Yeah, I might would say that:  
A Sociolinguistic Study of Double Modal Acceptance in the Mid-South  

J. Daniel Hasty

1 Introduction

In the Southern United States, there exists a construction involving what appear to be two and sometimes three modal verbs, see (1).

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

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 being the only other attested double modal variety), and they cite the earliest formal observations of double modals in Southern United States English (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 such common forms must be. This paper assumes the proposed syntactic structure argued for in Hasty (2010) where the first modal lacks syntactic tense and is located in a Modal Phrase merged above the TP and the second modal is viewed as a true modal located in T.

Although the double modal is a well-known feature of SUSE, there have been relatively few studies focusing on its form and distribution in the South. Much of this lack of coverage may
stem from the fact that the double modal construction is a relatively infrequently-occurring syntactic feature\(^1\) that seems to resist traditional sociolinguistic methods for studying variation. Further, of the studies which do exist, only Feagin (1979) has included detailed social information on the informants and attempted to provide any sort of analysis of the double modal’s social distribution. Feagin’s data showed a difference between her upper and lower class respondents suggestive of a social distribution of the form; however, Feagin (1979: 158) and Montgomery and Nagle (1993: 92) anecdotally claim that the construction is below the level awareness and to provide an additional exploration of the social distribution of the form, the present of social awareness in the South. To begin to examine these claims regarding social awareness, this study presents a fresh look at the double modal construction in the unstudied region of Northeast Tennessee using syntactic methodology with a focus specifically on the social distribution of the form in acceptability judgments.

The paper begins with a description of the syntactic variation observed in the double modal construction. Next I review the existing literature and then discuss the methods followed in this study, which are informed by the gaps revealed in the literature review. The remainder of the paper provides the results and discussion of fieldwork carried out in Northeast Tennessee. Lastly, I end with some conclusions about the apparent level of social awareness of the double modal in Tennessee and outline a follow-up to this study which will more directly address the question of the social evaluation of double modals.

\(^1\) Compared to phonological/phonetic variants, which are generally found at greater density.
2 Description of the Variation

While the double modal construction is of interest syntactically given its novel structure\(^2\), it is also of interest to sociolinguists because of its restricted usage. There are at least three areas where variation can be seen in the use of double modals: in surface forms, in the formation of questions, and in the placement of negation.

2.1 Double Modal Forms

Although *might could* is generally considered the most commonly used and most commonly attested double modal, the double modal construction can take quite a few forms, and variation in the different double modal forms has been reported in the literature. Example (2) lists the forms of the double modal attested in previous studies.

\[
\begin{align*}
\text{(2)} & \quad \text{ Might could} & \quad \text{ Must can} & \quad \text{ Might oughta} \\
& \quad \text{ Might should} & \quad \text{ Must could} & \quad \text{ Could oughta} \\
& \quad \text{ Might would} & \quad \text{ May can} & \quad \text{ Should oughta} \\
& \quad \text{ Might can} & \quad \text{ May could} & \quad \text{ Would oughta} \\
& \quad \text{ Might will} & \quad \text{ May will} & \\
& & \quad \text{ May should} &
\end{align*}
\]

Though all of these forms are attested in the literature, there seems to be a hierarchy of speaker acceptance. That is, speakers do not accept all double modal forms as possible in their dialect. This has led 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: \(\text{might would} > \text{might should} > \text{might could} > \text{might oughta}\). This scale implies that speakers who have \text{might would} will also have \text{might should}, \text{might could}, and \text{might oughta}. However, while speakers who have \text{might could} will also have \text{might oughta}, they may not have \text{might should} and \text{might would}. Under the analysis of Hasty (2010) which reanalyzes double modals with *oughta*

\(^2\) See Hasty (ms) for a review of the existing syntactic studies of double modals and for the analysis of the double modal’s syntactic structure which is assumed in this paper
as single modal constructions, given this proposed implicational scale *might could* is to be understood as the most common double modal.

While this proposed implicational scale may point to some similarities in the acceptance of these three common double modals in SUSE, there is still variation among the subsets of double modals found in subregions of the South, and perhaps in different social groups. For example, Coleman (1975) finds most of the double modals listed in (2) 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\(^3\). Therefore, the double modals used and accepted by speakers may at least vary regionally in their distribution, and the present paper will further examine if this extends to social variation as well.

2.2 *Double Modals and Questions*

In addition to the variation in the double modal forms used in SUSE, there is also variation in the formation of questions with double modals. Contrary to Labov’s (1972) and Butter’s (1973) original belief that questions involving double modals are not used in spontaneous speech, Coleman (1975) reports several naturally occurring examples. Additionally, double modal questions have been ruled grammatical by subjects in all of the elicitation studies in which they have been tested (Pampell 1975; Di Paolo et al. 1979; Boertien 1986; and Di Paolo 1989). The data in (3) show the attested behavior of double modals in main clause yes/no questions.

\(^3\) However, the lack of some of these modals in the spontaneous speech samples of these studies may be related to the difficulty of collecting specific syntactic forms in spontaneous speech. This has caused researchers like Coleman (1975), Butters (1973), Pampell (1975), Di Paolo et al. (1979), and Boertien (1986) that were looking specifically at the double modal construction to directly elicit double modals and/or to ask for grammaticality judgments of previously created double modal constructions, as the present study has done.
You might could go to the store.

Might could you go to the store for me?

Could you might go to the store for me?

*Might you could go to the store for me?

We see that there is a distinction between which modals can and cannot participate in subject/auxiliary inversion. In an affirmative declarative sentence such as (3a), *might appears as the first modal and *could as the second. Some speakers have been reported to invert both modals together (3b), preserving this ordering, while others invert only *could, the second modal (3c). Inversion of only the first modal is ungrammatical in every SUSE dialect so far investigated (3d). 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 (3b) with both modals raised have been quite varied (Pampell 1975: 112), so the current study examines question formation strategy in Tennessee.

2.3 Double Modals and Negation

There is also syntactic variation in the placement of negation in double modal constructions. Negation occurs between both modals (4a) or after the second modal (4b).

I might not could go to the store
I might could not go to the store
I might couldn’t go to the store
*I mightn’t could go to the store

Both full and contracted negation is allowed on the second modal (4c), but no contraction is accepted onto the first modal (4d). 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

---

4 In Coleman (1975), Pampell (1975), and Di Paolo et al. (1979).
5 In Boertien (1986).
6 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).
(as in 4a); 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. This variation will be explored in the present study to see if this is regional or socially governed.

3 Review of the Literature

While most of the previous studies of double modals have focused on its novel syntactic structure, we have seen from the brief description of the form that there is variation in the usage of the double modal as well. However, relatively few studies have attempted to account for or even describe its linguistic and social constraints. Before discussing the present study, then, we will first review the previous descriptions of the usage of the double modal.

The literature on the double modal construction can be broken down into two categories regarding the basic methodology taken to study the form. The first studies we will review—Wolfram and Christian (1976) and Coleman (1975)—have followed traditional Labovian methodology for collecting sociolinguistic variables and contain spontaneously collected examples of double modals. However, since the double modal is a syntactic variable, the spontaneous speech samples of these studies have yielded such a small number of naturally occurring double modals. For this very reason, researchers who wanted to focus specifically on the double modal have borrowed from syntactic field research methods and directly elicited double modals and/or asked for grammaticality judgments of previously created double modal constructions. Because of this, a large portion of Coleman (1975) is supplemented with an elicitation study, and the rest of the previous studies of double modals follow this mode: Butters (1973), Pampell (1975), Di Paolo et al. (1979), Boertien (1986), and Di Paolo (1989). As will be discussed below, these previous studies all lack an attention to the influence of social factors on
double modal usage; however, the one notable exception is Feagin’s (1979) study of Alabama. Given Feagin’s attention to social factors, we will review this study last in more detail.

