quantifiers, the line can be drawn between *many* and *several* to allow some of the weaker quantifiers. *Many*, although a fairly weak quantifier, would be strong enough to act

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17. As we saw in chapter 4, quantifier *many* is also attested in varieties of African American English and Appalachian English.

as a licit subject in the construction. This is a change that could be made to Green's proposal that would allow for a better account of the data for West Texas English. The impossibility of *most*, a quantifier that is much stronger than *many*, remains problematic.

Turning next to the negative quantifiers, consider first the negative scale in (5.60) as adapted from Horn (1989/2001).

(5.60)   Negative quantifier scale   (Adapted from Horn 1989/2001: 237)

      no/none » hardly/almost no(one) » very few » few » a minority/not half » not all

We have seen that adopting a scale analysis correctly predicts that *no* and *none* are possible subjects because they have the strongest value, as in (5.53). It also correctly predicts that *not all* is not a possible subject because it has the weakest value on the negative scale, as in (5.55). However, it wrongly predicts that *few* should be a possible subject. The strength of quantifier *few* is slightly below that of the strongest negative quantifiers *no* and *none* but above the middle point of the scale. However, despite being a stronger negative quantifier, quantifier *few* is not a possible subject, as in (5.61).

(5.61)   * Won't few boys go to the party.   (WTE; Foreman 1999/2001: 49)

Quantifier *few* can be excluded by a scale analysis with the proposal that the line for inclusion of possible subjects on the negative scale is drawn higher, above *few*. Under such an analysis, the line for inclusion for the positive and negative scales must be drawn at different points. On the positive scale, the line is drawn near the bottom of the scale to include weaker quantifiers like *many* whereas on the negative scale, it is drawn just below the strongest quantifiers. The subject distribution following a scale analysis of quantifier strength can be more specifically characterized as in (5.62).

(5.62)   i.   Most positive subjects are possible subjects of negative auxiliary inversion construc-
           tions, but the very weakest are not.

      ii.   Almost all negative subjects are impossible subjects of negative auxiliary inversion
           constructions, but the very strongest ones are allowed.

Such a recharacterization of Green's hypothesis allows us to account for all of the subjects we've considered except for *most*.

Green (2014) states that this analysis accounts for why referential subjects are disallowed but does not specifically explain how. I infer that she expects referential subjects to not be possible on the basis of the fact that they are not quantificational and so have no quantificational strength. They would then be excluded for the same reasons that *some* and *several* are excluded. For further insight into how the subjects might be excluded, I turn to an earlier version of her analysis in which she addresses the issue in more detail. In her 2011 analysis, Green does not adopt the quantifier strength scales but she does propose that negative auxiliary inversion constructions are correlated with a widening effect and explains why the widening can occur with negative indefinite subjects, as in (5.63a), and not in referential or specific subjects such as proper names, as in (5.63b).

(5.63) a.   Didn't nobody leave.   (AAE; Green 2011)

        b.   * Didn't Bruce leave.   (AAE; Green 2011)

Negative indefinites denote sets of individuals so are compatible with weak negation or cases in which the truth conditions do not hold of a few individuals. When forming a negative auxiliary inversion construction from a non-inverted construction, the effect is an exclusion of all possible individuals of which the truth conditions could hold. When a negative indefinite is in the subject position of a negative auxiliary inversion construction, the domain of the negation widens to include all potential individuals such that no individuals are excluded. Negative indefinites are therefore possible subjects of negative auxiliary inversion constructions.

In comparison, a proper name denotes an individual so it is incompatible with a weak negation interpretation. There are no individuals that could potentially be excluded in the non-inverted construction so the domain of negation cannot be widened with inversion. Since the widening effect is not possible with subjects that cannot allow exclusions, these subjects are not licit subjects in negative auxiliary inversion constructions. Following this logic, negative auxiliary inversion can occur for Green (2014) when the weak negation interpretation is available in its non-inverted counterpart. The inversion cannot occur when the strong negation interpretation is the only op-

tion available in a non-inverted construction.

5.4.2 Widening in West Texas English

Having outlined the analysis Green provides for negative auxiliary inversion constructions and having shown that it is successful at accounting for most of the attested subject distribution of the construction in West Texas English, I turn next to considering whether the widening nature of the construction is also present in this variety. A weak negation possibility has not been attested for West Texas English. The contrast Green (2014) observes in African American English for negative auxiliary inversion constructions and their non-inverted counterparts does not appear to be present in West Texas English. Recall that non-inverted constructions in African American English allow both weak and strong negation interpretations while negative auxiliary inversion constructions allow only a strong interpretation of negation. The availability of non-inverted constructions in itself is restricted in West Texas English. Non-inverted constructions in which only the subject and negated auxiliary bear negative morphology are unacceptable, as in (5.64).

(5.64)   a.   * None of em didn't hit the house.   (WTE; Foreman 1999/2001: 7)

         b.   * None of the students ain't done their homework.   (WTE; Foreman 1999: 3)

On the other hand, their inverted counterparts are judged as well-formed, as in (5.65).

(5.65)   a.   Didn't none of 'em hit the house.   (WTE; Foreman 1999/2001: 8)

         b.   Ain't none of the students done their homework.   (WTE; Foreman 1999: 3)

Non-inverted constructions are possible when an additional negative element is present in the sentence, as in the examples in (5.66).

