We might should oughta take a second look at this:
A syntactic re-analysis of double modals in Southern United States English

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Abstract

Previous analyses of double modal constructions in Southern United States English (SUSE) have been unable to fully explain all of the observed data regarding negation, questions, and stranded quantifiers. In this article, I argue for a structure placing the first modal in an MP merged above TP and the second modal in T. This structure has the benefits of maintaining the distinction seen between the two modals and explaining the separation of the modals by negation and stranded quantifiers while being able to explain the raising of the second modal in main clause questions. To support the proposed merged MP structure, I argue that the first modal of a double modal pair is immune to sequence of tense effects, and I take this as evidence that first position modals lack syntactic Tense. This is further supported with crosslinguistic evidence for epistemic modality located above Tense. This article thus explains SUSE double modals as an instance of parametric variation regarding the availability of epistemic modality to be located above Tense. I also address issues associated with the proposed structure involving the Head Movement Constraint and the proposed EPP feature on M.

Keywords: Double modals; Southern United States English; Modality; Syntactic variation

1 Introduction

While nonstandard syntactic forms attested in the sociolinguistic literature are often ignored or only partially described in most of the syntactic literature, double modal constructions (1) in Southern United States English (SUSE), relatively speaking, have received a fair amount of attention.

(1) I might could go to the store.

However, the previous analyses of this construction have been unable to fully and succinctly account for all of the observed data. Therefore, I wish to revisit the previously proposed syntactic structure of double modals. Based on the behavior of double modals with negation, sequence of tense, and stranded quantifiers, this paper argues for a structure that will be able to capture the merits of the previous analyses as well as more fully account for the data and make accurate predictions about the form of double modals observed in SUSE.
The paper begins with a presentation of the relevant data showing the patterning of double modal constructions in SUSE. I then review and critique the previously proposed syntactic structure of the double modal showing how they cannot account for all of the data regarding negation and questions. Based on this, I propose a new analysis of the construction employing a Modal Phrase (MP) that is merged above the TP structure of the main clause. The merged MP analysis hinges on the argument that first position modals in the double modal pair are epistemic and lack syntactic Tense, which will be supported by the first modal’s immunity to sequence of tense effects along with crosslinguistic evidence for epistemic modality located above Tense. Next, I show that this merged MP structure is able to more fully capture stranded quantifier and negation data. I then present arguments for a reanalysis of the Head Movement Constraint following a feature driven head movement system, which will explain the facts regarding T to C movement in double modal main clause questions. Lastly, I argue that there are only double modals in SUSE and that all observed so-called triple modal constructions can be reanalyzed as true double modals including a VP with a nonfinite TP complement.

2 Description of the Relevant Data

In SUSE and African American English, there exists a construction involving what appear to be two and sometimes three modal verbs, see (2). Montgomery and Nagle (1993) and Nagle (1994) trace the history of these so-called double modal constructions as coming from the Scottish immigrants who populated the South (Scots and some other northern British varieties being other attested double modal varieties), and they cite the earliest formal observations of double modals in SUSE in Carr (1905). In a discussion of the pragmatics of the double modal construction, Mishoe and Montgomery (1994) argue that it is used for hedging, politeness, being noncommittal, and expressing certainty without wanting to show certainty. This construction is
puzzling to non-Southern speakers because there appears to be a contradiction of the fundamental analysis of auxiliary verbs that there can be only one modal per TP, and therein lies the syntactic interest into what the structure of these forms must be.

(2) a. I might could go to the store.
b. You might should eat before you go.
c. You might oughta get your coat.\(^1\)
d. Those ducks must not can feel cold.
e. I might should oughta take these out of the oven.

2.1 Form and Distribution

Though *might could* is considered to be the most commonly used double modal, the double modal construction can take quite a few forms, and we will see below that this is the first piece of evidence for viewing the double modals as a syntactic structure made up compositionally of separate parts rather than as a single lexical item. Example (3) contains an overview of the different double modal forms attested in the literature (Butters 1973; Pampell 1975; Coleman 1975; Di Paolo, McClenon, and Ranson 1979; Feagin 1979; Boertien 1986; Di Paolo 1989; and Author 2010).

(3) Might could  Must can  Might oughta
Might should  Must could  Could oughta
Might would  May can  Should oughta
Might can  May could  Would oughta
Might will  May will  May should

Though all of these forms are found in the literature, there seems to be a hierarchy of speaker acceptance and subregional variation regarding which forms are present in the different areas of the South\(^2\). That is, speakers in different subregions of the South do not accept all of

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1 *Might oughta* will be reanalyzed below in section 5.1 as not being a true double modal.

2 For example, Coleman (1975) finds most of the double modals listed in (3) in South Carolina, Feagin (1979) finds a smaller subset of these in Alabama, and Wolfram and Christian (1976) find only a very small number of double modals in West Virginia. However, the lack of some double modals in the spontaneous speech samples of these studies may merely be related to the difficulty of collecting specific syntactic forms in spontaneous speech.
these possible double modal forms. This has lead several researchers (Butters 1973; Di Paolo et al. 1979; and Feagin 1979) to propose an implicational scale to describe the distribution of the different double modal pairs: *might would* > *might should* > *might could* > *might oughta*. This scale implies that speakers who have *might would* will also have *might should*, *might could*, and *might oughta*. However, while speakers who have *might could* will also have *might oughta*, they may not have *might should* and *might would*.

With this hierarchy of double modal pairs in mind we can view the double modals with *might* in first position in the first column of (3) as relatively more common than double modals in the second column containing *must* and *may* in first position. The last column in (3) with *oughta* in second position represents not only another double modal grouping but also the foundations for what have been called *triple modals*, since *might* can be added to the front of all the members of this column (starting at *could oughta* and moving down) forming a string of what appears to be three modals, see (2e) for an example of these “triple modal” constructions observed in spontaneous speech in Kentucky\(^3\). The existence of such forms in the data has caused some to refer to all double modal constructions technically as *multiple modals*.

Looking at the possible double modal forms in (3), we can also see that there are only a few modals that can be in the first position of the construction as compared to the second position. First place modals are confined to *might*, *may*, and *must* all of which are epistemic (not counting the modals before *oughta* since these will be reanalyzed in section 5.2), yet second place modals are more open and include: *could*, *should*, *would*, *can*, *(had) better*, and *will*. Further, while some speakers only have *might* for the first position modal, they generally tend to have more than one possible second place modal (i.e., why we see the implicational scale *might could*, *might should*, and *might would* which are all more popular than *may* or *must* double modal

\(^3\) Thanks to Greg Johnson for reporting this.
pairs). This distribution begins to point toward an important distinction between the first place and second place positions in the pair, which must be accounted for under any analysis of the underlying structure of this construction.

2.2 Double Modals and Questions

The importance of the distinction between the two modals becomes even more apparent when the behavior of the construction is observed in questions. Contrary to Labov’s (1972) and Butter’s (1973) original belief that questions with double modals are not used in spontaneous speech, Coleman (1975) reports several naturally occurring examples. Further, double modal questions forms have been ruled acceptable in all of the elicitation studies in which they have been tested (Pampell 1975; Di Paolo et al. 1979; Boertien 1986; Di Paolo 1989; and Author 2010). The data in (4) show the attested behavior of double modals in main clause yes/no questions.

(4) a. You **might could** go to the store for me.
   b. **Could** you **might** go to the store for me?
   c. **Might could** you go to the store for me?
   d. **Might** you **could** go to the store for me?

