A Sociolinguistic Study of Grammatical Variation in Martinique French

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For my Nan.

Words cannot describe how much I love you and miss you.

Declaration

I hereby declare that this thesis is my own work and that it contains no work previously submitted for any other degree. The work reported in this thesis has been executed by myself except where due acknowledgment is made in the text.

Abstract

This thesis is the first quantitative sociolinguistic study of grammatical variation in the French *département et région d'outre-mer* (DROM) of Martinique. Although Canadian varieties of French have been extensively studied within a Labovian framework, there is currently a dearth of variationist research focusing on varieties genetically related to European French. My doctoral work aims to address this gap in the research literature by presenting a sociolinguistic description of selected aspects of the variable grammar in a previously under-researched variety of French.

The data for the present study were extracted from a corpus of spoken Martinique French which comprises approximately 16 hours of semi-directed sociolinguistic interviews conducted between December 2010 and February 2011. The analysis is based on a judgment sample of 32 native islanders from the Saint-Pierre *arrondissement* in the Northwest of Martinique, who were stratified by age, sex and educational level. Due to high levels of French/*créole martiniquais* bilingualism, informants' frequency of use of French in interpersonal communication was measured using a modified version of Mougeon and Beniak's (1991) language-restriction index.

My thesis specifically focuses on three morphosyntatic variables, namely the alternation between doubled and non-doubled subject NPs, the use/non-use of the morpheme *ne* in verbal negation and the variable expression of future temporal reference. I investigate the overall distribution of variant forms and determine whether the constraint systems for other varieties of French also hold in a Caribbean context. I also test and compare a range of statistical methods currently used in variationist research with the aim of providing a more comprehensive picture of the variable grammar in this regional DROM variety. Fixed-effects logistic regression models demonstrate that this Caribbean variety exhibits patterns of variation that distinguish it from other French speech communities. Mixed models further reorder and refine the respective constraint hierarchies, demonstrating the importance of considering random effects—such as individual speaker or lexical verb—when analysing sociolinguistic data. The combination of these statistical tools thus allows me to assess the extent to which such random effects constrain variation in Martinique French grammar.

By contrasting variable usage in Martinique with that reported for communities in mainland France and francophone Canada, my doctoral thesis provides a localised as well as a global perspective on French morphosyntactic variability. This study therefore contributes to our understanding of the linguistic and social factors that unite and divide the French-speaking world. As such, it adds a French perspective to the extant literature on global linguistic trends (Meyerhoff & Niedzielski 2003; Buchstaller & D'Arcy 2009).

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This thesis would still be at the planning stages were it not for the residents of Martinique who kindly agreed to participate in the sociolinguistic corpus that serves as the primary data source for my doctoral research. Thank you to all of you for agreeing to take part in my study.

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List of Abbreviations

1	first person
2	second person
3	third person
DROM	*Département et région d'outre-mer*
EXPL	expletive
FUT	future
IF	inflected future
INF	infinitive
IMPERF	imperfect
NEG	negative marker
OH	*Corpus du français parlé à Ottawa-Hull*
PF	periphrastic future
PL	plural
PP	past participle
PRES	present
RFQ	*Récits du français québécois d'autrefois*
RHGF	*Recueil historique de grammaires du français*
SD	subject doubling
SG	singular

CHAPTER ONE: INTRODUCTION

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1. Introduction

This study is the first quantitative investigation of grammatical variation in Martinique French. Although Laurentian and Acadian varieties of Canadian French have been extensively studied within a Labovian framework, there is currently a dearth of variationist studies focusing on linguistic variability in French varieties spoken outside of North America.[1] As far back as the mid-1990s, Gadet's (1996: 89) oft-cited remark acknowledges that 'il n'existe pas à ce jour de sociolinguistique variationniste française'.[2] The comparative lack of quantitative variationist research on such varieties is indeed a situation that persists to the present day (see also Gadet 2003; Carruthers 2006; Jones 2011). Moreover, studies examining language variation and change in French outside of a Canadian context have tended to be restricted to the analysis of phonological and low-level morphosyntactic variables (i.e. variables that are 'purely morphological or purely syntactic', see Cornips & Corrigan 2005: 102), such as Pooley (1996), Armstrong and Unsworth (1999), Armstrong (2001), Hornsby (2002, 2006, 2007), Boughton (2003, 2005), Hall (2008), Armstrong and Pooley (2010) and Villeneuve (2010, 2011). By con-

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[1] For research on language variation and change in French-speaking Canada, see Sankoff & Thibault 1977; Mougeon & Beniak 1991; Poplack & Turpin 1999; King & Nadasdi 2003; Blondeau 2006; Poplack & Dion 2009; Grimm 2010; Mougeon, Rehner & Nadasdi 2010; Comeau 2011; Poplack, Zentz & Dion 2011; Sankoff & Wagner 2011; Poplack, Lealess & Dion 2013 *inter alia*.

[2] 'As yet, there does not exist a discipline of French variationist sociolinguistics' (my translation).

trast, there have been comparatively few French sociolinguistic studies focusing on variability at higher levels of linguistic structure, such as the variable nature of the subjunctive (Jones 2000), interrogative structures (Coveney 2002; Farmer 2013) or general extenders (Secova 2011, 2014).[3]

This doctoral dissertation addresses these gaps in the research literature and is the first sociolinguistic study of morphosyntactic variation in any Franco-Caribbean speech community. Although dialectological studies have previously noted that Caribbean varieties of French 'se caractérise[nt] par une syntaxe qui est typique du français parlé en général' (Pustka 2007b: 265, see also Drescher & Neumann-Holzschuh 2010),[4] the use of supralocal features in this region, such as those examined in the present study, remains a hitherto unexplored area of research.

My thesis makes use of variationist methods (see Labov 1984, 2001; Sankoff 1988; Poplack & Tagliamonte 2001) to investigate three variable grammatical phenomena in the French spoken in the Nord-Caraïbe area of the French overseas *département et région d'outre-mer* (DROM) of Martinique, Lesser Antilles. The data on which the present study is based were extracted from a corpus of spoken Martinique French that comprises approximately 16 hours of semi-directed sociolinguistic interviews conducted by myself between December 2010 and February 2011. The analysis is based on a judgment sample of 32 native islanders from the Nord-Caraïbe area in the Northwest of Martinique, who were stratified by age, sex,

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[3] High-level variables operate at 'the interface of levels of the grammar' (Cornips & Corrigan 2005: 102), such as the variable expression of future temporal reference (see Chapter 5).

[4] […] Caribbean varieties of French 'are characterised by a syntax that is typical of spoken French in general' (my translation).

educational level and language restriction (see Chapter 2 Section 2.3). The features of spoken Martinique French that I examine in this dissertation, and that are found throughout the French-speaking world, are the doubling of subject NPs, the omission of the negative particle *ne* and the expression of future temporal reference. I investigate the overall distribution of variant forms and explore the extent to which the constraint systems reported for other varieties of French also hold in a Caribbean context. As part of the statistical analysis which will establish the underlying grammar of the variability in this variety, I will test competing and innovative analytical statistical methods (fixed- versus mixed-effects modelling) in order to also assess the extent to which random effects, such as individual speaker and lexical verb, constrain variation in speakers' morphosyntax (cf. also Roberts 2012).

This introductory chapter is structured in four main parts: Section 2 presents a brief introduction to the main dialects of French. An overview of the three socio-linguistic variables under study in this dissertation is given in Section 3 and the main research questions that this research addresses are detailed in Section 4. The final section of this chapter provides a detailed outline of the remainder of the dissertation.

2. Other Regional Varieties of French

In the present study, I situate the variation exhibited in Martinique French in rela-
tion to other regional French varieties. I use the term 'regional French' to refer to
varieties of French that are spoken in a particular locality, e.g. the French as it is
spoken in Guadeloupe, Canada, Europe, Paris or Montréal (see also Hall 2008: 9
and Villeneuve 2011: 9). The notion of regional French is opposed to the abstract
concept of Standard French (*français de référence* 'Referential French'), an un-
marked neutral variety perpetuated via the education system.

I henceforth refer to the French of mainland France as Hexagonal French.[5]
This appellation reflects the common name for France's mainland European terri-
tory, *l'hexagone* 'the Hexagon', which is itself a reference to the approximate
shape of the French mainland on a map, as shown in Map 1.1. I also make a dis-
tinction between the two main dialects of Canadian French, namely Laurentian
and Acadian (see Hewson 2000). Laurentian French denotes those varieties genet-
ically related to Québec French. In other words, it characterizes the French spoken
in the Canadian province of Québec (see Map 1.2), as well as areas where French
is spoken as a result of westward migration: Ontario and in the northeast Unites
States. Acadian French refers to those varieties spoken in the four Atlantic prov-
inces of New Brunswick, Newfoundland (Terre Neuve), Nova Scotia and Prince
Edward Island (see Map 1.2 for locations).

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[5] In the literature, other terms have been used to refer to Hexagonal French, namely 'the
French of France' and 'Metropolitan French'. However, both of these fail to describe the territory
of mainland France: the former includes the French spoken in mainland France but also in the
overseas regions and territories, while the latter references mainland France and Corsica together,
i.e. *la métropole* 'the metropolis'.

Map 1.1: France (Source: Google Maps).

Map 1.2: The main French-speaking provinces in Canada. (Source: Google Maps).

Varieties of Acadian French are considered to be linguistically distinct to other dialects of French (see King 2000, 2013). These differences are due to the relative isolation of Acadian French speakers from the normative influences of a French education system and from supralocal varieties (King 2000: 35). Traditionally, Acadian varieties are characterized as conservative in nature. They still retain a rich inflectional verbal morphology and verbal paradigm that are no longer found in the other parts of the French-speaking world. For example, the use of the first person subject pronoun *je* with the *–ons* verbal suffix in 1PL contexts is still widely attested (King, Nadasdi & Butler 2004). This construction was lost in other French varieties by the end of the 18th century (King, Martineau & Mougeon 2011).[6] Likewise, the *passé simple* (Comeau, King & Butler 2012) and the imperfect subjunctive (Comeau 2011) are still employed in spoken Acadian French. These features have long been replaced in other French varieties by the *passé composé* 'perfect tense' and the present subjunctive/indicative/conditional respectively. Acadian French has also undergone a number of linguistic innovations that further distinguish it from other French speech communities. For instance, plural subjects in subject relative clauses take default singular marking (King 1994) and the English preposition *back* has been semantically and syntactically reanalysed as an adverb (King 2000: 122–133; King 2011).

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[6] In contemporary European and Laurentian speech, the use of 1PL pronoun *on* is now widespread at the expense of standard *nous* (Coveney 2000).

3. Research Questions

The overall objective of this thesis is to examine the variable grammar of an under-described, isolated variety of French. To achieve this, I will address the following three main research questions in my study of linguistic variability in spoken Martinique French:

Research Question 1. Which linguistic and social factors influence the choice of sociolinguistic variants in Martinique French? As discussed in Section 1, the variable grammar of Martinique, and indeed other Caribbean speech communities, has never been examined from a quantitative variationist perspective. An investigation of a range of sociolinguistic will therefore enable us to determine the linguistic and social constraints that influence variant choice in speakers' morpho-syntax outside of the well-trodden varieties spoken in mainland France and Canada. For instance, the use of the apparent-time construct (Labov 1963) will also help us to ascertain if any of the linguistic variables are stable or are undergoing generational change; this is achieved by examining how the use of variants differs depending on the age of the informants in the Martinique French speaker sample (see Chapter 2 Section 2.3.1 for further details).

Research Question 2. Which other factors constrain variant selection in Martinique French? Due to high levels of French/*créole martiniquais* bilingualism amongst my participants*,* informants' frequency of use of French in interpersonal communication is measured using a modified version of Mougeon and Beniak's (1991) language-restriction index. This index assesses how often speakers use

French in a variety of communicative settings as well as with a range of different interlocutors, and has been extensively used in previous research on French/English bilingual communities in Ontario, Canada (cf. Mougeon & Nadasdi 1998 and Nadasdi 2005 *inter alia*, see also Chapter 2 Section 2.3.4). The index allows us to investigate whether differing levels of restriction in French-language use affect the choice of linguistic variants in Martinique. In other words, do the more frequent users of French display a tendency to employ certain variants more often than informants who speak French less frequently on a daily basis?

A number of recent studies have demonstrated the importance of considering speaker-level and word-level variation when examining sociolinguistic data (see Chapter 2 Section 3.3; cf. also Johnson 2009, 2010). As a result, the use of mixed-effects modelling for data analysis is becoming increasingly prevalent in variationist research (see Roberts 2012; Tagliamonte 2012; Tagliamonte & Baayen 2012; Tagliamonte, Durham & Smith 2014). In the course of my analysis, I therefore test and compare a range of statistical methods currently used in variationist research (fixed- versus mixed-effects modelling in Rbrul (Johnson 2009) and GoldVarb Lion (Sankoff, Tagliamonte & Smith 2012)), with the aim of providing a more comprehensive picture of the variable grammar in this regional DROM (*département et région d'outre-mer*) variety. This approach is of particular importance when examining variation in Martinique since high levels of interspeaker variability have previously been reported in the speech of individuals living in small island communities, such as on Tristan da Cunha in the South Atlantic Ocean (Schreier 2006).

Research Question 3. How does the variable grammar of Martinique French pattern compared to previously studied varieties of French? Once the constraints underpinning the variability in Martinique French speaker's morphosyntax have been ascertained, it will be possible to triangulate variable usage with previously studied varieties of French in Canada and Europe. On the one hand, Martinique French might pattern like the highly conservative enclave Acadian varieties. Indeed, both varieties are geographically isolated, which are traditionally viewed as linguistically conservative in nature (Andersen 1988). On the other hand, the constraint systems governing variant choice in Martinique French might be comparable to those reported for the mainland, and more urban, European varieties. Such a finding might indicate that Martinique French should rather be viewed as a Lesser Antillean equivalent of a Hexagonal French dialect, i.e. a transplanted variety, rather than one that has formed and developed in isolation.

By contrasting the factors influencing variable usage in Martinique with those reported for communities in mainland France and French-speaking Canada, my doctoral thesis will provide both a local and a global perspective on French morphosyntactic variability. This dissertation will therefore contribute to our understanding of the constraint systems that govern variant choice in different varieties of French. It also will add a French perspective to the literature on the consequences of linguistic globalisation (cf. Meyerhoff & Niedzielski 2003; Buchstaller & D'Arcy 2009).

4. The Variables

In order to answer the study's research questions, I conduct quantitative variation-ist analyses in Chapters 3–5 of three of the most well studied sociolinguistic vari-ables in French, namely the doubling of subject NPs, the omission of the negative particle *ne* and the expression of future temporal reference. The variables under examination in this thesis are the only three features of spoken French that pro-vide a comparative platform for analysis, as they are the only morphosyntactic variables to have been comprehensively studied across European and Canadian speech communities.[7] Furthermore, the variables under study touch upon long-standing debates in French linguistics, such as whether the syntax of spoken French is undergoing a 'drift' from a left-headed language to a right-headed one (see Harris 1976, 1978; Ashby 1982).

The present section focuses on the fundamental unit of analysis in variationist sociolinguistics, namely the linguistic variable. I first define the concept of the linguistic variable and discuss its application to the examination of linguistic vari-ability at different levels of linguistic structure. I then present an overview of the three sociolinguistic variables under study in this dissertation. For each variable, I briefly outline its respective variants, as well as the findings of previous studies examining the same phenomena in varieties of French spoken in Canada and Eu-rope.

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[7] Importantly, without triangulation with previously studied varieties of French, such research would be merely descriptive in nature.

4.1 The Linguistic Variable

The variationist approach to the study of language variation and change originates in the pioneering work of William Labov on English in Martha's Vineyard, Massachusetts (1963) and the Lower East Side of New York City (1966). The variationist linguistic enterprise aims to investigate variability in language use from a quantitative point of view. This is primarily achieved through the analysis of linguistic variables and their respective variants. The linguistic variable refers to an underlying abstract concept consisting of two or more variants that are semantically or functionally equivalent. Their use is not free or random but is systematically constrained by linguistic and/or social factors. This fundamental principle of the discipline has been described by Weinreich, Labov and Herzog (1968) as 'orderly heterogeneity'. These factors may include 'the phonological environment, the syntactic context, the discursive function of the utterance, topic style, situation and personal and/or socio-demographic characteristics of the speaker and other participants' (Sankoff 1988: 151).

Although quantitative methodology has been applied to examine language variation at different levels of linguistic structure since the inception of the research paradigm (e.g. Labov's 1969 research on the copula and his 1972a study of negative concord), the sociolinguistic variable was originally conceived for the analysis of phonological variation. In spite of claims that 'the extension of probabilistic considerations from phonology to syntax is not a conceptually difficult jump' (Sankoff 1973: 58), the application of the Labovian paradigm to the analysis of linguistic variation 'above (and beyond) the phonological' (Sankoff 1973: 45) raises a number of fundamental issues regarding the theoretical postulates

underpinning the discipline (see Lavandera 1978; Dines 1980; Romaine 1980; Winford 1984; Weiner & Labov 1983; Cheshire 1987; Milroy & Gordon 2003; Cornips & Corrigan 2005; Buchstaller 2009 *inter alia*).

Central to this debate is the vexed issue of how the sociolinguistic variable is to be defined, i.e. whether variant forms occurring at higher levels of linguistic structure can ever be established as 'alternate ways of saying the same thing' (Chambers & Trudgill 1998: 50). This is not an issue for phonological variables as the semantic equivalence of sound-system variants is not problematic; individual sounds have no intrinsic meaning. However, the question of whether content-bearing units can truly adhere to the synonymy principle is controversial. To this effect, Buchstaller (2009: 1015) notes that 'much variationist research beyond the phonological level has tended to be deliberately non-committal about their conceptualisation of the variable' (see Macaulay 1995; Tagliamonte 1998; Nagy, Blondeau & Auger 2003, amongst others). Similarly, Cheshire (2005: 85) contends that there has been an implicit consensus amongst variationist researchers that the condition of strict semantic equivalence can be relaxed for morphosyntactic and discourse-pragmatic variables. Indeed, a function-based approach to the definition of grammatical variables has been widely adopted in the field. For instance, Buchstaller (2006: 5) defines the quotative variable as 'all strategies used to introduce reported speech, sounds, gesture and thought by self or other' (see also Tagliamonte & Hudson 1999), and Rickford et al. (2007: 7) establish the intensification variable as 'all adverbial strategies speakers have at their disposal to boost or reinforce the property denoted by their heads' (see also Ito & Tagliamonte 2003).

Studies with a similar orientation have successfully applied quantitative methods to investigate morphosyntactic and discourse-pragmatic variation in different varieties of French, such as the variable nature of the subjective mood (Poplack 1992; Jones 2000; Poplack, Leeless & Dion 2013), the pronominal system (Blondeau 2001; Coveney 2000, 2004; King, Nadasdi & Butler 2004; King, Martineau & Mougeon 2011), the quotative system (Levey, Groulx & Roy 2013), interrogative structures (Coveney 2002; Farmer 2013), discourse markers (Beeching 2002; Lemée 2014), general extenders (Secova 2014), and many more. Thus, in keeping with this tradition, I adopt a similar approach in my analysis and define variants to be members of the same sociolinguistic variable provided they are 'functionally equivalent' (Lavandera 1978: 181) or share a 'common function in discourse' (Dines 1980: 15).

4.2 The Doubling of Subject NPs

The first feature of Martinique French I quantitatively examine is the doubling of subject NPs (see Chapter 3). Subject doubling refers to a feature of non-standard French in which a subject noun phrase can be variably realised with an anaphoric subject clitic without contrastive or emphatic stress, as in examples (1) and (2).

(1)   *Subject doubling present*

   a. **Mon grand-père il**   parle   que le   créole. [MYR]

      My grandad   3SG speak.PRES.3G   only the   creole

      'My grandad only speaks Creole.'

b. **Lui   il**   était   presque mort. [OLM]

3SG   3SG   be.IMPERF.3SG   almost   dead

'He was almost dead.'

(2)   *Subject doubling absent*

a. **La   mer ø** est   rentrée   dans certaines   maisons. [DOT]

The   sea   ø be.PRES.3SG   go.in.INF   in   certain   houses

'The sea came in certain homes.'

b. **Eux   ø** nous font   sentir   que vous êtes   antillais [MAC]

3pl   ø   1pl   make.pres.3pl feel.inf that 2pl   be.pres.2pl Caribbean

'They make us feel as though you're from the Caribbean.'

Sociolinguistic studies examining this variable in French have focused on Canadian and mainland European speech communities. Previous research has demonstrated that the overall rate of subject doubling in these varieties ranges from 21% in Paris (Ashby 1980) to 55% in Montréal (Sankoff 1982). In Canada, the definiteness and specificity of the subject NP have been shown to play a role in variant selection (Nadasdi 1995, 2000; Auger & Villeneuve 2010). In contrast, these factor groups are not operative in European French. In this variety, sentential polarity tops the constraint system: full bipartite negation strongly disfavours subject doubling, whereas negation without the negative particle *ne* provides a favouring environment (Zahler 2014).

4.3 The Omission of the Negative Particle *ne*

The second feature of spoken French that I investigate in Chapter 4 is the variable omission and retention of the negative particle *ne*. In Standard varieties of French, verbal negation is expressed through a bipartite 'bracketing' structure, which comprises the pre-verbal morpheme *ne* and one of several post-verbal second negatives, as in (3). By contrast, in spoken language, the *ne* particle can be omitted leaving the post-verbal negative polarity items as the sole overt markers of negation, see (4).

(3) *Negation with ne retained*

a. Donc non je   **ne**   parle   **pas** créole. [ORT]

so   no   1SG   NEG   speak.PRES.SG   not   Creole

'So no I don't speak Creole'.

b. On   **ne**   les   voit   **plus**. [MAC]

3SG   NEG   3SG   see.PRES.SG   no.more

'We no longer see them.'

(4) *Negation with ne omitted*

a. Ça   ø   va   **rien**   changer   pour moi. [MYR]

EXPL   NEG   go.PRES.SG nothing change.INF for   me

'That isn't going to change anything for me.'

b. Elle   ø   a   **jamais** été   en   France. [NOR]

3SG   NEG   have.PRES.SG   never   be.PP in   France

'She has never been to France.'

The presence or absence of *ne* has been described as 'possibly the best known sociolinguistic variable in contemporary French' (Coveney 2002: 55). Indeed, previous variationist research has produced remarkably consistent results concerning both the internal and external factors governing negative particle variation. In European French, the omission of *ne* is associated with younger, lower class speakers and deletion sites tend to be those involving subject/non-subject clitics, the negative item *pas* and frequently occurring expressions (Ashby 1981; Armstrong 2001; Coveney 2002; Auger & Villeneuve 2008). Contrastingly, in Laurentian varieties of Canadian French, *ne* is rarely used in speech (<0.5% of the time) and its realisation is linked to a more formal speech style (Sankoff & Vincent 1977; Poplack & St-Amand 2007).

4.4 The Expression of Future Temporal Reference

The final linguistic variable to be analysed in Chapter 5 is the variable expression of future temporal reference. The evolution of the future temporal reference sector into a multi-layered system is a typologically well-attested developmental trajectory (Fleischman 1982; Bybee, Pagliuca & Perkins 1991 *inter alia*). As with varieties of English, future temporal reference in Contemporary French is realised predominantly via three different strategies: the inflected future (5), the periphrastic future (6) and the futurate present (7).

(5)   *Inflected future (IF)*

Vous **serez**   pas   là. [TEM]

2PL   be.FUT.PL   NEG   there

'You will not be here.'

(6)   *Periphrastic Future (PF)*

On   **va**   surtout   te   le   **montrer**. [MYR]

3SG   go.PRES.SG   especially   2SG   3SG   show.INF

'We are definitely going to show it to you.'

(7)   *Futurate Present (FP)*

Oui   mais il   y   **a**   une   parade   dimanche [JOB]

yes   but   EXPL there have.PRES.3SG   INDF parade   Sunday

'Yes but there is a parade on Sunday.'

Both prescriptive and pedagogical grammars claim that the principal factor influencing variant selection is the temporal distance between speech time and the future eventuality expressed by the verb (Grevisse & Goosse 1993; Hawkins & Towell 2001). Previous variationist work on French has tested this claim quantitatively by operationalising a range of linguistic and social factors posited to condition the choice of future forms (see Blondeau 2006; Poplack & Dion 2009; Grimm & Nadasdi 2011; cf. also Poplack & Tagliamonte 2000; Torres Cacoullos & Walker 2009; Tagliamonte, Durham & Smith 2014 for similar work on varieties of English). Crucially, these studies have revealed that different constraint

systems govern how speakers express futurity in different French varieties. In the Acadian French varieties, for example, temporal distance tops the constraint hierarchy (King & Nadasdi 2003; Comeau 2011). In these speech communities, the periphrastic future signals an immediate future and the inflected variant acts as a marker of distal time. Research on Laurentian and European varieties, however, identifies sentential polarity as the greatest determinant of variant choice. The inflected future is overwhelmingly preferred in negative contexts, whereas the periphrastic construction is favoured in affirmative utterances (Poplack & Turpin 1999; Wagner & Sankoff 2011; Grimm & Nadasdi 2011; Roberts 2012).

5. Dissertation Outline

The remainder of this dissertation is structured as follows: Chapter 2 outlines the methodology adopted in my thesis. It details the speech community under investigation and the corpus of spoken data which serves as the primary data source. It also presents the analytic methods used to examine grammatical variation in the spoken French of Martinique. In Chapters 3–5, I quantitatively examine three variable features of Martinique French, specifically the doubling of subject NPs in Chapter 3, the use/non-use of the negative particle *ne* in Chapter 4 and the variable nature of future temporal reference in Chapter 5. In each variable chapter, the first section provides a brief overview of the variants. This is followed by a review of the relevant literature examining the variable phenomenon in previously studied varieties. I then outline the methodological steps used to examine the feature in Martinique French. I focus on the reasons for excluding certain cases from

the 'envelope of variation' (Milroy & Gordon 2003), and the linguistic and social conditioning factors hypothesized to motivate variant selection. The final section of each variable chapter is devoted to the results of the quantitative analysis. In each case, I first calculate the relative frequency of the variant forms. I then discuss the results of the multivariate analyses, focusing on the intra- and extralinguistic constraints governing variant selection. Sophisticated mixed-effects models furthermore refine the initial fixed-effects analyses by considering the influence that random effects play in variant choice. I conclude this thesis in Chapter 6 by providing a summary of the study's findings, outlining the limitations of my dissertation and suggesting possible directions for future research.

CHAPTER TWO: METHODOLOGY

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1. Introduction

In this chapter, I present a description of the methodology adopted in this dissertation. The chapter is structured in two main parts: Section 2 outlines the speech community under investigation, namely the *Nord-Caraïbe* area of Martinique. I provide a brief overview of the area and present the corpus of spoken language that serves as the primary data source for my study. Section 3 then describes the quantitative analytic methods used to examine grammatical variation in Martinique French.

2. The Data

The data on which my study is based are extracted from a corpus of spoken Martinique French collected between December 2010 and February 2011. The following sub-sections outline the fieldwork procedure adopted. I first introduce the island of Martinique and then present my fieldwork location. The data collection process is subsequently detailed, with specific focus on: (i) how I recruited informants to participate in my study; (ii) the ethical issues that I had to consider; (iii) my interview protocol; and (iv) the methods used to orthographically transcribe the interviews. Finally, I detail the sample of informants whose speech data form the basis of the quantitative study in Chapters 3–5.

2.1 Fieldwork Location
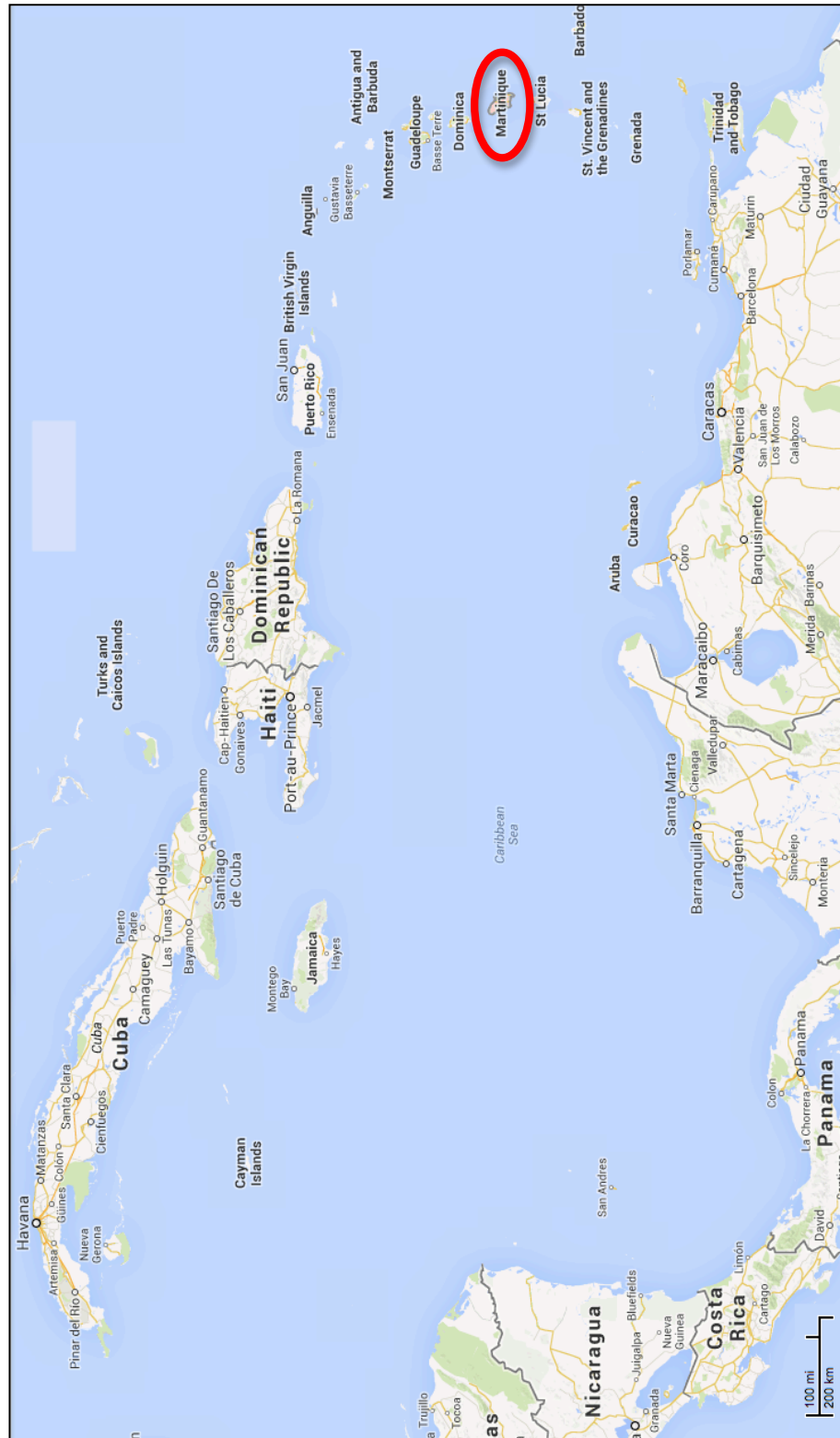
Map 2.1: The Caribbean (Source: Google Maps).

The volcanic island of Martinique forms part of the Lesser Antillean archipelago in the Caribbean (see Map 2.1).[1] More specifically, it is located to the south of Dominica and to the north of Saint Lucia. It is bordered by the Caribbean Sea to the west and the Atlantic Ocean to the east.

Martinique is a former slave-based plantation colony that was first settled by the French in 1635 (Chaudenson 1979: 29).[2] Although African and Amerindian slaves were present in Martinique from the start of colonization, over two-thirds of the island's original workforce were labourers from Brittany in Northern France who signed up for three-year work contracts. As sugar production rapidly became the dominant economic activity on the island, it proved difficult to find Europeans who were willing to sign indentures and work in the harsh conditions on the plantations. The development of the sugar industry as the island's dominant economic activity in the latter half of the 17th century thus led to the abandonment of the use of indentured workers and a significant increase in the number of West African slaves. Indeed, the percentage of slaves increased from 62% of the total population of Martinique in 1671 to over 80% by 1719 (Corne 1999: 126).

The abolition of slavery in the French West Indian colonies in 1848 came 10 years after emancipation in the British Caribbean and there were important differ-

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[1] The term 'Lesser Antilles' refers to the chain of smaller islands that stretch in an arc from the Virgin Islands to Aruba. This contrasts with the 'Greater Antilles', which comprise Cuba, Jamaica, Haïti, the Dominican Republic, Puerto Rico and the Cayman Islands.

[2] For an in-depth history of Martinique, from its colonization to the present day, see Armand (1996a, 1996b, 1998).

ences between the two processes.[3] In the former British colonies, the adult male slaves did not become British citizens. In the French context, however, they became both free men and, like the newly-enfranchised males of France, citizens of the French Second Republic.[4] Furthermore, unlike the majority of former British Caribbean territories, which gained their independence in the latter half of the 20th century, Martinique has been incorporated into the institutional, political and legal framework of the French state since 1946 (see Hintjens 1995; Reno 1995).[5] Nowadays, Martinique forms an integral part of the French Republic as a *département et région d'outre-mer* 'overseas mono-departmental region' (DROM).[6]

The native islanders of Martinique (*les martiniquais*) are thus full French citizens. Even though the island is located approximately 7000km from Paris, Martinique nevertheless constitutes part of France just like any other French *région* or *département*,[7] as the quotation below from Burton (1995: 2) confirms:

> The Frenchness of [Martinique] is undeniable. It is not just the *Monoprix* and *Unimags* [supermarkets, NSR] […], not just the administrative and political superstructures,

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[3] There was a brief hiatus in the French slave trade when the abolition of slavery was enshrined in the *Déclaration des Droits de l'Homme* of 1794, although it was reinstated by Napoléon during the First Empire in 1804. However, the slave trade continued on Martinique as, during this time, the island was under British control.

[4] This citizenship was revoked by the right-wing régime of the Second Empire (1851–1870). It was, however, restored by the Third Republic in 1870 (Hintjens 1995: 22).

[5] In fact, Martinique has legally been part of France for a longer period of time than parts of the mainland, such as Savoie (Burton 1995).

[6] In addition to Martinique, there are four other DROMs: Guadeloupe, which is also located in Lesser Antilles to the north of Dominica, La Guyane, which forms part of the South American mainland, La Réunion and Mayotte, both of which can be found in the South Indian Ocean near Madagascar.

[7] Mainland French territory is separated into five subdivisions of ever-decreasing size: *région*, *département*, *arrondissement*, *canton* and *commune*. In the DROMs, the *région* and the *département* occupy the same geographical space.

> the French-style educational and social security systems, the *autoroutes* chock-a-block with Peugeots, Citroëns and Renaults […], not just the *baguettes*, the day-old copies of *Le Monde* and *Libération*, the *mulâtresses* in the latest Paris fashion. Far deeper than such surface manifestations, the Frenchness of Martinique […] involves a mentality produced by more than 350 years of near-continuous occupation by France.

Martinique is the third largest island in the Lesser Antilles after Trinidad and Guadeloupe, but it is the most densely populated with 353 inhabitants per km^2. According to the *Institut d'Émission des Département d'Outre-Mer* (IEDOM 2010), the island is home to approximately 402,000 people, 45% of whom live in the main town of Fort-de-France and the neighbouring communities of Le Lamentin and Schœlcher (see Map 2.2 below). At any one time, approximately 10–15,000 metropolitans (i.e. French mainlanders) reside on the island. These residents, known locally as *zoreilles*, are relatively isolated, tend not to mix with the local population outside of the workplace and predominantly live in the south of Martinique close to the main tourist locations (Burton 1995: 10–11).

 Although the rate of unemployment is currently 25.3%, Martinique is one of the most developed islands in the Caribbean as a result of the generous financial subsidies provided by the French State (Howarth & Varouxakis 2003: 66). For instance, the general infrastructure, living and employment conditions and social security and medical provisions are all comparable to what is found in continental France. Martinique's economy has traditionally centred on agriculture, fishing and craft industries (Burton 1995: 4). In recent years, the island's *départementalisation* led to the rapid erosion of this traditional economic base. The sugar industry could not compete with cheaper sugar beet in mainland France and the fruit trade became uncompetitive due to cheaper imports from Central and Southern America and Africa. Currently, one of the main driving forces behind the island's economy

is tourism which also appears to be in significant decline: The number of tourists has reduced considerably in recent years, from 994,000 in 1999 to 577,000 in 2009 (IDEOM 2010: 118).

Martinique is territorially divided into four *arrondissements*: Fort-de-France in the centre, Le Marin in the south, La Trinité in the northeast and Saint-Pierre in the northwest. I chose to limit my fieldwork to one of these localities, namely the Saint-Pierre *arrondissement*, which is locally referred to as the Nord-Caraïbe and which comprises the *communes* and villages of Le Prêcheur, Le Morne Rouge, Saint-Pierre, Fonds-Saint-Denis, Le Carbet, Le Morne Vert, Bellefontaine and Case Pilote (see Map 2.2).
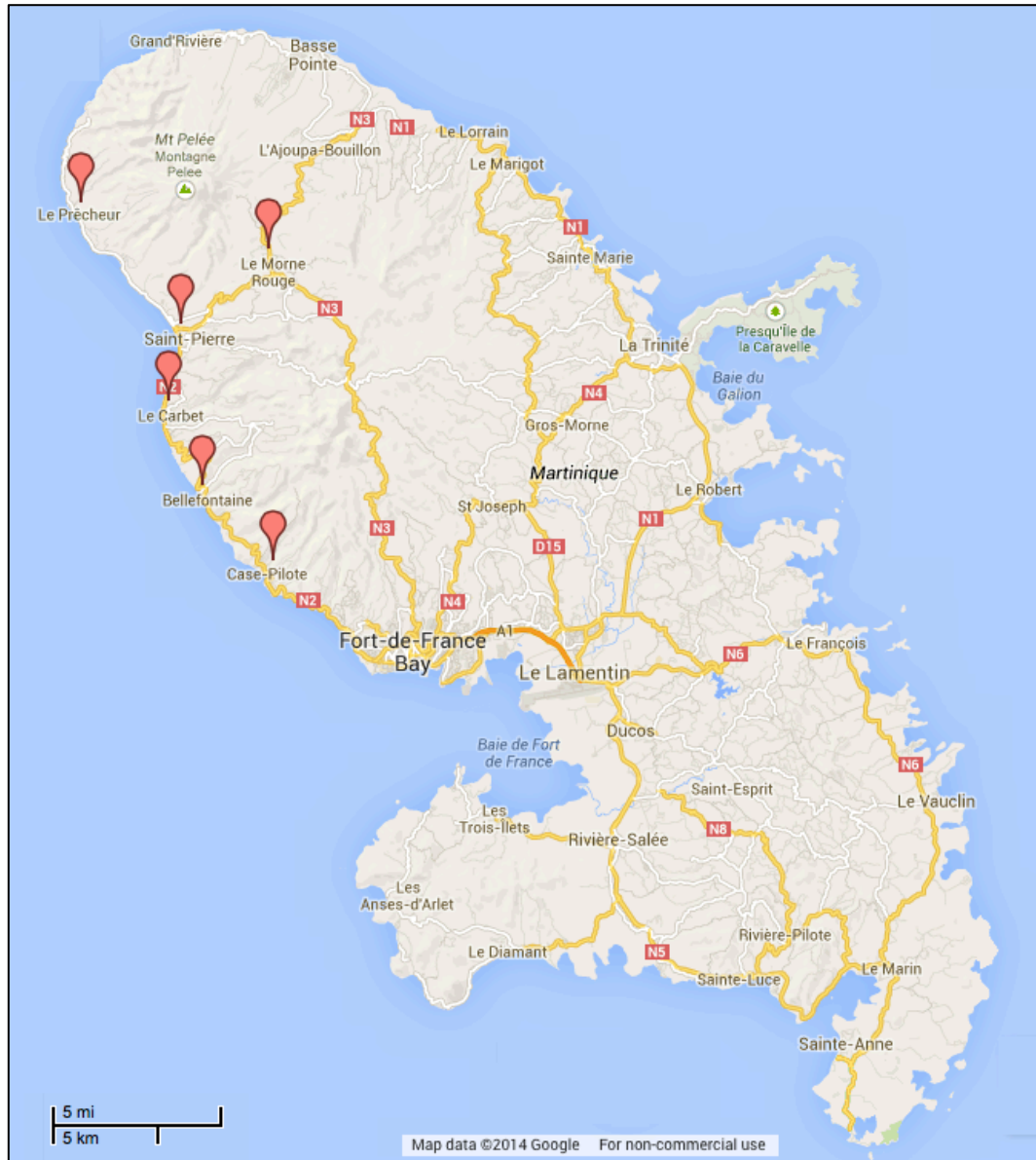
Map 2.2: Martinique and my fieldwork locations in the Nord-Caraïbe

(Source: Google Maps).

On the 8th May 1902, many communities in the Nord-Caraïbe were completely

destroyed by a volcanic eruption, including the island's former capital, Saint-

Pierre.[8] This natural disaster led to mass migration to the south of the island and a

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[8] Over 28,000 people were killed in less than 2 minutes (see Ursulet 1999, 2004).

new capital was established in Fort-de-France. To this day, the Nord-Caraïbe area remains under-populated compared to the rest of Martinique: the area has a population of only 24,000 people with just 113 inhabitants per km^2 (INSEE 2010).

The infrastructure and communications network in the Saint-Pierre *arrondissement* are also comparatively under-developed. For those people without a car, transportation in this region is difficult due to the tropical climate and mountainous relief. The only means of public transport are the *taxis collectifs*.[9] These are known locally as *taxicos* and are essentially privately owned minibuses or people carriers. They are unscheduled and only run during daylight hours on a weekday and up to midday on a Saturday. Although some of the villages, such as Saint-Pierre, Le Carbet, Bellefontaine and Case-Pilote are well serviced by the *taxicos,* the more remote communities, such as Le Prêcheur, can only be accessed once or twice a day. Locating potential informants and collecting data in these more isolated villages was therefore an extremely time-consuming process, since I relied heavily on the *taxicos* for travel.

2.2 Finding Informants

The primary reason for restricting my data collection to the isolated Nord-Caraïbe area was that I had previously lived in this locality from 2007 to 2008, having been employed as an English-language teaching assistant in three primary schools. I therefore already had longstanding links to the community, excellent contacts in

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[9] Due to poor transportation links, over 70% of the active population on the island owns their own car.

place and an understanding of the local social setting (see also Roberts 2008). I was able to utilize these long-term connections when recruiting potential informants. Before leaving the UK, I chose to tap into my pre-existing social circle. I made my stay on the island and the purpose of my visit known to friends, former colleagues and the parents of former students. Upon re-entering the community, I was thus able to adopt a snowball technique when recruiting new participants and was generally seen more as a 'friend of a friend' to potential informants (Milroy 1987; Milroy & Gordon 2003: 32–33). This meant that I could rise above my role as a linguistic researcher, challenge my non-native status and be perceived as less of a community outsider.

However, I quickly found that this technique for recruiting participants was somewhat limiting, as it proved difficult to widen my contacts beyond this network of people (see also Eckert 2000: 76–77 and Schilling 2013: 192–193 who report similar issues). I therefore adopted two different approaches in an attempt to make myself as visible as possible to the local community. On the one hand, I went through an administrative route and introduced myself to the local mayors' office. On the other hand, I adopted a classic ethnographic approach to data collection and hung out at local gathering points like the beach cafés and community events, such as football matches and carnivals. Since research has shown that the social networks of isolated rural speakers tend to be fairly dense (Ball & Müller 1992: 246), these different techniques allowed me to recruit a wider variety of informants, including public sector workers, employees of the local hotel and tourism offices, cashiers in shops, owners of cafés and restaurants and even a local historian.

The main limitation to this revised recruitment method was that I initially struggled to meet younger *martiniquais*. Thus, in order to augment this speaker sub-sample, I chose to volunteer as an English-language teaching assistant at two local *lycées* 'high schools'. This proved effective in redressing the dearth of younger informants in my sample (see Section 3.6). There was, however, a major caveat to working as a volunteer in these schools: I did not want the students to view me as one of their teachers. I therefore orientated towards the participant observation methods advocated in ethnographic research examining language use amongst adolescents (see Eckert 2000; Mendoza-Denton 2008; Lawson 2009; Snell 2009; Daleszynska 2011; Kirkham 2013 *inter alia*). To this end, I spent time socializing with the students in the schoolyard during their breaks from class. During these playground meetings, I was able to gain valuable insights into the lives of teenagers on the island. However, unlike previous school-based research, my relatively short period of participant observation in the schools limited the extent to which the teenage informants viewed me as an active member of the community (see Levon 2013).

My involvement in local schools also meant I could proactively seek ways of giving "something" back to the local community. This practice is encapsulated by Wolfram's (1993: 227) principle of linguistic gratuity: 'Investigators who have obtained linguistic data from members of a speech community should proactively pursue positive ways in which they can return linguistic favours to the community'. I offered free English-language tuition to all of my volunteers once my data collection was complete. I was therefore able to help, for example, the students of one particular *lycée* to prepare for a study visit to the UK by hosting informal

conversational classes twice a week. I also gave regular and frequent English-language tuition to three of my older informants.

In the next section, I present the final speaker sample in greater detail.

2.3 Speaker Sample

Table 2.1 summarises the social characteristics of the speaker sample used in the current study. The 32 speakers were selected on the basis of a judgment sampling method. The research reported in this thesis is based on speech data from informants who originate and continue to reside in this part of Martinique.[10] The participants are stratified by age (younger, older), sex (male, female) and educational level (no qualifications, *baccalauréat*, university degree).[11] Each of these social variables has been shown to govern the choice of linguistic variants in previous sociolinguistic research. Additionally, due to levels of French/*créole martiniquais* bilingualism, informants' frequency of use of French in interpersonal communication was measured as a continuous scale using a language-restriction index. I now present the extralinguistic factor groups in more detail and explain the rationale behind their inclusion in the present study.

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[10] Not all of the speakers had remained in the Nord-Caraïbe for their entire lives. Permanent residency in the area was not a prerequisite for inclusion in my speaker sample. This is because time outside of the research site is a reflection of the local demographic. This was especially the case with my older informants, who were required to move away to attend *lycée* 'high school' and university. Other than for schooling, none of the speakers had spent more than one continuous year away (see also Smith & Durham 2011).

[11] French students sit their *baccalauréat*, or *bac*, exams at the end of the *lycée* 'high school' at around the age of 18 years old. It is roughly equivalent to the GCE Advanced Level qualifications offered in England, Wales or Northern Ireland and the High School Diploma in North America.

Informant Identifier	Age Bracket	Age	Sex	Highest Educational Qualification	Language Restriction	Type of *lycée*
ALB		63	M	Degree	0.74	
ANP		68	M	*Baccalauréat*	0.91	
CHL		63	M	None	0.77	
CLU		69	M	*Baccalauréat*	0.67	
ELN		61	F	*Baccalauréat*	0.85	
IRL		52	F	Degree	0.97	
JOB	Older (aged over 39 years old)	39	F	*Baccalauréat*	0.85	Not applicable
JOU		67	F	Degree	0.72	
LYB		57	F	None	0.89	
MAE		55	F	*Baccalauréat*	0.82	
MAN		68	M	Degree	0.79	
MAP		69	F	None	0.74	
MIP		67	F	Degree	0.76	
WIP		69	M	None	0.67	
AUB		17	M	None	0.83	Vocational
DOT		19	F	None	0.77	Vocational
GEM		17	M	None	0.71	Vocational
JUF		19	M	None	0.83	Vocational
KAG		15	F	None	0.92	Academic
KAL		17	M	None	0.73	Academic
LUJ		15	F	None	0.85	Academic
MAC		19	F	None	0.77	Academic
MAJ	Younger (aged under 20 years old)	15	M	None	0.72	Academic
MYR		19	F	None	0.71	Vocational
NOR		18	F	None	0.88	Academic
OLM		17	M	None	0.82	Academic
ORT		17	F	None	0.88	Vocational
SAN		19	F	None	0.58	Vocational
SOD		17	F	None	0.52	Academic
TEM		18	M	None	0.77	Academic
TOS		15	M	None	0.83	Academic
VAV		18	F	None	0.77	Vocational

Table 2.1: The social characteristics of speakers in my Martinique French corpus.