(5.66)   a.   Nobody ain't doin' nothin' wrong.   (WTE; Foreman 1999: 3)

         b.   Nothin' good ain't never happened to me.   (WTE; Foreman 1999/2001: 7)

Whether these examples also allow a weak negation interpretation, as they do in African American English, and their inverted counterparts widen the domain of negation is currently an unresolved issue. If weak negation is not available or if inversion does not widen the domain of negation to exclude any potential exceptions, negative auxiliary inversion constructions in West Texas English would not need to be associated with a negative focus feature, as they are in African American English.

Preliminary investigations suggest that weak negation is available in West Texas English, but that negative auxiliary inversion does not widen its scope. One of my consultants confirms that non-inverted constructions with negative indefinite subjects and a negated auxiliary are unacceptable in West Texas English, as in (5.67).

(5.67)   a.   * Nobody didn't ride bus number 201 – just the three people who live in the country. Most of the students in this class rode bus number 99.   (WTE)

b.   * Nobody didn't ride bus number 201. Every student in this class rode bus number 99.   (WTE)

These examples are modeled on examples provided in Green (2014) which allow her to distinguish between the weak and strong interpretations of negation. The context in (5.67a) is compatible with a weak interpretation of negation whereas the context in (5.67b) is compatible with a strong interpretation of negation. The unacceptability of these examples is not surprising given Foreman's observation that such constructions are unacceptable when they lack morphologically negative elements other than the subject and negated auxiliary. More telling, however, is when we consider the inverted counterparts of (5.67). The judgments for the inverted counterparts are given in (5.68).

(5.68)   a.   Didn't nobody ride bus number 201 – just the three people who live in the country. Most of the students in this class rode bus number 99.   (WTE)

b.   Didn't nobody ride bus number 201. Every student in this class rode bus number 99.   (WTE)

Both cases are acceptable, so negative auxiliary inversion is compatible with both a weak interpre-

tation of negation, as in (5.68a) and a strong interpretation of negation, as in (5.68b). The example that suggests a cross-linguistic difference in the properties of the phenomenon between West Texas English and African American English is the example in (5.68a). In this example, negative auxiliary inversion is compatible with a context that allows for some exceptions, or a weak interpretation of negation. Recall that the same example in African American English was infelicitous, as we saw in example (5.49). Green ruled out this example on the basis of the incompatibility of inversion with weak negation in African American English. Unsurprisingly, negative auxiliary inversion constructions are also possible in a context which lacks excluded members, as in (5.68b). Since there is no contrast between whether negation is compatible with a weak interpretation of negation and a strong one, it does not appear as though the focus aspect of Green's analysis plays a part in the derivation of negative auxiliary inversion constructions in West Texas English.

5.4.3   Accounting for similar phenomena

5.4.3.1   *Not*-initial constructions

Green briefly addresses whether *Not*-initial constructions should be derived using the same mechanism as negative auxiliary inversion constructions. She observes that they are not fully acceptable in African American English, as in (5.69a), but they are not completely out, either. The negative auxiliary inversion counterpart of this example is perfectly well-formed, as in (5.69b).

(5.69)   a. ?? Not nobody would drive that car to Texas for me.   (AAE; Green 2014: 126)

         b.   Wouldn't nobody drive that car to Texas for me.   (AAE; Green 2014: 126)

Green does not provide the syntactic structure of the *Not*-initial construction, but I infer from her description that the structure of the *Not*-initial construction in (5.69a) would look like the one provided in (5.70).

(5.70)

FocusP

Focus° [NEGFOC]
    not

TP

DP
  nobody

T′

T°
would

NegP

Neg°
~~not~~

vP

DP
~~nobody~~

v′
drive that car...
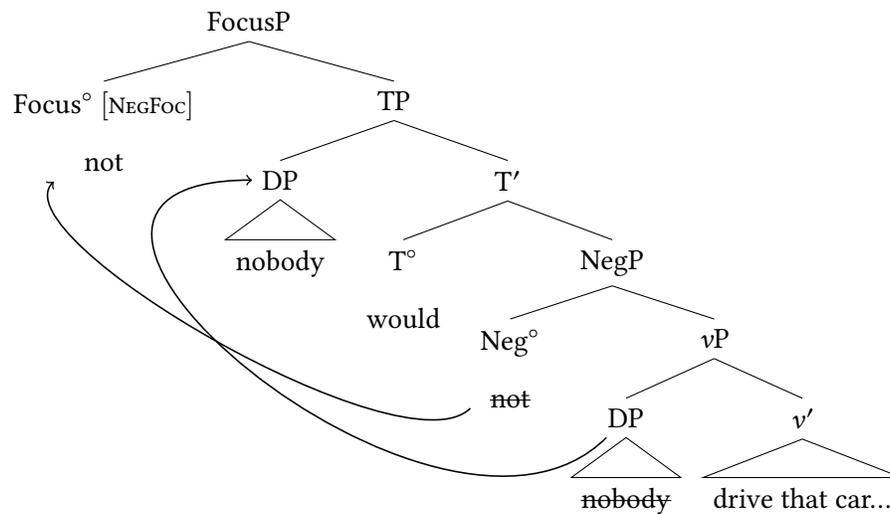
Green assumes *not* to be a head. She states that the movement of *not* could serve the same purpose as inversion in negative auxiliary inversion constructions, but accounts for the degraded acceptability of the construction by appealing to the violation of head movement that the movement of *not* incurs.