There are several important issues to note from the question data. The first is that there is a distinction between which modals can and cannot participate in subject/auxiliary inversion. In an affirmative declarative sentence such as (4a), *might* appears as the first modal and *could* as the second. Some speakers have been reported\(^4\) to invert only the second modal (4b), while others\(^5\) invert both modals together (4c). Inversion of only the first modal (4d) is ungrammatical in every SUSE dialect so far investigated. Thus, there appear to be two possible ways to form double modal questions, by inverting only the second modal or by inverting both modals together. However, the elicited acceptability judgments of constructions such as (4c) with both

\(^4\) In Boertien (1986).
\(^5\) In Di Paolo et al. (1979).
modals raise have been quite varied (Pampell 1975: 112), and I believe that such forms may vary by region.

The question data clearly reveal that there is a fundamental difference between the two modals. Since we know English has strong C in main clause questions, it seems feasible to say that the second modal is ultimately located in T\textsuperscript{6} since we see it invert with the subject. Where exactly the first modal is, however, is the main issue I will deal with in the rest of the paper.

While naturally occurring yes/no questions have been attested in the literature, there seem to have been no reported instances of WH questions in spontaneous speech. It seems unlikely, however, that this is a syntactic fact about the structure of double modals in WH questions, and it is much more likely a pragmatic fact about the function of double modal constructions in a discourse. Taking Mishoe and Montgomery’s (1994) view of the pragmatics of the double modal for hedging and politeness, it is unclear if this pragmatic situation will occur very often with any questions and even less often with WH questions. However, though Southern speakers may not normally use these constructions in spontaneous speech, we still have strong intuitions about what the form should be, as has been seen in the grammaticality judgments given in the literature.

The WH question data in (5), behave exactly as we would expect given the behavior of double modals in yes/no questions seen in (4). We see that the second modal inverts, whereas inverting the first modal is ungrammatical (6).

(5) a. How could you might do that? (You might could do this…)
b. Who would John might want to do hurt? (John might would want to hurt Bill)
c. What kind of proposal would John might agree to? (John might would agree to…)

(6) a. *How might you could do that? (You might could do this…)  

\textsuperscript{6} For ease of analysis, I am abstracting over the initial location of the second modal, which as for single modals could been analyzed as merging in an MP below T before being raised to T.
b. *Who **might** John **would** want to do that? (John might would want to hurt Bill)
c. *What kind of proposal **might** John **would** agree to? (John might would agree to...)

Since it is apparent that the second modal is in T, and thus the first modal must be above T, a possible location for the first modal could be C. However, the data from both types of questions give us evidence that wherever the first modal is, it is not in CP since the first place modal remains lower than the subject in these main clause questions. Data from embedded clauses in (7) also provide further proof that the first modal is not in C, given the overt realization of the complementizer.

(7) a. I thought that you **might could** do it.
    b. I wondered who **might would** do it.

2.3 Double Modals and Negation

The distinction between the two modals is further observed in the behavior of double modals and negation. The data in (8) show the negation patterns of double modals. Negation can occur after the second modal (8a) or between the two modals (8c). Both full and contracted negation is allowed on the second modal (8c), but no contraction is accepted onto the first modal (8e).  

(8) a. I **might could** not go to the store.
    b. I **might couldn’t** go to the store.
    c. I **might not could** go to the store.
    d. *I not **might could** go to the store.
    e. *I **mightn’t could** go to the store.

There is variation in the literature regarding which form of negation is used. Pampell (1975) and Feagin (1979) find negation only between the two modal (as in 8c); Coleman (1975) and Boertien (1986) find negation both between the two and after the second; and Di Paolo et al. (1979) find negation only after the second modal.

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7 It is unclear if this is an aspect of double modals or merely that speaker of American English dislike contracted forms with the single modals may, might, and must which solely make up the first place modals as shown in (2).
The second modal behaves exactly as we would expect the single modal to behave (9). That is, we find the full form not to the right of the second modal (8a compared with 9a) and contracted onto the second modal (8b compared with 9b). However, in (8c), we see negation occurring to the left of the second modal, yet in comparison with single modals (9c) negation cannot be placed to the left. For the first modal, we see that it partially follows the single modal pattern as well. That is, (8c) can be viewed as an instance of negation to the right of the first modal (as in 9a). Also, negation to the left of the first modal (8d) is ungrammatical as expected from (9c).

(9)  
   a. I could not go to the store.
   b. I couldn’t go to the store.
   c. *I not could go to the store.

Though these negation data do clearly show a difference between the two modals, these data are problematic for an analysis like Labov’s that views the first modal as nothing more than an adverb, for the first modal seems to behave, at least partially, like a true modal. That is, if we just viewed the first modal as an adverb and not a modal, then we would have to explain why the second modal, that seems to behave exactly as a single modal, would allow negation to the left of it, (8c) compared to (10b).

(10)  
   a. I really could not go to the store.
   b. *I really not could go to the store.

3 Review of the Previous Analyses

Our survey of the relevant data has revealed that the main issue in the structure of double modals involves the location of the first modal. We will now turn to a review of the previous analyses of the construction. Formal discussions of double modals began with William Labov’s (1972) study of African American English in New York City. Noting the double modals that
appeared in the speech of his young Black informants as an important yet greatly 
underappreciated aspect of Southern syntax, Labov put forth perhaps the first modern analysis of 
the construction. Based on their behavior as outlined above in Section 2, Labov posited that first 
place modals are “functioning formally as adverbs” (1972: 59). He related this to a loss of 
syntactic Tense, an analysis that he uses to explain some other interesting aspects of African 
American English. Labov’s belief that first place modals are adverbs, or that they are at least 
functioning adverbially, however, is ultimately left unspecified. That is, he does not propose a 
structure that would represent the adverbial behavior of the first modal. This adverbial analysis 
has been taken up as one of the main theories to account for the double modal construction, yet 
before we discuss some of the syntactic work-throughs of Labov’s hypothesis, we will first 
briefly entertain a more recent competing analysis of the construction.

3.1 Single Lexical Item

Rejecting Labov’s view, Di Paolo (1989) argues that the double modal construction 
should be thought of as an idiomatic, single lexical item. She presents some evidence that both 
modals should be of the same tense, that is ‘tense matched’ (e.g., may can and might could) and 
not ‘tensed mixed’ (e.g., may could and might can). This leads her to posit that both modals 
must be tensed and must both have the same tense. Further, Di Paolo suggests that the semantic 
restrictions on the senses of double modals as root, deontic, or epistemic are not consistent for all 
double modal constructions and seem to be idiosyncratic. This leads her to believe that the 
meaning and therefore the structure of double modals is not compositional. She accounts for 
these irregularities as being “characteristic of sets of related lexical items and not of phrases 
generated by a syntactic rule,” and she believes these irregularities can be overcome by 
analyzing double modals “as two-word lexical items such as idioms” (1989:196). As a single
lexical item, both members of the double modal construction could and should appear under T, which she believes would account for the tense matching evidence.

There are immediate problems with such an idiomatic view, given the sheer number of double modal constructions coupled with the fact that first position modals can combine with several other modals yielding distinct double modals (i.e., *might could*, *might should*, *might would*). This seems to point toward compositionality. Second, if double modals were idiomatic, single lexical items, then we would expect them to resist separation. However, we find many examples of double modal constructions that are split by adverbs or negation, see (11).

(11)  
   a. He might probably could help you.  
   b. I might not could go to the store.

Battistella (1995) extends this criticism showing that other related phrasal constructions like *have to* as in (12a) cannot be separated by adverbials, (12b). Additionally, the question data presented above showing the possibility of the inversion of the second modal and crucially not the first is undeniable evidence that the construction cannot be viewed as a single lexical item. The question data seem to directly contradict Di Paolo’s claim that double modals are not compositionally formed since the two modals seem to be functioning independently.