2.3.1 Age

Research on Martinique has demonstrated that generational differences are observable in the attitude of *martiniquais* towards France:

> Nationalist feeling tends to be strongest amongst those who came to maturity in the 1960s and 1970s […], while the attitude of the under 25s is more pragmatic and utilitarian. For them, there is no emotional identification with France but a recognition that French citizenship confers certain concrete advantages, combined with a fear […] that an independent Martinique […] would "become like Saint Lucia" or, still worse, Haiti (Burton 1995: 15).[12]

To examine if speaker age affects the linguistic habitus of my informants, I operationalised a binary categorisation and collected data from two distinct age groupings that represent two differing life stages, namely adolescence and adulthood (e.g. Eckert 1998: 151). To this end, my younger speakers were all below 19 years old and born after 1991 at the time of recording (N=18). By contrast, the older participants were over 39 years old and born before 1971 (N=14). This two-way age split will allow me to discern any linguistic change that might be occurring in Martinique French in apparent time. The apparent-time construct involves the 'use of the present to explain the past' (Labov 1975) and was first used by Labov (1963) to demonstrate that the linguistic output of different generations reflects actual diachronic linguistic change. It thus allows researchers to use synchronic data from differing age cohorts as a proxy for real-time historical data. Note, however, that to be able to infer real-time change from apparent-time data, we need an understanding of 'how individuals change or do not change during their

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[12] There is a general consensus among the islanders that the quality of life and standard of living is much better on the French-controlled islands of Martinique and Guadeloupe than on independent islands like Saint Lucia and Haiti.

lives, how communities do or do not change over time, and what may result from a combination of these possibilities' (Labov 1994: 83). These potential sites of difference can interact in four main ways as the apparent-time patterns presented in Table 2.2 demonstrate and which I outline briefly below.[13]

		Individual	**Community**
1	Stability	Stable	Stable
2	Age-grading	Unstable	Stable
3	Generational change	Stable	Unstable
4	Communal change	Unstable	Unstable

Table 2.2: Apparent-time patterns of linguistic change (from Labov 1994: 83).

In the first case, both the individual's and the community's use of a linguistic feature remain stable. In other words, no linguistic change is taking place. A number of sociolinguistic variables have been consistently shown to be stable across varieties and across time, such as (-t, -d) deletion (Guy 1980; Tagliamonte & Temple 2005) and (ing) variation in English (Labov 1972b; Trudgill 1974). The preponderance for stable variables is not unsurprising, as most features of a language are not involved in on-going change at a given period of time (Sankoff 2005).

In the second interpretation, age grading, individuals alter their linguistic habi-

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[13] See, however, Sankoff & Blondeau's (2007) expansion of the taxonomy to include cases of instability across the individual speaker's life-span that cannot be captured by age grading (cf. also Wagner & Sankoff 2011).

tus over the course of their lifespan. This patterning by speaker age is repeated with each passing generation but the community, as a whole, does not undergo any change because there is a 'a regular change of linguistic behaviour with age that repeats in each generation' (Labov 2001: 46). This age-grading interpretation counters the assumption that people do not modify their linguistic systems after the critical age period (Sankoff & Evans Wagner 2006: 3). Examples of age-graded variables include the replacement of generic 3SG *on* by generic 2SG *tu* (Sankoff & Laberge 1980; Thibault 1991) and the use of 'extension particles' (Dubois 1992) in Montréal French.

If the frequency of a variant changes when new speakers enter a speech community, and the linguistic habitus of the speakers remains stable across their lifespan, the third scenario, generational change, is the most likely interpretation. This change in progress eventually leads to a linguistic change if repeated across successive generations. Blondeau (1999, 2001) identifies a real-time change in the pronominal system of Laurentian French, in which the compound plural personal pronouns with –*autres* are being replaced with their simple counterparts, e.g. 1PL *nous-autres* is being lost at the expense of 1PL *nous*.

Finally, in case four, all individuals within the speech community alter their linguistic habitus concurrently. This is known as communal change. Examples of this change are often restricted to lexical forms involving 'taboo subjects' (Meyerhoff 2006). However, structural variables can also be subject to community-wide shifts, such as the use of the concatenated discourse marker *tu-sais-veux-dire*

'y'know I wanna say' in Montréal French (Thibault & Daveluy 1989).[14]

One methodological problem with the apparent-time construct is that synchronic differences between age groups can be indicative of two underlying scenarios: both age-grading and generational change result in the same age-related pattern of either increasing or decreasing frequencies in synchronic data. Research indicates that the most likely interpretation would be generational change: Bailey (2004) has shown that panel and trend studies often confirm predictions of generational change made in apparent time (see Buchstaller 2006: 7).[15] Nevertheless, Tagliamonte (2012: 247) suggests that distinguishing between change at the level of the individual and change at the level of the community is 'one of the major issues of contemporary sociolinguistics' (see also Wagner 2012). As such, one drawback to using apparent-time data in the present study is that it is not possible to *conclusively* differentiate between a case of age grading and a change in progress. Although the apparent-time construct has been used successfully as a surrogate for real-time data (Sankoff 2006), it is only with the latter that these two synchronic interpretations can be conclusively disambiguated.

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[14] For further examples, see Sankoff (2005).

[15] 'Trend studies' and 'panel studies' are both types of real-time study. However, a trend study involves comparing speech from different members of the same community at different points in time, whereas the informants are held constant in a panel study.

2.3.2 Sex

The literature has long identified a link between speaker sex and the choice of linguistic variants ('the sociolinguistic gender pattern', see Fasold 1990: 92).[16] Traditionally, men have been associated with the use of non-standard features, whereas women have been linked with the diffusion of prestigious and supra-local variants (Wolfram 1969: 78; Wolfram & Fasold 1974: 93; Trudgill 1983: 81; Milroy et al. 1994; Labov 2001: 274 *inter alia*). Gautier (1995) notes that the wider Martinique society is characterized by a profound disparity between men and women: Men, for instance, have a strong upward mobility while the social trajectory of women tends to be downward. To examine whether the linguistic habitus of my Martinique informants differs according to speaker sex, I included 13 men and 19 women in my final speaker sample.

2.3.3 Educational Level

Members of the active population in mainland France are traditionally grouped into one of eight *catégories socioprofessionnelles* 'socio-professional categories' depending on their type of employment (INSEE 2003). Although Martinique is an institutionally integrated part of France, such classifications reveal very little about the local stratification system when applied to a Lesser Antillean context (see also Rickford 1985, 1991). Indeed, Martinique society historically comprises

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[16] In the sociolinguistic literature, the term 'sex' is used to indicate to the biological distinction between males and females, whereas 'gender' is used to refer to 'a social identity that emerges or is constructed through social actions' (Meyerhoff 2006: 201).

three principal strata: a white upper class, known as *les békés*, a mulatto middle class and an overwhelmingly black lower class (Burton 1995: 11). The stratification of society on the basis of racial differentiation was borne out of the conditions in which Martinique society was first formed which I have described previously in Section 2.1. The demands of the slave industry created a situation in which white colonists of European origin occupied the upper echelons of the social spectrum, while the black slaves of West African descent were situated at the bottom of the social class hierarchy. Intermarriage between these two groups resulted in the formation of a mulatto class. These freemen occupied an intermediary position as small farmers or shopkeepers, for example (see Armand 1996a). In the present day, the traditional correlation between social class and race has become distorted due to the *départementalisation*, *régionalisation* and, more recently, Europeanization of Martinique. Although the majority of agricultural land remains under *béké* ownership, there has been a significant rise in the number of black middle class *martiniquais* since 1946 (Giraud 1995). The use of race as the sole indicator of social position is therefore problematic.

In the sociolinguistic literature, a range of different indices has been used to establish speakers' socioeconomic class (see Milroy & Milroy 1985; Maclagan, Gordon & Lewis 1999; Labov 2001: 61 *inter alia*). These have often been calculated by using a scale constructed from a number of different metrics, such as income and type of housing. In the present study, I did not adopt a similar approach for four main reasons. Firstly, it was not possible to assign a social class to my younger informants, as they were still in full-time education and did not have an occupation. In such cases, children are normally allocated the same SEC score as

their parents. However, nearly half of my younger speakers reported being from single-parent families: They all lived with their mothers, who tended to be unemployed and often lived in precarious circumstances.[17] Secondly, the value and upkeep of my informants' home residence could not be ascertained because I did not visit the homes of all my interviewees. Thirdly, it was not possible to collect sufficient data from the higher end of the social class spectrum, the *békés*. To this day, members of the *béké* class are viewed as 'quasi-mythical beings' (Burton 1995: 11) by other *Martiniquais* and, although they own the majority of agricultural land in my fieldwork area, they remain isolated from wider society. Indeed, multi-index scales are 'often not relevant to the delineation of the social structure of small, nonurban communities' like Martinique (King 2000: 55, see also Smith 2001; Corrigan 2009; Lambert 2013).

I thus chose to focus on the educational attainment of my informants as a marker of their socioeconomic standing. The use of education as a surrogate for informant's social class is widely used in work on mainland European French (Lefebvre 1991; Thiam 1995; Bavois 2002; Hambye 2005; Secova 2011, in 2014; Zahler 2014; see also Tagliamonte & Ito 2002 for English). These studies have demonstrated that the level of schooling tends to condition speakers' linguistic output, as greater amounts of time spent in education favour 'greater exposure to and use of near-standard speech' (Armstrong & Pooley 2010: 97). I therefore cod-

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[17]Over half of homes occupied by single mothers and their offspring lack running water, a bathroom or a toilet (Gautier 1995: 126). The rate of single parent families in Martinique is three times higher than in mainland France. In the *Nord-Caraïbe*, the number of families headed by a single mother (34.7%, N=2211) is much greater than those headed by a single father (5.0%, N=320) (INSEE 2008).

ed all my informants for their highest level of education. They were classified depending on whether they had no formal qualifications (N=22), a *baccalauréat* (N=5) or a university degree (N=4).

The older participants are relatively evenly stratified according to the educational level (no qualifications: N=4; *baccalauréat*: N=5; university degree: N=5). My younger subjects are, by contrast, automatically classified as having no qualifications since they were yet to successfully graduate from the secondary school system as they were still receiving secondary education at the time of recording. To differentiate the younger cohort on the basis of their educational performance, I collected data from the two *lycées*: the vocational *lycée technique* in Saint-Pierre and the academic *lycée polyvalent* in Bellefontaine. The students at the vocational school (N=8) were training to be mechanics or studying business and were expecting to enter employment upon completion of their *baccalauréat*, while those at the *lycée polyvalent* (N=10) were studying more traditional academic subjects and were expecting to continue their education on to tertiary level. With this in mind, I was also able to use scholastic performance as a proxy for educational aspiration (see Chapter 4 Section 4.2; cf. also Douglas-Cowie 1978: 47–51).

2.3.4 Language Restriction

French constitutes the official language of the native islanders since Martinique is a DROM. The inhabitants of Martinique also speak a French-lexifier Creole, known as *créole martiniquais* (see Pinalie & Bernabé 2000; Bernabé 2003 *inter alia*). The sociolinguistic situation in Martinique is often characterized as diglossic (Ferguson 1959). Traditionally, the use of the Creole is reserved for informal

conversation amongst friends and family, whereas Standard French is taught in schools and is used in more formal, public situations (Chaudenson 1979: 17; Holm 1988: 366). However, since the introduction of the *Certificat d'Aptitude au Professorat de l'Enseignement Secondaires* (CAPES) 'Certificate of Aptitude for Teaching Staff of Secondary Education', students in secondary schools can take language classes in *créole martiniquais*, but only as an L2. All other subjects are delivered in French (see Nazaire, Derrien & Prudent 2004).

Recent empirical research on present-day language use in Guadeloupe, the other French DROM located in the Lesser Antilles, reveals that the use of the local Creole variety has become highly restricted. Pustka (2007b) demonstrates that only a small number of *Guadeloupéens* do not nowadays acquire the regional variety of French as their L1 and that the use of the Creole is minimal. This finding leads her to conclude that 'le créole se trouve en réel danger de disparition' and that 'la mort du créole semble inexorable' (2007a: 261).[18] A similar generational shift has also taken place on Martinique, which is considered to be even more assimilated to mainland France, both linguistically and culturally, than its sister island (Pustka 2007b: 60).

All of my participants spoke the regional variety of French and the local French-lexifier Creole to varying degrees of competency. I chose to control for my informants' level of bilingualism by using a modified version of Mougeon and Beniak's (1991: 72) language-restriction index. Essentially, the index provides a quantitative measure of informants' use of French in interpersonal communica-

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[18] '[T]he Creole finds itself in real danger of disappearing' and that 'the death of the Creole seems inescapable' (my translations).

tion.[19] Subjects in my study completed a self-reported written questionnaire in French at the end of each interview, which took approximately 5–10 minutes to complete.

It has long been acknowledged that the use of written questionnaires in linguistic research may not provide an accurate reflection of actual language use (see Buchstaller & Corrigan 2011 for a discussion). Speakers' responses may be affected by a variety of different factors, such as levels of concentration or fatigue, audience design, memory, ordering effects and influence of the standard (see Labov 1996; Milroy & Gordon 2003; Cornips & Corrigan 2005; Buchstaller et al. 2013 *inter alia*). However, Dollinger (2012) argues that self-reported questionnaires can, in fact, provide reliable data for sociolinguistic research (see also Bailey et al. 1997). Indeed, a language-restriction index has been extensively utilized in research on bilingual communities in Ontario, Canada (see Mougeon & Nadasdi 1998 and Nadasdi 2005 *inter alia*) and has produced consistent findings concerning the effect it exerts on speakers' choice of variant forms. For instance, more restricted speakers display a tendency to prefer morphologically simple forms: In their study of irregular 3PL verbs (e.g. *ils comprennent* 'they understand'), Mougeon and Beniak (1991: 101–103) demonstrate that speakers with greater levels of restriction prefer to simplify the verbal paradigm so that 3SG and 3PL verb forms are homophonous (e.g. *il(s) comprend* 'he/they understand').

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[19] Other types of indices have also been used to rate speakers' use of French. For example, in L2 research on Anglo Montréalers, Sankoff et al. (1997) operationalise three different scales to measure their subjects' exposure and competence in French: an environmental scale, a formal acquisition scale and a grammar test. Unlike the language-restriction index, these measures all assess the use of French by L2 Anglophone students studying French in Montréal and not L1 French speakers.

Moreover, research has illustrated that speakers in the restricted cohort tend to limit their use of informal variants. They display lower rates of schwa deletion (Mougeon, Nadasdi, Rehner & Uritescu 2002), /l/ deletion (Tennant 1995), subject doubling (Nadasdi 2000), *ne*-use (Burdine & Mougeon 1999), *ça fait que* as an expression of consequence (Mougeon & Beniak 1991) and the restrictive construction *rien que* (Rehner & Mougeon 1998).

On the basis of their different life experiences, I created two separate surveys for my younger speakers and older participants, respectively, which are available in Appendix D. The questions focused on language use in a variety of communicative settings (e.g. home, classroom, playground, church) as well as with a range of interlocutors (e.g. mother, father, friend, spouse, boss, teacher). They also assessed the direction of the exchange (informant to interlocutor or interlocutor to informant). In each case, speakers were asked to rate how often they communicate in French and *créole martiniquais* on a four-point scale, ranging from 'always in French' to 'always in Creole'.

I subsequently scored each response from zero to three depending on whether the participants spoke, or were spoken to, always in Creole (0), mostly in Creole (1), mostly in French (2), always in French (3). Each question was equally weighted, regardless of the setting, interlocutor(s) or directionality. A mean index score was then calculated for each subject ranging from zero (i.e. they always communicate in Creole) to one (i.e. they only spoke French). Traditionally, Mougeon and collaborators have classified speakers into one of three groupings on the basis of their language restriction score: 'restricted' speakers are those who use French infrequently (<0.45), 'semi-restricted' speakers have mid-to high lev-

els of restriction (0.45–0.79) and communicate in both languages in relatively equal proportions, 'unrestricted' speakers are the most frequent users of French (>0.79).

The data in Tables 2.1 above illustrate that the restriction scores of my Martinique informants range from 0.52 to 0.91. There are no restricted speakers, 17 semi-restricted informants and 15 unrestricted subjects. This distribution appears to corroborate Pustka's (2007a, 2007b) observation that the islanders in France's Caribbean territories are indeed predominantly L1 French speakers. Note further that, although previous research on Ontario French has treated this social factor group as a discrete variable, I include each speaker's individual language-restriction score in the quantitative analyses reported in Chapters 3–5 (see also Section 3.3).

2.4 Ethical Issues

Various steps were taken to ensure that my fieldwork in the local community conformed to Newcastle University's ethical guidelines established to protect human subjects.[20] Firstly, the project passed ethical approval from my faculty's Ethics Committee prior to my undertaking any fieldwork. During the data collection period, I adhered to a standard fieldwork protocol to ensure that ethical guidelines were met at all times. This included the following considerations: Firstly, potential participants were informed of the general aims of my research project, includ-

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[20] In-depth discussions of the ethical issues to consider when carrying out linguistic fieldwork are available in Johnson (2000: 39–57), Milroy and Gordon (2003: 79–87), Crowley (2007: 23–52), Bowern (2008: 149–168) and Eckert (2013).

ing the fact that our exchange would be audio recorded before the actual recording started. The reason they were given was that I was investigating the everyday lives of people living in Martinique and the social, cultural and linguistic changes that have taken place on the island in recent years. However, I did not reveal to my informants that I was particularly interested in specific features of their French (see Milroy & Gordon 2003: 80, cf. also Milroy & Milroy 1978; Milroy 1987). With such information, the investigation of the use of socially marked features might have been compromised as future participants could have monitored their use of certain linguistic variants during the interview.

All of my participants were asked to read a detailed Information Sheet, which is available in Appendix A. This document contains the following information: (i) a short outline of the broad objectives and overall aims of the project; (ii) a description of the procedures, which outlines what the subject can expect; (iii) an assurance that they will be guaranteed anonymity through the use of pseudonyms and the assurance that all personal information will remain confidential; (iv) a confirmation that the subject's participation is completely voluntary and that they are able to withdraw wholly or partially from the study at any time; (v) a guarantee that the audio recording of the participant's speech will be held in a secure archive and that no surreptitious recording will take place; (vi) a promise that their speech will be used primarily as the basis for my doctoral thesis and will only be made available to bona fide researchers for use in future published research, conference papers and teaching; and (vii) an assurance that they will be able to contact me and have access to the research findings if they desire. I also asked my participants to read an Informed Consent Form, provided in Appendix B. This

document explicitly outlines the terms and conditions of participation. I asked my informants to complete and sign two copies of this form, one of which they could keep for future reference.

When collecting data from school-aged informants, I first met the headteacher of the two local *lycées* and sought their support and consent to my approaching pupils and parents in their school. I provided them with a cover letter from my university and a letter of recommendation from my supervisors. In return, I was issued with a *convention de stage*, an official letter confirming that I could conduct my research and volunteer in the schools. I then obtained the consent of the potential informants' parent(s) or guardian(s). Only if they agreed to their child's participation in my study, did I seek informed consent from the students themselves.

All participants received a general verbal debriefing once the interview had been conducted to let them know that their speech was no longer being recorded. It was at this point that my informants were given the choice to leave, continue being part of the project or indicate if there were any parts of the recording that they wanted me to erase. All the sound recordings were subsequently anonymised, encrypted and stored on my computer, two external hard drives and a secure server at Newcastle University.

2.5 Interview Schedule

The data on which this study is based were gathered using a semi-directed sociolinguistic interview protocol (Labov 1984). The main aim of the sociolinguistic

interview is to elicit the informants' vernacular style.[21] Labov (1972b: 208) defines the vernacular as 'the style in which the minimum attention is given to the monitoring of speech'. More recent definitions have affirmed that the vernacular is 'everyday speech' (Sankoff 1980: 54), 'real language in use' (Milroy 1992: 66) or 'the language of locally based communities' (Eckert 2000: 17), amongst others. This data collection method was particularly well suited to meet the demands of conducting fieldwork, as it allowed me to collect large amounts of high-quality speech data in a relatively short space of time (see Schilling-Estes 2007: 171–175; Becker 2013). To reduce the formality of the conversation, I conducted the recordings at a location of the informants' choosing: They took place in a classroom, in the schoolyard, in a private work office, at home, on the beach or in a quiet café. My informants were also informed that the interview would be conducted in French. Indeed, code-switching between French and *créole martiniquais* occurs only minimally in my Martinique corpus.

However, a number of researchers have expressed reservations about the effectiveness of non-community members interviewing native speakers so as to 'tap the vernacular' (Sankoff 1988: 157) and limit the effects of the observer's paradox in an interview situation (see Wolfson 1976; Douglas-Cowie 1978; Hazen 2000). This is because speakers modify their speech according to a variety of factors, such as their relationship with their interlocutors, the situational setting and

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[21] Other types of data collection are also used in sociolinguistics (see Johnstone 2000; Feagin 2002). These include written questionnaires (Coveney 1998; Carruthers 1999), rapid anonymous surveys (Labov 1972b) or participant observation (Eckert 2000). Additionally, some studies have adopted a two-pronged methodology, in which interview speech data is complemented with elicitation tasks via questionnaires (Buchstaller & Corrigan 2011).

the topic under discussion (Giles & Powesland 1975; Bell 1984). To minimize any potential effects arising from my status as a non-native community member, I recorded my participants in self-selected friendship pairs (see also Labov, Cohen, Robins & Lewis 1968; Feagin 1979; Pichler 2013).[22] This lessened the formality of the interview by turning the recording into a more natural conversation, akin to a chat amongst friends. Indeed, Labov (1981: 8–9) has previously argued that the speech in dyadic interviews is in fact more reflective of everyday unmonitored speech than in one-on-one interviews (see also Schilling 2013: 108–113). My informants felt more at ease in the presence of a friend or a family member and, in most cases, they engaged in lengthy conversations with each other. During these parts of the interview, my status as the fieldworker was downgraded from that of 'interviewer' to 'auditor' according to Bell's (1984) audience design model. Nevertheless, the data collected for the present study can only ever be viewed as an approximation of the everyday vernacular in the speech community due to my continued presence in the interview room.

Each interview lasts for approximately one hour. The corpus therefore comprises roughly 16 hours of speech data from 32 informants. The recordings were made in .wav format using an Edirol R-09HR recorder with a sample rate of 44.1kHz (24-bit). An omnidirectional tabletop microphone was used and the recording level was remotely adjusted at regular intervals to ensure that the sound quality was as good as possible.

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[22] Some studies have further modified the sociolinguistic interview. For instance, Wolfram, Hazen and Schilling-Estes (1999) used pairs of interviewers, whereas other studies have recorded informants without the presence of a researcher (Stuart-Smith 1999; Childs & Mallinson 2004). Such modifications, however, were not possible in my study due to practical reasons.

The interview schedules devised for the present study are available in Appendix C. The questions I asked my participants were based on the modules, or topic areas, found in a traditional sociolinguistic interview (Labov 1972b, cf. also Milroy & Gordon 2003; Tagliamonte 2006) but they were adapted to community-specific issues and traditions (cf. Meyerhoff & Walker 2007). The aim of these modules is to draw the informants' attention away from the fact that they were being recorded as part of a linguistic study. The topics covered from one interview to another remained as consistent as possible to counterbalance any topic-influenced style shifts (see Rickford & McNair-Knox 1994). The questions focused on a wide variety of themes, including family life, schooling, employment, childhood memories, future plans, local customs and festivals, religion and language use. The questions in each module were furthermore not ordered randomly. Instead, they were arranged to flow naturally from one to another: They progressed from general, non-specific questions to more personal, specific ones. If the participants showed an interest in a particular topic, I encouraged them to keep talking. If not, I moved on to the next set of questions until I found something that they enjoyed discussing.

Each interview schedule was tailored to older and younger audiences. Indeed, it quickly became apparent that each age cohort would respond more favourably to certain types of topic: my older informants appeared to be more at ease when fielding questions about their childhood experiences or the advent of cars on the island, whereas my adolescent participants were more comfortable discussing their social lives. The classic 'danger of death' question (Labov 1972b: 93) was particularly useful in emotionally engaging my informants in discussion. Alt-

hough this line of questioning has been viewed as problematic in some communities (cf. Trudgill 1974; Milroy & Milroy 1978; Butters 2000), it has proven to be fruitful in eliciting personal narratives in other Lesser Antillean speech communities (cf. Daleszynska 2011: 110). In my interviews, this type of questioning was moderated to focus on natural disasters. This approach proved highly successful in triggering anecdotes related to various earthquakes, hurricanes and volcanic eruptions to hit the island in recent times.

At the end of each recording, my informants completed the demographic information sheet and the language-restriction questionnaire previously described. The former provided basic demographic information about my subjects that did not arise during the interview, such as their family history.[23] The latter allowed me to quantitatively measure my informants' use of French in interpersonal communication (see Section 2.3.4).

2.6 Transcription

All 16 sociolinguistic interviews in my Martinique corpus were orthographically transcribed in CLAN and adhere to the CHAT transcription conventions (see MacWhinney & Snow 1990; MacWhinney 2000; Gardner-Chloros, Moyer & Sebba 2007).[24] Each transcript consists of three main components: a file header, the main tiers and the dependent tiers. The file headers appear at the very begin-

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[23] Such information did indeed prove to be useful when interpreting my results (see, for example, Chapter 4 Section 4.2)

[24] They are also many other programs used for transcribing sociolinguistic data, such as ELAN (see Meyerhoff & Nagy 2013).

ning of the file, an example of which is given in Figure 2.1. They encode basic

information about the recording and are each introduced by the @ sign. The

@Participants line lists the subjects' pseudonyms and their corresponding three

letter informant identifier codes. The *@ID* lines provide the basic social infor-

mation about the speakers, while the location of the interview is detailed in

@Location. Any general observations or impressions I had previously document-

ed as hand-written fieldwork notes are given under *@Comments.* The two-letter

code in the *@Transcriber* header identifies the name of the transcriber and check-

er.

@Begin
@Languages: fra
@Participants (pseudonyms):   NSR   Nicholas_Roberts   Investigator,   MAP
Marlène_Perrault Informant, WIP Willem_Perrault Informant
@ID: fra|COMS|NSR|~23;|Male|UniversityDegree|Investigator||
@ID: fra|COMS|MAP|~69;|Female|NoQualifications|Informant||
@ID: fra|COMS|WIP|~69;|Male|NoQualifications|Informant||
@Media: 16, audio
@Location: Interview conducted around the dining table on the terrace at the
Perrault's house in Morne-aux-Boeufs, Le Carbet (February 2011)
@Comment: None
@Transcriber: NSR, CA

Figure 2.1: An example file header taken from Interview 16.

The main and dependent tiers are illustrated with an excerpt from Interview 15 in

Figure 2.2.[25] In the main tier, the actual speech of the participants is orthograph-

ically transcribed. Each turn is introduced by an asterisk and is followed by the

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[25] The transcription excerpt has been translated to facilitate comprehension. No such transla-
tions exist in the CLAN transcription files.

speaker ID, a colon and a tabbed space. The dependent tiers, which are introduced using the %*com* code and are typed directly below the main tier they reference, contain comments and descriptions that may be of interest to the analyst.

```
*IRL:   quand on allait à Fonds_Saint_Denis on voyait rien .
*CHL:   tu voyais toutes les maisons . y avait aucun arbre là .
*IRL:   c' est impressionnant comment ça peut reprendre vite .
*CHL:   hello !
%com:   CHL address IRL's lodger NIN who is passing by and comes over to talk.
*NIN:   ça va ?
*CHL:   ça va ?
*NIN:   oui .
*CHL:   et ouais là là y avait pas d' arbres .

[Translation of above transcript]
*IRL:   when we went to Fonds_Saint_Denis we couldn' t see anything . we saw
        nothing .
*CHL:   you saw all of the houses. There wasn' t one tree there .
*IRL:   it' s impressive how quickly things can get back to normal .
*CHL:   hello !
%com:   CHL address IRL's lodger NIN who is passing by and comes over to talk.
*NIN:   how are you ?
*CHL:   how are you ?
*NIN:   good .
*CHL:   and yes there there there wasn't any trees .
```

Figure 2.2: An example of main and dependent tiers taken from Interview 15.

The first pass of each sound file was transcribed by myself or one of five native speakers of French. All the transcribers had previously been employed on the *French Learner Language Oral Corpora* (FLLOC; Myles 2010) and therefore had extensive experience of working with CHAT, CLAN and spoken language

data.[26] Each transcription file was subsequently second passed, checked for errors and verified by myself. To facilitate data analysis, all transcripts were time-aligned with the corresponding audio files in a converted .mp3 format.

3. Quantitative Variationist Methods

I now outline the analytical steps I undertook to examine grammatical variability in my Martinique corpus. I focus on data extraction, data coding and the specifics of quantitatively analysing and modelling sociolinguistic data.

3.1 Data Extraction and Token Exclusion

According to Labov's (1972: 72) 'principle of accountability', it is first necessary to identify the contexts in which a variant did occur, as well as those cases in which it could have occurred but did not. This practice, known as 'clos[ing] the set that defines the variable' (Labov 1996: 78), aims to create a homogenous dataset that is not contaminated by semantically and pragmatically non-equivalent cases (see also Labov 1982: 30). Only once these instances have been identified and removed from the data pool will the remaining tokens respond well to quantitative analysis (Coveney 2007: 103).

The steps involved in circumscribing the variable context (Poplack & Tagliamonte 1989: 60) are variable-specific and detailed in Sections 3.1 in Chapters 3–5 respectively. Nevertheless, for all variables under investigation in the present

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[26] See also http://www.flloc.soton.ac.uk.

study, a number of tokens were excluded in keeping with best practice in the analysis of spontaneous speech (see Tagliamonte 2006: 86–94). Firstly, all instances that involved potential priming by the interviewer were removed, as in example (1).[27] The effect of structural priming has been well documented in the psycholinguistic literature (see Bock & Kroch 1989; Boyland & Andersen 1998; Bock & Griffin 2000; Gries 2005). It was therefore important to remove any token that may have been selected due to the influence of the researcher.

(1) *Interviewer priming*

　　NSR:　　Vous **allez rester** en Martinique?

　　　　　　 'Are you going to stay in Martinique?'

　　MYR:　　Moi je **vais rester** en Martinique.

　　　　　　 'I'm going to stay in Martinique.'

Additionally, tokens appearing in indirect speech were excluded, as in (2). This is because it is not possible to code for the original speaker's social characteristics when tokens occur in reported speech. To this end, the only occurrences of the variants under examination that were retained for further analysis were those produced by the informants *themselves*.

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[27] For consistency, all of the following examples include tokens of future temporal reference (see Chapter 5).

(2) *Reported speech*

Elle disait « il faut rentrer parce que les crapauds **vont entrer** dans la

maison ». [ANP]

'She said "We've got to get back because toads are going to get into the

house".'

A similar set of exclusions involves instances of a variable occurring in metalinguistic commentary, as in (3) when WIP imitates a speaker from Guadeloupe. Tokens realised in this category must be discarded since these constructions are also imitative (Tagliamonte 2006:90).

(3) *Metalinguistic commentary*

« Aujourd'hui le ciel est bleu et on **va prendre** beaucoup de poissons. »

[WIP]

'Today the sky is blue and we are going to catch a lot of fish.'

Furthermore, only those tokens occurring in fully-formed utterances were included in the ensuing analyses. Incomplete utterances, due to either an interruption (4) or the speakers trailing off (5) were likewise excluded.

(4) *Interruption*

Alors qu'en France on **va arrive** +/- [NOR][28]

'While in France, you are going to arrive +/- '

+/- Les gens ils parlent pas ils disent pas bonjour! [MAC]

' +/- People don't speak, they don't say "hello"!'

(5) *Trailing off*

Quand vous allez faire votre petit marché y **aura [...]** achetez des fruits !
[DOT]

'When you go to the market there will be [...] buy fruit!'

Finally, all instances of verbatim repetition (6) and reformulation (7) were
included only once. Following Buchstaller (2004: 26–31), such tokens were
categorised according to the last variant used in the utterance and all initial forms
were rejected.

(6) *Repetition*

Je vais fêter [/] je **vais fêter** le carnaval oui. [OLM][29]

'I am going to celebrate-I am going to celebrate carnival of course'.

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[28] According to the CHAT transcription protocol, '+/-' indicates an interruption.

[29] In CHAT, [/] and [//] signal a repetition and a reformulation, respectively.

(7) *Reformulation*

Je pourrai [//] je **peux** pas franchement. [TEM]

'I will-can't frankly'.

3.2 Linguistic and Social Conditioning Factors

The variationist linguistic enterprise seeks to correlate the use of sociolinguistic variants with linguistic and social conditioning factors (Chambers 2003: 17, see also Tagliamonte 2006, 2012; Walker 2010). Following the accurate delimitation of the variable context, it is therefore necessary to formulate hypotheses concerning the constraints which may govern variant selection. Importantly, these postulates must be grounded in the relevant research literature and may relate to the linguistic environment or extralinguistic factors, such as speaker age, sex or educational level (see Section 2.3 above). For example, Simmons, Nadasdi and Mougeon (2011) hypothesise that the type of complement, grammatical number and social class might govern the type of construction used by speakers to express the notion of 'going' in the past in Ontarian French based on previous research on the same variety of Laurentian (see Alexandre 2004). In the present study, the coding schemata represent a series of hypotheses regarding the factors that might govern the choice of competing variants in Martinique French. For instance, in Chapter 5, it is hypothesised that the temporal distance between the speech act and the future eventuality, as well as the certainty of outcome, constrain how speakers encode future time in spoken French (see also Chapter 1 Section 3.4).

Research hypotheses are thus derived from the extant literature and are operationalised as testable factor groups (also known as independent or predictor varia-

bles). In any analysis, they must be orthogonal (Guy 1988), or independent from each other, and comprise at least two factor levels which may provide a favouring or a disfavouring environment for variant selection. I outline the coding protocol for all three variables under investigation in Sections 3.2 and 3.3 of Chapters 3–5.

3.3 Data Analysis

The first stage of quantitative data analysis involves computing the frequency of each variant in my Martinique corpus. I calculate the relative frequency of individual variants in proportion to the total number of potential occurrences (see Sections 4.1 in variable chapters). In practice, variant frequency is calculated by dividing the raw token count of a variant by the total number of potential occurrences, i.e. the overall frequency of the variable. To ensure maximal comparability with previous and future research, I follow standard variationist methodology and report both the raw empirical data as well as the normalised results (Macaulay 2002: 299; Tagliamonte 2006).

To determine which linguistic and social constraints significantly contribute to variant choice and to uncover the variable grammar that underpins the choice of variant forms, the data are submitted to statistical analyses (see Sections 4.2 and 4.3 of variable chapters). Variationist research has long-demonstrated that multiple contextual factors condition variation in a language at the same time (the 'principle of multiple causes', Young & Bayley 1996: 253). Mainstream variationist methodology therefore advocates examining all factor groups simultaneously, instead of carrying out a factor-by-factor analysis and treating individual constraints in isolation (Bayley 2002; Paolillo 2002; Tagliamonte 2006).

To this end, I use the standard statistical tool in variationist research, namely fixed-effects multiple logistic regression.[30] While this analysis has traditionally been performed using the Varbrul software packages, e.g. GoldVarb Lion (Sankoff, Tagliamonte & Smith 2012),[31] this dissertation relies on the increasingly prevalent Rbrul program which has become very popular in recent years (Johnson 2009). The main functions of Rbrul are the same as GoldVarb: the software uses a stepwise multiple logistic regression procedure to assess the contribution of the predictor (independent) variables on the choice of the binary response (dependent) variable. However, the Rbrul program offers a number of advantages for data analysis (Johnson 2009: 360–365). For instance, unlike GoldVarb, it can handle continuous variables. As such, the language restriction predictor variable in the present study (see Section 2.3.4) does not have to be packaged into discrete groupings.[32] Also, Rbrul can better deal with KnockOuts (Tagliamonte 2006: 152–153) and interaction effects can be tested in a very straightforward manner.[33]

Another benefit of using Rbrul for quantitative analysis is that the software incorporates mixed-effects modelling (see Baayen 2008). Traditional fixed-effects models cannot account for speaker-level and word-level variation. In other words,

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[30] Recently, newer statistical techniques are being used for sociolinguistic data analysis, such as Random Forests and Conditional Inference Trees (Tagliamonte 2012: 152–155; Tagliamonte & Baayen 2012: 158–167).

[31] See Tagliamonte (2006) and Walker (2010) for detailed discussions on how to carry out multivariate analyses in GoldVarb.

[32] I do not consider speaker age to be a continuous variable since my informants cluster into two clearly defined age brackets, i.e. those under 20 and those over 39 years old. The treatment of age as a continuous variable would thus be artificial and mask a binary condition.

[33] Though see Sigley (2003) and Buchstaller & D'Arcy (2009) for examples of how to manage interaction effects in GoldVarb.

they assume that there is no variation above the level of the token. This assumption is not warranted as linguistic data 'are naturally grouped according to the individual speakers who produced them' (Johnson 2009: 363). Mixed models, on the other hand, are capable of taking random effects, such as individual speaker and word-level variation into account.[34] They are therefore 'able to account for the fact that individual speakers may contribute different amounts of data, and that they may favour or disfavour individual variants as well as particular factor levels to a greater or lesser degree than a fixed model would predict' (Pichler 2013: 33). This approach to data analysis is of particular relevance to the present study as high levels of interspeaker variability have previously been reported in the speech of individuals living in island communities (Schreier 2006). A mixed-effects model thus reduces the risk that outliers might skew the results since the program only selects factors as statistically significant 'when they are strong enough to rise above the inter-speaker variation' (Johnson 2009: 365).[35]

The results of the multivariate analyses in question are displayed in tabular form in Chapters 3–5 and an example is given below in Table 2.3. Importantly, I assess the effect of linguistic and social factors separately (see discussion in Meyerhoff 2009b). This analytical step reduces the possibility of Type II errors, i.e. Rbrul failing to identify an effect that does exist (Johnson 2009: 365; Tagliamonte

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[34] The main difference between fixed and random effects is that the former are repeatable. For instance, a fixed effect, such as preceding phonological context, would have identical factor levels in a replication study of the same speech community. However, individual speaker is considered a random effect, as a new random sample of the population would yield a completely different set of speakers (see Johnson 2009).

[35] Note, however, that it is also possible to model individual variation using GoldVarb (see Paolillo 2013).

2012: 130–131, 141). It is also in keeping with the French variationist tradition
(see also Ashby 1980, 1981; Emirkanian & Sankoff 1984; Poplack & Turpin 1999;
Armstrong 2001; Coveney 2002; Grimm 2010; Poplack & Dion 2009; Auger &
Villeneuve 2010; Comeau 2011; Sankoff & Wagner 201; Roberts 2012; Zahler
2014 *inter alia* for an identical approach to data analysis).

	Centered Factor Weight	%	N	Tokens	Log-odd
Style					
Informal	0.57	66.2	210	317	0.276
Formal	0.43	53.4	408	764	-0.276
Range 14					
Educational level					
No qualifications	0.56	61.1	209	342	0.230
Baccalauréat	0.49	60.2	148	246	-0.039
University degree	0.45	52.9	261	493	-0.191
Range 11					
Language restriction				+1	0.021
Not significant: Sex					

Deviance=1447.123; df=5; Intercept=-1.227; Mean=0.572; Nagelkerke R^2=0.036

Table 2.3: Example of an Rbrul analysis results table.

Each table presents the total number of tokens per cell (see **Tokens** in Table 2.3),
the number of tokens of the application value, i.e. the non-standard variant, for
each factor level **(N)** and the relative proportion of the application value **(%)**. In
all of the multivariate tables, I also detail the **deviance**, the degrees of freedom
(df), the **intercept** and the **grand mean**. The deviance is a quantitative measure of
how well the model fits the data. In other words, it assesses the extent to which
the actual data deviate from the predictions of the model: the smaller the deviance,
the better the fit. The degrees of freedom relate to the number of observations that
are free to vary (see Field, Miles & Field 2012: 38). The intercept acts as the base-

line for the model and can be combined with log-odds to calculate a specific pre-diction that the model would make (Johnson 2009: 361–362). The grand mean indicates the overall frequency of that response variable in the data. Finally, I give the **Nagelkerke R^2** value for the fixed-effects models, which is used to gauge the proportion of the variation in the data that is explained by the model.

The impact of a particular factor on the application value is presented as a re-gression coefficient. In Rbrul, these are expressed as both a **log-odd** and a **cen-tred weighted probability** (or **factor weight**).[36] Log-odds range from positive to negative infinity: In general, a positive log-odd indicates a favouring effect, a negative log-odd is a disfavouring effect and a value of 0 indicates a neutralizing effect. In contrast, weight probabilities are measured on a scale from 0 to 1: A fac-tor weight greater than 0.5 denotes a favouring effect, less than 0.5 signals that the application value is disfavoured and a factor weight of 0.5 is neutral.[37] Since the vast majority of sociolinguistic research presents results as factor weights, I have chosen to report both types of regression coefficient for nominal factor groups. However, I report only the log-odd value for continuous variables, such as 'lan-guage restriction' in Table 2.3. In these cases, the predictor variable is not a factor group and therefore cannot be assigned a corresponding factor weight.

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[36] In GoldVarb, regression coefficients are only presented as uncentred factor weights. These coefficients are affected by the size of the cell they represent. Given the unbalanced nature of so-ciolinguistic data, Rbrul automatically centers all factor weights when they are converted from log-odds (Johnson p.c.).

[37] Tagliamonte (2006: 156) notes that the interpretation of factors weights is not necessarily such a straightforward matter. In reality, factors only favour/disfavor the application value relative to the other factors within the same factor group (Johnson p.c.). It is the relative position of a fac-tor in the constraint ranking that is more important than the actual factor weight (cf. also Ta-gliamonte & Smith 2005; Auger & Villeneuve 2008).

To build a more complete picture of the variable grammar in the variety of French under investigation, multivariate analyses provide us with 'three lines of evidence' (Poplack & Tagliamonte 2001: 93–94; Tagliamonte 2002; Tagliamonte 2013: 122–124). These are: (a) statistical significance, (b) the range and (c) the constraint hierarchy. Concerning statistical significance, the factor groups displayed in Table 2.3 and in the logistic regression models featured in Chapters 3–5, have all attained significance at the $p<0.05$ level and thus influence speakers' choice of variant in speech. The **range**, also known as the magnitude of effect, is the value which indicates the relative strength of a factor group and situates it with respect to the other predictor variables: the greater the range, the greater the effect of the factor group on variant choice. Finally, the constraint hierarchy is the ordering of the factors in a factor group from the most to the least favouring context.

These three results will be used to establish and explain the constraint systems underpinning the variability in the morphosyntax of Martinique French speakers. They will be further discussed in relation to each variable under study in the forthcoming chapters and will allow us to triangulate the use of variants in Martinique with previously studied French speech communities located in Canada and Europe.[38]

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[38] For comparative research on varieties of English, see Poplack & Tagliamonte (1991, 1999 2001), Tagliamonte (2013) and Tagliamonte, Durham and Smith (2014), amongst others. See also Meyerhoff (2009a) for a discussion of the use of the comparative framework in the context of language contact.

4. Conclusion

This chapter discussed the theoretical framework and methodological approach used in the present study to investigate grammatical variation in Martinique French. I detailed the corpus of spoken Martinique that will serve as the primary data source for the forthcoming chapters. I also presented the quantitative methods employed to examine linguistic variability in the data. The next three chapters offer quantitative analyses of three morphosyntactic variables: In Chapter 3, I investigate the doubling of subject NPs, before examining the use/non-use of the negative particle *ne* and the variable nature of future temporal reference in Chapters 4 and 5.

CHAPTER THREE: THE DOUBLING OF SUBJECT NPs

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1. Introduction

This chapter presents a quantitative variationist investigation of subject doubling (henceforth SD). As introduced in Chapter 1 Section 3.2, SD refers to a feature of non-standard French in which a subject can be variably realised with an anaphoric subject clitic (e.g. 3SG/PL *il(s)* and *elle(s)*) or the demonstrative subject pronoun *ce*/*ça*) without contrastive or emphatic stress, as in (1) and (2).

(1) *Subject doubling present*

a. **Mon grand-père il** parle que le créole. [MYR]

My granddad 3SG speak.PRES.3G only the creole

'My granddad only speaks Creole.'

b. **Lui il** était presque mort. [OLM]

3SG 3SG be.IMPERF.3SG almost dead

'He was almost dead.'

(2)   *Subject doubling absent*

   a. **La   mer ø** est   rentrée   dans certaines   maisons. [DOT]

      The   sea ø be.PRES.3SG go.in.INF   in   certain   houses

      'The sea came in certain homes.'

   b. **Eux ø** nous font   sentir   que vous êtes   antillais [MAC]

      3pl   ø 1pl   make.pres.3pl feel.inf that 2pl   be.pres.2pl Caribbean

      'They make us feel as though you're from around here.'

The SD construction (3) shares a number of properties with another feature of French, namely left dislocation (4) (Carroll 1982; Roberge 1990). Indeed, both sequences comprise a subject NP and a co-referential subject pronoun occurring pre-verbally.[1]

(3)   *Subject doubling*

   Mon père il chante bien.

   'My father sings well.'

(4)   *Left dislocation*

   Mon père, il chante bien.[2]

   'My father, he sings well.'

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[1] Unlike left dislocation, however, the SD construction is not grammatical in written French.

[2] Orthographically, left-dislocated subjects are differentiated from doubled subjects by a comma placed between the noun phrase and the clitic.

Certain studies claim that, despite having the same surface structure, cases of left dislocation and SD can be differentiated based on prosody (Nadasdi 1995, 2000; Auger & Villeneuve 2010; Villeneuve & Auger 2013). In contrast to SD, a left-dislocated subject is argued to be separated from the verb by a pause, bear contrastive or emphatic stress, and is supposedly unable to undergo liaison.[3] However, Deshaies et al. (1992: 32) suggest that these criteria are not always perceptible or relevant in spoken language (see also Coveney 2003: 114). Indeed, speakers may pause or omit liaison for a reason other than differentiating between a dislocated and a doubled subject. Coding for such a distinction on this basis of prosody is therefore unreliable. Similarly, Sankoff (1982: 85) argues that both left dislocation and subject doubling merely represent different stages in the same grammaticalisation trajectory. With this in mind, I therefore follow the practice of the majority of previous empirical work examining this variable (cf. Ashby 1980; Nagy, Blondeau & Auger 2003; Coveney 2003, 2005; Zahler 2014 *inter alia*) by not distinguishing between cases of SD and LD.[4]

The present chapter answers three main research questions. Firstly, what is the overall rate of SD in spoken Martinique French? Secondly, which linguistic and social factors govern SD in this regional variety? Thirdly, to what extent do the

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[3] Liaison is the pronunciation before a vowel-initial syllable of a word-final consonant that would not be realised in other phonetic environments, such as before a consonant or a pause. Liaison can be impossible (e.g. *j'ai cent **u**n livres ans* 'I have 101 books'), obligatory (e.g. *le**s a**utres* 'the others') and variable (e.g. je vai**s e**ssayer 'I am going to try). Armstrong (2000: 177–208) presents a sociolinguistic study of variable liaison in Dieuze French. See also Battye, Hintze and Rowlett (2000: 105–112) for more information on liaison and other linking phenomena in French.

[4] But see Nadasdi (1995) and Villeneuve & Auger (2013) for different conceptualisations of the variable.

results corroborate the findings reported in the existing French variationist litera-

ture on this particular sociolinguistic variable? The chapter is structured as fol-

lows: In Section 2, I review the quantitative sociolinguistic literature on the use of

SD constructions in French. Section 3 outlines the methodology adopted in the

present study. Section 4 is devoted to a quantitative analysis of my results and is

followed by a conclusion summarising the chapter as a whole.