5.4.4 Accounting for cross-linguistic differences

Green (2014) addresses why it is that varieties such as standard English lack the phenomenon of negative auxiliary inversion. The author ties the availability of the phenomenon to the node in the left periphery that has the negative focus [NegFoc] node, the node that houses the negated auxiliary in her analysis. Varieties which do not allow the phenomenon do not exhibit the focus projection with the negative focus feature in their set of available projections. This cross-linguistic account is similar to the account I propose. Recall my proposal that varieties which do not exhibit the phenomenon lack the higher negative projection, the projection that houses the negated auxiliary in my analysis. There is some preliminary evidence that not all varieties that allow negative auxiliary inversion constructions exhibit the widening effect that is present in African American English. Given this variation among languages which exhibit the phenomenon, the author would need to suggest a difference that accounts for the availability of the widening effect. I addressed this difference between varieties that exhibit it in chapter 4.

5.4.5 Comparing the analyses

The syntactic analyses we provide are similar in some respects. The subjects are in canonical subject position in both cases and the negated auxiliary raises above these subjects to a projection in the left periphery. In my analysis, the negated auxiliary raises to a higher negative projection. In Green (2014), the negated auxiliary raises to a focus position that has a negative focus feature. The association of focus with the construction explains the widening domain of negation. In negative auxiliary inversion constructions, negation is absolute and is incompatible with a weaker interpretation. Whether this part of the analysis captures a property of the phenomenon in West Texas English is an issue for future work, but preliminary investigations suggest that it does not.

Our analyses also explore the relationship between negative auxiliary inversion constructions and their non-inverted counterparts. The availability of negative auxiliary inversion constructions is in part predictable from properties of their non-inverted counterpart. In my analysis, there is scopal ambiguity between the subject and negation that is resolved by inversion. In Green's analysis, there is ambiguity with respect to whether negation has a weak or strong interpretation that is resolved by inversion.

In terms of the subject distribution, neither analysis captures the full range of attested and unattested subjects. Green (2014) has a better account of some of the subjects that are problematic for me and I have a better account of some of the subjects that are problematic for her. I offer a recharacterization of her analysis that is more successful at capturing a broader range of subjects. However, there is some detail missing about the mechanics of how Green's analysis is implemented. The author could be more specific about how the unacceptable examples are ruled out and at what stage in the grammar or course of the derivation. She does not address how negation gains scope in its moved position, but she would likely appeal to the fact that the position is associated with focus in an answer to this question. I, on the other hand, provide a thorough explanation of the stages at which derivations are ruled out. I also account for how negation can gain scope in its moved position and why the inverse scope is unavailable in negative auxiliary inversion constructions.

There are a few technical differences between our analyses. The nature of negative indefinites is different and, as a consequence, the way in which we must account for negative concord differs. Green does not discuss the nature of the negative indefinites or how she accounts for negative concord, but she does discuss adopting an analysis in which negative indefinites are strong negative quantifiers and refers the reader to analyses of negative concord discussed in Ladusaw (1992) and Haegeman & Zanuttini (1996), which she states are compatible with her analysis of negative auxiliary inversion. This implies that negative indefinites for her are negative universal quantifiers. In order for the truth conditions she observes to hold, the resulting interpretation of a negative auxiliary inversion construction with a negative indefinite subject must then include a universal quantifier that scopes above negation and only one instance of logical negation. The interpretation of (5.71a) that I infer to be consistent with Green's analysis is very roughly sketched in (5.71b).[18]

(5.71)   a.   Didn't nobody ride that bus.

       b. $\forall x \neg[\mathbf{ride\text{-}that\text{-}bus}(x)]$

Since there are two semantically negative elements in (5.71a), sentential negation and the negative indefinite *nobody*, the author needs to adopt an analysis of negative concord in which multiple negative elements combine to become a single generalized quantifier, in line with the papers she references. The movement of sentential negation does not help this operation if we consider the interpretation of the elements and whether their position in the syntactic structure corresponds to their position in the interpretation. Sentential negation c-commands the negative indefinite in the syntax but the universal outscopes negation in the interpretation, so part of the operation presumably happens covertly.

In comparison, the interpretation of negative indefinite and the theory of negative concord that accounts for their distribution differs in my analysis. I propose negative indefinites to be negative polarity items. They are existential quantifiers with a licensing requirement and bear no negative force themselves. The interpretation of (5.72a) in my analysis is very roughly sketched in (5.72b).

(5.72)   a.   Didn't nobody ride that bus.

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18. Please note that focus is not expressed in this interpretation.

b. $\neg\exists x[\textbf{ride-that-bus}(x)]$

The movement of the negated auxiliary is allowed in my grammar because negation can gain scope over the existential as a result. The licensing of the negative polarity item is considered at a later stage in the derivation and negative indefinites end up being licensed in the configuration that follows the movement of negation.

The way in which we account for negative concord is one of the ways in which our analyses diverge. Whether or not either analysis of the interpretation of negative indefinites or theory of negative concord is preferable is an unresolved issue that requires a more in-depth investigation on the nature of negative indefinites. It is entirely plausible that negative indefinites have a different interpretation in the two varieties and that this difference is responsible for the observation that negative indefinites are more readily available as the subjects of sentences in African American English. Further investigations need to be carried in order to determine whether the analysis of negative concord Green (2014) provides is preferable to mine for West Texas English.

Another difference between our analyses involves the availability of referential or specific subjects that are modified by a negative quantifier. Green (2014) observes that proper names can be modified by strong negative quantifier *no* and be licit in a negative auxiliary inversion construction. Consider the example in (5.73). The context is provided in (A) and the response is a negative auxiliary inversion construction whose subject is a proper name that is modified by *no*.

