An extension of the comparative sociolinguistics approach for sociosyntax:

Comparing a single linguistic constraint across multiple sociolinguistic variables

This paper integrates aspects of both generative theory and variationist sociolinguistics. To compare the structure of two varieties of French (Acadian French and Laurentian French), I adapt the comparative sociolinguistics approach to compare the syntactic structure of these varieties. Specifically, I focus on the effects of a single linguistic constraint across multiple sociolinguistic variables. I argue that such a comparison provides insights into the underlying grammatical structures of the varieties under comparison, differences that may have remained hidden otherwise. To illustrate the approach, I focus on a single constraint, sentential polarity, and I analyze its effects on two sociolinguistic variables, yes/no questions and future temporal reference. Results show that the polarity constraint is operative in Laurentian French for both variables, but inoperative in Acadian French. To account for this difference, I argue that Laurentian French negative structures involve a negative head above the tense phrase while Acadian French does not.

Keywords: sociosyntax, French, variation, comparative sociolinguistics, future temporal reference, yes/no question, negation, polarity, Acadian French, Laurentian French

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1. Introduction

This paper presents a methodological approach which integrates aspects of both comparative sociolinguistics and generative theory in order to compare the structural differences between two varieties of French spoken in Canada, Acadian French and Laurentian French. Laurentian French, spoken in the province of Quebec with related varieties spoken in Ontario and in western Canada, is distinct in many ways from Acadian French, primarily spoken in Canada’s Atlantic Provinces (i.e. New Brunswick, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island) and in parts of eastern Quebec. While there are some similarities between the two, there are nevertheless notable linguistic differences (Martineau 2005; King 2013a).

The methodology adopted here involves an extension of the comparative sociolinguistics approach (Tagliamonte 2002; King 2013a) in that the focus of the comparison is not the sociolinguistic variable per se, but rather the effects of a single linguistic constraint on multiple sociolinguistic variables. I argue that such a comparative framework can provide insight into structural differences between varieties and thus contributes to work which seeks to integrate both variationist and formal theoretical approaches to the study of grammatical variation. To illustrate this approach, I compare the effect of the sentential polarity linguistic constraint (i.e. whether an utterance is affirmative or negative) on two sociolinguistic variables: yes/no questions and the expression of future temporal reference. The results show that both variables are conditioned by the polarity constraint in Laurentian French, but that this constraint is inoperative in Acadian French for these two variables. To account for this difference, I
propose a formal theoretical analysis which argues that the basis for the different effects of this constraint can be explained by a structural difference between the varieties.

The paper is organized as follows. Following an overview of the theoretical frameworks, I provide an outline of the methodology adopted in this paper. I then discuss the varieties of French under comparison before presenting the analyses of the two sociolinguistic variables, yes/no questions and the expression of future temporal reference. Quantitative and formal analyses are provided for both variables. Finally, I summarize the methodological contributions of this paper as well as suggest potential avenues for future research.

2. Theoretical frameworks

The theoretical approach taken in this paper integrates aspects of both variation theory (Labov 1963, 1969, 1972) and generative theories of grammar (Chomsky 1995, 2000a, 2001), which is in line with other work which seeks to account for grammatical variation within a formal theoretical framework (e.g. Cornips & Corrigan 2005; Adger 2006; King 2013a, 2013b). In addition, I adopt the methodological tools made available by comparative sociolinguistics, but I propose an extension of the approach for the purpose of uncovering structural differences between varieties, outlined in section 2.2.

2.1 Formal theories and comparative sociolinguistics

Labov’s earliest research (1963, 1969, 1972) sought to model grammatical competence in a way which accounted for grammatical variability (e.g. his 1969 work on copula deletion), although this was not widely accepted by generativists (Chomsky 1965). Labov’s foundational works presented the central component of variation theory, the linguistic variable, which is often defined as “two ways of saying the same thing” (cf.
Bayley 2013). In their 1968 paper, Weinreich, Labov and Herzog (1968:100) argue that we should regard “language [...] as an object possessing orderly heterogeneity.” They argue that an understanding of this structured heterogeneity is necessary not only to fully understand language, but it is also crucial for understanding the mechanisms of language change. Despite their efforts, language-internal variation has remained largely excluded from generative theories. In fact, Chomsky (2000b:120) states that “[t]here is reason to believe that the computational system is invariant, virtually.” Thus, from its inception, variation theory was at odds with generative theories on the relevance of structured heterogeneity in the study of language. Despite this longstanding difference, there have been some attempts to reconcile the two theories.

In an overview of formal accounts of morphosyntactic variation, King (2013b) identifies two main approaches which have been proposed in the literature to build variation within a formal theoretical framework. The first, based on Kroch’s (1989, 1994) work, proposes that linguistic variation is the result of multiple grammars which are in competition. In this model, grammar-internal optionality is ruled out and linguistic variation is explained by the competition between grammars. While this model has been used to account for a number of morphosyntactic variables, including the loss of verb second in English (Kroch, Taylor & Ringe 2000), it has also been criticized on a number of points. For example, King states that some criticisms deal with the lack of sociohistorical documentation to support the model, although she (2013b:451) comments that such gaps in the data “apply to diachronic studies in general, not just to the Competing Grammars model.”
The second main approach to building variation within a formal framework involves mechanisms made available by generative theories of grammar (King 2013b). These approaches differ from the grammar competition model in that they consider various points within the grammar where variability could occur. In some studies (e.g. Adger & Smith 2005), variability arises due to choice between lexical items (bundles of morphosyntactic features) prior to their entering the syntax. The differing featural composition of these lexical items will engender variability rather than there being two entirely separate grammars in competition. In a later paper, Adger and Smith (2010) also advance a similar analysis in that the locus of variation is the lexicon of functional categories. In a similar vein, some studies (e.g. King 2005; Parrott 2007) make use of the mechanisms made available by the theory of Distributed Morphology (Halle & Marantz 1993; Embick & Noyer 2007) to account for grammatical variation in a formal theory. However, aside from the precise locus of variation, other studies focus on different aspects of variation within a formal framework, such as whether we can model the rates of variants as observed in sociolinguistic corpora. Adger’s (2006) Combinatorial Variability approach proposes an algorithm which fairly accurately predicts the observed rates of the variants as reported for sociolinguistic corpora. Despite the number of studies over the past decade, a number of topics remain the subject of debate, ranging from the precise locus of variation to how we should integrate psycholinguistic factors within a formal framework to whether we can model the rates of variants as observed in corpora. In contributing to this second main approach, I present an analysis which integrates aspects of formal theories of grammar (which is in line with work on syntactic microvariation, cf. Kayne 2000) and comparative sociolinguistics to shed light on
differences of syntactic structures across varieties and which accounts for variable linguistic phenomena.

Poplack and Tagliamonte (2001) propose a variationist methodology for comparative sociolinguistics in order to determine whether there is a genetic relationship between varieties of African American English and English-based creoles. Their analysis contributes to a longstanding debate on the origins of African American English as to whether it has predominantly British or Caribbean Creole origins. The methodology focuses on a comparison of the linguistic conditioning factors at play for different varieties. The comparison relies on three lines of evidence garnered from separate main effects regression analyses of the same variable in different varieties: 1) the statistical significance of a particular constraint, 2) the relative strength of a factor group, and 3) the constraint hierarchies of factors within a factor group. The first line of evidence, statistical significance, involves whether a potential constraint is statistically significant in terms of conditioning variant choice. The mere presence of a statistically significant factor group is not enough to determine whether two varieties are related. Poplack and Tagliamonte (2001) argue that additional evidence (i.e. the other two lines of evidence) is necessary to determine whether the varieties are (closely) related. The second line of evidence is the strength of a factor group as measured by the range between the highest and lowest factor weight within each factor group. Finally, the constraint hierarchy involves the particular order of the factors within a factor group. Comparisons among constraint hierarchies across varieties are taken to be indicative of a link (or lack thereof) among varieties. Taken together, these three lines of evidence can be used to determine whether two varieties of a language share a common ancestor. However, Tagliamonte
(2002) points out that care must be taken to ensure that historical developments of the varieties under comparison are also taken into consideration, especially in the case of a synchronic analysis. For instance, a consideration of the history of the language can help determine whether a change in progress in some varieties is the result of a separate innovation or if they result from a single change. The methodology adopted in this paper integrates aspects of both formal theory and comparative sociolinguistics in order to compare the structure of different varieties of the same language.