3.1 Studies with Spontaneously Generated Double Modals

Wolfram and Christian’s (1976) extensive study of what they refer to as Appalachian Speech in rural West Virginia is a canonical study of SUSE phonology and morphosyntax. Following the methodology similar to the dialect geographers, Wolfram and Christian trained local non-linguists who were members of the community to conduct sociolinguistic interviews with informants mostly from the lower socioeconomic levels. Though Wolfram and Christian discuss the usage of many Southern forms, they only find 4 tokens of double modals, showing the relative infrequency of the double modal at least in a sociolinguistic interview situation. With such a small number of examples, Wolfram and Christian are not able to draw any conclusions about double modal usage or social distribution.

Coleman’s (1975) dissertation attempted to present a structural analysis of the double modal as used in North Carolina. The study included both double modals observed in natural conversation (over the course of one year of participant/observer field work in the Upper Piedmont region of North Carolina) and a questionnaire eliciting acceptability judgments from 197 college students at the University of North Carolina at Greensboro. Because the study is largely focused on describing the structure of the form, Coleman does not investigate social variables; however, he does finds sub-regional variation in North Carolina in the acceptance of specific double modal forms. Regarding questions and negation, Coleman finds that negation is variably accepted both between the two modals and after the second modal, and he finds both strategies of question formation. However, Coleman notes that he does not have enough question and negation data to make accurate claims.
3.2 Studies with Elicited Double Modals

While the earliest sociolinguistic exploration of the double modal construction is found in Labov, Cohen, Robins and Lewis’s (1968) study of African American English, Butters (1973) is the first discussion of the usage of the double modal form in the South. In a written acceptability judgment questionnaire, Butters asked 51 students (18-22 years-old) from Duke University in Durham, North Carolina to rate 24 double modal sentences regarding whether they had heard the form or not and whether they used it themselves. Of those 51, only 25 were from the South, because Butters was trying to assess the different acceptance of the form by both Southern and non-Southern speakers. Based on the number of Southern respondents claiming to use a particular double modal form, Butters suggests an implicational ordering of the different double modals. That is, he finds that if a respondent accepted the lowest accepted double modal, then that respondent would also accept all of the other modals. That is, acceptance of might would presupposed acceptance of might should, might could, and might oughta). Butters did not, however, investigate the other areas of variation regarding the formation of questions or negative statements, nor the social distribution of these structures.

In direct response to Butters’ (1973) lack of coverage of the range of syntactic contexts in which double modals are found, Pampell (1975) elicited acceptability judgments of prepared sentences including negation, questions, floated quantifiers, and VP ellipsis. These sentences were read to 6 informants: 4 from Texas, 1 from Oklahoma, and 1 from Florida. Pampell’s data confirmed the implicational scale seen in Butters’ study, showing variation in the acceptance of specific double modals. Regarding negation, Pampell states that negation was most accepted between the two modals (e.g., I might not could). However, examination of Pampell’s reported results shows that both negation strategies (i.e., between the two modals and after the second
modal) seem equally preferred. For questions, raising the second modal was most accepted, yet raising both modals together was almost equally as accepted.

While Butters (1973), Pampell (1975), and Coleman (1975) employed acceptability judgments in prepared double modal sentences, Di Paolo et al. (1979) took a different route and sought to elicit double modals through the use of fill-in-the-blank type sentences in west Texas. The researchers provided a context sentence and then presented the respondents with sentences like “I might _____ use some” in an attempt to elicit the second modal of the double modal pair. The data were collected by 250 undergraduates who were instructed to find speakers in three different age ranges (under 25, 25-50, and over 50) and administer the survey. The data collection was a graded assignment for an introduction to linguistics course at the University of Texas, and Di Paolo confesses that since the students were graded on completion of the survey, she believes that the data were possibly falsified by some of the students instead of actually being collected.

Di Paolo’s stated goal for the study was to connect the double modal construction to a marker of rural southern identity, just as Labov (1963) did for diphthong raising and island identity in Martha’s Vineyard. However, as Di Paolo notes, the differences between the rural and urban respondents are relatively small, and no evidence of statistical significance is given in the study. Di Paolo did find some support for the implicational scale given in Butters (1973) and Pampell (1975), with *might could* being a more popular response than *might should* and *might would*. Regarding questions and negation, Di Paolo states that their respondents fronted both modals in direct questions and placed negation after the second modal⁷.

---

⁷ However, it is unclear from the description of the methodology and from the results reported how these generalizations were determined since the only methods described in the paper were that the respondents were asked to fill in the blank with the second modal in simple positive declarative sentences.
Boertien (1986) is a more recent study of double modals with the aim of understanding the syntax of double modal constructions as well as the variation in the use of the form in questions and negation. Boertien elicited acceptability judgments from 5 respondents in Texas and asked them to generate negated forms of affirmative sentences and questions using double modals. Along with variation in the form of double modals accepted, Boertien found that negation was most preferred between the two modals, while at least some of his informants showed acceptance for negation after the second modal as well. In questions, Boertien found that respondents raised the second modal only but that some double modals could not be made into questions. Based on these findings, Boertien suggests that there is variation in the double modal idiolects which will either allow or not allow certain syntactic operations to occur with the form.

3.3 Feagin (1979)

Feagin (1979) is perhaps the most extensive and complete descriptive study of SUSE. Following the methodology of and partly in response to Labov, Cohen, Robins, and Lewis’s (1968) study of the Black community in New York, Feagin set out to describe the language of White Southerners in Anniston, Alabama and to make direct comparisons to Labov et al.’s descriptions of the Black community. Because of this scope, the study describes many canonical pieces of SUSE morphosyntax, one of which is the double modal construction. Feagin observed 98 tokens of double modals in spontaneous speech through a combination of sociolinguistic interviews and casual observation over an almost 5 year period as a participant/observer in the community. The relatively small number of tokens of the double modal construction points to the infrequency of the form as Feagin notes. Additionally Feagin states that the double modal does not vary with another form and the precise situation in which a double modal could occur
but did not is difficult to pinpoint, as will be discussed below (see Section 4.3); thus, although Feagin provides a breakdown of which informants used or did not use a double modal, she is unable to provide a clear percentage or frequency of use of the form. Regarding negation and questions, Feagin finds negation only between the two modals, but given that she collected no examples of double modal questions, she is unable to describe her informants’ question formation strategy.

Unlike all the other previous studies of double modals reviewed here, Feagin provides social information (age, gender, class, urban/rural) for her respondents and uses these in her analysis of the data. Feagin finds that double modals are used in all of the social classes in Anniston. Using the occurrence of the form in the interview portion of her study, Feagin reports a statistical difference between the Upper class with 2 occurrences and the Working class with 11 occurrences. Additionally, using the distribution of the forms of double modals used and an implicational scale similar to Butters, Feagin shows that the Working class uses a greater variety of double modals than the Upper class. However, despite these findings, Feagin claims that “the use of double modals has no social evaluation in Anniston. Both school and society ignore them. Most Southerners are not conscious of using them at all” (158). Because of the importance, scope, and careful methods of Feagin’s study, this statement seems to have been taken in the literature as the last word on the double modal construction’s social stratification. While Feagin did find members of all of the social classes to use double modals in her study, the conclusions regarding the social evaluation of the form are backed up with no empirical data. Further, if we take Feagin’s anecdotal claims as a 5 year participant/observer who would have a good understanding of the social evaluation of linguistic forms, it is still unknown if the situation in
the late 1960s early 1970s in Alabama can be extended to other parts of the South at that time or whether this situation has changed today.

3.4 Goals of the Present Study

The review of the literature has revealed several gaps in our understanding of the double modal linguistic and social distribution. First, there were methodological problems with the way many of the studies elicited their data. Butters (1973) and Coleman (1975) used a written questionnaire when eliciting acceptability judgments. Since double modal constructions usually do not appear in written form and since they are a feature of a non-standard and stigmatized dialect this would have caused a register clash for the respondents (Henry 2005). Additionally, except for Feagin (1979) and Wolfram and Christian (1976) which were large scale studies looking at several different features of SUSE, the format of the questionnaires or other methods for eliciting double modals in the previous studies drew overt attention to the linguistic variable under study. That is, in Coleman (1975) and Butters (1973) all sentences in the questionnaire contained double modals, and each of the other studies were designed in such a way that it was obvious what the researchers were looking for. This could have biased the respondents and influenced their reports of usage, and this could have drawn further attention to the fact that double modals are non-standard which would raise issues with the standard language ideology.