(5.73) A. Many old fraternity guys showed up for homecoming. I think even Vince Jackson was there.

B. No, didn't no Vince Jackson show up! (AAE; Green 2014: 131)

One of the readings available for this example is that the one specific individual named Vince Jackson did not show up.[19] The author expects this example to be possible given a scale analysis because the proper name is modified with a strong negative quantifier. My analysis does not derive these types of examples as negative auxiliary inversion constructions because the subject

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19. The other available reading involves a non-specific interpretation of the name where nobody by the name of Vince Jackson showed up.

is not quantificational. Instead, I propose that although examples such as the one in (B) share similarities with negative auxiliary inversion constructions in appearance, they are derived using a different strategy. Such examples are a result of metalinguistic negation, a strategy used to correct a previous utterance or assumption.

In this section, I considered whether the analysis Green (2011, 2014) provides for negative auxiliary inversion constructions in African American English can be extended to account for the construction in West Texas English. Adopting a scale analysis for quantifiers makes predictions for why certain certain quantifiers are excluded. Strong quantifiers are attested in negative auxiliary inversion constructions while weak quantifiers are not. The behavior of many of the attested and unattested subjects is in line with their position on the strength scale. However, relying too heavily on the scales as given did not account for the attested subject distribution. There are examples of strong quantifiers that are unattested and weak quantifiers that are attested as the subjects. I provided a recharacterization of Green's analysis that more accurately accounts for the subject distribution of negative auxiliary inversion constructions in West Texas English. However, in spite of this recharacterization's broader empirical coverage of the subject distribution, this competing analysis is not completely compatible with the West Texas English data because the widening effect the author observes to be correlated with the construction in African American English is apparently not available in West Texas English. It is not clear that focus plays a part in the construction in West Texas English. Additionally, the competing analysis does not address how negation can gain scopal significance after movement, as my analysis does, or how to account for the attested interpretations of the construction, as I do when I adopt an interpretation-first framework.

5.5   Deriving negative auxiliary inversion by Neg-raising

Another analysis of negative auxiliary inversion constructions in the literature is proposed by Blanchette (2015), who refers to the phenomenon as Popular Negative Inversion. Her analysis extends Collins & Postal (2014) analysis of syntactic Neg-raising to account for both negative auxiliary inversion constructions and negative concord in Appalachian English. The way in which the syntactic structure of a negative auxiliary inversion construction is derived is in some ways

similar to the way in which I derive mine. The subject moves to canonical subject position and the negated auxiliary moves above the subject to a projection in a split CP domain, as in (5.74). The position to which the negated auxiliary raises is Fin°, a position proposed in Rizzi (1997) that is linked to tense and mood.[20]

(5.74) $[_{\text{Fin}'}$ didn't $[_{\text{TP}}$ everybody $[_{\text{T}'}$ ~~didn't~~ $[_{v\text{P}}$ ~~everybody~~ watch the show$]]]]$
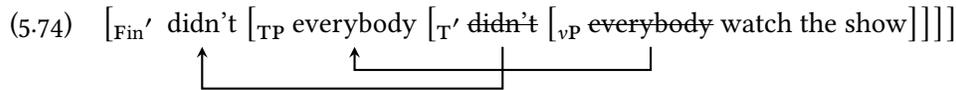
However, while I derive the construction by moving sentential negation from a lower projection to a higher one, the source of negation for Blanchette comes not from a projection in the hierarchy but instead from the subject. Negation forms a constituent with the subject and from its subject-internal position moves higher in the structure by Neg-raising to adjoin to the auxiliary. The subjects of negative auxiliary inversion constructions are therefore always negative. For example, the subject *everybody* in the above example has the internal structure in (5.75).

(5.75)
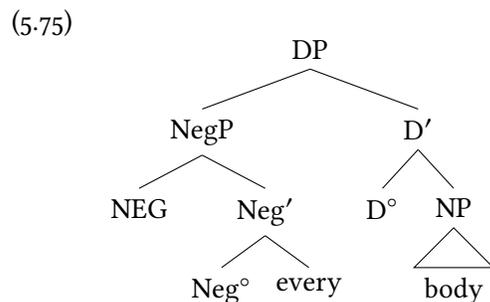
Logical negation is shown as NEG. In deriving the negative auxiliary inversion construction, NEG raises from its subject-internal position to adjoin to T°, as in (5.76). Following the movement of negation, the subject raises to canonical subject position and the complex negative head raises to Fin°. The author's Spellout rules ignore the negation that precedes the subject, so the subject is pronounced as *everybody*.

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20. This projection was also proposed to be the host of the negated auxiliary of NAI constructions in earlier versions of Green's (2014) analysis for African American English.