2. Literature Review

SD is attested across Romance languages, such as European Portuguese (Martins

2009), dialects of Northern Italian (Roberge 1990) and Faetar (Heap & Nagy

1998).[5] To date, our knowledge of SD in spoken varieties of French is based on

empirical data from both Canadian (G. Sankoff 1982; Nadasdi 1995, 2000; King

& Nadasdi 1997; Auger & Villeneuve 2010) and European varieties (Ashby 1980;

Sankoff 1982; Campion 1984; Coveney 2003, 2005; Villeneuve & Auger 2013;

Zahler 2014).[6]

   Below, I review existing studies of the phenomenon in different French

speech communities before examining the variable data in my own Martinique

corpus. I take each variety in turn and focus on (i) the data collection methods; (ii)

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[5] SD is also a feature of Dutch (van Craenenbroek & van Koppen 2002; De Vogelaer & Devos 2006; Barbiers 2008) and Finnish (Holmberg & Nikanne 2006). In varieties of English, the use of subject doubling without emphatic or contrastive marking is restricted to the Southern US dialects (Wolfram & Christian 1976; Southard & Muller 1998).

[6] See Labelle (1976) for an analysis of SD in the speech of young children (ages 5:0–5:11) in Montréal and Paris. This variable has also been studied in the L2 French of Anglo-Montréalers (see Nagy, Blondeau & Auger 2003).

the evolution of the variable context; (iii) the overall rate of SD and (iv) the significant linguistic and social variables influencing variant selection.

2.1 Canadian Varieties

King and Nadasdi (1997: 273) examine the behaviour of subject clitics in a conservative variety of Acadian French spoken in Newfoundland. Their quantitative investigation reveals that subject doubling does not occur in this particular Acadian speech community. On the other hand, Beaulieu and Balcom (1998: 14) report that SD is permissible in the Acadian variety spoken in Terre-Neuve, New Brunswick. They do not, however, present any quantitative evidence to support this claim. By contrast, all Laurentian varieties studied thus far have reported instances of SD in speech. For instance, in Sankoff's (1982: 84) study of four Montréal informants, frequency of SD is reported to be 55%, though rates are highly sensitive to style shifting. Indeed, one informant's rate of SD decreases from 38% in the home to only 0.5% at work (Sankoff 1982: 85).

Nadasdi (1995, 2000) is the first to quantitatively examine the linguistic and social constraints governing SD-use in French. The data were extracted from a 1978 corpus of 117 sociolinguistic interviews conducted with Francophone adolescents living in four French-speaking communities in Ontario (Mougeon & Beniak 1991). In contrast to prior research, Nadasdi (1995: 2) restricts the variable context to 3SG/PL full NPs subjects and strong pronouns 3SG *lui*, 3PL *eux* and 3PL *elle(s)* on the grounds that clauses containing a first or second person strong pronoun are categorically doubled in this variety. This investigation is also the first empirical study to differentiate between cases of left dislocation and SD (Nadasdi

1995: 3–4): subjects are considered to be left dislocated if there is a noticeable pause between the subject and the following verbal group and are thus excluded from quantitative examination.

The frequency of SD in this Canadian province is 27% (Nadasdi 2000: 57). Multivariate analyses furthermore reveal that a range of linguistic and social factors influence variant choice in Ontarian French. Firstly, the type of subject tops the constraint system, with a range of 58. While strong pronouns (FW=0.86), and proper nouns (FW=0.68) both favour subject doubling, common nouns and other pronouns, such as *quelqu'un* 'someone', disfavour this variant (FWs=0.46 and 0.28, respectively). Similarly, the specificity and definiteness of the subject NP are shown to have a robust effect on variant selection. Nadasdi (1995: 4–5) coded for this factor group by operationalizing a four-way split between [±definite] and [±specific] tokens.[7] Results indicate that SD is more likely to occur when the NP is both [+definite] and [+specific] (FW=0.59) and least likely when the subject has negative values for both (FW=0.19). Likewise, animate subjects are shown to favour SD (FW=0.53) more than inanimate ones (FW=0.37). Moreover, any element intervening between the subject and the verb has a favouring effect on SD-use. The presence of a relative clause (FW=0.79), an adverb (FW=0.78) or a hesitation (FW=0.65) increases the likelihood that speakers will employ an SD construction. This relationship is interpreted as evidence for a processing constraint:

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[7] In addition to traditional indefinite nouns, such as *certains* 'certain', all nouns that were preceded by an indefinite article were deemed to be [-definite]. Contrastingly, the category [+definite] includes all tokens preceded by a definite article, as well as proper nouns and personal pronouns. [+specific] NPs had an identifiable referent, while [-specific] ones did not. Section 3.2.1 provides further information on these definitions.

doubling increases when the subject is separated from the verb (Nadasdi 2000: 59). Contrastingly, the presence of a non-subject clitic, such as first person *me*/*nous* or second person *te*/*vous,* has a disfavouring effect on SD as speakers avoid strings of multiple clitics wherever possible (see also Morin 1979, 1981).

Concerning the extralinguistic constraints, two social factors were selected as significant in the GoldVarb analysis: language restriction and social class.[8] In Ontario, speakers whose dominant language is French double subjects more often (FW=0.66) than informants with a 50/50 language split (FW=0.50) or those who use English comparatively more in their daily lives (FW=0.35). Nadasdi (1995: 10–12) postulates that linguistic transfer from English, stylistic reduction and morphological simplification may explain why those speakers who use less French display a tendency to avoid SD when using this language.

A negative correlation is also detected between increasing rates of SD and social class (Nadasdi 1995: 15). Working class speakers favour the vernacular doubled variant (FW=0.70), while lower-middle (FW=0.43) and middle class informants (FW=0.34) prefer the standard non-doubled construction. However, this clear-cut stratification only holds for the French-majority town of Hawkesbury. This finding leads Nadasdi (2000: 65) to postulate that Standard French does not hold much value on the local *marché linguistique* (Sankoff & Laberge 1978) in the three other French-minority communities of Cornwall, North Bay and Pembroke. This could be because, unlike Hawkesbury, English is the more dominant language in these three communities.

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[8] Recall that the language restriction factor group quantitatively measures speakers' language-use habits (see Chapter 2 Section 2.3.4).

As we will see, the same linguistic constraints reported for Ontarian French are also operative in Québec (cf. Nadasdi 2000). Auger and Villeneuve (2010) conducted a more recent apparent-time study on variable usage in Saguenay. The data were extracted from a corpus of 18 one-on-one sociolinguistic interviews recorded between 1980 and 1982 (Paradis 1985). Auger and Villeneuve's definition of the variable context and coding protocol are comparable with Nadasdi's (1995, 2000) earlier research.

Variationist analysis of 1458 tokens reveals a high overall SD rate of 45%. The authors furthermore highlight the importance of considering individual speaker and verb type in accounts of SD variation. Their findings reveal a high incidence of inter-speaker variability: Doubling rates range from 79% (N=59) to 18% (N=155). In this variety, other elements occupying subject position are categorically doubled (N=14), whereas the presence of the negative particle *ne* prohibits SD (N=7). Additionally, Auger and Villeneuve (2010) demonstrate that the complexity of the subject NP plays an important role in variation selection (range=47). A fine-grained classification of the subject NP reveals that longer, more complex NPs, such as those with more than one complement or a relative clause, consistently favour subject doubling.[9] Contrastingly, speakers disfavour SD with NPs that have no modification (FW=0.46). A link between SD and the type of verb is also established. Speakers prefer to double the subject with frequent lexical verbs *avoir* 'to have' and *être* 'to be' and other lexical verbs

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[9] There is one exception to this general trend: Post-nominal adjectives are shown to disfavour SD (FW=0.36). However, the low occurrence of this modifier in the data (N=18) might skew the factor weight for this particular factor level.

(FW=0.58) but not with auxiliaries (FW=0.42) or modals (FW=0.29). This find-
ing might also indicate that frequency plays a role in variant choice: the highest
doubling rates are reported with the most frequent type of verb (i.e. *avoir* and *être*
as lexical verbs), whereas the lowest rate of SD is shown to co-occur with the
least frequent type of verb (i.e. modals).

2.2 European Varieties

Ashby (1980) is the first study to examine SD in Hexagonal French. The data
were drawn from the *Paris Corpus* (Malécot 1972), which comprises 25 hours of
spoken language surreptitiously recorded from 50 upper-middle class Parisians.
Distributional analysis suggests that the doubling of subject NPs occurs at a rate
of 21.1% (N=122) in Paris. In contrast, Campion's (1984: 219) study of adoles-
cent speech in the Parisian *banlieue* of Villejuif reveals a much higher rate of SD.
In this suburb, speakers display near-categorical levels of the phenomenon
(96.4%). Sankoff's (1982: 85) study of two speakers originating from Marseille
who double with a frequency of 86% corroborates this finding. A larger, more
sociolinguistically balanced speech sample would be required, however, to shed
further light on the frequency of SD in Hexagonal French.

   Ashby's (1980: 202–205) analysis of the social factors governing the choice
of doubled/non-doubled variants focuses on the influence of speaker sex, profes-
sion and age.[10] The findings for sex indicate that women display a more conserva-

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[10] Ashby provides no raw or relative token frequencies. Instead, for each factor, he gives both
the number and the percentage of speakers whose SD rate is higher than the corpus average.

tive linguistic behavior, with lower overall rates of SD than men. Furthermore, professionals double subject NPs much more frequently than administrators.[11] In contrast, teachers categorically employ the standard non-doubled variant and thus represent the most conservative group in the Paris data. The use of SD is similarly limited in the speech of the student informants. This result for teachers and students might indicate that the education system plays a role in variant choice, as it could promulgate the standard form. Finally, with respect to speaker age, the highest users of SD are those belonging to the middle-aged bracket (30–59 years old). The older and younger speakers actually pattern alike, with relatively low rates of SD. This age-related distribution is interesting as use of non-standard SD feature peaks during adulthood. The pattern is therefore the inverse of what would be expected for a traditional age-graded variable (see Bailey 2007). However, such age-related conservatism for the oldest and youngest groupings might be due to lifespan change for the older speakers and an attempt by the younger informants to be accepted amongst the social elite (see Ashby 1980: 204).

Coveney (2003, 2005) investigates SD in his *Picardy Corpus* (cf. Coveney 2002: 4–28), an 18-hour corpus consisting of one-on-one interviews conducted in the 1980s with 30 adults, all of whom originated from the Somme *département* in Northern France and were stratified by age, sex and occupation. Coveney (2003: 114–118) adapts Ashby's (1980) original methodology by focusing exclusively on the doubling of subject NPs and 3SG/PL emphatic pronouns (cf. also Nadasdi 1995, 2000). Results reveal an overall SD rate of 24.4% in this Picard variety, which is comparable to the findings for subject NP doubling amongst middle-class Parisi-

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[11] Ashby does not detail the types employment categorized as 'professional'.

ans (Ashby 1980: 200).

Two social factors are shown to condition variant frequency levels in Picard French: speaker age and social class. The rate of SD amongst the younger cohort of speakers (17–22 years old: 31.4%) is notably higher than that for the middle-aged participants (24–37 years old: 16.5%). Notably, this age distribution is the opposite of the findings for Paris (cf. Ashby 1980). These differing results might indicate that a different social value is attached to SD constructions in both localities. In Picardy, the age differentiation matches the results for the variable omission/retention of the negative particle *ne* (Coveney 2002: 55–90). For both variables, Coveney (2005: 105) suggests that the synchronic age patterning could be indicative of age grading. There is, however, currently no real-time evidence to support or refute this apparent-time interpretation.[12] Furthermore, social class governs variant choice (Coveney 2003: 135): Working class informants employ SD constructions much more frequently (41.8%) than lower-middle (19.6%) or middle class speakers (17.5%).

Coveney (2003: 138–139) also operationalises style by examining the situational setting of two interviews conducted with the same individual: a 37-year-old male recorded in his office at work and outdoors on a walk. The change in interview location resulted in a notable style-shift by the individual. His overall SD rate increased from 5% in a more formal work setting to 18% in a less formal so-

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[12] As I will further discuss in Chapter 4, both trend and panel studies examining variable *ne* in varieties of European French indicate that the loss of *ne* does indeed represent an ongoing linguistic change and is not a case of stable age grading (cf. Ashby 1981, 2001; Armstrong & Smith 2002; Hansen & Malderez 2004). To date, no real-time study has tracked the evolution of SD in any variety of French.

cial environment (see also Sankoff 1982 for a similar style shift in Montréal French). This finding—albeit based on only one individual—might therefore indicate that speakers are sensitive to the socio-stylistic function of SD in speech. It furthermore highlights an important cross-dialectal trend, as the same situational shift is also attested in Montréal (Sankoff 1982), though further research with a larger number of speakers is required.

Villeneuve and Auger (2013) examined SD in both the French and Picard varieties spoken in the Vimeu area of the Somme. Although the main focus of the paper centres on whether speakers maintain distinct grammars in both languages, the authors quantitatively investigate the doubling of subject NPs and 3SG/PL strong pronouns in the speech of four monolingual and four bilingual speakers. Unlike previous research on SD-use in Hexagonal French (Ashby 1980, Coveney 2003, 2005), cases of left dislocation were distinguished from SD when a prosodic break between the subject NP and the rest of the utterance was detected (Villeneuve & Auger 2013: 118, see also Nadasdi 1995, 2000).

Quantitative examination reveals that bilingualism influences the level of SD in French to a significant degree. French monolinguals are shown to use the device more frequently (42%) than their bilingual counterparts (25%) (cf. also Nadasdi 1995). This finding is somewhat unexpected: since subject doubling in Picard is obligatory, any linguistic transfer from Picard ought to cause bilinguals to produce higher doubling rates in French (Vasseur 1996; Auger 2003 *inter alia*). However, Villeneuve and Auger (2013: 121) postulate that the bilingual participants—who are were all involved in a social movement to promote the use of Picard—might have developed an increased metalinguistic awareness of the varia-

bility in the French subject NP. They therefore posit that these speakers might actually use SD when they speak French to highlight and mark their Picard identity to monolingual French interlocutors (cf. also Coveney 2005: 103).

Finally, a recent article focuses on SD in Parisian French (Zahler 2014). The data were drawn from 17 sociolinguistic interviews in the *Corpus du français parlé parisien des années 2000* (Branca-Rosoff, Fleury, Lefeuvre & Pires 2012). Zahler's definition of the variable context and coding protocol are based on the more recent studies of Laurentian French (cf. Nadasdi 1995, 2000; Auger & Villeneuve 2010), which facilitates trans-Atlantic comparison. However, no distinction is made between doubled and left-dislocated subjects, as Zahler (p.c.) considers both features to be at opposite ends of the same grammaticalisation path (cf. also Sankoff 1982: 85; Nagy et al. 2003: 78). Additionally, she excludes the strong feminine pronouns *elle(s) from* the variable context because both 3SG *elle* and 3PL *elles* are homophonous with their weak clitic counterparts, i.e. Hexagonal speakers realise all forms as [ɛl].[13]

The overall rate of SD in Zahler's dataset is 22% (N=1097), which is almost identical to Ashby's (1980) findings for the same city. GoldVarb models select sentential polarity as the strongest linguistic factor group governing variant choice. Zahler operationalises polarity as a ternary factor group consisting of affirmative tokens, negative contexts with the negative particle *ne* omitted and negative contexts with the negative particle retained (i.e. full-bipartite negation). In Paris, the retention of *ne* strongly disfavours SD (FW=0.09, see also Nadasdi 2000; Auger

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[13] This contrasts with Laurentian French varieties, in which the strong pronoun is pronounced [ɛl] but its clitic counterpart is typically realised as either [al] or [a].

& Villeneuve 2013), whereas subject doubling is favoured when the negative particle is omitted (FW=0.71). However, affirmative tokens are shown to have a neutralising effect on variant choice (FW=0.53).

Importantly, Hexagonal French differs from its Canadian counterpart in that semantic factors, such as the definiteness and the specificity of the subject NP, are not operative in mainland Europe. Both factor groups have consistently been shown to govern variant choice in previous Canadian research. Zahler's finding could therefore highlight a key varietal difference, though more research on other European French speech communities is needed to substantiate this claim.

Speaker age is identified as the strongest social determinant of variant choice, with a range of 24. The older speakers are the only cohort to favour SD in this variety (FW=0.62). Interestingly, this result is a reversal of the trend reported in previous work on Hexagonal French (Ashby 1980; Coveney 2003, 2005). However, further examination reveals an important interaction effect between speaker age and sex. The younger male informants display comparatively lower rates of SD (5%, N=33) compared to their female peers (21%, N=33). Notably, the female informants in the middle age bracket reduce their SD frequency (15%, N=230) as they engage with the *marché linguistique*, while the older speakers show a marked increase in their use of SD post-retirement (31%, N=290). This age-related pattern for the female speakers thus corroborates Coveney's (2005: 105) synchronic interpretation of age grading. It does, however, contrast sharply with Ashby's (1980) Paris data, in which the middle-aged speakers increased their SD-use compared to the younger and older informants.

In summation, previous sociolinguistic studies have demonstrated that the SD-

phenomenon is, on the whole, more frequent in Québec and Ontarian varieties than in European French speech communities. Although the envelope of variation is not defined in exactly the same way in every study, the same set of linguistic factors govern subject doubling across all Canadian and Hexagonal studies. The use of SD constructions in speech is influenced by the type of subject, the complexity of the subject NP, strong agreement, subject animacy, the presence of intervening elements/non-subject clitics, sentential polarity and the type of verb. The main difference between Canadian and European French relates to the definiteness and specificity of the subject NP (see also Section 3.2.2). These constraints have consistently been shown to influence variant choice in varieties of Canadian speech but do not appear to play a role in European French, though there is currently a lack of research examining this feature in the latter varieties.

I now present the methodology used to investigate SD in Martinique French in Section 3.

3. Methodology

This section has two main goals. Firstly, in Section 3.1, I define the envelope of variation, identifying those tokens which fall outside the variable context and which are therefore excluded from quantitative analysis. In Sections 3.2 and 3.3, I present and explain the way in which the linguistic and social constraints hypothesised to constrain SD in my Martinique data were operationalised.

3.1 Excluded Tokens

In keeping with the Principle of Accountability, described in more detail in the previous chapter (Labov 1966: 49; 1969: 737–738; 1972: 72), it was first necessary to identify and extract every occurrence of the phenomenon, as well as those instances in which SD could have occurred but did not. I manually extracted from my Martinique corpus all common nouns (5); proper nouns (6); strong pronouns (7);[14] other pronouns, such as *quelqu'un* 'someone' or *tout le monde* 'everyone' (8); and other sentential constituents occupying subject position, like those in (9).

(5) *Common noun*

   Les enfants ø viennent en vacances. [MAN]

   'Children come on holiday.'

(6) *Proper noun*

   Marie-Jo elle est née comme ça. [JOU]

   'Marie-Jo was born like that.'

(7) *Strong pronoun*

   Lui il va nous parler en créole de temps en temps. [NOR]

   'He will speak to us in Creole sometimes.'

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[14] The term 'strong pronoun' refers to the stressed pronouns 1SG *moi*, 2SG *toi*, 3SG *lui*, *elle* and *ça*, 1PL *nous*, 2PL *vous* and 3PL *eux* and *elles*.

(8)   *Other pronoun*

Tout le monde ø habitait dans le bourg. [CHL]

'Everyone lived in the centre.'

(9) *Other sentential constituent*

Se baigner à la Seine c'est dégueulasse. [LUJ]

'Going swimming in the Seine is gross.'

The next step was to scrutinize the data and exclude those instances that did not represent loci of variation. I excluded a number of tokens falling outside the envelope of variation in line with the protocol first outlined in Nadasdi (1995: 2–4). This procedure for delimiting the variable context has also been replicated in more recent work (cf. Auger & Villeneuve 2013: 70–71; Zahler 2014: 362–365).

I first removed tokens containing a post-verbal subject from the data pool, as in (10) and (11). Such occurrences are instances of right dislocation, where the nominal subject appears post-verbally and yields the subject position to a clitic cataphor (Ashby 1988, 1994; Auger 1993). The clitic subject is categorically realised in such cases and is therefore not variable. As a result, only those tokens containing pre-verbal nominal subjects were considered to be cases of SD and were retained for further examination.

(10) *Right dislocation*

Elle fait sa vie, **la montagne**. [MYR]

'She does her own thing, the mountain.'

(11) *Right dislocation*

Ça fait bizarre quand **ils** parlent créole, **les jeunes**. [LUJ]

'It's weird when they speak Creole, young people.'

Thus far, the discussion has centered on what counts as instances of SD in spoken French. However, it was also necessary to exclude certain instances of SD cases from the quantitative analysis. Firstly, strong emphatic pronouns can only function as stand-alone subjects (i.e. without the support of a corresponding subject clitic) in 3SG/PL contexts. By means of example, both third person constructions in (12) are grammatically acceptable but only the equivalent second and first person expressions that are grammatical in any variety of French are (13a) and (14a) respectively.

(12) *Third person context*

   a. **Lui il** va aller au marché.

   b. **Lui ø** va aller au marché.

     'He is going to go to the market'.

(13) *Second person context*

    a. **Toi tu** vas aller au marché.

    b. *__Toi ø__ vas aller au marché.

    'You are going to go to the market'.

(14) *First person context*

    a. *__Moi je__ vais aller au marché

    b. *__Moi ø__ vais aller au marché

    'I am going to go to the market'.

As such, both 1SG/PL (15) and 2SG/PL subjects (16) are deemed to fall outside of the variable context. As almost all other studies reported in the literature review, (Nadasdi 2000; Coveney 2003; Auger & Villeneuve 2010; Zahler 2014), I removed tokens occurring in these environments from my dataset and restricted my analysis to 3SG/PL contexts.

(15) *1SG strong pronoun*

    Moi j'ai jamais vu la neige. [KAG]

    'I've never seen snow.'

(16) *2SG strong pronoun*

    Toi tu vas dire « bonjour » mais l'autre ne va pas te répondre. [NOR]

    'You are going to say "hello" but the other person won't answer you.'

Finally, both strong and weak feminine 3SG/PL subject pronouns *elle*(*s*) are typi-
cally pronounced [ɛl] in Martinique French.[15] It is therefore not possible to differ-
entiate between cases of doubling or repetition because both forms are homopho-
nous.[16] As such, I removed tokens with a 3SG/PL *elle*(*s*) subject from the dataset
(17). Similarly, constructions involving the 3SG strong neuter pronoun *ça* (18) are
excluded as they are categorically doubled in my data.

(17) *Third person strong pronoun elle*

   Elle elle comprend pas créole. [ELN]

   'She doesn't understand Creole.'

(18) *Third person neuter pronoun ça*

   Ça ça n'a pas fait du bien à l'économie de la Martinique. [TEM]

   'That didn't do Martinique's economy any good.'

In total, 1336 variable tokens, in which speakers could choose between doubled
and non-doubled variants in 3SG/PL contexts, were retained for quantitative
analysis. Each instance of the variable was subsequently coded for internal and
external constraints. In order to facilitate cross-dialectal comparison, this was
achieved by refining the coding protocols developed in previous SD research (cf.
Nadasdi 1995; Auger & Villeneuve 2010; Zahler 2014). The following sub-

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[15] This is also the case in European French but not in Laurentian varieties (see Section 2.2).

[16] Although it might be possible to distinguish strong and weak feminine pronouns on the ba-
sis of prosody, no such differences were detectable in my Martinique data.

sections discuss the conditioning factors included in the present quantitative analysis, focussing first on the linguistic constraints and then on the social factor groups.

3.2 Linguistic Factors

All tokens of the variable were coded for a total of eight factor groups, namely subject type, definiteness/specificity, animacy, complexity, the influence of intervening elements, the influence of non-subject clitics, sentential polarity and verb type. Each of these constraints has been shown to govern subject doubling in other varieties of French (see Section 2). The following sections outline how I operationalised each factor group in order to examine SD-use in Martinique French.

3.2.1 Subject Type

The effect of the type of subject has consistently been shown to be the most influential linguistic constraint governing variant selection in Canadian French varieties (Nadasdi 2000; Nagy et al. 2003; Auger & Villeneuve 2010).[17] Speakers display a tendency to avoid SD when the subject is either a common noun or an indefinite pronoun. In contradistinction, proper nouns actually favour SD constructions. Strong pronouns and other sentential constituents occupying subject position are similarly reported to have a strong favouring effect on SD.

Given the convergent results reported in previous studies, I coded each token

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[17] Zahler (2014) does not include this factor group in her multivariate analysis of Parisian French.

for its subject type, which includes distinguishing common nouns from proper nouns, strong pronouns from other (indefinite) pronouns, and other types of subject. Examples of different types of subject have previously been given in Examples (5)–(9).

3.2.2 Definiteness and Specificity

Previous Canadian research has shown that the definiteness and specificity of the subject NP also influences rates of SD.[18] These factor groups have been operationalised using the binary features [±definite] and [±specific]. Nadasdi (1995) reports that speakers are more likely to double subjects when the values for both features are positive: [+definite] and [+specific].[19] In contrast, negative values strongly disfavour SD. Auger and Villeneuve (2010) report similar findings. Their results, however, indicate that a small group of nouns, namely, indefinite generic subjects, respectively, strongly favour SD in spite of the fact that they are both [-definite] and [-specific]. Carroll (1981) similarly asserts that indefinite NPs can be doubled in Laurentian French. In European French, however, this constraint does not seem to govern variant choice (Zahler 2014).

In order to operationalise the [±definite] factor group, I adopted the *il y a* 'there is/are' test (cf. Nadasdi 1995). In essence, I coded the variable token as

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[18] The definiteness constraint is also attested cross-linguistically. For instance, verbs only agree with definite objects in Hungarian and Zulu (Wald 1979; Marácz 1987).

[19] In the theoretical literature, SD is hypothesized to be impossible with definite NPs (Roberge 1990: 63). This claim of categoricity is, however, not substantiated by empirical data for any variety of spoken French.

[+definite] if it was unable to function as the object of *il y a*. If this was not the

case, it was deemed to be [-definite]. For practical purposes, the [+definite] tokens

were those introduced with a definite article (19), as well as proper nouns and

personal pronouns. The [-definite] factor included all nouns that were preceded by

an indefinite article (20), as well as indefinite pronouns.

(19) *[+definite]*

La terre ø a commencé à trembler. [OLM]

'The ground started to shake.'

(20) *[-definite]*

Une région c'est un ensemble de départements. [WIP]

'A region is a collection of departments.'

For noun specificity, I adopted Suñer's (1988, see also Nadasdi 1995: 5) defini-

tion and defined [+specific] NPs those with an identifiable referent in the dis-

course, as in (21). I coded any token with an unidentifiable referent as [-specific],

as in (22).

(21) *[+specific]*

Son grand frère c'était un très bon ami à Aimé Césaire. [MAJ]

'His older brother was a very good friend of Aimé Césaire.'

(22) *[-specific]*

Les moustiques vous repèrent à distance donc c'est vous qu'ils piquent

avant. [KAG]

'Mosquitoes spot you from a distance so it's you who they bite before.'

In the research literature, both the [±definite] and the [±specific] factor groups

have been viewed as separate or as overlapping (see Hawkins 1978; Rando &

Napoli 1978; von Heusinger 2002). In keeping with previous variationist work

examining SD-use in French, I followed Nadasdi (1995, 2000) and Zahler (2014)

and combined both predictor variables to create a four-way interaction group. This

new factor group, henceforth termed 'strong agreement' (see also Auger 1996),

consists of [+definite, +specific], [+definite, -specific], [-definite, +specific] and [-

definite, -specific] tokens.[20]

3.2.3 Subject Animacy

The animacy of the subject has previously been hypothesized to condition rates of

SD in French with animate subject favouring the phenomenon more than inani-

mate ones (Sankoff 1982: 84; Auger 1996: 6; Auger 1998: 52–53).[21] This asser-

tion has been supported by empirical data from Ontario, Canada (Nadasdi 2000).

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[20] Note, however, that Auger & Villeneuve (2010) include both [±definite] and [±specific] as
separate factor groups within the same multivariate model.

[21] The animate or non-animate nature of the subject has also been shown to have an impact on
a variety of linguistic variables, such as dative/genitive alternation (Bresnan and Hay 2008; Ros-
enbach 2005) and auxiliary contraction in dialects of English as well as in AAVE (McLaughlin
2013, McLaughlin & MacKenzie 2013).

Consequently, in my study, occurrences of the variable were categorised depending on whether the subject was animate (23) or inanimate (24).

(23) *Animate*

Aimé Césaire il avait refusé de lui donner la main. [JUF]

'Aimé Césaire had refused to hand over to him.'

(24) *Inanimate*

Mais **l'immeuble** ø était vétuste. [MIP]

'But the building was dilapidated.'

3.2.4 Subject Complexity

The literature indicates that the complexity of the subject (also known as 'NP weight') may impact upon variant choice (Nadasdi 2000; Auger & Villeneuve 2010; Zahler 2014): longer and/or more complex subject NPs promote the use of SD constructions regardless of the variety under investigation.

The complexity of an NP subject can be measured using a variety of methods (Rickford et al. 1995) as in, for example, the number of syllables, prosodic words or major phrase boundaries. Both Szmerecsanyi (2004) and Shih and Grafmiller (2011) argue in favour of operationalizing NP weight as a simple word count due to the strong correlation between the various metrics (see also MacKenzie 2012). However, to enable maximal comparison with previous SD research, I chose to capture the potential effect of this constraint by adopting Auger and Villeneuve's (2010) fine-grained categorisation (cf. also Zahler 2014).

I therefore classified tokens into one of eight categories depending on the weight of the subject NP. I distinguished a simple subject (25) (i.e. the absence of any modification) from those containing one of seven different types of modification: whether there was an apposition (26), coordination (27), a pre-nominal modifier (28), a post-nominal modifier (29), a relative clause (30), a prepositional complement (31) or more than one complement (32).

(25) *No complement*

Ma mère elle était carbétienne. [ALB]

'My mum came from Carbet.'

(26) *Apposition*

Ma belle-sœur **Murielle** ø me disait ça tout le temps. [JOU]

'My sister-in-law told me that all the time.'

(27) *Coordination*

Le racisme **et** la discrimination ils existent toujours. [NOR]

'Racism and discrimination will always exist.'

(28) *Pre-nominal modifier*

Une **jeune** fille ø est tombée amoureuse d'un vampire. [MAC]

'A young girl fell in love with a vampire.'

(29) *Post-nominal modifier*

Mon plat **préféré** c'est quand il y a du poisson. [SAN]

'My favourite meal is when there is fish.'

(30) *Relative clause*

Les jeunes **qui sont nés là-bas** ils parlent pas créole. [LUJ]

'The youngsters who are born over there don't speak Creole.'

(31) *Prepositional complement*

La route **de Fonds-Saint-Denis** ø était complètement euh ravagée. [TEM]

The road to Fonds-Saint-Denis was completely destroyed.'

(32) *More than one complement*

Le niveau **alimentaire à la cantine** c'est pas très bon. [MAJ]

'The quality of the food in the canteen isn't great.'

3.2.5 The Influence of Intervening Elements

Elements intervening between the subject NP and the verb have been observed to influence rates of SD in previous research (Sankoff 1982; Nadasdi 2000; Nagy et al. 2003; Auger & Villeneuve 2010; Zahler 2014). In Canadian and European French, the presence of any intervening element promotes the use of SD constructions. This favouring effect has been linked to the increase in distance between the subject and the verb phrase, which promotes the doubling of the subject clitic to re-establish a link between the subject and the verb.

In this research, I first adopted a detailed coding schema to operationalise this variable based on previous protocols (see Auger & Villeneuve 2010 and Zahler 2014). I coded the data for the presence of adverbials (33), hesitations (34), discourse marker (35), emphatic pronouns (36), as well as other types of pre-verbal material, such as *oui* 'yes' (37) or *non* 'no'. I also distinguished the presence of more than one element (38) from the absence of any intervening unit (39).

(33) *Adverb*

Des gens **quand même** ils sont partis. [MIP]

'People still left.'

(34) *Hesitation*

Les enfants **er** ø restaient à la maison. [MAP]

'The children were staying at home.'

(35) *Discourse Marker*

Un garçon **ben** ø épouse telle fille parce qu'il y a le sentiment qui prime. [ALB]

'A boy marries a girl like that because emotion takes over.'

(36) *Emphatic pronoun*

Et le copain **lui** il ôte. [DOT]

'And the friend he takes off.'

(37) *Other type of intervening element*

La femme **oui** c'est le symbole. [NOR]

'The woman yes is the symbol.'

(38) *More than one element*

Ton compte **er ben** il est réglé à la maison. [JOB]

Your account er well it's settled at home.'

(39) *No intervening element*

Sa famille est née ici. [NOR]

'Her family was born here.'

3.2.6 The Influence of Non-Subject Clitics

The realisation of non-subject clitics has been shown to influence variant selection in both Canadian (Sankoff 1982; Nadasdi 2000; Nagy et al. 2003; Auger & Ville-neuve 2010) and European speech communities (Coveney 2003). In contrast to the presence of intervening elements (see Section 3.2.5), the presence of non-subject clitics strongly disfavours subject doubling. Morin (1981) has argued that this is because speakers display a tendency to avoid chains of multiple clitics whenever possible.

I thus created a binary categorisation and coded each token of the variable for the presence (40) or absence (41) of any pre-verbal non-subject clitics.

(40) *Presence*

Lui il **t'**emmerde. [MYR]

'He gets on your nerves.'

(41) *Absence*

Les békés ce sont des français qui viennent de Bretagne. [WIP]

'The békés are French people who come from Brittany.'

3.2.7 Sentential Polarity

Several studies report a correlation between polarity and the frequency of SD (Nadasdi 2000; Coveney 2003, 2005; Auger & Villeneuve 2010; Villeneuve & Auger 2013; Zahler 2014). In standard varieties of French, verbal negation is expressed through a bipartite 'bracketing' structure comprising of the pre-verbal negative morpheme *ne* and one of several post-verbal negative items. In speech, however, the negative particle *ne* is variably omitted and the negative meaning is marked through the sole use of post-verbal polarity items.[22] Both the omission of *ne* and SD are characteristic features of non-standard French (Ball 2000 *inter alia*).[23] In both Canadian and European varieties, doubled subjects rarely co-occur with *ne* in negative contexts, while high rates of SD are linked to high omission

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[22] As already noted in the Introduction, Chapter 4 contains a detailed investigation into the use of *ne* in spoken Martinique French.

[23] Although there is an almost categorical absence of the pre-verbal negative morpheme *ne* in Canadian French speech (Sankoff & Vincent 1977; Comeau p.c.), research on European varieties reveals that this particle is still used in spoken language (Ashby 1981; Coveney 1996; Armstrong 2001).

rates of the negative particle (Coveney 2005; Villeneuve & Auger 2013 *inter alia*).

The variable nature of the negative particle in Martinique French, led me to operationalise polarity as a three-way constraint (see Chapter 4).[24] This factor group therefore comprises affirmative tokens (42), negative utterances with only post-verbal negation (43) and negative utterances with full bipartite negation (44).

(42) *Affirmative*

Lui il est revenu. [MIP]

'He came back.'

(43) *Negative with ne omitted*

Mais la politique ça **ø** m'intéresse **pas** vraiment. [DOT]

'But politics doesn't really interest me.'

(44) *Negative with ne retained*

Les moustiques **ne** nous piquent **pas**. [LUJ]

'Mosquitoes don't bite us.'

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[24] The type of negation (bipartite versus post-verbal) has also been shown to govern variant selection for other linguistic variables, such as the variable expression of future temporal reference (see Roberts 2012 and Chapter 5).

3.2.8 The Type of Verb

The final linguistic factor group to be included in the multivariate analysis is verb type. Lexical verb has been reported to affect the frequency of SD across a range of different French varieties (Nadasdi 2000; Auger & Villeneuve 2010; Zahler 2014). Speakers are more likely to double a subject NP if the verb is lexical than if it is either an auxiliary or a modal. Also, verb frequency seems to have an effect on subject doubling: SD constructions are more likely with highly frequent lexical verbs like *avoir* 'to have' or *être* 'to be', though not when they act as auxiliaries (see Auger & Villeneuve 2010).

In order to test the effect of this constraint on my Martinique data, I operation-alised the type of verb based on Auger & Villeneuve's (2010) protocol, coding for co-occurrence of SD with lexical verbs *avoir* 'to have' or *être* 'to be' (45), other lexical verbs (46), auxiliaries (47) and modals (48).

(45) *Frequent lexical verb*

La télécommande **est** là. [GEM]

'The remote control is there.'

(46) *Other lexical verb*

Les enfants **se baignaient** nus. [IRL]

'Children swam naked.'

(47) *Auxiliary*

Dean **avait** pris la maison de Charles. [JOU]

'Dean had taken Charles' house.'

(48) *Modal*

Mon papa il **voulait** pas trop que je parle créole. [KAG]

'My Dad didn't want me to speak French.'

3.3 Social Constraints

I also coded the data for four social constrains, namely speaker age, sex, educational level and language restriction. As Section 2 demonstrates, each of these factors has been shown to affect the SD rates. The social factor groups are outlined below.

3.3.1 Age

Canadian studies indicate that this variable is stable in North American speech communities (Nadasdi 2000; Auger & Villeneuve 2010). Apparent-time work on European French, on the other hand, reveals conflicting results concerning the effect of speaker age on the frequency of subject doubling. This has led researchers to argue that the synchronic patterning is indicative of both age grading and a change in progress. In Ashby's (1980) Paris data, the use of the standard non-doubled variant only increases when speakers are engaged with the linguistic marketplace (Sankoff & Laberge 1978). However, it is the youngest speakers who

are the lowest users of SD in the *CFPP2000* Paris corpus (see Zahler 2014). This age stratification has lead Zahler (2014) to surmise that the phenomenon is, in fact, declining in spoken Parisian French.

In light of the complex findings for this factor group, I decided to test whether speaker age influences SD in Martinique. I coded my informants as either younger (under 19 years old) or older (over 39 years old).

3.3.2 Sex

The findings of previous studies suggest that the effect of speaker sex on variant selection depends on the variety under consideration. Men consistently favour constructions involving SD in Paris and northern France (see Ashby 1980 and Coveney 2003). By contrast, Zahler's (2014) more recent investigation of Parisian French indicates that it is the female speakers who actually prefer to double subject NPs. I therefore coded all the variable tokens for the sex of the speaker.

3.3.3 Educational Level

A connection has previously been established between informants' social class and the frequency of SD constructions (Nadasdi 1995, 2000; Coveney 2003). To date, however, no study has focused on the role education plays in determining variant choice by speakers. Nevertheless, a number of previous studies examining language variation and change in European French varieties have successfully shown that informants' level of education can be used as a diagnostic of their socioeconomic status (in the absence of a complex index; cf. Secova 2011, 2014 and

Roberts 2012, see also Labov 2001: 115). In the present study, I have similarly

chosen to use educational level as an indicator of speakers' social standing. As

detailed in Chapter 2 Section 2.3.3, I categorised my participants depending on

whether they have no formal qualifications, a *baccalauréat* or a university degree.

3.3.4 Language Restriction

Language restriction quantitatively measures the use of French in interpersonal

communication.[25] It has been operationalised extensively in research on bilingual

communities in Ontario, Canada, and has been shown to be operative across a

range of sociolinguistic variables (cf. Rehner & Mougeon 1998; Mougeon et al.

2002 *inter alia*). For example, Nadasdi's (2000) study on the use of clitics in On-

tarian French reveals that speakers who use less French on a daily basis display a

tendency to avoid structures containing bound morphemes (see also Andersen

1982). They furthermore exhibit a preference for morphologically simpler con-

structions (Mougeon & Beniak 1991).

   Importantly, Villeneuve and Auger (2013) have demonstrated that bilingual-

ism affect rates of subject doubling. However, to date, Nadasdi (1995, 2000) is the

only study to examine the extent to which varying levels of restriction in French

language use influence SD-frequency. His results demonstrate that language re-

striction does indeed correlate with SD-use, i.e. the probability that speakers will

double subjects increases the more often informants use French. In the light of

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[25] See Chapter 2 Section 2.3.4 for an in-depth discussion on language-use restriction in previ-
ous sociolinguistic research and how the language-restriction index was operationalised in the
present study.

this outcome, and given the wider findings of the Ontario investigations more generally, I chose to examine whether this constraint was also operative in my Martinique data by coding each token for the speaker's language restriction score.

I now present the results of my investigation on SD in Martinique French.

4. Results and Analysis

In this section, I first focus on the overall frequency of SD constructions in my Martinique data and then explore its distribution according to the linguistic and social conditioning factors previously hypothesised to govern its use in Section 3.2 and 3.3.

4.1 Overall Variant Distribution

The overall frequency of SD in Martinique French is 25.2% (N=337), which is in line with the results reported in previously studied Canadian and European communities. As Figure 3.1 displays, the incidence of SD in all European varieties investigated to date varies from 45% in Vimeu (Villeneuve & Auger 2013: 121) to 22% in Paris (Ashby 1980: 200). Similar usage rates are reported for Canadian French varieties: SD-use fluctuates from 55% in Montréal (Sankoff 1982: 84) to 27% in Ontario (Nadasdi 2000: 57).
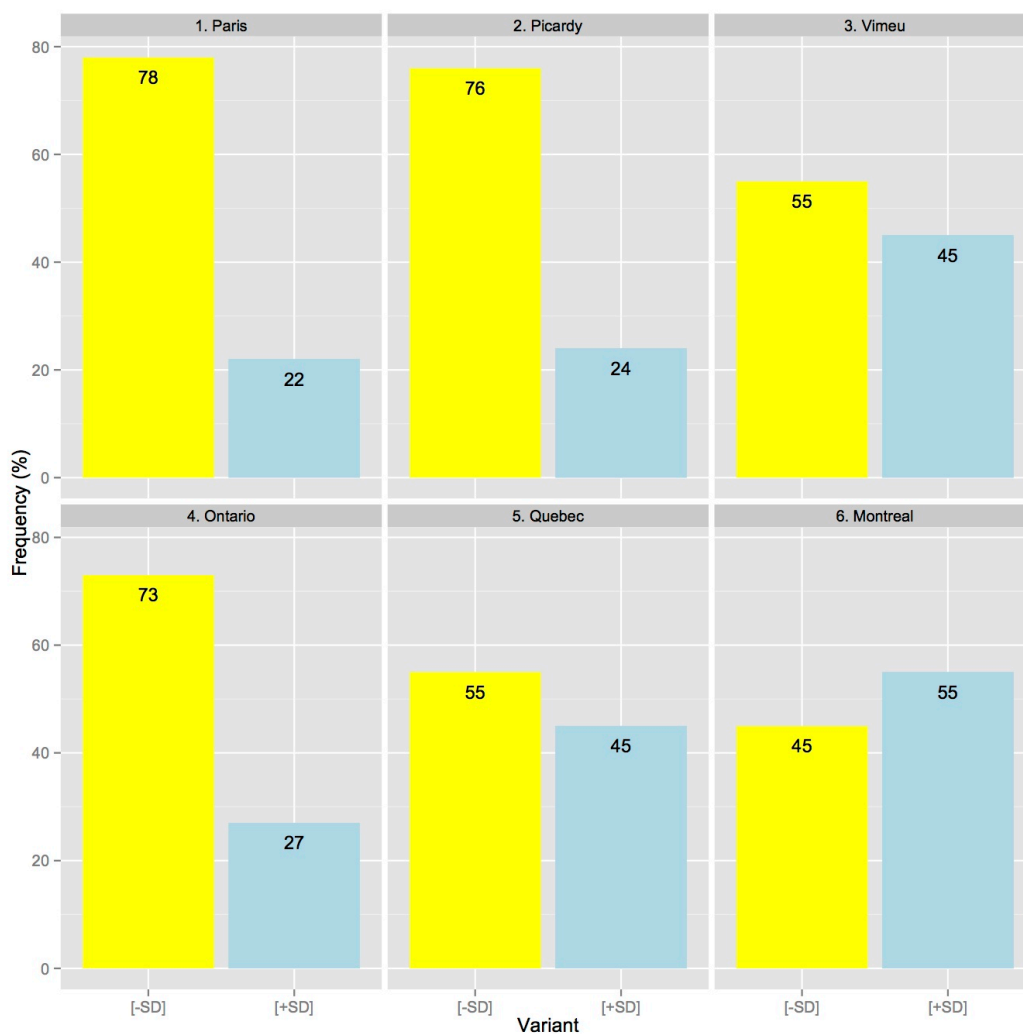
1. Paris (Zahler 2014) | 2. Picardy (Coveney 2003)

3. Vimeu (Villeneuve & Auger 2014)

4. Ontario (Nadasdi 2000) | 5. Québec (Auger & Villeneuve 2010)

6. Montréal (Sankoff 1982)

Figure 3.1: Distribution of SD variants from selected previous studies.

However, further examination of my data reveals a number of invariable contexts.

Table 3.1 illustrates that speakers categorically double the subject with other sen-

tential complements occupying subject position (100%, N=6).[26] Auger and Ville-
neuve (2010: 74) similarly report that this context is invariable in their analysis of
Saguenay, Québec. Furthermore, my Martinique data reveals high rates of dou-
bling with strong emphatic pronouns (96.9%, N=31). In contrast, informants rare-
ly employ SD constructions with other pronouns (4.2%, N=9; e.g. *tout le monde*
'everybody' or *quelqu'un* 'somebody'). The almost complete lack of variability in
these two contexts has not been reported for any other variety of French. In Qué-
bec, the frequency of SD is 78% (N=143) with strong pronouns and 25% (N=14)
with other pronouns (Auger and Villeneuve 2012: 77). In his study of Ontarian
French, Nadasdi (2000: 57) also reports comparable frequencies: 74% (N=145) in
the former and 12% (N=14) in the latter context.

Due to the lack of variation and low token counts in the three conditions dis-
cussed above, I thus chose to exclude tokens occurring in these environments
from further investigation (cf. also Blake 1997). Consequently, only those tokens
with a proper noun or common noun subject are examined, both of which exhibit
considerable variation. In Martinique French, speakers double subject NPs more
frequently with proper nouns (37.8%, N=59) than common nouns (28.3%,
N=262). The same pattern is similarly found in Ontario (Nadasdi 2000: 58–59)
and Québec (Auger & Villeneuve 2010: 78).

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[26] In such contexts, doubling can only occur with 3SG *ça*. Doubling is not permissible with a
clitic personal pronoun.

Subject Type	Presence of SD		Absence of SD		Total
	%	N	%	N	
Other complement (*aller à la page* 'going to the beach')	100.0	6	0.0	0	6
Strong pronoun (3SG *lui*, 3PL *eux*)	96.9	31	3.1	1	32
Proper noun (*Willem, Irmine, Charles*)	37.8	59	62.2	97	156
Common noun (*la voiture* 'the car')	28.3	262	71.7	665	927
Other pronoun (*tout le monde* 'everybody')	4.2	9	95.8	206	215

Table 3.1: Distribution of SD variants by subject type.

As Table 3.2 reveals, the decision to remove a number of tokens reduces the data pool from 1336 to 1083 instances of the variable. Once categorical contexts are removed, speakers of Martinique French in my corpus double subject NPs in 29.6% of all potential occurrences.

Variant	N	%
Presence of SD	321	29.6
Absence of SD	762	70.4
Total	1083	100.0

Table 3.2: Distribution of SD variants in Martinique French.

Sections 4.2 and 4.3 report my findings regarding the variable grammar that underpins the use/non-use of SD constructions. In other words, I investigate which linguistic and social constraints govern variant selection at a statistically significant level. All tokens of the variable were submitted to multiple logistic regres-

sion models using the program Rbrul (Johnson 2009) with SD set as the applica-

tion value. The output generated by this software allows us to identify the relative

magnitude of every factor group simultaneously within one model instead of treat-

ing individual constraints in isolation. Recall that, like GoldVarb Lion (D.