Additionally, most of the previous studies have suffered from extremely small sample sizes, most notably in Pampel (1975) and Boertien (1986) who only had 4 and 5 respondents respectively. Of the other studies which did have greater numbers of respondents, these respondents were socially homogeneous. For example, Coleman (1975) and Butters (1973) exclusively surveyed college students between 18-22 years old. Along with a lack of social coverage, there has been relatively little coverage of the great Southern region. That is, except
for the mention of double modals in West Virginia in Wolfram and Christian (1976), the previous studies were all carried out in Alabama, North Carolina, and Texas leaving the Mid South completely undescribed. Thus, much of the previous work on double modals cannot be taken as representative of the South as a whole.

The greatest issue with the previous studies of double modals and the most important area for study is that no studies except Feagin (1979) adequately investigate whether double modal use is stratified by the social groups of age, gender, education, class etc. This lack of social differentiation is a result of the small and homogeneous samples which preclude any social information being used in analysis of the data. While the small and homogeneous samples and lack of social information are understandable in the syntactic focus of many of the previous studies, a sociolinguistic investigation of the form will need to go deeper.

The previous studies do suggest variation in linguistic factors regarding double modal form as well as negation and question formation. However, given the lack of social information and/or small and homogeneous samples, these studies cannot shed light on what conditions this variation, and whether it is social or regionally constrained. Coleman points out this lapse and calls for future studies to investigate what effect regional and possibly social differences may have on double modal usage.

In light of these criticisms, the present study sets out to elicit acceptability judgments of double modal constructions in the untapped area of the Mid South and to examine its social and linguistic variation. The primary goal of this study is to determine what social factors (age, gender, education), if any constrain informants’ acceptance of double modals in this area of the South. Variability in informant responses is expected and will be examined in relation to
informants’ social characteristics to gain a better understanding of the social distribution of the double modal in the Mid South.

4 Methodology

The following section will give an overview of the methods taken in this study to better understand double modal usage in Northeast Tennessee. I begin with a description of the research site focusing on the geographic and social make up of this particular area of the Mid South. Next, I provide a description of the respondents in this study. Lastly, I address the specific methodological constraints that arise when studying syntactic variables like the double modal, and I set out the ways in which I elicited the acceptability judgments and the question and negation formation tasks.

4.1 Research Site

Given the review of the literature above, it seems apparent that much more geographic coverage is needed of this distinctly Southern syntactic form if we are to attempt to arrive at any descriptive accuracy of double modals in SUSE as a whole and if we are to fully understand the social factors that constrain their usage. Therefore, the present study was conducted in an area representative of the Mid South.

The research site is located in the foothills of the Appalachian Mountains in Northeast Tennessee and will be referred to as the Tri-Cities (population 490,238⁸). This area is a conurbation of three cities: Kingsport, Johnson City, and Bristol (see Figure 1). I myself was born in Johnson City and grew up in Gray, a small rural community located between Johnson City and Kingsport, which has been annexed by Johnson City. As a native speaker of the local

---

⁸ Population data is gleaned from the 2008 estimates of the US Census Bureau (www.census.gov).
dialect, I knew prior to the study that double modals were very prevalent in this area and thus that this location would be a profitable research site.

Figure 1: Map of the Tri-Cities

Kingsport (population 44,473) is home to the Eastman Chemical Company (formerly Eastman Kodak), and many of the respondents in this study are or have been employed by Eastman. Eastman employs many highly educated workers including chemical engineers, physicists, chemists, and computer scientists. At the same time it also employs a great number of blue-collar workers including manufacturing laborers, electricians, mechanics, contractors, welders, and other manual laborers. Because of the diversity of employment offered at this major chemical company, this lends a lot of social diversity to the city and the other surrounding areas.

Johnson City (population 61,990) is larger than Kingsport and has more of an urban feel than Kingsport or Bristol provided by a larger and more vibrant downtown area which includes a state university. However, in my opinion (which I believe closely matches the local consensus),
Johnson City should in no way be thought of as urban in the strict sense, because its greater metropolitan area contains many outlying smaller rural communities made up of small farms raising beef cattle and some small quantities of cash crops like tobacco. Johnson City is home to East Tennessee State University (approximately 14,500 students), as well as a community college, Northeast State Technical Community College (approximately 5,470 students). Many of the respondents included in this study who attended college did so at either Northeast State, ETSU, or the University of Tennessee located in Knoxville, which is about 102 miles away (about one and a half hours’ drive).

Bristol (population 25,817) is located in the extreme northeast of Tennessee on the border with Virginia. The city of Bristol, in fact, spans the state lines and comprises two sister cities of Bristol, TN and Bristol, VA. Despite the fact that many of its residents are employed in manufacturing, Bristol is locally perceived to be somewhat more rural than Kingsport or Johnson City, possibly by its close proximity to rural Southwest Virginia which appeared to be a salient local area that is viewed pejoratively. Bristol also is known as the birthplace of country music (due to the so-called Bristol Sessions which produced the first commercially available recordings of bluegrass and mountain music including the Carter Family), and this may contribute to the rural perception.

The boundaries of Kingsport, Johnson City, and Bristol are rather fluid socially speaking. The cities are all located about 25 miles from each other, so as the term Tri-Cities suggests, these three cities should be, and are thought of locally, as one region. People living in one of the three main cities often work in one of the other cities as well as drive daily to one of the other cities to shop or dine. Because of this, social networks extend over the three cities, making this area, at least from a social and sociolinguistic point of view, easily viewable as one unified area.
The Tri-Cities’ location in the foothills of the Appalachian Mountains and the valleys of the other surrounding mountains provides a unique location as an area more urban (though as mentioned above certainly not urban in the sense of Atlanta, Nashville or even Knoxville) than the surrounding communities in the mountains and ‘hollers.’ As Figure 1 above shows, interstates 81 and 26 run directly through the Tri-Cities providing easy mobility to other parts of the South. This mobility coupled with its close location to the higher mountain regions has allowed the Tri-Cities to become a unique location in the Appalachian region, providing an escape from the isolation of the mountains and hollers while still maintaining a close connection to the region. That is, people wanting to leave the isolation of the mountains yet not leave the region may congregate in the Tri-Cities. In fact many of the respondents’ families moved to the Tri-cities from the mountainous regions of Southwest Virginia, many to find employment other than mining, which is so prevalent in the surrounding mountain areas of Kentucky and southwest Virginia. With the employment offered by Eastman and the now Mead Paper factory in Kingsport, many of these former miners could relocate and provide their family with a more modern lifestyle while continuing in the traditions and culture they were used to.

4.2 Respondents

The present study includes 30 respondents from the Tri-Cities, 15 male and 15 female, who are equally distributed by age (see Table 1). The ages range from 19 to 82.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old (age 60+)</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Middle (age 30-59)</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Young (age 19-29)</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>15</td>
<td>30</td>
</tr>
</tbody>
</table>
Respondents were recruited by the primary investigator through personal contacts and friends of extended family. The major criterion for selection of the respondents was that they be born and/or raised in Northeast Tennessee. All but five of the respondents were born and/or raised in the Tri-Cities area. The other five respondents were from the greater Northeast Tennessee region, which can be seen to extend as far west as Knoxville\(^9\). Three of these were from Knoxville, TN, and the other two were from Oak Ridge, TN (slightly northwest of Knoxville). A few of the older respondents were originally born in southwest Virginia but moved to the Tri-Cities area as young children.

For analysis purposes, the respondents were split into two groups based on higher education. Those in the College group (n 17) had graduated from college or graduate school, and those in the No College group (n 13) had either been to a trade school, graduated from high school, or dropped out of high school. Table 2 shows the distribution of the respondents by educational level.