(5.76)
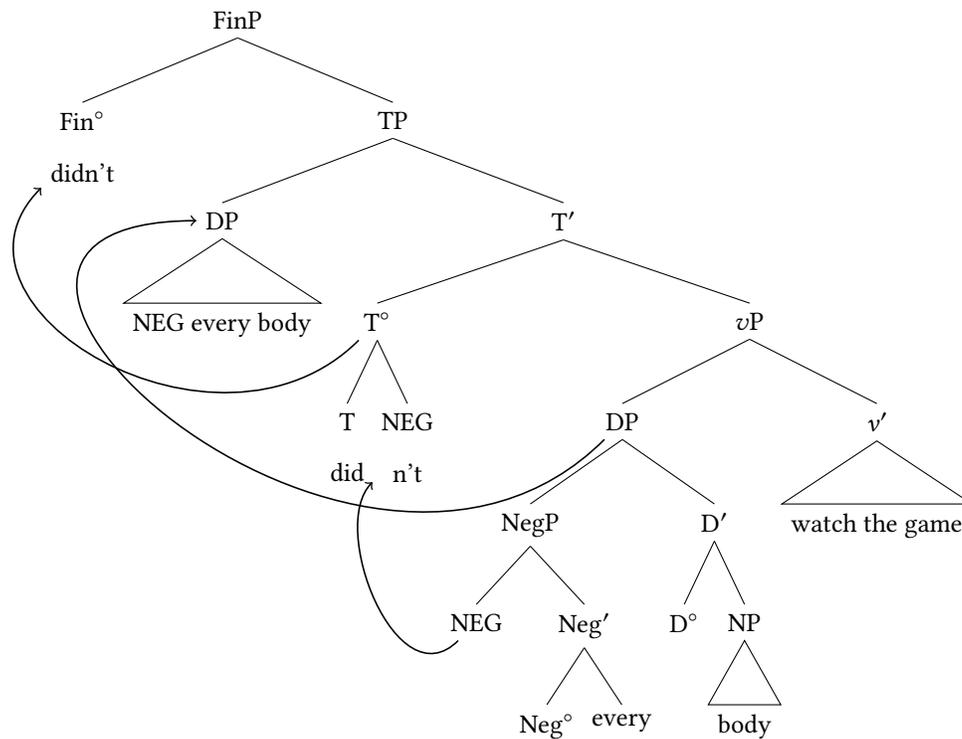
5.5.1 Accounting for the subject distribution

Blanchette derives negative auxiliary inversion constructions from negative subjects by Neg-raising and she accounts for the construction's subject distribution with the proposal that only subjects that can combine locally with negation are possible subjects of the construction. She builds on Foreman observation that the subjects of negative auxiliary inversion constructions and *Not*-initial constructions have a similar distribution and uses *Not*-initial constructions as evidence for whether a subject can combine with negation locally or not. Subjects such as *everybody* are possible subjects, as in (5.77a) because they can combine with negation, as in (5.77b). Specific subjects such as *the students* are not possible subjects, as in (5.84), because they cannot combine with *not*, given the unacceptability of (5.78b).

(5.77) a. Didn't everybody finish their homework.   (WTE; Foreman 1999/2001: 41)

     b. Not everybody finished their/his homework   (SE; Foreman 1999/2001: 41)

(5.78) a. * Won't the students answer the question.   (WTE; Foreman 1999/2001: 41)

b. * Not the students will answer the question. (SE; Foreman 1999/2001: 41)

Considering the types of subjects that were problematic in my analysis next, quantifiers that are not attested subjects, such as *few* and *some*, these examples are ruled out for Blanchette because they cannot combine with negation. *Few* and *some* cannot appear in either negative auxiliary inversion constructions or *Not*-initial constructions, as in (5.79) and (5.80), respectively.

(5.79) a. * Won't few boys go to the party. (WTE; Foreman 1999/2001: 49)

b. * Not few boys went to the party. (SE; Foreman 1999/2001: 49)

(5.80) a. * Didn't some students sleep. (WTE)

b. * Not some students slept. (SE)

Blanchette's analysis focuses on accounting for negative concord and the availability of negative polarity items and our analyses differ with respect to the nature they attribute to these types of subjects. The author accounts for the construction headed by NPI *any*, as in (5.81a), and n-word *no*, as in (5.81b), with the same structural analysis.

(5.81) a. Cain't anything jump in this game. (WTE)

b. Cain't nothing jump in this game. (WTE)

Following Collins & Postal (2014), she posits them as being abstract instances of SOME that are inherently negative. The subjects contain logical negation, NEG, locally, as in (5.82). NEG undergoes Neg-raising to derive the examples in (5.81a) and (5.81b), as it does for the other types of subjects.

(5.82)
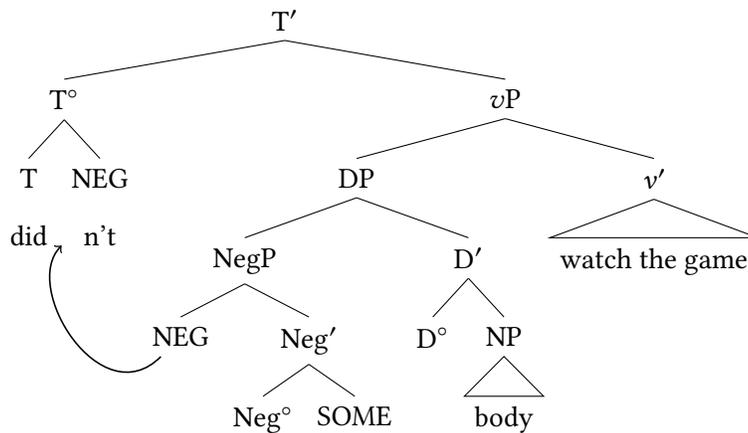
Spellout rules apply to the 'NEG SOME body' constituent to derive the examples in (5.81a) and (5.81b) from the structure in (5.82). Notice that SOME is abstract enough for it to be able to combine with NEG in the above structure. *Some* cannot appear as a possible subject of either negative auxiliary inversion or *Not*-initial constructions, as we saw in (5.80) above. The author suggests that the surface form of SOME might be ruled out on the basis of the fact that *some* is a positive polarity item.