(12)  
   a. I still have to go.  
   b. *I have still to go.

Further, Di Paolo’s arguments for tense matching are only applicable to first position modals like *may/might* which appear to be present and past tense versions of the same modal, but other first position modals like *must* have no such counterparts. Lastly, though Di Paolo claims that tense mixed modals are ungrammatical, over half of her own research subjects judged the so-called tensed mixed form *may could* as acceptable (1989: 210), and such tense mixed forms
have been found in spontaneous speech in Coleman (1975) and Feagin (1979) and judged grammatical in other elicitation studies (Author 2010).

3.2 Both Modals Under T

Besides the single lexical item view, the other previous syntactic analyses of the double modal construction have attempted to reconcile Labov’s generalizations that the first modal appears to be untensed and is behaving somewhat adverbially. These analyses can be broken down into two groups based on the positioning of the first modal: both modals under T and first modal adjoined to T-bar.

The main proponent of the both under T hypothesis is Harmon Boertien. Similar to the ultimate claim of Di Paolo (1989), Boertien believes that there are times when the double modal construction appears to behave like a single verb, yet there are also times with the construction appears to clearly behave as two separate parts (1986:294). Based on this view of the data, Boertien posits two structures for the double modal, one with both modals under T, (13a), and one with the first modal in T and the second as a VP (13b).

\[\text{(13)}\]

\[\text{a. } \]

\[\text{b. } \]

\[
\begin{align*}
\text{TP} & \\
\text{DP} & \text{subject} \\
\text{T} & \text{might} \\
\text{T} & \text{could} \\
\text{TP} & \text{subject} \\
\text{T} & \text{should} \\
\text{VP} & \text{ought} \\
\text{VP} & \text{verb}
\end{align*}
\]

\[\text{8 Though Boertien (1986) uses a pre-TP syntax, which treats the maximal projection of a main clause as S and labels T as a V, for ease of comparison I have represented his analysis using the current assumptions of a TP.}\]
Unlike Labov, Boertien believes that both modals are in fact verbs (not adverbs) and should be treated as such in the syntactic analysis. The structure in (13a) is meant to represent double modals that raise both elements in questions and whose first modal resists contraction. These are the type of double modals which Boertien sees as acting like one single unit. The second structure in (13b) is meant for double modals that accept contraction on the first modal and whose first modal is allowed to raise in questions (e.g., couldn’t oughta). All of the double modal constructions that he posits as being of type (13b) have oughta as the second element, although Boertien never addresses this fact.

Though Boertien’s analysis can account for some of the data of the speakers who can raise both modals in questions and who put negation only after the second modal, there are still many problems with his proposed structures. The first problem may be merely an issue of reclassification. It is uneconomical to propose two different structures for what are supposed to be the same construction. That is, if the double modals pairs with oughta in second position are to be considered double modals, then why should there not be one structure for all double modals? Further, if some first place modals accept contraction yet others do not, why are these still considered the same structure? However, these problems can be easily dealt with if such modal combinations with oughta are viewed as something other than double modals, as we will discuss at length in section 5.

However, there is also a problem with Boertien’s first structure in (13a) which he proposes for true double modals. While this may not have seemed like a major problem under the syntactic theory Boertien was using, since he makes no distinction between verbs and auxiliaries, having two heads in T is contrary to a minimalist approach. Though this is a theory internal issue, there is also evidence in the data to suggest that such a structure cannot be right.
Boertien’s analysis is basically the same proposal as Di Paolo’s single lexical item view except that he maintains the compositional nature of the construction by separating the two modals into two different heads; therefore, all of the arguments against Di Paolo’s view apply here regarding adverbs and negation appearing between the two modals. If both modals are thought to be co-heads under T, you would have to propose some theory of incorporation for anything to intervene between them. Further, since some speakers raise only the second modal in questions, this both under T analysis will be unable to explain these cases. Lastly the clear distinction between the first and second modals as highlighted in Section 2 is lost if they are both considered to be co-heads.

3.3 First Modal Adjoined to T-Bar

Edwin Battistella has proposed that instead of viewing the construction as a single lexical item or seeing both modals as co-occurring in T we should think of the first modal as some form of adjunction above T. Although Battistella does not formally acknowledge this, his view is basically a working out of the details of Labov’s original idea that first modals are adverbs and do not have syntactic Tense. First proposed in Battistella (1991) and then streamlined in Battistella (1995), the adjoined to T-bar analysis sees the second modal as a true modal ultimately located in T. Battistella refers to the first modal as a “spurious” modal, and places it as an MP above T, attached at a second T-bar in a position of adjunction (and thus modification) to T, see (14)\(^9\).

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\(^9\) Throughout the paper I have simplified the VP shell and drawn tree structures with the subject beginning in Spec-TP rather than Spec-vP since the top of the tree is the major concern for analysis of the double modal construction.
By placing the first modal in its own phrase contained inside the TP, this analysis is able to account for the generalization that Labov made, i.e., that the first modal is not tensed or as Battistella explains, not tensed in the way we would normally think. Battistella (1995) argues that while Labov’s adverb theory of first modals seems to possibly account for the meaning of the construction, viewing the first modal as nothing more than an adverb will not square with the data. Citing arguments that the first modal appears to behave at times as if partially tensed, in that it allows negation directly after it (as discussed in section 2.3) yet the first modal clearly does not raise in questions, Battistella argues that there is a distinction being made here between morphological tense and syntactic Tense (1995:36). Similar to McFadden’s (2004) argument for a distinction between morphological case and syntactic Case, Battistella contends that the first modal has morphological tense and thus is allowed to participate in some of the activities that we would normally find tensed items doing (e.g., negation) but not in the purely syntactic raising of T to C in questions. Under this two tense story and based on the adjunction structure he proposes, Battistella is able to account for the adverbial behavior of first place modals as well as their somewhat “verby” behavior.
Battistella’s analysis is superior to the previous views in that it has the potential to explain the question data in a coherent way. By putting the first modal above T and the second modal in T, Battistella is able to explain why the second but not the first modal is able to raise, and through the partial tense analysis he is able to explain why negation is allowed to follow the first modal. However, there are some problems with this proposed structure. Although the adjunction allows Battistella to maintain the adverbial view of the first modal, the adjunction location of the MP is somewhat controversial. While previous syntactic theories allowed adjunction to take place at X-bar positions (cf. Johnson 1991 and Chomsky 1995), currently most adjunction is assumed to attach at the XP level (cf. Chomsky 1985, Kayne 1994, Alexiadou 1994, 1997, and Cinque 1995, 1997). If we have good reasons to believe that adjunction is at the XP level, then Battistella’s structure needs to be revisited.

Though Battistella relies on evidence from negation to motivate the verbiness of the first modal and to rule out the single lexical item hypothesis, arguments from negation are perhaps the most crushing to the adjunction to T-bar analysis. The view of negation as a NegP that attaches below TP will have to be slightly altered, I believe, by any analysis of double modals since for many speakers negation occurs between the two modals (see Pampell 1975, Feagin 1979, Coleman 1975, Boertien 1986, and Author 2010). Under Battistella’s story, the location of the NegP in sentences like (15a) would have to be located between the two T-bars, and thus negation would be contained inside of the TP, see (15b). Such a structure seems completely untenable, and it should be noted that though Battistella uses many arguments from negation, he never indicates how the structure with negation between the two modals would actually look under his analysis. Rather, Battistella attempts to deal with these problems through complex phrase structure rules dictated by the stipulations of Head Feature Licensing (Travis 1988).
a. **I might not could** do that.

b. 

\[
\begin{array}{c}
\text{TP} \\
\text{DP} \\
I \\
\text{MP} \\
\text{might} \\
\text{NegP} \\
\text{Neg} \\
\text{not} \\
\text{T'} \\
\text{could} \\
\text{VP} \\
V \\
\text{DP} \\
do \\
\text{that}
\end{array}
\]

Though Battistella’s structure may be able to account for some of the double modal data except for negation or questions raising only the second modal, there is another problem with his structure concerning the observed double modals in SUSE. Though the preferred technical term for double modals has been **multiple modals** given the occurrence of what appear to be “triple modals” (as shown in (2e) repeated here as (16) for convenience), there have been no reported cases of anything more than triple modals in any of the usage studies to date. Though a full analysis of these apparent triple modals will be given in section 5, we will take a brief look at these structures here since I believe that these constructions may present a problem for Battistella’s analysis.