2.2 The comparative-constraint approach to grammatical variation

While the comparative sociolinguistics approach detailed in section 2.1 focuses on the three lines of evidence (i.e. statistical significance, relative strength, and constraint hierarchies) when comparing results of a sociolinguistic variable, I propose a different focus: comparing a single linguistic constraint (or factor group) across multiple variables. The focus on a single linguistic constraint across multiple variables will enable us to discern its patterning across varieties, thereby uncovering aspects of the structure of the varieties in question. I will illustrate the utility of such an approach in the comparison of the effect of the linguistic constraint of sentential polarity (i.e. affirmative vs. negative contexts) on two linguistic variables: the expression of future temporal reference, shown in (1), and yes/no questions, shown in (2).

(1)  


   ‘I will work on the other side.’

b. *Denise, ièlle, va point travailler pour les next cinq ans.*  

   ‘Denise is not going to work for the next five years.’
The future temporal reference variable involves variation between the inflected future (1a) and the periphrastic future (1b).

(2) a. *Tu aimerais mieux d’aller à la Tavern* ?
   ‘You would rather go to the Tavern?’

   (Carole, GC-6)

b. *As-tu été aux moules* ?
   ‘Did you go picking mussels?’

   (Carole, GC-18)

c. *La bus arrête-*ti point à la Casse-croûte itou* ?
   ‘Doesn’t the bus also stop at the Casse-croûte?’ [a local restaurant]

   (Zabeth, GC-12)

The yes/no questions variable involves alternation between the rising intonation variant (2a), pronominal inversion (2b), and the –*ti* or –*tu* particle (2c).

By comparing the effect of a single constraint (sentential polarity) on these two sociolinguistic variables across Acadian and Laurentian French, I argue that we can uncover structural differences between the varieties. To account for these structural differences, I adopt a formal generative approach.

3. *French in Canada: Acadian and Laurentian varieties*

The linguistic differences between Acadian and Laurentian varieties have often been attributed to the different point of origin of the settlers in France: Laurentian settlers came from a greater area of France, mainly north of the Loire Valley and the settlers were of a range of social classes while Acadians originated mainly in the *centre-ouest* of France and were predominantly lower-class (King 2013a). In addition, the relative isolation in which the Acadian communities found themselves may have also contributed to the preservation of features lost in other spoken varieties of French, including Laurentian varieties. For instance, the simple past tense (Gesner 1979; Comeau et al. 2012), the
imperfect subjunctive (Gesner 1979; Comeau 2011), and the je ... –ons first person plural conjugation (King et al. 2004) are all features argued to have long been absent from spoken, informal French in most North American and European varieties, but they are still found in some varieties of Acadian French today. None of these features have been found in Laurentian French since the 19th century, if not earlier. Thus conservative varieties of Acadian French are distinguished from Laurentian varieties in terms of their greater linguistic conservatism. In the analyses which follow, I shed light on another type of distinguishing feature between the two varieties, the structure of negation and its effects on two grammatical variables, yes/no questions and the expression of future temporal reference.

3.1 The Baie Sainte-Marie community

The data for the present study come from one of the most conservative varieties of Acadian French, that spoken in Baie Sainte-Marie located in the southwest region of the Canadian province of Nova Scotia, shown in Map 1.
Baie Sainte-Marie, or the Municipality of Clare, is a predominantly French-speaking Acadian region according to the 1991 Canada Census where 67% of the Baie Sainte-Marie residents report French or French and English as a mother tongue (Statistics Canada 1991). The data are drawn from the Butler Sociolinguistic Corpus collected in 1989-1990 by community residents in the village of Grosses Coques. Interviews were conducted with 31 consultants of both sexes and for a wide age range (15–84). The interviews, which follow no strict sociolinguistic questionnaire, were focused on the elicitation of narratives (including narratives of personal experience along with community narratives) and conversational data. The data from the Grosses Coques corpus were analyzed for the two variables under investigation, yes/no questions and the expression of future temporal reference, presented in sections 4 and 5 respectively. In
each section, the variationist analysis precedes the formal analysis. Comparisons are also made with the literature on Laurentian varieties of French for both variables.

4. Yes/No questions

Yes/no questions present a rich area of variability across varieties of French, as evidenced by the numerous studies on this variable (Foulet 1921; Pohl 1965; Terry 1970; Kayne 1972; Ashby 1977; Söll 1983; Fox 1989; Dewaele 1999; Coveney 2002; Elsig & Poplack 2006; Elsig 2009; Thomas 2010; Martineau 2011). These studies reveal that spoken French makes use of a number of variants to express yes/no questions, although the same variants are not used in all of the varieties. For instance, Coveney (2002:96) reports that the particle –ti is not productive in Picard French (though it does occur in Picard) while Elsig (2009) reports that the related variant –tu is one of the main variants in Laurentian French. In addition to different distribution of the variants across varieties, some variants have taken on stylistic values in particular varieties. For instance, est-ce que is considered formal in Laurentian French (Elsig 2009:100), but in European varieties it is considered neutral (Coveney 2002:98). Since the focus of the present paper is a comparison of the Acadian French system (specifically the Baie Sainte-Marie variety) with the Laurentian French system, I draw on Elsig’s (2009) results from his study of interrogation in the Hull data from the Ottawa-Hull Corpus (20th century sociolinguistic interviews) and in the Récits du français québécois d’autrefois data (audio recordings representative of 19th century Laurentian French).

4.1 The envelope of variation for French yes/no questions
In contrast to the range of yes/no questions variants that exists across spoken varieties of French, only three variants are found in the Baie Sainte-Marie data: rising intonation as in (3), pronominal inversion as in (4), and use of the particle –ti in (5).

(3)  Tu aimerais mieux d’aller à la Tavern ?  
‘You would rather go to the Tavern?’

(4)  As-tu été aux moules ?  
‘Did you go picking mussels?’

(5)  C’est-ti lui qu’était au restaurant ?  
‘Is it him who was at the restaurant?’

Based on the descriptions provided by Auger (1996) and Elsig (2009), the Laurentian French system differs slightly from that of Acadian French. Two variants, rising intonation and pronominal inversion, are the same in both Laurentian and Acadian French and both varieties make use of an interrogative particle, however these are not identical. While Acadian French makes use of the interrogative particle –ti, Laurentian French uses the particle –tu as well, as shown in (6). While Elsig did find tokens of –ti, he found a greater number of –tu and so he combines the two.

(6)  Il dit faut-tu (TU) je garde ma-, ma vieille il dit ?  
‘He says, is it necessary that I keep my old one?’  
(RFQ.021.2064, Elsig 2009:43, my emphasis)

Elsig also found tokens of the est-ce que variant, as shown in (7), a variant which does not occur in the Baie Sainte-Marie corpus.

(7)  Est-ce que tu travaillerais toi dans un sewer de…  
‘Would you work in a sewer of...’  
(OH.114.2081, Elsig 2009:42, my emphasis)
Interestingly, Elsig reports that the *est-ce que* variant is extremely rare in the 19th century *Récits* data (0.5%) and is a minor variant in the contemporary Ottawa-Hull corpus (7.9%). While the variants used in both Acadian and Laurentian varieties of French are not identical, there is considerable overlap between the two, which allows for a comparison of the two systems.

To circumscribe the variable context in the Baie Sainte-Marie corpus, all yes/no questions tokens were extracted if they unambiguously expressed a question that could be answered by ‘yes’ or ‘no’. Following standard sociolinguistic practice, tokens which fell outside the variable context were excluded from further analyses, as outlined below:

- echo questions, since the token repeats another speaker’s preceding declarative statement;

(8) Carole: \( J’aime du riz ! \)

‘I like rice!’

Marie: \( Tu aimes du riz ? \) \( (GC-11) \)

‘You like rice?’

- tag questions, since these are invariant;

(9) \( Puis là faudrait je retourne [...] tu sais ? \) \( (Hector, GC-13) \)

‘And then I’ll have to come back [...] you know?’

- reported speech of others;

(10) \( Elle dit : « Viens-tu au bingo ? » \) \( (Denise, GC-21) \)

‘She said, “Are you you coming to bingo?”’

- invariant fixed expressions;

(11) \( On dirait-ti ? \) \( (Evelyn, GC-12) \)
‘You don’t say?’

- hesitations, truncated utterances, and other incomplete utterances.