5.5.2   Accounting for similar phenomena

5.5.2.1   *Not*-initial constructions

Blanchette (2015) does not provide a parallel analysis for *Not*-initial constructions and negative auxiliary inversion constructions. *Not*-initial constructions are not derived by moving negation or Neg-raising. The subjects that derive negative auxiliary inversion constructions are negative constituent subjects and her explanation for *Not*-initial constructions is quite simple. They surface when NEG does not undergo Neg-raising and NEG is spelled out as *not*. The whole subject, 'NEG every body' for the example in (5.77b), moves to canonical subject position and is pronounced only in this position as *not*.

5.5.2.2 Split subject constructions

The author accounts for split subject constructions and the analysis she provides is very similar to the one I adopt. Split subject constructions are formed as other negative auxiliary inversion constructions and, following Zanuttini & Bernstein (2014), the element which precedes the negated auxiliary is derived by movement of a subset of the features of the subject. The position to which this movement occurs is SpecFinP. In comparison, in my analysis, the projection to which this feature bundle moves is instead SpecNeg$_2$P.

5.5.3 Accounting for cross-linguistic differences

The author does not explain why certain varieties of English lack negative auxiliary inversion constructions. She does, however, provide an elegant solution for the observed cross-linguistic variation with respect to whether they allow negative concord in the non-inverted counterpart when both the subject and the auxiliary are negated. Recall that negative concord in which both the subject and auxiliary are negated is possible in African American English, as in (5.83a), and Appalachian English, as in (5.83b), but is often ruled out in West Texas English, as in (5.83c).

(5.83) a. Nothing don't come to a sleeper but a dream.   (AAE; Green 2002: 80)

'Nothing comes to a sleeper but a dream.'

  b. Nobody couldn't handle him.   (AppE; Wolfram & Christian 1976: 112)

'Nobody could handle him.'

  c. * Nobody didn't like the movie.   (WTE)

'Nobody liked the movie.'

Blanchette (2015) derives constructions which exhibit this type of negative concord with the same movement of the negated auxiliary to Fin° that occurs in negative auxiliary inversion constructions and an additional movement of the n-word subject to SpecFinP. In the case in which a negative auxiliary inversion construction has an n-word subject, movement to SpecFinP can derive two types of constructions. When a subset of the features of the subject raise to SpecFinP, the resulting

structure is a split subject construction. When the whole subject raises to SpecFinP, the resulting structure is the non-inverted counterpart of the construction which is not attested in all varieties that allow negative auxiliary inversion constructions.

5.5.4   Discussion

Blanchette (2015) does not offer any insight into why only certain types of subjects can form a constituent with *not*. The advantage of my analysis over hers is that I explain why most scope-bearing subjects are possible and why all subjects which lack scope are not by invoking the Revised Principle of Scope Economy. I share with her the problem of not having an easy explanation for certain types of subjects. We both rely on independent properties of certain subjects and the way in which they interact with negation to rule them out. It is only the scope-bearing subjects whose scope is restricted with respect to negation that are hard to account for in my analysis.

The types of subjects that are not possible in negative auxiliary inversion constructions are the types of subjects that cannot combine with *not*. For her, negation forms a constituent with the subjects, and negative auxiliary inversion constructions will not happen with the types of subjects that cannot combine locally with negation. The test the author uses to determine whether a subject is compatible with negation is the *Not*-initial.

There are two cases in which Foreman (1999, 1999/2001) notices a divergence in the parallelism between negative auxiliary inversion constructions and *Not*-initial constructions. These cases involve indefinites such as n-word subjects headed by *no* and NPI subjects headed by *any*. Subjects headed by *no* are possible in negative auxiliary inversion constructions while they are not possible in *Not*-initial construction, as can be seen given the contrast in acceptability in (5.84). Similarly, subjects headed by *any* are possible in negative auxiliary inversion constructions while they are not in *Not*-initial constructions, as in (5.85).

(5.84)   a.   Can't nobody jump in this game.   (WTE)

  b.   * Not nobody can jump in this game.   (SE & WTE)

(5.85)   a.   Can't anybody jump in this game.   (WTE)

b.   * Not anybody can jump in this game.   (SE & WTE)

The author does not specifically address this contrast. Recall that to derive the negative auxiliary inversion constructions, the Spellout rules allow SOME to be spelled out as either *no* or *any*.

Summary

In this chapter, I considered first analyses in which the subjects of the construction do not occupy canonical subject position. The subject-auxiliary order in these analyses is a result of the negated auxiliary occupying its usual position and the subject not raising at all or not raising as high as they do in the non-inverted constructions. Many of these types of analyses predominantly treat negative auxiliary inversion constructions as a type of existential construction. A problem with the idea that negative auxiliary inversion and negative existentials should be derived by the same analysis is that there are many differences between them structurally that are not captured in these types of analyses. They do not co-occur with the same auxiliaries, their subject distribution varies, and they behave differently with respect to structural tests that indicate that the subjects of negative auxiliary inversion constructions are in canonical subject position. In cases in which the authors do not attempt to account for the subject restriction of the construction with the definiteness effect of existentials, the analyses account solely for negative auxiliary inversion constructions with negative subjects, so the co-occurrence of negative concord with the construction. For these reasons, analyses in which the subject of negative auxiliary inversion constructions stay low are not true competitors to the analysis I provide.