(16) **I might should oughta** take these out of the oven.

To begin, I will sketch out the behavior of these apparent triple modal constructions. It appears at first from examples like (16) above that instead of two modals we now have three. In an extension of the observed behavior of the double modals, we would expect at least one of
these modals to be in T and operate as a true modal. Given the pattern from double modal constructions where the last modal was the true modal, we might expect the third modal to be the true modal in triple modal constructions. As in the double modal data, the true modal can be identified through subject/auxiliary inversion in questions. As the data in (17) show, instead of the last apparent modal in a multiple modal construction being raised to C, it is still the second modal that is raised. Further, it would be very problematic to consider oughta as a true modal located in T since it has an apparent non-finite TP complement signaled by the cliticized to.

(17)  

a. I might should oughta take these out of the over.  
b. *Oughta I might should take these out of the oven?  
c. Should I might oughta take these out of the oven?

The problem this presents for Battistella’s analysis is that under an adjunction to T-bar story, producing triple modals should be merely a case of iterating another T-bar to adjoin another “spurious” modal above the true modal located in T. This is certainly not what takes place in sentence like (16) where the apparent third modal oughta is located after the true modal could as revealed in the question data (17c). Additionally, if the adjunction to T-bar view is correct, it seems plausible that we could merely continue to iterate and adjoin to T-bar to obtain triple, quadruple, and even n-modal constructions. That is, if multiple modals are adjunction structures, we would expect them to behave like other instances of adjunction, and it is clear that PPs and AdvPs can be multiple in a given clause. However, as stated above there is no evidence in any of the natural language data or usage studies for anything other than apparent triple modals. Thus, Battistella’s proposed structure would grossly overgenerate unobserved strings of multiple modals.

Given the inability of Battistella’s structure to explain negation and its unobserved predictions of unrestricted strings of modals, I believe that a structure should be proposed that
will maintain the advancements made through Battistella’s structure. That is, a structure that will maintain the distinction between the two modals, which is able to adequately explain the subject/auxiliary inversion in questions, and a structure that will be able to more clearly account for the negation data and make correct predictions about the strings of modals observed in natural language.

4 Merged MP Analysis of Double Modals

To account for the flaws in the previous analyses, I will now motivate an alternative structure. As in the T-bar adjunction view, I assume that the second modal is ultimately located in T, which allows us to maintain the facts about subject/auxiliary inversion of the second modal in main clause questions. Additionally, I propose viewing the first modal as the head of an MP, as does Battistella; however, under my analysis the MP is crucially merged with TP, not adjoined inside of it. While this alleviates the potential problem created by Battistella’s analysis regarding the unconventional location of adjunction, this proposed structure causes a problem with the linearization of word order. Since we assume that the subject is in Spec of TP, a merged MP would place the first modal above the subject. Borrowing again from Battistella’s analysis that the first modal retains something like Tense (i.e., morphological tense) and therefore has some of the properties we would associate with T, I propose that there is an EPP feature on M that causes the subject to raise from the Spec of TP to the Spec of MP, which will yield the correct word order. Under this analysis then, a sentence like (18a) will have the structure in (18b).

(18) a. I might could do that.
The rest of this section provides motivation for the proposed MP structure given in (18) as well as addresses theoretical issues associated with the new structure. I begin with an argument from sequence of tense effects to show that the first modal does indeed lack syntactic Tense. Secondly, I present some crosslinguistic evidence from Cinque’s (1999) study of the hierarchy of functional heads to argue for the possibility of an epistemic modal located above the TP. I then examine data with stranded quantifiers in double modal constructions to argue for an additional Spec position above the known Spec-TP position. Next, I return to the negation data to observe how the new merged MP structure is more clearly able to account for the data than Battistella’s adjunction view. The rest of section 4 deals with theoretical issues connected with the proposed EPP feature on M as well as an apparent violation of the Head Movement Constraint in double modal main clause questions.

4.1 First Modal’s Lack of Tense

For this merged MP analysis to get off the ground, it is crucial that the first place modal lack syntactic Tense since it is being analyzed as a functional head above TP and therefore
completely separate from T. Although I have shown that the second and not the first modal raises in questions and Labov’s preliminary analysis was that first place modals are tenseless, it is still necessary to provide some evidence that the first modal has no Tense. I propose that such proof can come from instances of double modal constructions and sequence of tense effects.

There is a condition known as sequence of tense (SoT) affecting the interpretations of the tenses of verbs in embedded clauses (see Enç 1987 and Stowell 1995). When a matrix clause verb is in the past tense in a language with SoT and the embedded clausal complement is in the past tense as in (19), there will be two possible readings of the sentence. Using the terminology of Enç (1987), we can describe these different readings in semantic terms as *shifted* or *simultaneous* readings. In a shifted reading, the evaluation time for the embedded clause is shifted to a time before the evaluation time of the matrix clause. This yields the reading illustrated in (19b) where the embedded past tense verb *was* refers to a time previous to the time of the matrix clause verb *said*. That is, Bill was sick at a time in the past which is before the time that John made his statement. In a simultaneous reading illustrated in (19c), the embedded clause has the same evaluation time as the matrix clause. That is, the evaluation time of Bill being sick is the same time as the evaluation of John making his statement. Thus, the time of Bill’s sickness is the same time as John making his statement.

\[(19)\]  
\[\text{a. John said that Bill was sick. (ambiguous)}\]  
\[\text{b. John said, “Bill was sick.” (shifted)}\]  
\[\text{c. John said, “Bill is sick.” (simultaneous)}\]

The ambiguous reading is only available for stative\(^{10}\) complements expressed in past tense, which are embedded under a matrix clause with a past tense verb. That is, sentences like (20) where the embedded clause is in present tense unambiguously yield a simultaneous reading, see (20b) and (20c).

\(^{10}\) Not non-stative complements or relative clauses, see Enç (1987:635).
(20)  a. John said that Bill is sick. (unambiguous)
     b. #John said, “Bill was sick.” (shifted)
     c. John said, “Bill is sick.” (simultaneous)

Though SoT may work slightly differently when modals are involved (see Enç 1987, Stowell 1995, and Abusch 1997), the same distinction is made between past and present tense in the embedded clauses. In the SoT constructions below involving single modals, we see that the past forms might (21a) and could (21b) provide an ambiguous reading in that the snowing could have occurred either between the time of John’s talking (i.e., the reference time \( t_{\text{ref}} \)) and the time John’s speaking was reported (\( t_{\text{now}} \)) as shown graphically in (22a) or that the snowing will occur sometime after \( t_{\text{now}} \), shown in (22b).