(12) **La connaissait, tu la connaissais though?**

‘Did you kn-, you knew her though?’

Once these tokens were excluded from the Baie Sainte-Marie data set, 641 tokens were retained for analysis.

4.2 *Negation and yes/no questions in French*

Studies of yes/no questions in French have revealed a number of potential conditioning factors, which were operationalized in the present study based on hypotheses from the extant literature on French yes/no questions.

Elsig’s (2009) study serves as the main source of comparison with the results for Baie Sainte-Marie Acadian French. In his analysis of the Ottawa-Hull corpus (but only the data for Hull, Quebec) and in the *Récits du français québécois d’autrefois* data, Elsig considered a number of potential influencing linguistic and social factors. He found a striking pattern in that negative contexts highly constrain variant choice for both corpora with negative contexts highly favouring the rising intonation variant. For the Ottawa-Hull corpus, Elsig (2009:43) found that out of the 88 negated tokens, the intonation variant was used at a rate of 91%. For the *Récits* corpus, he found an even higher rate of intonation in negative contexts: 98% of the 170 negated tokens occur with rising intonation (Elsig 2009:46). Due to the near-categoriality of the rising intonation variant in these contexts, he excluded negative interrogatives from further analysis (i.e. he analyzed only the affirmative tokens). In addition to the Hull and *Récits* data, Elsig examined European data predating North American settlement. These data, involving a
number of literary genres (e.g. plays, prose, farce, etc.) ranging from the 15th to the 17th century, add a further diachronic dimension to his study. His findings (Elsig 2009:127) with regard to polarity in these older data contrast with what he found in his more contemporary Laurentian data: polarity does not influence variant choice in this early data set. The differences between the European and Laurentian data with regard to the polarity constraint lead Elsig (2009:127) to suggest that this constraint is an innovation of Quebec French. However, in a study of ne-absence in negative interrogatives in plays, mazarinades (pamphlets), parodic texts, and personal letters for Continental and North American varieties of French, Martineau (2011:194) shows that use of the rising intonation variant rose dramatically in negative interrogatives from the 17th century to the 19th century from 26% to 63% (total N=794). Thus, Martineau’s study points to a fairly recent change with regard to the status of the rising intonation variant in negative contexts. Furthermore, her study suggests that the polarity constraint observed by Elsig in Laurentian French is likely not a Laurentian innovation since it is also attested in varieties of French spoken in France.

LeBlanc (2013) analyzes yes/no questions in the variety of French spoken in the Magdalen Islands, an archipelago of islands in the Gulf of Saint Lawrence. Although part of the province of Quebec, the islands were largely settled by Acadians during a period beginning at end of the 18th century until the middle of the 19th century. LeBlanc’s results show that polarity is the only significant linguistic factor group, with negative contexts favouring rising intonation, the same pattern reported for Laurentian French. Historically, the settlement of the Magdalen Islands was prolonged and marked with contact with both external varieties of French as well as other varieties of Acadian French, much unlike the
situation described for Baie Sainte-Marie which was settled by a fairly homogeneous Acadian population and did not have prolonged contact with other varieties. This extensive contact may have resulted in the Magdalen Islands variety of French to lose certain traditional linguistic features, such as the *je ... –ons* feature or the simple past tense (Comeau et al. 2014). In addition, it may be that this contact resulted in the adoption of the polarity constraint. While the polarity constraint in the Magdalen Islands variety may be due to contact with Laurentian French or perhaps an independent innovation, I will take the Baie Sainte-Marie variety as the baseline in terms of conservative Acadian varieties since it retains many features lost in other varieties of Acadian French, including the Magdalen Islands variety.

4.3 Potential conditioning factors

To determine whether polarity constrains variant choice with regard to yes/no questions in Baie Sainte-Marie Acadian French, a number of hypotheses from the literature were operationalized into testable factor groups.

4.3.1 Grammatical person. The effect of the grammatical person of the subject is widely reported in studies of yes/no questions in French, especially in relation to the inversion variant. In Laurentian French, both Auger (1996) and Elsig (2009) show that inversion can only occur in the second person in Laurentian French. The Baie Sainte-Marie data were coded for grammatical person, which involves three factors: 1st person, as in (13), 2nd person, as in (14), and 3rd person, as in (15).

(13)  *Ça fait que j’en boivons encore?*  
  ‘So, we still drink?’ [i.e. alcohol]  
  (Hector, GC-13)

(14)  *As-tu des chats?*  
  (Carole, GC-6)
‘Do you have cats?’

(15)  *Ils avont-ti toujours été tight de même?*  (Nicole, GC-19)

‘Have they always been so tight?’ [i.e. with their money]

If the Baie Sainte-Marie variety patterns like other varieties of French, we would expect second person subjects to favour the inversion variant.

4.3.2 Syllable length. Another potential conditioning factor is that of the length of the syllable. Coveney (2002:296) reports that the length of the verb, measured in terms of syllables, conditions variant choice. Specifically, he found that multisyllabic verbs (i.e. two syllables or more) disfavour inversion. In contrast, Elsig (2009) found that in Laurentian French, monosyllabic verbs favour the particle –*tu* while multisyllabic verbs favour both inversion and *est-ce que*. The Baie Sainte-Marie data were coded for syllable length, specifically, whether the verb is monosyllabic, as in (16), or multisyllabic, as in (17).

(16)  *Crois-tu ça?*  (Aimée, GC-11)

‘Do you believe that?’

(17)  *Elle grouillait-ti?*  (Carole, GC-35)

‘Was she moving?’

Given the conflicting results obtained independently in the previous studies, it is unclear how syllable length might condition variant choice in the Baie Sainte-Marie data.

4.3.3 Sentential polarity. Due to the fact that the focus of this paper is a comparison of polarity across Canadian varieties of French, each token was coded for polarity, that is, whether the token is found in an affirmative context, as in (18), or a negative context, as in (19).
(18) *Elle attrape toute ?* (Zabeth, GC-12)

‘She catches everything?’

(19) *La bus arrête-ti point à la Casse-croûte itou ?* (Zabeth, GC-12)

‘Doesn’t the bus also stop at the Casse-croûte?’ [a local restaurant]

Negative contexts are widely reported in the literature as having an effect on French yes/no questions. For example, for European French, Terry (1970:92) reports that negative interrogatives disfavour inversion in a study of contemporary French plays while Coveney’s (2002) study of Picardy French found the same polarity constraint. In Laurentian French, Elsig (2009) reports that negative contexts almost categorically favour the rising intonation variant.

### 4.4 Results

Once the data were coded for the linguistic factors presented in section 4.3, the data were submitted to main effects multivariate analysis using the software Goldvarb X (Sankoff et al. 2005). A first step in the quantitative analysis involved establishing the overall distribution of the variants followed by a crosstabulation for each linguistic factor group. The particular pattern that emerged when grammatical person was considered resulted in a further refining of the variable context, as we shall see in section 4.4.1.

#### 4.4.1 Overall distribution

Table 1 shows the distribution of the variants of the yes/no questions variable for the Baie Sainte-Marie data.

<INSERT TABLE 1 ABOUT HERE>

<table>
<thead>
<tr>
<th></th>
<th>N=</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rising intonation</td>
<td>265</td>
<td>41%</td>
</tr>
<tr>
<td>$-ti$</td>
<td>212</td>
<td>33%</td>
</tr>
<tr>
<td>Pronominal inversion</td>
<td>164</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>641</td>
<td></td>
</tr>
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</table>
Table 1. Distribution of the yes/no questions variants in Baie Sainte-Marie Acadian French.

While table 1 presents the overall distribution of the variants in Baie Sainte-Marie Acadian French, this display masks an important distinction in the linguistic system at play. Once the data were coded for the effect of potential linguistic factors, a pattern emerged with regard to the grammatical person factor group. Table 2 shows the variants organized by grammatical person.

< INSERT TABLE 2 ABOUT HERE >

<table>
<thead>
<tr>
<th>Grammatical Person</th>
<th>Rising Intonation N=</th>
<th>Pronominal Inversion N=</th>
<th>–ti N=</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>0</td>
<td>8</td>
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<td>2</td>
<td>109</td>
<td>163</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>150</td>
<td>1</td>
<td>204</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>164</td>
<td>212</td>
</tr>
</tbody>
</table>

Table 2. Distribution of the yes/no questions variants based on grammatical person.