Sankoff, Tagliamonte & Smith 2012), Rbrul uses a step-wise multiple logistic

regression procedure to assess the contribution of each factor group to variant

choice when all constraints are considered simultaneously within one statistical

model. However, Rbrul also incorporates mixed-effects modelling. This effective-

ly allows it to account for the fact that individual speakers may contribute differ-

ent amounts of data as well as for the fact that informants may disfavour individu-

al variants to a greater or lesser degree than a fixed-effects model would predict.[27]

Importantly, the relative frequency of variants detailed above masks all inter-

speaker variability present in the data. This is important, as high rates of variation

between individual speakers have been previously reported in the SD literature, as

already noted. Auger and Villeneuve (2010: 75), for instance, illustrate that rates

of SD-use amongst speakers in Saguenay, Québec, range from 18% to 79%. Simi-

larly, Coveney (2005: 104 & 109) demonstrates that frequency varies from 0% to

67% amongst his Picardy speakers and that they each contribute between 7 and

128 tokens of the variable in total. Comparable levels of inter-speaker variability

are also evident in Martinique French, with doubling rates ranging from 60% to

0%. All in all, seven speakers use the SD construction over 50% of the time and

six informants exhibit usage rates below 15%.

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[27] See Chapter 2 Section 3.3 for more information on the quantitative methods used in this study.

Given the high level of inter-speaker variation and the differing token contributions per speaker, this variable is well suited to a mixed-effects analysis. The following two sub-sections present the results of the multivariate analyses with individual speaker included as a random effect. I do not report the outcome of any fixed-effects analyses. This approach to data analysis is due to the identical constraint systems and hierarchies in the fixed- and mixed-effects models.[28] As such, although individual rates of SD vary greatly from-speaker-to-speaker, informants' choice between doubled and non-doubled variants is governed by the same variable grammar (see also Auger & Villeneuve 2010: 76). I will first focus on the linguistic factor groups and then examine the social variables.

4.2 Linguistic Factors

The coding schema outlined in Section 3.2 essentially represents a series of hypotheses concerning which linguistic constraints might govern SD in Martinique French based on the findings of previous studies. Table 3.3 shows the frequency of SD by subject complexity. The data in the table reveal that SD constructions are more frequent when the subject NP is modified than when it is not, regardless of the type of modification. The only exception to this trend is when there is an apposition, which is categorically doubled. This factor level, however, contains a very low token count (N=2). The cross-tabulation furthermore reveals that only the factor level that contains enough tokens for multivariate analyses (see Guy's

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[28] Both Drummond (2012) and Pichler (2013) similarly only report the outcome of mixed models with speaker as a random effect.

1988 5% minimum threshold) is the 'simple subject' factor. With this in mind, I reclassified tokens as depending on whether they had a simple (49) or a complex subject (50). This latter category includes subjects containing a postnominal adjective, a postnominal modifier, a prenominal modifier, a PP complement, a relative clause, a coordination, an apposition or more than one modified element (see Section 3.2.4 for examples).

Subject Complexity	Presence of SD		Absence of SD		Total
	%	N	%	N	
More than one element	50.0	13	50.0	13	26
Relative clause	44.4	4	55.6	5	9
Postnominal adjective	42.1	8	57.9	11	19
Postnominal modifier	41.7	5	58.3	7	12
Prenominal modifier	38.5	10	61.5	16	26
PP complement	32.3	20	67.7	42	62
Coordination	28.6	2	71.4	5	7
Simple	28.2	259	71.8	661	920
Apposition	0.0	0	100.0	2	2

Table 3.3: Distribution of SD variants by subject complexity.

(49) *Complex subject*

La porte de mon garage électrique en aluminium elle s'est retrouvée chez le voisin. [DOT]

'The aluminum door from my electric garage found itself in the neighbours.'

(50) *Simple subject*

Ma mère elle l'a connu. [CHL]

'My mum knew it.'

Similar problems arise when we examine the influence of intervening elements. The data presented in Table 3.4 demonstrate that, with the exception of discourse markers, the frequency of SD increases with all other types of intervening element than in the absence of any modification. However, the six factors capturing the presence of an intervening element all contain too few tokens to be submitted to quantitative analysis in Rbrul. As a result, I recoded the tokens for the presence (51) or absence (52) of any intervening element.

Influence of Intervening Elements	Presence of SD		Absence of SD		Total
	%	N	%	N	
Emphatic pronoun	75.0	3	25.0	1	4
Hesitation	57.7	15	42.3	11	26
Other	50.0	3	50.0	3	6
More than one	45.0	9	55.0	11	20
Adverb	35.5	11	64.5	20	31
None	28.2	279	71.8	710	989
Discourse marker	14.3	1	85.7	6	7

Table 3.4: Distribution of SD variants by the intervening element.

(51) *Presence of an intervening element*

La mer **aussi** elle était très agitée. [NOR]

The sea was also very rough.'

(52) *Absence of an intervening element*

Mon beau-père c'était un champion. [CLU]

'My father-in-law was a champion.'

The outcome of the mixed-effect regression analysis with the two remodeled factor groups is given in Table 3.5. In total, six linguistic constraints attained statistical significance at the 0.05-level: sentential polarity, the type of verb, the influence of intervening elements, subject complexity, the type of subject and the influence of intervening clitics.[29] I now discuss the effect of these predictor variables in more detail.

	Factor Weight	%	N	Tokens	Log-odd
Sentential polarity					
Negative without *ne*	0.83	66.7	20	30	1.598
Affirmative	0.50	30.5	295	968	0.012
Negative with *ne*	0.17	7.1	60	85	-1.610
Range 66					
Type of verb					
Frequent lexical	0.69	39.2	201	513	0.786
Other lexical	0.51	21.2	76	359	0.050
Auxiliary	0.46	21.3	40	188	-0.154
Modal	0.36	17.4	4	23	-0.582
Range 33					
(Table continued over the page)					

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[29] I examined both the definiteness and specificity factor groups as a 'strong agreement' interaction group (see Section 3.2). I also included them as isolated factor groups in different Rbrul runs to avoid any interaction effects between these non-orthogonal variables. In both cases, the constraints did not exert any favouring or disfavouring effect on variant choice.

	Factor Weight	%	N	Tokens	Log-odd
Intervening elements					
Presence	0.60	44.7	42	94	0.396
Absence	0.40	28.2	279	989	-0.396
Range 20					
Subject complexity					
Complex	0.58	38.0	62	163	0.310
Simple	0.42	28.2	259	920	-0.310
Range 16					
Subject Type					
Proper noun	0.58	37.8	59	156	0.308
Common noun	0.42	28.3	262	927	-0.308
Range 16					
Non-subject clitic					
Absence	0.57	31.5	302	959	0.286
Presence	0.43	15.3	19	124	-0.286
Range 14					
Not significant: Strong agreement, Subject animacy					

Deviance=1150.856; df=12; Intercept=-0.726; Mean=0.296;
Speaker Random Std Dev=0.731

Table 3.5: Rbrul analysis of linguistic factors contributing to SD with speaker as a random effect.

Sentential polarity is identified as the strongest determinant of variant choice in Martinique French with a range of 66.[30] The effect of this factor group on SD has

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[30] This particular factor group was operationalised to encompass a structural contrast embedded within a semantic one. One reviewer suggested running separate models to further tease out the structural contrast but, given variationist sociolinguistic practice of operating within a functionally-defined variable, this would open up the envelope of variation (see Tagliamonte 2012: 10–15).

been well attested in previous studies. In Laurentian varieties of Canadian French, the co-occurrence of a doubled subject NP with the negative particle *ne* is extremely rare. Auger & Villeneuve (2010: 74) report that speakers categorically avoid the doubling strategy when *ne* is realised, while Nadasdi (2000: 60–61) identifies only one occurrence of a doubled subject with *ne*. Similar low-frequency rates are reported for European varieties: 3% (N=2) in Paris and 5% (N=1) in Vimeu French (Villeneuve & Auger 2014: 122; Zahler 2014: 366). However, Coveney (2003: 134) notes that negative contexts with *ne* are slightly more receptive (13%) to SD constructions in his Picardy corpus.

Notably, in Martinique French, there is an inverse relationship between the frequency of SD and the formality of the negation. As in previous studies, negative contexts with full bipartite negation are also a disfavouring environment for SD in a Caribbean context. Speakers strongly disfavour this variant in negative contexts with *ne* (FW=0.17, 7.1%, N=60). This finding lends further evidence to Coveney's (2011: 76) observation that such constructions are indeed permissible in spoken varieties of French (cf. Massot 2010). In contradistinction, speakers much prefer to double subject NPs in negative contexts without *ne* (FW=0.83, 66.7%, N=20). This finding is not unexpected. Both SD and *ne*-omission have long been considered characteristics of informal spoken French (Sankoff & Vincent 1977; Ashby 1981; Sankoff 1982; Coveney 2002), while non-SD constructions and the use of *ne* are associated with Standard French (Grevisse & Goosse 1993). Affirmative utterances are shown to have a neutralizing effect on variant choice in Martinique, as the factor weight hovers around the 0.5 mark (FW=0.50, 30.5%, N=295; see also Zahler 2014).

The logistic regression model in Table 3.5 selects verb type as the second most influential constraint governing SD-use in Martinique with a range of 33. Speakers are shown to prefer subject doubling with all lexical verbs, whether frequent (FW=0.69, 39.2%, N=201) or not (FW=0.51, 21.2%, N=76). By contrast, informants favour the standard non-doubled variant with both auxiliaries (FW=0.46, 21.3%, N=40) and modals (FW=0.36, 17.4%, N=4). This result corroborates Auger and Villeneuve's (2010: 79) findings for Québec and suggests that verb frequency has an effect on SD. Indeed, there is much debate in the literature as to whether weak subject clitics in French are grammaticalizing as morphological affixes of verbal agreement (Roberge 1990; Auger 1993, 1994, 1995). The quantitative link established here between frequently occurring verbs and SD might therefore shed further light on this issue, since frequency is widely accepted as playing a key role in the grammaticalization process (Bybee 2003; Hopper & Traugott 2003).

Let us now examine the extent to which intervening elements occurring between the subject NP and the verb influence SD in my data as this constraint has previously been shown to affect variant selection in both Canadian and European speech. Across both varieties, the presence of any non-cliticized element occurring between the subject NP and the verb favours the occurrence of an SD construction (Nadasdi 2000: 59–60; Auger & Villeneuve 2010: 78; Zahler 2014: 367). The same tendency is also detected in the data given in Table 3.5. My Martinique informants favour SD when an intervening element is realised (FW=0.60, 44.7%, N=42), whereas they disfavour it in the absence of any pre-verbal material (FW=0.40, 28.2%, N=279). This result suggests that *martiniquais* speakers dis-

play a tendency to use SD to re-establish a link between the head noun and the verb when the latter is separated from the subject NP by some intervening element (see Nadasdi 2000: 59–60).

A similar effect is noticeable when we examine the impact of subject complexity (range=16). Recall that the influence of this factor group has been shown to constrain variant selection in a range of variable phenomena cross-linguistically (see Wasow 1997; Benor & Levy 2006; MacKenzie 2012, 2013 *inter alia*). In relation to SD, Auger & Villeneuve (2010: 78) demonstrate that more complex subject NPs favour doubling. Zahler (2014: 366) likewise reports a similar effect for NP subjects that are modified post-nominally. Simple NPs disfavour the SD strategy in both cases and exactly this trend is found in the Martinique corpus. My informants prefer to employ SD constructions with complex NP subjects (FW=0.58, 38.0%, N=66). In contrast, the non-doubled variant is preferred in utterances with an unmodified subject NP (FW=0.42, 28.2%, N=259).

The type of subject governs the use of SD to the same degree as the preceding factor group: the ranges for both are 16. In Martinique, SD is more likely to occur with proper nouns (FW=0.58, 37.8%, N=59) than with common nouns (FW=0.42, 28.3%, N=262). The effect of this constraint has previously been noted to influence variant choice in Laurentian French (Nadasdi 2000; Auger & Villeneuve 2010) but this is the first time that it has been shown to play a role in SD-use in a non-Canadian French variety.

Finally, let us consider the role that the influence of intervening non-subject clitics plays on variant selection (range=14). Speakers of Canadian French varieties have consistently been shown to disfavour SD in the presence of a non-

subject clitic (Nadasdi 2000: 60–61; Auger & Villeneuve 2010: 79). This finding corroborates broader research on the use of clitics in French. Morin (1981) notes that speakers of French display a preference for limiting the number of clitics in an utterance wherever possible. My results for pronominals displayed in Table 3.5 indicate that this is also the case in Martinique. The presence of a non-subject clitic acts as a disfavouring environment for SD-use (FW=0.43, 15.3%, N=19). Conversely, SD is more likely to occur in the absence of any non-subject clitics (FW=0.57, 31.5%, N=302). In essence, speakers of Martinique French prefer to avoid SD constructions when other content-bearing clitics are realised in the same utterance.

4.3 Social Factors

In order to assess the overall effect of the extralinguistic constraints, I conducted another mixed-effects analysis in Rbrul with speaker as a random effect. Table 3.6 reveals that educational level, in fact, emerges as the only social factor to govern variant selection in Martinique French. However, note that the link between social class and variant choice has been long-attested in the SD literature. In both the French-majority town of Hawkesbury in Ontario, Canada, and the French region of Picardy, the frequency of SD increases further down the social class spectrum (Nadasdi 1995: 11; Coveney 2003: 135–136). Notably, rates of the phenomenon are markedly higher amongst working-class speakers than either the lower-middle or middle classes in both localities (cf. also Ashby 1980: 204).

In view of these findings, it is therefore not unreasonable to postulate that the level of educational attainment might be a good predictor of variant choice when

treated in isolation. Poplack and Dion (2009: 581) posit that schools and higher education institutions might be successful in transmitting the 'prescriptively sanctioned form'. Since SD is not permissible in written French, we might hypothesise that an increase in exposure to formal instruction would correlate with decreasing rates of SD due to the normative influences of the French education system.

	Factor Weight	%	N	Tokens	Log-odd
Educational level					
No qualifications	0.66	38.4	232	604	0.674
Baccalauréat	0.43	19.6	36	184	-0.270
University degree	0.40	18.0	53	295	-0.404
Range 26					
Not significant: Age, Sex, Language restriction					

Deviance=1251.42; df=4; Intercept=-1.189; Mean=0.296;
Speaker Random Std Dev=0.403

Table 3.6: Rbrul analysis of social factors contributing to rates of SD with speaker as a random effect.

The results from Martinique demonstrate that educational level influences the use of SD constructions in this locality in that higher levels of formal education have a disfavouring effect on SD in my dataset. Informants without any formal qualifications display a preference for the non-standard subject-doubled construction (FW=0.66, 38.4%, N=232) whereas speakers with a *baccalauréat* (FW=0.43, 19.6%, N=36) or a university degree (FW=0.40, 18.0%, N=53) favour the non-doubled variant. Successfully graduating from the secondary school system thus seems to be conducive to the dominance of the standard form in the linguistic habitus of speakers as one might indeed expect.

5. Conclusion

To conclude, this chapter has investigated variable SD in Martinique French. I examined the extent to which the constraint systems reported for other varieties of French also hold in a Caribbean context. Frequency rates were shown to be comparable to those uncovered in previous research. Indeed, SD in Martinique falls within the range of other French varieties studied to date. Nevertheless, the overall rate of SD in this locality masked high rates of inter-speaker variability. These were accounted for in mixed-effects logistic regression models with individual speaker included as a random effect. SD in Martinique is also only variable with certain types of subject, namely common nouns and proper nouns.

Multivariate analyses furthermore showed that, unlike Canadian French, noun specificity and definiteness are not operative as constraining factors in this variety. Instead, results show that the variable mirrors, to a certain extent, the findings reported in the Hexagonal French literature: sentential polarity was identified as the greatest determinant of variant choice. Furthermore, the type of verb, the presence of intervening elements and non-subject clitics, and the complexity of the subject were all shown to govern SD in Martinique. As I will expound in much more detail in Chapter 6, the results presented in this chapter highlight a number of similarities between Martinique and Hexagonal varieties. Such similarities may, however, only be isolated and specific to the SD variable. Further investigation of other variables in Chapters 5 and 6 will better situate the variety spoken in Martinique with the well-studied speech communities in North American and Europe.

Finally, the present chapter was the first study to examine the role played by informants' educational attainment on SD-use in French. This factor group proved,

in fact, to be the only social factor to constrain SD-use in this community. An inverse relationship was detected between the frequency of the SD strategy and speakers' educational level: the likelihood that speakers would use SD constructions decreased with increasing levels of education. As such, this chapter highlights the importance of accounting for the effect of education when investigating the role played by external conditioning in French LVC research.

CHAPTER FOUR: THE OMISSION OF THE

NEGATIVE PARTICLE *NE*

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1. Introduction

This chapter examines the variable use/non-use of the negative particle *ne* in Martinique French. In Standard varieties of French, verbal negation is most commonly expressed through a bipartite 'bracketing' or 'embracing' structure, which comprises the pre-verbal morpheme *ne* and one of several post-verbal items (usually *pas* 'not' but also *rien* 'nothing', *jamais* 'never', *personne* 'nobody' and *plus* 'no more', amongst others). Examples are given in (1) below. By contrast, in spoken French *ne* is often omitted without changing the meaning, leaving the negative polarity item as the sole overt marker of negation, as in (2).

(1)   *Negation with ne retained*

    a. Donc non   je   **ne**   parle   **pas**   créole. [ORT]

        so   no   1SG   NEG   speak.PRES.SG   not   Creole

        'So no I don't speak Creole'.

    b. On   **ne**   les   voit   **plus**. [MAC]

        3SG   NEG3SG   them   see.PRES.SG   no.more

        'We no longer see them.'

(2)   *Negation with ne omitted*

   a. Ça   ø   va   **rien**   changer   pour   moi. [MYR]

      EXPL   NEG go.PRES.SG   nothing change.INF   for   me

      'That isn't going to change anything for me.'

   b. Elle   ø   a   **jamais** été   en France. [NOR]

      3SG   NEG   have.PRES.SG   never   be.PP   in France

      'She has never been to France.'

While *ne* is mainly used as a pre-verbal marker in bipartite negation, it can also be variably employed in other environments, such as restrictive expressions with *que* 'only' (3) and *guère* 'hardly', as well as in expletive contexts (4).[1]

 (3)   *Restrictive ne…que*

    Ça   **ne**   fait   **que**   trois   kilomètres de Saint-Pierre. [MIP]

    3SG   NEG   make.PRES.3SG   only   three   kilometres of Saint-Pierre

    'It is only three kilometres from Saint-Pierre.'

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[1] There are a number of non-negative contexts in which expletive *ne* (also known as 'pleonastic *ne*') can variably feature. These include fixed expressions in formal styles (e.g. à Dieu **ne** plaise 'God forbid') or after the conjunctions *à moins que* 'unless', *sans que* 'without' and *avant que* 'before' (e.g. avant qu'il **ne** vienne 'before he comes'). For a full list, see Hawkins and Towell (2001: 380–381). Furthermore, although not found in my Martinique French corpus, it is also possible for speakers of contemporary French varieties to negate a small number of pseudo-modal verbs with *ne* alone (i.e. without the post-verbal items), such as *cesser* 'to stop', *oser* 'to dare' and *pouvoir* 'to be able to'. In these cases, the negative particle is invariable due to the absence of a negative item.

(4) *Expletive ne*

On	va		retrouver	les éléments	africains	du
3SG	go.PRES.3SG		find.INF	the elements	african	of.the

langage	beaucoup	plus	présents	qu'	on	**ne**	le
language	a.lot	more	present	than	3SG	NEG	it

retrouve		dans	le	créole martiniquais. [ALB]
find.PRES.3SG		in.the	the	creole martinican.

'You are going to find that features of African language are much more prominent than what you find in Martinique Creole.'

In this chapter, I do not consider the distribution of *ne* in restrictive or expletive contexts (see Section 3.1 for a full discussion). Instead, I investigate the overall omission/retention rates of the negative particle *ne* in spoken Martinique French, as well as the internal and external constraints governing the variation. The chapter is structured in four main parts: In Section 2, I review the extant sociolinguistic literature focusing on variable *ne*. Section 3 outlines the methodology adopted in the present study. Section 5 is devoted to the results and analysis of my investigation.

2. Literature Review

The term 'Jespersen's Cycle' (Dahl 1979) denotes the diachronic cross-linguistic process by which sentential negation first increases and then decreases in complexity:

> The history of negative expressions in various languages makes us witness the follow-ing curious fluctuation: the original negative adverb is first weakened, then found in-sufficient and therefore strengthened, generally through some additional word, and this in it turn may be felt as the negative proper and then in course of time be subject to the same development as the original word (Jespersen 1917: 4).

According to Schwenter (2006: 238), the 'paradigm case' of Jespersen's Cycle is that of French. The development of negation in French from a pre-verbal to a post-verbal system has been well documented in the literature and is schematized in Figure 4.1 (parentheses indicate optional elements; cf. Hopper & Traugott 2003: 65–66; Ashby 1981: 675; Detges & Waltereit 2002: 173–176; Schwenter 2006: 328; Grieve-Smith 2009: 14–27).

Stage 1:	*ne*	VERB		*Je ne mange* 'I don't eat'
Stage 2:	*ne*	VERB	(*pas*, etc.)	*Je ne mange* (*pas*)
Stage 3:	*ne*	VERB	*pas*, etc.	*Je ne mange pas*
Stage 4:	(*ne*)	VERB	*pas*, etc.	e.g. *Je* (*ne*) *mange pas*
Stage 5:		VERB	*pas*	e.g. *Je mange pas*

Figure 4.1: Jespersen's Cycle in French.[2]

Much of the recent socio-historical literature on the use of the negative particle has focused on Stage 4 of Jespersen's Cycle and has centred on determining the origins of *ne*-deletion in speech. To this day, there exists much debate in the liter-ature concerning the dating of this process: Some scholars maintain that that there

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[2] It should be noted that there is no discrete Stage 1 and 2. Post-verbal elements could be used non-harmonically even in the oldest attested documents of French, such as the poem *La chanson de Roland* and the drama *Sponsus*, both of which date from the 11th century (Grière-Smith 2009: 17).

is actually no evidence of *ne*-dropping in documents from the 1600s (Ayres-Bennett 1994) and that 'the trend to delete *ne* rose substantially on both sides of the Atlantic' as late as the 19th century (Martineau & Mougeon 2003: 138; cf. also Pohl 1968, 1975). By contrast, more recent studies of sociolinguistically diverse text corpora indicate that the omission of the negative particle was, in fact, a feature of vernacular French towards the end of the 17th century (Dufter & Stark 2007; Martineau 2009, see also discussion in Grieve-Smith 2009: 24–26).

In the present day, bipartite negation is still compulsory in officially sanctioned written French (see Grevisse & Goosse 1993). However, research on contemporary varieties has shown that the omission of the negative particle is nowadays a common feature of the spoken language (see Armstrong 2001; Coveney 2002 Poplack and St-Amand 2007; Auger & Villeneuve 2008, amongst others). Indeed, the variable presence or absence of *ne* has been described as 'possibly the best known sociolinguistic variable in contemporary French' (Coveney 2002: 55). Thus far, the majority of sociolinguistic studies have focused on the variable use of *ne* in Hexagonal French (Ashby 1976, 1981, 2001; Armstrong 2002; Armstrong and Smith 2002; Coveney 2002; Hansen & Malderez 2004; van Compernolle 2009, Auger & Villeneuve 2008 *inter alia*). However, we also have evidence from Swiss French (Fonseca-Greber 2007) and Laurentian varieties of Canadian French (G. Sankoff & Vincent 1977[1980]; Burdine & Mougeon 1999; Poplack & St-Amand 2007).[3] Furthermore, research has shown that *ne*-deletion is

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[3] A number of studies have also examined this variable in second language varieties of French (cf. Regan 1996, 2002, 2005; Rehner & Mougeon 1999; Dewaele 2002, 2004a, 2004b; Mougeon, Rehner & Nadasdi 2004; Mougeon, Nadasdi & Rehner 2010; Rehner 2010).

now also a feature of Canadian and European online chat-room discourse (van Compernolle 2007, 2008a, 2008b) and newspaper advertisements (van Compernolle 2010).

In the subsequent survey of the literature, I review all sociolinguistic studies that explore the variable nature of the negative particle in contemporary French varieties. I consider each variety in turn and focus on (i) the data collection methods; (ii) the development of the variable context; (ii) the overall frequency of *ne* retention/omission; and (iv) the significant internal and external conditioning factors that influence variant choice.

2.1 European Varieties

Ashby (1976) is the first quantitative variationist investigation of variable *ne* in a European French variety. The data were extracted from Malécot's (1972) *Paris Corpus*, which comprises 25 hours of speech data recorded surreptitiously from 50 upper-middle class Parisians (see also Chapter 3 Section 2.2). Ashby's (1976: 120) findings indicate that *ne* was omitted in 44.1% (N=450) of negative and restrictive contexts. Moreover, the results clearly show that a fast speech rate is more conducive to *ne*-omission (51.2%, N=215) than a slow one (39.2%, N=235).[4] Furthermore, the negative particle is rarely dropped in intervocalic position (6.1%, N=3), which Ashby (1976: 129) postulates is indicative of speaker's

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[4] Speech under 340 syllables per minute is considered to be slow, while a fast speech rate is greater than 360 syllables per minute (Ashby 1976: 128).

'reluctance to create a vocalic hiatus' in this environment.[5]

Ashby (1976: 121–126) also acknowledges that a range of morphosyntactic constraints influence variant selection. For instance, speakers drop *ne* considerably more often with a clitic subject (55.5%, N=377)[6] than with other pronominals (24.8%, N=32), subjectless expressions (i.e. infinitives and imperatives; 21.1%, N=4), full NPs (12.1%, N=8) and when the second negative is realised preverbally as the subject (0%; e.g. *personne ne le connaît* 'nobody knows him'). The negative particle is also omitted most frequently when the negative item is *pas* (47.5%, N=395). *Ne* is deleted less often with other negative items, such as *rien* 'nothing' (38.6%, N=17), *jamais* 'never' (36.6, N=15), *plus* (N=9) and *que* 'only' (8.0%, N=2). The same two morphosyntactic constraints have also consistently been shown to govern the use of *ne* in other varieties of European French, such as those spoken in Tours (Ashby 1981), Picardy (Coveney 2002) and Vimeu (Auger & Villeneuve 2008).[7] These constraints are furthermore operative in computer-mediated communication (also know as 'electronic French'): Van Compernolle's (2007: 254, 2008a: 329) study of *ne*-use in synchronous (i.e. real-time or 'live') European French Internet Relay Chat demonstrates that *ne*-deletion is only favoured with subject clitics. Van Compernolle (2007: 254) also shows that the deletion of the negative particle is more frequent with *pas* (86.2%, N=849) than with any other negative item (e.g. *rien*: 83.1% N=64; *jamais*: 74.1%, N=20).

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[5] See Walker (2001) for a discussion of hiatus in French.

[6] French clitics include 1SG *je*, 2SG *tu*, 3SG *ce*, 1PL *nous*, 2PL *vous* and third person *il(s)* and *elle(s)* (see Ashby 1976: 123).

[7] The methodological issues of Ashby (1976) are addressed in his subsequent 1981 paper. In the latter, he does not restrict his analysis to upper-middle class Parisian speech but instead reports on data extracted from a more socially diverse corpus of Tourangeau French.

Diller (1983) focuses exclusively on the extent to which the syntactic structure of a subject NP influences variable *ne*. Based on data from 12 informants in the South of France, her results reveal a *ne*-omission rate of 34.3% (N=220) in both negative and restrictive contexts. Although no tests of statistical significance were conducted, cross-tabulations show that negative particle deletion is markedly more frequent when the subject of the clause is a subject pronoun (39%, N=216) than when it is a full NP (3%, N=2). This finding thus supports Ashby's (1976) observation of his Parisian French data.

However, further examination of the data shows that deletion rates vary considerably within the pronoun category. Consequently, Diller (1983: 70–72) re-examines the data and instead focuses on the 'semantic weight' of the pronominal subject. She identifies four distinct categories of pronouns: those with no semantic weight (e.g. impersonal *il*), those with a pragmatic reference (for example, the indefinite deictic *ça*), those with a lexical reference (i.e. all personal pronouns) and those with a syntactic antecedent (e.g. the relative pronoun *qui*). On the basis of this new categorisation, Diller (1983: 72) notes that 'the operation of the rule of *ne*-deletion is inversely proportional to the semantic weight of the subject'. In other words, *ne* is most frequently dropped when there is a dummy subject (58%, N=58). Omission rates continue to decrease from 46% (N=42) when the subject is an indefinite deictic to 32% (N=117) for personal pronouns. There is then a cut-off point after which the negative particle is rarely omitted with relative pronouns (4%, N=2) and full NPs (3%, N=2). Diller (1983: 72) posits that the near-identical deletion rates for the final two categories is linked to the semantic weight of relative pronouns, which is equivalent to their full NP antecedents.

Previous studies have amply illustrated that speakers tend to avoid *ne* when they use certain formulaic expressions (see also Cowie 2001; Wray 2002; Ellis 2012). In Paris, for example, omission rates are greatest with *il (ne) faut pas* 'it is not necessary' (83.3%, N=10), *ce (n') est pas* 'it is not' (75%, N=90), *il (n') y a pas* 'it is not/there are not' (64.7%, N=44), *je (ne) sais pas* 'I do not know' (55.3%, N=57), than with other constructions (34.8%, N=249) (Ashby 1976: 126, see also Ashby 1981; Auger & Villeneuve 2008). Moreau (1986) also reveals similar findings in her analysis of 30 unscripted and live one-on-one interviews with a *Radio-télévision belge de la communauté française* journalist and male interviewees. In total, *ne* is omitted from 49.74% (N=1571) of all negative and restrictive phrases. However, in addition to Ashby's (1976) four main prefabricated expressions, Moreau (1986: 152) also identifies a further 15 collocations, all of which display high levels of *ne*-omission (e.g. *je (ne) vais pas* 'I don't go': 83.33%; *je (ne) dis pas* 'I don't say': 72.22% and *je (ne) pense pas* 'I don't think': 62.5%). Coveney (2002: 78–83) extends Moreau's (1986) fine-grained classification when examining the role that prefabricated expressions play in *ne*-omission. He identifies a prefabricated expression as a negative sequence occurring at least nine times in his data that consists of a verb preceded by any subject clitic or *qui*. In total, 39 frequently occurring expressions are analysed. The omission of *ne* is shown to be much higher than the overall average (89.9%) when speakers use one of these sequences.

In addition to the linguistic constraints discussed above (i.e. subject type, prefabricated expressions and type of negative item), subject doubling also governs the use of *ne* (see also Chapter 3). Pooley (1996: 172–176) illustrates the con-

straint with data from his 1982 corpus of Lillois French in which omission rates differ depending on whether the subject NP is doubled or not. Speakers delete the negative particle 95% of the time with a doubled subject NP but only 35% (N=23) of the time with a single noun phrase. Additionally, the presence of any intervening non-subject clitic (e.g. 2SG *te* or 3SG *le/la/lui*) between the subject and the verb increases the propensity of *ne*-deletion. This finding leads Pooley (1996: 173) to posit that the presence of a content-bearing unit forces out the semantically redundant negative particle as the former are 'of greater semantic import' (cf. Diller 1983).

Auger and Villeneuve (2008) focus on the deletion of the negative morpheme in French and Picard in the Vimeu area of the Somme. To date, their study is the only investigation to exclude restrictive *ne…que* clauses from their analysis of variable *ne* on the grounds that negative *ne* and restrictive *ne* are two separate sociolinguistic variables (Auger & Villeneuve 2008: 236; to be discussed in greater detail in Section 3.1 below). Initial results reveal an overall omission rate of 79% (N=562), which mirrors Coveney's (2002: 73) findings for the same *département* (Auger & Villeneuve 2008: 237). However, in Vimeu French, it is the influence of prefabricated expressions, and not the type of subject, that is actually identified as the greatest determinant of variant choice. Additional evidence from the Vimeu variety supports existing research by demonstrating that the presence of a subject clitic and subject doubling favour the deletion of the negative particle (see also Pooley's 1996: 173 findings for Lille). Moreover, the location of the negative item returns a statistically significant result (see also Ashby 1976, 1981): when the second negative occurs post-verbally, speakers prefer to delete the negative

particle (FW=0.51, 80%, N=562), yet this variant becomes strongly disfavoured when it occurs before *ne* (FW=0.09, 13%, N=1; e.g. ***personne ne** le connait* 'no one knows him').

In apparent-time studies, speaker age is shown to be the most influential social factor governing variant choice. In Paris, for example, Ashby (1976: 132–135) demonstrates that younger speakers omit the negative morpheme at a higher rate (48.5% N=316) than the older informants (35.5%, N=367). This pattern is also found in other spoken varieties, such as Tours (Ashby 1981: 882) and in French Internet Relay Chat. In online communication, van Compernolle (2007: 554) reports that the overall omission rate is 85.17% (N=1057). As such, the frequency of *ne* in this type of communication is comparable to rates reported in previous studies on spoken Hexagonal French. Moreover, users of the chat channel aimed at younger members omit *ne* more often (89.64%, N=528) than those in the older group (81.13%, N=529). For Ashby, the tendency to omit *ne* in speech thus represents an on-going linguistic change and he postulates that *ne* is in the process of disappearing from spoken French.

The same age-based differentiation is also found in Picard: The younger cohort omit *ne* much more often (91.6%) than the middle-aged (76.1%) and older (71.2%) speakers do. But, contrary to the authors discussed before, Coveney (2002: 90) suggests that the synchronic age differentiation does not reflect a change in progress but is instead indicative of age grading (cf. Ashby 1981, 1991). This is because studies examining this variable in the speech of children report that they only begin to use *ne* productively once they have begun formal education (Pohl 1968, 1972; Lemieux 1985). In essence, 'each generation of speakers

has virtually a zero rate of *ne*-retention as children and adolescents, but then, as they become older, they modify their speech under pressure from and in the direction of the written language' (Coveney 2002: 90).[8]

Real time evidence enables us to better understand whether the greater omission rate of the negative particle amongst the younger speakers in apparent-time is reflective of a change in progress (Ashby 1976, 1981) or age grading (Coveney 2002). To this end, Ashby (2001) conducts a follow-up study to his earlier (1981) Tours investigation. He tracks the frequency of *ne* across a 19-year span and notes that that the rate of deletion has increased from 63% (N=1031) in 1976 to 82% in 1995 (Ashby: 2001: 9). Moreover, a panel sample of 10 informants demonstrates that the majority have not altered their use of *ne* across their lifespan (Ashby 2001: 18). The decrease in the frequency of *ne* across time (i.e. instability at community level, see Labov 1994: 83) and relative stability of the panellist's linguistic habitus thus supports Ashby's (1981: 682) original apparent-time interpretation. In other words, variable *ne* in the Tourangeau variety is, in fact, undergoing change and does not represent a case of age grading. The diachronic loss of *ne* in speech is also substantiated with data from Parisian French. Hansen and Malderez (2004: 16) note that *ne*-use declines from 15.8% (N=38) in the early 1970s to 8.2% (N=109) in the early 1990s.

Similarly, Pooley (1996) conducts a trend study to track variable *ne* among urban working-class speakers from the Lille area. Quantitative analysis is based on data taken from two corpora: (i) *The* 1983 *Roubaix Corpus,* which comprises 61 informants, stratified by age, educational level and sex; and (ii) *The* 1995

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[8] See also Guy and Boyd's (1990) study of semi-weak verbs for a similar argument.

Rouge-Barres Corpus, which consists of individual and group recordings with 15 adolescents. Overall, Pooley (1996: 168) reports that the frequency of *ne*-deletion in his earlier data set is 93%, though speaker's individual retention rates are shown to vary from 100% to 65%. Moreover, the youngest speakers in 1983 omit the negative particle in 98% of all potential occurrences. This figure increases to over 99% by 1995 (Pooley 1996: 282). Nevertheless, it is important to exercise caution when interpreting this real-time result (Pooley 1996: 276). While the youngest speakers in 1983 were in their twenties, those in 1995 were only in their early teens. This finding might therefore be the result of a combination of age- and time-related factors (see also Wagner & Sankoff 2011; Prichard and Tamminga 2012).

Finally, Armstrong and Smith (2002) compare the use of *ne* in non-scripted French radio speech in the 1960–1961 *Ågren Corpus* (Ågren 1973) with a contemporary corpus recorded by Armstrong and Smith in 1997. They report that the omission of *ne* in negative and restrictive contexts increases over time from 7.4% (N=191) to 27.5% (N=568). The change found in radio discussions therefore mirrors the real-time pattern reported in everyday speech (cf. Ashby 2001; Hansen & Malderez 2004) but at a lower rate, potentially due to the type of speech data examined. Furthermore, chi-square analyses demonstrate that the subject-type constraint has altered over time. Although the influence of NPs and non-overt subjects remains stable throughout the 37-year period, *ne*-retention is shown to be proportionally more frequent with subject clitics in the early 1960s (89.4%, N=1405) than in 1997 (63.8%, N=807). This leads Armstrong & Smith (2002: 34)

to suggest that speakers increasingly feel that subject clitics are bound to the verb due to their comparatively high frequency in speech (cf. also Goldberg 2006).

Despite the real-time decline in the use of *ne*, Hansen and Malderez (2004: 26) postulate that the change will never fully go to completion for two key reasons. Firstly, analysis of corpora of written texts by primary school students shows that children continue to use *ne* 75% of the time in writing. It is hypothesised that this figure will increase as the children continue their education. Secondly, previous work has demonstrated that adolescents use *ne* when imitating the speech of up-per-class individuals, even though it does not yet form part of their linguistic sys-tem (Lemieux 1985).

Social class also plays a role in the use of *ne*. A negative correlation is detect-ed between increasing social class and decreasing rates of *ne*-omission (Ashby 1981: 682; see also Ashby 1976, Coveney 2002). For example, working-class Pa-risians prefer *ne*-omission (FW=0.19, 15%, N=446), while those belonging to the middle (FW=0.64, 47%, N=348) and upper-middle classes (FW=0.71, 45%, N=549) disfavour this variant. Similarly, the sex of the speaker also governs nega-tive particle variation, though its effect differs depending upon the variety under investigation. Parisian men omit the negative particle more frequently (48.7%, N=306) than women (36.8%, N=144). This finding reflects previous studies based on the *Paris Corpus*, which have shown that women are more linguistically con-servative than their male counterparts. In Tours, however, the results for speaker sex show a reversal of the trend reported for Paris. In this variety, it is the women who favour *ne* omission (FW=0.42, 30%, N=446), while men disfavour this vari-ant (FW=0.58, 42%, N=585).

Variable *ne* has also been shown to be sensitive to style shifting. Ashby (1976: 130–132) operationalises style by examining the use of different pronouns of address. Speakers who employ the informal second person pronoun *tu* to refer to their interlocutor (also known as *tutoiement*) omit *ne* more often (58.1%, N=50) than those who use the more formal *vous* pronoun (42.9%, N=400). Usage rates are shown to vary depending on the topic under discussion. Informal subject matter, such as, according to Ashby, banalities or reflection, favours *ne*-omission (52.4%, N=287 and 72.7%, N=8 respectively), whereas speakers tend to drop *ne* less often when the topic is formal, e.g. in explanations (32.7%, N=119). Furthermore, omission rates in the first 15 minutes are lower (39.8%, N=200) than those in the second half of the interview (48.4%, N=250). This is also the case in Vimeu French: the probability that speakers drop *ne* increases as the interview progresses from 0.27 (65%, N=41) and 0.45 (73%, N=49), in the first and second five minutes of recording, to 0.53 (81%, N=473) after ten minutes (Auger & Villeneuve 2008: 240).

Ashby (1981) also demonstrates that the use of *ne* varies depending on the location of the interview. Speakers doubled their *ne*-omission rates from, on average, 16% (N=25) when interviewed in an informal, relaxed setting to 35% (N=104) in a work environment. A noticeable style-shift is also detected by Coveney (2002: 88–89) who finds that one speaker's rate of *ne*-use decreased from 50% in their office environment to only 11.4% on a stroll outdoors. However, both findings are only based on the speech of a small number of informants. More data is therefore required to better understand how the use of *ne* fluctuates depending on the communicative setting.

Armstrong (2001, 2002) focuses on intra-individual variation in his corpus of spoken Dieuze French. He records 16 secondary school students (known as *collé-giens* and *lycéens* in French) in two speech styles, namely 'interview' and 'conversation' (Armstrong 2001: 63–65). In the former, informants were interviewed one-on-one with the researcher, while groups of two or three informants self-recorded in the latter. Importantly, quantitative analysis shows that speakers almost categorically omit *ne* regardless of speech style: 98.9% of cases in the more formal interview style and 97.1% of the time in the peer-recordings (Armstrong 2002: 158, see also Pooley 1996: 286). Some male informants, however, exhibit a negative style shift. Their use of *ne* actually decreased when the interviewer was present (Armstrong 2002: 161). The modest degree of style-shift in this variety (1.8%) thus contrasts markedly to the findings in Tours (19%, Ashby 2001) and Picardy (38.6%, Coveney 2002).

Fonseca-Greber (2007) is the only paper to examine the negative particle in conversational Swiss French. The study is based on 8.5 hours of spontaneous speech data from 14 middle-class speakers of various ages. They all formed part of the researcher's social network and they were recorded in the late 1990s in dyads. Quantitative results demonstrate that the frequency of *ne* is only 2.5% (N=50) in this variety (Fonseca-Greber 2007: 256–258). Further qualitative analysis, however, focuses on the micro-stylistic use of *ne* (see also Armstrong 2002). Findings suggest that *ne* now has a functional role in this variety, which is similar to that reported for Tourangeau French (van Compernolle 2009) and Canadian varieties (see Section 2.2): In essence, *ne*-realization serves to mark 'micro-shifts in register […] when otherwise informal conversations turn to "institutional

talk"'(Fonseca-Greber 2007: 258). This is also the case in computer-mediated communication, in which *ne* is argued to have ludic and emphatic functions in discourse (van Compernolle 2007: 257). Additionally, in Swiss French, *ne* has now acquired a new communicative function as the pragmatic marker of emphasis that is often used in conjunction with other contextual cues, such as lexical intensifiers, repetition, a slower speech rate, pitch prominence and contrast (Fonseca-Greber 2007: 260–276).

2.2 Canadian Varieties

In Acadian varieties of Canadian French, negation is no longer marked preverbally with *ne* (Comeau p.c.). Variation is instead found in the choice of *pas* or *point* as the default post-verbal negative item (Flikeid 1994; Comeau 2007). Laurentian varieties of Canadian French, however, variably mark negation with *ne* and a number of studies have examined negative particle variation in these varieties. Sankoff and Vincent (1977[1980]) focus on variable usage in the 1971 Sankoff-Cedergren corpus of Montréal French (Sankoff & Sankoff 1973). Their data were extracted from 60 of the 120 original interviews, which is roughly equivalent to 75 hours of speech data. Their investigation yielded approximately 10000 variable tokens, of which only 0.5% (N=46) contained *ne* (Sankoff & Vincent 1980: 300). Lemieux (1985) corroborates the low frequency of *ne* in this speech community in her study of the Laurentian negative item *pas rien*. She reports that the remaining 60 participants in the Sankoff-Cedergren corpus realise the negative particle in only 1% of negative contexts (Lemieux 1985: 92).

Further examination of the 15 informants who realised *ne* at all reveals that they are older, more educated and more integrated into the *marché linguistique* (Sankoff & Laberge 1978) than non-users (Sankoff & Vincent 1980: 301). More-over, despite its relative infrequency in spoken language, Montréal speakers continue to use *ne* as a stylistic resource when they are 'maximally attentive' to their own language (Sankoff & Vincent 1980: 301). Indeed, of the 46 tokens containing *ne*, 34 were realised with more formal topics of conversation, such as language, religion or education. In other words, the negative particle is retained more frequently in contexts promoting a more careful, self-monitored speech style.

Burdine and Mougeon (1999) examine the use of *ne* in four French-speaking communities in the southeast corner of Ontario (see Mougeon & Beniak 1991). Variationist analysis of 5835 tokens reveals that Franco-Ontarians have the highest overall usage rate of the negative particle in any Canadian speech community studied to date (1.5%, N=90). The only social factor selected as statistically significant in the aggregated data was language restriction (see Chapter 2 Section 2.3.4; cf. also Mougeon & Beniak 1991). A linear correlation was identified between increasing levels of restriction and increased retention of *ne*. Restricted speakers, i.e. those who use French infrequently, favour the retention of the negative particle (FW=0.67, 2.9%, N=44) more than the semi-restricted informants (FW=0.54, 1.6%, N=36), whereas the unrestricted French speakers prefer to omit *ne* in speech (FW=0.33, 0.4%, N=10).

Poplack and St-Amand (2007) conduct a diachronic investigation of the variable in two apparent-time corpora of spoken Laurentian French. They aim to trace the use of *ne* in the *Récits du français québécois d'autrefois* (RFQ; Poplack & St-

Amand 2007), a 19th-century collection of folklore recordings, with the *Corpus du français parlé à Ottawa-Hull* (OH; Poplack 1989), a 20th-century corpus of contemporary Québécois French. Quantitative comparison of the two corpora reveals that the overall rate of *ne* has not altered over time. In both contexts, *ne* is realised in only 0.2% (RFQ: N=12; OH: N=152) of cases. In other words, by the mid-1800s, the change in Laurentian French appears to have almost gone to completion (cf. Martineau & Mougeon 2003).

Furthermore, Poplack and St-Amand (2007: 728) are unable to detect any social or stylistic stratification in the earlier RFQ data set. Contrastingly, 89% (N=152) of tokens in the more recent OH corpus occur with quotes, formulaic expressions and topics associated with a formal speech style (Poplack & St-Amand 2007: 724). Thus, while the frequency of *ne* has remained stable in real time, a change has occurred in terms of the function of *ne* in discourse (Poplack & St-Amand 2007: 726). This finding corroborates Sankoff and Vincent's earlier Montréal (1977[1980]) study and leads the authors to suggest that Laurentian French *ne* is now limited to hyperstylistic, specialized or formulaic contexts (Poplack & St-Amand 2007: 724).

Van Compernolle (2008b) focuses on the use of *ne* in online dating advertisements (i.e. asynchronous online communication) from Québec. Results indicate that *ne* is retained in 77.6% of cases (van Compernolle 2008b: 12). This figure aligns more closely with written language data from France (cf. Hansen & Malderez 2004) than with synchronous chat discourse (cf. van Compernolle 2007, 2008a) and spoken Québec French (cf. Sankoff & Vincent 1977, 1980; Poplack & St-Amand 2007). Nevertheless, it demonstrates that the tendency to delete *ne* is

not only restricted to speech but is also a feature of synchronous and asynchronous written electronic communication. GoldVarb analysis furthermore demonstrates that the advertiser's age and use of the 2SG and 2PL pronouns of address, *tu* and *vous* respectively, condition variant choice (van Compernolle 2008b: 13). A positive linear correlation is detected between age and *ne*-retention rates, with the constraint mirroring the trend already noted for spoken European French (cf. Coveney 2002, Hansen & Malderez 2004 *inter alia*). Van Compernolle (2008b: 16) postulates that the preference for older dating site members to retain the negative particle is related to their 'wish to convey to their audience a certain level of literacy or the ability to conform to standard written norms' and is thus a case of age-grading under the apparent-time construct.

Moreover, the probability of negative particle omission was greater in ads that contained a second person pronoun of address to communicate to their potential audience (*tu*: FW=0.44, 76.2%, N=157; *vous*: FW=0.47, 74.5%, N=143). Van Compernolle (2008: 13) hypothesises that the use of second person forms of address 'personalizes the text, in that the advertiser is directly addressing his or her interlocutor, which may lead to a more conversational-style personal ad'. The use of other subject pronouns favours the *ne* form (FW=0.64, 85.1%, N=103) since the advertisement becomes less personal and thus more similar to standard written language.

The most recent study by van Compernolle (2010) examines *ne* in a 100,000-word corpus of online Montréal French IRC in which the omission rate is reported to be 94.9% (N=1058). Although this figure is lower than what is reported for spoken varieties of Laurentian French, van Compernolle's results (2010: 455)

demonstrate that synchronous Canadian chat reflects spoken language more close-ly than its asynchronous counterpart (cf. van Compernolle 2008b). Furthermore, the omission of *ne* in this context is much higher than in European French chat rooms (cf. van Compernolle 2007). The cross-dialectal differences reported for spoken language are therefore mirrored in online communication. Interestingly, further quantitative investigation reveals that the factors constraining the use of *ne* in Montréal online chat mirror previous research on spoken European French. Thus, *ne* is more frequent with full NPs (15.4%, N=8) and nonovert subjects (12.8%, N=6), while the reverse is true for subject pronominals (4.2%, N=43).