(21)  a. John said it might snow. (ambiguous)
     b. John said it could snow. (ambiguous)

(22)  a. 
     \[
     \begin{array}{c}
     t_{\text{ref}} \\
     \hline
     \text{snowing} \\
     \hline
     t_{\text{now}}
     \end{array}
     \]
     Meaning: John said it might snow, and it did.

     b. 
     \[
     \begin{array}{c}
     t_{\text{ref}} \\
     \hline
     t_{\text{now}} \\
     \hline
     \text{snowing}
     \end{array}
     \]
     Meaning: John said it might snow, but it hasn’t yet.

However, we see in (23) that the present forms may and can yield only the reading in which the snowing occurred after \( t_{\text{now}} \) (meaning 22b). That is, the snowing could not have occurred between the time of John speaking and the time John’s speaking was reported.

(23)  a. John said it may snow. (only after \( t_{\text{now}} \))
     b. John said it can snow. (only after \( t_{\text{now}} \))

The data in (24) show that in double modal constructions, the so-called ‘tensed matched’ double modals behave exactly as we would expect from the single modal data. That is, in (24) might could follows the pattern of the past tense modal forms seen in (21) having an ambiguous reading, and may can in (25) follows the pattern of the present tense modal forms in (23) having
an unambiguous reading. To this point, the behavior of double modals tells us nothing about the
tense of the first modal since it is unclear which modal is driving these effects (or if both modals
have an impact).

(24)  a. John said it might could snow. (ambiguous)
     b. John said it might could snow, and it did.
     c. John said it might could snow, but it hasn’t yet.

(25)  a. John said it may can snow. (only after $t_{\text{now}}$)
     b. #John said it may can snow, and it did.
     c. John said it may can snow, but it hasn’t yet.

However, in so-called ‘tensed mixed’ double modal forms we see a distinction between
the first and second position modals. In (26), *may could* provides an ambiguous reading,
following the pattern of the second modal *could* and crucially not the first modal *may*. If first
place modals had syntactic Tense, we would expect the present form of the modal here to
perhaps disambiguate the reading to only after $t_{\text{now}}$ as was seen in the single modals in (23).
Since this is not the case, it appears that the first place modal has no impact on the SoT, and thus
the second place modal is the only modal with syntactic Tense.

(26)  a. John said it may could snow. (ambiguous)
     b. John said it may could snow, and it did.
     c. John said it may could snow, but it hasn’t yet.

One possible alternative to this view would be that perhaps ‘tense mixed’ double modals
always yield an ambiguous reading given the two different tenses expressed. The data in (27),
however, show that this cannot be the case, for *might can* follows the pattern of the second
modal with the present form *can* in having an unambiguous reading and remains seemingly
unaffected by the apparent past tense first position modal *might*.

(27)  a. John said it might can snow. (only after $t_{\text{now}}$)
     b. #John said it might can snow, and it did.
     c. John said it might can snow, but it hasn’t yet.
Therefore, it seems clear from these data that the SoT effects are driven by the second modal only and not a combination of the two, and these data also show that the ‘tense’ of the first place modal has no effect on the reading of the sentence. Since the second place modal drives the reading of the sentence no matter what the form of the first place modal, I take this as evidence that the first place modal has no syntactic Tense to be affected by SoT constructions, which is predicted if the first place modal is a head above TP.

4.2 Crosslinguistic Evidence for Epistemic Modality above Tense

Along with the arguments that the first modal does not have syntactic Tense, there is crosslinguistic evidence to entertain the possibility of a modal located above the TP. Recall from section 2.1 that all of the first place modals in double modal constructions in SUSE are epistemic. In the development of his proposed hierarchy of functional heals, Cinque (1999) argues with evidence from languages with rich agglutinating morphology that epistemic modality is located higher in the structure than Tense.

Cinque notes that in Korean (28) modality is located higher in the structure than past Tense, which following Baker’s Mirror Principle (1985) he uses to propose the ordering of functional heads in (29).

(28) Ku pwun-i caphi-si-ess-ess-keyss-sup-ti-kka?
    the person-NOM catch-PASS-AGR-ANT-PAST-EPISTEM-AGR-EVID-Q
    'Did you feel that he had been caught?' (1 Ch. 3 in Cinque 1999)

(29) Mood\_speech\_act > Mood\_evaluative > Mood\_evidential > Modal\_ity > T(Past) > T(Anterior) > Voice (>V) (4 Ch. 3 in Cinque 1999)

These Korean data are contrasted with data from Turkish (30) where modality is expressed below Tense, yielding the hierarchy in (31).

(30) Oku-y-abil-ecek-ti-m.
    read-y-MOD-FUT-PAST-1sg
    'I was going to be able to read / I would be able to read.' (5b Ch. 3 in Cinque 1999)
Cinque explains the apparent contradiction between the two orderings in (29) and (31) by showing that the modals in the Korean data which are located above Tense are epistemic while the modals in the Turkish data located below Tense are root.

Along with referencing double modal varieties as evidence of this apparent difference in structure between epistemic and root modals as the present paper further argues for, Cinque provides additional evidence from Una (an agglutinating language of New Guinea, see Louwerse 1988), where the same language shows the contrast between the locations of root and epistemic modals relative to Tense. In Una, epistemic modals in (32a) are located higher than Tense while root modals in (32b) are located lower than Tense. Thus, Cinque arrives at a final ordering where epistemic modality is located above Tense and root modality is expressed below Tense (33).

\[(32)\]  
\[a.\] Er bin-kwan-de-darib.  
'\text{she go-FUT-3sg-PROBAB} \quad \text{'She might go.'}  

\[b.\] Nibuk-ti-nyi.  
'I sit-\text{ABIL-PRES} \quad \text{'I can sit.'} \quad (9 \text{ Ch. 3 in Cinque 1999})

\[(33)\]  
\text{Modality}_{\text{epistemic}} > \text{T(absolute)} > \text{Modality}_{\text{root}} \quad \text{(10 Ch. 3 in Cinque 1999)}

Therefore, with the SoT data from section 4.1 showing the first modal to lack Tense coupled with the evidence from other languages presented in Cinque (1999), we have some objective basis for viewing the first modal as a separate functional head above TP.
4.3 Evidence from Stranded Quantifiers

While Battistella’s T-bar adjunction view might capture some of these generalizations regarding the first modal’s lack of Tense and location above T, further motivation of a merged MP over an adjoined MP can come from double modal constructions involving the quantifier all. It is well know that the all has the ability to become stranded while the DP which it quantifies over moves further up the tree, see Sportiche (1988) and Boskovic (2004). In a double modal construction like (34), we see that there are three possible locations for all to be stranded: between the second modal and the verb, between the first and second modal, and to the left of the first modal next to the subject.

(34) We (all) might (all) could (all) go to the store.

The crucial location for the current MP analysis is the stranding of all between the two modals. Since the quantifier can be stranded as the DP moves through specifier positions (Sportiche 1988), the possibility of all between the two modals is evidence for a specifier position located between the two modals. Given that we have proof from subject/auxiliary inversion to believe that the second modal is located in T, I argue that the location of all stranded between the two modals is Spec-TP (35) leaving another specifier position and thus another head above TP, which I propose is the merged MP.

(35) [MP We; [M’ [M might] [TP t; all [T’ [T could] [vP t; go to the store.]]]]]

If both modals are located in TP as all the previous analyses have argued, then we would be unable to explain how it is possible to strand all between the two modals. For example, Battistella’s T-bar adjunction view would have no way to account for this data since we would have no reason to think that the subject passed through an adjoined XP on its way to Spec-TP.
Since from the stranded quantifier data there is an apparent Spec position above Spec-TP, this is further evidence that a separate functional head is merged above TP and not adjoined inside of it.