<table>
<thead>
<tr>
<th></th>
<th>College</th>
<th>No College</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Old</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Middle</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Young</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

### 4.3 Elicitation Methods

Most studies of sociolinguistic variation have followed the methodology developed by William Labov, which is focused on recording large quantities of unselfconscious speech and then counting occurrences or non-occurrences of the variable in question (c.f. Labov 1984; 2001; and Tagliamonte 2006). This method, however, was primarily designed to study phonological

---

\(^9\) Northeast Tennessee is considered to stretch northeast from Knoxville, evidenced by the location of the East Tennessee Historical Society is in Knoxville.
variables, which are of such high frequency that a sociolinguistic interview lasting thirty minutes could easily generate enough tokens for statistical significance to be reached in analysis. However, when studying syntactic variation\(^{10}\), unless the variable occurs at high frequency, like the copula which has been studied in depth through Labovian methods (cf. Labov 1966, 1969, Baugh 1980), a thirty minute sociolinguistic interview will most likely not be able to capture enough instances of a syntactic variable to make accurate predictions about frequency or use. While some investigators have successfully collected spontaneous speech data from informants over several days in a variety of discourse contexts (e.g., Coupland 1980, Hindle 1980), this is a time consuming method that is not appropriate for more than very small sample sizes. Specifically for double modals, Feagin (1979) and Coleman (1975) actually collected examples of double modals from spontaneous speech over months and even years of fieldwork; however, Feagin was only able to collect fewer than 100 tokens in almost 5 years and Coleman was forced to use an acceptability judgment survey to supplement his spontaneous speech data.

Additionally some syntactic variables like the double modal present further difficulty for traditional sociolinguistic methodology because of the difficulty in determining their ‘envelope of variation.’ That is, under traditional variationist methods, one of the first steps is to establish what the variants of a variable are and to determine when these alternative forms can occur. For example, a syntactic feature like copula deletion in African American English clearly varies with the presence of a copula in certain definable linguistic situations (see Rickford et al. 1991, Romaine 1982, and Alim 2002 for a discussion of the envelope of variation of the copula) allowing researchers to easily count the presence or absence of the copula in these situations to determine an inter- and intra-speaker percentage of use. However, for the double modal there is

\(^{10}\) That is, variation between two syntactic objects rather than variation in allophones/allomorphs.
no clear other form or construction with which it alternates\textsuperscript{11}. That is, it cannot be said that (5a) or (5b) are alternate forms of (5c) since they crucially lack semantic equivalence\textsuperscript{12}. In this way, the double modal has more in common with syntactic variables like the passive construction, which cannot truly be said to alternate with an active counterpart. Syntactic variables like these, then, cannot be studied through sociolinguistic methods of counting occurrences and non-occurrences in a specific linguistic environment or range of environments.

\begin{enumerate}
\item a. I might go to the store.
\item b. I could go to the store.
\item c. I might could go to the store.
\end{enumerate}

Therefore, since the double modal is a nonstandard syntactic form with no other clear alternate, a blend of sociolinguistic and syntactic field methods was used in the present study. Elements of sociolinguistic interview methodology were included, such as tape-recording the entire session in the informant’s home and eliciting background demographic information via informal questioning. Elements of syntactic fieldwork were also included. An acceptability judgment test of prepared double modal sentences representing several different double modal was implement to assess variation in double modal form, and the informants were asked to manipulate simple affirmative declarative sentences to form both questions and negated sentences to assess the variation in the different strategies of question and negation formation. The entire process was conducted orally.

The interviews began with a general discussion about the respondents’ personal history. Questions used included: where the respondents grew up, where they went to school, what they do for a living, how they met their spouses, plans for the future, discussions about their children,

\textsuperscript{11} While \textit{might could} is most easily translated into a standard dialect of English as \textit{might be able to}, there is no such easy translation of \textit{might should} or \textit{might would}.

\textsuperscript{12} Maintaining \textit{semantic equivalence}, while quite easy in dealing with phonological/phonetic variants which have no intrinsic meaning, in syntactic variation may ultimately be impossible, since syntactic objects require a semantic meaning (cf. Romaine 1984).
etc. Not only did these general questions allow the respondents to become comfortable with the recording equipment, but these questions also allowed for the gathering of important demographic information (date of birth, place of origin, education, employment) in a way that is much less intrusive and more like a natural conversation than having the respondents fill out a written questionnaire. Further the conversational element introduced by having the questionnaire conduced orally was meant to obtain syntactic judgments that would be more based on the respondents’ casual speech and less on learned rules of prescriptive grammar. This method of verbally obtaining demographic information kept with the philosophy espoused in Henry (2005) that when studying non-standard syntactic forms which never appear in writing, there should be no writing or reading used in the interview.

4.3.1 Acceptability Judgments

After 10-20 minutes of casual conversation, informants were presented with a series of sentences and asked to judge, for each sentence, whether it sounded like something they could say in casual conversation. Acceptability of a particular sentence was taken as evidence that the informant had this double modal pair in his or her dialect. The sentences were read to the respondents at least two times. The 12 sentences given in (6) were used as the double modal stimuli. To keep the respondents from becoming aware of the form under study, these twelve sentences were intermingled with twenty-four other sentences not containing double modals to distract the respondents from the focus of the study and thus keep their judgments more genuine and less conscious, (see Appendix I for the entire list of sentences).

(6)  

a. I think I **may can** come tonight, if I can find something to wear.  
b. If it weren't so hot, I **may could** get a little work done.  
c. I **might can** ask my boss for the day off on Friday.  
d. Well, I **might could** pick some up from the store if you really need them.  
e. Since Bill won't, I guess I **might could** give you a ride home.  
f. If you want, you **might could** make some sweet tea.
g. I **might should oughta** take these out of the oven before they burn.
h. You **might should** eat before you go to work.
i. If I were you, I **might would** try digging over by that creek.
j. If it rains, you **might would** want to have that umbrella with you.
k. It's cold outside, so you **might oughta** take your coat.
l. Those ducks **must not can** feel cold.

These particular sentences were chosen to represent the most commonly attested double modals, and all of the sentences are grammatical according to my native intuitions. Since **might could** and **might would** have been found in every study and seem to be some of the most salient double modals in SUSE, these particular forms were over sampled (3 instances of **might could** and 2 of **might would**).

### 4.3.2 Question Formation

Respondents were also asked to complete a series of tasks involving the behavior of double modals in questions and with. For the question task, respondents were given a declarative sentence containing a double modal and asked to change the statement into a question that someone could answer *yes* or *no* to without taking out any of the words from the original statement.

The respondents were first given a context for the situation in which the statements and questions would be uttered (see 7). Then the respondents were given practice sentences that did not contain double modals to make sure that they understood the task (see 8a and 8b). Once the respondents had grasped the concept of the task, they were given a statement containing **might could** in (9). This double modal pair was selected because previous studies have confirmed both empirically and anecdotally that **might could** is by far the most common of the double modals, so using this form rather than one of the less common double modals would allow the maximum number of respondents to complete the task.
You are having a party tonight and you are in charge of the food. Things are a little hectic, and you are unsure if you’ll be able to pull everything off because you only have one person helping you. Here are statements about your expectations for the party. Can you turn these into the kind of question that could be answered with ‘yes’ or ‘no’?

a. John will eat a lot tonight.

b. Mary could bring some extra napkins.

You might could go to the store for me.

After this first question task, the respondents were given a forced choice between two interrogative sentences containing double modals and were asked to identify which of these question sentences sounded the best. The paired questions were identical in content with the only difference being which double modal question strategy was implemented: raising the second modal only (10a) or raising both modals together (10b).

a. Could you might go to the store for me?

b. Might could you go to the store for me?

The task allowed for corroboration of individual respondents’ preferences in the questions they generated themselves in the previous task, as well as to directly test the possibility of the respondents raising both modals as a valid method to form yes/no questions. That is, this forced choice was meant to be a more direct way of determining which method of question formation the respondents favored: second modal raising or both modal raising.

4.3.3 Negation of Declarative Sentences

Respondents were lastly asked to complete a task involving negation. The respondents were read a declarative sentence and asked to give the negated form of the statement without taking any of the original words out and only adding not. As with the question task, the respondents were given two practice sentences that did not contain double modals (11) to make
sure that they understood the task, then they were read two sentences containing double modals, again using *might could* (12) and *might would* (13).