As table 2 shows, the three variants pattern differently depending on the grammatical person. In the Baie Sainte-Marie Acadian French system, pronominal inversion occurs nearly categorically with a second person subject (singular or plural). There is one token of inversion with a third person subject, possibly a data fluctuation. Recall that this finding for grammatical person had previously been noted for Laurentian French (Auger 1996; Elsig 2009). With regard to the particle –ti, this variant only occurs with non-second person subjects (i.e. with first and third person subjects). This pattern contrasts with what has been reported for Laurentian French, that is, in those varieties, the
interrogative \textit{–tu} can be found with first and third person subjects, but also with second person subjects, as shown in (20).\(^8\)

(20) \textit{Il dit, tu es-tu après tomber sur la tête?} \\
\textquoteleft He says, are you just talking nonsense?\textquoteright \hspace{1cm} (OH.088.426, Elsig 2009:74)

In contrast, in Baie Sainte-Marie Acadian French the use of the particle \textit{–ti} with a second person subject results in an ungrammatical utterance.\(^9\) Due to the distribution of the variants based on grammatical person shown in table 2, I refined the analysis by replacing the yes/no questions variable as a single ternary variable with two binary variables, each analyzed independently. The first variable, presented in the left of figure 1, involves tokens with a second person subject: there are two variants in this context, rising intonation and pronominal inversion. The second variable, presented in the right of figure 1, involves first and third person subjects with two variants: rising intonation and the particle \textit{–ti}. The redistribution from a single ternary variable into two binary variables is shown in figure 1.

\begin{figure}
\centering
\begin{tikzpicture}
  \node[draw] {2nd Person} child {node{Intonation}} child {node{Inversion}};
  \node[draw] {1st and 3rd Person} child {node{Intonation}} child {node{\textit{–ti}}};
\end{tikzpicture}
\caption{Yes/no questions in Baie Sainte-Marie Acadian French as two binary variables.}
\end{figure}

Once the variable context was refined to two binary variables, both were each subjected to separate multivariate analysis. The results for the second person data are first presented followed by the results for first and third person data.
4.4.2 Second person data: Quantitative results. The second person data were submitted to statistical analyses to determine which linguistic factors condition variant choice. Table 3 shows the results of the multivariate analysis on the factors influencing the choice of rising intonation.

< INSERT TABLE 3 ABOUT HERE >

<table>
<thead>
<tr>
<th>Syllable length</th>
<th>Factor Weight</th>
<th>% Intonation</th>
<th>N=</th>
</tr>
</thead>
<tbody>
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<td>.70</td>
<td>46%</td>
<td>69</td>
</tr>
<tr>
<td>monosyllabic</td>
<td>.41</td>
<td>20%</td>
<td>155</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Linguistic factors conditioning rising intonation in second person subject contexts.

As table 3 shows, the only significant factor group which influences variant choice with a second person subject is syllable length. Multisyllabic verbs favour the rising intonation variant with a factor weight of .70 while monosyllabic verbs favour pronominal inversion with a factor weight of .59.\textsuperscript{10} This finding is in line with Coveney’s (2002) results for Picardy French, but contrasts with Elsig’s (2009) findings for Laurentian French.

However, for the broader comparative analysis presented in this paper, the relevant finding is that polarity does not constrain variant choice in Baie Sainte-Marie Acadian French. That is, negative contexts admit both rising intonation and pronominal inversion in this variety, a finding that contrasts with what has been reported for Laurentian French (Elsig 2009).
4.4.3 First and third person data: Quantitative results. The multivariate analysis of the remaining data (i.e. for first and third person subjects) reveals a similar pattern, as shown in table 4.

< INSERT TABLE 4 ABOUT HERE >

<table>
<thead>
<tr>
<th>Syllable length</th>
<th>Factor Weights</th>
<th>% Intonation</th>
<th>N=</th>
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<tbody>
<tr>
<td>multisyllabic</td>
<td>.60</td>
<td>44%</td>
<td>108</td>
</tr>
<tr>
<td>Monosyllabic</td>
<td>.45</td>
<td>31%</td>
<td>221</td>
</tr>
<tr>
<td>Range</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n.s.: Polarity, Grammatical Person.

Table 4. Linguistic factors conditioning rising intonation in first and third person subject contexts.

The results for first and third person subjects, presented in table 4, pattern similarly to the results for second person subjects, presented in table 3. Taken together, tables 3 and 4 show that regardless of the grammatical person of the subject, syllable length is the only significant factor group that constrains variant choice. However, the most important finding in both analyses is that the polarity constraint, which was the greatest predictor of variant choice in Laurentian French, does not influence variant choice in Baie Sainte-Marie Acadian French. Unlike in Laurentian French, all variants can occur in negative contexts in Baie Sainte-Marie Acadian French. To explain the absence of the polarity constraint in Acadian French, I argue that the difference results from a structural difference between the varieties. Section 4.5 provides a formal account of this difference.

4.5. Formal analysis of polarity and yes/no questions in Canadian varieties of French
The quantitative results presented in section 4.4 showed that polarity does not constrain variant choice in the Baie Sainte-Marie variety of Acadian French, in contrast with what has been reported for Laurentian French (cf. Elsig 2009). I argue that the different quantitative results can be accounted for if we consider the syntactic structure of negation of each variety.

There have been a number of generative studies of particular forms of yes/no questions in Laurentian French. For instance, Auger (1996) provides a morphological analysis to explain the fact that subject pronominal inversion is restricted to the second person in Laurentian French. In her analysis, she accounts for the fact that second person subjects can occur in inversion constructions since the second person pronouns bear an [interrogative] feature, which is not the case with first and third person subjects. Vinet (2000a, 2000b) analyses the incompatibility of the –tu particle and pas in Laurentian French negative interrogatives. She (2000a:407-08) proposes that “–tu represents a mophophonological spell-out of stress at PF and it is identified as an in situ wh Force operator checked at LF in an unselected C.” According to Vinet, the only context that allows for both –tu and pas are those in which pas is checked in a higher position than it would be in negative contexts and that this gives us an exclamative/evaluative reading, as shown in (21).

(21)  

Le voilà-tu pas qui arrive

‘Well, here he is just coming’

(28c in Vinet 2000a:398)

She accounts for this interpretation by arguing that when pas scopes over –tu, a Force operator, it provides us with a non-negative reading.
As in Laurentian French, Baie Sainte-Marie Acadian French also uses the interrogative particle in negative contexts with non-interrogative readings, as in (22).\(^{11}\)

(22) *Mais, ils sont-ti point simples cette année!*  
(Evelyn, GC-12)  
‘Well, they are silly this year!’

However, what distinguishes the Baie Sainte-Marie variety with Laurentian French is that the use of the particle or pronominal inversion variants in negative contexts does not result in an ungrammatical utterance in Acadian French, shown in (23), as it does in Laurentian French, shown in (24).\(^{12}\)

(23) *Il a-ti point fishdraggué avec Elzé icitte là?*  
(Evelyn, GC-13)  
‘Didn’t he drag fish with Elzé here?’

(24) *Ta mère est-tu pas là?*  
(6 taken from Vinet 2000b:138)  
‘Isn’t your mother there?’

As these two examples show, the two varieties are distinct in terms of whether or not they allow negative interrogatives with particular variants.

Martineau and Vinet (2005) consider the relationship between inversion and whether a variety has a single negative marker (i.e. *pas* ‘not’) or if the *ne* preverbal marker is present as well. They provide a diachronic account of why cases of subject pronominal inversion in contemporary French varieties require the presence of *ne* while its absence renders the utterance ungrammatical in the case of a yes/no question, shown in (25a-b).\(^{13}\)

(25) a. *N’est-elle pas belle?*  
‘Isn’t she pretty?’

b. *Est-elle pas belle?*
‘Isn’t she pretty?’ (13 in Martineau and Vinet 2005:202)

In contrast with (25a-b), negative interrogatives without inversion (such as with rising intonation) allow both presence and absence of *ne*. Martineau and Vinet (2005:202) link the fact that contemporary French requires *ne* in cases of negated inversion to some parameter change involving “verb movement and rise of SV word order in interrogatives.” While many spoken varieties of French lack a productive *ne* marker, the period in which it was lost has been the subject of much debate. In an empirical study of the loss of *ne* in Canadian and European varieties of French, Martineau and Mougeon (2003) date the rapid decline of *ne* to the 19th century on both sides of the Atlantic. However, the presence of *ne* cannot be used to distinguish the structure of negation in either Acadian or Laurentian French since both lack a productive *ne* marker. Comparative analysis of the structure of negation in each variety must be based on other cues, such as those from quantitative analyses of yes/no questions, presented in section 4.4.