### 4.4 Evidence from Negation

Recall from section 3.3 that one of the major problems with the adjunction to T-bar analysis is the placement of negation. As discussed in section 2.3, negation for many double modal speakers is located between the two modals. However, under Battistella’s view the NegP would have to be contained inside the TP between two T-bars, see (14) repeated here for convenience as (36).

\[(36) \quad \begin{align*}
\text{a.} & \quad \text{I might not could do that.} \\
\text{b.} & \quad \text{I might not could do that.}
\end{align*}\]

Since the maximally projected NegP would have to intervene between the TP and its head in T, this structure cannot be maintained under a minimalist approach. With the proposed MP analysis, however, an account of negation between the two modals becomes much more tenable. Since the first modal is located in a separate phrase above TP, the location of the NegP can be less controversially placed between the MP and the TP, see the structure in (37).
Since I am proposing that this functional head M is very closely related to T, in that it has something akin to syntactic Tense which, following Battistella, I am calling morphological tense, placing the NegP after the MP does not appear unreasonable. This structure may still be relatively controversial since all other stories of negation would place it directly after T; however, since from subject/auxiliary inversion the second modal clearly appears to be in T, the data are pushing us towards an analysis of negation in double modal clauses placed above T. Given that the competing T-bar adjunction analysis would place a merged phrase between a head and its maximal projection, the merged MP structure more clearly explains the negation data.

I am not proposing that NegP is always above TP in SUSE. For double modal sentences with negation after the second place modal, it seems clear that NegP is in the normal location between T and vP. Further, I am not suggesting that single modal sentences with negation in SUSE contain an MP above TP with the NegP located between them. I only propose that NegP is licensed above TP by the M of a double modal construction.
4.5 *The Need of an EPP Feature on M*

With the arguments made for the location of the second modal in T and the first modal in an MP merged above TP, I now turn to the issues of the linearization of the subject to the left of the first modal. I take the availability of a stranding location for quantifier *all* between the two modals as evidence that the subject has moved through Spec-TP on its way to Spec-MP (see section 4.3). To motivate this movement of the subject, I propose that the functional modal head M contains an µD feature and an EPP feature which must be checked by a DP.

There is precedence in the literature for functional heads other than T to contain an EPP feature. Minimalist approaches have proposed EPP features on functional heads such as v and Agr (cf. Chomsky 1995, 2000, and Lasnik 1995); therefore, the existence of an EPP feature on M is not unreasonable. Further, given the close relationship that modals have with T, it seems feasible that M would have some similar features to T.

The existence of the EPP feature on T has often been argued for by the necessity of an expletive in sentences like (38) where the subject remains low in the structure. The argument is made that when the subject stays low an expletive is merged from the numeration to satisfy the functional head T’s EPP feature. (cf. McFadden 2004 and sources cited there).

(38)  
a. *[TP [T_EPP Could] be a monkey over there.]  
b. [TP There_EPP [T_EPP could] be a monkey over there.]

In the double modal examples in (39), it is not entirely clear that the necessity of an expletive is driven solely by the known EPP feature on T. While sentences like (39b) with no expletives could be ruled ungrammatical by the unchecked EPP feature on T, I propose that the ungrammaticality of sentences like (39c) with an expletive only in Spec-TP is stemming from an undeleted EPP feature on M. Therefore, given the arguments to propose an MP merged above the TP above, I take the need for an expletive to the left of the first modal as shown in (39a) and
(39c) as evidence of an EPP feature on M which requires Spec-MP to be filled in double modal constructions in SUSE.

(39)  

a. [MP There; [M_{EPP} might] [TP t; [T_{EPP} could] be a monkey over there.]]

b. *[MP [M_{EPP} Might] [TP [[T_{EPP} could] be a monkey over there.]]

c. *[MP [M_{EPP} Might] [TP there [T_{EPP} could] be a monkey over there.]]

Though an EPP feature on M motivating movement to Spec-MP will yield the correct word order, there are still a few issues to be dealt with. Under a standard theory of syntactic Case, the subject DP checks and deletes its Case feature in Spec-TP as well as checking the EPP feature of T (see Chomsky 1995, 2000, Martin 2001). Under the current merged MP analysis, the subject DP of a double modal construction in SUSE checks the EPP feature on T first and then moves again to Spec-MP to check the EPP feature on M. This was not a problem under Chomsky’s (1995) formulation of EPP feature checking in which the D feature on the DP subject remained interpretable, and thus one DP is able to check multiple EPP features. An example of this is Successive Cyclic Movement in sentences like (40) where the same DP is raised through several embedded TPs, checking the EPP features of those T’s as it goes.

(40) We; are likely [t; to be asked [t; to [t; build airplanes.]]]                         (14 in Lee 2006)

Under Chomsky (1995), a DP could check and deletion its Case feature and still be available to move to another Spec position to satisfy another EPP feature. This need for on DP to check the EPP features of multiple functional heads is similar to situation presented by the current merged MP analysis since the subject’s Case would be checked and deleted in Spec-TP. However, as Lee (2006) addresses, Chomsky (2000) revisits the ability of a DP to check multiple EPP features and formulates Agree such that after Case has been checked and deleted, a DP is frozen in place and no longer allowed to move. The cases of Successive Cyclic Movement illustrated in (40) are analyzed as being grammatical because the matrix Spec-TP is the only
position where the subject checks and deletes Case, since the embedded TPs are non-finite. Therefore, under the most current formulation of the interaction between checking Case and an EPP feature, the subject in double modal constructions should be frozen in Spec-TP and not allowed to move to Spec-MP to check M’s EPP feature.

This problem, however, can be dealt with if adopt an alternative analysis presented in McFadden (2004) that checking of syntactic Case does not affect a DP’s ability to raise to check an EPP feature. In a larger project relating to the elimination of syntactic Case completely, McFadden proposes that the movement to a specifier position of a functional head like little v or T is motivated not by any needs of the DP, i.e., needing to check μCase feature, but solely by the needs of the functional head, i.e., satisfying the head’s EPP feature. Under this story, McFadden is able to do away with Agree’s restrictions that a DP can only check EPP features until its Case is deleted, and thus DPs are free to check EPP features of functional heads, even after having their Case feature checked and deleted.

As McFadden addresses, the biggest argument for the checking of Case to freeze a DP in place comes from sentences like (41) where the DP John cannot raise to Spec-TP and an expletive subject must be merged. Proponents of the Case freezing argument suggest that John cannot raise to check the EPP because it has already checked its Case feature in the finite embedded clause (Chomsky 2000 and Martin 2001).