To summarise, previous sociolinguistic studies have demonstrated that levels of *ne*-omission/retention differ considerably depending on the speech community under investigation. In the majority of European French varieties studied to date, the same set of linguistic and social constraints have consistently been shown to govern this variable, with the omission of the negative particle associated with younger, lower class speakers. Moreover, deletion sites tend to be those involving subject/non-subject clitics, the negative item *pas* and frequently occurring expres-sions. Contrastingly, in Canada and certain European varieties, lower rates of use have led to *ne* fulfilling roles which are discourse-pragmatic in nature. The nega-tive particle has thus acquired a functional role and now either acts as a marker of emphasis or is used by speakers to signal a more formal speech style.

The review of the literature has thus demonstrated that variable *ne* is con-strained by a range of internal and external constraints. While the change has all but gone to completion in Canadian varieties (i.e. Stage 5 of Jespersen's Cycle, see Section 2), speakers of European French still variably omit the negative parti-

cle in speech (i.e. Stage 4). Research is yet to examine how this feature patterns in Caribbean varieties of French. To this end, Section 3 details the methodology used to investigate this sociolinguistic variable in Martinique French.

3. Methodology

This section is structured in two parts. Section 3.1 outlines the steps taken to delimit the variable context. To this effect, tokens that fall outside of the envelope of variation (Milroy & Gordon 2003: 180) are identified and excluded from variationist analysis. Section 3.2 then presents the linguistic and social constraints hypothesised to condition the use/non-use of *ne* in Martinique French and details the coding protocol.

3.1 Excluded Tokens

In keeping with Labov's (1972: 72) Principle of Accountability, it was necessary to account for each occurrence of *ne* in my Martinique French corpus, as well as those instances in which it could have occurred but did not. As a result, I identified and extracted every context featuring *ne* (or *n'*) and every occurrence of a negative item (*pas, jamais, rien, personne*, etc.) from my corpus using the AntConc concordance program (Anthony 2011). The two concordance files were subsequently merged and any duplicated tokens removed. In total, 4003 tokens were identified in the speech of all 32 informants. The next step was to scrutinize the data and exclude those instances that did not represent loci of variation. In other words, tokens falling outside of the envelope of variation were not submit-

ted to further analysis. I now outline the procedure that I followed for circum-
scribing the variable context (see also Coveney 2002: 66–71).

Recall that *ne* is predominantly used in spoken language as a pre-verbal mark-
er in bipartite negation. However, it can also be variably employed in certain af-
firmative environments, such as in expletive contexts and in restrictive expres-
sions with *que* (see Section 1). Although Moreau (1986: 148) notes that '*que* est
doté sans doute d'un statut un peu à part dans le sémantisme de la négation',[9] she
does not exclude such tokens from quantitative analysis. Auger and Villeneuve's
(2008) study is the only investigation to explicitly exclude restrictives. They argue,
cogently I believe, that the removal of these constructions 'ensure[s] functional
comparability (Lavandera 1978), and avoid[s] treating two distinct semantic uses
of *ne* as one sociolinguistic variable' (Auger & Villeneuve 2008: 236). For this
reason, it was first of all necessary to remove occurrences of expletive and restric-
tive *ne* from my data (see Examples 3 and 4) in order to focus exclusively on the
role of *ne* in negative constructions.

In certain sequences, *ne* is an obligatory element. It was therefore necessary to
remove these 'don't count' cases (Blake 1997), which do not permit variation,
from the data set. Instances of invariant contexts were found in fixed expressions,
e.g. *n'est-ce pas* 'isn't it' (5), as well as in song lyrics and film titles (6).

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[9] '*[Q]ue* is seen as an exception in the semantics of negation' (my translation).

(5) *Fixed expression*

Je sais qu'il y en a pas tellement qui aiment faire le shopping **n'est-ce pas**.

[JOB]

'I know that there aren't many of them who like shopping, right.'

(6) *Film title*

Never Back Down. **Ne jamais reculer**. J'aime bien les films américains.

[DOT]

'Never Back Down. Never Back Down. I really like American films.'

A further category of exclusions involves the potential realization of *ne* in 'phono-logically ambiguous environments' (Sankoff & Vincent 1980: 297). As such, I removed tokens occurring in negative constructions when the 3SG pronoun *on* occurs in a pre-vocalic context, as in (7). In these cases, the audible [n] could indicate either the liaison of *on* with the following vowel-initial word. It could also signal the presence of pre-vocalic *ne*, due to the elision of the /e/. In this case, the negative force is thus carried solely by the nasal (i.e. *n'*), which is homophonous to the last segment of *on*. Although Fonseca-Greber (2007: 256) makes a distinction between [*on –ne*] and geminate [*on +ne*] sequences, in my data at least, it is not possible to determine with certainty whether the negative particle has been realized. Indeed, the vast majority of previous research excludes tokens occurring in this context (Armstrong 2002: 159; Armstrong & Smith 2002: 25; Coveney 2002: 66; Auger & Villeneuve 2008: 235). Similar identification difficulties arise when any potential instance of *ne* follows a word-final [n] but precedes a vowel-

initial word, as illustrated in examples (8) and (9). These tokens were discarded on the same grounds.

(7) *Ambiguous context*

Nous avons une structure géologique qui fait qu'**on (n') aura** pas de glisse-ments de terrain. [ALN]

'We have a geological structure which means we won't have any landslides.'

(8) *Ambiguous context*

Donc **rien (n') est** sûr pour la Martinique. [JOB]

'Nothing is certain for Martinique.'

(9) *Ambiguous context*

En (n') ayant pas de voiture on ne dépensait pas de l'argent pour acheter de l'essence. [ANP]

'In not having a car we weren't spending any money on buying petrol.'

Thus far, I have focussed on excluding tokens involving non-negative, invariant or unidentifiable instances of *ne*. It was, however, also necessary to remove occur-rences of negative items which preclude the use of the negative particle, such as when certain lexemes, that can be recruited as negative items, are used in their literal sense. This is the case with the noun *personne* 'person' (10) or the adverb *plus* 'more' (11). Outside of negative contexts, these tokens clearly fall outside of the envelope of variation and were therefore not included in my study.

(10) *Personne as a noun*

C'est une **personne** au même stade que nous [NOR]

'It's a person at the same stage as us.'

(11) *Plus as an adverb*

Ben déjà il fait **plus** chaud. [SOD]

'Well already it's much warmer.'

Furthermore, I exclude all negative cases that do not permit full variability. To this end, tokens containing an omitted 3SG impersonal *il* subject (12) were removed because the absence of the subject pronoun renders the omission of *ne* obligatory (see discussion in Coveney 2002). Another categorical context involves occurrences of a negative item in elliptical non-verbal negation (13). These were discarded as such sequences do not contain a locus for variation and are therefore invariable.

(12) *Omitted subject*

Non, ø **faut** pas faire ça. [VAV]

'No, you mustn't do that.'

(13) *Non-verbal negation*

Pour les vacances ok mais **pas** pour la vie non. [ORT]

'For the holidays ok but not for everyday.'

A further set of exclusions concerns certain uses of *pas mal*. In French this collocation can be used to express the notion of 'not bad' but can also be used as a synonym of the quantifier *beaucoup* 'a lot'. Although both readings of *pas mal* have been retained in previous work (Hansen & Malderez 2004: 14), other research has explicitly excluded such uses when it acts as a synonym of *beaucoup* (Armstrong 2002: 160; Coveney 2002: 69–70; van Compernolle 2008b: 11). The same approach is advocated here because it is important to differentiate between two different semantic uses of this expression. To this end, I exclude those cases in which *pas mal* functions as a synonym of *beaucoup* (14) from further examination. I do not discard instances of *pas mal* that retain negative polarity (literally 'not bad', as in 15), as the negative particle is still variably realised in such contexts.

(14) *Pas mal* as a synonym of *beaucoup*

Il y a eu **pas mal** de dégâts. [DOT]

'There was a lot of damage.'

(15) *Pas mal with negative polarity*

Et vous allez voir un petit peu les communes qui nous entourent. Le Prêcheur de loin donc c'est **pas mal**. C'est très joli à voir. [JOB]

'You are going to see a little bit the communes which surround us. Le Prêcheur from afar so it's not bad. It's very nice to see.'

The location of the negative item has been shown in previous work to affect omission rates of the negative particle. A negative element occurring before *ne* strongly favours *ne*-retention (Auger & Villeneuve 2008: 239). However, for the purposes of the present study, I have chosen to exclude those tokens in which the negative item is realised before the locus of variation, as in (16). Such cases prohibit full variability, since only a sub-set of negative items (e.g. *jamais*, *personne* and *rien* but not the most frequent item *pas*) can occur in this context.

(16) *Negative item realised before ne*

Maintenant il y a Leclerc c'est moins cher donc ils sont forcés de baisser leurs prix sinon **personne ne** va venir dans leur magasin. [KAG]

'Now there is Leclerc it's cheaper so they are forced to lower their prices otherwise nobody will go to their shop.'

Finally, as previously discussed in Chapter 2, in keeping with the best practice for the analysis of speech data (cf. also Tagliamonte 2006: 86–94), I decided to remove all tokens occurring in reported speech (17).[10] In cases of verbatim repetition (18) and reformulation (19), tokens were categorised according to the last variant used in the utterance, even if the polarity changed between the two instantiations.

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[10] Film titles are also a case of reported speech (see Example 6 above).

(17) *Reported speech*

Elle me dit « mais tu sens pas que la terre tremble » ? [MIP]

'She said to me, "but aren't you feeling the ground moving?"'

(18) *Repetition*

Je sais pas [/] **je sais pas** où vous habitez. [MAC]

'I don't know [/] I don't know where you live.'

(19) *Reformulation*

C'est pas [//] c'est tout-à-fait différent. [NOR]

It's not [//] It's completely different.'

In total 2344 tokens of verbal negation, in which speakers could either retain or omit the negative particle, were included in the quantitative analysis. Each instance of the variable was first coded for the presence or absence of *ne*. In addition, every token was coded for a number of internal and external constraints which have been shown to condition variant selection in the literature. In order to facilitate cross-dialectal comparison, this was achieved by combining and refining the coding protocols outlined in previous research on the negative particle (cf. Ashby 1981; Coveney 2002; Auger & Villeneuve 2008; van Compernolle 2008a *inter alia*). The following two sub-sections will detail the conditioning factors that I have included in my quantitative analysis. I focus first on the linguistic factor groups and then move on to the social constraints.

3.2 Linguistic Factors

In total, I coded the data for four linguistic constraints: the type of subject, the presence or absence of intervening clitics, the type of negative item and the influence of prefabricated expressions. Each of these factors has been shown to affect the choice of the dependent variable in previous studies. I now detail how I operationalised each factor group in my study.

3.2.1 Subject Type

The strong link between variant choice and the type of grammatical subject has been well documented in the literature. It has been shown to be operative in both contemporary spoken language (Ashby 1981; Diller 1983; Armstrong & Smith 2002; Coveney 2002; Hansen & Malderez 2004 *inter alia*) and chat room discourse (van Compernolle 2008a, 2010). Research shows that the omission of *ne* is strongly favoured with subject pronominals, while its retention is associated with all other types of grammatical subject. To capture the potential effect of this factor group in my Martinique data, tokens of the variable were first coded for all grammatical persons, both singular and plural. However, for analytic purposes and in keeping with previous work, these initial categories were subsequently collapsed to create a four-way distinction between pronominals (20), relatives (21),

full noun phrases (22) and subjectless expressions, such as infinitives (23) and imperatives (24).[11]

(20) *Pronominal*

Mais **je** mange pas tous les légumes. [MYR]

'But I don't eat all kinds of vegetables.'

(21) *Relative pronoun*

Alors elle se moque de sa sœur **qui** ne veut pas parler ni créole ni français. [WIP]

So she makes fun of her sister who doesn't want to speak either Creole or French.'

(22) *Noun phrase*

Les gens ne mangent pas de trempage. [ALB]

'People don't eat *trempage*.'

(23) *Subjectless expression (infinitive)*

Ça fait du plaisir de ne pas **avoir** de moustiques. [IRL]

'It's a joy to not have any mosquitoes.'

---

[11] Recall that I excluded expressions containing an omitted 3SG impersonal *il* subject from the quantitative analysis (see Section 3.1). This was because, in these cases, the absence of *ne* is categorical. However, I have retained other types of construction lacking an overt subject, such as infinitives and imperatives, as speakers can opt to omit or retain the negative particle.

(24) *Subjectless expression (imperative)*

Ne **parle** pas du baccalauréat. [TEM]

'Don't speak about the *baccalauréat*.'

3.2.2 The Influence of Non-Subject Clitics

The literature reports a small but nevertheless statistically significant link between *ne*-dropping and the presence of a non-subject clitic, i.e. a direct or an indirect object pronoun (Ashby 1981; Auger & Villeneuve 2008 *inter alia*). In previous work, this factor group has been operationalised in various ways. For instance, a number of studies have coded for every type of non-subject clitic (Armstrong & Smith 2002; Coveney 2002). It was, however, not possible to code my tokens in a similar fashion. This is because a considerable number of pronouns occur too infrequently in the data to be individually included in a multivariate analysis (e.g. 3SG *lui* 'to him': N=4; *y* 'there': N=5). By contrast, Ashby (1981: 680) makes a binary distinction between the presence and absence of an object pronoun, while Pooley (1996: 174) demonstrates that combinations of more than one clitic result in the near-categorical deletion of *ne*. As a result, I distinguished tokens depending on whether they co-occurred with one (25), two (26) or no (27) intervening clitic pronouns.

(25) *One intervening clitic*

Je ne **le** dis pas dans un sens péjoratif. [ALB]

'I'm not saying it in a pejorative way.'

(26) *Two intervening clitics*

On **s'en** rend même pas compte maintenant. [DOT]

'We don't even realise it now.'

(27) *Absence of any non-subject clitic*

Moi je n' ø aime pas le piment. [JOB][12]

'I don't like chilli.'

3.2.3 The Type of Negative Item

In both Laurentian and European varieties of French, *pas* functions as the default negative item in verbal negation. Previous studies have consistently demonstrated that omission rates of the negative particle are higher with *pas* 'not' than with any other negative item such as *jamais* 'never', *plus* 'no more' or *rien* 'nothing' (Ashby 1976, 1981; Armstrong & Smith 2002; Coveney 2002). I therefore coded all instances of the response variable for every negative item, such as *pas* (28), *plus* (29) and *jamais* (30). I also categorised tokens with a combination of two second negatives (31) as a separate factor level.

(28) *Pas 'not'*

Je me souviens même **pas** de Dean. [LYB]

'I don't even remember Dean.'

---

[12] In this example, 1SG *je* is a doubled weak subject pronoun (see Chapter 3) and not a non-subject clitic.

(29) *Plus 'no more'*

Donc comme nous sommes devenus département français nous sommes **plus** colonie. [WIP]

'So as we became a French department we are no longer a colony.'

(30) *Jamais 'never'*

Ça fait quinze ans que j'habite ici il n'a **jamais** explosé. [DOT]

'I've been living here for fifteen years it has never exploded.'

(31) *Two or more negative items*

On ne voit **plus personne**. [JOU]

'We no longer see anyone.'

3.2.4 The Influence of Prefabricated Expressions

Research has shown that speakers omit the negative particle more readily with prefabricated expressions. Some studies have opted for fine-grained categorisation and coded every collocation in the data (cf. Moreau 1986; Coveney 2002). For the purposes of the present study, however, it was not possible to adopt a similar coding schema, since certain cells do not contain a sufficient number of tokens to be submitted to variationist analysis. Consequently, and in line with previous work (cf. Ashby 1976, 1981; Auger & Villeneuve 2008), I distinguished the four most frequent prefabricated expressions *il y AVOIR* (32) 'there is/are', *ce/ça ÊTRE* 'it is' (33), *il FALLOIR* 'it is necessary to' (34) and *je SAVOIR* 'I know' (35). All other types of construction were collapsed into one separate category (36).

(32) *Il y AVOIR*

Pendant le weekend entre 12h et 15h **il y aura** personne dans les rues parce que c'est le moment de la sieste. [MAE]

'During the weekend between midday and 3pm there will be nobody in the streets because it's time for a siesta.'

(33) *Ce/Ça ÊTRE*

Donc on a tout de suite compris que **c'était** pas un petit cyclone. [DOT]

'So we understood straightaway that it wasn't a small hurricane.'

(34) *Il FALLOIR*

Les parents nous parlaient créole mais **il fallait** pas répondre en créole. [CLU]

'Parents spoke to us in Creole but it wasn't possible to answer in Creole.'

(35) *Je SAVOIR*

Je sais pas comment elle a dit ça. [OLM]

'I don't know how she said that.'

(36) *Other constructions*

Ils ont des coutumes que **nous** n'**avons** pas. [JOU]

'They have some traditions that we don't have.'

3.3 Social Factors

In addition to the four linguistic constraints outlined above, all tokens of the variable were coded for five social factors groups: speaker age, sex, educational level, language restriction and style.

3.3.1 Age

Speaker age has been identified as the most influential social constraint on *ne*-deletion in every study of a European French variety. Older speakers have consistently been shown to prefer the use of the *ne* more than younger informants, who tend to clearly disfavour negative particle use. This age-based pattern has been interpreted under the apparent-time construct as either evidence of a change in progress (Ashby 1976, 1981) or as a case of age grading (Coveney 2002). Real-time research has, however, shed further light on this synchronic age gap. Trend studies have demonstrated that the overall frequency of *ne* is indeed decreasing in diachrony in Paris and Northern French varieties (Armstrong & Smith 2002; Hansen & Malderez 2004), while the Tours panel study revealed that panelists' use of *ne* do not alter over the course of their lifespan (Ashby 2001). Thus, real-time evidence suggests that the loss of *ne* in spoken French is an ongoing linguistic change. I therefore decided to test whether informant age also influences *ne*-realisation in Martinique. Consequently, I coded my informants as either younger (under 19 years old) or older (over 39 years old).

3.3.2 Sex

The vast majority of research on European French shows that sex of the speaker only plays a marginal role in the variable realisation of *ne*. However, Ashby's (1976, 1981) work on Parisian and Tourangeau varieties reveals contradictory findings regarding the effect of this factor group. In Paris, women are reported to be driving the change towards the loss of *ne*. In contrast, it is men who are shown to be the leaders in Tours. Nevertheless, the sex effect is dependent on speaker age and social class, as explained in the next section, in both varieties. In light of these rather complicated results, I coded each token for the sex of the speaker and tested for interaction effects with the other social variables.

3.3.3 Educational Level

Previous European French studies have reported a linear correlation between the use of *ne* and social class marking, with upper and middle-class speakers realising *ne* more often than working class informants (Ashby 1976, 1981; Coveney 1996). However, Hansen and Malderez (2004: 19) chose instead to focus on informants' educational attainment as an indicator of socioeconomic standing. Their results demonstrate that higher levels of formal instruction do positively correlate with *ne*-retention in their 1980s dataset. In the present study, I have similarly chosen to use informant's current educational level as a surrogate for social class, as explained in detail in Chapter 2 Section 2.3.3. Recall that speakers were categorised depending on whether they have no formal qualifications, a *baccalauréat* or a university degree.

3.3.4 Language Restriction

Language restriction is a measurement of the use of French in interpersonal com-
munication (Mougeon & Beniak 1991). It has traditionally been used in the inves-
tigation of language variation and change in bilingual communities in Ontario,
Canada. Although Ontarian studies regularly return statistically significant find-
ings for this particular social factor (cf. Mougeon & Beniak 1991; Nadasdi 2000),
Burdine & Mougeon (1999) is the only other study to examine the effect this fac-
tor group has on the use of *ne*. Their results indicate that speakers with greater
levels of restriction in the use of French are more likely to retain the negative par-
ticle. As a result, I chose to test if this constraint was also operative in my Carib-
bean data and I coded each token for the speaker's language restriction score.

3.3.5 Style

Finally, I examine if variable *ne* is sensitive to stylistic variation (see Labov 1972:
208). Previous work has shown that individuals alter their retention/omission rates
depending on their interlocutor(s), the situational setting, the interview portion
(e.g. first half or second half) and the topic of conversation (Ashby 1976, 1981;
Armstrong 2001; Coveney 2002; Auger & Villeneuve 2008). In each of my inter-
views, the location of the recording and the interlocutors does not change. Fur-
thermore, the first 10 minutes of each audio file were not transcribed in an attempt
to circumvent the effects of the Observer's Paradox (see Chapter 2 Section 2.6). I
therefore decided to operationalise this factor group by testing for the effect of
topic formality (see Mougeon, Nadasdi and Rehner 2008).

Research on the variable *ne* has linked the use of the negative particle to more formal topics, while its omission is associated with more informal ones (Sankoff & Vincent 1977; Ashby 1981 *inter alia*). I therefore coded the parts of speech containing every occurrence/non-occurrence of *ne* for a specific topic, such as 'politics', 'religion', 'formal education' or 'free time', using a modified version of Mougeon et al.'s (2008: 373) topic typology. I subsequently categorised each subject as either formal or informal to achieve a binary topic dichotomy, as illustrated in Table 4.1.

Formal Topics	Informal Topics
Personal information elicited at the beginning of the interview (e.g. age, place of residence, etc.)	Free time and hobbies (includes school life outside of the classroom in the playground)
School and work life	Relationships and activities with friends
Relationships with parents and teachers	Holidays both past and future
Religion, politics and language use	Local life and festivals
Language	'Danger of death' narratives

Table 4.1: Topic typology (adapted from Mougeon et al. 2008: 373).

The results of this investigation are presented and analysed in Section 4.

4. Results and Analysis

In this section, I first discuss the overall frequency of *ne* in my data. I then exam-

ine the linguistic and social constraints governing the variable use/non-use of the

negative particle in Martinique French.

4.1 Overall Variant Distribution

The overall retention and omission rates of the negative particle are given in Table

4.2. It shows that speakers of Martinique French show a marked preference for the

omission of *ne* in speech: it is dropped in 73.4% (N=1720) of cases, while it is

retained only 26.6% (N=624) of the time.

Variant	N	%
+ *ne*	624	26.6
- *ne*	1720	73.4
Total	2344	100.0

Table 4.2: Overall retention and omission rates of *ne* in Martinique French.

The use of *ne* in Martinique is notably higher than the levels reported for Lauren-

tian speech communities. In Ontario (Mougeon & Burdine 1999) and Québec

(Sankoff & Vincent 1977; Poplack & St-Amand 2007), the negative particle is

employed in less than 1.5% of all potential occurrences (see Table 4.3 for an

overview). Indeed, my Martinique data pattern more closely with European

French. In Continental varieties, levels of *ne* deletion vary greatly depending on

the research site under investigation: from 34.3% in the South of France to 99.0%

in Rouge-Barres (Pooley 1996).[13]

	Year of Recording	Research Site	% *ne* Omission
Laurentian varieties			
Poplack & St-Amand 2007	20th century	Ottawa-Hull	99.8
Sankoff & Vincent 1977	1971	Montréal	99.5
Burdine & Mougeon 1999	1978	Ontario	98.5
European varieties			
Pooley 1996	1995	Rouge-Barres	99.0
Armstrong 2002	1986–1987	Lorraine	98.2
Fonseca-Greber 2007	Late 1990s	Switzerland	97.5
van Compernolle 2009	2005	Tours	94.5
Pooley 1996	1983	Roubaix	93.0
Hansen & Malderez 2004	1989–1993	Paris/Oise	91.8
Ashby 2001	1995	Tours	84.3
Hansen & Malderez 2004	1972–1974	Paris	84.2
Coveney 2002	1980s	Somme	81.2
Auger & Villeneuve 2008	2006–2007	Somme	79.0
Ashby 1981	1976	Tours	63.4
Ashby 1976	1967–1968	Paris	44.2
Diller 1983	1975	South of France	34.3
Caribbean varieties			
Present study	2010–2011	Martinique	73.4

Table 4.3: Overview of *ne*-omission rates from selected previous studies (adapted from Armstrong & Smith 2002 and Auger & Villeneuve 2008).

According to Armstrong and Smith (2002: 28), 'one can safely say that the rather

large degrees of variation [in European French varieties] are due to the social

characteristics of the speakers sampled, as well as the speech situations in which

the corpora were recorded'. For instance, Armstrong's (2002) research is based on

the speech of adolescent school pupils from Lorraine aged between 11 and 19

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[13] The range of diatopic variation may not just be regionally motivated. Indeed, the time of data collection may also be a factor in producing quite different results.

years old (omission rate=98.2%), Ashby's (1976) investigation focuses exclusive-

ly on upper-middle class Parisians (omission rate=44.2%). Unsurprisingly, these

two studies report comparatively high and low levels of *ne*-omission respectively.

Such an explanation might therefore be able to account for the greater prepon-

derance of *ne* in my Martinique data compared to the vast majority of previously

studied speech communities. However, data for the present study were drawn

from a socially diverse group of informants, who were recorded in self-selected

dyads at a mutually convenient location. As such, the data collection methodology

was specifically designed to 'tap into the vernacular' of my speakers and mini-

mise the effects of the Observer's Paradox (see Chapter 2 Section 2.5). To ex-

clude the possibility of structural priming, I examined my own use of *ne*. Distribu-

tional analysis of tokens of verbal negation produced by myself as the interviewer

reveals that I have an overall omission rate of 87.2% (N=184). The comparatively

high retention rate of *ne* for Martinique French speakers does not therefore appear

to be in line with my status as a highly-educated, white speaker of European

French.

I now turn to an investigation of the variable grammar governing the omis-

sion/retention of the negative particle *ne* in my data. To this end, I submitted all

tokens of verbal negation to multiple logistic regression models using the program

Rbrul (Johnson 2009) and set *ne*-omission as the application value. The models

generated by this software identify which linguistic and extralinguistic constraints

contribute to variant choice at a statistically significant level. In sections 4.2 and

4.3, I discuss the results of the multivariate analyses. I focus first on the intralin-

guistic constraints and then on the social factor groups.

4.2 Linguistic Factors

The results of the initial fixed-effect regression analysis are shown in Table 4.4.[14]

	Centered Factor Weight	%	N	Tokens	Log-odd
Subject type					
Pronominal	0.85	80.1	1657	2068	1.705
Relative	0.40	25.3	24	95	-0.424
Subjectless	0.37	23.9	11	46	-0.543
Full NP	0.32	20.7	28	135	-0.738
Range 53					
Prefabricated expressions					
ce/ça ÊTRE	0.71	94.8	313	330	0.902
je SAVOIR	0.57	90.9	221	243	0.270
il FALLOIR	0.56	90.5	19	21	0.233
il y AVOIR	0.39	81.0	111	137	-0.449
Other constructions	0.28	65.5	1057	1613	-0.957
Range 43					
Type of negative item					
2 or more	0.63	80.0	8	10	0.549
Pas	0.61	74.8	1554	2077	0.445
Personne	0.56	66.7	4	6	0.251
Jamais	0.50	59.7	43	72	-0.001
Plus	0.49	71.9	41	57	-0.24
Rien	0.42	57.6	68	118	-0.326
Aucun	0.29	50.0	2	4	-0.895
Range 34					
Non-subject clitic					
Two	>0.999	100	10	10	8.980
One	0.01	74.1	166	224	-4.277
None	0.01	73.2	1545	2110	-4.703
Range *KnockOut*					

Deviance=2219.895; df=16; Intercept=4.596; Mean=0.734; Nagelkerke R^2=0.278

Table 4.4: Rbrul analysis 1 of linguistic factors contributing to *ne*-omission.

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[14] As introduced in Chapter 2 Section 3.3, regression coefficients for nominal factor groups in Rbrul are expressed as both a factor weight (i.e. a weighted probability) and a log-odd (see Chapter 2 Section 3.3 for further information). While a factor weight greater than 0.5 indicates a favouring effect for the omission of the negative particle, a value smaller than 0.5 designates a preference for *ne*-retention. A value of 0.5 is neutral.

In this model, the factor groups are operationalised according to the coding protocol outlined in Section 3.2 and 3.3. They will be refined in the course of this chapter. As Table 4.4 illustrates, all four linguistic constraints have been selected as influencing the use of *ne* in Martinique.

There are two key problems with this initial model. Firstly, there are two 'type of negative item' factor levels that occur comparatively infrequently in my data. The very low count of tokens co-occurring with *personne* (N=6) and *aucun* (N=4) may be affecting the overall model. As a result, I decided to exclude tokens occurring in these low-frequency factors. Likewise, only 0.42% (N=10) of tokens co-occur with two or more negative items. Further investigation revealed that such instances were categorically realised with *plus* as the initial second negative. Instead of removing these tokens entirely, I orientated towards Coveney's (2002: 75) original coding protocol and reclassified the data according to the initial negative element. As such, future models do not take into consideration combinations of negative items, i.e. *plus personne* and *plus rien*, but take into account only the first element, i.e. *plus*.

A further issue concerns the 'intervening clitic' factor group. When there are two or more non-subject clitics present (N=10), speakers categorically omit the negative particle. The categorical favouring effect of this factor results in a KnockOut (cf. Tagliamonte 2006: 152–153). Since the data are not variable, they cannot be subjected to multivariate analysis. I therefore recoded this particular factor group and operationalised a binary distinction between the presence and absence of an intervening object pronoun (cf. also Ashby 1981).

The changes outlined above reduced the overall token count from 2344 to 2334 (+*ne*: 26.6%, N=620; -*ne*: 73.4%, N=1714). The outcome of the revised logistic regression analysis is given in Table 4.5. Let us now investigate the effect of the linguistic constraints that were retained by the model as statistically significant.

	Centered Factor Weight	%	N	Tokens	Log-odd
Subject type					
Pronominal	0.85	80.2	1651	2059	1.727
Relative	0.40	25.3	24	95	-0.416
Subjectless	0.37	23.9	11	46	-0.540
Full NP	0.32	20.1	27	134	-0.771
Range 53					
Prefabricated expressions					
ce/ça ÊTRE	0.71	94.8	313	330	0.915
je SAVOIR	0.57	90.9	221	243	0.280
il FALLOIR	0.56	90.5	19	21	0.247
il y AVOIR	0.38	80.3	106	132	-0.509
Other constructions	0.28	65.6	1054	1608	-0.933
Range 43					
Type of negative item					
pas	0.60	74.8	1554	2077	0.388
plus	0.52	73.1	49	67	0.066
jamais	0.48	59.7	43	72	-0.070
rien	0.41	57.6	68	118	-0.384
Range 19					
Non-subject clitic					
Presence	0.56	75.2	176	234	0.23
Absence	0.44	73.2	1537	2100	-0.23
Range 12					

Deviance=2210.349; df=12; Intercept=0.146; Mean=0.734; Nagelkerke R^2=0.277

Table 4.5: Rbrul analysis 2 of linguistic factors contributing to *ne*-omission.

The type of subject constraint now tops the hierarchy and is selected as the most influential with a range of 53. This finding is not unexpected in light of the results from previous studies of this feature (Ashby 1981: 680–681; Diller 1983; Arm-

strong & Smith 2002: 30–36; Coveney 2002: 72–74; Hansen & Malderez 2004: 21–22 *inter alia*), while more recent multivariate analyses confirm that this factor group is one of the strongest determinants of variant choice (Auger & Villeneuve 2008: 239; van Compernolle 2008a: 330). The data in Table 4.5 reveal that subject pronominals strongly favour the omission of *ne* (FW=0.85; 80.2%, N=1651). Contrastingly, this variant is disfavoured with relatives (FW=0.40; 25.3%; N=24), subjectless expressions (FW=0.37; 23.9%; N=11) and full NPs (FW=0.32; 20.9%; N=27).

In a recent study of variable *ne* from within a Distributed Morphology framework (Halle & Marantz 1994), Meisner and Pomino (2014) demonstrate that *ne*-realisation varies considerably depending on the type of subject clitic. They argue that stressable (e.g. 1PL *nous*, 2PL *vous*, 3SG/PL *elle(s)*) and unstressable (e.g. 1SG *je*, 2SG *tu*, 3SG/PL *il(s)*) clitic subjects should be treated independently of each other. In their data, the former pattern like other stressable subjects, such as full NPs, whereas the latter form a distinct group, consisting of zero or mono-segmental variants that never co-occur with *ne*: for example 3SG *il* [i], 3SG *ce/c'* [s] and 2SG *tu* [t] (Meisner & Pomino 2014: 26). With this in mind, I deconstructed the pronominal subject factor level to investigate whether this finding also holds in my Martinique French data. Table 4.6 shows that the negative particle is omitted more frequently with unstressable clitic subjects (83.0%, N=1479) than with stressable ones (64.1%, N=75). However, a finer-grained examination of the data reveals divergent results in this second category. Indeed, stressable 3SG *elle* patterns more like its unstressable clitic counterparts, as speakers will omit *ne* in 76.2%

(N=32) of cases with a 3SG *elle* subject.[15] Indeed, it appears that there are two

pronouns, 2PL *vous* and 1PL *nous*, which pattern differently from other clitic sub-

jects, since both exhibit lower rates of *ne*-omission than any other type of clitic

subject: 64.8% (N=35) and 39.8% (N=7) respectively. These findings would

therefore suggest that the stressable/unstressable clitic distinction does not hold in

my data.

		+ *ne*		- *ne*		Total
		%	N	%	N	
Unstressable subject	ce/c'	3.1	10	96.9	311	321
	je	17.0	126	83.0	614	740
	tu	18.8	25	81.2	108	133
	ils	22.7	27	77.3	92	119
	il	24.3	57	75.7	178	235
	on	24.5	57	75.5	176	233
	Total	17.0	302	83.0	1479	1781
Stressable subject	elle	23.8	10	76.2	32	42
	vous	35.2	19	64.8	35	54
	nous	61.1	11	39.8	7	18
	elles	66.6	2	33.3	1	3
	Total	35.6	42	64.1	75	117

Table 4.6: Cross-tabulation of *ne* variants by clitic subject type.[16]

Instead, the reduced frequency of *ne* with both *nous* and *vous* might be indicative

of the socio-stylistic function of *ne* in Martinique French: Both *nous* and *vous*

pronominal subjects are considered to be more formal subjects (as opposed to

their less formal counterparts *on* and *tu*, respectively), while *ne*-deletion is less

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[15] I do not consider the effect of 3PL *elles* in isolation due to its infrequent occurrence in my data (N=3).

[16] I have excluded 3SG *ça* (N=161) from Table 3.X. Although *ça* is a pronominal subject, it is not considered a clitic in French (Armstrong & Smith 2002: 135).

likely to occur in more formal speech settings (Armstrong 2001: 122–4; Coveney 2002: 72–5). This is an area that warrants further investigation and I return to the stylistic use of the *ne* in Section 4.3.

To further investigate the effect that the type of subject plays in the use of *ne*, a number of studies have focused not on the type of pronominal subject but have instead considered the role that NP subject doubling plays in variant selection (cf. Chapter 3, see also Auger 1994; Nadasdi 2000; Coveney 2003). Indeed, both double subjects and *ne*-deletion are deemed to be features of informal spoken French (Ball 2000; Villeneuve & Auger 2013). However, this constraint has previously been treated in isolation (Auger & Villeneuve 2008: 238) and integrated into the larger subject-type (Pooley 1996: 173) factor group. In both studies, non-doubled and doubled noun phrases are shown to pattern differently: speakers are more likely to omit *ne* with doubled NPs than with undoubled ones in order to reduce the amount of semantically redundant material occurring pre-verbally (see Pooley 1996). I therefore decided to deconstruct the noun phrase factor and coded all NPs as either doubled (37) or non-doubled (38).

(37) *Doubled NP*

Quand j'étais petite **mon papa il** voulait pas que je parle créole. [KAG]

'When I was young my Dad didn't want me to speak Creole.'

(38) *Non-doubled NP*

Les Français n'avaient plus besoin de la canne à sucre. [WIP]

'The French no longer had a need for sugar cane.'

	Factor Weight	%	N	Tokens	Log-odd
Subject type					
Doubled NP	0.88	81.0	17	21	1.953
Pronominal	0.82	80.2	1651	2059	1.486
Relative	0.34	25.3	24	95	-0.659
Subjectless	0.31	23.9	11	46	-0.784
Non-doubled NP	0.12	8.8	10	113	-1.996
Range 76					
Prefabricated expressions					
ce/ça ÊTRE	0.71	94.8	313	330	0.913
je SAVOIR	0.57	90.9	221	243	0.277
il FALLOIR	0.56	90.5	19	21	0.252
il y AVOIR	0.38	80.3	106	132	-0.509
Other constructions	0.28	65.6	1054	1608	-0.933
Range 43					
Type of negative item					
pas	0.61	74.8	1554	2077	0.425
plus	0.52	73.1	49	67	0.086
jamais	0.46	59.7	43	72	-0.145
rien	0.41	57.6	68	118	-0.367
Range 20					
Non-subject clitic					
Presence	0.56	75.2	176	234	0.258
Absence	0.44	73.2	1537	2100	-0.258
Range 12					

Deviance=2160.322; df=13; Intercept=0.38; Mean=0.734; Nagelkerke R^2=0.30

Table 4.7: Rbrul analysis 3 of linguistic factors contributing to *ne*-omission.

As Table 4.7 illustrates, the decision to re-examine the NP factor was justifiable as it affords a better view of the variable grammar of *ne*-deletion.[17] Note that the rank order of constraints has remained the same, as have the ranges for prefabricated expressions, the type of negative item and the influence of an intervening clitic at 43, 20 and 12, respectively. However, the range for the type of subject has now increased considerably from 53 to 76. In Martinique, speakers are most likely to retain the negative particle with non-doubled NPs (0.12, 8.8%, N=10), yet dou-

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[17] This result is, however, based only on a small number of tokens (N=21). More tokens from a larger data pool are therefore required to substantiate this finding.

bled NPs are identified as the subject type most favourable to *ne*-omission (0.88, 81.0%, N=17).

Table 4.7 also displays the effect of prefabricated expressions. This factor group is identified as the second most important internal constraint operating on variable *ne* in my Martinique data. In previous work, all prefabricated expressions have been shown to affect variant usage to varying degrees (Ashby 1976: 126, 1981: 678; Auger & Villeneuve 2008: 237). In Martinique, the collocation *ce/ça ÊTRE* strongly favours the omission of the negative particle (FW=0.71, 94.8%, N=313). The probability that *ne* will be dropped then decreases from 0.57 (90.9%, N=221) with *je SAVOIR*, to 0.56 (90.5%, N=19) with *il FALLOIR*, and then to 0.38 (80.3%, N=106) with *il y AVOIR*.[18] As expected, speakers much prefer to retain *ne* with all other types of construction (FW=0.27, 65.6%, N=1054).

Speakers of Martinique French are most likely to omit the negative particle with *pas* (Table 4.7, FW=0.61, 74.8%, N=1554). As previously attested in other varieties of French examined in the literature, my informants prefer *ne*-retention with other negative items, namely with *jamais* (FW=0.46, 59.7%, N=43) and *rien*

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[18] At first glance, it appears that *ne*-omission is disfavoured with *il y AVOIR*, as the factor weight is 0.38. However, as Tagliamonte (2006: 156) notes, the interpretation of factor weights is not necessarily straightforward. This is because factor weights only favor/disfavor the application value in relation to other factors within the same factor group (Johnson p.c.). The relative position of a factor in the constraint hierarchy is therefore more important than individual factor weights (cf. also Tagliamonte & Smith 2005; Auger & Villeneuve 2008).

(FW=0.41, 57.6%, N=68).[19] Note, however, that the regression coefficient for *plus* hovers around the 0.5 mark (FW=0.52, 73.1%, N=49). This result indicates that this particular post-verbal polarity item has a neutralizing effect on variant choice. Recall that *plus* can also be used in its literal sense to express the notion of 'more', as in (39) (see also Section 3.1), and speakers tend to make a distinction in pronunciation between *plus* [ply] as a negative and *plus* [plys] as a positive polarity item in certain contexts (see also Armstrong & Smith 2002).

(39) *Plus used in its literal sense*

Les enfants sont **plus** évolués. [MAE]

'Children are more well-rounded.'

Finally, the results in Table 4.7 show that presence/absence of an intervening object pronoun exerts a small, but nevertheless significant, effect on variant selection (range=12). The data reveal that Martinique French speakers prefer to omit *ne* when there is an intervening pronoun (FW=0.56, 75.2%, N=176). This variant, however, is only marginally disfavoured in the absence of preverbal object clitics (FW=0.44, 73.2%, N=1537). As previously discussed in relation to Table 4.4, the effect of this factor group is, in fact, carried by those tokens with two or more intervening non-subject clitics. Recall, however, that the original constraint was col-

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[19] Both of these negative items can be used in their literal sense to mean 'ever' and 'anything' in questions or hypothetical statements, e.g. *elle est partie avant que j'aie **rien** dit* 'she left before I said anything' and s*i une malle s'était **jamais** trouvée dans le grenier, elle n'y était plus* 'if there had ever been a trunk in the attic, it was no longer there' (Examples taken from Hawkins & Towell 2001). However, disambiguation as motivation for the high incidence of *ne* with these particular negative items is unlikely, as their use in affirmative contexts is uncommon in spoken French.

lapsed to create a binary factor group due to a KnockOut. Nevertheless, this finding lends support to Pooley's (1996: 174) hypothesis that the presence of such elements essentially forces out the semantically redundant negative particle as they are of 'greater semantic import' than *ne*.

Importantly, however, the models in Table 4.4, 4.5 and 4.7 have thus far only been able to account for between-group effects. A number of variable *ne* studies have previously acknowledged high levels of inter-speaker variation (cf. Pooley 1996: 168, see also personal patterned variation in Dorian 1994). In research by Ashby (1981: 677) in Paris, one speaker deleted *ne* in only 6% of cases, while another categorically omitted the negative particle. Likewise, Moreau (1986: 142–143) reports high levels of individual variation with the omission rates of four speakers falling between 4% and 20% while, at the other end of the spectrum, five interviewees drop *ne* in 81% and 97% of cases, respectively (see also Pooley 1996: 168). I therefore decided to further investigate the role of individual speakers in my Martinique data.[20] Upon closer inspection (see Table 4.8), I noticed that certain informants display near-categorical omission rates of *ne* (e.g. SOD: 94.6%, N=35 and AUB: 94.4%, N=50). In contrast, other informants retain the negative particle comparatively more often (e.g. ALB: 75.7%, N=78 and MAP: 56.5%, N=13).

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[20] For illustrative purposes, Table 4.8 only includes the six most extreme informants. They have been ordered according to their increasing levels of *ne*-retention.

Speaker ID	Variant				Total
	+ *ne*		- *ne*		
	%	N	%	N	
SOD	5.4	2	94.6	35	37
AUB	5.6	3	94.4	50	53
ORT	7.5	6	92.5	74	80
WIP	53.8	78	46.2	67	145
MAP	56.5	13	43.5	10	23
ALB	75.7	78	24.3	25	103

Table 4.8: Cross-tabulation of *ne* variants by speaker.

The fixed-effects models in Tables 4.4, 4.5 and 4.7 have assumed that there is no variation above the level of the token and thus individual speaker variation does not exist As Table 4.8 illustrates, this assumption is not justified. This called for a reconsideration of the analytic tools used thus far in my analysis. Indeed, Johnson (2009: 263) has pointed out that 'one of the assumptions underlying [fixed-effects] regression analysis is that the observations making up the data are independent of each other. But, in linguistic […] data sets, the tokens are not independent. In particular, they are naturally grouped according to the individual speakers who produced them'. I thus decided to resort to mixed-effects logistic regression models, which are capable of taking random effects (i.e. speaker variability) into consideration. In Rbrul, a mixed model was run with individual speaker as a random effect. The results are shown in Table 4.9.

	Centered Factor Weight	%	N	Tokens	Log-odd
Subject type					
Doubled NP	0.87	81.0	17	21	1.926
Pronominal	0.84	80.2	1651	2059	1.681
Relative	0.38	25.3	24	95	-0.489
Subjectless	0.25	23.9	11	46	-1.076
Non-doubled NP	0.12	8.8	10	113	-2.042
Range 75					
Prefabricated expressions					
ce/ça ÊTRE	0.75	94.8	313	330	1.093
je SAVOIR	0.66	90.9	221	243	0.672
il FALLOIR	0.42	90.5	19	21	-0.305
il y AVOIR	0.42	80.3	106	132	-0.337
Other constructions	0.25	65.6	1054	1608	-1.123
Range 50					
Type of negative item					
pas	0.61	74.8	1554	2077	0.460
plus	0.51	73.1	49	67	0.058
jamais	0.47	59.7	43	72	-0.108
Rien	0.40	57.6	68	118	-0.409
Range 21					
Non-subject clitic					
Presence	0.56	75.2	176	234	0.241
Absence	0.44	73.2	1537	2100	-0.241
Range 12					

Deviance=1858.638; df=14; Intercept=0.644; Mean=0.734;
Speaker Random Std Dev=1.12

Table 4.9: Rbrul analysis of linguistic factors contributing to *ne*-omission with speaker as a random effect.

The output in Table 4.9 reveals that all four linguistic factor groups are still retained by the mixed model once we consider the effect of speaker on variant choice. In essence, the predictor variables are identified as statistically significant because they are 'strong enough to rise above the inter-speaker variation' (Johnson 2009: 365). Note that the ranking of individual factors with each factor group has remained the same and the constraint system has not been altered: the type of subject remains the most influential internal constraint governing variable *ne* in

Martinique French. Thus, although there is considerable variability in how frequently speakers omit *ne*, they all still orientate towards the same variable grammar.

4.3 Social Factors

In order to assess the overall effect of the extralinguistic constraints, I conducted another fixed-effect analysis in Rbrul.

	Centered Factor Weight	%	N	Tokens	Log-odd
Age					
Younger	0.67	87.3	1103	1263	0.689
Older	0.33	57.2	618	1081	-0.689
Range 34					
Style					
Informal	0.55	80.8	763	944	0.206
Formal	0.45	68.4	958	1400	-0.206
Range 10					
Educational level					
No qualifications	0.54	81.7	1311	1605	0.144
Baccalauréat	0.52	60.2	148	246	0.085
University degree	0.44	52.9	261	493	-0.229
Range 10					

Not significant: Sex, Language restriction

Deviance=2418.634; df=5; Intercept=1.107; Mean=0.734; Nagelkerke R^2=0.174

Table 4.10: Rbrul analysis 1 of social factors contributing to *ne*-omission.

Table 4.10 reveals that speaker age is the most influential social factor governing the use of the negative particle, with a range of 43. Educational level and style also emerge as statistically significant, with ranges of 10. I now explore the effect of these factor groups in greater detail.

The effect of speaker age on variant choice has been long noted in previous

apparent-time (cf. Ashby 1976, 1981; Coveney 2002) and real-time research (cf. Ashby 2001; Armstrong & Smith 2002; Hansen & Malderez 2004). It is therefore not unexpected that this social factor is also operative in Martinique French, with *ne*-omission strongly preferred by the youngest speakers (FW=0.67, N=87.3%, N=1103), but not by the older informants (FW=0.33. 57.2%, N=618). Note that the scatterplot in Figure 4.2, which displays age as a continuous variable, confirms the binary younger/older trend. Interestingly, the scatterplot shows that the younger informants display very similar omission rates of *ne* amongst one another. This close patterning of *ne*-use may indicate that the system of negation amongst younger speakers has become more focused, potentially as a function of in-group identification with other adolescents or as a means to distinguish themselves from older speakers (see Le Page & Tabouret-Keller 1985: 181). However, this trend could merely been an epiphenomenon related to the close age patterning of my younger informants. More data from a wider age range are therefore required to test this hypothesis.