The polarity effect on yes/no questions extends beyond French, as shown by Zanuttini’s (1997) work on Paduan, a variety of Veneto. The Paduan facts closely mirror those of Laurentian French. In Paduan, yes/no questions can be expressed using pronominal inversion, as shown in (26).

(26) \textit{Vien-lo?}

‘Is he coming?’ (17a in Zanuttini 1997:221)

However, the polarity constraint appears to be operative in Paduan as well since negative contexts do not allow for pronominal inversion, as shown in (27).

(27) \textit{*No vien-lo?}

‘Isn’t he coming?’ (17b in Zanuttini 1997:221)
Zanuttini argues that negative interrogatives in Paduan must be expressed with rising intonation, as shown in (28), a variant that clearly does not involve a movement.

(28)  \[ \text{No (e)}l \text{ vien?} \]

‘He isn’t coming?’ \hspace{1cm} (19a in Zanuttini 1997:221)

The finding that Paduan patterns closely with Laurentian French suggests a potential similarity in their negation systems. In both varieties, a negated interrogative is expressed by rising intonation, a variant that does not affect the syntactic structure. Zanuttini’s account of the polarity effect is based on the structural property of negation in Paduan that relates to the left periphery (the Complementizer Phrase or CP). She argues that either verb movement (in the case of inversion) or the preverbal negative marker \textit{no} can satisfy a requirement of C to be filled in cases of interrogatives. In the case of affirmative interrogatives, the verb moves to C while in negated interrogatives, the presence of the negative marker \textit{no} already fills this property of C and so verb movement is not required. In fact, she argues that due to reasons of economy, verb movement in negated interrogatives yield an ungrammatical utterance.\(^{14}\) What is relevant for the present paper is that negation interferes with variants involving movement in Laurentian French, but not in Acadian French, despite the fact that both varieties of French share similar surface facts (i.e. little to no \textit{ne} usage and postverbal negative markers). I argue that the pattern for Paduan mirrors the polarity constraint in Laurentian French, that is, negated interrogatives require a non-movement expression of interrogation such as rising intonation. We must still, however, account for the apparent differences in surface realizations of negation in Laurentian French and in Paduan. Negation in Laurentian French is largely expressed by a single postverbal \textit{pas} while Paduan has the single
preverbal negative marker *no*. Despite the apparent different surface realizations between Laurentian French and Paduan in terms of the expression of negation, I argue that they are structurally similar in that they both have a preverbal negative head (Neg) higher than the Tense Phrase (TP) domain. The difference is that Neg in Paduan is spelled out as *no* while in Laurentian French it is almost never phonologically realized (represented with [Ø] in figure 2).

![Figure 2](https://via.placeholder.com/150)

Figure 2. The structural representation of negation in Laurentian French.

This structure is similar to the Paduan structure argued for by Zanuttini with the exception of the spelling out of the negative head in Paduan and the addition of *pas* as a postverbal negative marker in Laurentian French. In fact, the argument that there is a negative head above the TP in Laurentian French is not novel, as others have argued for this structure: Di Sciullo and Tremblay (1993) argue that there is a negative head higher than the TP (which can spell out as *ne*) and that this head is distinct from the negative marker *pas*, which they analyse as an adverbial situated below the TP.¹⁵ Their arguments rely on a number of facts, such as negative imperatives. Unlike Standard French, which
permits *ne* presence in a negative imperative as in (29), Laurentian French does not allow *ne* presence in a negative imperative, as shown in (30).

(29)  (ne) le mange pas !

‘Don’t eat it!’

(29a in Di Sciullo and Tremblay 1993:82)

(30)  (*ne) mange-le pas !

‘Don’t eat it!’

(29b in Di Sciullo and Tremblay 1993:82)

The fact that *ne* is disallowed in Laurentian French negative imperatives is taken as evidence that the Neg head blocks the verb movement to the left periphery (CP) and so the Neg head does not occur in negative imperatives in Laurentian French. However, the fact that it does not block the movement of the verb to TP in declarative sentences suggests that it is generated above the TP rather than below it. Thus, the fact that Laurentian French has a negative head above TP accounts for the observed polarity effect in yes/no questions in the same way Zanuttini accounted for the Paduan data: the presence of this head prevents the movement of the verb in the case of inversion.

The ‘blocking’ analysis accounts for the infrequency of the pronominal inversion variant in negative contexts, but what about the case of the particle –tu? With regard to this variant, I maintain that –tu likewise requires a movement to the left periphery (cf. Morin 2008). Thus, both pronominal inversion and the –tu particle involve movement to the CP and, as such, rarely occur in negative contexts due to the presence of the Neg head above the TP. Alternatively, the rising intonation variant, which does not require syntactic movement, is the majority variant in negative contexts in Laurentian French.

With regard to Acadian French, I argue that the quantitative results presented in section 4.4 suggest that the structure of negation in Acadian French is different. If
presence of a negative head higher than the TP prevents movement of the verb (and T) to the CP domain in Laurentian French, then I argue that there is no negative head above TP in Acadian French and that this difference accounts for the different patterns observed in relation to polarity and yes/no questions. The structure of negation in Acadian French is shown in figure 3.

![Figure 3. The structural representation of negation in Acadian French.](image)

I suggest that negation is expressed in Acadian French by the negative adverb, *point* ‘not’, independently of a negative head. The proposal that negation is expressed lexically via an adverb without a negative head is not novel, as a number of other languages have been argued to have such a structure (Zeijlstra 2004).

Despite the relative strength of the polarity constraint in Laurentian French yes/no questions, we still need to account for the few tokens where we have a non-intonation negative yes/no questions variant in Laurentian French (i.e. variability). Recall that Elsig (2009:43) reported that out of the 88 negated tokens in the Ottawa-Hull corpus, the intonation variant was used at a rate of 91%. Likewise, he reported that in the *Récits* data, 98% of the 170 negated tokens are with the intonation variant. This means that the Laurentian speakers are allowing the other variants (variants which involve movement across the Neg head) at rates of 9% and 2% in each corpus. Despite the fact that formal
accounts present non-intonation negative yes/no questions as ungrammatical (cf. Vinet 2000a, 2000b), we still should account for the few cases where we find pronominal inversion and the –tu particle in negative contexts. In Section 2.1, I outlined some theoretical possibilities to account for grammatical variation. To account for these few tokens of negative yes/no questions with pronominal inversion or the –tu particle, we could posit that Laurentian French speakers are alternating between two grammars (i.e. one grammar which has a Neg head above TP and one grammar without) or it could be related to the featural properties of the lexical items involved. For instance, it may be that there are two competing pas lexical items which differ in terms of their selectional properties. In this line of thought, we could argue that one pas is similar to Acadian point in that it requires no overt Neg head (this pas would occur infrequently) while the other pas requires the presence of a Neg head. Thus, variation would fall out from the initial selection of lexical items rather than being situated in the grammar proper.

The difference in patterns observed for yes/no questions in terms of polarity results from the fact that the syntactic structure of negation in Acadian French is not the same as it is in Laurentian French. In both varieties, a negative adverb is generated in a vP adjunct position. However, the presence of a negative head above the TP in Laurentian French accounts for the verb movement blocking phenomena while its absence in Acadian French accounts for the possibility of negated interrogatives with the inversion or particle variants. However, the patterns observed with yes/no questions are but one effect of this different structure of negation. Section 5 provides further evidence of a structural difference between Acadian and Laurentian varieties of French with regard to negation.
5. The expression of future temporal reference in French

The results presented in section 4 show that Acadian and Laurentian French pattern differently in terms of yes/no questions and I argue that they are the result of different syntactic structures of negation. Section 5 provides further evidence in support of this analysis by showing that this difference is involved in another part of the grammar, the expression of future temporal reference.

5.1 Previous studies of the future in French

In most spoken varieties of French, there are two main ways of expressing future temporal reference, the inflected future, shown in (29), which involves a suffix on the verb, or the periphrastic future, shown in (30), which involves use of semi-auxiliary aller ‘to go’ followed by the lexical verb in its infinitival form.16

(29)  Il y aura rien là.  (Hector, GC-12)

‘There will be nothing there.’