(11) a. John will eat a lot tonight.
    b. Mary could bring some extra napkins.

(12) I might could make some sweet tea.

(13) I might would take those upstairs if I were you.

After the completion of the respondent-generated negation task, the respondents were then given a forced choice between two sentences containing negation and asked to identify which sentence sounded better to them. The sentences were identical in content except in the placement of negation: one of the sentences had negation between the two modals (14a) while the other sentence had negation after the second modal (14b). After the forced choice was made between the sentences in (14a) and (14b) the respondents were given the third option of a sentence containing negation contracted onto the second modal (14c) and asked if this was any better than the sentence they had previously chosen to assess whether contraction was preferred over the use of the full *not*. These responses, as with the question tasks, were meant to corroborate the data gleaned from the respondent-generated negation, as well as to present the respondent with the choice of using another form of negation than they gave in the previous task.

(14) a. I might not could go to the store later.
    b. I might could not go to the store later.
    c. I might couldn’t go to the store later.

5 Results

Of the 360 responses to the acceptability of the 12 double modal sentences in the first task, there were 143 (39.7%) positive responses and 217 (60.3%) negative. While the overall raw numbers for acceptance seem to be relatively low, this broad view blurs the insights that can be gleaned by taking the social and linguistic factors into account. In the following section, I
report the rate of double modal acceptance as a binary dependent variable (accept versus reject) and its distribution across three social independent variables: respondent Age (Young, Middle, Old), Gender (male, female), and Education (College, No College). See section 4.2 earlier for a fuller description of these variables. In addition, one linguistic independent variable was included: the Surface Form of the double modal. Nine double modal forms (see 6 above) were investigated. In sections 5.6 and 5.7, I report the results of the second task involving question and negation formation. Multivariate logistic regression as well as ANOVA and paired T-tests were used to test for statistical significance.

5.1 Distribution by Double Modal Form

The nine individual double modals used in the 12-sentence acceptability judgment task were accepted at different rates. They have been arranged in Table 3 according to their percentage rate of acceptance starting with the most accepted *might oughta* and *might should* (63% acceptance each) and finishing with the least accepted *must can* (13.3% acceptance).

<table>
<thead>
<tr>
<th>Table 3: Acceptance of Individual Double Modals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double Modal</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>might oughta</td>
</tr>
<tr>
<td>might should</td>
</tr>
<tr>
<td>might can</td>
</tr>
<tr>
<td>might could</td>
</tr>
<tr>
<td>may can</td>
</tr>
<tr>
<td>might would</td>
</tr>
<tr>
<td>may could</td>
</tr>
<tr>
<td>might should</td>
</tr>
<tr>
<td>oughta</td>
</tr>
<tr>
<td>Total Acceptance</td>
</tr>
</tbody>
</table>

This preliminary scan of the data shows that some of the double modal forms were accepted at very low. In a cross-tabulation of respondent Age and double modal Form (Table 4) we see that some of the acceptance rates of individual double modal forms vary by Age.
Table 4: Percent Acceptance by Double Modal Form and Age

<table>
<thead>
<tr>
<th>Form</th>
<th>Old</th>
<th>Middle</th>
<th>Young</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>might oughta</td>
<td>30</td>
<td>90</td>
<td>70</td>
<td>0.02</td>
</tr>
<tr>
<td>might should</td>
<td>30</td>
<td>70</td>
<td>90</td>
<td>0.02</td>
</tr>
<tr>
<td>might can</td>
<td>40</td>
<td>50</td>
<td>70</td>
<td>0.42</td>
</tr>
<tr>
<td>might could</td>
<td>43</td>
<td>20</td>
<td>67</td>
<td>0.00</td>
</tr>
<tr>
<td>may can</td>
<td>40</td>
<td>10</td>
<td>60</td>
<td>0.07</td>
</tr>
<tr>
<td>might would</td>
<td>45</td>
<td>5</td>
<td>55</td>
<td>0.00</td>
</tr>
<tr>
<td>may could</td>
<td>30</td>
<td>20</td>
<td>30</td>
<td>0.86</td>
</tr>
<tr>
<td>might should oughta</td>
<td>30</td>
<td>0</td>
<td>30</td>
<td>0.16</td>
</tr>
<tr>
<td>must can</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>37</td>
<td>27</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

For the double modal forms with overall acceptance rates below 40% (may can, might would, may could, might should oughta, and must can), there is a significant difference between the Middle and the Young age groups (p 0.05) for may can, and there is a significant difference between all the ages for might would. For the other double modal forms that disfavored acceptance overall, may could, might should oughta, and must can there were no significant differences between the ages. Therefore, it is apparent that these last three double modals may not make up a significant part of the local dialect and thus the responses to may could, might should oughta, and must can were not included in the analysis to follow.

The cross-tabulation of Age and Form additionally shows that there are Age differences for the remaining double modals. Overall, the Young accept double modal forms at the highest rate, with acceptance rates of 50% or greater for the first six forms listed in Table 4. The Old age group shows a low rate of acceptance of all the forms, with a slight preference for forms listed in the middle of the table. The Middle age group, while showing high rates of acceptance of might oughta and might should and to a lesser extent might can, are generally unaccepting of the 6 other double modal forms. For all of the age groups, may could, might should oughta, and must can have an acceptance of 30% or lower with no significant differences between the ages.
The high acceptance of *might oughta* is expected given the analysis of Hasty (2010) that treats *might oughta* not as a true double modal. Hasty (2010) shows that while all other true double modals invert the second modal (see section 2.2 above), *might oughta* does not. Hasty (2010) takes this lack of inversion and the fact that *oughta* contains a cliticized *to* which forms a non-finite TP compliment as evidence that *oughta* is verb rather than a modal, and thus has a completely different structure than the other double modals. This special view of *might oughta* as not a true double modal is seen even more clearly in the high acceptance of this double modal form by the Middle age group (90% acceptance), who are otherwise the least acceptant of double modals, (see section 6.1 below for further discussion). Therefore, because *might oughta* is not a true double modal, it is excluded in the following analysis which attempts to describe the social variation seen in true double modals in Northeast Tennessee. After removing the three unaccepted double modal forms and *might oughta*, we are left with the six forms and overall acceptance rates shown in Table 5.

<table>
<thead>
<tr>
<th>Acceptance of Individual Double Modals after Exclusions</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>might should</td>
<td>63.3</td>
<td>19/30</td>
</tr>
<tr>
<td>might can</td>
<td>53.3</td>
<td>16/30</td>
</tr>
<tr>
<td>might could</td>
<td>43.3</td>
<td>39/90</td>
</tr>
<tr>
<td>may can</td>
<td>36.7</td>
<td>11/30</td>
</tr>
<tr>
<td>might would</td>
<td>36</td>
<td>21/60</td>
</tr>
<tr>
<td>Total Acceptance</td>
<td>44.1</td>
<td>106/240</td>
</tr>
</tbody>
</table>

### 5.2 Statistical Model of Double Modal Acceptance

Double modal acceptance was coded as a binary dependent variable (1 for accept and 0 for reject). The surface form was taken as a linguistic independent variable and respondent Age, Gender, and Education were taken as social independent variables. To examine the influence of these social and linguistic factors on double modal acceptance, a multivariate analysis was
performed on the acceptability judgment data using GoldVarb X for Mac (Sankoff, Tagliamonte, and Smith 2005).

In a preliminary run of the data maintaining all three social groups separately (i.e., Age, Gender, and Education), Gender was not selected as a significant factor group constraining acceptance. However, the distribution of responses in the cross-tabulations of Gender and Education reported below (see Section 5.2) suggested that Gender was indeed a constraint on double modal acceptance, but that it interacted with Education. When Gender and Education factor groups were combined, this provided a better fit of the model to the data than Education alone shown through a decrease in the log likelihood (Log -139.319) compared to when Education and Gender were run separately (Log -139.918). After recoding all factors Age, Education combined with Gender, and double modal Form were maintained as significantly constraining double modal acceptance (see Table 6).