The focus of this chapter was instead on analyses in which the subject of the construction occupies canonical subject position. I considered first Foreman (1999, 1999/2001). The majority of the analyses proposed in the literature for the construction have been based on data from African American English. Foreman is the only author other than myself who discusses the phenomenon for West Texas English and my analysis builds upon his in some respects. He observes that negation scopes over the subject in negative auxiliary inversion constructions, an observation that I extend to account for the construction's subject distribution. He, on the other hand, proposes that

the unattested subjects of the construction escape the scope of negation by raising to a higher subject position. The fact that he does not restrict when negation can merge high except when dealing with a few problematic subjects results in issue with overgeneration and spurious ambiguity.

I considered next an analysis in which negation is restricted on when it can merge in its higher position. This competing analysis has not been proposed in the literature, but it is similar to Foreman's analysis and mine and has the advantage of not requiring changing the nature of negation to explain how it is able to gain scope in its moved position. Restricting when negation can merge high on the basis of Principles of Scope Economy makes the same predictions as I make for which types of subjects are possible and has the same issues that I have when dealing with unexpected subjects. In my analysis, I extend a previously observed restriction on movement to account for the subject distribution. In this competing analysis, the same restriction is instead on where a head can merge. I prefer my analysis on the basis of the fact that the competing analysis misses a generalization.

I considered Green's (2011, 2014) analysis for the construction in African American English and whether it can account for the construction in West Texas English. I determined that her analysis does not account for the West Texas English data because, unlike in African American English, negative auxiliary inversion does not co-relate with a widening effect of negation.

I outlined Blanchette's analysis of the construction, in which the negation that forms the negative auxiliary inversion constructions come from within the subject. In our analyses, we make different assumptions about the nature of n-words, and more work needs to be done in order to determine whether n-word subjects are non-negative existential quantifiers, as I claim that they are.

In this chapter, I compared my analysis to other analyses provided in the literature for negative auxiliary inversion constructions. The chapter that follows concludes this dissertation.

Chapter 6

Conclusion

This dissertation provided an analysis for the phenomenon of negative auxiliary inversion. I argued that the phenomenon is best understood as an instance of head movement that has a semantic effect, contributing further evidence to the growing literature on the interaction of head movement with semantics. Many of the construction's properties are explained if the construction is seen as an overt analog of quantifier raising.

A construction exhibiting negative auxiliary inversion is formed when the subject occupies canonical subject position and the negated auxiliary raising past the subject to a higher negative projection, as in (6.1).

(6.1) $\left[_{\text{Neg}_2\text{P}} \text{ didn't } \left[_{\text{TP}} \text{ everybody } \text{d\underline{i}dn't} \text{ see the fight}\right]\right]$

In defending the structural analysis for the construction in chapter 2, I considered the evidence in favor of the subject occupying canonical subject position and the evidence in favor of the negated auxiliary raising to the higher negative projection proposed in Foreman (1999, 1999/2001). The evidence provided for the subjects raising comes from their distribution in the construction being unlike that of other known restrictions. In particular, the construction's subject distribution is distinct from the subject distribution of existential constructions. While both constructions allow weak quantifiers as subjects and disallow specific subjects, strong quantifiers are allowed as sub-

jects only in negative auxiliary inversion constructions. The availability of strong quantificational subjects makes it impossible to extend the definiteness restriction seen in existentials to account for the subject distribution of negative auxiliary inversion constructions. The remaining evidence that supports the claim that the subject of NAI constructions occupies canonical subject position comes from the position of the subject when the construction interacts with other phenomena. Evidence that the subject must raise in the construction comes from vP ellipsis tests, in which the subject is not elided, and low adverb tests, in which low adverbs can intervene between the subject and the verb. The results of applying both of these tests indicate that the subject is not in its base-generated position. Further evidence in favor of the subject's movement comes from varieties in which the subject precedes aspectual markers. Evidence that the subject is in canonical subject position comes from tag-question formation, an operation that targets the structural subject. The subject of a tag question agrees with the thematic subject of a negative auxiliary inversion construction, indicating that the subject of the construction is the structural subject.

Reviewing next the evidence provided for the landing site of the negate auxiliary, adopting the higher negative projection has the advantage of explaining why the construction is restricted to negative contexts and the presence of sentential negation in its *n't* form. Additional arguments come from independent proposals for a higher negative projection in syntactic analyses of negative concord (Zanuttini 1991, 1997, Zeijlstra 2004, 2008). In my analysis, I combine the two functions of the higher negative projection as proposed in the literature. The higher negative projection is able to host the negated auxiliary in negative auxiliary inversion, in line with Foreman (1999, 1999/2001), and it allows me to provide a syntactic analysis of negative concord in line with Zeijlstra (2004, 2008). Furthermore, I tied the availability of negative auxiliary inversion to the availability of a higher negative projection and proposed that Neg_2 is present in all varieties that exhibit the phenomenon.

The movement of negation to the higher negative projection is optional, as it is for quantifiers undergoing quantifier raising. I define optional movement as movement that is not feature-driven. When the higher negative projection is merged into the structure from the numeration, it does not have any feature-checking requirements. Instead, movement to this projection is subject to the same constraints proposed to hold for quantifiers. More specifically, the movement is subject to

Fox's (2000) Principles of Scope Economy that I extend to apply to overt movement. The movement is possible only when negation interacts scopally with the subject and it is otherwise ruled out.

Treating negative auxiliary inversion as the overt analog of quantifier raising explains the observed correlation of the construction with the presence of ambiguity in its non-inverted counterpart. The types of subjects that are possible in the construction are scope-bearing and there is a correlation between their availability in a NAI construction and their interaction with negation in its non-inverted counterpart. The subjects that give rise to ambiguity in non-inverted constructions are the subjects that are possible in negative auxiliary inversion constructions. For this reason, quantificational subjects are generally possible subjects of the construction, as in (6.2), whereas specific subjects are not, as in (6.3).