(41) a. It is likely (that) John will be sick.
   b. *Johni is likely (that) t_i will be sick. (321 and 322 in McFadden 2004)

Under McFadden’s analysis where Case plays no syntactic role, it initially appears that the ungrammaticality of (41b) is not predicted. That is, if John has no Case features to check and keep it low in the structure, we would predict that it could raise to Spec-TP to check the EPP feature. However, McFadden accounts for such apparent counterexamples as (41b) by seeing the
CP as blocking the movement of the DP *John*. McFadden argues that the reason *John* cannot raise out of an finite embedded clause is not that the DP *John* has checked its Case features, but rather that there is a higher element in the structure which T would attract to check the EPP feature first, namely the CP. He provides sentences like (42) as evidence for this, where the entire CP raises to Spec-TP.

\[(42) \text{[That John will be sick]}\_i \text{ is likely } t_i.\]  
(326b in McFadden 2004)

This accounts for the ungrammaticality of (41b) since for the DP *John* to raise to Spec-TP the CP would have been skipped over. Under this story, T is probing for a syntactic object to check the EPP feature. The first valid element that is encountered is the CP rather than the DP, and the grammaticality of (42) is evidence that CP is a valid syntactic object to satisfy the EPP feature. McFadden provides an additional example where a syntactic object like the DP *Frank* in (43) cannot raise because there is a closer candidate the DP *the picture of Frank* which would be visible to the probe first.

\[(43) \text{a. [The picture of Frank]}_i \text{ seems } t_i \text{ to be hanging askew.} \]
\[\text{b. *Frank}_i \text{ seems [the picture of } t_i] \text{ to be hanging askew.} \]  
(327 in McFadden 2004)

In light of these arguments that checking syntactic Case does not affect a syntactic object from raising to satisfy the EPP feature of T, there is no violation by extension in allowing the subject in double modal constructions to raise to Spec-MP to check M’s EPP feature. Therefore, under the merged MP analysis, although the subject DP in a double modal construction may be analyzed as having checked and deleted its Case feature in Spec-TP, following McFadden (2004) the subject is still free to move to Spec-MP. This movement to Spec-MP is driven, then, by the functional head M’s need to check its strong EPP feature, and not by the DPs need to check Case.
4.6 MP Analysis of Questions

Having motivated the first modal’s position in a functional head M above TP through the first modal’s lack of Tense and having explained the subject’s raising to Spec-MP through a strong EPP feature on M, we have been able to capture a great deal of the double modal data. However, we run into another potential problem for the merged MP analysis in the question data. As has been discussed above, the second modal raises to C in questions, and this is one of the main arguments to view the second modal as being located in T. With the proposed merged MP structure, for the second modal in T to raise to C in main clause questions, the first modal as a functional head M above TP must have been skipped over. This would be a violation of the Head Movement Constraint as defined by Travis (1984): head movement may not skip intermediate heads.

This problem can be avoided if we propose a reanalysis of the Head Movement Constraint. Instead of seeing head movement of the type seen in questions as a blind process which selects the next head down the tree, it makes sense to view this movement, and in fact all movement under the Minimalist Program, as being motivated by Probe and Goal feature checking. In fact, Matushansky (2006) argues that heads c-select for a certain feature and that similar to phrasal movement this c-selection can be seen as the trigger for head movement. Matushansky does not see the need to limit c-selection to solely apply to lexical or categorical features, and thus there is no reason to rule out a head c-selecting for a feature like Tense (2006: 77). Following this analysis, T to C head movement in main clause questions in English can be seen as being driven by C’s μTense feature; C probes down the tree looking for a goal with the proper Tense feature and then raises this head to Spec-CP to check and delete this feature.
Pesetsky and Torrego (2001) and Zwart (1996) propose just such a feature driven account of T to C movement in Germanic. Zwart (1996) shows evidence from Dutch that T to C movement is licensed by the Tense features on T since verb raising occurs only if the verb is finite. Extending this analysis to the current MP structure, the reason that the functional head M is skipped over in subject/auxiliary inversion in main clause questions is that M is not an active Goal for C in that M does not contain the Tense feature that C c-selects for. Therefore, C will continue to probe down the tree until it reaches the second modal in T containing the Tense feature. Thus, the MP structure can be maintained as not being a violation of the Head Movement Constraint if this constraint is reformulated to say that any intervening head cannot be skipped over if it contains the proper features that the Probe is searching for, i.e., an active head cannot be skipped.

4.7 Accounting for the Raising of Both Modals in Questions

There is perhaps another issue with an analysis of double modal questions regarding the existence of two attested forms of raising: raising only the second modal (Boertien 1986 and Author 2010) or raising both modals\footnote{The elicited acceptability judgments of constructions with both modals raised have been quite varied (Pampell 1975: 112). Di Paolo et al. (1979) is the only study which only finds this possibility. Coleman (1975) and Pampell (1975) find both possibilities, and Hasty (2010) shows some acceptance of both forms, although there is a clear statistical preference for raising only the second modal. In light of this, I believe that raising both modal vary by region and/or age.} (Di Paolo et al. 1979), see (4) repeated here as (43) for convenience.

\begin{align*}
(44) & \quad \text{a. You } \textbf{might could} \text{ go to the store for me.} \\
& \quad \text{b. } \textbf{Could you might} \text{ go to the store for me?} \\
& \quad \text{c. } \textbf{Might could} \text{ you go to the store for me?} \\
& \quad \text{d. } \textbf{*Might you could} \text{ go to the store for me?}
\end{align*}

To account for the attested raising of both modals (44c), I will appeal to a historical argument. Following the standard story of modals in English, we believe that single modals
began as full verbs but were reanalyzed as modals sometime during the Middle English period, possibly in concert with the loss of strong T (see Lightfoot 1979). During this same time, double modals began to surface in Scots and some other northern British varieties, most likely in connection with this change from verb to modal (Fennell 1993 and Nagel 1994). The double modals were then transported to the American South through the Scots Irish and Scottish settlers who predominately settled there (see Montgomery and Nagel 1993 for the Scottish origins of double modals and their transfer to SUSE). Thus, it appears that the modals have been on a progression from verb to auxiliary (i.e., V to T), and now in SUSE under the present analysis to a functional head M above T for epistemic modals in double modal constructions.

Returning to the problem of analyzing the attested examples of the raising of both modals in questions, it is possible that this is an issue of syntactic change over time. Since the modals have been on a progression from V to T to M, it is possible that the instances of both modals raising is a transitional or relic form of the double modal construction. That is, perhaps the speakers who raise both modals have not fully reanalyzed the first modal as losing all syntactic Tense, and by extension other speakers have continued this loss of Tense for epistemic modals to reanalyze the first modals as being in the MP above TP.

There is some corroboration for this view from the findings of Di Paolo et al. (1979), for all of the respondents in their study preferred raising both modals in questions and negation was only found after the second modal. I believe this corroborates my appeal to the history of double modals because if the speakers Di Paolo et al. surveyed were all at the stage before the progression of the first modal to M (given their particular region or age), then we would expect for negation to only come after the second modal, since perhaps the MP has not been motivated in these speakers’ internal grammars. For the speakers who front both modals in questions, then,
it is possible that this is evidence that both modals may be contained under T as a sort of phrasal auxiliary verb (similar to the intended analysis of Boertien 1986), which may be an intermediate step before the reanalysis of the loss of syntactic Tense on the first modal and thus the move to the M. At present, however, this story is only tentative and would need to be corroborated by actual demographics of both modal raisers. In this theoretical analysis, however, I have only chosen to account for the second modal raising, since raising the second modal only seems more syntactically problematic and since this is my preferred question form as a native speaker.

5 Analysis of ‘Triple’ Modals

With the descriptions and motivations of the merged MP analysis being complete I will lastly turn to a formal reanalysis of so-called triple modals. Recall from section 3.3 that apparent triple modal constructions like (2e), repeated here for convenience as (45), had bearing on the adjunction to T-bar analysis in that an adjunction view of double modals would predict quadruple, quintuple, even n-modals, yet there are only apparent triple modal constructions observed in the data, and all of these end with oughta.

(45) I might should oughta take these out of the oven.

To further advance the merged MP analysis, we will see that all of the observed so-called “triple modals” can be reanalyzed as double modals. Based on this reclassification, I will argue that there are only double modals allowed in SUSE and that this will fall out directly from the merged MP analysis though it could not be accounted for under the T-bar adjunction view. Lastly, I will extend the analysis of these “triple modals” to some of the more problematic cases which would be left unexplained if “triple modals” are structurally true instances of three modals.
5.1 Reanalyzing oughta as a VP

If *oughta* in constructions like (46) is viewed as a single lexical item and not a combination of *ought* + *to* in a cliticized form, we would perhaps more easily be able to see this as an instance of three modals occurring before the verb *take*. However, if this were the case we would expect *oughta* to raise in questions as the last member of the modal combination, which has been shown before as being in T. Since we see in (45c) that this is not the case, to continue to view *oughta* as a single modal we would need to motivate a completely different structure to account for these sentences alone.