(30)  Je vais avoir soixante-et-deux.  (Hilaire, GC-35)

‘I’m going to be sixty-two.’

Historically, grammarians attempted to account for variation between the forms of the future based on the particular functions of the variants. Poplack and Dion (2009) provide an overview of the range of purported grammatical functions attributed to the variants in grammarian commentary ranging from 1530 to the present.17 They report that grammarians assign a wide range of functions to the variants that are sometimes contradictory. However, the most agreed-upon function (59% of grammarians consulted) is the use of the periphrastic future to denote proximate events thus giving rise to its label as the futur proche ‘near future.’ Despite a longstanding history of attributing the
proximate reading to the periphrastic future, recent studies of spoken varieties of French have shown a discrepancy between grammarian commentary and actual usage. Studies of the future variable in Laurentian French have proliferated since the 1980s (Deshaies & Laforge 1981; Emirkanian & D. Sankoff 1985; Zimmer 1994; Poplack & Turpin 1999; Blondeau 2006; Poplack & Dion 2009; G. Sankoff, Wagner & Jensen 2012). These studies consistently report that a single constraint, sentential polarity, conditions variant choice in all Laurentian varieties studied to date and that it is the strongest factor group uncovered in quantitative analyses. In all of these varieties, negative contexts favour almost categorically the inflected future while affirmative contexts favour the periphrastic future, but also allow for the presence of the inflected future. In contrast to the overwhelming polarity effect in Laurentian French, studies of Acadian French (King & Nadasdi 2003; Comeau 2014) report different results. For example, King and Nadasdi analyze the expression of future temporal reference in the Acadian spoken in the two Canadian provinces of Newfoundland and Labrador and Prince Edward Island. Their study shows that the polarity effect is not operative in these varieties of Acadian French. Rather, the strongest factor group in conservative varieties of Acadian French is that of temporal distance, the constraint most agreed-upon by grammarians and commentators, according to Poplack and Dion’s (2009) survey of grammarian commentary. With regard to temporal distance, events anticipated to occur in proximity to the moment of speech favour the periphrastic future while more distant events favour the inflected future. Thus, once again polarity appears to constrain a variable in Laurentian French, but not in conservative Acadian French.

5.2 The variable context
To circumscribe the envelope of variation, all tokens of the future variants that unambiguously express a future eventuality were extracted from the Butler Grosses Coques Sociolinguistic Corpus. However, future forms that have other functions were subsequently excluded from further analysis. These excluded tokens are as follows:

- tokens which express habitual aspect;

(31) *Des temps là, j’allons dîner là.* (Marie, GC-6)

‘Sometimes, we go eat there.’

- use of *aller* as a verb of movement;

(32) *Je vas aller le fermer.* (Michelle, GC-29)

‘I’m going to go close it.’

- reported speech of others;

(33) *Elle a dit : « Oh, je vas me larguer su le couch. »* (Marie, GC-6)

‘She said, “Oh, I’m going to let myself unwind on the couch.”’

- fixed expressions (such as leavetakings);

(34) *Bien, tu reviendras, Patrick!* (Evelyn, GC-18)

‘Well, come again, Patrick!’

- hesitations, false starts, and other incomplete utterances.

(35) *Parce que [...] ils allont patiner de, de quoi/ (Evelyn, GC-13)

‘Because [...] they are going skating some, some thing/’

Once such tokens were removed, the remaining 559 tokens formed the data set that was then submitted to statistical analyses.

5.3 Potential conditioning factors
A number of potential linguistic conditioning factors were operationalized based on the literature on the expression of future temporal reference in French.

5.3.1 Temporal distance. Since the most widely attributed function by grammarians to the future forms is that of temporal distance, each token were coded based on whether the anticipated event would occur in less than an hour, as shown in (36), more than an hour, as shown in (37), more than a day, as shown in (38), more than a week, as shown in (39), and more than a year, as shown in (40).

(36)  *Well, je *vas changer* la tape de bord.*  (Carole, GC-6)

‘Well, I’m going to change the cassette to the other side.’

(37)  *Je *vas jouer* ça *de soir*, voir quoi ce-*que* c’est.*  (Carole, GC-6)

‘I’m going to play that tonight, to see what it is.’

(38)  *À la fin de la semaine, je *pourrai* mettre mes pipes là.*  (Éric, GC-23)

‘At the end of the week, I’ll be able to put my pipes there.’

(39)  *J’aurai* peut-*être* un autre job *après Noël.*  (Carole, GC-21)

‘I’ll maybe have another job after Christmas.’

(40)  *J’allons rester là quatre, cinq ans, puis là j’*allons venir* back par ici*tte.*  (Carole, GC-23)

‘We’re going to stay there four, five years, and then we’re going to come back here.’

While Poplack and Turpin’s (1999) study of Ottawa-Hull reports a weak effect for temporal distance, other studies of Laurentian varieties have found that temporal distance does not condition variant choice (e.g. Blondeau 2006; Grimm 2010; Grimm & Nadasdi 2011). As noted above, King and Nadasdi’s study of Newfoundland and Prince Edward Island varieties of Acadian French found temporal distance to be the strongest factor
group. More precisely, they found that proximate events (events within an hour from the moment of speech) favour the periphrastic future. They also found a linear correlation between temporal distance and use of the variants in that the further removed the anticipated event is from the speech time, the more the inflected future is favoured.

5.3.2 Certainty/imminence. Studies have also considered whether a future event’s certainty or its imminence has an effect on variant choice. Poplack and Turpin (1999:152), drawing on the work of Vet (1993), operationalized this constraint that entails “a state at which the eventuality is impending.” Departing somewhat from Poplack and Turpin, King and Nadasdi (2003:330) focus more on the certainty aspect of the constraint since, they argue, “temporal distinctions are already taken into account by the independent variable referred to as temporal distance.” They coded each token based on whether the token seemed certain or not to occur based on the speaker’s evaluation. To code for this factor group, I relied on contextual cues as much as possible (such as adverbials) to determine whether the speaker is certain, as in (41), or not, as in (42), that the future event will occur.

(41)  *Il va avoir deux ans dans mars.*  
(Hilaire, GC-35)  
‘It’s going to be two years in March.’ [since the speaker’s wife’s death]

(42)  *Puis bientôt, elle larguera, peut-être.*  
(Denise, GC-21)  
‘And later, she will let go, maybe.’

In the absence of overt contextual cues (e.g. *pour sûr* ‘for sure’ or *peut-être* ‘maybe’), I adopted King and Nadasdi’s approach whereby if the addition of *sans aucun doute* ‘without a doubt’ renders the token more certain, then it was coded as uncertain.
Conversely, if the addition of *sans aucun doute* did not increase the certainty of the token, then it was coded as certain.

5.3.3 *Adverbial specification*. The factor group adverbial specification, that is, the presence or absence of specific or nonspecific temporal adverbials, has also been shown to influence variant choice, albeit with mixed results. For instance, Poplack and Turpin (1999) report that nonspecific adverbials favour use of the inflected future while the futurate present is favoured with specific time adverbials. Other studies found no effect of this factor group (King & Nadasdi 2003; Blondeau 2006; Grimm & Nadasdi 2011; Wagner & Sankoff 2011). The Baie Sainte-Marie data were coded based on the presence of specific adverbials, as in (43), the presence of nonspecific adverbials, as in (44), or the absence of adverbial specification, as in (45).

(43)  *Je vas point te voir demain.*  (Aimée, GC-11)

‘I’m not going to see you tomorrow.’

(44)  *Bien, je vous verrons à la Club bientôt.*  (Nicole, GC-19)

‘Well, we will see you at the Club soon.’

(45)  *Si ça vient pesant, tu verras des lumps sur son plancher.*  (Hector, GC-13)

‘If it gets heavy, you will see lumps on his ceiling.’

5.3.4 *Sentential polarity*. Since the focus of this paper is the comparison between Laurentian and Acadian French on the basis of sentential polarity, I considered the effect of sentential polarity on variant choice, that is, whether the token was in an affirmative context, as in (46), or a negative context, as in (47).