   There is, however, one speaker who patterns differently from the other younger informants, namely NOR. At the time of recording, NOR had lived in Le Prêcheur all of her life. Her father, however, had been employed by the *police nationale* since she was born and had been posted to work in Guadeloupe, French Guiana as well as mainland France. NOR revealed during the course of the interview that she spends the duration of every school holiday visiting her father, during which time she does not socialize with anyone outside of her immediate fami-

ly. As such, her comparatively low omission rate of *ne* is not unexpected.[21] This is because she may not orientate towards the adolescent community-norm of her 'stay-at-home' peers (i.e. those informants who remain in the speech community; cf. Meyerhoff & Walker 2007). Instead, she may pattern like mainland French teenagers, or indeed the older speakers with whom she spends the vast majority of her time when not in school. Nevertheless, further research into NOR's social network and broader social milieu with regard to her use of the negative particle would be needed to fully understand her anomalous result.

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[21] Remember that Hexagonal French omission rates range from 34% to 99% (see Table 4.3).
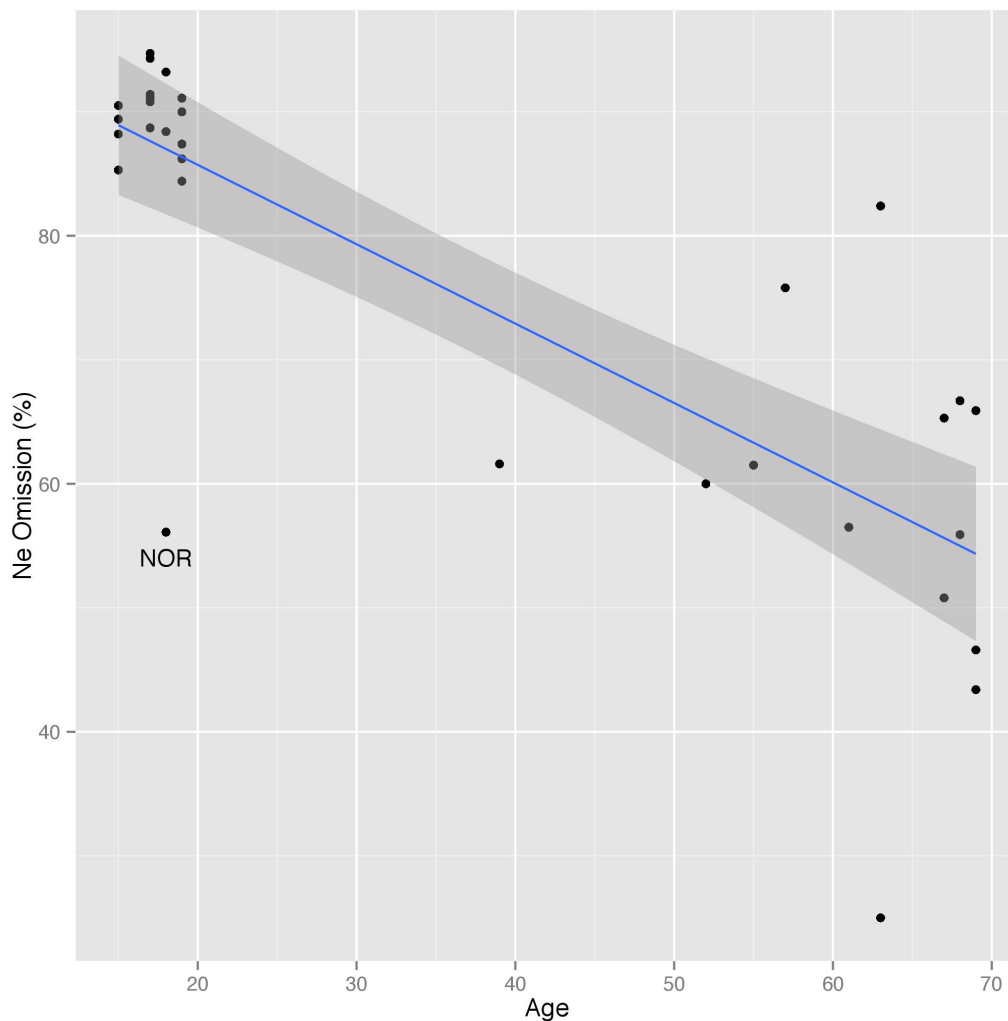
Figure 4.2: Profile of speaker age by the frequency of *ne*-omission.

Stylistic choice is also shown to impact upon this variable in Martinique French. My results show the expected effect, namely, that the retention of the negative particle is concomitant with more formal topics (FW=0.55, 80.8%, N=763) and its omission is linked to informal ones (FW=0.45, 68.4%, N=958). This result demonstrates that this variable is indeed a sociolinguistic marker and not just an indicator in the speech community under investigation. However, the role that this factor group plays in the variable use of *ne* is only relatively minor (range=10)

Let us now consider the effect that educational level exerts on variant selection. To date, Hansen & Malderez (2004: 18–19) is the only other study to examine the effect of this factor group on *ne* usage. Although they detect a positive correlation between increasing levels of education and the use of *ne* in their 1980s corpus, their 1990s results do not reveal any clear-cut pattern. In my dataset, an increase in formal education has a disfavouring effect on the omission of the negative particle. Informants without any qualifications slightly favour *ne*-deletion (FW=0.54, 81.7%, N=1311), while those with a university degree prefer retention (FW=0.44, 52.9%, N=261). Obtaining a *baccalauréat* has a neutralizing effect (FW=0.52, 60.2%, N=148).

There is, however, one important caveat to the results displayed in Table 4.10: the fixed-effects analysis includes data from *all* my Martinique informants. My younger participants are therefore automatically classified as having no qualifications since they are yet to successfully graduate from the secondary school system. As a result, the influence of this social factor could be an epiphenomenon of speaker age. The question thus arises as to how best to integrate the younger speakers into the analysis on the basis of their educational performance? At the time of recording, my youngest informants were attending either a vocational or an academic secondary school: the *lycée technique* in Saint-Pierre or the *lycée polyvalent* in Bellefontaine. I therefore deconstructed the youngest cohort and classified the speakers depending on the type of school they were attending. The cross-tabulation in Table 4.11 reveals that those students at the technical *lycée* omit the negative particle more frequently (89.9%, N=481) than their academic peers

(84.0%, N=623). This result suggests that, even at an early life stage, the linguistic habitus of speakers may differ depending on the type of education they receive.

Type of *lycée*	Variant				Total
	+ *ne*		- *ne*		
	%	N	%	N	
Vocational	10.1	54	89.9	481	535
Academic	15.0	110	84.0	623	733

χ^2=6.630; df=1; *p*<0.05

Table 4.11: Cross-tabulation of *ne* variants by type of *lycée* for younger speakers.

Research has shown that speakers' linguistic behavior can be linked to their social aspirations as well as their current social status (see Douglas Cowie 1978: 47–51). With this in mind, and in light of the results in Table 4.11, I recoded the younger cohort for the type of *lycée* they were attending as a proxy for their educational aspiration/profile: The adolescents studying the vocational *lycée* were all expecting to enter employment upon the completion of the *baccalauréat*, while those at the academic secondary school would continue their education at tertiary level. This enabled me to collate my younger speakers with the older participants on the basis of expected level of education. The results of this amended analysis are presented in Table 4.12.

	Centered Factor Weight	%	N	Tokens	Log-odd
Age					
Younger	0.69	87.3	1103	1263	0.812
Older	0.31	57.2	618	1081	-0.812
Range 38					
Style					
Informal	0.55	80.8	763	944	0.207
Formal	0.45	68.4	958	1400	-0.207
Range 10					
Educational profile					
No qualifications	0.53	61.1	209	342	0.136
Baccalauréat	0.53	80.6	629	780	0.122
University degree	0.44	72.2	882	1222	-0.258
Range 9					
Not significant: Sex, Language restriction					

Deviance=2412.118; df=5; Intercept=1.239; Mean=0.734; Nagelkerke R^2=0.177

Table 4.12: Rbrul analysis 2 of social factors contributing to *ne*-omission.

The outcome of this revised model corresponds well with the initial analysis given in Table 4.10. All factor groups in the original analysis are identified as significant in the latest model and the ranges have all remained stable. Nevertheless, the factor weights for educational attainment/profile have now shifted. The crucial difference between the models in Table 4.10 and 4.12 is that the influence of education is now only noticeable for those students and adults who have either studied, or aspire to study, at university level. Tertiary education is shown to favour *ne*-retention (FW=0.44; 72.2%, N=882), while both other factors have a neutralizing effect (FW=0.53).

As was the case with the linguistic constraints, the fixed-effects models for the social factors in Tables 4.10 and 4.12 cannot account for the fact that 'some individuals might favour a linguistic outcome […], over and above […] what their age, gender, social class, etc. would predict (Johnson 2009: 365). Indeed, a more

fine-grained investigation of the data revealed that some of the older speakers with no qualifications retain the negative particle much more frequently than their educated counterparts (e.g. WIP: 53.7%, N=78; MAP: 56.5%, N=13). Likewise, other educated speakers with a university degree omit *ne* much more often than we would expect (e.g. JOU: 66.7%, N=78; MAN: 66.2%, N=43). I therefore decided to operationalize speaker as a random effect in the regression analysis. The results of the mixed model are presented in Table 4.13.

	Centered Factor Weight	%	N	Tokens	Log-odd
Age					
Younger	0.70	87.3	1103	1263	0.845
Older	0.30	57.2	618	1081	-0.845
Range 40					
Style					
Informal	0.54	80.8	763	944	0.141
Formal	0.47	68.4	958	1400	-0.141
Range 7					
Not significant: Sex, Educational profile, Language restriction					

Deviance=2327.705; df=4; Intercept=1.25; Mean=0.734;
Speaker Random Std Dev=0.541

Table 4.13: Rbrul analysis of social factors contributing to *ne*-omission with speaker as a random effect.

As we might have expected, once we consider the effect of speaker on variant selection, educational profile is actually discarded from the mixed model. Only two social factors constrain the use/non-use of *ne* in Martinique French. Speaker age still remains the most influential social factor (range=40) and style has only a minimal effect (range=7).

As previously mentioned, Hansen and Malderez (2004) is the only other study to examine the role exerted by level of education on the frequency of *ne*. They

chose to adopt a different approach when examining the role that this factor group plays in *ne*-use. Specifically, they limit their investigation of educational attainment to only those informants aged over 22 years 'pour assurer qu'on peut leur attribuer une formation propre' (Hansen & Malderez 2004: 14).[22] With this in mind, and for maximal comparability with previous work, I decided to return to Rbrul and restricted the social analysis to my older participants. The outcome of the revised fixed-effects model is given in Table 4.14.

	Centered Factor Weight	%	N	Tokens	Log-odd
Style					
Informal	0.57	66.2	210	317	0.276
Formal	0.43	53.4	408	764	-0.276
Range 14					
Educational level					
No qualifications	0.56	61.1	209	342	0.230
Baccalauréat	0.49	60.2	148	246	-0.039
University degree	0.45	52.9	261	493	-0.191
Range 11					
Language restriction				+1	0.021
Not significant: Sex					

Deviance=1447.123; df=5; Intercept=-1.227; Mean=0.572; Nagelkerke R^2=0.036

Table 4.14: Rbrul analysis of social factors contributing to *ne*-omission amongst older speakers.

These results reveal that, once we isolate the older speakers, both educational and style are still operative as factors that constrain speech within the interview. Although the ranking of individual factors within the factor groups does not change, the constraint system alters: the range for educational level remains stable at 11

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[22] '[I]n order to ensure that one assigns them their own education level' (my translation).

but speech style is now identified as the strongest determinant of variant choice with a range of 14.

Additionally, language restriction is also shown to govern the use of *ne*. As all of my informants were bilingual French/*créole martiniquais* speakers, I quantitatively measured the use of French in interpersonal communication using a modified version of Mougeon and Beniak's (1991) language-restriction index (see Chapter 2 Section 2.3.4 for further details). Burdine and Mougeon's (1999) investigation of Franco-Ontarian adolescents is the only other study to consider the effect of this factor group on the use of *ne*. As noted in Chapter 2, research examining Ontarian French has traditionally categorised speakers into one of three groupings depending on their language restriction score (cf. Mougeon & Beniak 1991): 'restricted' speakers are those who use French infrequently (<0.45); 'semi-restricted' informants have mid-to-high levels of restriction (0.45–0.79) and thus communicate in both languages in relatively equal proportions; and 'unrestricted' speakers (>0.79) use French as their dominant language. Burdine and Mougeon (1999) report that levels of *ne*-retention increase with greater levels of restriction in the use of French: i.e. the use of *ne* is favoured most by the restricted speakers and least by the unrestricted informants. Since the Rbrul software used in this study can handle continuous variables, I was able to run an analysis that considers language-restriction score as a continuous variable. The log-odd coefficient for this variable, +1 0.021, indicates that *ne*-omission becomes favoured as we move further up the language restriction scale. In other words, the more speakers use French on a daily basis, the probability that they will omit *ne* also increases. This trend is displayed visually in the scatterplot in Figure 4.3.
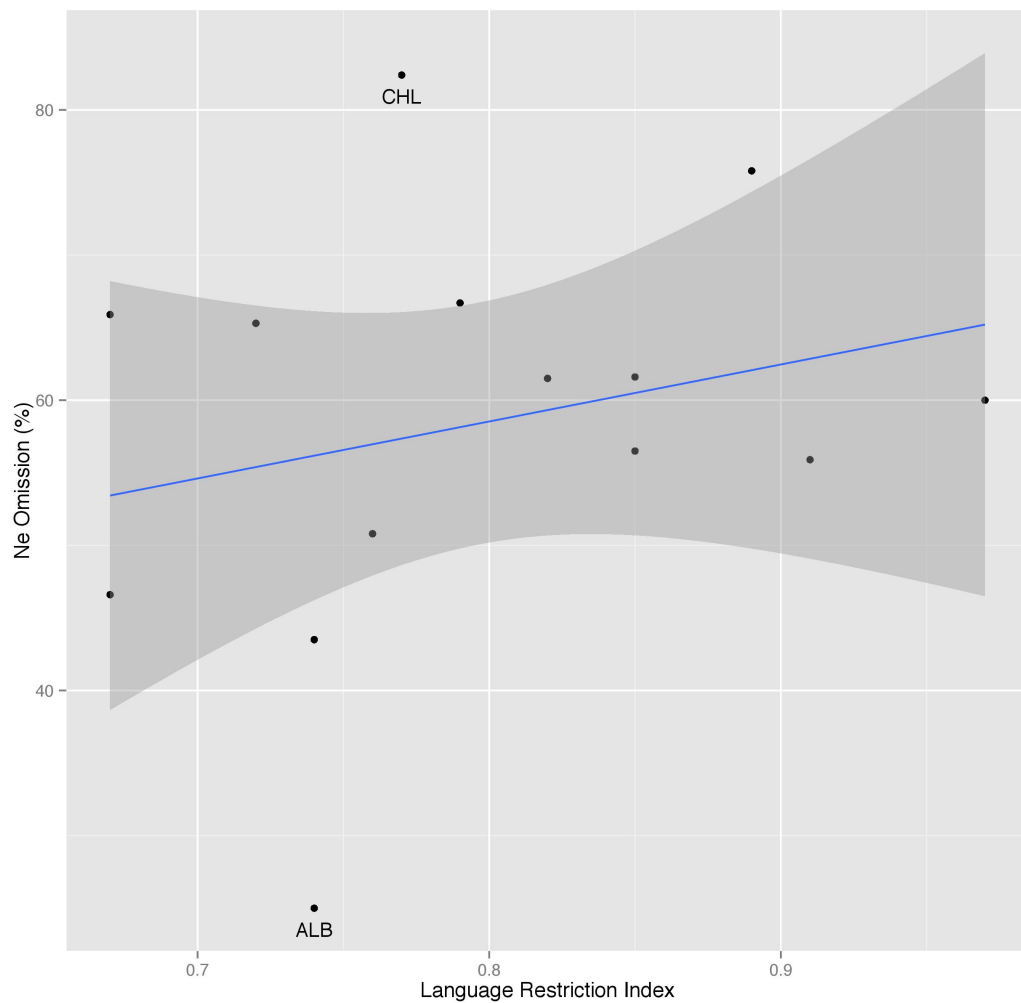
Figure 4.3: Profile of language restriction score by the frequency of *ne*-omission.

Note that the scatterplot identifies two exceptions to the general trend reported in Table 4.14. Both ALB and CHL are semi-restricted speakers, though they display markedly different omission rates of *ne*: 24.3% (N=25) for ALB and 82.1% (N=87) for CHL. Ethnographic information can help explain the drastically different deletion rates for these two informants. At 18 years old, CHL left school after completing *troisième* (equivalent to Year 10 in England and Wales and Fourth Year in Scotland) with no formal qualifications. At the time of the interview, he was a retired postman and had lived in Le Carbet all of his life. He is

married to someone from mainland France and has one daughter who currently lives in the South of France. Until recently, he used to spend up to four months of the year visiting his immediate and extended family in mainland France. As such, low levels of education and prolonged contact with speakers of Hexagonal French, who tend to have higher omission rates (see Table 3.2), may have contributed to CHL's comparatively high levels of *ne*-omission.

In contrast, ALB is a retired secondary school history teacher with a Master's degree. In my Martinique corpus, he is also the most frequent user of formal linguistic variants, such as the inflected future (63.1%, N=12), and is the sole user of a *ne explétif* (see Example 3). ALB could therefore be employing a number of features traditionally associated with Standard French (i.e. *ne*-retention) in response to being interviewed by an English doctoral student (cf. Ashby 1981: 686, see also Wagner & Sankoff 2011 on higher-class speakers using more archaic features).

5. Conclusion

In conclusion, this chapter examined the variable nature of the negative particle *ne* in spoken Martinique French. Variationist analysis revealed a negative particle omission rate of 26.8% in my Martinique French data. This figure is comparable to other French varieties spoken in Europe but is considerably lower than the rate of *ne*-omission found in Laurentian varieties of Canadian French. In fixed-effects models, the same intralinguistic and extralinguistic factors reported for European French were shown to also be operative in this locality. The influence of prefabricated expressions and intervening non-subject clitics, the type of negative item,

age, educational level, style and language restriction all play a role in the use of *ne* in Martinique French to varying degrees and in the expected direction. As with the subject-doubling variable in Chapter 3, the results presented in this chapter illustrate a number of important similarities between the variable grammar of both Martinique and European varieties. They also further distance the variety spoken in Martinique from its North American counterparts. Such important points will be discussed in greater detail in the concluding chapter of this thesis (see Chapter 6).

It was also demonstrated that the educational aspiration of the younger informants correlated well with their linguistic behaviour. This allowed us to integrate these speakers into the model with their older counterparts and tease apart the effect of education, which was confounded by speaker age. My analysis also illustrated the importance of considering social profile, in addition to the more traditional macro-sociological categories used in variationist research, when examining the factors governing language variation and change in French.

Once variation at the level of individual speakers was accounted for, the constraint hierarchies were further refined and reordered. In mixed model tests, the type of subject and speaker age were identified as the most influential factors governing the use of the negative particle: *ne*-omission is favoured when the subject is doubled and by the youngest speakers. This chapter has thus demonstrated the importance of mixed-effects modelling. Such an approach to data analysis enabled me to integrate my findings into the wider body of literature examining variable *ne* while being accountable to individual variation.

CHAPTER FIVE: THE EXPRESSION OF FUTURE TEMPORAL REFERENCE

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1. Introduction

This final variable chapter reports on my quantitative variationist investigation of the competing forms used to express futurity in Martinique French. In all contemporary French varieties, future temporal reference is realised predominantly via three different strategies: the inflected future (or IF), given in (1), the periphrastic future (or PF), as shown in (2), and the futurate present (or FP), in (3).[1]

(1) *Inflected Future (IF)*

Vous **serez**   pas là. [TEM]

2PL   be.FUT.PL   NEG there

'You will not be here.'

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[1] Although not found in my Martinique corpus, speakers of certain French varieties can also encode future time by employing one of two other vernacular periphrastic constructions in 1SG contexts: *je vas* and *m'as* (Mougeon, Nadasdi & Rehner 2008; Sankoff & Thibault 2011). Although *je vas* is now virtually extinct in urban European French speech (Martineau & Mougeon 2005), its usage is widely attested in other varieties. In contrast, *m'as* is restricted to varieties spoken in Québec and Ontario. See Mougeon and Beniak (1991) and Mougeon (1996) for a full historical overview of these two marginal variants.

(2) *Periphrastic Future (PF)*

On **va** surtout te le **montrer**. [MYR]

3SG go.PRES.SG especially 2SG 3SG show.INF

'We are definitely going to show it to you.'

(3) *Futurate Present (FP)*

Oui mais il y **a** une parade dimanche sur

yes but EXPL there have.PRES.3SG INDF parade Sunday on

Fort-de-France. [JOB]

Fort-de-France

'Yes but there is a parade on Sunday in Fort-de-France.'

The present chapter contributes to a growing body of literature examining the variable expression of future temporal reference in French. It is framed by three main research questions: Firstly, how variable is the future temporal reference system in spoken Martinique French? Secondly, what linguistic and extralinguistic factors govern the variation? Finally, to what extent do the results corroborate findings reported in the existing French variationist literature?

The remainder of the chapter will be structured as follows: In Section 2, I review the extant sociolinguistic literature focussing on French future temporal reference. In Section 3, I outline the methodology adopted in the present study. Section 4 is devoted to the results and analysis of my investigation. Finally, I summarise the contents of this chapter in the conclusion.

2. Literature Review

The French IF, also known as the morphological/synthetic future or the *futur simple* 'simple future', dates from the ninth century (Hansen 2008: 56–57). It originally developed out of a Latinate periphrasis, in which the lexical verb *habere* 'to have' expressed obligation when used in conjunction with an infinitive. Constructions such as *cantare habet* 'he/she has to sing' eventually gave rise to the modern French equivalent *il/elle chantera* 'he/she will sing' (Hansen 2008: 56–57). In colloquial speech, this form was rivalled, as early as the fifteenth century, by a PF construction (Fleischman 1982: 82).

The PF, often referred to as the *future proche* 'near future', is constructed using the semi-auxiliary *aller* 'to go' followed by a verb in its infinitival form. It was originally used to indicate motion but also became grammaticalised as a future marker and eventually entered literary usage during the sixteenth and seventeenth centuries (cf. Gougenheim 1971; Fleischman 1982).[2] As in other Romance languages, both IF and PF forms compete with a third variant, the futurate present or the *praesens pro futuro*, to express the notion of futurity.

According to both prescriptive and pedagogical grammars, the principle linguistic factors conditioning variant selection in the French future temporal reference sector are: (a) the temporal distance between speech time and the future eventuality; and (b) the degree of certainty expressed by the speaker that the future event will in fact take place (cf. Poplack & Dion 2009: 561–569). The periphrastic future, for instance, has been claimed to mark 'souvent un futur proche,

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[2] See Poplack and Tagliamonte (2000) for an analysis of the '*go*-future' in English.

parfois aussi un futur relativement lointain mais considéré comme inéluctable' (Grevisse 1993: 1230).[3] Thus, according to Hawkins and Towell (2001: 228–229), the selection of IF in (4) renders the utterance as purely hypothetical, i.e. she is currently not pregnant but will have a baby in the future. In contrast, the choice of PF in (5) indicates that the speaker has the evidence to justify her utterance, i.e. she is pregnant and will give birth.

   (4)   Elle **aura** un bébé.

        'She will have a baby'.

   (5)   Elle **va avoir** un bébé.

        'She is going to have a baby'.

                  (Examples taken from Hawkins & Towell 2001: 229)

Labovian sociolinguistic studies have set out to quantitatively test the claims made in the prescriptive and/or descriptive literature. Thus far, such studies have focused exclusively on Laurentian (Deshaies & Laforge 1981; Emirkanian & D. Sankoff 1985; Zimmer 1994; Poplack & Turpin 1999; Blondeau 2006; Poplack & Dion 2009; Grimm 2010; Grimm & Nadasdi 2011; Wagner & G. Sankoff 2011; G. Sankoff, Wager & Jensen 2012) and Acadian (Chevalier 1996; King & Nadasdi 2003; Comeau 2011) varieties of Canadian French, as well as European French

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[3] '[O]ften a near future but also sometimes a relatively distal one that is considered unavoidable' (my translation).

(Söll 1983; Roberts 2012).[4] In the subsequent survey of the literature, I review all the available empirical studies examining French future temporal reference. I consider each variety in turn and, for every study, I focus on: (i) the data collection methods; (ii) the development of the variable context; (iii) the overall frequency distribution of the variants; and (iv) the salient linguistic and social conditioning factors shown to motivate variant selection.

2.1 Laurentian Varieties

The first empirical study of French future temporal reference was Deshaies and Laforge's (1981) study of IF/PF alternation in Laurentian French. Their data were extracted from a corpus of 54 interviews with young male and female speakers from Québec City. All tokens exhibiting future morphology, including those verb forms with a non-temporal function, such as habituals and hypotheticals, were included in their analysis. Although the authors do not report raw tokens or conduct tests of statistical significance, Deshaies and Laforge (1981: 28–32) identify the presence of a polarity constraint. The periphrastic future is shown to occur almost categorically in affirmative utterances (99.5%), whereas the inflected variant dominates negative contexts (96.9%).

Emirkanian and Sankoff's (1985) IF and PF data were extracted from a sociolinguistically balanced sub-sample of 36 informants in the 1971

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[4] A number of studies have also examined the alternation between future variants in second language varieties of French (cf. Nadasdi, Mougeon & Rehner 2003; Mougeon, Rehner & Nadasdi 2004; Dion & Blondeau 2005; Regan, Howard & Lemée 2009; Mougeon, Nadasdi & Rehner 2010; Blondeau 2011; Blondeau, Dion & Michel to appear).

sociolinguistic survey of Montréal French (Sankoff & Cedergren 1971). Like Deshaies and Laforge's (1981) investigation, their analysis includes all non-temporal variable tokens, though fixed expressions were removed from the data pool. Results indicate that the PF is markedly more frequent in speech, with an overall usage rate of 79% (N=1093). However, due to the complete absence of negative PFs in the data, all 183 negative tokens were excluded from quantitative analysis.

Two extralinguistic factor groups are identified in a multiple regression analysis as influencing variant selection to a statistically significant degree (Emirkanian & Sankoff 1985: 197–200). Firstly, those speakers with the highest *marché linguistique* classification (Sankoff & Laberge 1978) use more inflected futures (16.3%, N=53) than those belonging to both the middle (5.4%, N=20) and lowest (6.9%, N=35) sub-groups. Additionally, the incidence of PF forms is shown to increase with age. Speakers in the youngest age bracket produce IF forms in only 5.3% (N=26) of cases, compared to 9.9% (N=39) for the middle age band and 13.5% (N=43) for the oldest speakers. According to the apparent-time construct, this pattern could be interpreted as a case of either age grading or a change in progress (see Labov 2001; Bailey 2002; Wagner 2012).

Zimmer's (1994) Montréal study builds on Emirkanian and Sankoff's (1985) earlier work, examining IF/PF usage in the follow-up study to the 1971 Montréal survey, which was collected in 1984 (Thibault & Vincent 1990). Zimmer extract-ed tokens from the speech of the 24 youngest speakers (12 males and 12 females) in this later corpus and applied an identical methodology to Emirkanian and Sankoff (1985: 190–191). Results indicate that the frequency of PF has slightly

increased over time from 78.97% (N=1093) in 1971 to 83.33% (N=1135) in 1984. They furthermore show that the frequency of IF forms has dropped from 1971 to 1984 in both affirmative (9%, N=108, to 5.24%, N=62) as well as negative contexts (100%, N=183, to 92.18%, N=165). The 14 negative PFs, which represent 7.82% of all negative tokens, are taken as evidence that the periphrastic variant is expanding into contexts that were previously the exclusive domain of the IF.

Zimmer (1994: 220) recognises a previously unacknowledged but fundamental methodological problem in the analysis of future temporal reference in French: 'Si l'on veut examiner la variation entre le [IF] et le [PF], on est obligé de ne retenir que les formes […] ayant un aspect temporal et d'écarter les formes ayant un aspect modal'.[5] Future analyses of this variable should be limited to only those tokens with a future temporal reference. This is because, in certain contexts, tokens with future morphology do not necessarily refer to future time, such as habitual and hypotheticals (see Section 3.1 for further discussion).

Poplack and Turpin's (1999) paper is the first to consider the distribution of the minority variant, the futurate present, in French. Their data were extracted from the *Corpus du français parlé à Ottawa-Hull* (Poplack 1989), a mega-corpus of over 3.5 million words, which is of sufficient size to contain enough tokens of the comparatively infrequent FP variant. The researchers acknowledge the methodological problems associated with previous research and therefore examine variability in the French *future temporal reference sector* and not merely the morpho-

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[5] 'If we want to examine the variation between IF and PF verb forms, it is necessary to retain only those tokens with a temporal reference and exclude those with a modal aspect' (my translation).

logical exponents of futurity. All tokens exhibiting future morphology but not re-ferring to future time (e.g. habituals or the use of *aller* as a verb of spatial move-ment), as well as those expressions that do not admit all the variants (e.g. protases of *si-* 'if' clauses, fixed expressions or quotes from literary sources) were exclud-ed from the data set. In total, 3594 tokens with 'unambiguous reference to a state or event occurring posterior to speech time' were retained for quantitative analysis (Poplack & Turpin 1999: 143). The results reveal that 73% of all future temporal reference expressions in Ottawa-Hull are expressed by means of the PF (N=2627), while the frequency rates of IF and FP are 20% (N=725) and 7% (N=242), respec-tively. Variable rule analyses were also conducted for each of the three variants. They reveal that a host of linguistic and social factors govern the variation in this Laurentian French variety.

Sentential polarity is deemed to be the greatest determinant of variant choice, with negative contexts identified as 'indisputably the domain of [the] IF' (Poplack & Turpin 1999: 160). Another factor group contributing a robust effect to variant selection is adverbial specification. Results indicate that the inflected future is fa-voured in the context of non-specific adverbials, such as *tôt ou tard* 'sooner or later'. The periphrastic construction, on the other hand, is selected in contexts with no adverbial modification, while the futurate present is strongly linked with specific adverbials, such as *ce soir* 'this evening'. Poplack and Turpin (1999: 152) suggest that the modification of FP by adverbials has a disambiguating function, since the absence of any adverbial complement would confer a present or habitual reading on this particular variant. A link is also established between the second person plural pronoun of address *vous* 'you' to a singular addressee (also known

as *vouvoiement*) and the inflected future. This relationship is interpreted as evidence of the formal nature of this variant in speech (Poplack & Turpin 1999: 154). Ottawa-Hull speakers also display a tendency to prefer inflected forms when the future eventuality is dependent upon the fulfilment of a condition. The effect of this factor group, henceforth termed 'contingency', though, is minimal (range=6). Additionally, imminence and temporal distance both exert a significant effect, though further investigation by Poplack and Turpin reveals that the effect of these two factor groups are epiphenomena related to adverbial specification.

Though not included in their multivariate analyses, Poplack and Turpin's (1999: 155–156) results also indicate that certain highly frequent and/or morphologically irregular verbs (such as *pouvoir* 'to be able to' and *vouloir* 'to want') regularly occur with the IF. In contrast, other verbs strongly disfavour this variant, for example *commencer* 'to begin' and *manger* 'to eat'. The authors postulate that the preference for IF is linked to both the frequency of the verb in speech and the 'morphological salience' of the resulting inflectional form.

Concerning the social constraints, only one extralinguistic factor was identified as significant, namely speaker age. IF and PF variants appear to be participating in a change in progress as the older speakers show a preference for the inflected variant, while the youngest age cohort favour the periphrastic alternative. In conclusion, Poplack and Turpin (1999: 160) claim that the periphrastic future functions as the default marker of futurity in Laurentian French, while the IF is reserved for only fixed expressions, negative environments and as a marker of formal speech.

Blondeau's (2006) panel study examines future temporal reference in Montré-al French. The paper aims to investigate the extent to which speakers altered their linguistic habitus across their lifespan. Consequently, the evolution of IF/PF verb forms is tracked across a 24-year time period in the speech of 12 individuals, who were recorded in 1971, 1984 and 1995 (Vincent et al. 1995). Results demonstrate that, in contrast to the body of apparent-time research, the use of the IF increases considerably, from 14% in 1971 to 23% in 1984, and remains relatively stable at 22% in 1995. Blondeau (2006: 85) postulates, however, that the overall increase is not, in fact, indicative of actual change in the linguistic system, but rather is a re-sult of age grading as the informants enter the world of work and engage with the *marché linguistique*.

Only one factor group, yet again sentential polarity, is shown to constrain var-iation selection to a significant degree. Negative contexts strongly favour the se-lection of the IF in all three corpora (1971: FW=0.98, 88%; 1984: F.W=0.98, 93%; 1995: FW=0.98, 91%). Given the robust effect of polarity, all negative tokens were removed from the dataset (cf. also Emirkanian & Sankoff 1985). However, the multivariate analysis of affirmative contexts yet again illustrates that only one factor group is operative in this variety, namely contingency. Those future events that are dependent on the outcome of another are shown to have a weak favouring effect towards IF (FW=0.54, 7%).

Poplack and Dion (2009) carried out a follow-up to the original Ottawa-Hull study. They conducted an analysis of the prescriptive efforts to explain French future temporal reference variability in the *Recueil historique de grammaires du français* (RHGF; Poplack et al. 2002) as well as a diachronic investigation of

spoken data from two corpora: the *Récits du français québécois d'autrefois* (RFQ; Poplack & St-Amand 2007) the *Corpus du français parlé à Ottawa-Hull* (OH; Poplack 1989). Quantitative analysis of the RHGF, which contains 163 French grammars published between 1530 and the present day, reveals a complete lack of agreement concerning what function(s) should be associated with which variant(s) (Poplack & Dion 2009: 561–569). They furthermore acknowledge that the polarity constraint, which has been shown to exert a strong effect in all of the studies reviewed thus far, is completely absent from prescriptive commentary, except for one grammar (Léard 1995), which cites the findings of previous corpus-based research.

Poplack and Dion's (2009: 569–577) quantitative comparison of the RFQ (a collection of folklore recordings with rural *Québécois* born between 1846 and 1895) with the Ottawa-Hull mega-corpus reveals that the distribution of variant forms has indeed altered over time. Although the use of the futurate present has remained relatively stable in real time, it appears as though PF is gaining ground at the expense of the inflected variant: Its usage increases from 56% (N=2637), in the earlier RFQ database, to 73% (N=2627), in the contemporary speech corpus (Poplack & Dion 2009: 572). These results also indicate that the constraint system reported in Poplack and Turpin (1999: 149) was already well established in the 19th century. Sentential polarity is, yet again, '[b]y far the greatest determinant of variant choice' (Poplack & Dion 2009: 574). The selection of IF is almost categorical in negatives (RFQ: 99%, N=451; OH: 97%, N=456) and its usage has declined considerably in affirmative contexts (RFQ: 32%, N=1211; OH: 9%, N=269). Adverbial specification, grammatical person and temporal distance are

also shown to constrain the variation to the same degree and in the same direction as in the original Ottawa-Hull study (Poplack & Turpin 1999: 148–155).

Grimm and Nadasdi (2011) examine inflected and periphrastic future variability in four French-speaking communities in the southeast corner of Ontario. The data were extracted from a 1978 corpus of 117 sociolinguistic interviews with francophone adolescents living in the towns of Hawkesbury, Cornwall, North Bay and Pembroke (Mougeon & Beniak 1991). Variationist analysis of 1232 tokens reveals that Franco-Ontarians generally have the highest usage rate of the PF to date (89%, N=1097) and, consequently, the lowest recorded IF frequency level (11%, N=135). Furthermore, the only linguistic factor selected as statistically significant in the multivariate analysis was sentential polarity. In the French-majority community of Hawkesbury, the IF was used categorically in negative environments (N=24) and the PF in affirmative ones (N=154).

A range of social factors is also shown to be operative in this variety. There is a weak preference among male adolescents for the IF (FW=0.42, 88%, N=75), whereas females favour the periphrastic construction (FW=0.58, 90%, N=545). This result runs counter to the pattern reported in Zimmer (1994: 217), who documents that the youngest females used PF nearly 15% more than males in the same age bracket. Moreover, there is a clear linear correlation between variant choice and social class (cf. Emirkanian & Sankoff 1985). Whilst middle-class speakers favour the periphrastic future (FW=0.59, 82%, N=153), it is disfavoured amongst the lower-middle (FW=0.48, 89%, N=504) and middle (FW=0.35, 93%, N=153) classes.

Grimm (2010) conducted a real-time trend study of IF/PF variation in Hawkesbury, Ontario, with data from the 1978 corpus and a more recent one constructed in 2005 (Mougeon, Rehner & Alexandre 2005). His research indicates that, on the basis of three key findings, the PF has strengthened its position as the default future marker in Laurentian French over time. Firstly, the frequency distribution of both variants indicates that the use of PF has increased by nearly 3% in 27 years, from 86.9% (N=154) in 1978 to 89.5% (N=815) in 2005.

Moreover, this variant has expanded into negative environments, which have been previously shown to be almost impervious to the periphrastic construction. Recall that in the 1978 dataset, polarity had a categorical effect on variant selection. However, in 2005, the incidence of negative PFs increases considerably to 26% (N=29). This finding is particularly striking, as, in previous apparent-time studies of Laurentian French, negative PFs have never accounted for more than 8% of all the negative tokens. Grimm (2010: 88) thus postulates that this result signifies 'a possible sign of the IF's erosion in spoken Ontarian French'.

Finally, the results for socio-economic class indicate that, amongst the middle-class speakers, the PF has gained in social prestige. In 1978, both the middle and working classes used the periphrastic future 90% (N=17 and N=64 respectively) of the time. Yet, by 2005, the IF has become associated with working-class speech, increasing in frequency from 10% (N=2) to 16% (N=44).

Wagner and Sankoff's (2011) panel-study of Montréal French examines data from 59 individuals interviewed in both the 1971 and 1984 corpora. In keeping with previous studies using these datasets, their analysis focuses exclusively on those tokens occurring in affirmative contexts (cf. Emirkanian & Sankoff 1985;

Blondeau 2006). Indeed, Wagner and Sankoff (2011: 285) report that, in all 588 negative constructions identified in their Montréal dataset, only two were realised as PF and both of these involved false starts and hesitations, followed by a repetition. As such, only 0.003% of negative tokens were realised using the periphrastic construction. Their results show that over two-thirds of the panellists increased their use of the inflected future in real time, from an average of 10% (N=122) in 1971 to 15.5% (N=379) in 1984. Additionally, 16 individuals who were categorical PF users in 1971 added the inflected variant to their linguistic habitus by the time they were re-interviewed. Wagner and Sankoff's (2011: 295) results for the overall frequency of the two future variants thus reveal a retrograde life-span change, indicative of age grading, which appears to be running counter to the direction of the long-standing historical trend.

Further investigation reveals that the younger Montréal informants are leading this retrograde movement. This age cohort contributed the most significant increase in IF usage, from 7% (N=65) to 13% (N=249) over the 13-year period. This pattern indicates that the inflected future has come to be viewed as a marker of adult speech and is now associated with seniority. Indeed, all the informants had entered adulthood by 1984 and results show that the effect of speaker age is weakened in favour of social class.[6] Those speakers in the highest socio-economic class use the IF comparatively more (29%, N=547) than those belonging to the middle (17.5%, N=1132) and lower class groups (9%, N=551).

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[6] The R^2-values demonstrate that 27.6% of the variation in 1971 is predicted by speaker age, but only 11.3% of it in 1985 can be attributed to this factor.

Concerning the linguistic constraints governing the variation, a logistic regression model identifies two factor groups as significant in the combined 1971 and 1984 datasets.[7] The retention of contingency in the model mirrors the results reported by Blondeau (2006) for all three Montréal corpora. Contingent clauses are consistently shown to favour the IF, while assumed events disfavour this variant (FW=0.43, 6%, N=2846). Grammatical person is also shown to be operative, though its effect is relatively weak, with only a range of 10. In line with Poplack and Turpin's (1999) results for Ottawa-Hull, formal subject pronouns, which include the 1PL subject pronoun *nous*, *vouvoiement* and full nominals, favour IF selection (FW=0.59, 23%, N=280) in this variety.

Sankoff, Wagner and Jensen's (2012) real-time trend study complements the panel analysis of Montréal French by Wagner and Sankoff (2011). In this follow-up investigation, the authors aim to determine if the retrograde life-span change exhibited by the majority of the panellists in the earlier 2011 paper also represents a retrograde change at the level of the community. For maximal comparison with the earlier panel study, 68 informants were sampled (34 speakers from both the 1971 and the 1984 Montréal corpora) and only affirmative contexts were examined. A comparison of the results for the two datasets reveals that there is no retrograde movement towards the inflected future at community level. Thus, although individual panellists increase their use of the inflected variant over time,

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[7] In their trend study using the same corpora, Sankoff, Wagner and Jensen (2012) demonstrate that the community has not changed over time, thus demonstrating that combining the datasets is methodologically principled.

the community has remained stable over the 13-year time frame (Wagner &
Sankoff 2011: 295; Sankoff, Wagner & Jensen 2012: 109–110).

Moreover, multivariate analysis of the two trend samples identifies contingen-
cy, socioeconomic status and age as significant in both datasets, along with
grammatical person in the 1971 sample. As with previous research, contingent
clauses favour IF and the periphrastic variant is preferred in non-contingent con-
texts. Also, higher socioeconomic status and the use of formal subject pronouns
positively correlate with an increase in the use of the IF. Moreover, as we would
expect for a variety of Laurentian French, older speakers use the IF more fre-
quently than the younger subjects. The patterns exhibited at both individual and
community levels are therefore interpreted as a case of age grading. The results
thus demonstrate that, in Laurentian French, lifespan change can run in the oppo-
site direction to the community trend (cf. Poplack & Dion 2009). It is postulated
that, as a late-stage morphosyntactic change, age grading could be prolonging the
life of affirmative IF:

> The increasing rarity of the [inflected future] over time […] has made it
> particularly attractive to older, higher social class, linguistically conservative
> speakers. Not only does an increased use of IF in their repertoires both reflect and
> constitute their seniority and social class, but it affords them an opportunity to
> indulge in conservative linguistic efforts at community level (Sankoff, Wagner &
> Jensen 2012: 113).

2.2 Acadian Varieties

Labovian sociolinguistic methods have also been applied to examine this variable
in Acadian varieties of Canadian French. Chevalier (1996) examined IF and PF
alternation in three regions of New Brunswick, extracting data from a spoken
language corpus collected in 1988 via face-to-face interviews with 42 school

students. As with the earlier Laurentian studies (Deshaies & Laforge 1981; Emirkanian & Sankoff 1985), Chevalier examines tokens exhibiting future morphology and does not exclude those verb forms with a nontemporal function. Her analysis of 242 tokens reveals that, whilst the PF is the dominant variant, its usage rate of 62% (N=150) is much lower than any of the contemporary Laurentian communities. Although no tests of statistical significance were carried out, Chevalier's results nevertheless indicate that the inflected future occurs more frequently in certain environments. This is most notable in negative contexts, (67%, N=20) and in embedded clauses introduced by the wh-term *quand* 'when' (60%, N=9).

King and Nadasdi's (2003) study examined IF and PF variability in three other Acadian French communities: Abram-Village and Saint-Louis, which are both located in the province of Prince Edward Island, and L'Anse-à-Canards in Newfoundland. In total, eight informants from each province, who were interviewed between 1987 and 1988, were included in the speaker sub-sample. The study replicates the protocol outlined in Poplack and Turpin (1999) and reveals that the inflected future is the dominant variant with a usage rate of 53% (N=362). This result is in contrast to what is reported for Laurentian French and undermines the claim by Poplack and Turpin (1999: 160) that the PF functions 'as the basic default marker in (Canadian) French'. Indeed, King and Nadasdi (2003: 325–326) note that Acadian varieties preserve a rich inflectional verbal morphology that is not found in other varieties of French (see Chapter 1 Section 2). They postulate that the preservation of the vernacular third person plural ending *-ont* (cf. King & Nadasdi 1997) in tenses other than the inflected future may promote the use of

this variant when expressing futurity, thus limiting the presence of PF in the local Acadian future temporal reference system.[8]

Furthermore, their findings reveal that the constraint system governing the variable is different from its Laurentian counterpart. GoldVarb analyses identify the temporal distance and certainty of outcome, but not sentential polarity, as the two most influential factor groups. King and Nadasdi's results indicate that 75% (N=141) of actions or states set to occur up to a week following the time of the utterance favour the use of the periphrastic variant, whilst the IF is preferred in 60% (N=266) of contexts anticipated to occur after a week following speech time, as well as with 89% (N=48) of continuous actions. Additionally, PF is used in 72% (N=178) of all certain events but only in 33% (N=145) of uncertain ones. Finally, King and Nadasdi (2003: 334–335) detect a correlation between the presence of *quand* 'when' and the IF. Their results show that in 87% (N=14) of cases, temporal subordinate clauses headed by *quand* 'when' provide a favouring environment for the inflected future in the main clause.

Finally, Comeau's (2011) more recent doctoral thesis examines the ternary alternation between IF, PF and FP verb forms in the Baie Sainte-Marie area of southwest Nova Scotia from both variationist and generative perspectives. His data were drawn from two sociolinguistic corpora: the *Butler Grosses Coques Sociolinguistic Corpus* and the *Corpus acadien de la Nouvelle-Écosse*. Comeau's definition of the variable context and coding protocol are based on more recent

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[8] In Acadian French, the vernacular 3PL morpheme *–ont* has been retained in a wide range of tenses (for instance, *ils parlont* 'they speak' instead of *ils parlent*). Yet, in non-Acadian varieties of French, it is only used when the verb is conjugated in the inflected future (for example, *ils auront* 'they will have').

future temporal reference studies (cf. Poplack & Turpin 1999, King & Nadasdi 2003, Grimm & Nadasdi 2011). His results indicate that the PF is the preferred variant (57.5%, N=425) in speech. However, in line with the existing Acadian studies, the usage rates of the inflected future are relatively high (34.7%, N=257) when compared with Laurentian varieties. Yet, the use of the futurate present remains relatively consistent cross-dialectally at 7.8% (N=58).[9]

In total, three factor groups were shown to condition IF/PF choice in Comeau's (2011: 226–231) multivariate models. While sentential polarity is, once again, shown not to be operative in Acadian French, temporal distance is selected as the strongest determinant of variant choice, i.e. a higher number of proximal events are more readily expressed by verbs in the periphrastic future (FW=0.68, 82%, N=103). The results also indicate that lack of modification by a time adverbial favours the selection of the PF (FW=0.52, 66%, N=512), which corroborates Poplack and Turpin's (1999) finding. Finally, the sex of the speaker is identified as the only social constraint operative in this variety: women are shown to use the periphrastic variant (69%, N=306) slightly more than men (56%, N=179).

2.3 European Varieties

In contrast to the literature on French Canadian varieties, there is a relative dearth of quantitative sociolinguistic studies of future temporal reference in European

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[9] Due to the low frequency rate, the FP was excluded from further analysis (Comeau 2011: 226, see also Emirkanian & Sankoff 1985; Zimmer 1994; Grimm 201l; Grimm & Nadasdi 20111 Wagner & Sankoff 2011; Roberts 2012).

French varieties.[10] Söll (1983) reports on data extracted from the spoken language corpus *Transcriptions de conversations d'enfants de 9 ans*. As with the earlier Laurentian (cf. Deshaies & Laforge 1981) and Acadian (cf. Chevalier 1996) work, Söll does not define the variable context and therefore includes all morphological future forms in his analysis. Although no statistical significance tests are carried out, Söll (1983: 21) acknowledges that, in line with the Laurentian French literature, a polarity constraint is operative in the Hexagonal variety.[11] Recall that the vast majority of research on Laurentian varieties of Canadian French has consistently reported a complete absence of periphrastic futures in negative contexts. In contrast, Söll's results reveal that the IF is not categorically selected in negative environments and speakers actually use a relatively high percentage (26%, N=15) of negative PFs. Moreover, the PF is clearly preferred in 1SG and 1PL contexts, with speakers selecting this variant in 67% (N=91) of all potential occurrences. Notably, Söll's (1983) paper is the first empirical study to acknowledge that certain verbs display a tendency to appear with a particular future variant: For example, a link between the use of *être* 'to be' and the inflected future (67%, N=24) is argued to be due to the verb's relatively high frequency in speech, as well as its near-categorical use as an auxiliary (Söll 1983: 20).[12]

My (2012) study of Hexagonal French is the most recent variationist study of future temporal reference in this region. The data on which this study is based

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[10] See, however, Jeanjean (1988) for a distributional analysis and Fleury and Branca-Rosoff (2010) for a computational examination of IF/PF alternation in Continental French.