<table>
<thead>
<tr>
<th>Table 6: Statistical Model of Double Modal Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Young</td>
</tr>
<tr>
<td>Old</td>
</tr>
<tr>
<td>Middle</td>
</tr>
<tr>
<td>Range 46</td>
</tr>
<tr>
<td>Form</td>
</tr>
<tr>
<td>might should</td>
</tr>
<tr>
<td>might can</td>
</tr>
<tr>
<td>might could</td>
</tr>
<tr>
<td>may can</td>
</tr>
<tr>
<td>might would</td>
</tr>
<tr>
<td>Range 33</td>
</tr>
<tr>
<td>Education and Gender</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Range 31

Input 0.432
Log likelihood -139.319
Significance 0.044
Total N 240

From the range of the factor weights, we can see that respondent Age is the strongest predictor of acceptance, with a range of 46 compared to 33 for the double modal surface Form and 31 for Education and Gender factor groups. The ordering of the factor weights inside each group indicates how individual factors favor double modal acceptance. The factor weights in the Age group show that there is not a linear correlation with age and acceptance of double modals. That is, the Young and the Old are shown to be most likely to accept the construction, while the Middle aged disfavor it. The ordering of factor weights in the Education and Gender group shows that speakers without a higher education favor acceptance of double modals. Additionally, Males in both Education groups are more likely than Females to accept double modals. Further, the factor weight ordering for double modal Form suggests a hierarchy of acceptance by individual form. Overall, the results of the multivariate analysis suggest that Young and Old respondents without a college education who are male are more likely to accept double modals than other respondents. Regardless of social background, however, respondents were most likely to accept *might should*, *might can*, and *might could*. In the following sections, we will look more in depth at the results for each factor group.

5.3 Distribution by Age

Looking first at double modal acceptance by age, there is an age effect in the data (Figure 2). The Young group clearly favor double modal acceptance, with the Old slightly less

---

13 Factor weights of 0.5 and greater in a Goldvarb output favor the presence of the dependent variable which was set as acceptance of the double modal sentence.
acceptant. The Middle Age group is shown to disfavor acceptance. As stated above, this does not show a linear correlation with acceptance and age but rather a u-shaped distribution.

![Factor Weight by Age](image)

Looking at the percentages, the Young show a 66.3% rate of acceptance compared to the Old at 41.3% and the Middle at 25% (see Table 7). An ANOVA showed statistically significant differences between the three age groups (F 15.66, p 0.00). Further, a paired T-test confirmed significant differences between the Young Age group and the Middle Age group (p 0.00) and between the Old and the Middle age group (p 0.01).

<table>
<thead>
<tr>
<th>Age</th>
<th>%</th>
<th>N</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old (n 10)</td>
<td>41.3</td>
<td>33/80</td>
<td>F 15.66</td>
</tr>
<tr>
<td>Middle (n 10)</td>
<td>25.0</td>
<td>20/80</td>
<td>p 0.00</td>
</tr>
<tr>
<td>Young (n 10)</td>
<td>66.3</td>
<td>53/80</td>
<td></td>
</tr>
</tbody>
</table>

### 5.4 Distribution by Education and Gender

Education and Gender had a clear effect on the likelihood that a respondent would judge a double modal as acceptable. The factor weights show an overall education effect with a lack of
higher education favoring acceptance, and inside the education groups, there is gender effect with males more acceptant than females (see Figure 3).

Looking specifically at the Education percentages, respondents without a college education accept a double modal sentence at a rate of 60.2% compared to respondents with a higher education at 34.9% (p 0.00) (see Figure 4).
A cross-tabulation of Education with Age reveals that education effect holds for only the Old and Middle age respondents. Non-college-educated respondents are significantly more likely (p 0.00 for both age groups) to accept double modals than the college-educated respondents in both the Old and Middle age groups (Figure 5). However, in the Young group, the rate of acceptance is high in both educational groups, with no statistically significant difference between them (p 0.80).

![Figure 5: Acceptance by Age and Education](image)

Internal to the Education groups, there is also Gender effect in the data which seems to be driven by the males. In a cross-tabulation of Gender and Education, there is a statistically significant difference (p 0.03) between college educated males and males without a college education (Figure 5). However, the difference between the females for education is slighter and not statistically significant (p 0.19). Inside the College group, there are no statistical differences between the genders (p 0.97); however, there is a statistical difference between the genders in the No College groups (p 0.03).
Looking at Gender independent of Education, overall Males tend to be more likely to report acceptance of a double modal sentence than Females but this is not statistically significant (see Table 8).

### Table 8: Acceptance by Gender

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>N</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (n 15)</td>
<td>49.2</td>
<td>59/120</td>
<td>p 0.06</td>
</tr>
<tr>
<td>Female (n 15)</td>
<td>39.2</td>
<td>47/120</td>
<td></td>
</tr>
</tbody>
</table>

However, in a cross-tabulation of Age and Gender, there is a significant difference (p 0.02) between the genders with the Males leading for the Middle age group (Figure 5). This Male leading trend is suggested in the Old age group, though not statistically significant (p 0.47). For the Young age group where there is much more clearly no significant difference in double modal acceptance between the two genders (p 0.84). Recall that within the Young age group, we also found no significant difference in rate of double modal acceptance between the college-
educated and the non-college-educated. I return to the lack of social differentiation in the Young group in the Discussion below (Section 6).

Figure 5:
Acceptance by Age and Gender

![Acceptance by Age and Gender](image)

5.5 Questions Formation Tasks

Acceptability of double modals in the judgment task appears to be constrained by the double modal surface form and by the social characteristics of the respondent. In contrast, however, no significant social differentiation was found in the responses to the question formation tasks. (Surface form was not relevant to the respondent-generated question task, in which *might could* was the only form presented.)

When asked to generate a question from a declarative sentence containing a double modal, most respondents (63%) raised the second modal as opposed to raising both modals (13%)¹⁴, statistically significant at p 0.00 (Figure 6). The responses were tested to see if any

---

¹⁴ A small number of respondents (23%), felt unable to generate a question and keep the sentence as a double modal construction. It is unclear if this lack of response comes from a lack of the double modal construction in their grammar, an inability to form questions with double modals, or simply a discomfort with manipulating the grammatical form of a non-standard variant.
social factors constrained choice of question formation strategy, and none of the social factors tested in this study showed a difference: age (F 0.97, p 0.39), education (p 0.36), gender (p 0.27).

The results from the forced choice between prepared sentences raising the second or raising both modals align with the respondent generated data (see Figure 7), in that the sentence with the second modal raised is again clearly preferred with 70% of the respondents choosing the raised second modal compared to 27% for raising both modals, significant at p 0.00. There were also no statistically significant differences between the social groups for this task: age (F 0.44, p 0.65), education (p 0.10), gender (p 0.27).
In summary, both the raised second modal and the double modal raising options appear to be acceptable in the community grammar. However, raising of the second modal only is strongly preferred.

5.6 Negation Formation Tasks

The results for the negation task are less clear than for the question formation task. Figure 8 shows that the placement of negation (either between the two modals or after the second modal) appears to be variable with there being no statistically significant difference between the two strategies (p 0.46). There were also no statistically significant differences between the social groups regarding this task: age (F 0.39, p 0.68), education (p 0.56), gender (p 0.43).
The results for the forced choice between the two options for negation seem to point towards a preference for negation between the two modals, with 67% of the respondents choosing the prepared sentence with negation between the two modals (see Figure 9); however, this difference could not be proven to be statistically significant (p 0.07). As before, none of the social groups had statistically significant differences on this task: age (F 3.17, p 0.06), education (p 0.21) gender (p 0.46).
6 Discussion

The results presented in section 5 above show that in this study of the Tri-Cities area of Northeast Tennessee double modal acceptance is constrained by the social variables of age, education, and gender and by the surface form of the double modal. The major influence on subjects’ willingness to accept a sentence containing a double modal was the respondents’ age. The other social factors and the surface form all showed sensitivity to the age of the respondents in that the gender and education trends disappeared in the Young age group, and the Youngest respondents showed the broadest acceptance of the different double modal forms. In the following subsections, I discuss the implications of these finding for an understanding of the social acceptability of the double modal construction in the Tri-cities.