(46)  *Moi, je travaillerai sur l’autre bord.*  (Dianne, GC-21)

‘I will work on the other side.’
As noted in section 5.1, studies of Laurentian French overwhelmingly report a strong effect of sentential polarity on variant choice in the expression of future temporal reference. In Laurentian French, negative contexts highly favour the inflected future. By contrast, King and Nadasdi’s (2003) study of Acadian French showed that sentential polarity plays no effect on variant choice. Despite the overwhelming effect of the polarity constraint in the expression of future temporal reference in Laurentian varieties, there is no adequate explanation in the literature to account for its mechanism, although some suggestions have been put forward. For instance, some studies (Deshaies & Laforge 1981; Jeanjean 1988) have proposed that the association of negative contexts with the inflected future is a result of the inflected future’s semantics, specifically its use is due to the hypothetical nature of the event. Laurendeau (2000) argues that the association is due to the nonassertion of the future eventuality, that is, both negative contexts and the inflected future entail a nonassertion of the realization of the future event. However, Poplack and Dion (2009) reject this explanation due to the fact that it does not account for the absence of the inflected future in other contexts of nonassertion nor does it explain why the periphrastic future is largely absent from negative contexts. While Wagner and Sankoff (2011) do not agree with Laurendeau’s claim that the inflected future expresses a particular, inherent meaning, they argue that there is a link between negative contexts and contingency, perhaps due to the irrealis modality expressed by both.

Other possible explanations have been put forward in the literature. To account for the near-absence of the periphrastic future in negative contexts, Poplack and Dion
(2009) cite an earlier study by Jarmasz (2007) who sought a possible structural explanation. This is based on the premise that the semi-auxiliary *aller* and the lexical verb cannot have any intervening material, including the negative marker *pas*. In the case of the inflected future, the negative marker follows the inflected verb and so there is no intervening matter. Jarmasz considers the possible effect of other intervening material, such as object clitics, both direct and indirect, adverbs, and the negative marker *pas*. However, she found that the periphrastic future is favoured with all types of intervening material with the exception of negative markers. Thus, Poplack and Dion conclude that the association of negative contexts with the inflected future cannot have a structural explanation. However, I argue in the present study that the association between the inflected future and negation is, in fact, due to the particular structure of negation in Laurentian French. The comparison with Acadian French allows us to see how a structural property of the negation system of Laurentian French can account for the polarity effect, a constraint for which a sufficient explanation has eluded us thus far.

5.4 Quantitative results

The overall distribution of the variants in the Baie Sainte-Marie Acadian French data is presented in table 5. As the results show, the periphrastic future is used at higher rates than the inflected variant.

< INSERT TABLE 5 ABOUT HERE >

<table>
<thead>
<tr>
<th></th>
<th>N=</th>
<th>Rate</th>
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<tbody>
<tr>
<td>Periphrastic Future</td>
<td>337</td>
<td>60%</td>
</tr>
<tr>
<td>Inflected Future</td>
<td>222</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>559</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5. Overall distribution of the future temporal reference variants in Baie Sainte-Marie Acadian French.
Beyond the overall rates of occurrence, a detailed statistical analysis of the potential conditioning factors provides a better understanding of the linguistic system. The 559 tokens were analyzed in various combinations using Goldvarb X (Sankoff, Tagliamonte & Smith 2005) to determine the best model of the variation, shown in table 6.

< INSERT TABLE 6 ABOUT HERE >

<table>
<thead>
<tr>
<th>Temporal Distance</th>
<th>Factor Weight</th>
<th>% Periphrastic Future</th>
<th>N=</th>
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<tbody>
<tr>
<td>Within the hour</td>
<td>.67</td>
<td>77.9%</td>
<td>77</td>
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<tr>
<td>Longer than a year</td>
<td>.53</td>
<td>63.2%</td>
<td>38</td>
</tr>
<tr>
<td>Longer than a week</td>
<td>.46</td>
<td>55.4%</td>
<td>56</td>
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<tr>
<td>Within the day</td>
<td>.42</td>
<td>50%</td>
<td>44</td>
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<tr>
<td>Within the week</td>
<td>.32</td>
<td>38.8%</td>
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<td><strong>Range</strong></td>
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<table>
<thead>
<tr>
<th>Adverbial Specification</th>
<th>Factor Weight</th>
<th>% Periphrastic Future</th>
<th>N=</th>
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<tbody>
<tr>
<td>Absent</td>
<td>.52</td>
<td>64.7%</td>
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<td>140</td>
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<td><strong>Range</strong></td>
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</table>

Not selected as significant: Certainty, Polarity.

Table 6. Linguistic factors constraining choice of the periphrastic future in Acadian French.

As table 6 shows, two factor groups are statistically significant for Baie Sainte-Marie Acadian French, temporal distance and adverbial specification. However, what is relevant for the present paper is that sentential polarity does not condition variant choice in this variety of French. This result is in line with King and Nadasdi’s (2003) findings for the Newfoundland and Prince Edward Island varieties and it further confirms a
difference between conservative varieties of Acadian French and Laurentian French in terms of the polarity constraint. Section 5.5 provides a formal account of this difference.  

5.5 Formal analysis of polarity and the future temporal reference variable in Canadian varieties of French

The quantitative results for Baie Sainte-Marie Acadian French show that, along with the yes/no questions variable, the polarity constraint does not influence variant choice for the future variable either, despite its overwhelming effect in Laurentian French. Although there have been numerous attempts to account for the polarity constraint, there remains to be a satisfactory explanation of its effect on the future temporal reference variable. The methodological approach proposed in this paper is that the comparison of a single constraint across multiple sociolinguistic variables allows us to uncover structural differences between related varieties. Again, I argue that the particular pattern of polarity (i.e. operative in Laurentian French for two variables, but not operative in Acadian French) results from a single structural difference between the two varieties.

In Laurentian French, the periphrastic future is almost non-existent in negative contexts while the inflected future varies with the periphrastic future in affirmative contexts. This unequal distribution of the variants has led some researchers, such as Wagner and Sankoff (2011) and Sankoff, Wagner and Jensen (2012) to exclude negative tokens entirely from their analysis, instead choosing to focus on the affirmative contexts. Thus, what needs to be accounted for is the disfavouring of the periphrastic future in negative contexts in Laurentian French, but not in Baie Sainte-Marie Acadian French.

Some generative work on the French periphrastic future (e.g. Rowlett 2007) has argued for a biclausal analysis of the periphrastic future with aller as a subject-raising
verb, as shown in figure 4. According to this analysis, *aller* is in the higher clause (higher TP) and the lexical verb is in the lower clause (lower TP). In subject-to-subject raising constructions, we assume the subject of the embedded clause raises to the matrix clause in order to occupy the structural subject position despite the fact that it received its thematic role from the embedded clause verb. This analysis is reflected in the structure in figure 4 in which *Jean* raises from the lower TP (Spec, vP) to occupy the subject position in the higher TP (Spec, TP).

![Figure 4](image-url)

Figure 4. A biclausal structural representation of the French periphrastic future.

As figure 4 shows, the biclausal analysis of the French periphrastic future entails two separate TPs; the higher one hosts *aller* while the lower one is an infinitive clause with the lexical verb, in this case *manger* ‘to eat’.

Evidence for the biclausal structure of the periphrastic future can be found in the distribution of object clitics. The position of object clitics with a periphrastic future
construction provides evidence that they are located in a lower position than *aller*, which suggests that they are attached to the lower clause T, as shown in (48) and represented in figure 5.

(48)  *Je vais le manger.*

‘I am going to eat it.’

Figure 5. A biclausal structural representation of the French periphrastic future with an object clitic.

Examples like (48) show that the object clitic attaches to something lower than the matrix clause T since a sentence with the object clitic attached to the matrix clause T results in an ungrammatical sentence, as shown in (49).

(49)  *Je le vais manger.*

Since object clitics point to the presence of an embedded clause T, this suggests that the French periphrastic future is biclausal rather than monoclausal.
If we consider the other future variant, the inflected future, I argue that the structure is monoclausal, as evidenced by the example in (50).

(50) *Je le mangerai.*

With the inflected future, there is one T and object clitics surface in a position to the left of the lexical verb, which suggest that they cliticize onto the T that also hosts the lexical verb inflected for the future tense.