[11] Söll's findings might, however, be due to developmental factors as his tokens were extracted from interviews with 9-year-old children.

[12] See also Poplack and Turpin's previously discussed (1999) paper.

were extracted from the *Beeching Corpus*, an online corpus of 16 hours of spoken speech which consists of 95 interviews recorded throughout the 1980s in both Northern (Brittany and Paris) and Southern (Lot and Minervois) France (Beeching 2002: 68–77). The definition of the variable context and coding protocol are comparable with recent Laurentian (Poplack & Turpin 1999; Grimm 2010) and Acadian (King & Nadasdi 2003; Comeau 2011) research. My results thus provide a direct comparison with the more recent Canadian literature.

Chi-square analyses of the Beeching data reveal that sentential polarity, grammatical person and educational level govern variant choice to a statistically significant degree. The polarity constraint is again shown to be operative in this variety, which corroborates the findings from the existing Laurentian studies. The IF is clearly preferred in negative contexts (65.9%, N=31) and the PF in affirmative ones (61.5%, N=238). However, note that my results (2012: 101) demonstrate that negative environments are highly receptive to the periphrastic future (34.1%, N=16), which corroborates Söll's (1983: 21) observation for European French.

Furthermore, this study is also the first to deconstruct the negative polarity category into a ternary factor group, consisting of affirmative utterances, negative tokens with *ne* dropped and negative tokens with *ne* inserted. Results indicate that IF-use increases from affirmative contexts (38%, N=149), through to utterances with only post-verbal negation (61.5%, N=16) and finally to full bipartite negation (71.4%, N=15). This finding is not unexpected as both the inflected future and negation with the negative particle *ne* retained are considered to be features of more standard French. A relationship is also detected between the inflected future and *vouvoiement*. When there is a *vous* subject, the IF was selected in 63% (N=12)

of cases, yet it occurs with only 40% (N=168) of all other subject pronouns. I conclude that the association of the inflected future with certain markers of formality, namely negation with *ne* and the formal *vous* pronoun of address, could be interpreted as evidence of the formal nature of the IF in spoken Hexagonal French (Roberts 2012: 102).

In addition to the two linguistic factors, educational attainment also affects variant selection. In Hexagonal French, the proportion of inflected forms increases with higher levels of education, from 37.7% (N=80) for those informants with no formal qualifications, to 38.2% (N=52) for those with a *baccalauréat*, and then to 55.8% (N=48) for those who hold a university degree (Roberts 2012: 103). The results therefore indicate that, unlike in Canada (cf. Poplack & Dion 2009), the French higher education system appears to act as a source of transmission for the inflected form.

My study also highlights the importance of analysing sociolinguistic data with mixed-effects logistic regression models (cf. Johnson 2009; Johnson 2010; Tagliamonte 2012). Once speaker-level and word-level variation were controlled for and included as random effects, the only factor group identified as statistically significant in the mixed-effects model was sentential polarity (Roberts 2012: 103–105).

The following section now turns to the treatment of the variable in Martinique French and outlines the methodology adopted in the present study.

3. Methodology

This section has two principal aims. Firstly, to define the envelope of variation, with those tokens falling outside the variable context identified and excluded from quantitative analysis. Secondly, to present and explain the salient linguistic and social constraints hypothesised to constrain variant selection in the Martinique future temporal reference sector, along with the coding protocol adopted in the present study.

The remainder of this chapter will focus exclusively on the alternation between inflected and periphrastic future verb forms. The third variant, the futurate present, has been excluded from my investigation.[13] This decision was motivated by three main reasons. In the first place, this variant occurs infrequently in spoken language, with usage rates reported to be as low as 7% in Canada for both Baie-Sainte-Marie (Comeau 2011: 225) and Ottawa-Hull (Poplack & Turpin 1999: 148).[14] Moreover, it almost categorically co-occurs with future adverbials which, Blondeau (2006: 74) argues, are required in order to disambiguate the notion of futurity from a default present tense reading. Finally, by excluding this variant, this thesis follows the practice of the vast majority of previous variationist research on future temporal reference in French (cf. Deshaies & Laforge 1981; Emirkanian & Zimmer 1985; Zimmer 1994; Chevalier 1996; King & Nadasdi 2003; Blondeau 2006; Wagner & Sankoff 2011; Grimm & Nadasdi 2011; Roberts

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[13] See Le Goffic (2001) for an in-depth examination of FP in the French language.

[14] Note that, although relatively rare in spoken French, the futurate present is much more frequent in varieties of Spanish (Orozco 2007b: 317) and is identified as the most frequent variant in Southern Italian (Fleischman 1982: 77).

2012). Indeed, Poplack and Turpin (1999) are the only study to include the futur-ate present in their multivariate analyses. This study used the Ottawa-Hull corpus, which contains approximately 3.5 million words and is therefore of sufficient size to contain enough tokens of the rare FP variant.

3.1 Excluded Tokens

I define the future temporal reference variable as consisting of all strategies that speakers have at their disposal for expressing the notion of future time, with variants occurring in 'any […] unambiguous reference to a state or event occurring posterior to speech time' (Poplack & Malvar 2007: 135). The focus of the present chapter is therefore the variable expression of futurity, and not posteriority (cf. Fleischman 1982: 36). Consequently, I began my analysis by extracting every verb form that featured IF tense morphology and every *aller* periphrasis from my Martinique corpus using the AntConc concordance program (Anthony 2011). In total, 838 tokens were identified in the speech of all 32 informants. Furthermore, since the present study analyses variability in the French *future temporal reference sector* and not merely in those verbal forms featuring future morphology (cf. Deshaies & Laforge 1981; Söll 1983), I excluded a number of tokens in line with the protocol first outlined in Poplack and Turpin (1999:143–145).

As such, it was necessary to exclude all 'false futures'. In other words, I discarded those tokens exhibiting future morphology but not actually referencing a future eventuality, such as those with a modal or aspectual usage. One example of this type is the habitual class, as in (6). Such tokens encode a habitual action and

do not have a future temporal reference. Many of these were easily identified as they often co-occur with adverbials expressing habitual activity, such as *des fois* 'sometimes', *de temps en temps* 'sometimes' or *souvent* 'often'.

(6) *Habitual*

Des fois on va rigoler avec le professeur. [NOR]

'Sometimes we'll have a laugh with the teacher.'

Another set of excluded tokens includes all uses of the variable in hypothetical statements, as in (7). Such instances are conjectural: They do not reference a specific future event and were therefore not included in the ensuing quantitative analysis. Another category of exclusions involves cases of the verb *aller* used to indicate spatial movement, as in (8).[15]

(7) *Hypothetical*

Si **par exemple** tu sors avec la fille tu vas pas lui parler créole. [AUB]

'If, for example, you are going out with a girl you wouldn't speak to her in Creole.'

(8) *Spatial*

Oui moi je **vais voir** si elle est là. [MAC]

'Yes, I am going see if she is here.'

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[15] Although extremely rare, Wagner and Sankoff (2011: 282) report two cases of motion expressed using the IF. No such instances, however, were found in my Martinique corpus.

The final set of 'false futures' to be excluded from the dataset were imperatives and pseudo-imperatives (9). While these instances have been included in previous sociolinguistic studies (Poplack & Dion 2009), others have explicitly excluded such uses (Blondeau 2006; Wagner & Sankoff 2011; Sankoff, Wagner & Jensen 2012; Roberts 2012). The same approach is adopted in the present study, as these constructions do not have a future temporal reference.

(9) *Volitional*

Va pas lui **remplir** la tête avec des bêtises! [JOU]

'Don't go filling his head with nonsense!'

Thus far, all the excluded tokens have displayed future morphology but do not actually refer to future time. However, it was also necessary to remove those tokens that have a future temporal reference but do not admit all the variants. An example of these "true futures" includes tokens occurring in the protases of conditional *si*-clauses (10). These were excluded because the inflected future did not occur in such contexts in my Martinique data.[16]

(10) *Non-admittance of all the variants (e.g. protases of si 'if' clauses)*

Parce que **si** cela va recommencer peut-être on choisirait une autre formule. [ALB]

'Because if that is going to happen again we'd perhaps choose another option.'

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[16] Though relatively infrequent, IF is in fact permissible in the protases of *si*-clauses.

Genuine future forms not displaying variable behaviour were also eliminated from the dataset. Tokens occurring in these invariant, or categorical, contexts were found in both proverbs and set expressions, as in (11).

(11) *Invariant expressions*

On se dit que ce qui doit se faire se **fera**. [JOB]

'We believe that what must be done shall be done.'

In total, 513 tokens that made unambiguous reference to future time, in contexts where speakers must choose between inflected and periphrastic future verb forms, were retained for quantitative analysis. Each instance of the variable was coded for a number of internal and external constraints. In order to facilitate cross-dialectal comparison, this was achieved by combining and refining the coding protocols developed in previous future research (cf. Poplack & Turpin 1999; King & Nadasdi 2003; Grimm & Nadasdi 2011). The following sub-sections will discuss the conditioning factors that I have included in the present quantitative analysis, focussing first on the intralinguistic constraints and then on the social factors.

3.2 Linguistic Factors

I coded the data for a total of six linguistic factor groups: sentential polarity, temporal reference, adverbial modification, grammatical person, the influence of *si* 'if' and the presence or absence of *quand* 'when'. As Section 2 demonstrated,

each of these factors has been shown in the future temporal reference literature to affect the choice of the dependent variable. They will now be outlined below.

3.2.1 Sentential Polarity

The effect of this factor group has been largely ignored by prescriptive grammars (Poplack & Dion 2009). It is also not operative in Acadian French (King & Nadasdi 2003; Comeau 2011) and in other Romance languages, such as Brazilian Portuguese (Poplack & Malvar 2007) and Colombian (Orozco 2005), North American (Orozco 2007b) or Peninsular Spanish (Blas Arroyo 2008; Osborne 2008). Nevertheless, the polarity of the future eventuality has been identified in all Laurentian French studies to be the greatest determiner of variant choice. It has been operative since at least the 19th century (Poplack & Dion 2009) and has a near-categorical effect: The IF is overwhelmingly preferred in negative contexts, whereas the PF is almost exclusively conditioned by affirmative utterances.[17] I therefore coded all tokens as either affirmative (12) or negative (13).

(12) *Affirmative*

Il faudra faire un tour au Centre de Découverte de la Terre. [MAE]

'You will have to visit the Centre de Découverte de la Terre.'

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[17] Emirkanian and Sankoff (1985), Blondeau (2006), Wagner and Sankoff (2011) and Sankoff, Wagner and Jensen (2012) therefore chose to exclude negative tokens from their analysis.

(13) *Negative*

Ça **ne** va **plus** se reproduire. [MAN]

'That is not going to happen again.'

In Roberts (2012), I identified a link between the type of negation (bipartite versus post-verbal) and variant choice in Hexagonal French. In this thesis, sentential polarity was operationalised via a four-way constraint.[18] This factor group consists of affirmative utterances, negative utterances with only post-verbal negative (14), negative utterances with full bipartite negation (15) and those contexts in which it is not possible to identify if the negative morpheme *ne* has been realised, such as in liaison contexts where *on* 'one' is followed by a vowel (16).[19]

(14) *Negative with ne omitted*

Ça va **pas** être à cause de nous. [TEM]

'That's not going to be because of us.'

(15) *Negative with ne retained*

Même s'il veut partir je **ne** le suivrai **pas**. [MIP]

'Even if he wants to leave I will not follow him.'

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[18] As previously discussed in Chapter 3 Section 4.2, the sentential polarity factor group was established to capture both a semantic and a structural contrast. Such an approach enables us to follow standard variationist practice of examining the effect of all linguistic predictor variables within one statistical model.

[19] See Chapter 4 Section 3.1 for a detailed account of how the envelope of variation for the negative morpheme *ne* was delimited.

(16) *Outside of variable context for ne omission/retention*

Qu'est-ce qu'on **(n')** aura pas? [MYR]

'What will we not have?'

3.2.2 Temporal Distance

The principle linguistic factor hypothesised by traditional grammarians of French to condition variant selection is the temporal distance between the speech act and the future eventuality. The PF is viewed as referring to proximal events and states, in contrast to the IF, which is preferred for distal time contexts. Variationist studies of Laurentian French report that this factor group exerts a small (Poplack & Turpin 1999) if any (Grimm & Nadasdi 2011) effect on variant choice, whereas it is identified as the most influential linguistic constraint in Acadian communities (King & Nadasdi 2003; Comeau 2011).[20]

In order to capture any distinction between the two variants on the basis of temporal distance, I operationalised Dahl's (1984: 112–113) 'hodi-

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[20] Note that the proximal/distal temporal distinction in French is mirrored in *créole marti-niquais*. According to the prescriptive literature, futurity is typically rendered by the use of the particle *ké* before a verb in the creole. Speakers can also use the pre-verbal marker *kay* to denote a near future (Pinalie & Bernabé 2000: 77). These two different analytic forms have the same functional allocation as French and are thus considered equivalent to the French inflected and periphrastic futures respectively.

ernal/nonhodiernal' categorisation.[21] All tokens were coded as either proximal events or states, defined as those set to occur within the same day as the utterance, as in (17), or distal ones (18), i.e., those occurring thereafter (cf. Poplack & Turpin 1999; Poplack & Malvar 2007). However, coding for this particular factor group proved to be problematic: It was impossible to ascribe a precise future reference to 66% (N=339) of the tokens in my data. The binary category was therefore modified in order to accommodate those tokens with an indeterminate future temporal reference (19).[22]

(17) *Proximal*

Alors ça c'est une question difficile. Je répondrai en nuançant. [ALB]

'Well, that's a difficult question. I will qualify my answer.'

(18) *Distal*

Donc en fait je pense que je vais partir aux États-Unis ou en Europe. [LUJ]

'So basically I think that I am going to leave for the US or Europe.'

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[21] This temporal distinction echoes Estienne's (1569, quoted in Comeau, King & Butler 2012: 316) '24-hour rule', which prescribes that past events occurring within the first 24 hours prior to utterance time should be realised in the *passé composé*, while all other contexts should select the *passé simple*. Both Schwenter and Torres Cacoullos (2008) and Comeau et al. (2012) also operationalise the '24-hour rule' for studying past temporal reference in Mexican and Peninsular Spanish, and Acadian French, respectively.

[22] Note that we do not know the proportion of tokens that could not be coded for temporal distance in previous French studies examining this variable. Nevertheless, the percentage of my data with an indeterminate future reference is comparable to Torres Cacoullos and Walker's (2009: 329) study of the English future in Québec City and Montréal. They report that 70% of their tokens had no overt indication of temporal reference.

(19) *Indeterminate*

Et personnellement c'est pas moi qui va les aider. [DOT]

'And personally, it won't be me who is going to help them.'

3.2.3 Adverbial Modification

The literature reports a link between variant choice and the type of adverbial modification (Emirkanian & Sankoff 1985, Jeanjean 1988, Poplack & Turpin 1999). When treated as a ternary variable, research indicates that the futurate present is preferred in the presence of a specific time adverbial, such as *demain* 'tomorrow'. In contrast, the inflected future is associated with non-specific adverbials, such as *plus tard* 'later', whilst the periphrastic variant is favoured in contexts with no adverbial specification (Poplack & Turpin 1999: 151–152).

To capture the potential effect of this factor group, I therefore coded for the type of adverbial specification, distinguishing specific (20) and non-specific adverbials (21), from the absence of any modification (22).

(20) *Specific adverbial*

Au mois de juin j'aurai 19 ans. [TEM]

In June, I will be 19 years old.'

(21) *Non-specific adverbial*

Et tu vas revenir ici **après**? [CLU]

'And are you going to come back here afterwards?'

(22) *No adverbial modification*

Comme il y a une seule école donc je vais faire une demande ici. [KAG]

'As there is only one school I am going apply here.'

3.2.4 Certainty

The certainty of outcome of the future eventuality may also impact upon variant choice (see Poplack & Turpin 1999; King & Nadasdi 2003; Grimm 2010). According to the literature, the periphrastic future ought to be selected when the state or event is deemed certain to take place, whereas the IF is linked to doubtful outcomes (Franckel 1984).

Coding for the degree of certainty is extremely difficult and highly subjective and, as such, it is difficult to identify the single most appropriate method for operationalising this factor group. This is because subtle semantic or pragmatic distinctions in the message the speaker wishes to convey cannot be easily identified in the absence of overt contextual cues. Nevertheless, the presence of adverbials, such as *bien sûr* 'of course' or *peut-être* 'maybe', do facilitate the decision making process as they clearly indicate whether a token is deemed by the speaker to be certain or not. Consequently, I have adopted King and Nadasdi's (2003) protocol, which was developed with the aim of coding each token using criteria that were as objective as possible. In essence, if adding *sans aucun doute* 'without any doubt' to the variable token rendered the future event more certain to occur, it was coded as 'certain' (23). If this was not the case, however, the token was deemed to be 'uncertain' (24). If the certainty of the future eventuality could not be ascertained, the token was coded as 'unknown' (25).

(23) *Certain*

On va **certainement** apprendre à jouer au piano. [JOB]

'We will definitely learn how to play the piano.'

(24) *Uncertain*

Je vais **peut-être** continuer ou je vais directement changer de filière. [VAV]

'I am perhaps going to carry on or I am going to completely change my

course of study.'

(25) *Unknown degree of certainty*

Moi je pense qu'il va rester. [JUF]

'I think that he is going to stay.'

3.2.5 Grammatical Person

A number of different postulates regarding grammatical person have been shown

to influence variant selection (see Section 2). Tokens of the variable were coded

for all grammatical persons, both singular and plural, some examples of which are

given below in (26) through (30). For analytic purposes, these categories were

collapsed in various ways (as detailed in Section 4.2).

(26) *First person singular*

Je suis chez moi ah ben oui **je** vais pas partir hein! [JOU]

'I am home so well I am not going to leave eh!'

(27) *First person plural*

Ensuite ben **nous on** sera en période d'examen tout de suite après donc euh.

[NOR]

'Then well we will be in the exam period straight after.'

(28) *Second person singular informal*

Non mais dans le cadre des études du moins **tu** vas pas revenir là non?

[CLU]

'No but for your studies at least you are not going to come back here no?'

(29) *Second person singular formal*

Et **vous** allez voir un petit peu les communes qui nous entourent. [JOB]

'And you are going to see a little bit the towns that surround us.'

(30) *Impersonal il*

Il paraît qu'**il** va y avoir une pénurie de riz. [CHL]

'It seems that there is going to be a shortage of rice.'

3.2.6 The Influence of *si* 'if'

Previous studies identify contingency as a factor constraining the variation: The inflected future is preferred with contingent events (Poplack & Turpin 1999; Blondeau 2006; Wagner & Sankoff 2011). In most cases in French, contingency is indicated by a conditional *si* 'if' + present + future sequence, with the variant

located in the apodosis clause. In order to test this hypothesis, the tokens were

coded for whether they did (31) or did not (32) occur in the apodosis of a *si*-clause.

(31) *Presence*

Si j'ai besoin d'un truc je n'irai pas au Conseil Général. [WIP]

'If I need something I will not go to the General Council.'

(32) *Absence*

Vous êtes pas obligé de tout faire mais juste faire le début et vous allez

avoir une petite idée. [JOB]

'You don't have to do it all but just do the start and you will have a little

idea.'

3.2.7 The Presence or Absence of *quand* 'when'

Finally, the favouring effect of *quand* 'when' for IF selection has been

hypothesised to be operative in spoken French. This claim has been substantiated

with data from both Acadian (King & Nadasdi 2003) and Laurentian French

(Wagner & Sankoff 2011). Consequently, occurrences of the variable were coded

for the presence (33) or absence (34) of *quand* 'when'.[23]

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[23] Sankoff and Wagner (2011) include this predictor variable in the wider factor group of
'contingency', along with the influence of *si* 'if'. However, I have orientated towards the lion's
share of studies examining this variable in French by treating both predictors as separate linguistic
constraints (see also King & Nadasdi 2003; Grimm 2010; Comeau 2011; Grimm & Nadasdi 2011;
Roberts 2012).

(33) *Presence of quand*

Quand je serai grande je mangerai beaucoup de bonbons. [ORT]

'When I'm older I will eat lots of sweets.'

(34) *Absence*

Je lui dis et après je vais traduire. [MIP]

'I am telling him and afterwards I am going to translate.'

3.3 Social Factors

Though, as I have already demonstrated, a comparative investigation of previous studies reveals conflicting evidence regarding the linguistic constraints underpinning the variation, there is a much greater consensus in the literature concerning the effect of social variables. As a result, all tokens of the variable were coded for four extralinguistic factors: age, sex, educational level, and language restriction.

3.3.1 Age

The results from both apparent-time research (Comeau 2011; Roberts 2012) and the Montréal trend study (Sankoff, Wagner & Jensen 2012) indicate that the two main future variants are stable and are not undergoing any major change. Other apparent-time studies on Laurentian French have shown that the periphrastic future is participating in a change in progress at the expense of the IF (Emirkanian & Sankoff 1985; Zimmer 1994; Poplack & Turpin 1999). Poplack and Dion's

(2009: 572) real-time work on Québec and Ottawa-Hull French has supported this finding. Their results indicate that an increase in the frequency of the periphrastic variant is linked to a concomitant decline of the inflected future. In contrast, Blondeau's (2006) and Wagner and Sankoff's (2011) Montréal panel studies demonstrate that speakers actually increase their use of IF over the course of their life span. In light of these conflicting findings, I decided to test whether age (younger vs. older) influences variant use in Martinique.

3.3.2 Sex

Whilst a number of studies have shown that sex is not operative on the selection of IF or PF verb forms (cf. Poplack & Turpin 1999; Roberts 2012), research on certain varieties of Canadian French has demonstrated that females are more likely to use the PF, while males employ the IF variant comparatively more (Comeau 2011; Grimm & Nadasdi 2011). In order to test for the role played by speaker sex in my Martinique data, I consequently coded all tokens for the sex of the speaker.

3.3.3 Educational Level

Previous Laurentian studies have shown a linear correlation between variant choice and social class, with upper and middle-class speakers producing more IF tokens than the working classes (cf. Emirkanian & Sankoff 1985; Grimm & Nadasdi 2011; Wagner & Sankoff 2011). Moreover, Poplack and Dion (2009) have examined the effect of educational level on variant selection and my

previous work has used informant's educational attainment as a marker of their socioeconomic standing to good effect (Roberts 2012: 103). My results revealed that higher levels of education positively correlate with increased use of the inflected future. The present study also focuses on educational level. As noted already, speakers were categorised depending on whether they had no formal qualifications, a *baccalauréat* or a university degree.[24]

3.3.4 Language Restriction

Finally, I also chose to examine the effect of language restriction on variant selection which has already revealed interesting results with respect to the other variables I have reported on. Recall that this constraint measures how often speakers use either French or *créole martiniquais* in interpersonal communication. Although this factor group has received little attention in previous research on future temporal reference (cf. Grimm 2010; Grimm and Nadasdi 2011), work on other grammatical variables in Ontarian French frequently reports significant results for this particular social factor. Most notably, the more restricted speakers tend to prefer morphologically simple forms (see Mougeon and Beniak 1991). Consequently, I decided to investigate whether variable levels of restriction in the daily use of French played a role in variant choice in my Caribbean data and hypothesise that an increase in use of the analytic PF construction will positively correlate with increasing levels of language restriction.

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[24] See Chapter 2 for a discussion as to why speakers are categorised according to their educational level and not their social class.

4. Results and Analysis

In this section, I first present the overall frequency of variant forms and then explore their distribution according to the intralinguistic and social factors hypothesised to affect variant selection.

4.1 Overall Variant Distribution

The overall distribution of the two main future temporal reference variants in Martinique French is provided in Table 5.1.

Variant	N	%
Inflected future	142	27.7
Periphrastic future	371	72.3
Total	513	100.0

Table 5.1: Distribution of future variants in Martinique French.

The table reveals that speakers of Martinique French show a clear preference for the periphrastic future in spoken language: it is occurs in 72.3% (N=371) of all potential occurrences, in contrast to the IF, which is employed only 27.7% (N=142) of the time.

However, when compared to its mainland counterpart (see Figure 5.1 for an overview), the periphrastic future is used more frequently in Martinique than it seems to be in those varieties spoken in Continental Europe. The distribution for Martinique in Table 5.1 therefore lends empirical support to Fleischman's (1982: 102) observation that '[t]hroughout Romance [the] trend toward periphrastic futures appears to be more pronounced in the overseas regions […] than in the re-

spective continental dialects'. In comparison with the extant French Canadian futurate systems, my results indicate that PF is used less often in Martinique than in all of the Laurentian communities studied to date. The frequency of periphrastic forms is reported to be between 89% (N=1097) in Ontarian French (Grimm & Nadasdi 2011: 181) and 93% (N=2627) in Ottawa-Hull (Poplack & Turpin 1999: 148). In contrast, there is a greater prevalence of the periphrastic future in Martinique than in the more conservative Acadian varieties. PF usage rates vary from 47% (N=323), on average, in Prince Edward Island and Newfoundland (King & Nadasdi 2003: 332) to 62% (N=425) in Baie Sainte-Marie, Nova Scotia (Comeau 2011: 226).
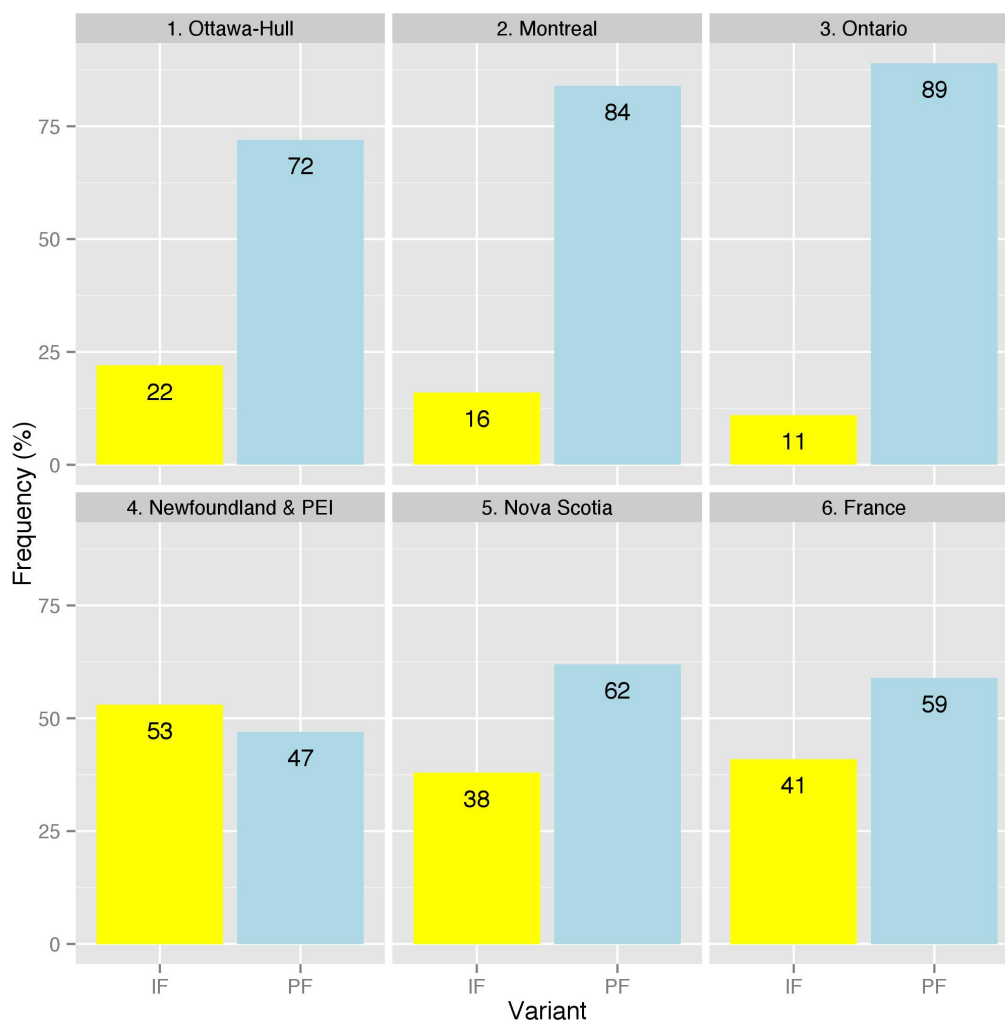
1. Ottawa-Hull (Poplack & Turpin 1999) | 2. Montréal (Sankoff, Wagner & Jensen 2012) | 3. Ontario (Grimm & Nadasdi 2011) | 4. Newfoundland & PEI (King & Nadasdi 2003) | 5. Nova Scotia (Comeau 2011) | 6. France (Roberts 2012)

Figure 5.1: Distribution of IF and PF variants from selected previous studies.

The overall variant distribution for spoken data is in stark contrast to the results obtained from studies on written language, which show a reversal of this trend. Lesage and Gagnon (1993) and Wales (2002) report that the incidence of IF forms far exceeds that of the periphrastic future in their journalistic corpora. Indeed, the relative frequency of the two variants in Lesage and Gagnon's (1993: 367)

Québécois dataset was 97% (N=5818) for the IF and only 3% for the PF (N=199). Wales (2002: 79) also reports similar results in his *Ouest-France* study (IF: 90%, N=7751; PF: 10%, N=887).

In Sections 4.2 and 4.3, I investigate the variable grammar that underpins this variability. In other words, I determine which linguistic and social constraints contribute to variant choice. All inflected and periphrastic future tokens were submitted to multiple logistic regression analyses using the programs Rbrul (Johnson 2009) and GoldVarb (Sankoff, Tagliamonte & Smith 2012) with the PF set as the application value. Recall that these software packages have the advantage of indicating the relative magnitude of every factor group simultaneously within one statistical model instead of treating individual factors in isolation. The models generated identify which internal and external factor groups, outlined in Section 3.2 and 3.3, govern variation selection at a statistically significant level. In the following sub-sections, I present the results of the multivariate analyses, focusing first on the linguistic constraints and then examining the social variables.

4.2 Linguistic Factors

The outcome of the fixed effects regression analysis is shown in Table 5.2.[25] In total, three linguistic factor groups were retained by the model as statistically significant: grammatical person, adverbial specification and temporal distance. Let us now investigate the effect of thee constraints in greater detail.

	Centered Factor Weight	%	N	Tokens	Log-odd
Grammatical person					
Other	0.81	75.5	367	486	1.422
Impersonal *il*	0.19	14.8	4	27	-1.422
Range 62					
Adverbial specification					
Specific	0.76	82.4	28	34	1.159
No modification	0.44	72.6	326	449	-0.234
Non-specific	0.28	56.7	17	30	-0.925
Range 48					
Temporal distance					
Proximal	0.70	88.4	38	43	0.838
Indeterminate	0.55	77.0	261	339	0.194
Distal	0.25	55.0	72	131	-1.032
Range 45					

Not significant: Sentential polarity, Certainty, Influence of *si*, Presence/Absence of *quand*

Deviance=528.111; df=6; Intercept=0.024; Mean=0.723; Nagelkerke R^2=0.202

Table 5.2: Rbrul analysis 1 of linguistic factors contributing to PF selection.

Notably, sentential polarity does not exert any influence on the variants as either a binary or a ternary factor group. This is in stark contrast to the findings reported

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[25] In Rbrul, as already noted, regression coefficients for nominal factor groups are expressed as both a factor weight (i.e. a weighted probability) and a log-odd. A factor weight greater than 0.5 indicates that speakers favour the periphrastic future, while a value smaller than 0.5 shows that speakers prefer the inflected variant. 0.5 is neutral. See also Footnote 28 for an explanation of how to interpret log-odds.

for Laurentian and Hexagonal French. However, in line with work on Acadian

varieties (cf. King & Nadasdi 2003; Comeau 2011), temporal distance is shown to

be operative in Martinique French. The results in Table 5.2 demonstrate that prox-

imal events and states favour the selection of the PF (FW=0.70, 88.4%, N=38),

while the IF is preferred with distal outcomes (FW=0.25; 55.0%, N=72). Im-

portantly, however, neither Acadian study codes for a binary proximal/distal divi-

sion when operationalising this factor group. Both opt instead for a more fine-

grained distinction on the basis of temporal reference. My tokens were therefore

recoded for a finer degree of temporal proximity: whether the verbal action was

set to occur within the day (see Example 35), the week (36), the year (37) or a pe-

riod longer than a year (38), as well as those with a continuous (39) or an inde-

terminate future reference (40).

(35) *Within 24 hours*

Oui, **viens voir** je vais te montrer. [JOU]

'Yes, come see I am going to show you.'

(36) *Within the week*

Elle sera encore là **samedi**. [MAE]

'She will still be there on Saturday.'

(37) *Within the year*

Après en **septembre** il y aura les sénatoriales. [MAN]

'Afterwards in September there will be the Senate elections.'

(38) *Longer than a year*

Il ne sera pas réélu en **2012**. [NOR]

'He will not be re-elected in 2012.'

(39) *Continuous*

Il va **toujours** habiter le Nord-Caraïbe. [ELN]

'He is always going to live in the Nord-Caraïbe.'

(40) *Indeterminate*

J'espère vraiment qu'ils vont aboutir. [MIP]

'I really hope that they are going to come to an agreement.'

The results of the revised fixed-effects regression analysis, with temporal distance as a remodelled factor group, are given in Table 5.3. Note that although all three linguistic factor groups are still identified as statistically significant, the constraint hierarchy has now been altered and the Nagelkerke R^2 value (R^2=0.256) indicates that the model is a better fit to the data than the original analysis presented in Table 5.2 (R^2=0.202).

	Centered Factor Weight	%	N	Tokens	Log-odd
Temporal distance					
Within 24 hours	0.78	88.4	38	43	1.252
Within the week	0.67	81.3	26	32	0.706
Indeterminate	0.65	77.0	261	339	0.612
Within the year	0.59	71.9	23	32	0.338
Longer than a year	0.24	39.0	16	41	-1.178
Continuous	0.15	26.9	7	26	-1.729
Range 63					
Grammatical person					
Other	0.81	75.5	367	486	1.45
Impersonal *il*	0.19	14.8	4	27	-1.45
Range 62					
Adverbial specification					
Specific	0.70	82.4	28	34	0.885
No modification	0.49	72.6	326	449	-0.053
Non-specific	0.30	56.7	17	30	-0.823
Range 40					

Not significant: Sentential polarity, Certainty, Influence of *si*, Presence/Absence of *quand*

Deviance=505.181; df=9; Intercept=-0.592; Mean=0.723; Nagelkerke R^2=0.256

Table 5.3: Rbrul analysis 2 of linguistic factors contributing to PF selection.

Temporal distance is now selected as the most influential linguistic constraint with a range of 63. This finding is in line with both Acadian studies (King & Nadasdi 2003; Comeau 2011), which report that this factor group is the strongest predictor of variant choice. Moreover, the hypothesis that PF is more frequent in cases where the future event is proximal to the speech act is substantiated by the present study. Crucially, the probability that speakers will select the periphrastic future declines with increasing temporal distance from 0.78 (88.4%, N=38) when the action is set to occur within the day, to 0.67 (81.3%, N=26) for within the week, and to 0.59 (71.9%, N=23) for within the year. This variant then becomes disfavoured when reference is being made to something expected to occur over a

year following speech time (FW=0.24, 39.0%, N=16), as well as in continuous contexts (FW=0.15, 26.9%, N=7).

Not only is the Martinique data the first to report a straightforward linear association between future variants and the degree of temporal distance in French, the proximal/distal cut-off point in the Martinique system differs noticeably from what we find in Acadian varieties.[26] King and Nadasdi (2003: 333–334) report that, for Newfoundland and Prince Edward Island, only those events expected to occur up to a week following speech time actually favour PF. In Baie Sainte-Marie, Comeau (2011: 227) notes that speakers only select the periphrastic variant for events set to occur within an hour of speech time. Both Acadian studies report that the regression coefficients remain relatively stable at the 0.5 level after a week post-speech time. This result indicates that the effect of temporal distance in these varieties is neutralised in the more distal time contexts. In Martinique, however, the probability that speaker will select the periphrastic future gradually declines and PF becomes disfavoured only after 12 months.

When investigating temporal distance, the question of how to deal with tokens to which it was not possible to ascribe a precise future reference came to the fore. A full 66% (N=339) of such tokens in my data were ambiguous in this regard. These indeterminate tokens strongly favour the periphrastic construction (FW=0.65, 77.0%, N=261). Since Rbrul does not allow the exclusion of tokens from a specific factor group while retaining them in all others, I decided to rerun

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[26] This result is not unexpected given the 'conservative' patterns of variation exhibited in the Acadian varieties that distinguish them from the rest of the French-speaking world (see King 2000, 2013 for a full discussion).

the model using GoldVarb Lion, which is based on the same statistical principle, namely multiple logistic regression. I was thus able to remove those tokens with an indeterminate temporal reference using the 'slash' function and analyse only those tokens associated with a clear-cut temporal reference. The outcome of the multivariate run on the GoldVarb platform is displayed in Table 5.4. Note that although the range for grammatical person has decreased from 62 to 48, the ranges for temporal distance and adverbial specification have remained stable at 62 and 40, respectively. In essence, the ranking of constraints remains the same. What this effectively means is that those tokens without a specific future reference do not seem to have an impact on the overall model.

	Uncentered Factor Weight	%	N	Tokens
Temporal distance				
Within 24 hours	0.78	88.4	38	43
Within the week	0.68	81.3	26	32
Within the year	0.59	71.9	23	32
Longer than a year	0.24	39.0	16	41
Continuous	0.16	26.9	7	26
Range 62				
Grammatical person				
Other	0.54	75.5	367	486
Impersonal *il*	0.06	14.8	4	27
Range 48				
Adverbial specification				
Specific	0.71	82.4	28	34
No modification	0.47	72.3	326	449
Non-specific	0.31	56.7	17	30
Range 40				

Not significant: Sentential polarity, Certainty, Influence of *si*, Presence/Absence of *quand*

Sig=0.038; Corrected Mean=0.66; Log Likelihood=-252.591; Total N=513

Table 5.4: GoldVarb analysis of linguistic factors contributing to PF selection.

The literature boasts a number of hypotheses regarding the effect of grammatical person on variant choice. Crucially, in Martinique French, no relationship was detected between *vouvoiement* and the IF (cf. Poplack & Turpin 1999; Roberts 2012).[27] Likewise, claims that the periphrastic future is more subjective and therefore more likely to occur with first person subjects were not substantiated by the data (cf. Söll 1983). The only significant conditioning effect exerted by a personal pronominal form was that of impersonal *il* constructions, an example of which is given in (30) in Section 3.2.5. As Table 5.3 illustrates, the inflected future is selected in 85.2% (N=23) of cases with an impersonal *il* subject, yet it only occurs 24.5% (N=119) of the time with other subject pronouns. The association between impersonal *il* and the IF has never been reported for any variety of French in previous quantitative studies. This is therefore clearly an area that warrants further investigation and will be addressed below.

The results in Table 5.3 also indicate that non-specific adverbials favour the inflected future (FW=0.30, 56.7%, N=17). This result echoes Poplack and Turpin's (1999:151–152) findings for Ottawa-Hull. Specific adverbials in my data, on the other hand, are shown to have a favouring effect on the periphrastic variant (FW=0.70, 82.4%, N=28), whereas the absence of adverbial modification has a neutral effect (FW=0.49, 56.7%, N=17). These findings are somewhat unexpected, since it is the PF which is traditionally preferred in unmodified contexts (Poplack & Dion 2009: 573; Comeau 2011: 228–229). Moreover, note that this factor

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[27] See, in contrast, the retention of the negative particle *ne* with *vous* 'you' subjects in Chapter 4.

group is not identified as significant in an isolated chi-square calculation (χ^2=5.400; df=2; *p*=0.670).

Importantly, as I have previously argued, a fixed-effects regression analysis, assumes that 'the observations making up the data are independent of each other' (Johnson 2009: 363). However, in spoken language data, this is not the case since tokens 'are naturally grouped according to the individual speaker who produced them' (Johnson 2009: 363). Thus, in order to investigate what underpins the results in Table 5.3 and 5.4, and hoping to explain the unforeseen result for adverbial specification, I chose to examine the role of individual speakers. Upon closer inspection, I noticed that certain informants tend not to modify either IF or PF variants with a time adverbial (see Table 5.5). This finding is not unexpected, of course, as neither variant needs modification in order to express future temporal reference (King & Nadasdi 2003: 335).[28]

Speaker ID	Adverbial specification						Total
	No modification		Non-specific		Specific		
	%	N	%	N	%	N	
MYR	88.2	15	0.0	0	11.8	2	17
ELN	83.3	15	16.7	3	0.0	0	18
KAG	83.4	10	8.3	1	8.3	1	12
MAE	81.5	22	11.1	3	7.4	2	27
LUJ	80.0	8	10.0	1	10.0	1	10
NOR	78.3	18	17.4	4	4.3	1	23

Table 5.5: Cross-tabulation of type of adverbial specification by speaker.[29]

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[28] This is in contrast to the futurate present, which requires adverbial modification in order to disambiguate between a future and a present tense reading (see Le Goffic 2001; Blondeau 2006).

[29] For illustrative purposes, only six informants were included in Table 5.5. The same six speakers are also listed in Table 5.6 but have been ordered according to their increasing use of IF.

When I examined the 'no modification' category more closely (see Table 5.6 below), I noticed that a number of informants display higher than expected rates of the periphrastic future (e.g. LUJ: 100%, N=8 and KAG: 90%, N=9). Likewise, some speakers use the inflected future comparatively more without modification (e.g. NOR: 77.8%, N=14 and MAE: 54.5%, N=12).

Speaker ID	Adverbial specification: No modification				Total
	Inflected future		Periphrastic future		
	%	N	%	N	
LUJ	0.0	0	100.0	8	8
KAG	10.0	1	90.0	9	10
MYR	13.3	2	86.7	13	15
ELN	20.0	3	80.0	12	15
MAE	54.5	12	45.5	10	22
NOR	77.8	14	22.2	4	18

Table 5.6: Cross-tabulation of future variants unmodified adverbially by speaker.

Whereas the fixed-effects models in Tables 5.3 and 5.4 have accounted for between-group effects, they have also assumed that there is no variation above the level of the token and thus 'individual-speaker and individual-word variation do not exist' (Johnson 2010: 7). As Table 5.6 illustrates, this assumption is not warranted. Mixed-effects regression models, on the other hand, are capable of taking random effects, such as speaker variability, into consideration. They only identify a factor group as statistically significant when it is 'strong enough to rise above the inter-speaker variation' (Johnson 2009: 365). I therefore decided to return to Rbrul to run a mixed model with individual speaker as a random effect. Table 5.7 reveals that, unsurprisingly given the results in Table 5.6, once we consider the effect of speaker on variant choice, adverbial specification is discarded from the model altogether. Additionally, while the ranking of individual factors within the

factor groups has remained constant, the constraint hierarchy has changed: The range for temporal distance remains stable at 61, grammatical person is now identified as the strongest predictor of variant choice with a range of 66.

	Centered Factor Weight	%	N	Tokens	Log-odd
Grammatical person					
Other	0.83	75.5	367	486	1.67
Impersonal *il*	0.17	14.8	4	27	-1.67
Range 66					
Temporal distance					
Within 24 hours	0.76	88.4	38	43	1.155
Within the week	0.70	81.3	26	32	0.857
Indeterminate	0.61	77.0	261	339	0.443
Within the year	0.60	71.9	23	32	0.388
Longer than a year	0.24	39.0	16	41	-1.117
Continuous	0.15	26.9	7	26	-1.727
Range 61					

Not significant: Sentential polarity, Adverbial specification, Certainty, Influence of *si*, Presence/Absence of *quand*

Deviance=497.154; df=8; Intercept=-0.441; Mean=0.723; Speaker Random Std Dev=0.779

Table 5.7: Rbrul analysis of linguistic factors contributing to PF selection with speaker as a random effect.

Johnson (2010: 11) has also illustrated that similar pitfalls in data analysis may be encountered if the effect of individual word-level variation is ignored. Indeed, although the literature on future temporal reference in French has acknowledge that certain variants appear to co-occur more readily with certain variants (Poplack & Turpin 1999; Wagner & Sankoff 2011), its overall effect has been comparatively under-researched from a quantitative perspective (cf. Roberts 2012). Crucially, in my data, I noticed that a number of verbs in impersonal *il* constructions appear to occur frequently (e.g. *y avoir* 'to be': 90%, N=18), if not categorically (e.g. *falloir* 'to have to': 100%, N=5), with the inflected future. The previously unattested re-

sult for grammatical person could thus potentially be masking a purely lexical effect. I decided to control for such an epiphenomenon by including individual verb as a random effect.[30] The results of a mixed model that includes both speaker and lexical verb as random effects are displayed in Table 5.8.

	Centered Factor Weight	%	N	Tokens	Log-odd
Temporal distance					
Within the year	0.68	71.9	23	32	0.570
Within 24 hours	0.67	88.4	38	43	0.704
Within the week	0.66	81.3	26	32	0.682
Indeterminate	0.64	77.0	261	339	0.570
Longer than a year	0.27	39.0	16	41	-1.011
Continuous	0.15	26.9	7	26	-1.711
Range 53					

Not significant: Sentential polarity, Adverbial specification, Certainty, Grammatical person, Influence of *si*, Presence/Absence of *quand*

Deviance=381.722; df=8; Intercept=-0.587; Mean=0.723;
Speaker Random Std Dev=0.727; Lexical Verb Random Std Dev=2.033

Table 5.8: Rbrul analysis of linguistic factors contributing to PF selection with speaker and lexical verb as random effects.

Now, grammatical person is not selected as significant which suggests that the significant effect in Tables 5.3 and 5.4 was indeed an epiphenomenon. The only linguistic factor that remains in the model is temporal distance. Also, the regression coefficients have altered considerably from the initial fixed-effects analysis. Those events set to occur up to a year following speech time all favour the periphrastic future to same degree (FW=0.66–0.68). After that, there is a clear temporal divide, with actions occurring in the most distal time context strongly disfa-

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[30] In Chapters 3 and 4, lexical effects were controlled for by examining the type of verb and the influence of prefabricated expressions, respectively.

vouring the PF (FW=0.27, 39.0%, N=16). This result contrasts with what is reported for Acadian varieties, in which PF acts as a marker of proximity and the temporal distinction becomes neutralised in the more distal time contexts.[31] In Martinique French, PF is the default option in the majority of cases and it is the inflected variant which functions an indicator of distal outcomes.

4.3 Social Factors

In order to assess the overall effect of the social constraints, I conducted another fixed-effect analysis in Rbrul. Table 5.9 reveals that both educational level and language restriction emerge as statistically significant in the logistic regression model. It is interesting to note that both age and sex do not govern variant choice in the Martinique variety. Recall that both predictor variables have been shown to influence variant selection in a variety of previous studies (see Poplack & Turpin 1999; Grimm 2010; Comeau 2011; Sankoff & Wagner 2011 *inter alia*). This finding is perhaps not wholly unsurprising given the results presented in Chapters 3 and 4 of this thesis. Indeed, my results for subject doubling and variable *ne* indicate that the variable grammar of Martinique French patterns closely to those reported for European French varieties, in which speaker age and sex do not influence the choice of future variants (see Roberts 2012). I now discuss the effect of educational level and language restriction in more detail.

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[31] The cut-off point for what is considered proximate is slightly different in both King and Nadasdi (2003) and Comeau (2011): a week in the former and only an hour in the latter.