(6.2)　a.　Didn't everybody see the fight.　　　　　　　　　　　　　　　(WTE)

　　　　b.　Can't all of y'all win the jackpot.　　　　　　　　　　　　　　(WTE)

　　　　c.　Don't many people like you.　　　　　　　　(WTE; Foreman 1999: 21)

　　　　d.　Won't more than 5 people fit in that car.　　　　(WTE; Foreman 1999: 7)

　　　　e.　Didn't half the students do their homework.　　　(WTE; Foreman 1999: 8)

(6.3)　a.　* Didn't Jamie see the fight.　　　　　　　　　　　　　　　　(WTE)

　　　　b.　* Won't the students answer the question.　　(WTE; Foreman 1999/2001: 41)

　　　　c.　* Cain't their dogs bite me.　　　　　　　(WTE; Foreman 1999/2001: 42)

　　　　d.　* Wouldn't I do that.　　　　　　　　　　　(WTE; Foreman 1999: 11)

Recall that negation has wide scope in negative auxiliary inversion constructions and that the inverse scope interpretation is not attested, as in (6.4).

(6.4)　Didn't everybody see the fight.　　　　　　　　[*not » everybody*; **everybody » not*]

In deriving the interpretation of the structures in chapter 3, I proposed that the subjects are interpreted in canonical subject position, building on observations made in Lasnik (1999) and Lechner (2007) on restrictions on their reconstruction. Negation is interpreted in its moved position. I

discussed two ways in which negation could gain scopal significance in its moved position. One possibility is that negation type-shifts and the other possibility is that negation does not leave a trace that is interpretable semantically. Both of these possibilities allow negation to outscope the subject.

The inverse scope interpretation of the construction is not derivable because it would give rise to a derivation that disobeys both scope transparency and canonical word order. The interaction of economy principles determine how different interpretations are spelled out, following Bobaljik & Wurmbrand (2012), and interpretations in which the subject has wide scope do not surface as apparent negative auxiliary inversion constructions.

While the Principle of Scope Economy accounts for much of the subject distribution, there are some quantificational subjects that are unattested in the construction, such as *some*, *several*, and *few* as in (6.5).

(6.5) a. * Didn't some people come.   (WTE)

    b. * Cain't several students read that book.   (WTE; Foreman 1999/2001: 48)

    c. * Won't few boys go to the party.   (WTE; Foreman 1999/2001: 49)

However, the unavailability of these subjects is not surprising when we consider the observations other authors have made about their interaction with negation. Their interpretation in the context of negation is fixed, and derivations containing these types of subjects are ruled out for independent reasons.

Additionally, in my analysis, I address the availability of indefinite subjects as being parallel to the availability of any other quantifier whose scope is not restricted in the context of negation.

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

    b. Cain't anything jump in this game.   (WTE)

    c. Won't none of the students go to the party.   (WTE; Foreman 1999/2001: 10)

Indefinite subjects headed by *a* are existential quantifiers. Negative polarity items in subject posi-

tion, including those headed by *any* and *no*, are existential quantifiers with an additional licensing requirement. The movement of the negated auxiliary over these subjects is licensed because the quantifiers interact scopally with negation, and have their licensing requirement checked at a later stage of the derivation.

This dissertation focused on accounting for negative auxiliary inversion constructions in a variety of English spoken in Texas. In the first section of chapter 4, I considered whether the analysis I provided for the construction can be extended to other varieties of English, such as African American English and Appalachian English. I concluded based on preliminary investigations that the analysis can be extended to account for the phenomenon in these varieties of English and I discussed the consequences of doing so. I turned next to considering whether the analysis can account for phenomena other than negative auxiliary inversion. Since I account for the availability of negative auxiliary inversion constructions with the higher negative projection, I considered first phenomena that are attested in varieties which exhibit NAI constructions to see if the higher negative projection has other functions in these varieties. I concluded that the analysis can be extended to account for split subject constructions, such as transitive expletive constructions and partitive doubling constructions, and that the analysis should not be extended to account for negative existential constructions. Considering phenomena that are available independently of negative auxiliary inversion in varieties in which the higher negative projection is not available, I concluded that the analysis can be modified to account for *Not*-initial constructions but it should not be extended to canonical negative inversion.

In chapter 5, I discussed other possible analyses for the phenomenon of negative auxiliary inversion and explained why my analysis is preferable. I considered analyses in which the subject stays lower in the structure than canonical subject position and argued against the construction being treated as parallel to existential constructions. I also compared my analysis to Foreman's, an analysis on which mine builds quite a bit. I discuss the differences between our analyses and the predictions they make. I considered an analysis in which negation is base-generated in the higher negative projection rather than moved to this projection. Rather than the movement of negation being subject to principles of scope economy, it is merging in the higher position that is sensitive to the principles. I favor a movement analysis predominantly because the alternative

misses a generalization. I also considered an analysis in which the movement of negation widens the domain of negation, an analysis proposed by Green (2014) for African American English. I suggested a revision that results in greater empirical coverage of the subject distribution for the subject restriction and discussed why the analysis is not entirely compatible with the phenomena for West Texas English. The final competing analysis I considered was Blanchette's (2015) analysis for the construction in Appalachian English, in which the construction is derived by syntactic Neg-raising. The biggest differences between our analyses are the source of logical negation, the nature of indefinites, and how we account for the phenomenon of negative concord.

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