Now that I have established that the periphrastic future construction involves a biclausal structure while the inflected future involves a monoclausal structure, we can examine how this affects the interaction of negation with the expression of future temporal reference. The differences between the Acadian and Laurentian negative structures have different consequences in terms of what can attach to the matrix clause verb *aller*. I argue that the matrix clause *aller*, in both Laurentian French and Acadian French, selects a TP as a complement and that this results in a biclausal structure. In terms of checking theory, we could posit that *aller* bears an uninterpretable feature specified for T which must be satisfied (i.e. the featural specification of *aller* would look like \[V, uT, \ldots\]). In order to satisfy this \[uT\] feature on *aller*, it must merge with a TP clause. However, recall that Laurentian French negative structures have a negative head above the TP, a head that is often not spelled out (shown in figure 2). I argue that the presence of this head interferes with the checking relation between the T head of the embedded clause and the matrix clause *aller*. Thus, the presence of the negative head above TP in Laurentian French results in an ungrammatical structure. In contrast, there is no negative head above the TP of the embedded clause in Acadian French (as shown in figure 3) so *aller* can successfully merge with the embedded clause.
As was the case with the yes/no questions variable, we should also be able to account for the presence of the periphrastic future in negative contexts. As was the case with the yes/no questions variable, there are relatively few periphrastic future tokens in negative contexts: Poplack and Dion (2009:573) report a rate of 3.2% of periphrastic futures in negative contexts in the Ottawa-Hull corpus and 1.3% in the *Récits* data.\(^{21}\) Again, I maintain that we could account for the variability by positing that negative structures in Laurentian French involve alternation between a *pas* lexical item which requires a negative head above the TP and one which does not (with the former being selected at least 90% of the time in most Laurentian varieties). The fact that negation in Laurentian French is overwhelmingly expressed with a negative head is thus reflected by the strength of the polarity constraint operating on the two grammatical variables, yes/no questions and the expression of future temporal reference.

If the presence of the negative head interferes with the checking operation between *aller* and the embedded clause TP in Laurentian French, why is it that other intervening material does not? As noted in section 5.3, Poplack and Dion cite Jarmasz’s work as to whether it is the fact that negation intervenes between *aller* and the lexical verb causes a problem. However, they consider the presence of object clitics and adverbs. With regard to those two types of intervening material, I argue that they do not cause a problem with regards to the selection of the embedded clause TP since, in the case of object clitics, these are attached to the embedded clause TP and so are not considered an intervening head for checking. With regard to the presence of adverbials, again, I argue that these are non-argumental materials that do not interfere with the selection of the embedded clause TP. As such, it is not the fact that there is intervening material, but
precisely because there is an intervening negative head that the negative periphrastic future structure in Laurentian French crashes. This analysis captures the fact that it is specifically the negative head that causes a problem in terms of the structure of the periphrastic future in Laurentian French, but that other intervening material do not. With regard to Acadian French, the lack of a polarity effect results from the fact that negation is structurally different from the Laurentian French negative structure. This structural difference, I argue, is at the root of the multiple polarity effects observed across variables.

6. Conclusion

The analysis presented in this paper integrates aspects of both formal generative theory and comparative sociolinguistics. Specifically, I argue that the comparison of a single constraint, rather than a single variable, can shed light on structural differences between varieties. While this paper contributes to the comparative sociolinguistics approach, it also contributes to the field of sociosyntax, that is, efforts to integrate formal theories of grammar with variationist sociolinguistics. While numerous studies point to various mechanisms that might account for variability, the analysis presented in this paper shows that by extending the comparative sociolinguistics approach, we can uncover aspects of the syntactic structure of the varieties under investigation. Thus, the present paper’s methodology provides an empirical basis for understanding structural differences between varieties of the same language or of potentially different languages as well.

Furthermore, this paper contributes to work on French sociolinguistics more generally in that it seeks to provide a description of the syntax of negation for two varieties of French. While both yes/no questions and the expression of future temporal reference are widely studied variables in French, there has been a lacuna in terms of
adequately explaining the effect of polarity for these two sociolinguistic variables. The analysis presented in this paper argues that the polarity effects result from differences in the syntax of negation.

With regard to potential future avenues for this approach, we might consider what other grammatical variables might show the effect of the structural difference between varieties. In addition, studies of other varieties of French would provide an important testing ground for the approach presented in this paper. If the analysis proves correct, we would expect other varieties of French to pattern similarly for both yes/no questions and future variables (i.e. either the polarity effect is operative for both variables or it is not). Another potential avenue for further research is the diachronic study of both variables in French to see whether the polarity constraint becomes ‘online’ for the two variables at the same point in time. While the comparative-constraint approach proposed in this paper warrants further testing, I argue for the importance of data-driven formal accounts in the analysis of grammatical variation.
References


*Verbum* 4. 71-84.

Vinet, Marie-Thérèse. 2000a. Feature representation and –*tu (pas)* in Quebec French.

*Studia Linguistica* 54(3). 381-411.

Vinet, Marie-Thérèse. 2000b. La polarité pos/nég, -*tu (pas)* et les questions oui/non.

*Revue québécoise de linguistique théorique et appliquée* 28(1). 137-149.


Zimmer, Dagmar. 1994. « Ça va tu marcher, ça marchera tu pas, je le sais pas » (71: 15) :

le futur simple et le futur périphrastique dans le français parlé à Montréal.


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1 Codes in parentheses refer to the consultant’s pseudonym, the corpus (Grosses Coques), and the interview number.

2 *Point* ‘not’ is the general marker of negation in some varieties of Acadian French, such as the Baie Sainte-Marie variety (cf. Comeau, 2007; Flikeid, 1994).

3 However, not all varieties of Acadian French display the level of linguistic conservatism observed for the Baie Sainte-Marie variety. For instance, the *je ... –ons* first person plural marker is all but lost in spoken New Brunswick Acadian French (cf. Beaulieu & Cichocki 2008) as are other traditional features (e.g. the simple past, the imperfect subjunctive, etc.).

4 I use the results from the 1991 Canada Census since this best reflects the community at the time of data collection.

5 See Foulet (1921) on the history of the French interrogative particle –*ti* and Morin (1985) for the development of –*tu*, a Laurentian French innovation from –*ti*.


7 Elsig (2009:40-41) considers only the Hull data from the Ottawa-Hull corpus for better comparability with the *Récits* data, since both are from the province of Quebec.

8 It also contrasts with –*ti* use in a number of other Acadian varieties, where –*ti* or variation between –*ti* and –*tu* appear throughout the paradigm (King 2013a:68).
Grammaticality judgments with native speakers of the Baie Sainte-Marie variety (other than myself) confirm this.

To calculate the factor weights for pronominal inversion, subtract the factor weight of the rising intonation from 1.0.

Tokens such as 22 were excluded from the data set since it has a non-interrogative reading.

Utterances such as (24) are grammatical in Baie Sainte-Marie Acadian French as confirmed by native speakers’ grammaticality judgments.

According to Martineau and Vinet, negative sentences with inversion like (25b) are grammatical if they are rhetorical questions (i.e. they are not real interrogatives).

Other work has sought to account for this seeming ‘blocking phenomena.’ For instance, Travis’ (1984) Head Movement Constraint or Rizzi’s (1990) relativized minimality put forth principles to account for this observed phenomenon.

Clearly, there are instances where ne is not spelled out (cf. Sankoff & Vincent 1977 which shows the infrequency of ne in Montreal French). An analysis of why this Neg head is rarely spelled out is beyond the scope of the present paper.

A third variant, the futurate present, was infrequent in the data and, in keeping with most variationist studies of future temporal reference in French, I limit the analysis to the two main variants.

It should be noted, however, that most of the sources they consider are from the 19th century and later.

Seutin (1975) notes the polarity constraint in effect in the French spoken in L’Isle-aux-Coudres, an island in the Saint Lawrence River northeast of Quebec City. While he
reports that the inflected future occurs in affirmative clauses, he found only one token of a negated periphrastic future (N=569). I thank Rick Grimm (p.c.) for pointing this out.

An exception to trend is found in New Brunswick varieties of Acadian French (e.g. Chevalier 1996, Chiasson-Léger 2014) where polarity is shown to constrain variant choice. This suggests that some New Brunswick Acadian varieties pattern more like Laurentian French than the more conservative Acadian French (i.e. spoken in other Atlantic Provinces) for certain linguistic features.

For a detailed discussion of the effects of temporal distance and adverbial specification in Baie Sainte-Marie Acadian French, see Comeau 2014.

Studies of other varieties of Laurentian French (Blondeau 2006, Wagner and Sankoff 2011) report similar rates, with the exception of Grimm (2010:88) who reports 26% of negative tokens to be of the periphrastic future, which he interprets as a recent change.