	Centered Factor Weight	%	N	Tokens	Log-odd
Educational level					
No qualifications	0.60	76.5	283	370	0.437
Baccalauréat	0.42	60.3	41	68	-0.112
University degree	0.42	62.7	47	75	-0.325
Range 18					
Language restriction				513	+1 -0.037
Not significant: Age, Sex					

Deviance=588.726; df=4; Intercept=3.589; Mean=0.723; Nagelkerke R^2=0.046

Table 5.9: Rbrul analysis of social factors contributing to PF selection.

Poplack and Dion (2009: 581) first hypothesised that educational attainment could be a good predictor for variant choice. They posit that both schools and higher education institutions might be successful in transmitting the 'prescriptively sanctioned' form. In other words, exposure to formal instruction might positively correlate with the use of the inflected future. While their results for Laurentian French indicate that the distribution of the future variants is the same, regardless of informants' educational level, the results from Martinique appear to substantiate Poplack and Dion's initial postulate. In my dataset, an increase in educational level has a disfavouring effect on PF usage. Whereas those informants without any formal qualifications favour the use of the PF (FW=0.60, 76.5%, N=283), it is those speakers with either a *baccalauréat* (FW=0.42, 60.3%, N=41) or a university degree (FW=0.42, 62.7%, N=47) who prefer the inflected variant. In recent research, I have reported a very similar effect for Hexagonal French (Roberts 2012: 103). The crucial difference between the two studies, however, is that the effect of education in mainland Europe is only noticeable for those informants who have studied at university level. In Martinique, on the other hand, as the findings in Ta-

ble 4.9 demonstrate, successful graduation for the secondary school system seems to be conducive to increased use of the inflected future.

Let us now consider the effect of language restriction on variant selection. Recall that research on Franco-Ontarian communities classifies informants into one of three groupings on the basis of their language restriction score (cf. Mougeon & Beniak 1991): 'restricted' speakers are those who use French infrequently (<0.50), 'semi-restricted' informants have mid-to-high levels of restriction (0.50–0.79) and communicate in both languages in relatively equal proportions, while 'unrestricted' speakers are the most frequent users of French (>0.79). However, since the Rbrul software used in this study can handle continuous variables, I ran an analysis that considers each speaker's individual language-restriction score.

Grimm and Nadasdi (2011: 184–185) postulate that speakers with higher levels of restriction in the use of French may demonstrate a tendency to prefer morphologically analytic forms. As a result, given the morphological complexity of the French inflected future, we might expect reduced IF rates amongst these informants. Grimm and Nadasdi's (2011: 183) own research on future temporal reference reveals, however, that there is no significant difference between this factor group and the choice of variants in Ontarian French.

In my Martinique French data, on the other hand, this factor group is operative. The log-odd coefficient for language restriction (+1, -0.037) indicates that the periphrastic future becomes disfavoured as we move further up the language-

restriction scale.[32] In other words, the more speakers use French on a daily basis, the greater the likelihood is that they will select the inflected variant. This general trend is confirmed by the graph in Figure 5.2.
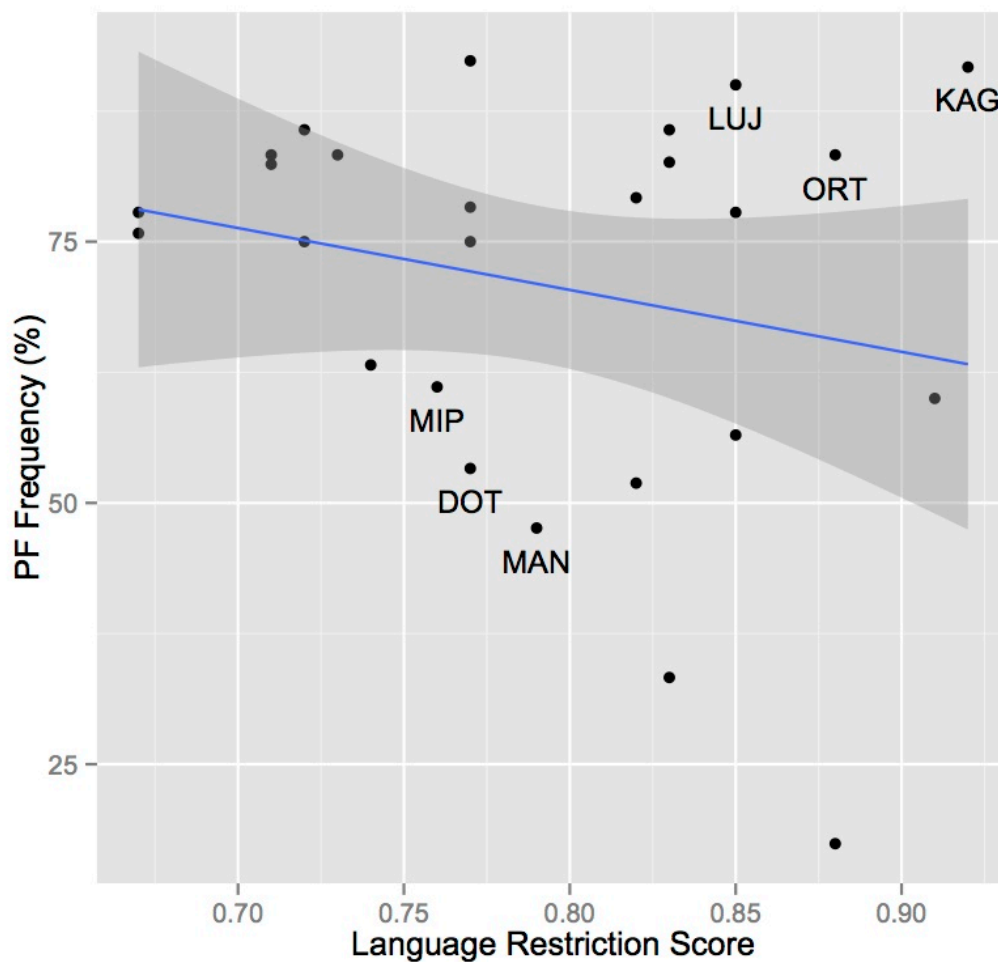

Figure 5.2: Language restriction profile by the frequency of PF.

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[32] Note, that Rbrul reports the effect of continuous variables as log-odd and not as a weighted probability. Unlike factor weights, log-odds range from positive to negative infinity: A positive regression coefficient indicates a favouring effect, a negative value is a disfavouring effect and a value of zero is neutral.

Note, however, that the scatterplot in Figure 5.2 identifies a number of informants who display somewhat unexpected speech behaviours. On the one hand, certain semi-restricted informants employ the PF variant much less frequently than their peers with unrestricted usage (e.g. MAN: 47.62%, N=10; DOT: 53.33%, N=8 and MIP: 61.11%, N=11). In turn, some unrestricted speakers use PF much more often than we would expect (KAG: 91.67%, N=11; LUJ: 90%, N=9 and ORT: 83.33%, N=10). Indeed, these findings correlate with results from an analysis that considered informants' educational level (not shown in graph): some speakers with no qualifications exhibit unexpectedly high rates of the IF (e.g. NOR: 82.60%, N=19; DOT: 46.67%, N=7), while others who hold either a *baccalauréat* (e.g. ELN: 77.77%; N=14) or a university degree (JOU: 85.71%, N=6) select PF comparatively more.

As was the case with the linguistic constraints, the fixed-effects run for the social factors cannot account for the fact that 'some individuals might favour a linguistic outcome […], over and above […] what their age, gender, social class, etc. would predict' (Johnson 2009: 365). I therefore decided to once again run a regression analysis on the data and included speaker as a random effect. Notably, once we consider the effect of speaker on variant choice, none of the social factors are retained as significant: both educational level and language restriction end up being discarded from the mixed model. This finding thus demonstrates that the variability in the expression of futurity cannot be accounted for by aggregate social factors, since any social variation operates on a purely individual level.

5. Conclusion

In conclusion, this chapter examined the variable nature of future temporal reference in Martinique French. The two variants under investigation are the inflected future (*je serai* 'I will be') and the periphrastic future (*je vais être* 'I am going to be'). The principal factors hypothesised to condition variant selection in both prescriptive and pedagogical grammars are the temporal distance between speech time and the future eventuality or the degree of certainty that the future event will actually take place. Empirical variationist studies—based thus far on Acadian, Laurentian and Hexagonal French data—have attempted to test this claim quantitatively. These studies have shown that there exists a preference in the spoken French language for PF forms irrespective of the variety under consideration, though with the usual Prince Edward Island and Newfoundland exceptions (King & Nadasdi 2003).[33] They have furthermore demonstrated that a clear distinction exists between different varieties of spoken French as regards the constraint systems governing the variation. In Acadian communities, temporal distance is identified as the greatest determinant of variant choice. While speakers favour the *futur proche* to denote a proximal event, the temporal distinction becomes lost as time progresses. Conversely, in all Laurentian and Hexagonal studies, sentential polarity consistently tops the constraint hierarchy. The PF dominates affirmative constructions, while the inflected form is almost categorical in negative environments.

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[33] As previously noted, Acadian varieties are traditionally considered to be distinct from other dialects of French.

The present chapter investigated whether the constraint systems reported for other varieties of French also hold in a Caribbean context. Fixed-effect logistic regression models highlighted the complex set of constraints governing the variation in the Martinique future temporal reference sector. They revealed that the strategies of encoding future time in Martinique French differ from its mainland Hexagonal counterpart. Instead, results show that the variable mirrors, to a certain extent, the findings reported in the extant Canadian literature: The periphrastic future is the dominant variant in this particular speech community with a distribution comparable to Laurentian varieties. However, sentential polarity as a conditioning factor is not operative in speech and the constraint hierarchy patterns more like the equally geographically isolated and highly conservative Acadian French varieties. Furthermore, temporal distance, adverbial specification, grammatical person, educational level and language restriction were all shown to influence variant choice.

However, once speaker-level and word-level variation were accounted for in the various regression models, results indicate that only one factor, namely temporal distance, constrains the variable expression of future temporal reference in Martinique French. My results therefore highlight the importance of analysing sociolinguistic data with mixed-effects regression models. Once random effects were controlled for, the PF acts as the default option in the majority of time contexts, while the inflected future acts as *the* marker of distal time.

Chapter Six: Conclusion

1. Research Questions

In my study of linguistic variability in Martinique French, I sought to examine the variable grammar of an isolated and previously under-described variety of Caribbean French. Quantitative analyses of the constraints underpinning variability in Martinique French speakers' morphosyntax enabled me to triangulate variable usage with previously studied varieties of French in Canada and Europe. In this chapter, I take stock and relate the findings of the sociolinguistic analyses conducted in Chapters 3–5 with the thesis' original research questions:

1. Which linguistic and social factors influence the choice of sociolinguistic variants in Martinique French?

2. Which other factors constrain variant selection in Martinique French?

3. How does the variable grammar of Martinique French pattern compared to previously studied varieties of French?

1.1 Linguistic and Social Constraints

Variationist analysis identified a range of factors governing variant choice in Martinique French. Quantitative examination of subject NP doubling and the use of the negative particle *ne* in Chapters 3 and 4 revealed that the constraint systems

governing variant choice in Martinique French are comparable to those reported for European varieties. By contrast, the analysis of the alternation between inflected and periphrastic future forms indicates that the variety spoken on Martinique exhibits strikingly distinct patterns of variation when compared to other French speech communities. I now briefly elaborate on my results.

For subject doubling, my Martinique findings indicate that sentential polarity, as in mainland France, and educational level are the most influential linguistic and social factor groups. Subject doubling is favoured in negative contexts in which the negative particle *ne* has been omitted. It is also more prevalent amongst those speakers with lower levels of education. Also, the type of verb, the presence of intervening elements and non-subject clitics, as well as the complexity of the subject, were all shown to influence the rate of SD. However, unlike Canadian French but like Hexagonal French, noun specificity and definiteness are not operative as constraining factors in Martinique.

Concerning the variable omission/retention of the negative particle *ne*, fixed-effects models demonstrated that speaker age and subject type were the greatest determinants of variant choice: *Ne*-omission is favoured by the youngest speakers and when the subject is cliticized. Additionally, the presence of intervening non-subject clitics, the type of negative item, prefabricated expressions, educational level and style all play a role in variant selection to differing degrees.

My results for these two variables mirror those of previous studies examining Hexagonal French varieties (see Ashby 1981; Coveney 2002, 2003, 2005; Auger & Villeneuve 2008; Zahler 2014 *inter alia*). In light of these findings, one might ask the question whether Martinique French should be viewed as a transplanted

variety of French, i.e. a Lesser Antillean equivalent of a Hexagonal French dialect, rather than one that has formed and developed in isolation? Remember that the island has been institutionally, politically and legally part of the French Republic since 1946 (see Hintjens 1995; Reno 1995). The results presented here might suggest that, despite its geographical isolation from France, Martinique's ever-increasing social assimilation to the mainland appears to have also been accompanied by linguistic integration (see also Montgomery 2000; Britain 2002; Puskta 2007b). [1]

Contrastingly, however, my investigation of the future variable revealed grammatical differences between Caribbean and Hexagonal varieties. In Martinique French, speakers prefer to encode future time by employing the periphrastic future; usage rates of this variant are comparable to Laurentian French communities in Canada. Fixed- and mixed-effects models furthermore highlight the idiosyncratic constraint system operating in this locality. Temporal distance, and not sentential polarity as in Laurentian and European French, topped the constraint system: While the periphrastic future (PF) acts as the default marker of futurity, the inflected future (IF) functions as *the* marker of distal time. The variable grammar of futurity in Martinique French therefore patterns like the highly conservative enclave Acadian varieties (see King 2000; 2013; Comeau 2011).

How can we conceptualise the fact that two varieties of French share the same constraint system, even though they are situated approximately 2200 miles (3500 km) apart? Geographically isolated communities, like Martinique and the Atlantic Provinces in Canada, are often viewed as linguistically conservative in nature and

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[1] Though, as one reviewer notes, more information on how Martinique French has historically patterned would be required to substantiate this tentative claim.

do not partake in language change as much as urban mainland communities do (Andersen 1988). The constraint systems in both varieties may therefore be lagging behind those found in contemporary Hexagonal and Laurentian French (see also Trudgill 1999: 27), in which the robust effect of polarity has been well documented (Poplack & Turpin 1999; Poplack & Dion 2009; Grimm 2011; Wagner & Sankoff 2011; Roberts 2012). If temporal distance was indeed once operative in European varieties pre-colonisation, it may therefore have been transplanted to Martinique and the Atlantic Provinces in Canada by the input varieties spoken by the first settlers. Such an explanation, however, implies that the temporal distinction in European and Laurentian varieties (that we still see in Martinique) has been lost in favour of the polarity constraint. At the moment, we are not in the position to answer this question with certainty because diachronic investigations into the historical development of the variable grammar that governs the future temporal reference system in French are notably lacking.[2] Socio-historical research into the use of future variants at the time of colonisation is required to better understand the origins of this cross-dialectal (Caribbean-Acadian) trend.

1.2 Language Restriction

As already noted, participants' frequency of French usage in interpersonal communication was quantitatively measured using a version of Mougeon and Beniak's (1991) language-restriction index which specifically tailored to my particular

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[2] Though see Fleischman (1982) and Bybee, Pagliuca & Perkins (1991) for a cross-linguistic discussion on the diachronic evolution of the future temporal reference system.

speech community.[3] Mougeon and collaborators have traditionally categorized their Ontarian informants into one of three groups on the basis of their language-restriction score (see Chapter 2 Section 2.3.4, cf. also Mougeon & Beniak 1991; Mougeon et al. 2010; Grimm & Nadasdi 2011). I chose instead to examine the effect of each individual's language-restriction score on variant choice, as the Rbrul statistical software does not require continuous variables to be packaged into discrete groupings.

Quantitative investigation revealed that language restriction influences the use of *ne* amongst my older speakers and it governs the selection of the periphrastic future for all my participants. In both cases, a correlation was identified between the use of non-standard features and levels of restriction: The probability that speakers select non-standard variants (i.e. *ne*-omission and PF-use) decreases as we move further up the language-restriction scale. That is to say, the more speakers use French on a daily basis, the greater the likelihood is that they will retain the negative particle and use the inflected future.

This finding contrasts markedly with the results of previous work examining the effect of language-use restriction in Ontarian French. In Ontario, the more frequent users of French tend to employ more non-standard variants (see Mougeon & Beniak 1991; Rehner & Mougeon 1998; Nadasdi 2000; Mougeon et al. 2002). The results for Martinique, however, are not unexpected. Remember that the sociolinguistic situation on the island is often characterized as diglossic (Ferguson 1959). While *créole martiniquais* is usually spoken in informal contexts with friends and family, French is reserved for more formal, public situa-

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[3] The questionnaires are available in Appendix D.

tions (Chaudenson 1970; Holm 1988). What this effectively means is that those speakers who use more French on a daily basis tend to do so in speech events that typically warrant a more standard speech style, e.g. in schools, whilst under the normative influence of the French education system. It is in genres and styles such as this that the market pressures of the standard language are most felt by speakers.

1.3 Random Effects

To establish the influence of different linguistic and social factors on variant choice, I used the standard statistical tool in variationist research, namely multiple logistic regression. While Varbrul software packages have traditionally been utilized in variationist research to perform multivariate analyses, my dissertation relied on the Rbrul program which has become an increasingly prevalent analytic tool in recent years (see Chapter 2 Section 3.3). One of the main benefits of using Rbrul is that this software incorporates mixed-effects modelling, which allows me to test for the effect exerted by variation 'above the level of the token'. I was thus able to explain more of the variation by evaluating the effect that individuals may have on the data.

This is important since previous studies examining subject doubling and the use of the negative particle *ne* have reported high rates of inter-speaker variability, which, to date, have not been incorporated into any statistical model (cf. Ashby 1981; Moreau 1986; Pooley 1996; Coveney 2002, 2003; Auger & Villeneuve 2010). High inter-subject variability also characterised my data from Martinique: doubling rates range from 0% to 60%, and the frequency of *ne*-omission ranges from 56.5% to 94.6%. I therefore decided to run mixed models in order to control

for high levels of speaker variation. Crucially, in both cases, all linguistic factor groups were retained by the mixed models as significant, once I took the effect of speaker on variant choice into consideration. This result suggests that, despite sizeable variation in how frequently they double subject NPs or omit *ne*, the majority of speakers in Martinique orientate towards the same variable grammar. It also raises the possibility that the constraints governing subject doubling and *ne*-use in other varieties could similarly rise above individual variation.

As for future temporal reference, speaker and lexical verb effects were shown to considerably alter the constraint systems governing the choice of future forms. In fixed models, a range of constraints was shown to be operative in Martinique: temporal distance, grammatical person, adverbial specification, educational level and language restriction all constrain the expression of futurity. However, once random effects were accounted for, results indicate that only one factor group, namely temporal distance, actually influences the variable expression of futurity in Martinique French.

As previously discussed in Chapter 5, Poplack & Malvar (2007: 137) note that 'the lion's share of [future] variant choice is ascribed to subtle semantic or pragmatic distinctions in the message the speaker wishes to convey' (see also, for example, Fleischman 1982). What this effectively means is that the differences between the two main future variants are highly subjective in nature and contingent on psychological notions, such as intention, certainty, doubt and proximity (see Poplack & Turpin 1999; Poplack & Malvar 2007; Poplack & Dion 2009). It is exactly this non-overt/grammatically-encoded, rather than overt-contextualised, information in the discourse which may lead to high levels of speaker variability.

This contrasts with subject doubling and *ne*-omission. Both of these variables are predominantly governed by structural constraints, e.g. the type of subject or the presence/absence on intervening clitics. As these constraining factors do not rely on access to speaker motivations regarding epistemicity or modality, they are more accessible than the temporal distinction governing the expression of futurity. The different types of factors influencing variation selection might therefore offer an insight into why the strong effect of speaker-level variation is detectable with the future cross-dialectally in both Martinique and Hexagonal French varieties (see also Roberts 2012: 103–105). They might also, as in Buchstaller and D'Arcy's (2009) research, offer an insight as to why the future in Martinique, but not *ne* and subject doubling, patterns so differently to non-isolated varieties of French.

2. Limitations of the Study and Directions for Future Research

I now turn to a discussion of the limitations of my study and directions for future research. Firstly, the scope of the present dissertation has been limited to the analysis of three morphosyntactic variables. The corpus of Martinique French that served as the primary data source contains a plethora of other non-standard features that can be exploited in future research. These include the use of prepositions (Latimer 2014) and the subjunctive (Comeau 2011; Poplack, Lealess & Dion 2013), the deletion of complementizer *que* 'that' (Hall 2008), and the pronominal (Ashby 1992; Coveney 2000), quotative (Levey, Groulx & Roy 2013) and interrogative systems (Coveney 2002; Farmer 2013), amongst others. There is also the

possibility of extending the analysis of this regional variety of French to examine variables at other levels of linguistic structure that have been implicated as subject to linguistic and social conditioning in other research, with a view to making comparisons across differing linguistic levels (see also Cheshire, Kerswill & Williams 2005; Buchstaller et al. 2013).[4]

The linguistic fieldwork was conducted by myself during a relatively short three-month stay on the island. In future research, I would like to return to my original research site in order to replicate my original data collection methodology. This would allow me to conduct follow-up trend and panel studies in order to track how variant-usage alters and how the constraint systems change in real time (see, for example, Blondeau 2006 and Wagner & Sankoff 2011). As Sankoff and Wagner (2006: 13) acknowledge, 'there is [...] no substitute for diachrony in sociolinguistics'. Such work would therefore serve as a reality check for my own findings which are so far based on the apparent-time construct.[5] Future work may also benefit from a more ethnographic approach to data collection, involving, for example, participant observation or a fieldworker native to the speech community (Trudgill 1974; Milroy & Milroy 1978; Eckert 2000; Kirkham 2013). Alternatively, the interview protocol could be modified to accommodate the fieldworker's non-native status with informants self-recording their speech (see Armstrong 2001; Smith, Durham & Fortune 2007). Such work could compare its findings with those of the present study, as well as explore the effect played by the race of the

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[4] Examples of potential variables include schwa-use (Armstrong & Unsworth 1999), variable liaison (Armstrong 2001), /l/-deletion (Armstrong 1996), discourse markers (Lemée 2014) and general extenders (Secova 2014).

[5] See also the discussion in Chapter 2 Section 2.3.1.

interviewer on speakers' linguistic output (see also Rickford & McNair-Knox 1994; Cukor-Avila & Bailey 2001).

Furthermore, data collection has thus far been restricted to only a relatively small part of Martinique, specifically the Nord-Caraïbe area in the northwest of the island. Future research could involve the construction of new corpora and contain speech data from informants living in other parts of Martinique, such as Fort-de-France, Les Trois-Îlets, Le Marin and Grand'Rivière, or in French-speaking enclave communities on the neighbouring islands of Saint Lucia and Dominica. Data from these additional sources will increase our knowledge-base of the range of factors governing variation in the French-speaking Caribbean.

Regarding the actual analysis, my coding schemata were based on those advocated in previous research but adapted to my own data. However, in sociolinguistic research, the variable context, as well the constraints governing variant-usage, can be interpreted in different ways (see van Herk and Thorburn 2014 on the founder effect in linguistic epistemology). In this present study, for example, my examination of the doubling of subject NPs does not distinguish between cases of left-dislocation and instances of subject doubling. Some studies have argued that it is possible to differentiate both features of spoken language, as a left-dislocated subject can: (i) be separated from the verb by a pause; (ii) bear stress and (iii) undergo liaison (Roberge 1990; Nadasdi 1995). Other work has, however, empirically demonstrated that such criteria are not always relevant or perceptible when investigating speech data (Deshaies et al. 1992; Coveney 2003). When defining the variable context, I therefore cautiously chose to avoid diluting my data pool (see Tagliamonte 2006). Further research is required to enable researchers to disam-

biguate tokens of subject doubling for left-dislocation.

Similar dubiety occurs in the study of variable *ne*. Any potential occurrence of the negative particle following a world-final [n] but preceding a vowel-initial word has been excluded from the variable context and the present study follows common practise. Future studies might want to test whether fine grained acoustic analysis can enable us to identify cases of *ne*-omission from geminate [n *+ne*] sequences. Thirdly, my examination of future temporal reference in Chapter 5 only considered the alternation between inflected (IF) and periphrastic future (PF) forms. However, this variable is in fact ternary: the IF and PF compete with a third variant, namely, the futurate present (FP). The FP variant occurs only relatively rarely in spoken language, with frequency rates reported to be as low as 7% in Canadian varieties (Poplack & Turpin 1999; Comeau 2011). Preliminary analysis on my data reveals that this variant is similarly rare in Martinique French. Indeed, the only study to submit this variant to multivariate analysis used the Ottawa-Hull corpus, which contains over 3.5 million words and is therefore of sufficient size to contain enough FP tokens. The addition of more data would thus allow me to examine how this variant patterns in Martinique French and uncover the linguistic and social constraints operating on its use.

Finally, the results reported here could be complemented by research on the acquisition of sociolinguistic competence in L2 Martinique French. Such work could adopt a comparative sociolinguistic framework (Tagliamonte 2002) and investigate how immigrant speakers acquire the local norms of variation (see Drummond 2012; Meyerhoff & Schleef 2012, 2013; Nestor, Ní Chasaide & Regan 2012; Diskin 2013; Roberts & Corrigan 2014 for such work on varieties of

English) or how advanced learners of French acquire native-like *martiniquais* norms in a year-abroad context (see Regan, Lemée & Howard 2009).

In sum, this thesis has identified the linguistic and social correlates of grammatical variation in a hitherto under-researched variety of French. On-going comparative work on varieties of English has revealed very important insights into the localised use of supralocal features (e.g. Buchstaller & D'Arcy 2009; Tagliamonte 2013; Tagliamonte, Smith & Durham 2014). My dissertation is one of the first steps towards carrying over such a framework into French. This new avenue of research in French sociolinguistics will ultimately further our knowledge of the complex set of constraints that unite and divide *la francophonie*.

APPENDIX A: INFORMATION SHEET 'FICHE D'INFORMATION'

Nicholas Roberts vous propose de participer à une enquête dans le cadre de son doctorat, qui examine l'évolution des pratiques culturelles et langagières au Carbet. Une partie importante du travail consiste à enregistrer des conversations avec des Martiniquais au sujet de vos origines, votre île, et vos coutumes et culture, ainsi que le créole martiniquais et la langue française. Chaque entretien durera entre une heure et une heure et demie, suivant votre disponibilité.

Les enregistrements et d'autres données recueillies seront utilisés d'abord et avant tout pour cette étude. Après l'achèvement du projet, ils seront conservés dans des archives à l'université de Newcastle upon Tyne en Angleterre et ils pourraient être utilisés dans des recherches ultérieures, dans des ouvrages érudits (livres, revues, sites-web, etc.) ou à des fins d'enseignement.

Dans tous les cas, les informations vous concernant seront exploitées de manière anonyme (c'est-à-dire que les noms propres ne seront jamais utilisés) et elles ne seront consultées que par des chercheurs de bonne foi. Vous pourrez par ailleurs avoir accès à toute publication éventuelle si vous en faites la demande. Votre participation est entièrement optionnelle et vous pourrez vous retirer du projet à n'importe quel moment.

Si vous avez besoin de plus d'informations, n'hésitez pas à me contacter soit à l'adresse ci-dessus soit à mon adresse électronique (n.s.roberts@ncl.ac.uk). Merci pour votre participation à cette enquête.

APPENDIX B: CONSENT FORM 'FORMULAIRE DE CONSENTEMENT'

Je soussigné(e) _____ consens librement à participer à la recherche de Nicholas Roberts qui examine l'évolution des pratiques culturelles et langagières au Carbet.

Je comprends que ma participation n'est pas obligatoire et que je peux retirer ma participation à tout moment sans avoir à me justifier ni encourir aucune responsabilité. Mon consentement ne décharge pas Nicholas Roberts de ses responsabilités et je conserve tous mes droits garantis par la loi.

J'accepte que les données recueilles seront utilisés pour cette étude, dans des recherches ultérieures, dans des ouvrages de recherche ou à des fins d'enseignement.

Je comprends que les informations recueillies seront exploitées de manière anonyme et elles seront conservées dans des archives à l'université de Newcastle upon Tyne en Angleterre. Les enregistrements sont strictement confidentiels et à l'usage exclusif des chercheurs de bonne foi.

Si vous acceptez de faire partie de l'échantillon d'études dans les conditions énoncées ci-dessus, merci de signer ce document. Votre collaboration est essentielle à la réalisation du projet et Nicholas Roberts tient à vous en remercier. Si vous souhaitez obtenir un résumé écrit des principaux résultats de cette recherche, veuillez ajouter vos coordonnées ci-dessous.

Signature : _____

Date et lieu : _____

Appendix C: Interview Schedules

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1. Interview Questions for Younger Informants

1.1 Information Personnelle

1. Tu t'appelles comment ?

2. T'es né(e) en Martinique ? Où ?

3. T'as habité dans d'autres villes ? En Martinique ? En métropole ? Lesquelles ?

4. Tes parents viennent de Martinique ? Tes grands-parents ?

5. Ta famille est originaire de la région Nord-Caraïbe ?

6. Tes parents qu'est-ce qu'ils font comme métier ? Tes grands-parents ?

7. Tu as des frères et sueurs ? De quel âge ? Qu'est-ce qu'ils font ?

1.2 Milieu social

1. T'as habité au Nord-Caraïbe pendant toute ta vie ?

2. T'habites où maintenant ?

3. ça fait longtemps que t'habites dans ton quartier ?

4. T'aimes habiter là ? Pourquoi (pas) ?

5. Ton quartier a beaucoup changé depuis ta naissance ? Comment ?

1.3 Temps-Libre et Loisirs

1. Qu'est-ce que tu fais les soirs ou les weekends normalement ?

2. Qu'est-ce que t'aimes faire pendant ton temps libre ?

3. T'aimes aller à la plage ? Quelle est ta plage préférée ? Pourquoi ?

4. Est-ce que t'as un boulot quand t'es pas au lycée ? Tu fais quoi ? T'aimes bosser ? Pour quoi (pas) ?

5. Tu aimes aller au cinoche à la Madiana ? Quel est ton film préféré ? De quoi s'agit-il ?

6. La plupart de tes amis sont originaires d'ici ? Ils se connaissent ? Qu'est-ce que vous faites quand vous êtes tous ensemble ?

7. Quelles sont les différences entre ta façon de vivre et celle de tes parents quand ils avaient le même âge que toi ?

1.4 Education

1. Tu fais quel bac ?

2. Tu as des bons souvenirs de l'école primaire ? Du collège ?

3. Qu'est-ce que tu penses du lycée ?

4. T'as beaucoup de devoirs à faire ? Pour quelles matières ?

5. Quelle est ta matière préférée ? Pourquoi ?

6. Il y a des matières que tu détestes ? Lesquelles ? Pourquoi ?

7. Tu as gardé les mêmes copains tout au long de ta scolarité ?

8. Quand t'était à l'école primaire, qu'est-ce que tu aimais faire pendant les récréations ? Tu fais quoi maintenant ?

9. Quelles sont les principales différences entre la vie à l'école primaire et la vie au collège/lycée ?

10. Les étudiants en Angleterre ils portent un uniforme scolaire. Tu le trouves mieux de porter ce que tu veux ? Pourquoi (pas) ?

1.5 Catastrophes Naturelles

1. Y-a-t-il des catastrophes naturelles en Martinique ? Lesquelles ?

2. Qu'est-ce qu'il faut faire quand il y a un tremblement de terre ? Un ouragan ?

3. Tu te souviens d'un grand tremblement de terre il y a 3 ans ? T'étais où ? Qu'est-ce que t'as fait ? Il y avait beaucoup de dégâts chez toi, dans ton quartier et dans les villes ?

4. Il y avait des catastrophes naturelles cette année ? Lesquelles ? Qu'est-ce qui s'est passé ?

5. La Montagne Pêlée est toujours active ? La dernière éruption était quand ? Qu'est-ce qui s'est passé ? Il y avait beaucoup de dégâts ?

1.6 Avenir

1. On est en 2011 maintenant. Qu'est-ce que t'as fait pour fêter le nouvel an ?

2. Quelles sont tes bonnes résolutions pour cette nouvelle année ?

3. Qu'est-ce que tu veux faire comme métier après la fin de tes études ? Pourquoi ?

4. Est-ce que tu as l'intention de rester en Martinique ? Pourquoi ?

5. T'aimes voyager ? Tu vas aller en vacances pendant les grandes vacances cette année ? Où ?

6. Tu aimerais habiter dans un autre pays ? Lequel ? Pourquoi (pas) ?

1.7 Vie et Culture Régionale

1. Quels sont les animaux indigènes à la Martinique ? Peux-tu les décrire ?

2. T'aimes écouter la musique ? Quels sont tes artistes préférés ? Quel est ton genre préféré ?

3. Il y a un genre de musique antillaise ? Qu'est-ce que c'est ? Tu l'aimes ? Pourquoi (pas) ? Le zouk ? La biguine ?

4. Qu'est-ce qu'il y a comme traditions martiniquaises ? Tu participes à ces activités ?

5. Qu'est-ce que t'as fait pour fêter Noël ?

6. Il y a un repas traditionnel de Noël ? Qu'est-ce que c'est ? Tu le prépares comment ?

7. On m'a dit qu'il y a la cuisine créole aussi ? Qu'est-ce que c'est ?

8. Quel est votre plat créole préféré ? Pourquoi ?

9. A part Noël, est-ce qu'il y d'autres fêtes en Martinique ? On m'a dit qu'il y a la Carnaval ?

10. Il y a la Toussaint aussi ? Qu'est-ce que c'est ?

11. Est-ce qu'il y a des célèbres martiniquais ? Ils s'appellent comment ? Qu'est-ce qu'ils font/ont fait ?

12. T'étais où quand Aimé Césaire est mort ? Qu'est ce que tu en as pensé ? T'étais triste ?

13. Selon toi, être martiniquais, qu'est-ce que ça signifie ?

14. Est-ce que t'es content(e) que la Martinique soit un département d'outre-mer français ? Pourquoi (pas) ?

15. Est-ce que tu sens plutôt martiniquais(e), antillais(e) ou français(e) ? Pourquoi ?

1.8 Créole

1. Tu parles des langues étrangères ? Lesquelles ? Tu les as appris à l'école ? Sinon, où ?

2. Tu parles créole ? Sinon, tu aimerais pouvoir parler créole ?

3. Tu le parles depuis ta naissance ? Sinon, où est-ce que tu l'as appris ?

4. Quand t'étais plus jeunes, est-ce que c'était interdit de parler créole ? Chez toi ? A l'école ?

5. Si t'avais des enfants, tu leur apprendrais créole ? Pourquoi (pas) ?

6. Il y a des gens qui te parlent en créole ? Lesquelles ?

7. A part les gens qui ne le savent pas parler, il y a des personnes qui ne te parlent jamais en créole ? Pourquoi ?

8. Tu parles à qui en créole ? Pourquoi ?

9. Il y a des personnes à qui tu ne parles jamais en créole ? Pourquoi

10. Des fois, est-ce que tu mélanges le créole et le français ? Donne-moi des exemples ? Pourquoi mélange-les ?

11. Est-ce que tu sens différent(e) quand tu parles créoles par rapport à quand tu parles français ? Explique-moi comment ?

12. Est-ce qu'on peut l'apprendre dans les écoles ?

13. Quel est l'avenir du créole martiniquais ? Tu crois qu'il y aura toujours des gens qui le parlent ?

14. A ton avis, pour être vraiment martiniquais, faut-il pouvoir parler créole ?

1.9 Français Régional

1. Est-ce que tu penses que le français en Martinique est différent d'ailleurs ? Comment ? Est-ce qu'il y a un accent martiniquais ? Tu peux le décrire ou l'imiter ?

2. A ton avis, ça vient d'où ?

3. T'aimes cette façon de parler ? Pourquoi (pas) ?

4. Tu dirais que tu as toi-même une façon particulière de parler ? Tu parles de la même manière que tes parents ou tes grands-parents ? Si oui, quelles sont ces différences ?

5. Tu aimerais changer ta façon de parler ? Pourquoi (pas) ?

6. Tu penses qu'on pourrait te reconnaître comme martiniquais d'après ton accent ?

7. Tu pourrais toi-même reconnaître des gens d'autres régions françaises d'après leur accent ? Quelles villes/régions ?

8. Tu connais des mots ou des expressions locales ? Tu les utilises souvent ? Dans quels contextes/en parlant avec qui ?

2. Interview Questions for Younger Informants

2.1 Information Personnelle

1. Vous vous appelez comment ?

2. Vous êtes né(e)s en Martinique ? Où ?

3. Vous avez habité dans d'autres villes ? En Martinique ? En métropole ? Lesquelles ?

4. Votre famille est originaire de la région Nord-Caraïbe ?

5. Qu'est-ce que vous faites/faisiez comme métier ? Vous l'aimez ? Pourquoi (pas)

6. Est-ce que vous avez un mari/une épouse ? Il/elle a quel âge ? Il/elle vient d'où ? Qu'est-ce qu'il/elle fait/faisiez comme métier ?

7. Vous avez des frères et sœurs ? De quel âge ? Qu'est-ce qu'ils font ?

8. Et des enfants ? Vous en avez combien ? Ils ont quel âge ? Où habitent-ils ? Qu'est-ce qu'ils font comme métier ?

2.2 Milieu Social

1. Vous habitez où maintenant ?

2. Ça fait longtemps que vous habitez dans ce quartier ?

3. Vous aimez habiter là ? Pourquoi (pas) ?

4. Ce quartier a beaucoup changé depuis votre naissance/arrivée ? Comment ?

2.3 Temps-Libre / Loisirs

1. Après avoir travaillé, qu'est-ce que vous faites les soirs et les weekends normalement ?

2. Vous allez souvent à la plage ? Quelle est votre plage préférée ? Pourquoi ?

3. Vous aimez regarder les films ? Quel est votre film préféré ? De quoi s'agit-il ?

4. Quelles sont les différences entre votre façon de vivre et celle de tes parents quand ils avaient le même âge que vous ?

5. Quelles sont les différences entre votre façon de vivre et celle des plus jeunes ?

2.4 Education

1. Vous êtes allés à quelles écoles ?

2. Vous avez eu votre bac ? Lequel ? Sinon, vous avez quitté l'école à quel âge?

3. Vous avez des bons souvenirs de l'école primaire ? Du collège ? Du lycée ?

4. Quelle était votre matière préférée ? Pourquoi ?

5. Il y avait des matières que vous avez détestées ? Lesquelles ? Pourquoi ?

6. Vous avez gardé les mêmes copains tout au long de votre vie ?

7. Selon vous, quelles étiez les principales différences entre la vie à l'école primaire et la vie au collège/lycée ?

2.5 Catastrophes Naturelles

1. Y-a-t-il des catastrophes naturelles en Martinique ? Lesquelles ?

2. Qu'est-ce qu'il faut faire quand il y a un tremblement de terre ? Un ouragan ?

3. Vous vous souvenez d'un grand tremblement de terre il y a 3 ans ? Vous étiez où ? Qu'est-ce que vous avez fait ? Il y avait beaucoup de dégâts chez vous, dans ton quartier et dans les villes ?

4. Il y avait des catastrophes naturelles cette année ? Lesquelles ? Qu'est-ce qui s'est passé ?

5. La Montagne Pêlée est toujours active ? La dernière éruption était quand ? Qu'est-ce qui s'est passé ? Il y avait beaucoup de dégâts ?

6. Est-ce que vous pouvez me parler de l'éruption de 1902 ?

7. Quel est la plus pire catastrophe naturelle que vous ayez vue ? Qu'est-ce qui s'est passé ?

2.6 Avenir

1. Est-ce que vous avez l'intention de rester en Martinique ? Pourquoi ?

2. Vous aimez voyager ? Vous allez en vacances cette année ? Où ?

3. Vous aimeriez habiter dans un autre pays ? Lequel ? Pourquoi (pas) ?

2.7 Vie et Culture Régionale

1. Quels sont les animaux indigènes à la Martinique ? Pouvez-vous les décrire?

2. Vous aimez écouter la musique ? Quels sont vos artistes préférés ? Quel est votre genre préféré ?

3. Il y a un genre de musique antillaise ? Qu'est-ce que c'est ? Vous l'aimez ? Pourquoi (pas) ? Le zouk ? La biguine ?

4. Qu'est-ce que vous avez fait pour fêter le nouvel an ?

5. Vous avez des bonnes résolutions pour cette nouvelle année ? Lesquelles ? Qu'est-ce que vous avez fait pour fêter Noël ?

6. Il y a un repas traditionnel de Noël ? Qu'est-ce que c'est ? Vous le préparez comment ?

7. On m'a dit qu'il y a la cuisine créole aussi ? Qu'est-ce que c'est ?

8. Quel est votre plat créole préféré ? Pourquoi ?

9. Vous buvez du rhum ? Quel est votre rhum préféré ? Pourquoi ?

10. A part Noël, est-ce qu'il y d'autres fêtes en Martinique ?

11. Est-ce qu'il y a des célèbres martiniquais ? Ils s'appellent comment ? Qu'est-ce qu'ils font/ont fait ?

12. Vous étiez où quand Aimé Césaire est mort ? Qu'est ce que vous en avez pensé ?

13. Est-ce que vous êtes content(e)s que la Martinique soit un département d'outre-mer français ? Pourquoi (pas) ?

14. Est-ce qu'il y avait des mouvements indépendantistes ici en Martinique dans le passé ? Et maintenant ?

15. Quelles sont les différences entre la Martinique et la Guadeloupe ?

16. Est-ce que vous sentez plutôt martiniquais(e), antillais(e) ou français(e) ?

17. A votre avis, pour être vraiment martiniquais, faut-il pouvoir parler créole?

2.8 Créole

1. Vous parlez des langues étrangères ? Lesquelles ? Vous les avez appris à l'école ? Sinon, où ?

2. Vous parlez créole ? Sinon, vous aimeriez pouvoir parler créole ?

3. Vous le parlez depuis votre naissance ? Sinon, où est-ce que vous l'avez appris ?

4. Quand vous étiez plus jeunes, est-ce que c'était interdit de parler créole ? Chez vous ? A l'école ?

5. Quand votre/vus enfants était/étaient plus jeune(s), vous lui/leur parliez créole ? Pourquoi (pas) ?

6. Vous avez commencé de lui/leur parlé en créole dès qu'il/ils avait/avaient quel âge ?

7. Si vous aviez des enfants, vous leur apprendriez créole ? Pourquoi (pas) ?

8. Quels sont les gens qui vous parlent en créole ?

9. A part les gens qui ne le savent pas parler, il y a des personnes qui ne vous parlent jamais en créole ? Pourquoi ?

10. Vous parlez à qui en créole ? Pourquoi ?

11. Il y a des personnes à qui vous ne parlez jamais en créole ? Pourquoi

12. Des fois, est-ce que vous mélangez le créole et le français ? Donne-moi des exemples ? Pourquoi mélange-les ?

13. Est-ce que vous sentez différent(e)s quand vous parlez créole par rapport à

quand vous parlez français ? Expliquez-moi comment ?

14. Quel est l'avenir du créole martiniquais ? Vous croyez qu'il y aura toujours des gens qui le parlent ?

2.9 Français Régional

1. Est-ce que vous pensez que le français en Martinique est différent d'ailleurs ? Comment ? Est-ce qu'il y a un accent martiniquais ? Vous pouvez le décrire ou l'imiter ?

2. A votre avis, ça vient d'où ?

3. Vous aimez cette façon de parler ? Pourquoi (pas) ?

4. Vous diriez que vous avez vous-même une façon particulière de parler ? Vous parlez de la même manière que vos parents ou vos grands-parents ? Si oui, quelles sont ces différences ?

5. Vous aimeriez changer votre façon de parler ? Pourquoi (pas) ?

6. Vous pensez qu'on pourrait vous reconnaître comme martiniquais d'après ton accent ?

7. Vous pourriez vous-même reconnaître des gens d'autres régions françaises d'après leur accent ? Quelles villes/régions ?

APPENDIX D: LANGUAGE RESTRICTION QUESTIONNAIRES

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1. Language Restriction Questionnaire for Younger Informants

Nom : _____

Date de naissance : _____

Ecole : _____

Sexe : _____

1. Parles-tu créole ?

    ☐   ☐
    oui   non

Si oui, merci de répondre aux questions suivantes :

2. Parles-tu français à tes amis pendant les cours ?

    ☐   ☐   ☐   ☐
    tout le temps   de temps en temps   rarement   jamais

3. Est-ce que tes amis te parlent en français pendant les cours ?

    ☐   ☐   ☐   ☐
    tout le temps   de temps en temps   rarement   jamais

4. Parles-tu français à tes amis pendant la récréation?

   ☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

5. Est-ce que tes amis te parlent en français pendant la récréation?

   ☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

6. Parles-tu français à ta mère ?

   ☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

7. Est-ce que ta mère te parle en français ?

   ☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

8. Parles-tu français à ton père ?

   ☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

9. Est-ce que ton père te parle en français ?

tout le temps   de temps en temps   rarement   jamais

10. Est-ce que tes parents parlent français entre eux ?

tout le temps   de temps en temps   rarement   jamais

11. Si tu as des frères et sœurs, leur parles-tu en français ?

tout le temps   de temps en temps   rarement   jamais

12. Si tu as des frères et sœurs, est-ce qu'ils te parlent en français ?

tout le temps   de temps en temps   rarement   jamais

13. Parles-tu français à tes grands-parents ?

tout le temps   de temps en temps   rarement   jamais

14. Est-ce que tes grands-parents te parlent en français ?

tout le temps	de temps en temps	rarement	jamais

15. Parles-tu français à tes professeurs ?

tout le temps	de temps en temps	rarement	jamais

16. Est-ce que tes professeurs te parlent en français ?

tout le temps	de temps en temps	rarement	jamais

17. Est-ce que les gens de ton quartier parlent en français ?

tout le temps	de temps en temps	rarement	jamais

2. Language Restriction Questionnaire for Younger Informants

Nom : _____

Date de naissance : _____

Niveau de scolarité: _____

Métier　　　　　　: _____

Sexe : _____

1. Parlez-vous créole ?

oui	non

Si oui, merci de répondre aux questions suivantes :

2. Parlez-vous français à vos amis ?

tout le temps	de temps en temps	rarement	jamais

3. Est-ce que vos amis vous parlent en français ?

tout le temps	de temps en temps	rarement	jamais

4. Parlez-vous français à votre mère ?

☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

5. Est-ce que votre mère vous parle en français ?

☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

6. Parlez-vous français à votre père ?

☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

7. Est-ce que votre père vous parle en français ?

☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

8. Est-ce que vos parents parlent français entre eux ?

☐   ☐   ☐   ☐

tout le temps   de temps en temps   rarement   jamais

9. Si vous avez des frères et sœurs, leur parlez-vous français ?

☐	☐	☐	☐

tout le temps   de temps en temps   rarement   jamais

10. Si vous avez des frères et sœurs, est-ce qu'ils vous parlent en français ?

☐	☐	☐	☐

tout le temps   de temps en temps   rarement   jamais

11. Si vous avez des enfants, leur parlez-vous en français ?

☐	☐	☐	☐

tout le temps   de temps en temps   rarement   jamais

12. Si vous avez des enfants, est-ce qu'ils vous parlent en français ?

☐	☐	☐	☐

tout le temps   de temps en temps   rarement   jamais

13. Si vous avez un(e) conjoint(e), lui parlez-vous en français ?

☐	☐	☐	☐

tout le temps   de temps en temps   rarement   jamais

14. Si vous avez un(e) conjoint(e), est-ce qu'il/elle vous parle en français

tout le temps	de temps en temps	rarement	jamais

15. Parlez-vous français à votre patron ?

tout le temps	de temps en temps	rarement	jamais

16. Est-ce que votre patron vous parle en français ?

tout le temps	de temps en temps	rarement	jamais

17. Parlez-vous français à vos confrères ?

tout le temps	de temps en temps	rarement	jamais

18. Est-ce que vos confrères vous parlent en français ?

tout le temps	de temps en temps	rarement	jamais

19. Est-ce que les gens de votre quartier parlent en français ?

☐	☐	☐	☐
tout le temps	de temps en temps	rarement	jamais

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