(46)  
  a. I *might should oughta* take these out of the oven.  
  b. *Shouldn’t* you *might ought* take these out of the oven?  
  c. *Oughta* you *might shouldn’t* take these out of the oven?

However, if we take the alternate view proposed by Dickey et al. (2000)\(^{12}\) that *oughta* is in fact not a single lexical item but a composition of *ought* + *to*, our analysis becomes more straightforward. The merged MP analysis, then, will view the *might should* of (46) as a true double modal, and *ought*, following Dickey et al. (2000), will be viewed as a VP with *to* heading a nonfinite clausal complement. This view would explain why all instances of apparent triple modals have an apparent compositional *oughta* and nothing else (i.e., never a bare *ought* and never a different modal). This would then yield a structure for sentences like (46a) as (47) below with the first modal contained in an MP, the second modal in T followed by *ought* as a VP and *to* heading a nonfinite clause.

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\(^{12}\) Dickey et al. (2000) advance this analysis of *oughta*, not from a discussion of triple modals or even SUSE double modals, but from an apparently related construction *had oughta* found in the Midwest. The present analysis, then, is an extension of Dickey et al.’s analysis to double and ‘triple’ modal constructions in SUSE.
Beyond the ease of analysis for apparent triple modal constructions, there are several reasons to view *ought* not only as something different from the other modals but also specifically as a VP. First, since no modals are allowed to take infinitival complements, we have evidence to view *ought* as a VP and not a modal. Second, Dickey et al. (2000) has argued that that if *ought* is
a VP, we would expect it to pass some of the tests for VPs such as ellipsis. In (48a) we see that we can elide out *ought*, but we see *should* behaving as a modal and thus resisting ellipsis in (48b), in that *Bill might too* does not mean *Bill might should too*.

(48)  
   a. John **might should oughta** take a bath, and Bill **might should** too.  
   b. *John **might should** take a bath, and Bill **might** too.

### 5.2 Explaining other problematic oughta double modals

Extending this VP view of *oughta*, we are able to account for some other problematic instances of apparent double modals. Constructions like (49) with *oughta* as the last member of an apparent two modal pair have been called double modal constructions in the literature (Boertien 1986).

(49) John **should oughta** go to the store with you.

The problem with such structures being thought of as double modals is that in questions, the *oughta* does not raise as we have seen the second modal do in all other instances of double modals, see (50).

(50)  
   a. *Oughta John **should** go to the store with you?  
   b. **Should** John *oughta* go to the store with you?

This problem has been noted in the previous studies, but instead of analyzing the *oughta* as something different from a modal, Boertien (1986) had to propose two different structures for double modals, one for what I consider two double modals and one for any apparent double modal involving *oughta* (see 13 above). The present analysis of *ought* as a VP, then, has the strength of covering the data more economically, and this view predicts the raising of *should* and not *ought* in main clause questions like (50) since *should* is located in T. The structure of sentences like (49) under the present view would be rendered as (51).
The facts about the data discussed above regarding the reanalysis of formerly triple modal constructions suggest that a merged MP analysis not only is able to capture the data, but that it also actually predicts this to be the structure, i.e., that there should only be one epistemic first modal in a merged MP that would not raise in questions, that there should be one true root modal in $T$, and that anything else would be in the verb phrase. Therefore, the fact that we only find true double modals, rather than quad or n-modals, falls out directly from the proposed analysis without the need for two separate structures to account for all of the data.

5.3 Forms of some other double modals

The analysis proposed for apparent modals like *oughta* above which we have analyzed here as compositions made up of two lexical items *ought* + *to* may have some implications for other somewhat problematic apparent SUSE modals like *usta* in constructions like (52), which Feagin (1979) refers to as semi-modals.

(52) a. I *usta could* run a mile.
    b. I *usta would* make biscuits from scratch.
Given our analysis of the compositionality of *oughta* we would perhaps expect *usta* to also be made up of *used* + *to*. Extending the *oughta* analysis, this would make *used* a VP followed by a nonfinite TP complement. However, we will see below that we have good evidence to suggest that this analysis cannot be directly transferred from *oughta* to *usta* and that *usta* has in fact been lexicalized, at least in these constructions, to a single lexical item which functions as a modal.

The major difference between *oughta* and *usta* which would take away from an argument by extension is that although *oughta* is always used in SUSE following other modals (either a single modal or a double modal), *usta* is always used as a first place modal in double modal constructions as seen in (52) above and the ungrammatical sentences in (53) below.

(53)  
a. *I could *usta* run a mile.  
b. *I would *usta* make biscuits from scratch.

If *usta* is not analyzed as a single lexical item, then it would perhaps have a structure similar to *oughta* consisting of a VP *used* followed by a nonfinite TP complement. Under this story, a sentence like (54a) would have the tree structure of something like (54b).

(54)  
a. I usta could run a mile.
b.

The major problem with such a generalization is that *to could* would then be analyzed as an infinitive, yet the *could* appears with tense morphology, which should be blocked if there is the infinitival marker *to* in T. Further, this view would actually say that there are no modals in this construction at all, which seems to go against the meaning of the sentence. While there may be other ways to analyze the rest of the sentence in (54a), I believe that there is a much more simple explanation if *usta* is viewed as a single lexical item.
To test for a modal, we can again appeal to subject/auxiliary inversion in main clause questions. The structure of the yes/no question form of the sentence in (54a) would be as in (55a) with shows that following the pattern for all the other double modals we have looked at, the second modal of the pair could raises to C.

(55) a. Could you usta run a mile?
    b. *Usta you could run a mile?
    c. *Did you usta could run a mile?

So, even abstracting over the problems with placing run a mile in a separate TP below could, it is apparent that (54b) is the wrong analysis of this construction. These data, then, would point us in the direction of viewing usta as a lexicalized form which functions as a first modal in double modal constructions in SUSE.

Following the merged MP analysis and taking usta as a lexicalized form, we are able to account for the data. This single lexical item view would place usta as the head of the MP leaving could to occupy T. Such a structure will account for the tense marking on could and the inversion of could in main clause questions. This will then yield a much more straightforward structure for sentences like (54a) as given in (56).
6 Conclusion

Though the previous analyses of double modals have given us some valuable insights and enabled us to account for some facets of the data regarding the difference between the two modals, we have seen in this paper that these accounts are unable to fully capture the negation data or the existence of a stranded quantifier between the two modals or to accurately predict the strings of modals actually found in SUSE. Through the merged MP analysis, however, we were able to keep the positives of the previous analyses as well as fully capture the negation and quantifier data and make accurate predictions about the lack of anything more than double modals found in SUSE.

On a broader level, this paper was able to show an instance of parametric variation regarding the location of epistemic modality above Tense to be as aspect of SUSE. Double modal structures from SUSE, then, can be more fully used to support Cinque’s (1999) hierarchy of functional heads. Additionally, since the merged MP analysis of double modals questions
pushed us towards a feature driven analysis of T to C movement and thus a reanalysis of the Head Movement Constraint, this can be taken as further evidence for a feature driven system of head movement and as support for McFadden’s (2005) reanalysis of the EPP feature rather than Case driving movement to Spec positions. Therefore, this paper draws attention to the importance of studying the syntactic structure of nonstandard varieties of English like SUSE.
References


Author, 2010.