6.1 Double Modal Form

While might oughta, might should, might can and might could were seen to favor double modal acceptance, the results for the individual double modal forms indicate that some of the double modals tested in this study do not make up a significant part of the Tri-cities regional grammar. May could, might should oughta, and must can were mostly unacceptable across all social groups, while may can and might would were acceptable to some Young and Old respondents but were mostly unacceptable to respondents in the Middle age group. The general reluctance on the part of Middle aged respondents to judge double modals as acceptable is discussed in the next section.

The ordering of the individual double modal forms based on their factor weights and overall acceptance percentages shows might oughta tied with might should as the double modal forms most likely to be accepted. As mentioned above, might oughta is expected to stand out from the other double modals given the syntactic analysis of Hasty (2010) that treats might
oughta not as a true double modal. That is, since might oughta is not a true double modal, we would expect that its acceptance would pattern differently. Additionally, I believe that the high acceptance of might oughta comments on the social acceptance of double modals in the Tri-cities. Since might oughta as a modal and verb combination has an unmarked syntax exactly like a standard variety of English, the high acceptance of this form contrasts with the lower acceptance of the true double modals tested in this study. Since true double modals have a unique syntactic structure with the first modal in a Modal Phrase attached to a Tense Phrase containing the second modal (see Hasty 2010), and since no standard variety of English allows more than one modal, it is apparent that lowered acceptances come from the marked structure. I take this as the first piece of evidence that double modals may be stigmatized in the Tri-cities.

This more positive view of might oughta given that it is not a true double modal is seen even more clearly in the high acceptance of this form by the Middle age group (90% acceptance), who are otherwise the least acceptant of double modals. If the tentative conclusion that the double modal is stigmatized is correct, the high acceptance of might oughta points toward a stigmatization placed not on the double modals as individual lexical items but directly on a marked syntactic structure. That is, since might oughta was highly accepted by the age group least acceptant of double modals who show very little acceptance of canonical double modals like might could, then the differences in reactions can best be explained by a preference for the unmarked internal syntactic structure of might oughta which mirrors standard dialects of English while the other double modals are less accepted because of their marked structure.

Looking at the ordering of acceptance of the other double modals, it was perhaps unexpected that might should would be tied for the highest acceptance and that might can would be more accepted than might could. In the literature, in anecdotal opinions, and in my own
personal experience as a double modal speaker, *might could* is viewed as the most salient double modal. From this salience, it would seem that if the respondents are fully assessing the availability of a certain double modal in their casual speech with no interference from a perceived stigma on the double modal construction then *might could* would be one of the most accepted double modal forms in the study. However, *might could* is only the third most accepted double modal form in the study with a factor weight of 0.491 (running the border between favoring and disfavoring acceptance) and an overall acceptance rating of only 43.3%. While *might should* and *might can* are commonly used double modals, in my personal observation as a native speaker of the region they are certainly less recognized than *might could*, and perhaps this is the reason for the lower acceptance of *might could*. That is, the salience of *might could* as a double modal may have had an effect on the acceptance rate of that particular double modal form while the less recognized *might should* and *might can* stood out less. Respondents then, may have been more aware of *might could* as a double modal with a marked structure, and thus their lowered acceptance rates are evidence of a stigmatized view of double modals.

6.2 Social Evaluation of the Double Modal

The biggest predictor of double modal acceptance revealed through the Goldvarb analysis is the age of the respondents, with the Young leading followed by the Old and with the Middle clearly the least acceptant. The fact that Middle aged respondents were least likely to accept double modals is not suggestive of a change in progress, for which we would expect more of a linear correlation. Instead we see a u-shaped distribution with a spike in the Younger ages, which is more suggestive of age graded. Age-grading is the regular association of a sociolinguistic variant with certain portions of the lifespan—such as adolescence—in every generation. Age-graded variation tends to occur with sociolinguistic variables that are above the
level of community awareness—such as negative concord (Eckert 2000) and the (ing) variable (Labov 2001)—and carry overt positive or negative social value. Therefore, to more fully support a conclusion of age grading for double modal acceptance in this study, we will need to examine the social value attached to the double modal as well as determine at what level of awareness the form is operating in the Tri-Cities. While these questions can only be fully answered by a study of the community’s evaluation of the double modal (see the plans for further study in section 7), the findings of the present study suggest that the double modal may be somewhat stigmatized, within the Tri-Cities speech community.

An image of the apparent prestige of the double modal is perhaps most fully seen in the educational distribution where there is a clear relationship between lack of higher education and willingness to accept double modals. While we do not at this point know what particular positive or negative social values are indexed by the double modal in the Tri-Cities, this greater acceptance by respondents with less education is consistent with a stigmatized variant (c.f. Labov 2001) and patterns like other known age graded variables with a low prestige evaluation, e.g., (ing) Trudgill (1974), negative concord Wolfram (1969), and (r) Labov (1966).

Along with the clear correlation of double modal acceptance and lack of higher education, the gender effects in the data are suggestive of a stigmatized view. No matter the educational level of the respondents, females were more likely than males to reject a double modal. As Labov (2001: 264) illustrates, in all the studies of linguistic variation where women have access to the social and sociolinguistic norms of the community, females use nonstandard forms less frequently than males when the variable is above the level of awareness in the community. Since women generally avoid stigmatized linguistic variants, the lowered acceptance of the females in this study is expected if the double modal is locally stigmatized.
Returning to the ages of the respondents, the Old and Middle age groups showed both the education and gender effects. However, the Young age group showed high acceptance of double modals with no educational or gender differences. This seems to indicate that they have a more positive view of the double modal construction than other age groups in the community. The results for Middle and Old age groups showing education and gender differences, however, seem to indicate a perception of social stigma attached to the double modal.

Since the Old group had the second highest acceptance rating behind the Young group this strengthens the age grading hypothesis. That is, members of the Old age group still may be aware of the social stigma of the double modal, but they are now at a time in life (i.e., in retirement or in a more socially established position) where acceptance of the double modal is more permissible than for respondents in the Middle age group who are in the prime working years and for whom their social status is still in flux. Members of the Middle age group are more engaged in gathering cultural and linguistic capital (c.f. Bourdieu and Boltanski 1975). Additionally the Middle age group, who are actively working, would have larger and more inclusive social networks than the two other age groups would, making social mobility more possible and more desirable. This view is consistent with the idea of the “conservative middle” (Chambers 2003). In fact, the working environment of most of the Middle age respondents at Tennessee Eastman (which, as discussed above in Section 4.1, employs a very diverse group of employees from white collar electrical engineers to construction and factory workers) is likely to facilitate regular work interactions with colleagues in both higher and lower class positions.

In fact, one respondent noted that she could tell when her husband, a chemical engineer at Eastman, had been working closely with “guys in the plant” (i.e., factory workers). She said that he would come home talking more like someone from “Southwest Virginia”, a region mentioned
pejoratively by several respondents. Considered to be more rural and less educated than Northeast Tennessee, it is associated with a distinct and nonprestigious way of talking. After learning of the focus of the study while doing the question and negation formation tasks, the respondent and her husband connected this overtly to double modal usage by saying the husband would be much more likely to use a double modal when talking with those plant workers or to use it after spending a day working closely with them.

Given the acceptance levels by gender and education, the double modal appears to behave like a *marker* of SUSE (Labov 1972). Markers, like the often-cited example (ing), are linguistic features that have overt social evaluation attached to them and that show social and style distribution. As Labov (2001: 272) explains, markers display a specific interaction of gender and social class with men and the lower classes leading, and they show style shifting from casual to careful speech.

The apparent social evaluation of double modals has been argued for above. To see the style shifting characteristic of a marker, we can take into account my observations as a double modal speaker and member of the Tri-Cities community that double modals are used much more widely in casual conversation though they are accepted in this study at seemingly low rates. Now, if the acceptability judgments in this study are taken as accessing something akin to careful speech, we can see the style distribution characteristic of a marker. That is, in casual speech double modals are more freely used, but in the careful speech situation of an acceptability judgment survey they are accepted at much lower levels while showing social distributions. Thus, Feagin’s (1979) claims that in Alabama double modals carry no social stigma though she saw a social distribution in her data suggest that in Aniston, Alabama during that time at least, the double modal may have been what Labov would call an *indicator*, which are features that
show social stratification but no style shifting. This appears not to be the case in the Tri-Cities. With women and people with higher educated, who are most likely to use (or claim that they use) prestigious linguistic variants, being the least likely to report using double modals, I argue that the double modal at this time in the Tri-Cities seems to be patterning like a marker.

6.3 Double Modal Questions and Negation in the Tri-Cities

Regarding the formation of questions with double modals, the results of the respondent generated questions, which were corroborated by the forced choice task, show that respondents in the Tri-Cities prefer to raise only the second modal to form questions. These results are predicted by Hasty’s (2010) syntactic analysis, where the first modal of a double modal pair is believed to lack syntactic tense and to be located at a functional head above T. It can therefore not be a candidate for subject/auxiliary inversion in questions. Since some previous studies (Coleman 1975 and Di Paolo et al. 1979) found respondents with a preference for raising both modals in question, these results suggest double modal question formation may vary regionally.

Although respondents in the Tri-Cities behaved homogenously with respect to question formation this was not the case for the negation of double modals. In the respondent-generated negation task, there was an almost even split between respondents who chose to place negation between the two modals and those who placed it after the second modal. There were no social differences between these two groups of respondents15. Unlike question formation, negation choice appears to be truly variable in the Tri-Cities. This variation in negation placement is mirrored in previous studies with some finding negation only between the two modals (Pampell 1975 and Feagin 1979), some only after the second modal (Di Paolo et al. 1979), and some

15 While the forced choice seemed to indicate that negation between the two modals was more preferred, this could not be proven statistically.
finding both patterns (Coleman 1975 and Boertien 1986) as seen here. Whether this variability is socially or regionally conditioned is a question for a larger study.

7 Conclusion and Areas for Expansion

Double modals constitute a syntactic-pragmatic variable whose variable context is not easily defined. Phonological variables, for example, present two or more ‘ways of saying the same thing’ (c.f. Chambers and Trudgill 1998). It is unclear, however, whether using a single modal form rather than a double modal form represents ‘the same thing’, i.e., has the same function in discourse. Since instances of single modals cannot reliably be counted as non-instances of double modals, an alternative approach to quantifying the variation was required in this study. Acceptability judgments—more commonly used by syntacticians—were used to get an initial sense of the prevalence of double modals in the Tri-Cities speech community. This method has been criticized by sociolinguists, most notably Labov (see e.g., Labov 1996), as well as syntacticians (Schütze 1996) for problems such as small sample sizes and a concern over whether respondent’s self-reported acceptability judgments accurately reflect what they do in practice (i.e., in unguarded speech). For example, Labov (1996) shows many instances from his studies where respondents have claimed to never use a certain variant or to have never even heard of it, yet they were recorded using the variant in the same interview.

Nonetheless, if they are interpreted cautiously, acceptability judgments can throw light on grammatical variables such as the double modal. The acceptability judgments given in this study, then, should not be taken as a direct reflection of actual double modal use in the Tri-Cities. Rather, these acceptability judgments should be viewed as a version of respondents’ maximally careful speech, given that much attention is overtly paid to a particular sentence and since the respondents are directly engaged in metalinguistic conversations about the variable. Therefore,
acceptability judgments in this study are seen as an indication of the respondents’ comfort level in admitting to using a double modal. Studies such as Labov (1966) and Trudgill (1972) have shown that when respondents are paying maximum attention to their speech (as in the reading of a passage or a word list) that they eliminate or reduce the frequency of non-prestigious variants. While careful speech is not helpful in estimating how common a variant is in everyday talk, it is essential for discovering how the variant is evaluated by the speech community. The acceptability judgment results in this study suggest that—contra Feagin’s claim for Alabama—double modals are a low-prestige item in the Tri-Cities. They are not so stigmatized that no one will admit to using them, but women and the college-educated are least likely to make this admission. Without corroborative production data, we cannot say for sure if such respondents genuinely do not have double modals in their grammar, or if they are making a false claim (intentionally or unintentionally). Regardless, the conclusion is the same: double modals are not associated with the social groups who use the most standard language.

The greater acceptability of double modals to the Young than any other age group points to one of two hypotheses. First, young people may be less concerned with personal reputation than older members of the community and as such are more willing to give accurate self-reports about their use of low-prestige items. Under the second hypothesis, young people in the Tri-Cities actually do use double modals more frequently than other age groups. This is either due to a community change in progress or to age grading. I believe that both hypotheses are plausible, i.e., that young people I interviewed were more relaxed and willing to say that they used double modals, but that they also probably do use them more frequently than older members of the community. I argue that this is most likely due to age grading, on the grounds that double modals are above the level of social awareness, and are avoided by women and those with a
college education. This pattern has been reported for other stable variables with non-prestigious variants, such as the suffix (ing) and multiple negation. Furthermore since the Young showed no educational or gender differences in their acceptance, this further supports the hypothesis that these young respondents are less sensitive to the low-prestige of the double modal. Another alternative is that the greater acceptance and lack of a negative social evaluation of double modals by the young may be an indication of a more positive view of SUSE features similar to the Cajun revival among the young reported by Dubois and Horvath (1999) in New Orleans. Further study is needed to determine if this is truly the case in the Tri-cities.

While the present study has revealed that double modals are in fact sensitive to social factors, to fully understand the complex relationship of positive and negative social characteristics usually this variable indexes, a study of the perception of and attitudes towards the double modal construction in the Tri-Cities community is needed. Therefore, a planned continuation of this study will focus directly on these perceptions through a language attitude study in the community taking the double modal construction as the dependent variable and studying respondents’ different ratings of speakers using and not using a double modal. This will more fully confirm the level of awareness that the double modal is at in the community and what particular positive and negative social attributes are indexed by its use in the Tri-Cities. Further, this language attitude study would help to answer whether the lack of social distribution in the Young age group is indicative of a more positive view of the double modal construction than older members of the community.
References


Appendix I

Complete list of sentences

1. He could have shaven his beard with those fingernails.
2. That manager might have chosen a different layout for the storeroom.
3. My grandpa saw that the pharmacist filled the prescription I waited.
4. If you want, you might could make some sweet tea.
5. Her baby tried the banana before taking his short nap.
6. Sheila knew that the Paul had the casserole while talking to friends.
7. Except for the economy, my cousin could have began his own business.
8. If it rains, you might would want to have that umbrella with you.
9. That angry horse should have bitten that mean kid poking at it.
10. I might should oughta take these out of the oven before they burn.
11. I might can ask my boss for the day off on Friday.
12. If he had wanted, that lawyer could have did so much for the community.
13. The cashier saw that you had the sandwich while at the counter.
14. He would have eaten an entire pizza without anyone helping him.
15. It's cold outside, so you might oughta take your coat.
16. My mom could have went to the most expensive grocery store.
17. Those ducks must not can feel cold.
18. If I were you, I might would try digging over by that creek.
19. His grandma could have sewn some pants for the rest of us.
20. I saw that my son had the hamburger while my wife talked.
21. Mr. Ford's cell phone could have rung for hours without him hearing it.
22. We could have saw a large number of birds in the forest.
23. If it were me, I'd have froze in place so no one saw me for a while.
24. The kindergartener got the picture before the lunch bell rang.

25. If it weren't so hot, I may could get a little work done.

26. If it was warmer, we would want some ice cream after church was over.

27. I remembered that the handyman got the sink as the bathtub arrived.

28. Since Bill won't, I guess I might could give you a ride home.

29. That angry bear could have tore them kids limb from limb.

30. I think I may can come tonight, if I can find something to wear.

31. Her baby had the milk after taking a long afternoon nap.

32. You might should eat before you go to work.

33. The contractor had the apartment after the inspection yesterday.

34. As the boss returned, Lyle understood that the mechanic tried the truck.

35. Just before the wedding, the baker started the cake.

36. Well, I might could pick some up from the store if you really need them.